



GEORGIA VERMONT

DRB MEETING

Tuesday, February 20, 2024
Chris Letourneau Meeting Room and via Zoom

Agenda

Zoom Details:

<https://us02web.zoom.us/j/6165843896?pwd=STduU2JzTmpiVmE1MXZSaWZWVadz09>

Meeting ID: 616 584 3896 | Passcode: 5243524

Dial by your Location: 1 929 205 6099 (New York)

1. **CALL TO ORDER - 7:00 PM**
2. **ADDITIONS, DELETIONS, OR CHANGES TO THE AGENDA**
3. **PUBLIC HEARINGS**
 - [A.](#) Site plan amendment (SA-001-24) for Jennifer & Joel Desautels at 1333 Bullock Road
 - [B.](#) Preliminary Plat (PR-001-24), Conditional Use (SU-001-24), Site Plan (SP-001-24) for 864 Ethan Allen Highway, llc
4. **APPROVAL OF MINUTES**
 - [A.](#) DRB Meeting Minutes December 19, 2023
5. **OTHER BUSINESS**
 - [A.](#) Decision Letter - Sketch Plan Review (SK-006-23) for Sandy Birch Road LLC
6. **PLAN NEXT MEETING AGENDA**
 - A. March 5, 2024 cancelled due to Town Meeting
 - B. March 19, 2024 - reorganizational meeting
7. **DELIBERATIONS**
8. **ADJOURN**

Posted to the Town website, four designated places within the Town of Georgia (Town Clerk's Office, Georgia Public Library, Maplefields & Georgia Market), and e-mailed to the local media.

Signed: Douglas Bergstrom, Zoning Administrator, DRB Coordinator

Phone: 802-524-3524 | Fax: 802-524-3543 | Website: townofgeorgia.com



Town of Georgia
47 Town Common Road North,
St. Albans, VT 05478
(802) 524-3524 or (802) 524-3323
email: roadforeman@townofgeorgia.com

Application for Town Road Access / Right of Way Permit

Application Information

Applicant: Joel & Jennifer Desautels Owner: Joel & Jennifer Desautels

Address: 1333 Bullock Rd Georgia, VT 05468 Address: (same)

Phone: (802) 370-4270 Phone: (same)

911 address of property: 1333 Bullock Rd (ex. house), no new 911 address for Lot 1 (not sold, no construction to date) Tax Parcel ID: 101450000

The undersigned requests an Access/Right of Way Permit to construct an access or make other improvements within the Town Right-of-Way, in accordance with Town Highway Standards, to serve the above referenced property located on the east side of Town Highway No. , the local name of this road being Georgia Shore Rd.

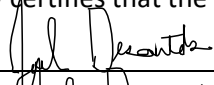
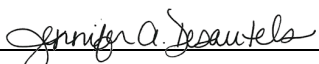
The proposed access or changes to be located approximately 1/4 mile (number of feet or miles) from the intersection of this road and Bradley Hill Rd. (next closest road or landmark).

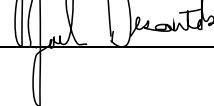
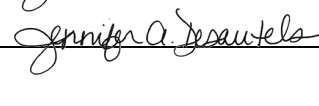
Description of Improvements: driveway to single-family residence

Note: Use back page to sketch locations of improvements requested. See back page for requirements for driveways. Permit not valid until fee is paid and application is signed by Road Commissioner.

Signatures

The applicant/owner hereby certifies that the information provided herein is true and correct:

Signature of Applicant:   Date: 1/16/24

Signature of Owner:   Date: 1/16/24

NOTE: This permit is issued in accordance with Title 19, Section 1111, V.S.A., relative to all highways within the control and jurisdiction of the Town of Georgia. The issuance of this permit does not release the applicant from any requirements of statutes, ordinances, rules and regulations administered by other governmental agencies. The permit will be effective upon compliance with such of these requirements as are applicable and continue in effect for as long as the present land use continues. Changes of present land use may require new permits. This permit is issued subject to the directions, restrictions and conditions contained herein and on the reverse side of this form and any attachments hereto, and covers only the work described in this application, and then only when the work is performed as directed. Violations are subject to the penalties set forth in Title 19, Section 1111, V.S.A., of fines not less than \$100 or more than \$10,000 for each violation.

Directions, Restrictions, and Conditions

- 1. If possible, all utilities, pipes, cables, wires, etc., will be placed under the road by drill and bore method and placed within a sleeve and may require a damage deposit. Any of the above requiring digging up of the road shall require a damage deposit.
- 2. The Town assumes no responsibility for damage to structures placed in the right-of-way.
- 3. All culverts are to be metal.
- 4. The Road Commissioner, at his discretion, may request an independent site evaluation by a licensed engineer at the applicant's expense.

Road Commissioner Section

Fee Paid: _____ Check #: _____

Approved On: _____ Denied On: _____ Returned On: _____

Road Commissioner Comments: _____

Road Commissioner Signature: _____ Date: _____

Driveway Standards

- 1. The driveway must be constructed so that no water run-off enters the roadway. Snow removed from the driveway must not be placed on the roadway.
- 2. The need for and size of culverts shall be determined by the Road Commissioner and/or the Road Foreman.
- 3. If needed, culverts shall be corrugated metal pipe, unless the Selectboard determines a cement box culvert is needed.

- 4. A minimum of 10" of gravel or crushed stone shall be placed over the top of the culvert.
- 5. All culverts, if needed, must be a minimum of 15" x 30' steel corrugated pipe. Larger culverts may be necessary in keeping with the size and use of the driveway.
- 6. The Town of Georgia assumes no responsibility for anything placed in the highway right-of-way, (i.e., mailboxes, signs, driveway markers, etc.).
- 7. Driveways must be designed and maintained for safe sight distances and traffic safety. If signage is required, signs shall be provided by the applicant. The Selectboard or their representative may consult with regional and state agencies to ensure safety or may require a traffic study.
- 8. All accesses to public roads must have a -3%-0% slope for approximately 20 feet. Any variation will require Selectboard approval.

Drawing of Location of Town Highway and Proposed Improvement

- 1. Indicate North with an arrow.
- 2. Indicate name of property owner and adjacent property owners.
- 3. Indicate name of highway and 911 address of the subject property.

See attached plans

Jennifer Desautels, PE

Subject: FW: 1333 Bullock Rd./3 Lot Subdivision

From: Georgia Road Foreman <roadforeman@townofgeorgia.com>
Sent: Wednesday, November 15, 2023 11:28 AM
To: Jennifer Desautels, PE <Jennifer.Desautels@tcevt.com>; Georgia Fire Chief <firechief@townofgeorgia.com>
Subject: RE: 1333 Bullock Rd./3 Lot Subdivision

Like I had stated before, as long as it meets the state B-71 driveway standards I'm good with it. I always try to stress that the required sight distance needs to be met and maintained. If you can put a couple of grade stakes where the Georgia shore driveway is I can take a better look.

From: Jennifer Desautels, PE <Jennifer.Desautels@tcevt.com>
Sent: Tuesday, November 7, 2023 5:27 PM
To: Georgia Road Foreman <roadforeman@townofgeorgia.com>; Georgia Fire Chief <firechief@townofgeorgia.com>
Subject: 1333 Bullock Rd./3 Lot Subdivision

Gentlemen:

I'm writing about a driveway change to a 2021 approval for a 3 lot subdivision of my property at 1333 Bullock Rd. in Georgia. I've included clips below of the plans showing the original driveway location off Bullock Rd. (from the 2021 approval) and the proposed driveway location off Georgia Shore Rd. (2023 proposed redesign). I called and talked to Doug at the Town about the approval process for the revised driveway location for Lot 1, and he suggested that I start with discussions with both of you first before applying for a site plan amendment. The reason for the change is that we've heard feedback from potential buyers of Lot 1 that they don't want a shared driveway or shared road maintenance responsibilities.

The new design includes a new driveway off Georgia Shore Rd. that will serve Lot 1 (lot with Georgia Shore Rd. frontage), which is approximately the same length and slope as the approved design. Lot 2 (middle lot) will be served by the previously approved driveway from Bullock Rd., and will be 500' long. Lot 3 (my existing house) will be served off the existing driveway off Bullock Rd. Any way you slice it, the driveway (new design or previously approved design) to Lot 1 is longer than what is recommended under the current Town Road regulations. We're not making it any worse (length or slope), but the new driveway design does allow for each home to have a separate driveway and no shared maintenance.

I'm glad to chat via e-mail or over the phone. Let me know if you have any questions or comments, or if you need any additional information.

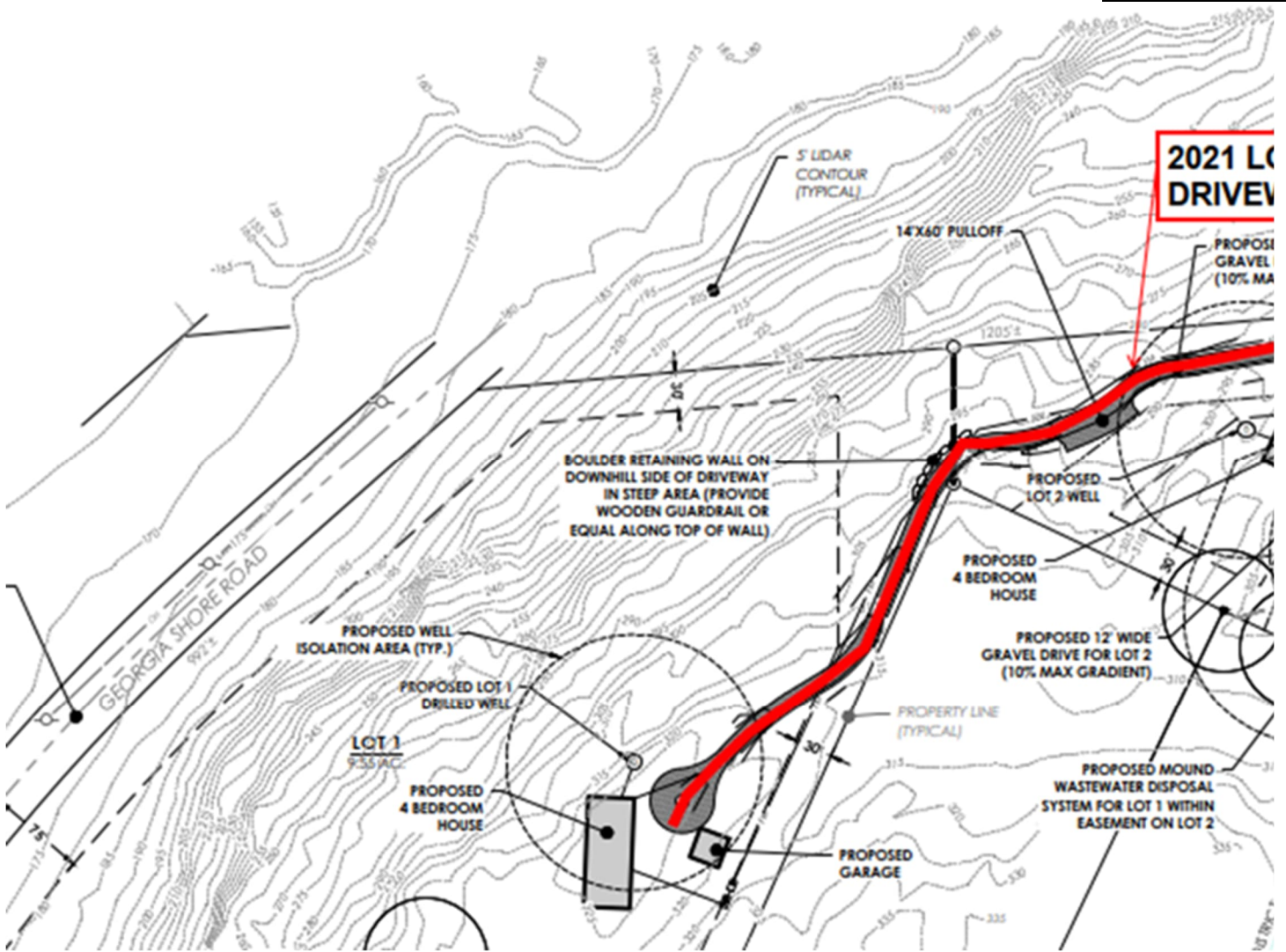
I know you are both busy, so I appreciate your time in reviewing this request.

Best,
Jenn
802-370-4270

Proposed Driveway Below:



Originally Approved Driveway Below:



Jennifer A. Desautels, P.E.
 Director of Operations
 e. Jenn.Desautels@tcevt.com
 c. 802.370.4270
 o. 802.613.7076

- Civil Engineering
- Environmental Services
- Landscape Architecture
- Underground Locating
- Land Surveying



**Site Plan Amendment
Change of Driveway Location
SA-001-24**

Owner: Jennifer & Joel Desautels 1333 Bullock Road Georgia, VT 05468	Property Tax Parcel & Location: 1333 Bullock Road (Lot 1) L-2 Zoning District Parcel #101450000(a)
Engineer: Jennifer Desautels, P.E./TCE 802-370-4270 Jenn.desautels@tcevt.com	Surveyor: Gerald Stockman L.S. 802-879-6331 Gerald.stockman@tcevt.com

BACKGROUND

Jennifer and Joel Desautels, hereafter referred to as Applicants, are requesting a Site Plan Amendment from Final Plat decision (FP-002-21) to allow for a change in the location of a driveway. The parent parcel is located at 1333 Bullock Road and within the L-1 and AR-1 zoning district with the total acreage of ±15.37 acres in size. The subject parcel #101450000(a) (Lot 1) is located entirely in the L-1 zoning district and is ±9.01 acres.

PROJECT NARRATIVE SUMMARY

1. Applicant has submitted the following site plans prepared by TCE:
 - C2-00.1 *Lot 1 Overall Site Plan* dated 10/27/2023
 - C6-03 *Lot 1 Driveway Plan & Profile* dated 10/27/2023
 - C6-04 *Lot 1 Driveway Plan & Profile* dated 10/27/2023
 - C8-00.1 *Lot 1 Driveway Details* dated 1/17/2024
 - C8-05 *EPSC Low Risk Handbook Sheet 1* dated 10/3/2021
 - C8-06 *EPSC Low Risk Handbook Sheet 2* dated 10/3/2021
 - C2-01 *Site Plan* (previously approved) dated 12/30/2020
 - S1-02 *Boundary Line Agreement* dated 5/12/2022
 - C1-00 *Legend and Notes* dated 9/20/2021
2. Site Plan approval for the Desautels 3 Lot Subdivision project (FP-001-21) was issued 11/23/2021.
3. The site plan revision is limited to relocating the driveway. The previously approved driveway provides access to Lot 1 from Bullock Road. The proposed driveway for Lot 1 provides access from Georgia Shore Road. No other site plan changes are requested.
4. The road length of the new driveway location is almost exactly the length of the previously approved driveway. Coordination with both the Fire Chief and Road Foreman have occurred. See attached letters and documents.

5. Erosion control measures will follow State of Vermont Low-Risk Erosion Control Manual as required.

6. According to Town of Georgia Developmental Regulations (2/27/2023) Article 5.2 (B)(2)(g) No driveway shall be constructed with a grade greater than 10%. A waiver may be granted by the Selectboard to allow 11-12% grade if the applicant can demonstrate an unnecessary hardship due to unique physical circumstances or conditions. The DRB may request that any section of driveways approved by said waivers shall also be paved with a minimum of 2” of asphalt pavement.

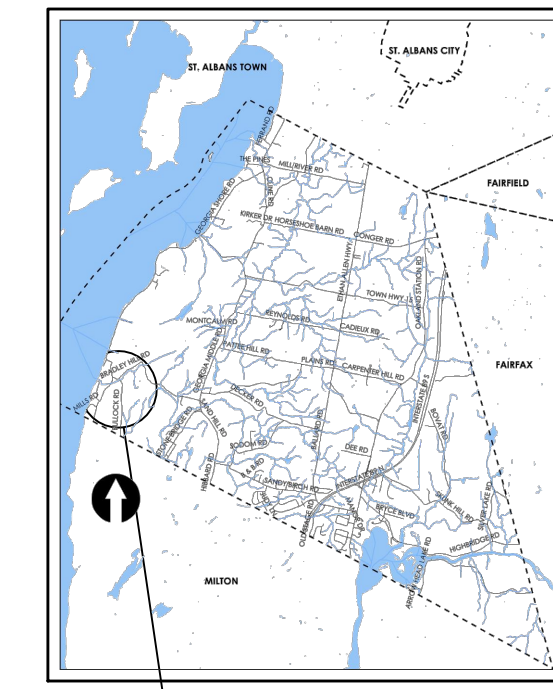
Respectfully submitted,

Douglas Bergstrom
Zoning Administrator
Planning, DRB & 911 Coordinator

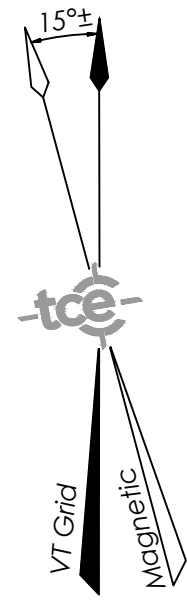


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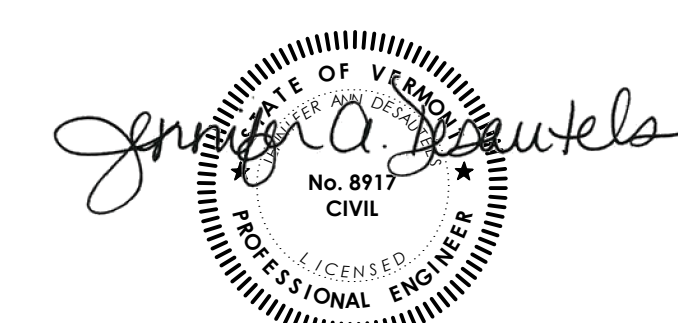
Revisions	No.	Description	Date	By
Plan Revisions			01/17/24	CMJ



PROJECT LOCATION



- TAX ID: 101450000
- Use of These Drawings
1. Unless otherwise noted, these Drawings are intended for preliminary planning, coordination with other disciplines or utilities, and/or approval from the regulatory authorities. They are not intended as construction drawings unless noted as such or marked approved by a regulatory authority.
 2. By use of these drawings for construction of the Project, the Owner represents that they have reviewed, approved, and accepted the drawings, obtained all necessary permits, and have met with all applicable parties/disciplines, including but not limited to, the Engineer and the Architect, to insure these plans are properly coordinated including, but not limited to, contract documents, specifications, owner/contractor agreements, building and mechanical plans, private and public utilities, and other pertinent permits for construction.
 3. Owner and Architect, are responsible for final design and location of buildings shown, including an area measured a minimum five (5) feet around any building and coordinating final utility connections shown on these plans.
 4. Prior to using these plans for construction layout, the user shall contact TCE to ensure the plan contains the most current revisions.
 5. These Drawings are specific to the Project and are not transferable. As instruments of service, these drawings, and copies thereof, furnished by TCE are its exclusive property. Changes to the drawings may only be made by TCE. If errors or omissions are discovered, they shall be brought to the attention of TCE immediately.
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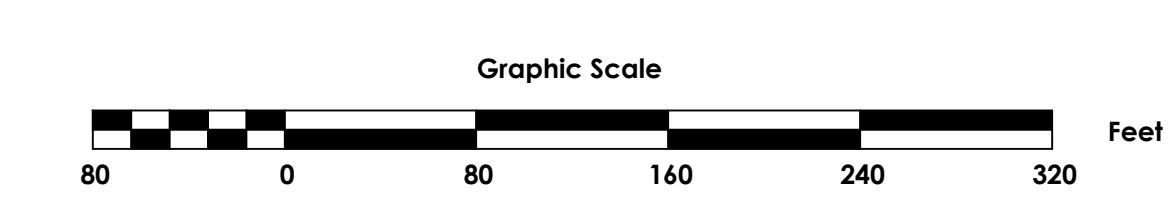
Project Title

Joel & Jennifer Desautels
1333 Bullock Road
Georgia, Vermont

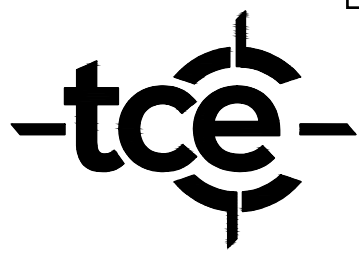
Sheet Title

Lot 1 Overall Site Plan

Date:	10/27/2023
Scale:	1" = 80'
Project Number:	15-212
Drawn By:	CMJ
Project Engineer:	JAD
Approved By:	JAD
Field Book:	



C2-00.1

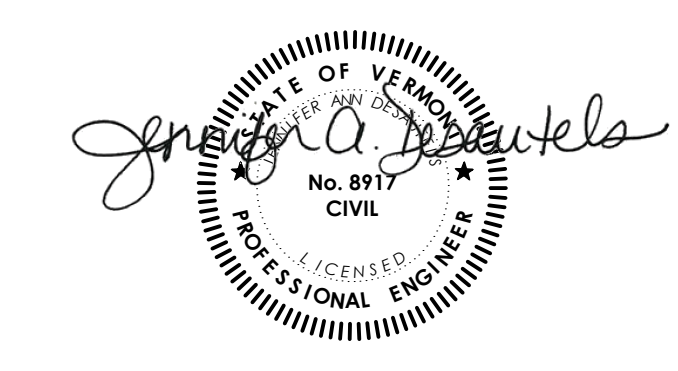


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Revisions	No.	Description	Date	By
Plan Revisions			01/17/24	CMJ

TAX ID: 101450000

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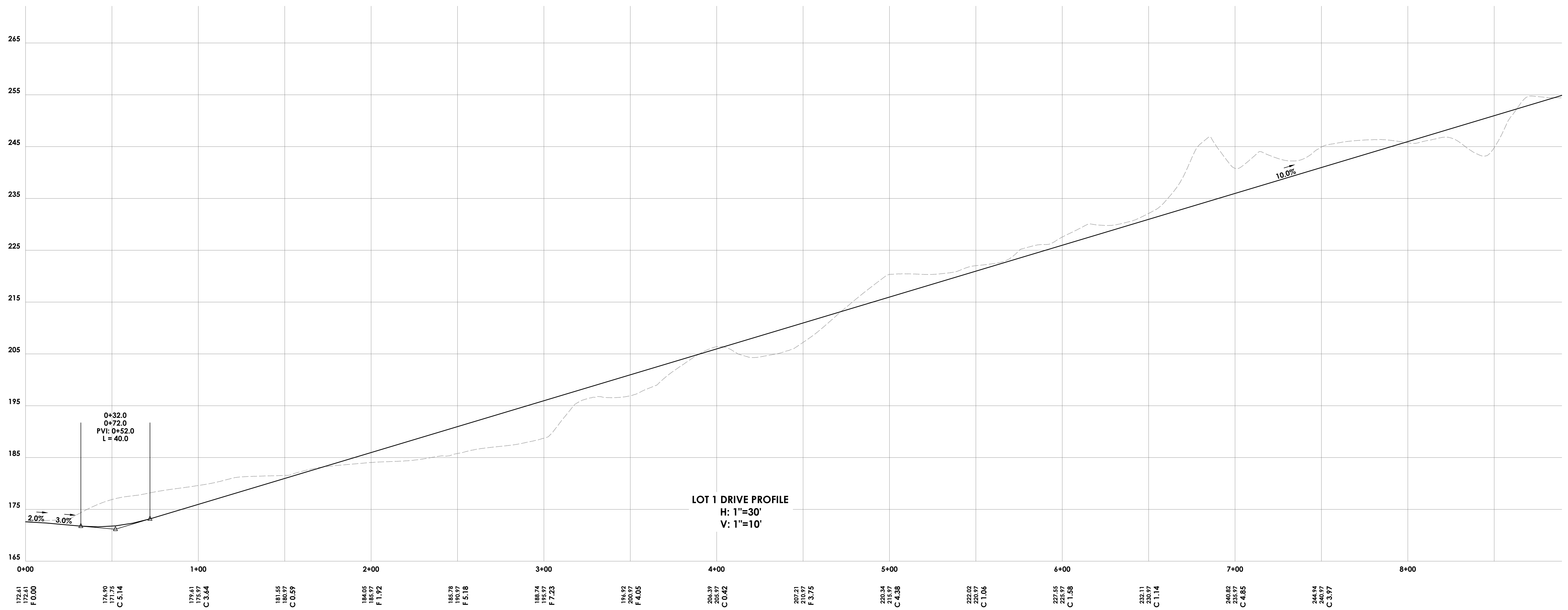
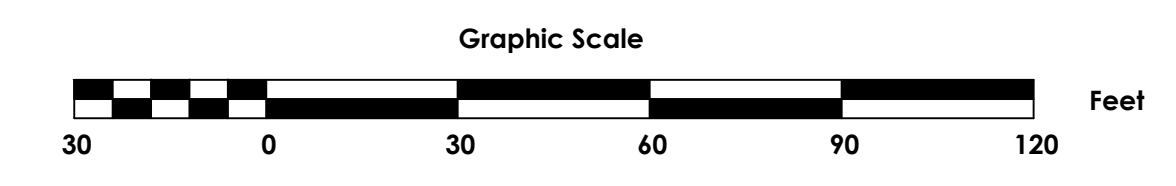
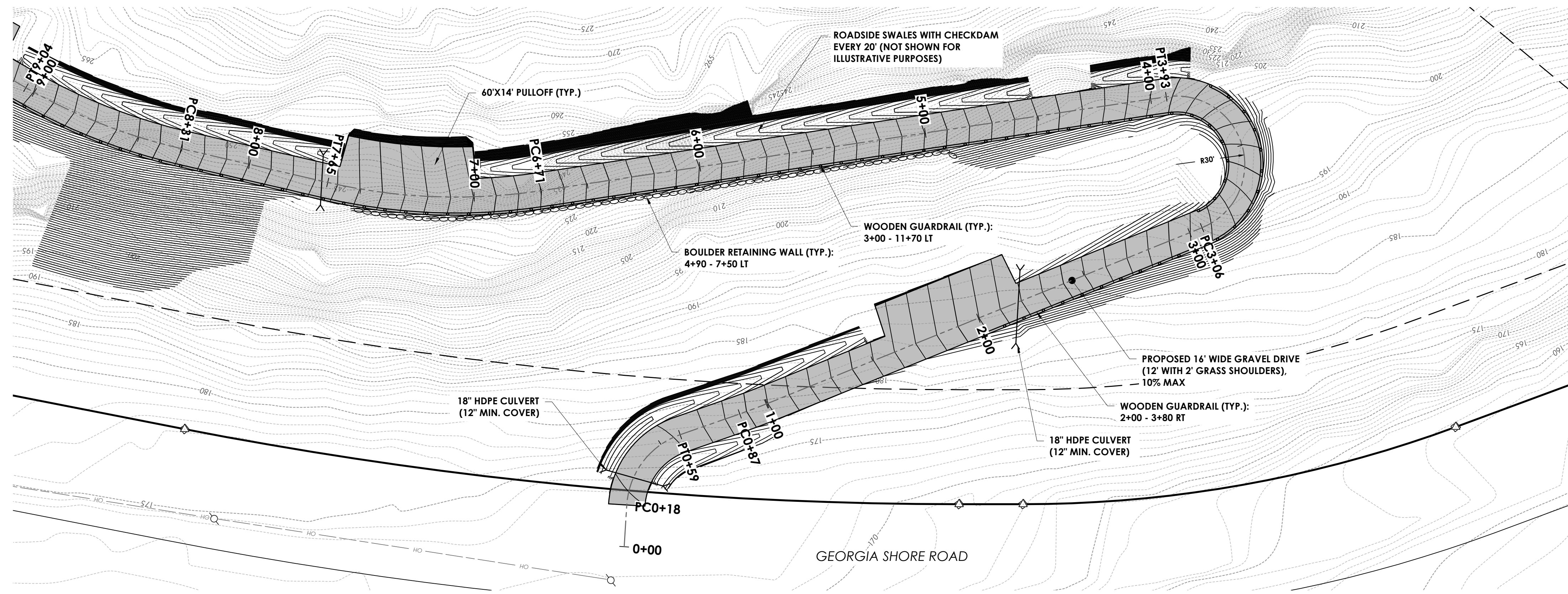
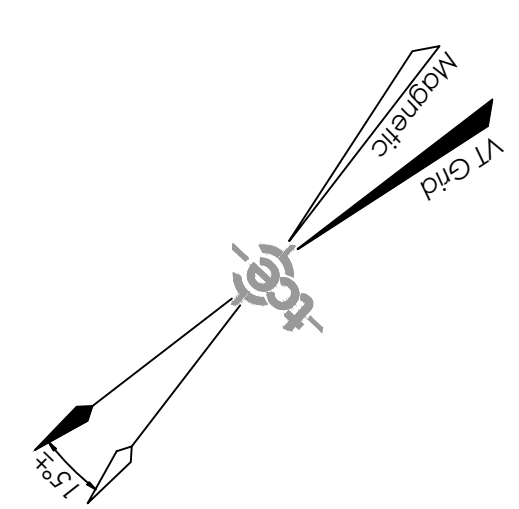
Joel & Jennifer Desautels
 1333 Bullock Road
 Georgia, Vermont

Sheet Title

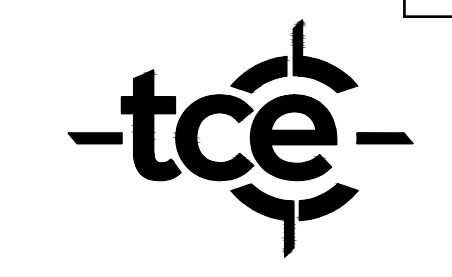
Lot 1 Driveway Plan & Profile

Date:	10/27/2023
Scale:	Shown
Project Number:	15-212
Drawn By:	CMJ
Project Engineer:	JAD
Approved By:	JAD
Field Book:	

C6-03



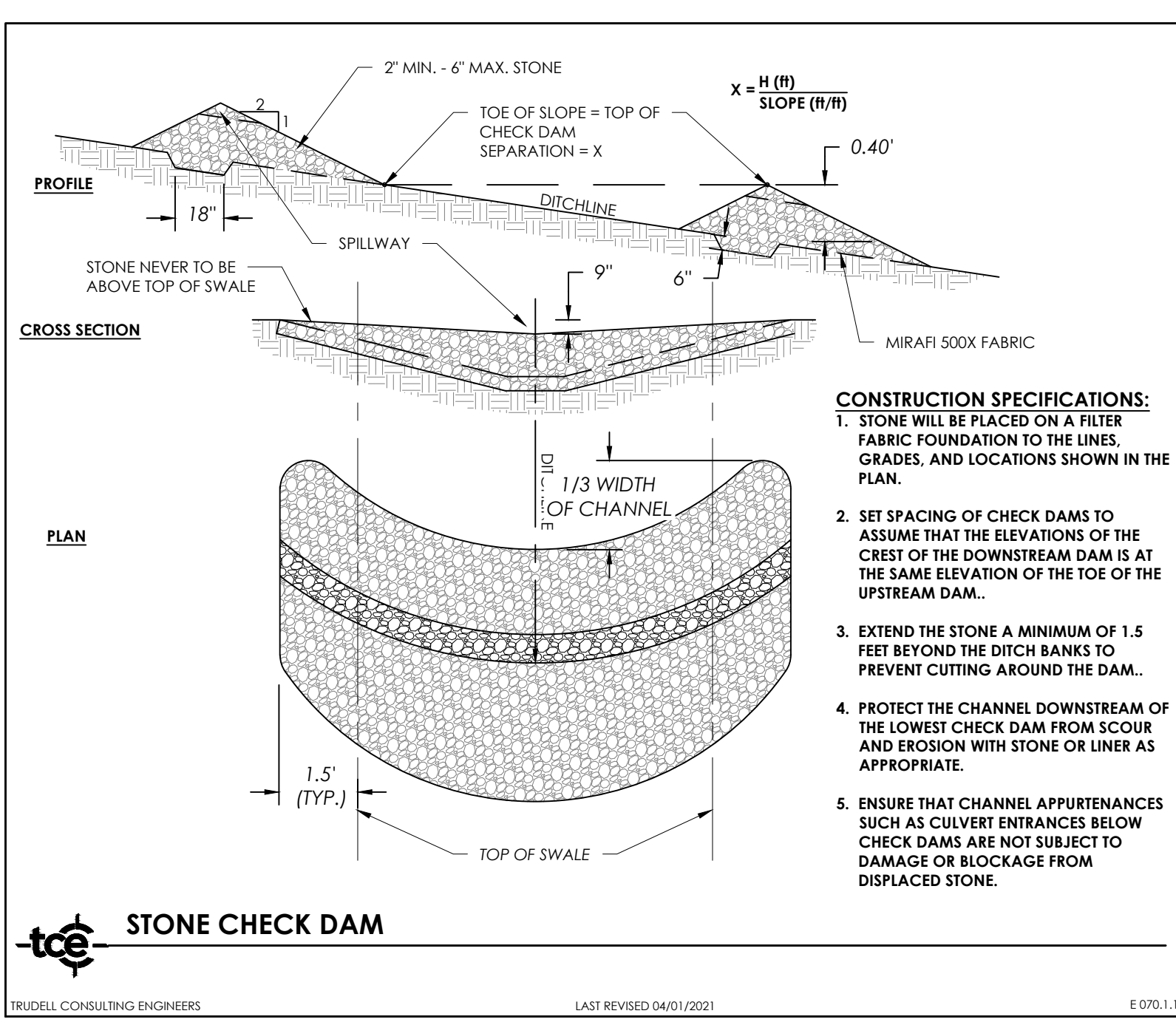
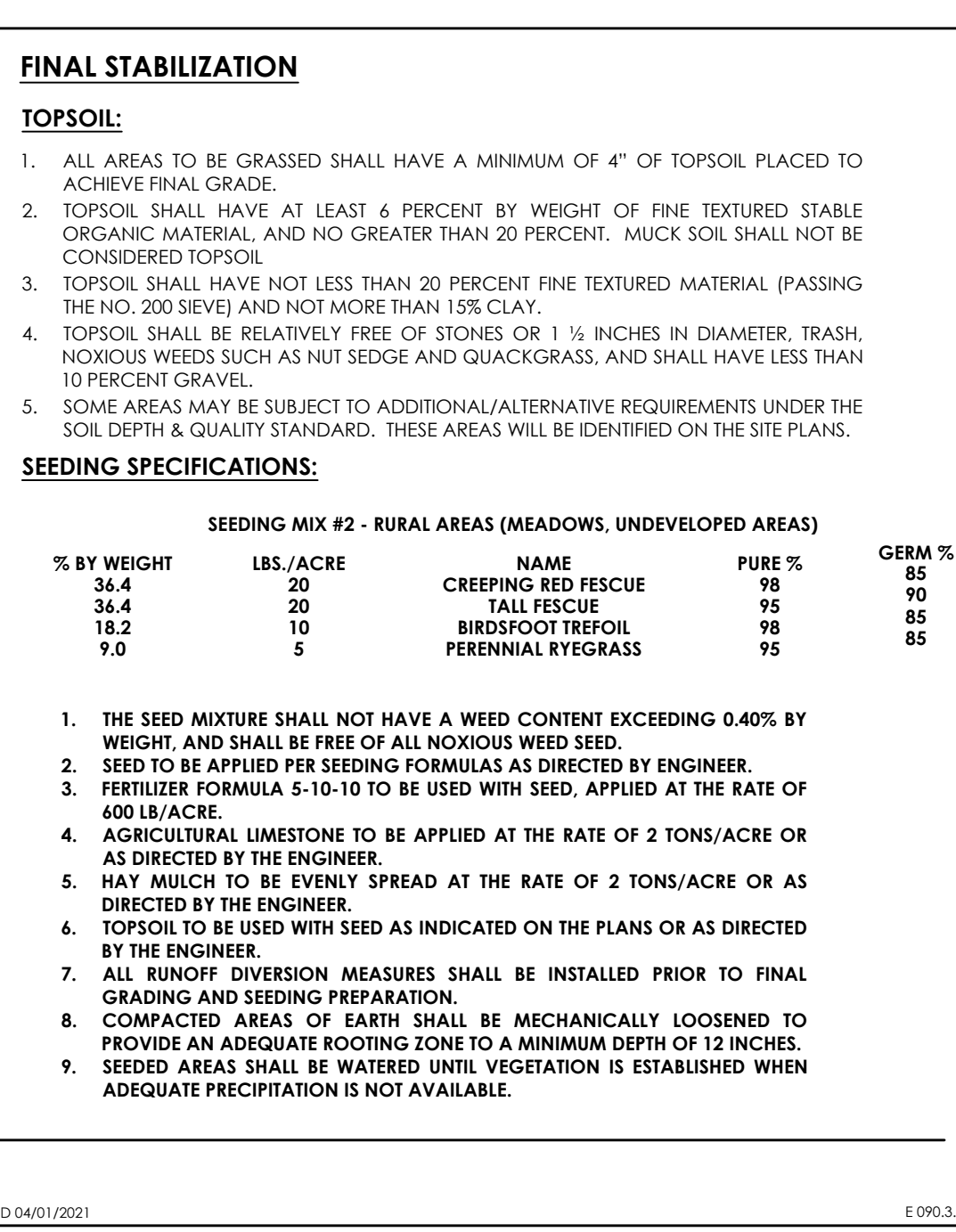
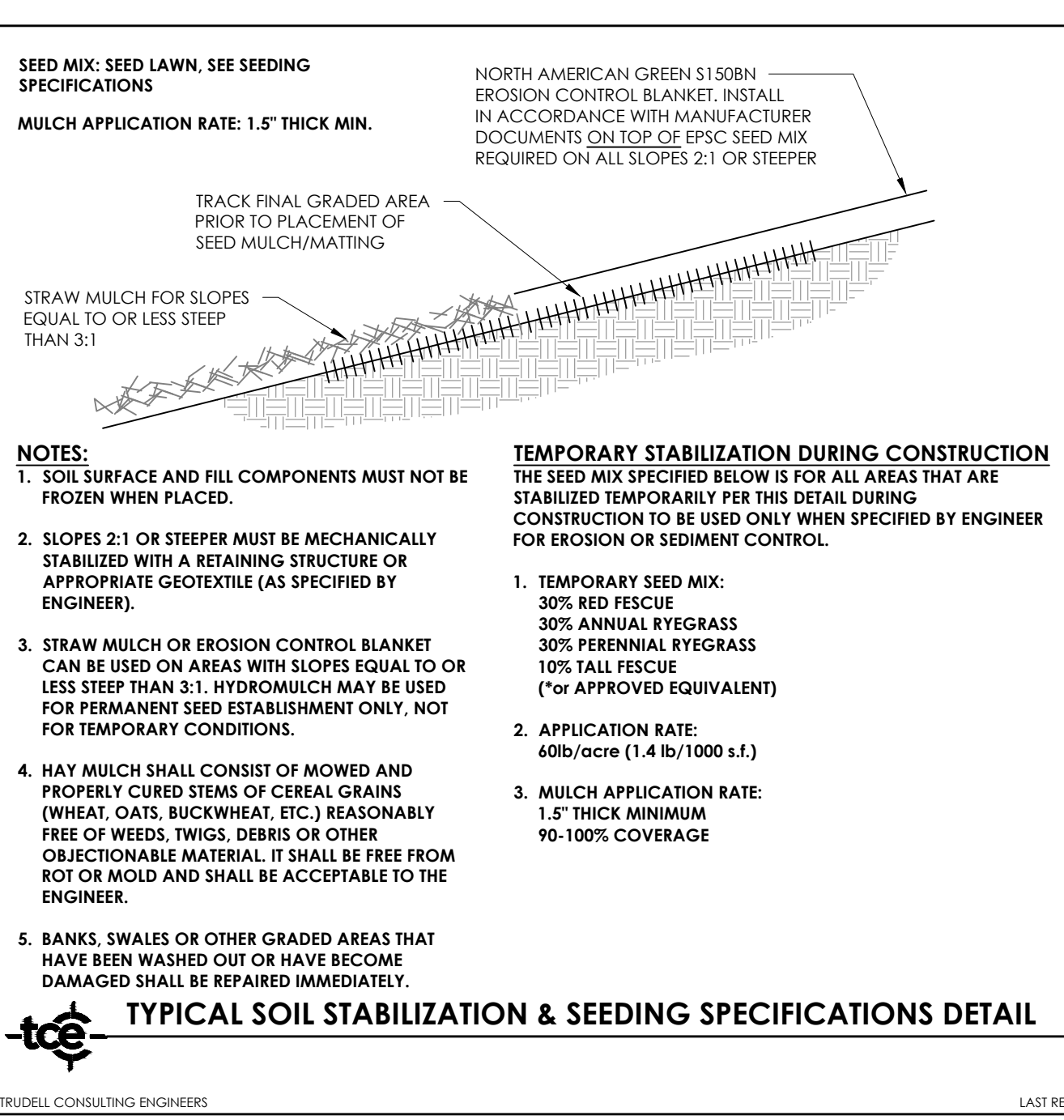
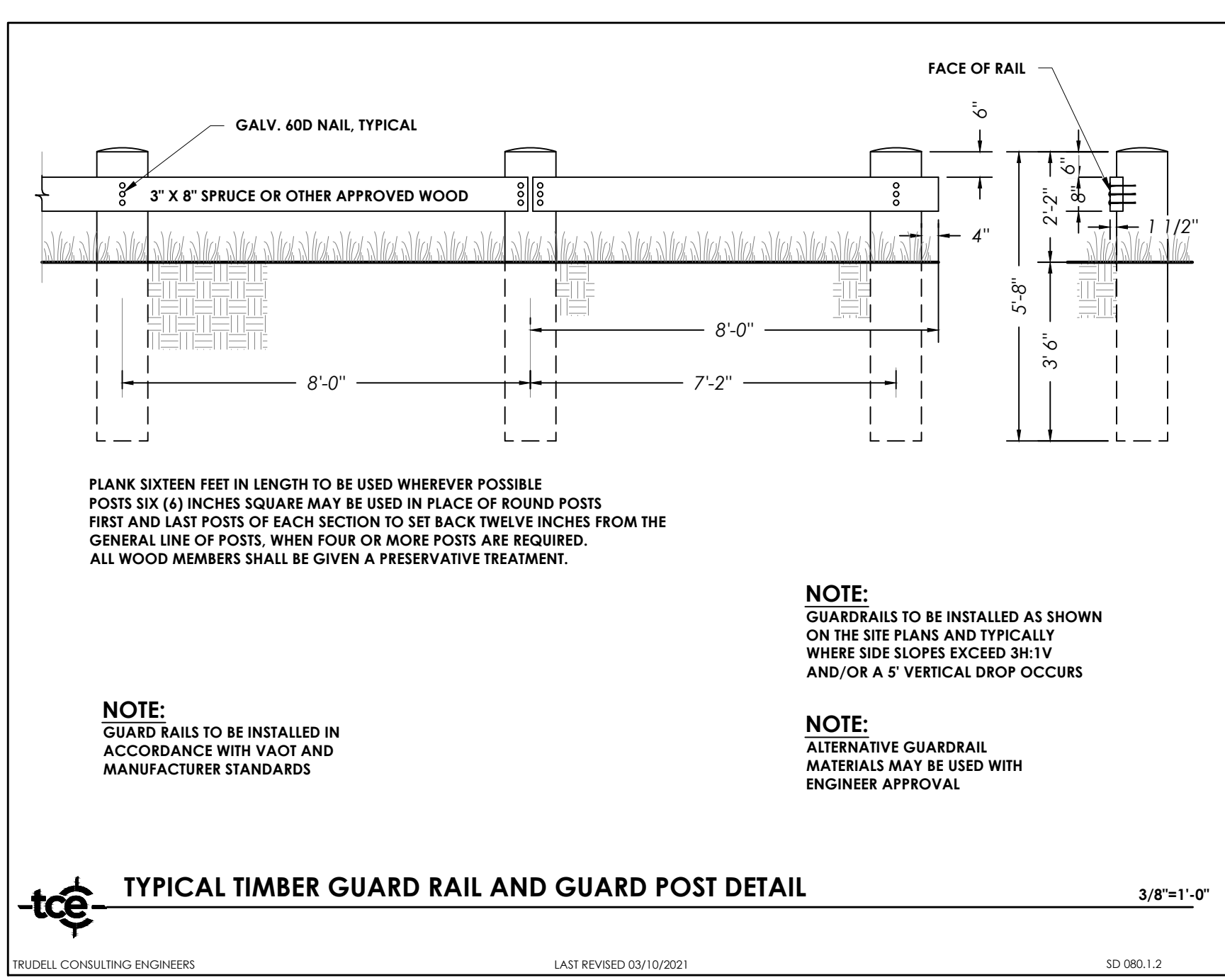
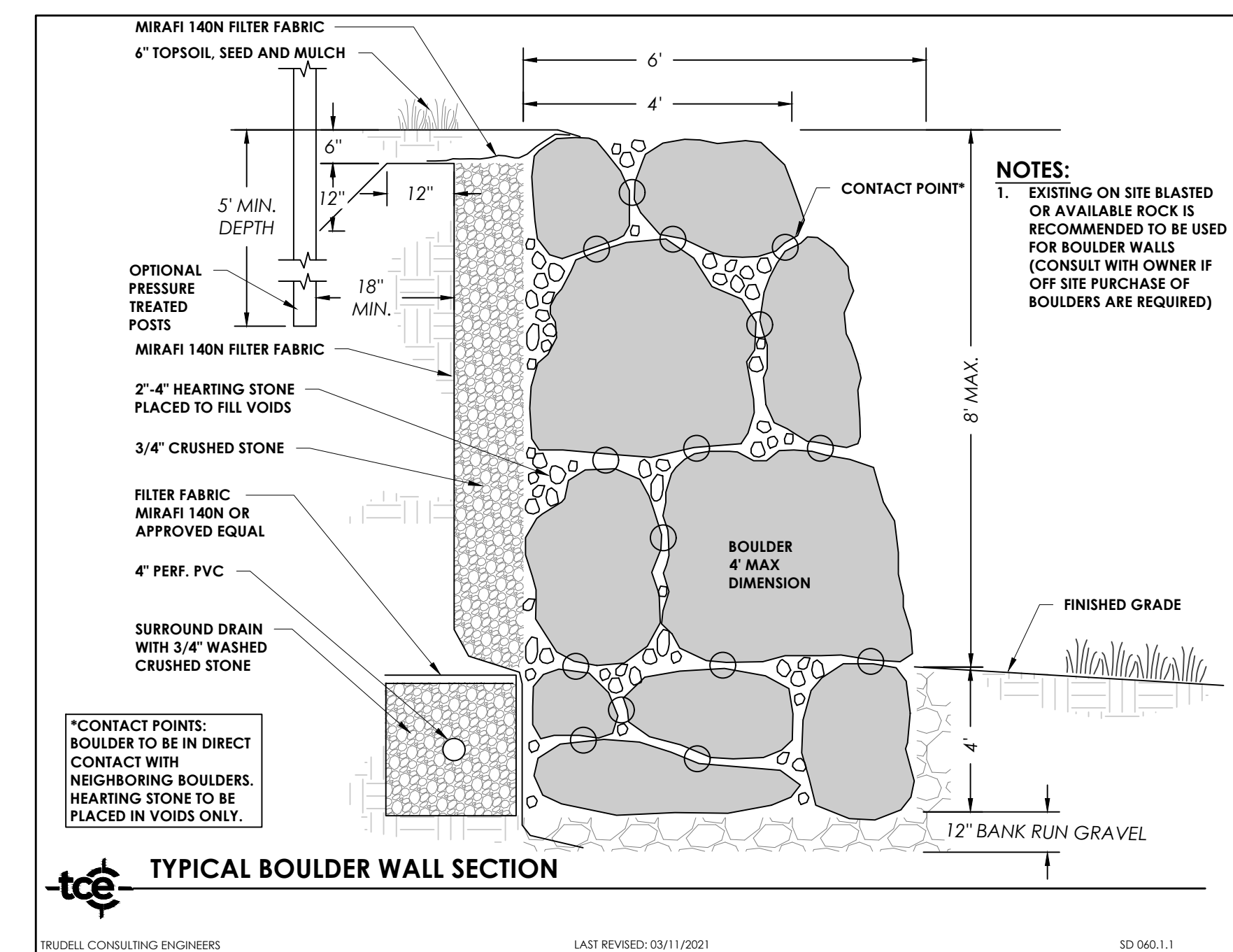
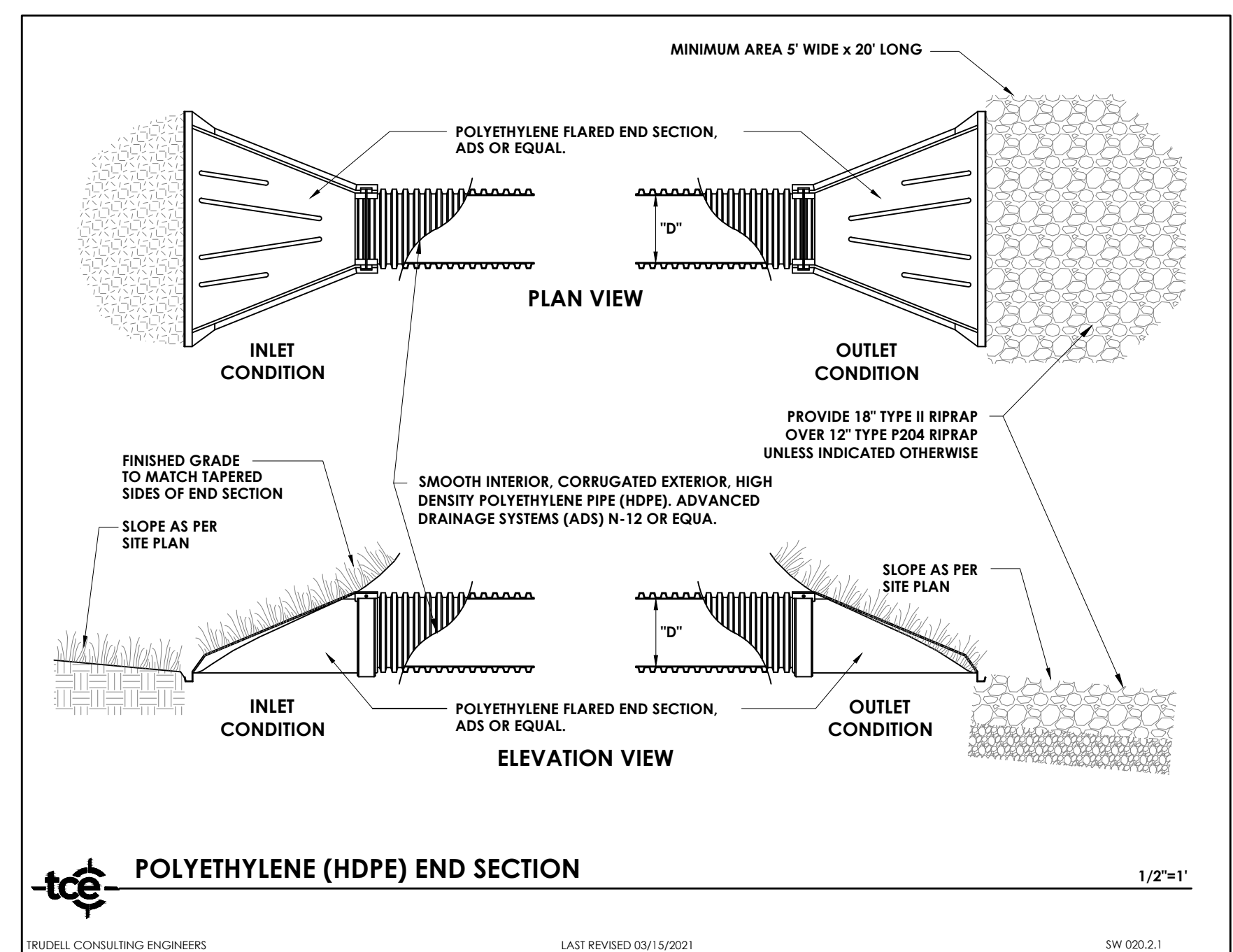
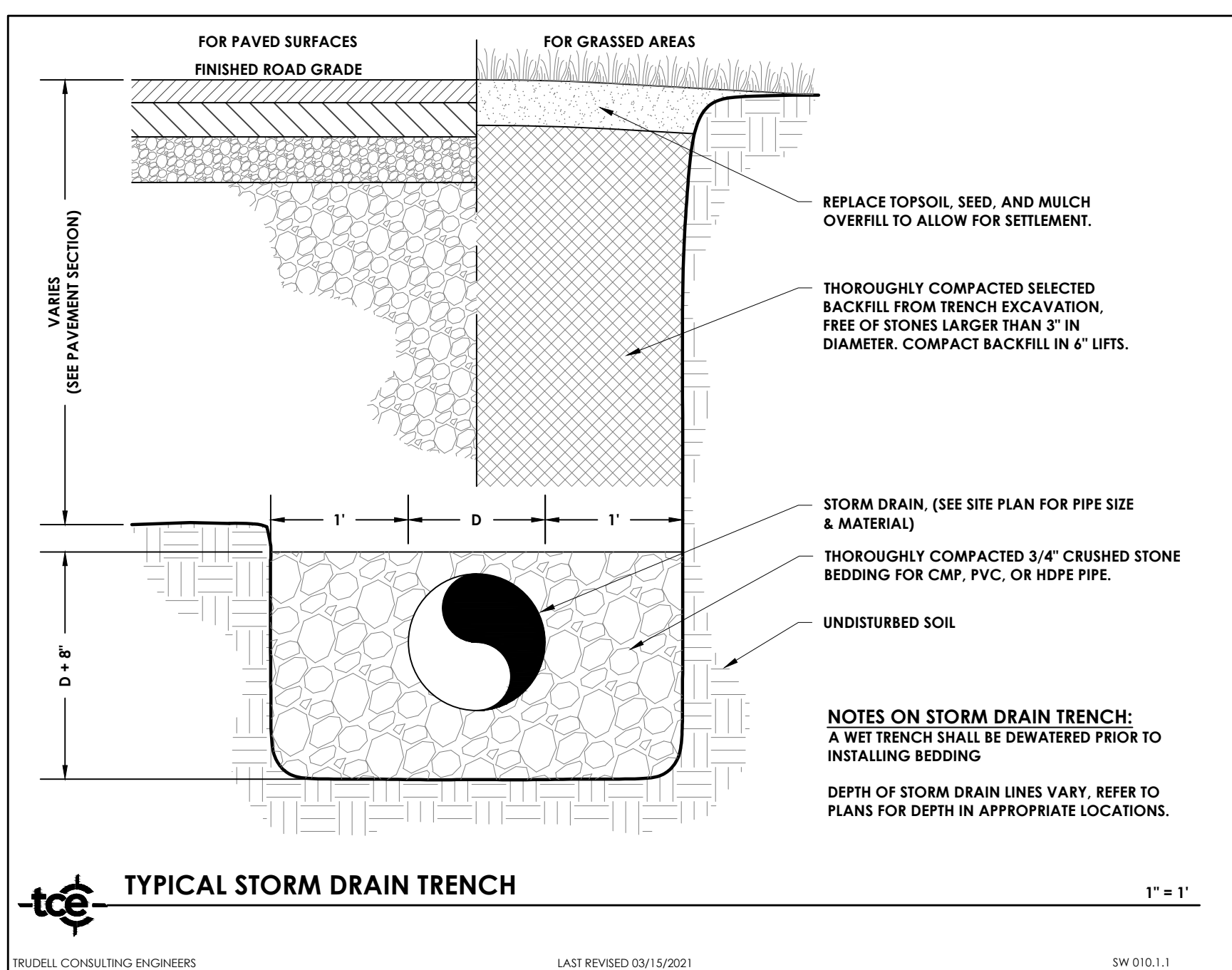
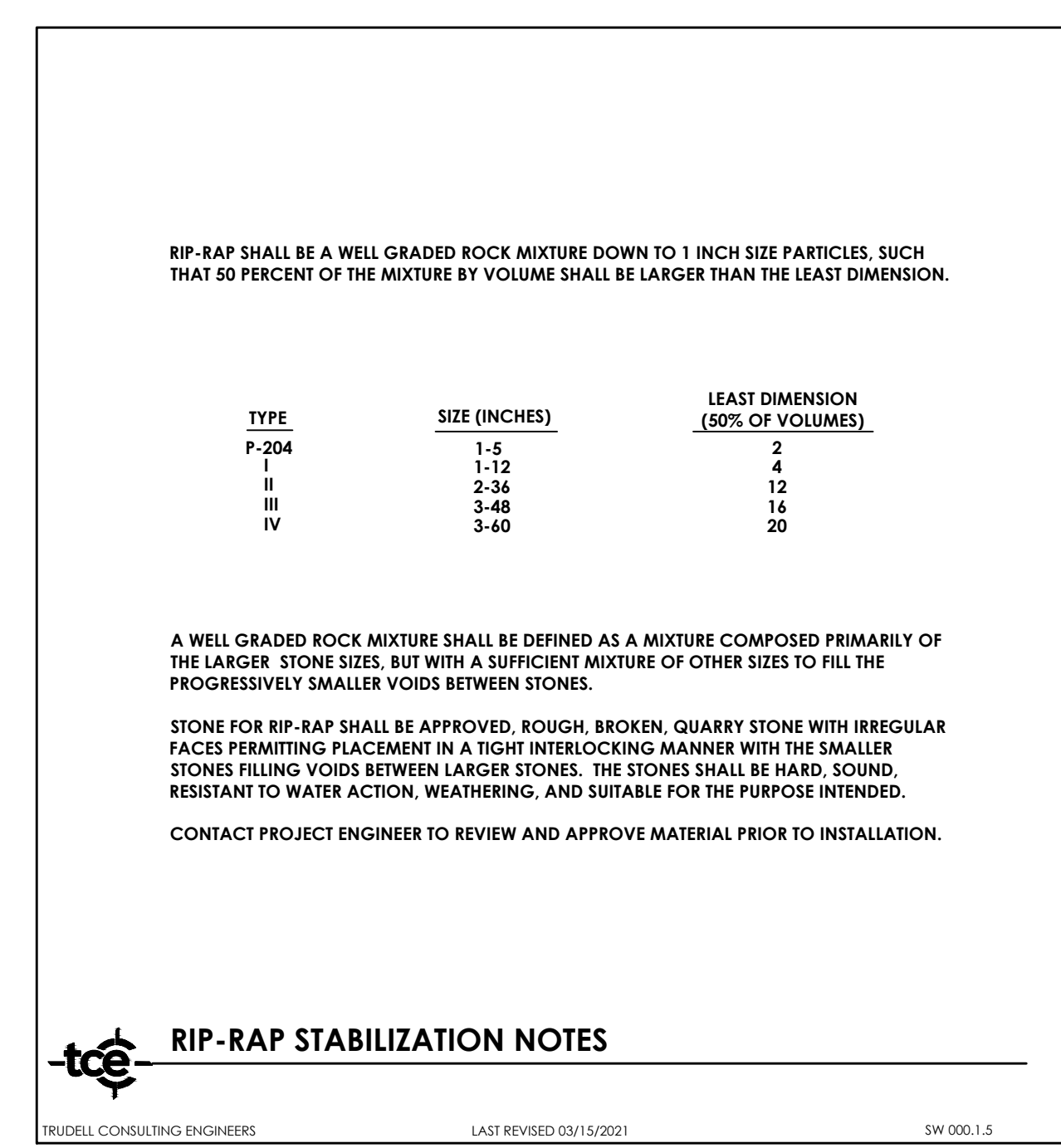
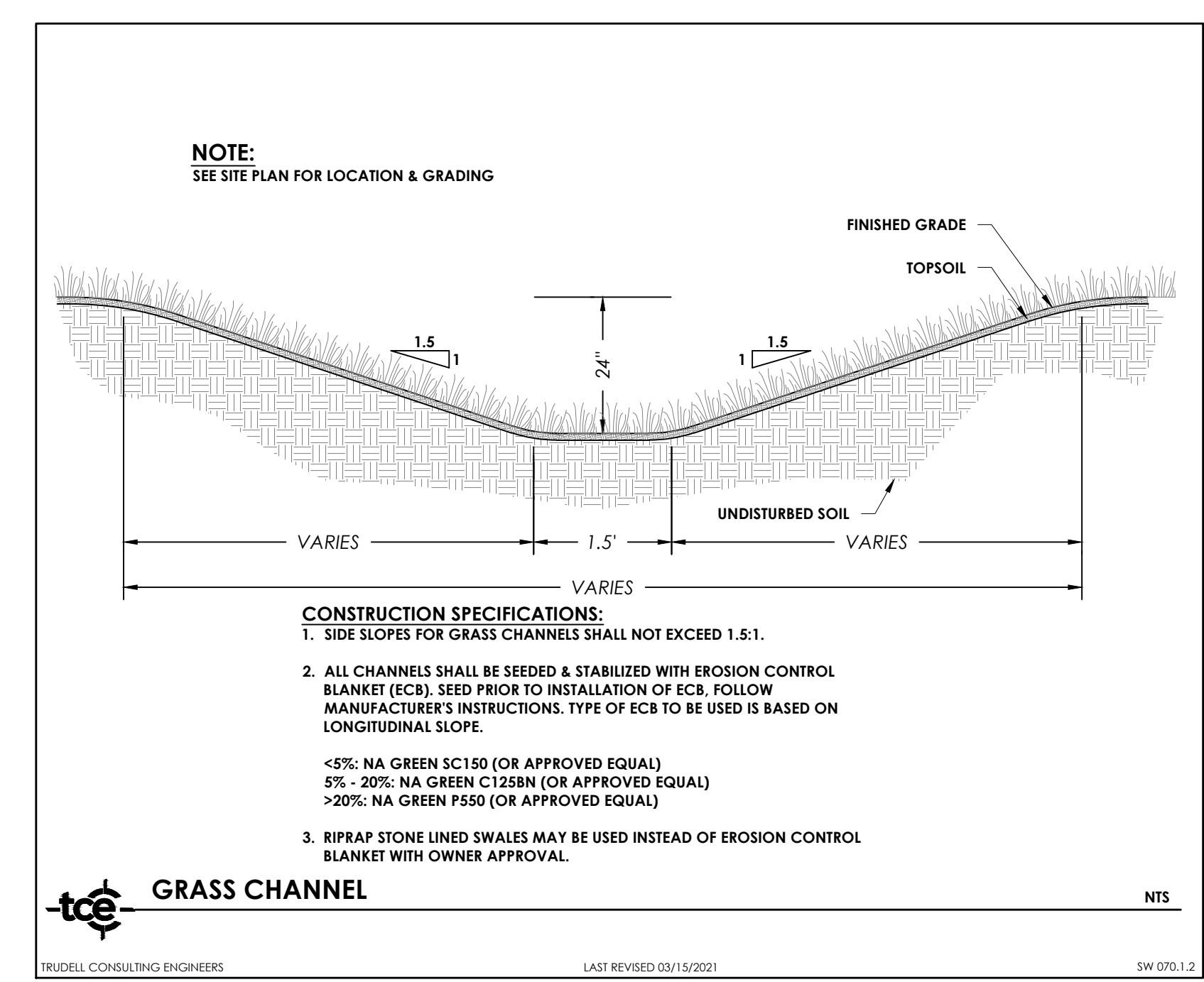
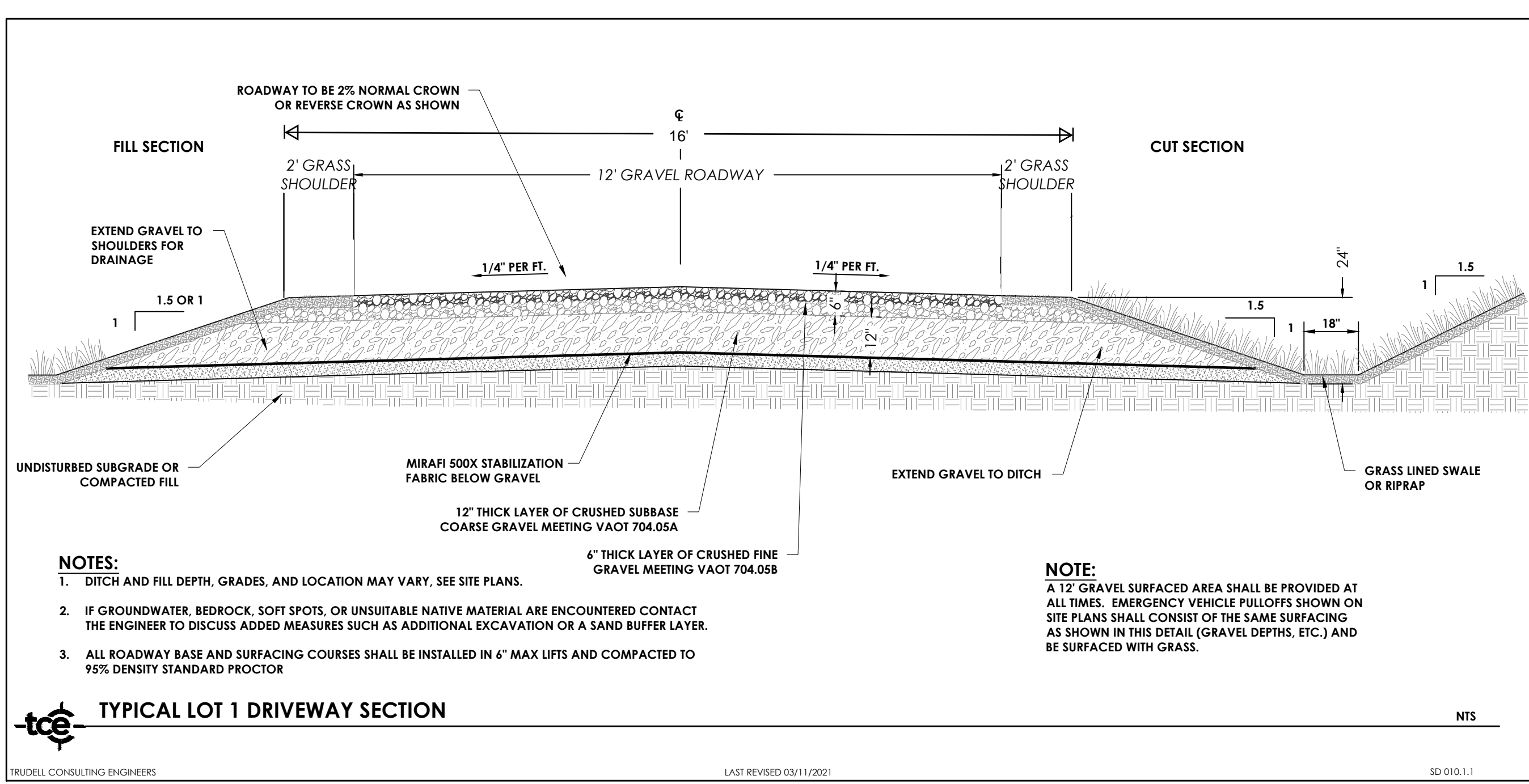
LOT 1 DRIVE PROFILE
 H: 1"=30'
 V: 1"=10'



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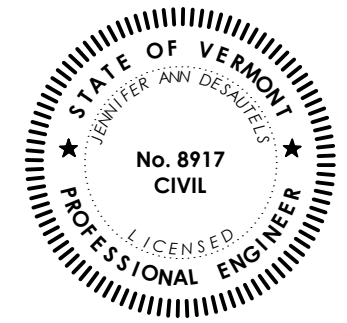
Revisions

No.	Description	Date	By



TAX ID: 101450000

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Project Title

Joel & Jennifer Desautels
 1333 Bullock Road
 Georgia, Vermont

Sheet Title

LOT 1 Driveway Details

Date: 01/17/2024
 Scale:
 Project Number: 15-212
 Drawn By: CMJ
 Project Engineer: JAD
 Approved By: JAD
 Field Book:

C8-00.1



Town of Georgia

47 Town Common Road North. • St. Albans, VT 05478
• Phone: 802-524-3524 • Fax: 802-524-3543 • website: townofgeorgia.com

Site Plan Application

Application #SA _____ Original SP# _____

Submission Requirements: An application for Sketch Plan Review will consist of one set 11"x17" site plan maps plus a digital file in *.pdf format which includes scale, north arrow, legend, abutters, title block, with supporting data to include items listed on the attached checklist, and as approved in the original Site Plan. The application will not be deemed complete until all required materials have been submitted. Failure to submit a complete application, as defined herein, shall be grounds for denial of the application by the DRB.. Applicant must also submit a list for all abutters, including those across a public or private right of way. **Incomplete applications will be returned and will delay scheduling your hearing.**

SECTION 1: OWNER/APPLICANT INFORMATION (complete all)

Owner(s): Jennifer & Joel Desautels Applicant(s): same as owners
Address: 1333 Bullock Rd Address: _____
Georgia, VT
Zip Code 05468 Telephone 802-370-4270 Zip Code _____ Telephone _____
Email jenn.desautels@tcevt.com Email _____

Tax Parcel ID: 101450000 Zoning District: L2/AR1 PUD Yes No

CERTIFICATION OF APPLICANT(S)

AFFIRMATION: The undersigned hereby certifies that the information submitted in this application is true, accurate, and complete.

Signature of Applicant: *Joel Desautels* Date: 1/11/24

Signature of Applicant: *Jennifer A. Desautels* Date: 1/11/24

PROPERTY OWNERS' AUTHORIZATION

The undersigned property owner(s) hereby certify that the information submitted in this application regarding this property is true, accurate and complete and that the Applicant(s) have full authority to request approval for the proposed use of the property and any proposed structure(s).

Signature of Owner: *Joel Desautels* Date: 1/11/24

Signature of Owner: *Jennifer A. Desautels* Date: 1/11/24

Location of Property: 1333 Bullock Rd, Georgia, VT 05468
Parcel ID No.: 101450000 Zoning District: L2
Deed Reference: Volume 254 Page 47 Size of Parcel: 9.01 acres

Previous subdivision of parcel (if applicable)

Permittee name: Desautels 3 Lot Subdivision approval 11/23/21 & Desautels/Gordon BLA (11/9/22)

Date: 11/23/21 Map # _____

Previous Site Plan Approval (if applicable)

Permittee name: N/A

Date: _____ Map # _____

If applicable:

Engineer: Jennifer Desautels, P.E./TCE Surveyor: Gerald Stockman, L.S.

Phone: 802-370-4270 Phone: 802-879-6331

Email: jenn.desautels@tcevt.com Email: gerald.stockman@tcevt.com

Description of proposed project: (Please describe here or attach a separate proposal)

The site plan revision is limited to relocating the driveway. The previously approved driveway provides access to Lot 1 from Bullock Rd. The proposed driveway for Lot 1 provides access from Georgia Shore Rd. No other site plan changes are proposed.

The road length of the new driveway location is almost exactly the length of the previously approved driveway. Coordination with both the Fire Chief and Road Foreman have occurred. See attached letters and correspondence.

Names and addresses of abutting property owners:

See attached.

Existing and/or proposed means of access to the site:

Existing Access: Lot 1 (none constructed), Lot 2 (none constructed), Lot 3 (ex. driveway off Bullock Rd.)

Proposed Access: Lot 1 (proposed driveway off Georgia Shore Rd.), Lot 2 (proposed new driveway off Bullock Rd.)

Lot 3 (remains the same, ex. driveway off Bullock Rd.)

List of plans, sketches, or other information submitted with this application:

C2-00.1 Lot 1 Overall Site Plan, C6-03 & C6-04 Driveway Plan & Profile, C1-00 Legend & Notes
C1-00 Legend & Notes
S1-02 Boundary Line Agreement Plat (FOR REFERENCE ONLY) & C2-01 Previously Approved Site Plan (FOR REFERENCE ONLY)

Location of parking and proposed number of spaces:

N/A

Existing and/or proposed road & driveway access to site:

See driveway notes above.

Existing and/or proposed easements and rights-of-way:

No change to previously approved easements and rights-of-way.

Proposed and/or existing wastewater disposal and water supply:

No change to previously approved wastewater or water supply.

Proposed drainage/storm water runoff (if required):
N/A - Erosion control measures will follow State of Vermont Low-Risk Erosion Control Manual as required
No stormwater permitting required.

Proposed landscaping (if applicable):
N/A

Size and location of proposed and/or existing buildings:
No change to prior approvals.

State permits required and/or obtained for this project:
No change requiring state permits.

Proposed lighting (if any):
N/A

Notes

- 1) Narratives which summarize the purpose, scope and key proposed changes to the approved subdivision and/or site plan are encouraged & may be attached.
- 2) Application standards for subdivision approval appear in the Georgia Development Regulations as Article 4. Site Plan Review and Approval standards appear in Article 3.

Site Plan Review Checklist:

This checklist is intended to be used as an aid in developing a complete application for Site Plan Review before the DRB. An application for Site Plan Review will consist of eight (8) sets of site plan maps and supporting data which will include the following information, and such information as indicated in the Concept Plan Recommendation, if applicable. The DRB may require additional information as necessary to determine compliance with the regulations.

- 1. Address of subject property.
- 2. Name and address of the owners of record of the subject property
- 3. Name and address of the owners of record of adjoining lands.
- 4. Map or survey, drawn to scale, showing existing features, including contours, land use, structures, large trees, roads, easements, rights of way, deed restrictions, name and address of person or firm preparing the map, scale of map, north point, date of map/revisions, and legend.

5. Site Plan, 24" by 36" digital file in PDF format in size and drawn to an appropriate scale proposed land use areas including proposed structures, roads, driveways, traffic circulation, parking and loading spaces, and pedestrian walkways; landscaping plans including site grading, culverts, drainage, landscape design, screening, signs and lighting; name and address of person or firm preparing the map, scale of map, north point, date of map and revisions, legend, and name, address and interest of the applicant in the subject property.
6. The DRB may require that the map or survey and site plan be prepared by a landscape architect, registered land surveyor, registered civil engineer, or registered architect if the proposed project utilizes more than 3,500 square feet, including parking area, or is a complex proposal that could have impacts on surrounding property owners, major roads, or important resources.
7. Construction sequence and timing schedule for completion of each phase for buildings, parking spaces, and landscaped areas of the entire project.
8. Specifications of the materials and plantings to be used.
9. A site location map showing the location of the project in relation to nearby town highways and developed areas at scale of one inch equals one thousand feet.
10. Uses that will generate more than one hundred and fifty (150) vehicle trip-ends per day (estimates shall be based on the most recent rates provided by the Institute of Transportation Engineers) shall include a traffic study conducted by a professional traffic engineer. The study will include details of existing and proposed ingress and egress, expected traffic volumes, turning movements, existing, and resulting levels of service, and proposed traffic control measures. The DRB may require a traffic study for projects generating less than 150 vehicle trip-ends where it finds there is a potential traffic safety issue.
10. A letter from the Georgia Fire Chief indicating any fire and rescue concerns with the proposed project.
11. A lighting plan including the location and height of mountings and/or light poles, fixture type, lamp type, wattage, level of illumination (footcandles). The DRB may require that the lighting plan be developed by a qualified professional. This plan shall show light levels, evenness, and patterns of light distribution, and should also indicate the lamp type, wattage, and lamp loss factors applied.
12. Sign details including dimensions, height, material, and proposed lighting.
13. At the request of the applicant, the DRB may waive any of the above submission requirements, but only where it finds that the size and scope of the application is such that the requirements represent an undue burden on the applicant and are clearly not necessary for the Commission to make findings on the application consistent with the requirements of these Zoning Regulations.
14. All fees according to the Permit Fee Schedule on the website at:

[Fee Schedule](#)

Decisions

The DRB shall act to approve or disapprove Site Plan applications in writing within forty-five (45) days after closure of the public hearing. Failure to act within the 45-day period shall constitute deemed approval on the 46th day. The DRB may recess and continue a hearing pending receipt of requested information, and non-submittal of requested information shall constitute grounds for Site Plan denial. The DRB shall prepare written findings-of-fact and conclusions setting forth background and rationale for their decision. The DRB may attach conditions of approval to ensure the intent of applicable bylaws and the municipal plan are met.

Site Plan decisions shall be distributed per requirements in Title 24, Chapter 117, Section 4464(b) Vermont Statutes Annotated.

Section 3. Item #A.

(FOR TOWN USE ONLY):

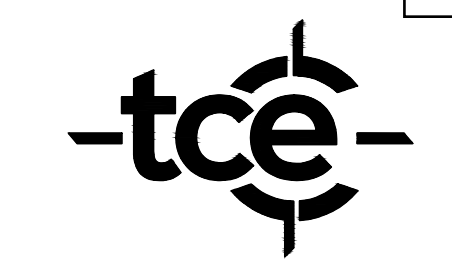
Date received: _____ Fee paid: _____ Check # _____

Returned (incomplete) _____ Date: _____

Signed: _____

Douglas Bergstrom
Zoning Administrator
Planning, DRB & 911 Coordinator

You will receive a written Decision and Finding of Fact within 45 days of the close of the hearing.



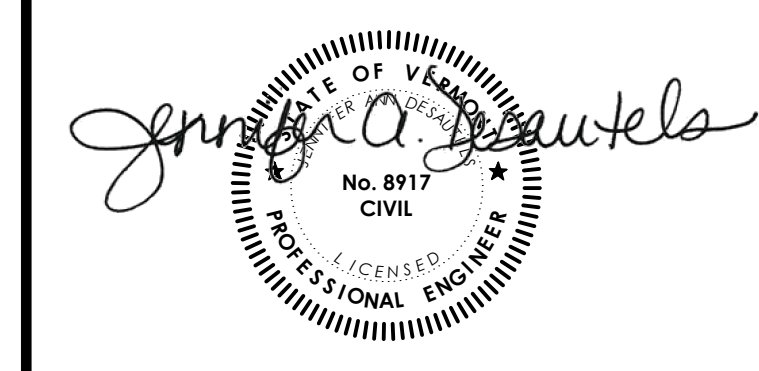
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 478 BLAIR PARK ROAD | WILLISTON, VERMONT 05495
 802 879 6331 | WWW.TCEVT.COM

Revisions	No.	Description	Date	By
Plan Revisions			01/17/24	CMJ

TAX ID: 101450000

Use of These Drawings

- Unless otherwise noted, these Drawings are intended for preliminary planning, coordination with other disciplines or utilities, and/or approval from the regulatory authorities. They are not intended as construction drawings unless noted as such or marked approved by a regulatory authority.
- By use of these drawings for construction of the Project, the Owner represents that they have reviewed, approved, and accepted the drawings, obtained all necessary permits, and have met with all applicable parties/disciplines, including but not limited to, the Engineer and the Architect, to insure these plans are properly coordinated including, but not limited to, contract documents, specifications, owner/contractor agreements, building and mechanical plans, private and public utilities, and other pertinent permits for construction.
- Owner and Architect, are responsible for final design and location of buildings shown, including an area measured a minimum five (5) feet around any building and coordinating final utility connections shown on these plans.
- Prior to using these plans for construction layout, the user shall contact TCE to ensure the plan contains the most current revisions.
- These Drawings are specific to the Project and are not transferable. As instruments of service, these drawings, and copies thereof, furnished by TCE are its exclusive property. Changes to the drawings may only be made by TCE. If errors or omissions are discovered, they shall be brought to the attention of TCE immediately.
- It is the User's responsibility to ensure this copy contains the most current revisions.



Project Title

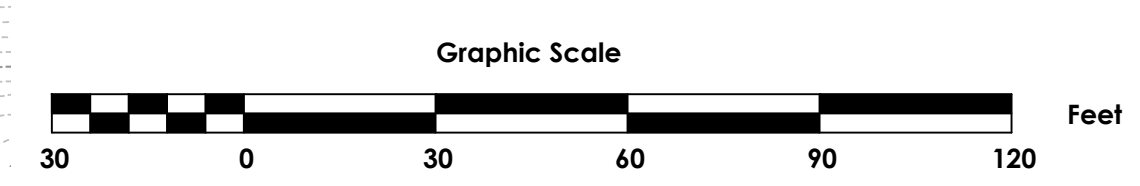
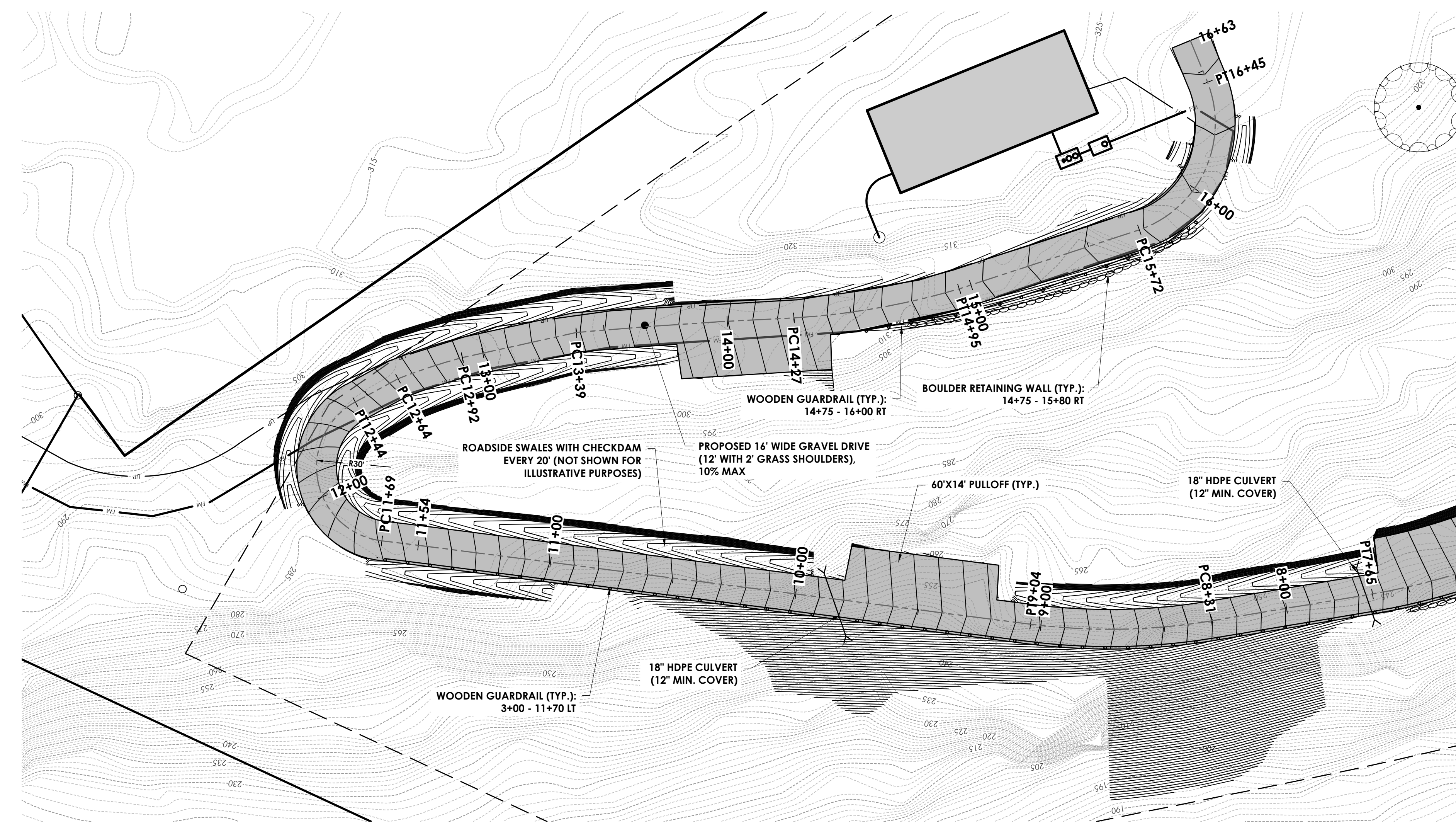
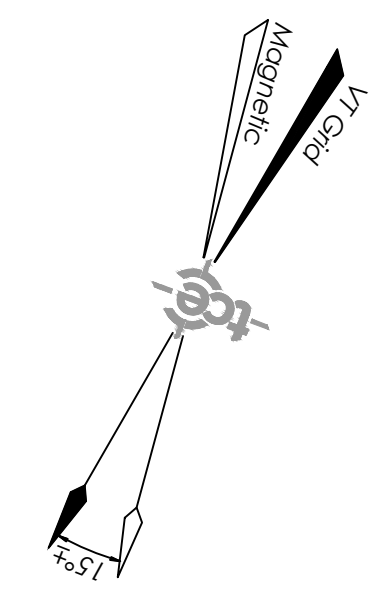
Joel & Jennifer Desautels
 1333 Bullock Road
 Georgia, Vermont

Sheet Title

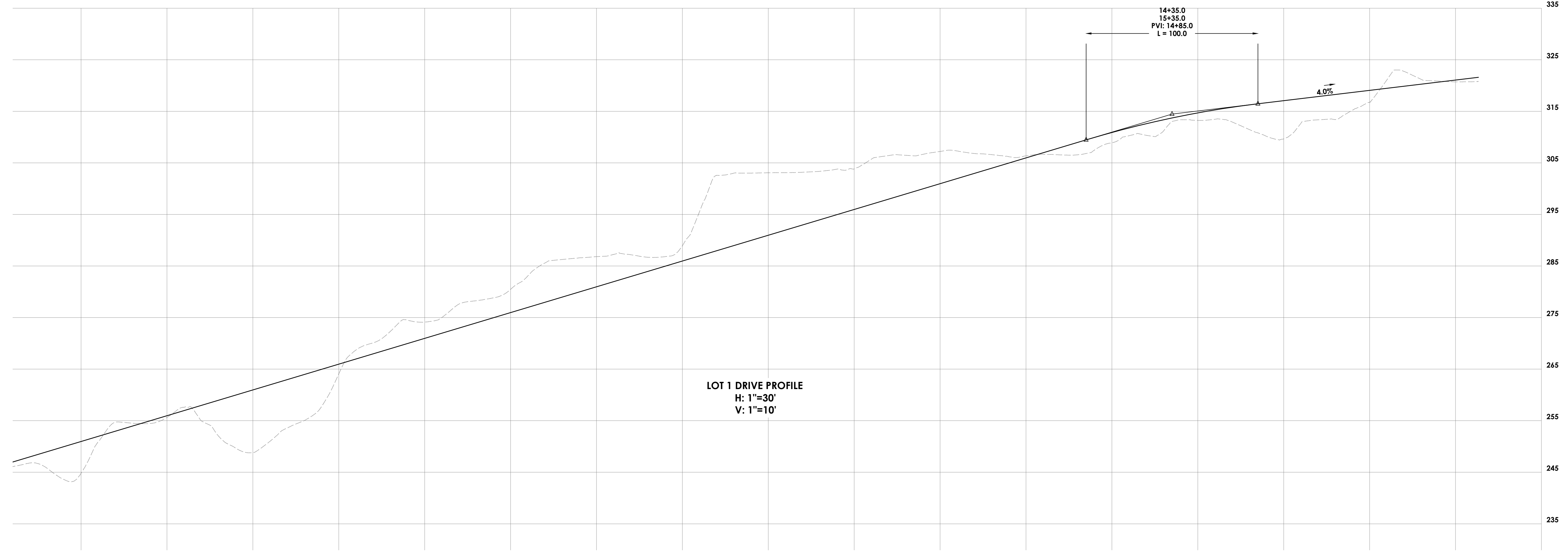
Lot 1 Driveway Plan & Profile

Date: 10/27/2023
 Scale: Shown
 Project Number: 15-212
 Drawn By: CMJ
 Project Engineer: JAD
 Approved By: JAD
 Field Book:

C6-04

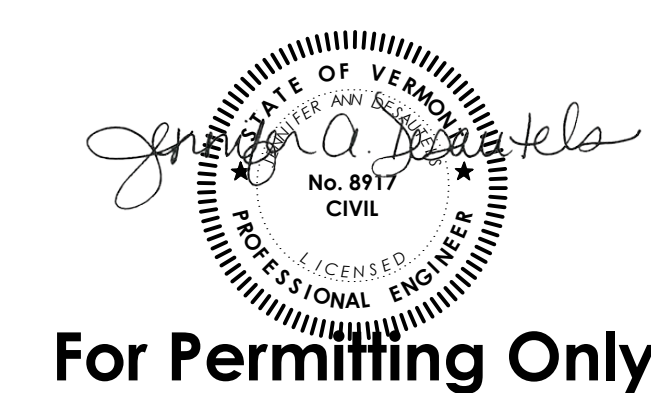


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9+00	10+00	11+00	12+00	13+00	14+00	15+00	16+00	17+00								





- Use of These Drawings**
- Unless otherwise noted, these drawings are intended for preliminary planning, coordination with other disciplines or utilities, and/or approval from the regulatory authorities. They are not intended as construction drawings unless noted as such or marked approved by a regulatory authority.
 - By use of these drawings for construction of the Project, the Owner represents that they have reviewed, approved, and accepted the drawings, obtained all necessary permits, and have met with all applicable parties/disciplines, including but not limited to, the Engineer and the Architect, to insure these plans are properly coordinated including, but not limited to, contract documents, specifications, owner/contractor agreements, building and mechanical plans, private and public utilities, and other pertinent permits for construction.
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 - It is the User's responsibility to ensure this copy contains the most current revisions.



For Permitting Only

Project Title

Joel & Jennifer Desautels
1333 Bullock Road
Georgia, Vermont

Sheet Title

EPSC Low Risk Handbook Sheet 1

Date: 10/03/2021

Scale:

Project Number: 15-212

Drawn By: CMJ

Approved By: JAD

Project Engineer: JAD

Field Book:

C8-05

Low Risk Site Handbook for Erosion Prevention and Sediment Control

VERMONT ENVIRONMENTAL OBSERVATION
February 2020

2. Pollution Prevention

Purpose:
Many construction sites require storage of chemicals and materials that have detrimental effects if released into our waterways. A storage plan for these potential pollution sources as well as a spill prevention and clean up plan are required to mitigate these risks.

Requirement:
Design, install, implement, and maintain effective pollution prevention measures to minimize the discharge of pollutants. At a minimum, such measures must be designed, installed, implemented and maintained in accordance with the following requirements.

Hydroseed

As per manufacturer's instructions.
• Must include mulch component
• Not acceptable stabilization for winter construction period

Excellent application of hydroseed with a mulch component. Entire soil surface has been covered and is temporarily stabilized.

Poor hydroseed application. Not applied at the appropriate rate, soil not prepared, and very little mulch component in mix.

Diversion Berm Installation:

2:1 SLOPE OR FLATTER

GRADE LINE

CUT OR FILL SLOPE

CROSS SECTION

A - Berm Height: 1.5 feet
B - Berm Width: 2 feet
Side slopes: 2:1 (H:V) or flatter

C - Flow width: 4 feet
D - Flow depth: 8 inches

- Construct berm to the minimum specification above.
- Compact the berm with a shovel or earth-moving equipment.
- Seed and mulch berm or cover with erosion control matting immediately after installation.
- Stabilize the flow channel with seed and mulch or erosion control matting. Line the channel with 4 inch stone if the channel slope is greater than 20%.
- Ensure the berm drains to an outlet stabilized with riprap. Ensure that there is no erosion at the outlet.

Excellent installation of reinforced silt fence and J-hooks in front of a stone-lined drainage channel.

ALTERNATIVE KEY-IN DETAIL

Low Risk Site Handbook for Erosion Prevention and Sediment Control

A construction stormwater discharge permit must be obtained for construction activity that results in total land disturbance of equal to or greater than 1 acre, including construction activities where disturbance is less than 1 acre, but is part of a larger common plan of development, if the larger development will ultimately result in the disturbance of 1 or more acres.

Vermont Construction General Permit (CGP) 3-9020 guides an applicant in assessing the potential risk to water quality from the proposed construction activity and categorizes the project activity as Low Risk, Moderate Risk, or that which requires an Individual Permit.

The practices in this handbook serve as the required Erosion Prevention and Sediment Control Plan for construction activity that is determined to be "Low Risk" under CGP 3-9020.

Table of Contents

Section 1: Introduction
What is erosion prevention and sediment control? . . . 1

How to comply:

- Minimize the exposure of the following to precipitation and to stormwater:
 - building materials,
 - building products,
 - construction wastes,
 - trash,
 - landscape materials,
 - fertilizers,
 - pesticides,
 - herbicides,
 - detergents,
 - sanitary waste, and
 - other materials present on the site.
- Minimization of exposure is not required in cases where the exposure to precipitation and to stormwater will not result in a discharge of pollutants, or where exposure of a specific material or product poses little risk of stormwater contamination (such as final products and materials intended for outdoor use).

Requirements for Dust Control:

Construction roads, access points, and other disturbed areas subject to surface dust movement and dust blowing during dry periods where off-site damage may occur if dust is not controlled shall be sprayed with water to prevent dust mobilization. **Chemical applications, including the use of chloride, shall not be applied without written approval from the VT DEC.**

Requirements for Final Stabilization:

All areas of disturbance must have permanent stabilization within 48 hours of reaching final grade.

- Bring the site or sections of the site to final grade as soon as possible after construction is completed. This will reduce the need for additional sediment and erosion control measures and will reduce the total disturbed area.
- Prepare bare soil for seeding by grading the top 4 to 6 inches of soil and removing any large rocks or debris, and apply seed per suppliers specifications.

6. The diversion berm shall remain in place until the disturbed areas are completely stabilized.

Good construction, seeding, and stabilization of diversion berm. Note that diversion ditch is lined with grass on flatter part of slope, and with rock on steeper part.

Erosion Control Berms

Erosion control berms are comprised of a dense mixture of interweaving wood fragments and grit that form a stable, long lasting mat. Common sources include stump grindings, and aged wood waste.

Erosion Control Berm Installation:

- Stump grindings from land clearing are an excellent source of material for erosion control berms, and may be readily produced when the area to be developed is forested.
- Erosion control berms are effective on frozen ground, rock outcrops, and forested areas with heavy root cover. It may be necessary to pack down or remove vegetation to prevent the creation of voids or bridges which will allow berm washout and pass sediment laden water offsite.
- The erosion control berm should be a minimum of 1 foot tall and 2 feet wide. On longer or steeper slopes a larger berm may be necessary.

Erosion Control Berm Maintenance:

- Erosion control berms must be redressed and reshaped as necessary to ensure that sediment doesn't accumulate more than halfway up the berm face.

Section 2: The Requirements

- Demarcate Limits of Disturbance 3
- Pollution Prevention 5
- Limit Concurrent Earth Disturbance 7
- Site Stabilization Construction Access 9
- Divert Upland Runoff 14
- Install Perimeter Controls 21
- Storm Inlet Protection 23
- Water Bars 37
- Slow Down Channelized Runoff 39
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- Winter Construction Requirements 49
- Dewatering Activities 55
- Concrete Washout 57
- Permanent Controls 59
- Inspection, Maintenance, and Discharge Reporting 61

Section 3: Additional Resources

How to calculate slope. 63
How to estimate area 63

3. Limit Concurrent Earth Disturbance

Purpose:
Limit the amount of soil exposed at one time to reduce the potential erosion on the construction site.

Requirement:
The maximum area of concurrent earth disturbance is specified on the site's written authorization to discharge. Earth disturbance at any one time cannot exceed the maximum concurrent disturbance identified in the authorization. Areas that are at final stabilization or that have been temporarily stabilized in accordance with Section 4 of this handbook, are not counted toward the maximum concurrent disturbance area.

5. Stabilized Construction Access

Purpose:
A stabilized construction access helps remove mud and sediment from vehicles and equipment to prevent tracking onto streets.

Requirements:
If there will be any vehicle or equipment traffic off of the construction site, you must install a stabilized construction access at the start of construction.

Construction access detail. Access pad must keep mud from tracking onto both paved and gravel roads.

7. Install Perimeter Controls

Purpose:
Silt Fence and Erosion Control Berms intercept runoff and allow suspended sediment to settle or filter out. Filter Socks and Straw Wattles also filter construction runoff and are acceptable for use in specific situations. Silt Fence, Erosion Control Berms, Filter Socks and Straw Wattles are all acceptable perimeter controls based on site specific conditions. Permittees must ensure the right practice is selected for erosion prevention and sediment control.

Requirements:
Perimeter controls must be installed:

- On the downhill side of the construction activities
- Between any ditch, swale, storm drain, or surface water and the disturbed soil
- Perimeter controls not labeled as biodegradable shall be removed once the drainage area has reached final stabilization

* Hay bales must not be used exclusively as sediment barriers due to their tendency to degrade and fall apart and may only be used in support of other required practices.

Filter Socks

A manufactured tube made of either a synthetic material or an organic fiber which is filled with erosion control mix or other finely shredded organic material such as coconut fiber. They are an excellent practice for slowing runoff on long open slopes and for use around stockpiles.

Filter Sock Installation:

- Filter socks are best used for small areas of disturbance, at the base of stockpiles, across slope contours and across paved areas.
- Full contact with the ground is critical for filter socks to be effective and to prevent bypass. A trench 2'-3" deep shall be dug along the path of the filter sock, with the exception of installations across paved areas.
- Most applications will require staking at 10 ft intervals, which should help both keep the filter sock in place and push it downward for maximum contact with the ground.

Filter Sock Maintenance:

- Accumulated sediment should be removed and placed in an upland location when material reaches half of the filter sock height.
- Filter socks can be reshaped if they become flattened or caked in sediment.

Section 1 Introduction

What is erosion prevention and sediment control?
Stormwater runoff carrying sediment into streams, lakes, and wetlands is a large contributor to surface water quality problems in Vermont. Sediment discharges from unmanaged construction sites can adversely impact aquatic habitat, and may have lasting impacts on fish and other aquatic organisms.

On most construction sites, the existing vegetation that holds the soil in place and protects it from the erosive forces of rain and runoff is removed, leaving large areas of soil exposed. During rainfall or snowmelt, the exposed soil may be easily eroded and transported to nearby streams, lakes, or wetlands*.

How to comply:

Plan ahead and phase the construction activities to ensure that no more than the permitted maximum concurrent acreage is disturbed and unstabilized at one time.

Be sure to properly stabilize exposed soil using one of the methods introduced in Section 4 of this handbook before beginning work in a new section of the site.

How to install:

Rock Size: Use a mix of 1 to 4 inch stone
Depth: 8 inches minimum
Width: 12 feet minimum, flared at road for vehicle turning
Length: 40 feet minimum (or length of driveway for residential projects, if shorter)
Geotextile: Place filter cloth under entire stone bed

Maintenance:
Redress with clean stone or scarify to open voids as required to keep sediment from tracking onto the street.

Good stabilized construction access. Adequate width to accommodate construction traffic and prevent mud tracking offsite. Ensure that the pad is 8 inches deep and 40 feet long.

How to Comply:

Select and install a perimeter control from the following options: Silt Fence, Erosion Control Berms, Filter Socks, or Straw Wattles.

Where to place:

- Place perimeter controls on the downhill side of disturbed soil. If space is available, place perimeter control 10 ft from the bottom of the slope, otherwise place along the contour at the bottom of the slope.
- Ensure the perimeter control catches all runoff from disturbed soil.
- Maximum drainage area is 1/4 acre for 100 feet of silt fence and erosion control berm.
- Install perimeter controls across the slope (not up and down slope)
- Do not install perimeter controls across ditches, channels, or streams.
- Maximum slope length (in feet) above a filter sock or straw wattle:

Slope (%)	Silt Drainage Area (ft)				Slope (%)	Straw Wattle (ft)
	12'	18'	24'	32'		
< 4	125	210	275	350	< 4	50
5-10	115	190	250	325	4.1-8.1	25
10-15	95	160	210	275	8.1-11.1	20
15-20	80	135	175	230	11.1-15.1	15
20-25	65	110	145	190	15.1-20	10
25-30	50	85	110	145	> 30	5

The erosion control berm above is allowing for both ponding and filtering of stormwater.

EROSION CONTROL BERM DETAIL

Good use of filter socks along a slope to slow runoff velocity.

To prevent this from happening, a small number of practices to prevent erosion and contain soil on the construction site must be used. The most effective approach to prevent a sediment discharge is temporary and final stabilization of exposed soils. Controls for sediment laden runoff are necessary at times, but should not be used as the primary means of prevention.

*Projects involving work within a jurisdictional (perennial) waterway for stream alteration, please contact your regional River Management Engineer for technical and permitting assistance.

*Projects involving work within or adjacent to jurisdictional lakes or buffers, please contact your regional Lakes and Ponds permitting staff for technical and permitting assistance.

*Projects involving work within jurisdictional wetlands or buffers, please contact your regional Wetland Ecologist for technical and permitting assistance.

4. Site Stabilization

Purpose:
Seeding and mulching, applying erosion control matting, and hydroseeding are all methods to temporarily stabilize exposed soil and prevent soil erosion prior to vegetative growth. Mulches and matting protect the soil surface while grass is establishing. Areas of earth disturbance may also be stabilized with stone, such as rip-rap or gravel, or other impervious surfaces such as pavement and concrete.

Requirements for Temporary Stabilization:
All areas of earth disturbance must have temporary or final stabilization within 14 days of initial disturbance, as stated in the project authorization. After this time, disturbed areas must be temporarily stabilized or permanently stabilized in advance of any runoff producing event. A runoff producing event is an event that produces runoff from the construction site.

The following exception applies:

- Temporary stabilization is not required if the work is occurring in a self-contained excavation (i.e. no outlet) with a depth of 2 feet or greater (e.g. house foundation excavation, utility trenches), provided any dewatering, if necessary, is conducted in accordance with Part 13.

Poor construction access. Rock pad is poorly constructed, rock is too small. Filter fabric is required under the 2 - 4 inch rock. Mud should not be tracked onto street.

- Where sediment has been tracked-out from your site onto paved roads, sidewalks, or other paved areas outside of your site, remove the deposited sediment by the end of the same business day in which the track-out occurs or by the end of the next business day if track-out occurs on a non-business day.
- Remove the track-out by sweeping, shoveling, or vacuuming these surfaces, or by using other similarly effective means of sediment removal.
- You are prohibited from hosing or sweeping tracked-out sediment into any stormwater conveyance, storm drain inlet, or water of the state.

Perimeter Control Construction Specifications

Silt Fence

A temporary barrier of geotextile fabric installed on the contours across a project site to intercept sediment laden runoff from small drainage areas of disturbed soil.

Silt Fence Installation:

- Dig a trench 6 inches deep across the slope
- Unroll silt fence along the trench
- Ensure stakes are on the downhill side of the fence
- Join fencing by rolling the end stakes together
- Drive stakes into against downhill side of trench
- Drive stakes until 16 inches of fabric is in trench
- Push fabric into trench; spread along bottom
- Fill trench with soil and pack down
- Gravel can be used to create ground contact with filter fabric when bedrock, ledges, or nearby tree roots do not allow for trenching. (A secondary perimeter control can be effective in these locations as well.)

TRIAL STRAW WATTLE INSTALLATION

Good use of straw wattles across a slope to slow runoff velocity.

Section 2 The Requirements

1. Demarcate Limits of Disturbance

Purpose:
Delineating the site will help to limit the area of disturbance to only what is necessary for construction, prevent unauthorized disturbance, preserve existing vegetation, and limit erosion potential on the site.

Requirement:
You must physically mark the limits of construction activity using one of the methods described below.

How to comply:

As required by the authorization, temporary stabilization for areas of earth disturbance shall be completed utilizing one or more of the methods below:

Hay or Straw Mulch

Mulching Rates

April 16 - Oct. 14 - Hay or Straw*: 1 inch deep (1.2 bales/1000 s.f.)
Oct. 15 - April 15 - Hay or Straw*: 2 inch deep (2.4 bales/1000 s.f.)
*seed may also be incorporated

Excellent application of hay mulch. Good mulch cover and perimeter control around soil stockpile.

6. Divert Upland Runoff

Purpose:
Diversion berms intercept stormwater runoff contributing from above the construction site and direct it around the disturbed area. This prevents offsite runoff from entering the construction site, thus reducing the potential for erosion and reducing the drainage area contributing to the site.

Requirements:
If stormwater runoff contributes to the construction site from upslope areas and the site meets the following two conditions, you are required to first install a diversion berm and stabilized swale before disturbing any additional soil.

- One or more acres of soil will be disturbed at any one time.
- Average slope of the disturbed area is 20% or steeper.*

* See page 63 for slope calculations.

Silt Fence Maintenance:

- Remove accumulated sediment before it is halfway up the fence.
- Ensure that silt fence is trenched in ground and there are no gaps.
- Replace any silt fence that is torn, ripped, or otherwise damaged that is no longer effective.

Straw Wattles

Straw wattles are similar to filter socks, but with less density due to straw filling material. These can be used in successive rows to slow sheet flow and collect sediment on long slopes or around the base of soil stock piles, but are not appropriate for application on impervious surfaces such as asphalt, concrete, or ledge.

Straw Wattle Installation:

Straw Wattles are best used for small areas of disturbance, at the base of stockpiles and across slope contours.

- Full contact with the ground is critical for straw wattles to be effective and to prevent short circuiting. A trench 2'-3" deep shall be dug along the path of the wattle.
- Straw wattles shall be secured with 18-24" stakes every 3-4' and with a stake at each end. Stakes shall be driven through the middle of the wattle and perpendicular to slope, leaving at least 2-3' of stake extending above wattle. In limited cases, wattles may be secured without stakes by use of sandbags if staking is not feasible.
- Adjacent wattles shall tightly abut or overlap.

Straw Wattle Maintenance:

- Accumulated sediment should be removed and placed in an upland location.

How to comply:

Before initiating any earth disturbing activities, install a perimeter fence, orange barrier tape, or flagging on stakes or trees to physically demarcate the approved limits of earth disturbance.

Properly placed barrier tape marks the boundaries and limits of construction on this site.

Wood Chip Mulch or Stump Grindings

Cover entire area with 2-7 inches or more of wood chip mulch or stump grindings.

Good application of wood chip mulch and stump grindings.

Berms and ditches divert upslope contributing runoff around construction sites and reduce erosion and sedimentation problems. Stabilize berms and ditches after construction.

Good use of J-hook in silt fence to trap sediment in water running along the fence. Sediment must be removed before it reaches halfway to top of fence.

Poor installation of silt fencing. Silt fence must be trenched in along bottom. Hay bales are not approved as sediment barriers.

- Straw wattles can be reshaped if they become flattened or caked in sediment.

TRIAL STRAW WATTLE INSTALLATION

Straw wattle properly staked in and providing setting of runoff from this shallow swale. Note a clean wattle was placed in front of an older less effective wattle.

TOWN OF GEORGIA, VT
RECEIVED FOR RECORD

Received for record _____ A.D. 202____
at _____ O'clock _____ m and recorded in
Slide # _____
Attest: _____
Town Clerk

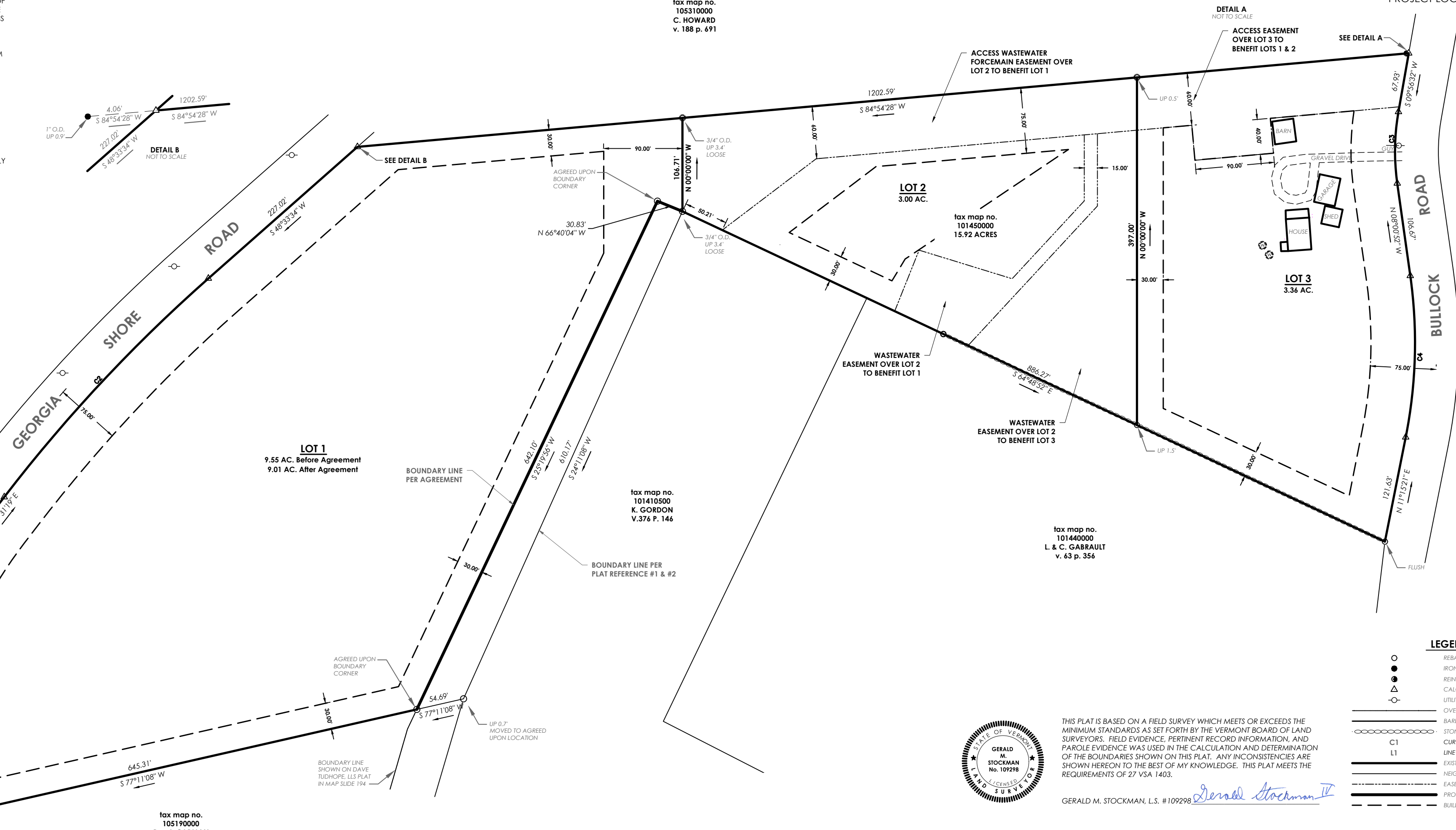
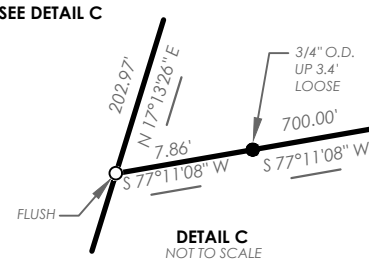
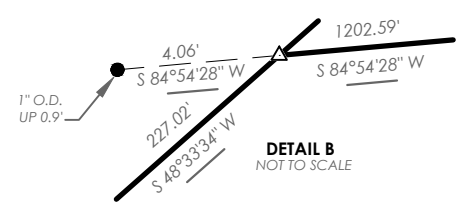
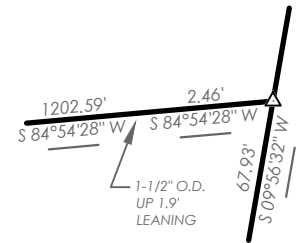
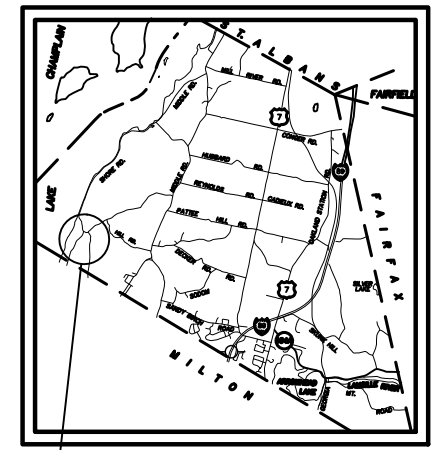
PREVIOUSLY SUBDIVISION PLAT SUBMITTED FOR REFERENCE ONLY

THIS SUBDIVISION PLAT HAS BEEN APPROVED BY RESOLUTION OF THE DEVELOPMENT
REVIEW BOARD OF THE TOWN OF GEORGIA, VT, THIS _____ DAY OF
SAID RESOLUTION, 202____, SUBJECT TO THE REQUIREMENTS AND CONDITIONS OF

SIGNED THIS _____ DAY OF _____ 202____
BY _____, DRB CHAIR.

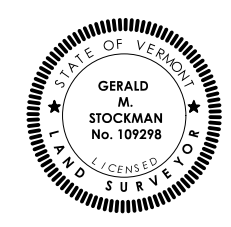
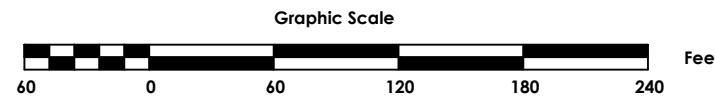
NOTES:

- THIS PLAT IS BASED ON DEEDS RESEARCHED IN THE TOWN OF GEORGIA LAND RECORDS AND A CLOSED FIELD TRAVERSE CONDUCTED WITH A TOTAL STATION ON 4/17/16. BEARINGS ARE BASED ON VERMONT STATE PLANE GRID NORTH ESTABLISHED WITH RTK OBSERVATIONS FROM VERMONT CORS STATION VISA.
 - REBAR'S SET ARE NO. 5 REINFORCING BARS WITH ALUMINUM CAPS STAMPED TRUDELL CONSULTING ENGINEERS, LS 109298.
 - THIS PARCEL WAS CONVEYED TO JOEL AND JENNIFER DESAUTELS IN VOLUME 254 PAGE 47 AND SHOWN ON A PLAT ENTITLED "PLAT OF SURVEY, DAWN C. CULTER", WHICH IS RECORDED IN MAP SLIDE 181.
 - DISTANCES ARE SHOWN TO THE HUNDRETH OF A FOOT AND BEARINGS ARE SHOWN TO THE SECOND FOR MATHEMATICAL CLOSURE PURPOSES ONLY.
 - AN ATTEMPT HAS BEEN MADE TO IDENTIFY OR DELINEATE EASEMENTS, RIGHTS OF WAY, LEASE LANDS, ENCROACHMENTS, ETC. OBSERVED IN THE FIELD OR READILY FOUND IN THE LAND RECORDS. ADDITIONAL ENCUMBRANCES MAY EXIST WHICH ARE NOT SHOWN ON THIS PLAT.
 - UNDERGROUND UTILITY LINES SHOWN ARE BASED ON ABOVE GROUND STRUCTURES AND PLANS OF RECORD. ACTUAL LOCATION OF UNDERGROUND LINES MAY VARY.
- PLAT REFERENCES:
- "BOUNDARY PLAT JOEL & JENNIFER DESAUTELS" DATED 5/4/16 BY TRUDELL CONSULTING ENGINEERS.
 - "SUBDIVISION PLAT JOEL & JENNIFER DESAUTELS" DATED 9/22/21 BY TRUDELL CONSULTING ENGINEERS.



CURVE DATA TABLE

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING
C1	547.32	193.90'	192.89'	S 27°22'23\"/>
C2	1775.26	341.98'	341.45'	S 43°02'28\"/>
C3	281.53	81.97'	81.63'	S 07°57'50\"/>
C4	550.80	185.25'	184.38'	N 01°37'15\"/>



THIS PLAT IS BASED ON A FIELD SURVEY WHICH MEETS OR EXCEEDS THE MINIMUM STANDARDS AS SET FORTH BY THE VERMONT BOARD OF LAND SURVEYORS. FIELD EVIDENCE, PERTINENT RECORD INFORMATION, AND PAROLE EVIDENCE WAS USED IN THE CALCULATION AND DETERMINATION OF THE BOUNDARIES SHOWN ON THIS PLAT. ANY INCONSISTENCIES ARE SHOWN HEREON TO THE BEST OF MY KNOWLEDGE. THIS PLAT MEETS THE REQUIREMENTS OF 27 VSA 1403.

GERALD M. STOCKMAN, L.S. #109298 *Gerald Stockman IV*

LEGEND

- REBAR (SET)
- IRON PIPE (FOUND)
- REINFORCING BAR (FOUND)
- CALCULATED POINT
- UTILITY POLE
- OVERHEAD UTILITY LINES
- BARBED WIRE FENCE
- STONE WALL
- C1 CURVE DATA TABLE REFERENCE
- L1 LINE DATA TABLE REFERENCE
- EXISTING BOUNDARY LINE
- NEIGHBORING BOUNDARY LINE
- EASEMENT
- PROPOSED BOUNDARY LINE
- BUILDING ENVELOPE/SETBACK

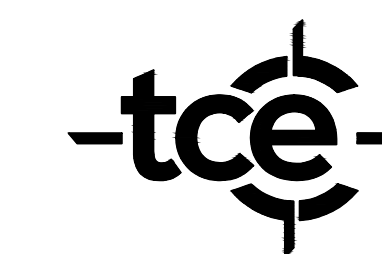
Boundary Line Agreement
DESAUTELS & GORDON
1333 Bullock Road
Georgia, Vermont

TRUDELL CONSULTING ENGINEERS
478 BLAIR PARK ROAD | WILLISTON, VERMONT 05495 802.879.6331 | WWW.TCEVT.COM

Date:	5/12/22
Scale:	1" = 60'
Project Number:	15-212
Drawn By:	CMJ
Surveyed By:	JAD
Date of Survey:	5/12/2022
Field Book:	331
Crd file:	15-212
Sheet:	S1-02

This is an original inkjet on mylar. This plat meets the requirements of 27 VSA 1403. (Signature)

This map has been reduced.



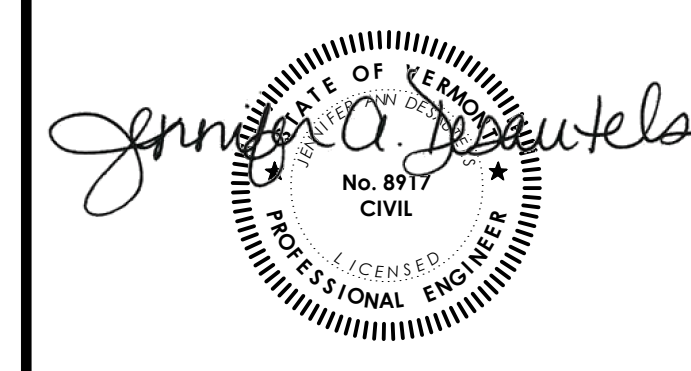
ENGINEERING • SURVEY
PLANNING • ENVIRONMENTAL
478 BLAIR PARK ROAD | WILLISTON, VERMONT 05495
802 879 6331 | WWW.TCEVT.COM

Revisions	No.	Description	Date	By
State Permitting Revisions			10/03/21	CMJ
Plan Revisions			05/19/23	CMJ

TAX ID: 101450000

Use of these Drawings

1. Unless otherwise noted, these Drawings are intended for preliminary planning, coordination with other disciplines or utilities, and/or approval from the regulatory authorities. They are not intended as construction drawings unless noted as such or marked approved by a regulatory authority.
2. By use of these drawings for construction of the Project, the Owner represents that they have reviewed, approved, and accepted the drawings, obtained all necessary permits, and have met with all applicable parties/disciplines, including but not limited to, the Engineer and the Architect, to insure these plans are properly coordinated including, but not limited to, contract documents, specifications, owner/contractor agreements, building and mechanical plans, private and public utilities, and other pertinent permits for construction.
3. Owner and Architect, are responsible for final design and location of buildings shown, including an area measuring a minimum five (5) feet around any building and coordinating final utility connections shown on these plans.
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6. It is the User's responsibility to ensure this copy contains the most current revisions.



Project Title

Joel & Jennifer Desautels
1333 Bullock Road
Georgia, Vermont

Sheet Title

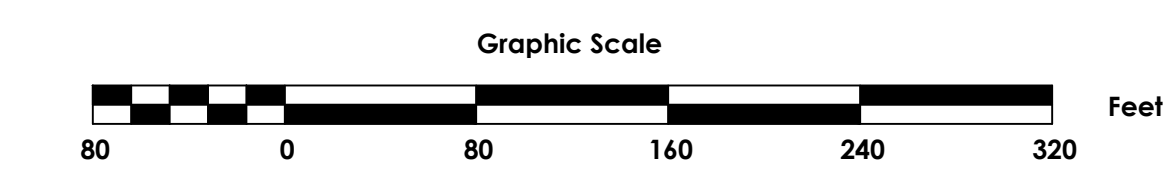
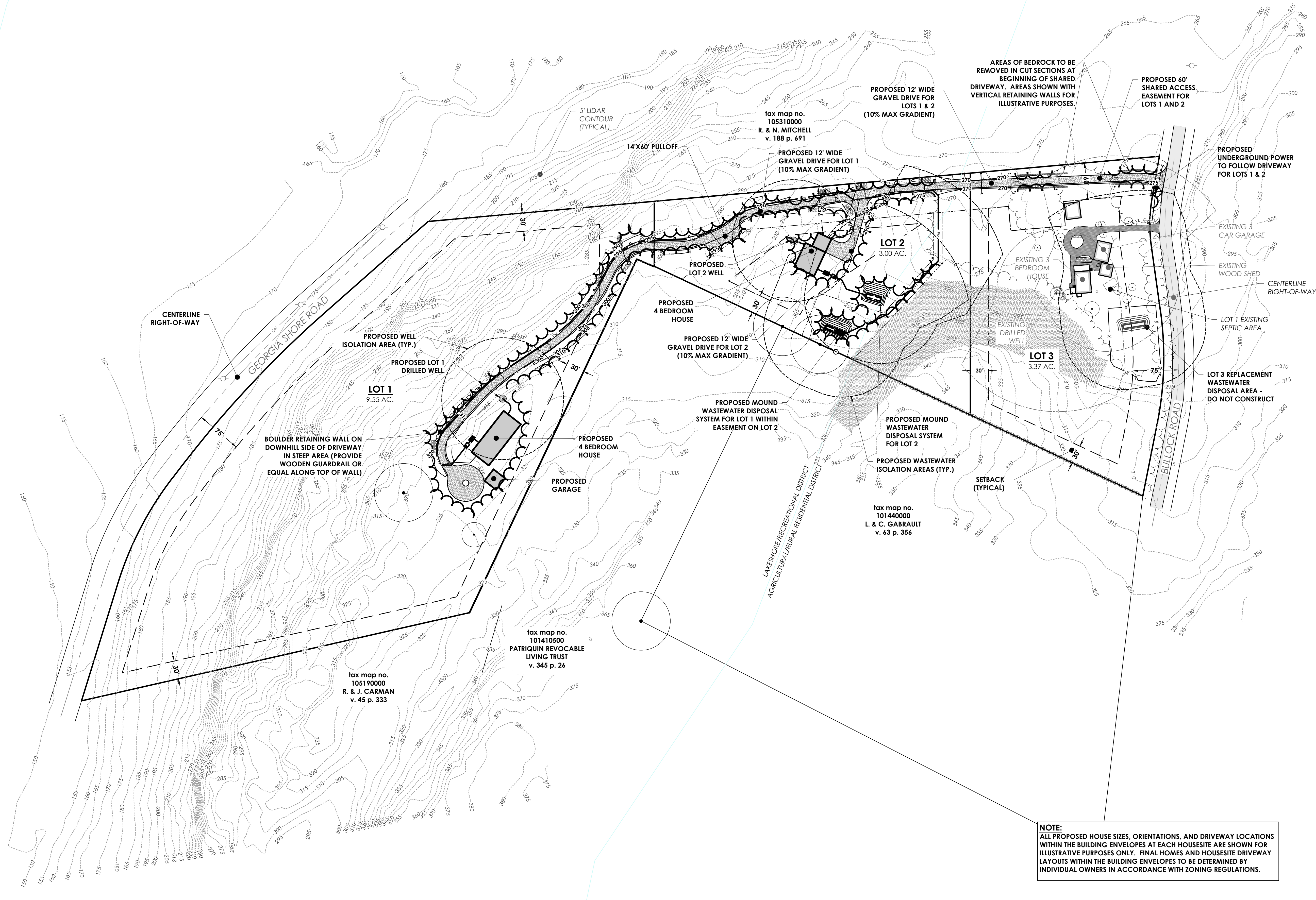
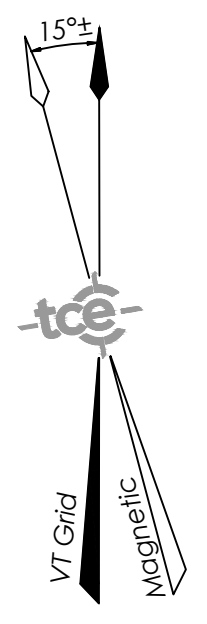
Site Plan

Date: 12/30/2020
Scale: 1" = 80'
Project Number: 15-212
Drawn By: RMP
Project Engineer: JAD
Approved By: JAD
Field Book:

PREVIOUSLY APPROVED SITE PLAN SUBMITTED FOR REFERENCE ONLY

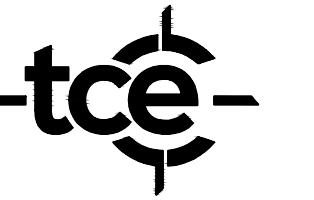
PURPOSE OF PLAN:
THE PURPOSE OF THIS PROJECT IS TO SUBDIVIDE THE EXISTING PROPERTY INTO THREE SINGLE FAMILY DWELLING LOTS. THE EXISTING HOME WILL REMAIN ON LOT 1. ONE NEW 4 BEDROOM HOME IS PROPOSED ON THE TWO NEW LOTS (LOT 1 & 2).

LOT AREA SUMMARY:
EXISTING PROPERTY = 15.92 ACRES
PROPOSED LOT 1 (NEW 4 BEDROOM HOME) = 9.55 ACRES
PROPOSED LOT 2 (NEW 4 BEDROOM HOME) = 3.00 ACRES
PROPOSED LOT 3 (EXISTING 3 BEDROOM HOME) = 3.37 ACRES



C2-01

**SPECIAL NOTE:
FOR CLARITY, ALL ORIGINAL COLOR SHEETS
MUST BE REPRODUCED IN COLOR**



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Revisions
No. Description Date By

LEGEND

	EXISTING	PROPOSED	REMOVED/ABANDONED
PAVED DRIVE OR ROAD			
GRAVEL DRIVE OR ROAD			
PAVED DRIVE OR ROAD WITH CURB			
TREE LINE			
TRAIL			
WETLAND LIMIT			
TOPOGRAPHIC CONTOURS			
STREAM			
GUARD RAIL			
SEWER MAINS AND SERVICES			
SEWER FORCEMAIN			
WATER MAINS AND SERVICES			
STORM DRAINAGE			
CURTAIN DRAIN			
UNDERDRAIN			
ROOF DRAIN			
FOOTING DRAIN			
LIQUID PROPANE OR NATURAL GAS			
OVERHEAD UTILITY			
UNDERGROUND UTILITY			
PROPERTY LINE			
ADJOINING PROPERTY LINE			
EASEMENTS			
FENCE			
STONEWALL			
SETBACKS			
WELL CONE / WASTEWATER CONE OF INFLUENCE			
SIGN			
SEWER, DRAINAGE OR TELEPHONE MANHOLE (SMH/DMH/TMH)			
CLEANOUT (CO)			
CATCH BASIN (CB)			
YARD DRAIN (YD)			
OUTLET OR END SECTION			
VALVE			
CURB STOP (CS)			
FIRE HYDRANT (HYD)			
WATER SUPPLY WELL			
END CAP			
BLOWOFF			
UTILITY POLE			
MTC OR TRANSFORMER			
TELEPHONE OR TELEVISION PEDESTAL (TEL-PED/TV-PED)			
LUMINAIRE			
BOLLARD LIGHT			
CANOPY LIGHT			
FLOOD OR WALL LIGHT			
BENCHMARK			
PERCOLATION TEST			
SOIL TEST PIT			
SOIL BORING			
OBSERVATION WELL			
TCE CONTROL POINT STEEL REBAR			
TCE CONTROL POINT MAG NAIL			

SURVEY	FOUND	TO BE SET	SET
IRON PIPE			
STEEL REBAR			
CONCRETE MONUMENT			
MARBLE OR STONE MONUMENT			
IRON PIN (IP)			
CALCULATED POINT			

CONSTRUCTION NOTES FOR CONTRACTOR & CLIENT/OWNER:

- CONTRACT DOCUMENTS:** THESE PLANS WERE PREPARED BY TRUDELL CONSULTING ENGINEERS (TCE) AND ARE INTENDED TO BE USED IN CONJUNCTION WITH THE STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT, #C-700 PREPARED BY THE ENGINEERS JOINT CONTRACT DOCUMENTS COMMITTEE (EJCDC), LATEST EDITION. COPIES ARE AVAILABLE AT WWW.EJCDC.ORG.
- UNDERGROUND IMPROVEMENTS:** THE LOCATION OF EXISTING UNDERGROUND UTILITIES AND IMPROVEMENTS SHOWN ARE ASSUMED BASED ON RESEARCH, UTILITY PLANS PROVIDED BY OTHERS, AND/OR SURFACE EVIDENCE AVAILABLE AND WERE OBTAINED IN A MANNER CONSISTENT WITH THE ORDINARY STANDARD OF PROFESSIONAL CARE AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR THE DESIGN ENGINEER.
- DIFFERING SUBSURFACE OR PHYSICAL CONDITIONS:** IF CONTRACTOR BELIEVES THAT ANY SUBSURFACE OR PHYSICAL CONDITION AT OR CONTIGUOUS TO THE SITE THAT IS UNCOVERED OR REVEALED EITHER: (1) IS OF SUCH A NATURE AS TO ESTABLISH THAT ANY "TECHNICAL DATA" ON WHICH CONTRACTOR RELIED IS MATERIALLY INACCURATE; OR (2) IS OF SUCH A NATURE AS TO REQUIRE A CHANGE IN THE PLANS/CONTRACT DOCUMENTS; OR (3) DIFFERS MATERIALLY FROM THAT SHOWN OR INDICATED IN THE PLANS/CONTRACT DOCUMENTS; OR (4) IS OF AN UNUSUAL NATURE, AND DIFFERS MATERIALLY FROM CONDITIONS ORDINARILY ENCOUNTERED AND GENERALLY RECOGNIZED AS INHERENT IN WORK OF THE CHARACTER PROVIDED FOR IN THE PLANS/CONTRACT DOCUMENTS; THEN CONTRACTOR SHALL, PROMPTLY AFTER BECOMING AWARE THEREOF AND BEFORE FURTHER DISTURBING THE SUBSURFACE OR PHYSICAL CONDITIONS OR PERFORMING ANY WORK IN CONNECTION THEREWITH (EXCEPT IN AN EMERGENCY), NOTIFY OWNER AND ENGINEER ABOUT SUCH CONDITION. CONTRACTOR SHALL NOT FURTHER DISTURB SUCH CONDITION OR PERFORM ANY WORK IN CONNECTION THEREWITH (EXCEPT AS AFORESAID) UNTIL RECEIPT OF WRITTEN ORDER TO DO SO. ALL PARTIES INVOLVED (OWNER, ENGINEER, ARCHITECT AND MUNICIPALITY IF APPLICABLE) SHALL AGREE UPON HOW TO PROCEED AND ANY RELATED COST IMPLICATIONS.
- UTILITIES:** PRIVATE AND PUBLIC UTILITIES SUCH AS ELECTRIC, TELEPHONE, GAS, CABLE, FIBER OPTIC ETC. ARE THE RESPONSIBILITY OF THE RESPECTIVE UTILITY COMPANY. ANY INFORMATION SHOWN BY TCE SHOULD BE CONSIDERED PRELIMINARY (USUALLY TO ASSIST WITH PERMITTING.) FINAL DESIGN, CONSTRUCTION AND MAINTENANCE ARE THE RESPONSIBILITY OF RESPECTIVE UTILITY COMPANIES. COMPLIANCE WITH EASEMENTS AND REGULATIONS (STATE AND LOCAL) ARE THE RESPONSIBILITY OF RESPECTIVE UTILITY COMPANY.
- DIGSAFE:** IN ACCORDANCE WITH VERMONT STATE LAW (VSA TITLE 30 CHAPTER 86 AND PSB RULE 3.800) THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT DIGSAFE SYSTEMS, INC. "DIGSAFE," AT LEAST 48 HOURS, EXCLUDING SATURDAYS, SUNDAYS, AND LEGAL HOLIDAYS, BUT NOT MORE THAN 30 DAYS BEFORE COMMENCING EXCAVATION ACTIVITIES. EXCEPT IN AN EMERGENCY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRE-MARKING THE SITE AND MAINTAINING DESIGNATED MARKINGS. FOR MORE INFORMATION ON DIGSAFE REQUIREMENTS SEE WWW.DIGSAFE.COM.
- JOB SITE SAFETY:** NEITHER THE PROFESSIONAL ACTIVITIES OF TRUDELL CONSULTING ENGINEERS (TCE), NOR THE PRESENCE OF TCE OR ITS EMPLOYEES AND SUB CONSULTANTS AT A CONSTRUCTION SITE, SHALL RELIEVE THE GENERAL CONTRACTOR AND ANY OTHER ENTITY OF THEIR OBLIGATIONS, DUTIES AND RESPONSIBILITIES INCLUDING, BUT NOT LIMITED TO, CONSTRUCTION MEANS, METHODS, SEQUENCE, TECHNIQUES OR PROCEDURES NECESSARY FOR PERFORMING, SUPERINTENDING OR COORDINATING ALL PORTIONS OF THE WORK OF CONSTRUCTION IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND ANY HEALTH OR SAFETY PRECAUTIONS REQUIRED BY ANY REGULATORY AGENCIES. TCE AND ITS PERSONNEL HAVE NO AUTHORITY TO EXERCISE ANY CONTROL OVER ANY CONSTRUCTION CONTRACTOR OR OTHER ENTITY OR THEIR EMPLOYEES IN CONNECTION WITH THEIR WORK OR ANY HEALTH OR SAFETY PRECAUTIONS. THE CLIENT AGREES THAT THE GENERAL CONTRACTOR IS SOLELY RESPONSIBLE FOR JOB SITE SAFETY, AND WARRANTS THAT THIS INTENT SHALL BE MADE EVIDENT IN THE CLIENT'S AGREEMENT WITH THE GENERAL CONTRACTOR. THE CLIENT ALSO AGREES THAT THE CLIENT, TCE AND TCE'S CONSULTANTS SHALL BE INDEMNIFIED AND SHALL BE MADE ADDITIONALLY INSURED UNDER THE GENERAL CONTRACTOR'S GENERAL LIABILITY INSURANCE POLICY.
- CODES AND STANDARDS COMPLIANCE:** TCE SHALL EXERCISE USUAL AND CUSTOMARY PROFESSIONAL CARE IN ITS EFFORTS TO COMPLY WITH CODES, STANDARDS, REGULATIONS AND ORDINANCES IN EFFECT. THE OWNER ACKNOWLEDGES THAT SUCH REQUIREMENTS MAY BE SUBJECT TO VARIOUS AND CONTRADICTORY INTERPRETATIONS. TCE, THEREFORE, WILL USE ITS REASONABLE PROFESSIONAL EFFORTS AND JUDGMENT TO INTERPRET APPLICABLE REQUIREMENTS AS THEY APPLY TO THE PROJECT. TCE, HOWEVER, CANNOT AND DOES NOT WARRANT OR GUARANTEE THAT THE PROJECT WILL COMPLY WITH ALL INTERPRETATIONS OF SUCH REQUIREMENTS.
- CONSTRUCTION OBSERVATION:** TCE MAY VISIT THE PROJECT AT APPROPRIATE INTERVALS DURING CONSTRUCTION TO BECOME GENERALLY FAMILIAR WITH THE PROGRESS AND QUALITY OF THE CONTRACTOR'S WORK AND TO DETERMINE IF THE WORK IS PROCEEDING IN GENERAL ACCORDANCE WITH THE CONTRACT DOCUMENTS. THE OWNER HAS NOT RETAINED TCE TO MAKE DETAILED INSPECTIONS OR TO PROVIDE EXHAUSTIVE OR CONTINUOUS PROJECT REVIEW AND OBSERVATION SERVICES. TCE DOES NOT GUARANTEE THE PERFORMANCE OF, AND SHALL NOT HAVE RESPONSIBILITY FOR, THE ACTS OR OMISSIONS OF ANY CONTRACTOR, SUB-CONTRACTOR, SUPPLIER OR ANY OTHER ENTITY FURNISHING MATERIALS OR PERFORMING ANY WORK ON THE PROJECT. TCE SHALL NOT SUPERVISE, DIRECT OR HAVE CONTROL OVER THE CONTRACTOR'S WORK NOR HAVE ANY RESPONSIBILITY FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES OF THE CONTRACTOR. IF THE OWNER DESIRES MORE EXTENSIVE PROJECT OBSERVATION OR FULL-TIME PROJECT REPRESENTATION, THE OWNER SHALL REQUEST SUCH SERVICES BE PROVIDED BY TCE AS ADDITIONAL SERVICES.
- THE CONTRACTOR SHALL REPAIR/RESTORE ALL DISTURBED AREAS (ON OR OFF THE SITE) AS A DIRECT OR INDIRECT RESULT OF THE CONSTRUCTION. ALL GRASSED AREAS SHALL BE MAINTAINED UNTIL FULL VEGETATION IS ESTABLISHED. MAINTAIN ALL TREES OUTSIDE OF CONSTRUCTION LIMITS.
- IN ADDITION TO THE REQUIREMENTS SET IN THESE PLANS AND SPECIFICATIONS, THE CONTRACTOR SHALL COMPLETE THE WORK IN ACCORDANCE WITH ALL PERMIT CONDITIONS, LOCAL PUBLIC WORKS STANDARDS AND ALL CONSTRUCTION SAFETY REGULATIONS.
- ANY DEWATERING NECESSARY FOR THE COMPLETION OF THE SITEWORK SHALL BE CONSIDERED AS PART OF THE CONTRACT AND SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
- IF THERE ARE ANY CONFLICTS OR INCONSISTENCIES WITH THE PLANS OR SPECIFICATIONS, THE CONTRACTOR SHALL CONTACT THE ENGINEER FOR VERIFICATION BEFORE WORK CONTINUES ON THE ITEM(S) IN QUESTION.
- SEWER LATERAL CONNECTIONS ARE SOMETIMES NOT SHOWN FOR CLARITY. CONTRACTOR TO CONSULT WITH ENGINEER AND SUPPLY BENDS, CLEANOUTS, ETC. AS NECESSARY TO FACILITATE PROPER CONNECTION BETWEEN FOUNDATION WALL AND SEWER MAIN LINE.
- CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH ALL RELEVANT PARTIES (INCLUDING, BUT NOT LIMITED TO OWNER, ARCHITECT AND UTILITY COMPANIES) TO DETERMINE FINAL LAYOUT AND DESIGN.
- DESIGN AND CONSTRUCTION OF PEDESTRIAN WALKS, RAMPS AND DECKS BETWEEN BUILDINGS AND PARKING LOTS IS PROVIDED BY THE ARCHITECT AND INCORPORATED INTO THE BUILDING DESIGN, UNLESS INDICATED OTHERWISE.
- ALL WATER LINE TAPS SHALL BE LIVE TAPS; EXISTING WATER LINE MUST REMAIN IN SERVICE DURING CONNECTION, UNLESS INDICATED OTHERWISE.
- ROOF DOWNSPOUT CAN CONNECT TO ROOF DRAIN MANIFOLD (RD) AS DETERMINED BY ARCHITECT AND OWNER. THIS CONNECTION PIPE IS INCLUDED AS PART OF THE DESIGN PLAN BUT NOT SHOWN TO ALLOW FLEXIBILITY IN LOCATION AS NEEDED.
- THRUST BLOCKS FOR PRESSURE LINES ARE NOT SHOWN FOR CLARITY PURPOSES. PROVIDE THRUST BLOCKS AT ALL BENDS, TEE AND REDUCES. PROJECT ENGINEER TO OBSERVE ALL THRUST BLOCKS PRIOR TO BACKFILL.
- WATER MAIN OPERATED AT HIGH PRESSURE. ALL BUILDINGS SHALL CONFIRM STATIC INTAKE PRESSURE AND PROVIDE PRESSURE-REDUCING VALVES AS DEEMED APPROPRIATE BY THE MECHANICAL ENGINEER (OR ARCHITECT.)
- CONTRACTOR TO SUPPLY DAYLIGHT PIPING FOR FOOTING DRAINS WITHIN CONSTRUCTION LIMITS. THE EXACT LOCATION MAY NOT BE CRITICAL. COORDINATE WITH OWNER AND PROJECT ENGINEER.
- FOOTING DRAINS AROUND BUILDING MAY BE SHOWN BY OTHERS (BECAUSE IT IS WITHIN THE 5' ZONE AROUND BUILDING). FOOTING DRAINS AND PIPE TO DAYLIGHT SHALL BE INCLUDED EVEN IF NOT SHOWN. DAYLIGHT PIPE LOCATION TO SWALE MAY NOT BE CRITICAL SO LONG AS IT DOES NOT CREATE ANY CONFLICT WITH OTHER UTILITIES, OR IMPACT ENVIRONMENTALLY SENSITIVE AREAS SUCH AS WETLANDS.
- SEWER CONNECTIONS TO EXISTING MANHOLES SHALL INCLUDE WATERTIGHT CONNECTIONS, REFORMING INVERT TO PROVIDE SMOOTH FLOW STREAM AND TESTING TO ENSURE STRUCTURE IS WATERTIGHT. IF AN EXISTING MANHOLE IS FOUND NOT TO BE WATERTIGHT IT SHALL BE EXPOSED AND REPAIRED ON THE OUTSIDE. PRIOR TO CONNECTING TO EXISTING MANHOLES, SUBMIT SHOP DRAWINGS ON CORE LOCATION, ANY REQUIRED PIPING (FOR DROP MANHOLES) AND CHANGES TO INVERT FORM.
- FINAL RIMS OF SEWER MANHOLES AND WATER VALVES SHALL BE CONFIRMED AND COORDINATED WITH FINAL SITE GRADING. MINOR ADJUSTMENTS FROM DESIGN GRADES MAY BE REQUIRED BY OWNER OR ENGINEER AND SHALL BE INCLUDED.
- ROCK REMOVAL WORK FOR BOULDERS UNDER 2.5 CUBIC YARDS IS INCLUDED AS PART OF EXCAVATION. ANY ROCK REMOVAL FOR 2.5 CUBIC YARDS OR GREATER SHALL BE TREATED AS LEDGE REMOVAL. THIS SHOULD BE REVIEWED AND AGREED UPON BY OWNER PRIOR TO CONDUCTING ROCK REMOVAL.
- THE GENERAL CONTRACTOR IS REQUIRED TO CONFORM TO THE STRICTEST INTERPRETATION OF THE CONTRACT DRAWING, SPECIFICATION, PERMITS AND CONSTRUCTION CONTRACT. ALL EARTH MATERIAL RECEIVED OR DISPOSED FROM OUTSIDE SOURCES SHALL COMPLY WITH APPLICABLE PERMITS AND REGULATIONS. SHOP DRAWING SUBMITTALS SHALL INCLUDE CONTRACTOR'S CERTIFICATION STATEMENT OF COMPLIANCE AND COPIES OF RELEVANT PERMITS FOR OUTSIDE SOURCES.
- CONTRACTOR SHALL PAY FOR ALL REQUIRED TESTING. THIS SHALL INCLUDE BUT IS NOT LIMITED TO: SOIL TESTING, COMPACTION TESTING, SIEVE ANALYSIS, CONCRETE TESTING, ASPHALT PENETRATION TESTING, BACTERIOLOGICAL TESTING FOR WATER AND OTHER TESTING AS PART OF STANDARD PRACTICE FOR A CONSTRUCTION PROJECT OF THIS NATURE, UNLESS INDICATED OTHERWISE AND APPROVED BY THE OWNER.

PROJECT INFORMATION:

OWNER OF RECORD:	JOEL & JENNIFER DESAUTELS 1333 BULLOCK ROAD GEORGIA, VERMONT 05468
TAX PARCEL ID:	TAX ID: 101450000
PHYSICAL ADDRESS OF PROPERTY:	1333 BULLOCK ROAD GEORGIA, VERMONT 05468
ZONING DISTRICT:	L-2 LAKESHORE RESIDENTIAL-
ZONING SETBACKS:	LOT SIZE = 3 ACRES MIN. FRONT YARD = 75 FT. FROM CENTERLINE OF THE ROAD RIGHT-OF-WAY SIDE YARD = 30 FT. REAR YARD = 30 FT. SHORELINE = N/A BUILDING HEIGHT = 35 FT. MAX
DEED REFERENCE:	VOLUME 254, PAGE 47

TAX ID: 101450000

Use of These Drawings

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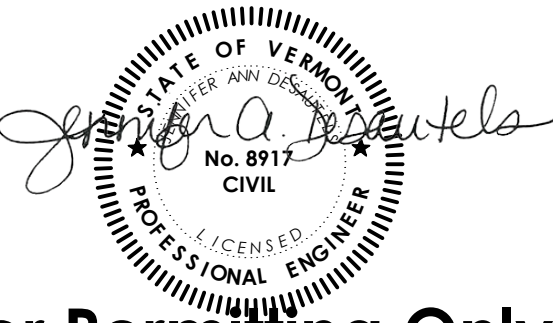
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6. It is the User's responsibility to ensure this copy contains the most current revisions.



For Permitting Only

Project Title

Joel & Jennifer Desautels
1333 Bullock Road
Georgia, Vermont

Sheet Title

Legend & Notes

Date: 9/20/2021

Scale:

Project Number: 15-212

Drawn By: CMJ

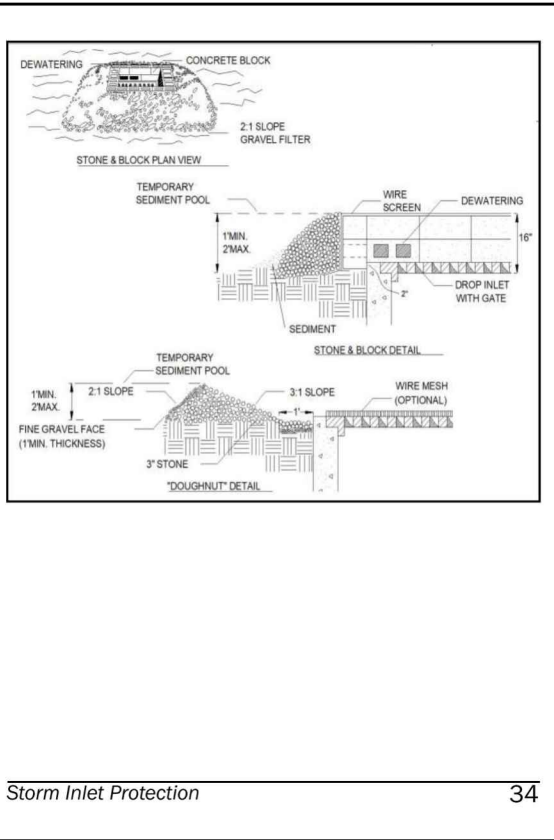
Project Engineer: JAD

Approved By: JAD

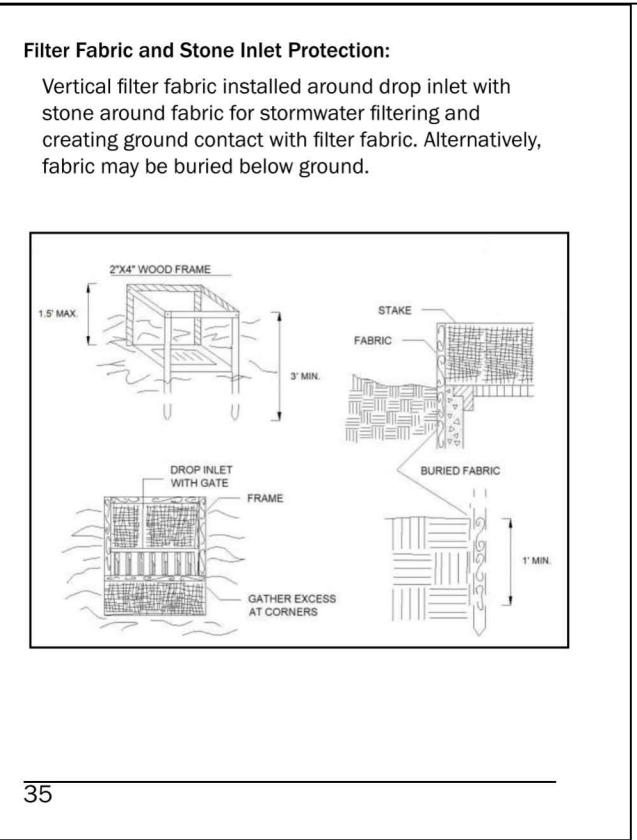
Field Book:

C1-00

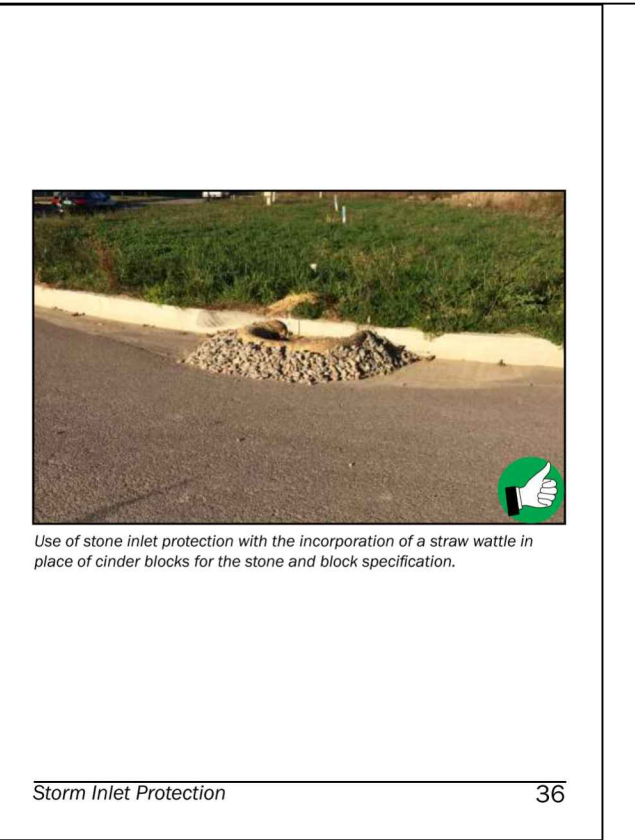
8. Storm Inlet Protection
Purpose:
 Existing or new storm inlets on construction sites constitute a site perimeter and must be protected from sediment laden runoff. The practices below allow stormwater to settle and filter through the practice and not bypass the inlet entirely.
Requirements:
 Stormwater inlets shall be 4 inches above grade or an acceptable inlet control/protection should be installed.
Inlet Protection Installation:
Proprietary Inlet Protection:
 Shall provide for storage and removal of sediment and be sized appropriately for the drainage area, while allowing stormwater to filter through. These may be used if installed and maintained in accordance with the manufacturer's specifications.
Stone and Block Inlet Protection:
 Concrete blocks placed around an inlet with a circle of filtering stone sloped against the blocks.



Storm Inlet Protection 34



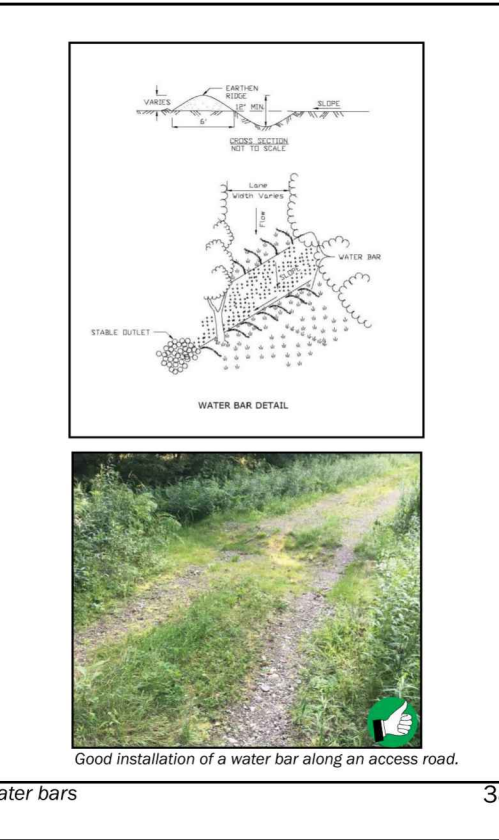
35



Storm Inlet Protection 36

9. Water Bars
Purpose:
 Some sites may benefit from the use of water bars on the construction site. When installed these may capture and redirect runoff to a stable low gradient location. Water bars limit the erosive velocity of water by diverting surface runoff at pre-designed intervals.
Requirements:
 These can be constructed per the following detail, with side slopes no steeper than 4:1 where vehicles cross with a minimum design height of 12 inches, measured from channel bottom to ridge top.
Water Bar Installation:
 Water bars should have stable outlets, either natural or constructed. The spacing should follow Table 1.
 Table 1. Water Bar Spacing

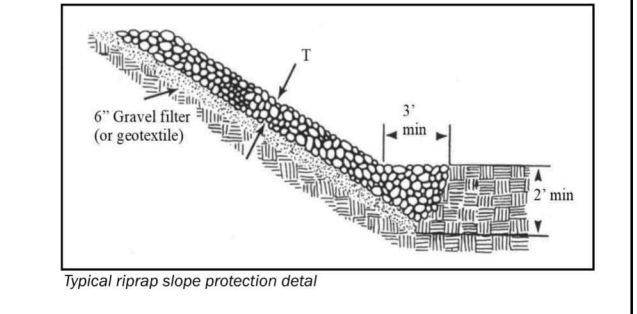
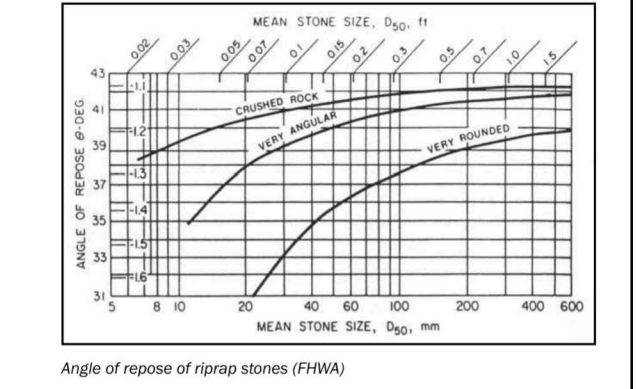
Slope (%)	Distance between structures (ft)
< 5	125
5 - 10	100
10 - 20	75
20 - 35	50
> 35	25



Water bars 38

10. Slow Down Channelized Runoff
Purpose:
 Stone check dams reduce erosion in drainage channels by slowing down the stormwater flow.
Requirements:
 If there is a concentrated flow (e.g. in a ditch or channel) of stormwater on your site, then you are required to install stone check dams. Hay bales and silt fence must not be used as check dams.
Check Dam Installation:

- **Height:** No greater than 2 feet. Center of dam should be 9 inches lower than the side elevation
- **Side slopes:** 2:1 or flatter (see p.63 for slope calculation)
- **Stone size:** Use a mixture of 2 to 9 inch stone; the smaller stone helps to filter the channelized runoff. The small stone should be placed primarily in the interior of the check dam and the large stone should be placed in an armoring layer on the outside.
- **Width:** Dams should span the width of the channel and extend up the sides of the banks

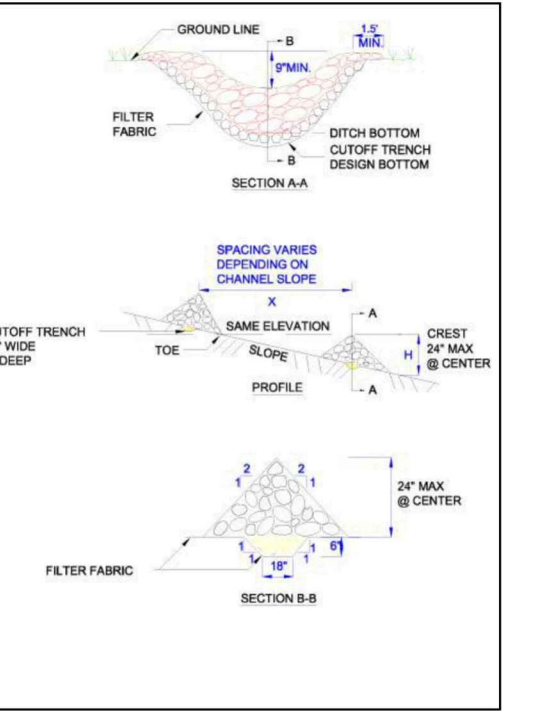


Slope Stabilization 46

Spacing: Space the dams so that the bottom (toe) of the upstream dam is at the elevation of the top (crest) of the downstream dam. This spacing is equal to the height of the check dam divided by the channel slope.
 Spacing (in feet) = Height of check dam (in feet) / Slope in channel (ft/ft)
Check Dam Maintenance:

- Correct all observed damage immediately after every runoff event.
- Remove all sediment accumulated behind the check dams and dispose of in an upland location.
- If significant erosion is observed between check dams, the channel shall be stone lined.

Slow Down Channelized Runoff



Slow Down Channelized Runoff 40



Slow Down Channelized Runoff 42

Rock Outlet Protection:

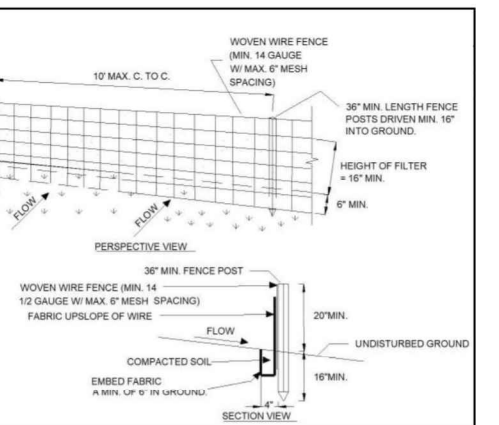
- Waterways or outlets with concentrated stormwater runoff shall be stabilized with riprap, proprietary stabilization product or permanent materials. This additional stabilization is applicable in areas where the channel slope and velocity or soil type require additional stabilization.
- All outlets from concentrated stormwater flows will require a stabilized bed.
- Stone shall be sized so it is not mobilized during high flows.

 The images on page 44 show the before and after of an eroding channel from a culvert outlet, stabilized with stone, to a small pool for energy dissipation at the bottom of the slope.

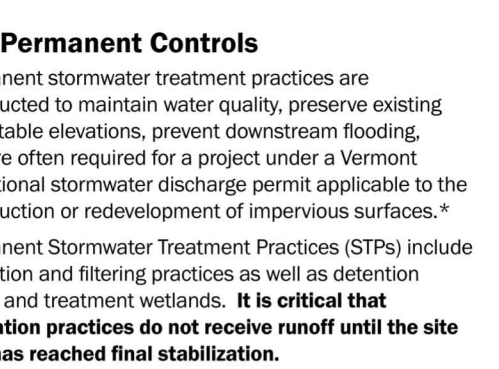


Stone riprap installed on an unstable slope with a stormwater outlet pipe along the slope. 45

11. Slope Stabilization
Purpose:
 Surface covering designed to protect and stabilize an area prone to erosion where seeding and mulching may be inadequate, generally slopes 3:1 or greater. The erosion potential may be due solely to slope angle; however, a more gradual slope and poor soil structure can also require additional stabilization.
Requirements for Temporary Stabilization:
 Use of one of the listed slope protection practices below on slopes 3:1 and greater or as needed on flatter slopes based on soil type.
Riprap: A layer of stone designed to protect and stabilize areas subject to erosion.



4. Drainage structures must be kept open and free of snow and ice dams.
5. Silt fence and other practices requiring earth disturbance must be installed ahead of frozen ground.
6. Mulch used for temporary stabilization must be applied at a minimum of 2 inches with an 80-90% cover.



15. Permanent Controls
 Permanent stormwater treatment practices are constructed to maintain water quality, preserve existing water table elevations, prevent downstream flooding, and are often required for a project under a Vermont operational stormwater discharge permit applicable to the construction or redevelopment of impervious surfaces.*
 Permanent Stormwater Treatment Practices (STPs) include infiltration and filtering practices as well as detention ponds and treatment wetlands. **It is critical that infiltration practices do not receive runoff until the site area has reached final stabilization.**
 The outlet of permanent controls that are used as temporary storage and sediment basins during construction constitutes a potential discharge point and therefore must be managed to minimize and prevent sediment laden stormwater discharges. These practices will often need to be reshaped to meet the operational design criteria for volumes, grades and geometry once final grading and stabilization has occurred.
 *An impervious surface is a manmade surface, including, but not limited to, paved and unpaved roads, parking areas, roofs, driveways, and walkways, from which precipitation runs off rather than infiltrates.

3. For areas of disturbance within 100 ft of a waterbody, the following must be installed across the slope, down gradient of the earth disturbance:
 - a combination of one practice from group A placed in front of a practice from group B, or
 - two group B practices, or
 - a single row of Reinforced Silt Fence

Group A	Group B
Filter Socks	Silt Fence
Straw Wattles	Erosion Control Berms



Permanent Controls 60

Rolled Erosion Control Product:
 A preformed protective blanket of straw or other plant residue, formed into a mat, with a supporting mesh framework on one or both sides. This mesh cannot be made of a material with welded joints.

 Install blankets and mats vertically on long slopes. Unroll from top of hill and staple as you unroll it. Do not stretch blankets.
Erosion Control Matting:
 Install per manufacturer's instructions.

 Excellent stabilization of large slopes to limit the area of disturbance. Make sure to install erosion control matting within 48 hours of grading to ensure good contact between soil and mat.

IMPORTANT NOTE:
 Rolled Erosion Control Product (RECP) materials have the potential to ensnare animals such as snakes and birds, which can lead to injury or fatality. This has been observed to be most problematic in products with a plastic mesh, whether biodegradable or not.

 Accordingly, only woven and interlinked products are approved for use in RECP applications. (See Tables 4.3 and 4.4 of the Vermont Standards & Specifications for Erosion Prevention and Sediment Control)

Slope Stabilization 48

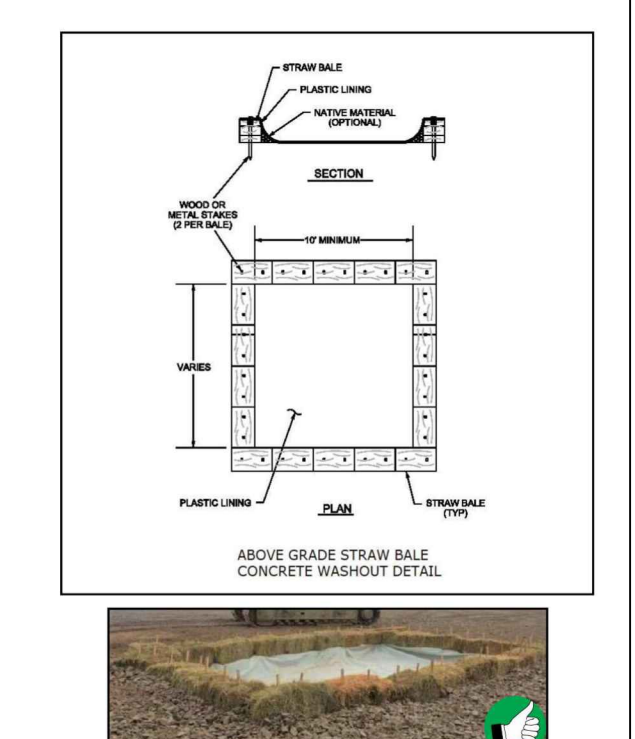
12. Winter Construction Requirements October 15 - April 15
Purpose:
 'Winter construction' as discussed here, describes the period from October 15 through April 15, when erosion prevention and sediment control is significantly more difficult. There are specific requirements for sites that conduct earth disturbance during the defined Winter Construction Period and for sites where disturbed areas have not reached final stabilization by October 15.
 Rains in late fall, thaws throughout the winter, and spring melt and rains can produce significant flows over frozen and saturated ground, greatly increasing the potential for erosion. A construction site can be managed to anticipate these conditions to prevent erosion and thus minimize the risk to water quality during this time period.
Requirements for Winter Shutdown:
 For projects or areas of a site that will have completed earth disturbance activities prior to the winter construction period (October 15 through April 15), the following requirements must be adhered to:

1. For areas to be stabilized for the winter through the establishment of vegetation, seeding and mulching shall be completed no later than September 15 to ensure adequate growth and cover before the start of the winter period.

 Stabilization and seeding of slopes before winter will reduce or eliminate erosion in the spring.
2. If seeding is not completed by September 15, additional non-vegetative protection must be used to stabilize the site for the winter period. Areas of disturbance not seeded and mulched by September 15 are required to temporarily stabilize by one of the following methods:
 - Implement Rolled Erosion Control Products (i.e. matting) over the areas of earth disturbance.
 - Apply a 2" mulch layer to areas of earth disturbance, equivalent to double the standard rate. Mulch should be tracked in open areas vulnerable to wind.
 - Seeding with winter ryegrass is recommended to allow for early germination during wet spring conditions.

Winter Stabilization 50

14. Concrete Washout
Purpose:
 Concrete wash water often contains a slurry of heavy metals, can be caustic, and has a high pH. As a result, concrete washwater is not a permitted discharge.
Requirements:
 Concrete washwater and excess washout concrete should go in a lined washout. This washout should be accessible to the cement truck and at least 50 feet away from stormwater inlets and surface water.
Concrete Washout Installation:
 If cement washout is going to occur on site, a lined concrete washout as shown below shall be used onsite. Care should be given to assure that the washout does not overflow during a storm event. Proprietary lined and contained concrete washout basins may also be utilized in accordance with manufacturer's specifications.
Concrete Washout Maintenance:
 Concrete washout shall be pumped to a concrete truck as necessary, for disposal or reuse at a batch plant. Washout may also be allowed to evaporate/harden for disposal in accordance with all applicable local, state, and federal regulations.



Concrete Washout 58

7. To ensure cover of disturbed soil in advance of a precipitation or melt event, areas of disturbed soil must be stabilized prior to any runoff producing event.

- Stabilization is not required if the work is occurring in a self-contained excavation (i.e. no outlets) with a depth of 2 feet or greater (e.g. house foundation excavation, utility trenches), provided any dewatering, if necessary, is conducted in accordance with Part 13.

 8. Prior to stabilization, snow or ice must be removed to the extent practicable.
 9. Use stone to stabilize areas such as the perimeter of buildings under construction or where construction vehicle traffic is anticipated. Stone paths should be sufficient width to accommodate vehicle or equipment traffic.
Winter Stabilization

13. Dewatering Activities
Purpose:
 To minimize and prevent discharges of sediment as a result of dewatering activities.
Requirements:
 Stormwater and groundwater from dewatering activities shall be uncontaminated and shall be filtered or passed through a sediment trapping device, or both, and routed in a manner that does not result in visually turbid discharges to waters. Pump intake for dewatering must be at or near the surface of the ponding area to prevent disturbance of the settled material. Visually turbid water must not be pumped directly to storm drains or other conveyance that leads to waters without implementing one or more of the practices described below.
How to comply:
 Implement one or more of the following practices when dewatering:

- Implement sock filters or sediment filter bags on dewatering pump discharge hoses or pipes.
- Route dewatering pump into silt fence enclosures or into stacked hay bale enclosures lined with fabric.

Dewatering Activities 56

• Route dewatering pump to vegetated area at least 50 feet from surface waters and at a slope no greater than 5%.
 Remove accumulated sediment after the water has dispersed or infiltrated and stabilize the area with seed and mulch as necessary. A sufficient area of vegetation greatly improves the efficacy of filtering/settling of turbid water discharged from a dewatering enclosure.

 Water is pumped from the construction site into a silt fence enclosure on a vegetated area or into a sock filter away from waterways.

Dewatering Activities 56

Section 3 Additional Resources
 How to calculate slope:

Some design details and standards were adopted from those provided by Vermont Electric Power Company (VELCO), TRC Solutions, Connecticut Department of Transportation (CTDOT) and the New York Department of Environmental Conservation (NYDEC).

Steepness	Percent	Slope ratio (ft/ft)	Degree
Very steep	100%	1:1	45°
	50%	2:1	27°
	33%	3:1	18°
Moderate	25%	4:1	14°
	10%	10:1	6°
	Slight	5%	20:1

How to estimate disturbance area:
 1 acre = 43,560 square feet = 4,840 square yards

Area in acres (width in feet x length in feet)	100	150	200	300	400	500
100	0.2	0.3	0.5	0.7	0.9	1.1
150	0.3	0.5	0.7	1.0	1.4	1.7
200	0.5	0.7	0.9	1.4	1.8	2.3
300	0.7	1.0	1.4	2.1	2.8	3.4
400	0.9	1.4	1.8	2.8	3.7	4.6
500	1.1	1.7	2.3	3.4	4.6	5.7

Vermont Department of Environmental Conservation
 Watershed Management Division
 1 National Life Drive
 Montpelier, VT 05620-3522
 dec.vermont.gov/watershed/stormwater

16. Inspection, Maintenance, and Discharge Reporting
 Site inspections are required to ensure that all erosion prevention and sediment control practices are sufficient and functioning properly. Regular inspections and maintenance of practices will help to reduce costly repairs and minimize the risk to water quality from construction stormwater discharges.
Requirements:
 Inspect the site at least once every 7 days and after every rainfall or snowmelt that results in stormwater runoff. Perform maintenance to ensure that practices are functioning according to the specifications outlined in this handbook.
 In the event of a visibly turbid discharge from the construction site, you must take immediate action to inspect and maintain existing erosion prevention and sediment control practices. Additional erosion prevention and sediment control measures must be installed as necessary, including temporary stabilization, to minimize and prevent the discharge of sediment laden stormwater runoff.

If after maintaining and supplementing BMPs, a discharge of visibly discolored stormwater from the construction site to surface waters continues, the permittee is required to notify DEC within 24 hours.
 While documentation of a routine inspection is not required, example inspection forms and forms for required discharge reporting are available at the Stormwater Program website. Permittees shall review Construction General Permit 3-9020 for all discharge reporting requirements.

- A copy of the Low Risk Site Handbook shall be kept on-site.
- Daily inspections are required from October 15 through April 15.

Inspection, Maintenance, and Reporting

Inspection, Maintenance, and Reporting 62

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Revisions

No.	Description	Date	By

Use of These Drawings
 1. Unless otherwise noted, these Drawings are intended for preliminary planning, coordination with other disciplines or utilities, and/or approval from the regulatory authorities. They are not intended as construction drawings unless noted as such or marked approved by a regulatory authority.
 2. By use of these drawings for construction of the Project, the Owner represents that they have reviewed, approved, and accepted the drawings, obtained all necessary permits, and have met with all applicable parties/disciplines, including but not limited to, the Engineer and the Architect, to insure these plans are properly coordinated including, but not limited to, contract documents, specifications, owner/contractor agreements, building and mechanical plans, private and public utilities, and other pertinent permits for construction.
 3. Owner and Architect are responsible for final design and location of buildings shown, including an area measured a minimum five (5) feet around any building and coordinating final utility connections shown on these plans.
 4. Prior to using these plans for construction layout, the user shall contact TCE to ensure the plan contains the most current revisions.
 5. These Drawings are specific to the Project and are not transferable. As instruments of service, these drawings, and copies thereof, furnished by TCE are its exclusive property. Changes to the drawings may only be made by TCE. If errors or omissions are discovered, they shall be brought to the attention of TCE immediately.
 6. It is the User's responsibility to ensure this copy contains the most current revisions.



For Permitting Only
 Project Title
Joel & Jennifer Desautels
 1333 Bullock Road
 Georgia, Vermont

Sheet Title
EPSC Low Risk Handbook Sheet 2

Date: 10/03/2021
 Scale:
 Project Number: 15-212
 Drawn By: CMJ
 Project Engineer: JAD
 Approved By: JAD
 Field Book:

C8-06



Town of Georgia Fire Department

4134 Ethan Allen Highway • Georgia, VT 05478 • Phone: 802-782-8045
Keith Baker, Fire Chief • Email: firechief@townofgeorgia.com

January 17, 2024

Jennifer Desautels, P.E.

Trudell Consulting Engineers
42 Mapleville Depot
St. Albans, VT 05478

RE: Desautels 3 lot Subdivision Driveway Change

Jennifer,

I have reviewed the updated plans for your proposed 3-lot subdivision at 1333 Bullock Road and the driveway change to have access of Lot 1 to now be off from Georgia Shore Road. We will be able to provide services to Lot 1 with the driveway being off from Georgia Shore Road with the understanding that travel time to Georgia Shore will be longer than the travel time to Bullock Road. The lots new driveway will still have delays in establishing a water supply due to its length as it would have on Bullock Road in the event of a fire. Having a place near the end of the driveway to turn trucks around would be helpful. It appears they would have to back down the driveway currently proposed.

Though not currently required, we do recommend a fire sprinkler system in any residential structure for life safety as explained in our phone conversation yesterday.

The only request that we would have would be that the driveway would continue to be maintained for access of fire apparatus. This would include, but not be limited to, snow removal, a solid roadway, and anything over hanging such as wires or branches from planted or existing trees be high enough for apparatus to safely go under (14 feet).

If you have any questions, feel free to contact me at (802) 752-5813.

Sincerely,

Keith Baker, Fire Chief

THE TOWN OF GEORGIA FIRE DEPARTMENT



February 2, 2024

Doug Bergstrom
Zoning Administrator
Town of Georgia, VT
47 Town Common Road No.
St. Albans, VT 05478

RE: 864 Ethan Allen Highway, Georgia - Preliminary Plan Application

Dear Doug:

We are writing on behalf of landowner, 864 Ethan Allen Highway, LLC (c/o Rick Bove) and applicant, Greenfield Growth, LLC (c/o Benjamin Avery) to request Preliminary Plan Review for a proposed Planned Unit Development located at 864 Ethan Allen Highway in Georgia. The existing 12.3 acre parcel is located in the South Village Core zoning district and previously functioned as the Homestead Campground. The parcel currently contains one existing house and gravel driveways. A second existing house and several other small accessory structures were recently removed. A Sketch Plan Review application for this project was well received by the Georgia Development Board at their July 18, 2023 hearing.

The proposed project involves subdividing the existing parcel into fifteen (15) Lots (see plan Sheet 1 – Overall Plan for lot sizes). Lots 1 and 3 will contain mixed use buildings with commercial space on the first floors and four (4) 2-bedroom residential units on each of the second floors. Lots 2 and 4 will contain three (3) 5-plex multi-family buildings containing a total of fifteen (15) 2-bedroom residential units. Lots 5 and 6 will remain open for future development. Lot 7 will contain two (2) 5-plex multi-family buildings containing a total of ten (10) 2-bedroom residential units. Lots 8 – 13 will contain six (6) single-family homes served by individual on-site septic systems. Lot 14 will be open space and will contain the possible future public community water system and shared on-site wastewater disposal systems that will serve the project (other than single-family homes). Lot 15 will be open space that will contain one or more shared wells.

The proposed mixed-use and 5-plex residential buildings on Lots 1, 2, 3, 4 and 7 are located in the front half of the parcel and face the proposed public road and/or Ethan Allen Highway with parking located between and/or behind the buildings. The remaining proposed lots containing the single-family homes are located toward the rear of the parcel. Access will be provided via a public road within a 60 FT wide right of way. The proposed public road is 24' wide and is curbed in front of the mixed-use buildings and 5-plex units with sidewalks on both

sides. The section of the public road in front of the single-family homes is uncurbed and has sidewalk on one side (in front of the homes) per discussions with Doug Bergstrom. Stormwater runoff will be collected by catch basins and roadside swales (along uncurbed sections) and conveyed to an infiltration basin in the southern corner of the parcel. The proposed public road will be lined by street trees spaced 40 feet on center.

A Site Transportation Assessment performed by Wall Consultant Group (attached), which accounts for the future connection and right-of-way to Dollar General, concluded that the proposed development does not warrant turning lanes or a traffic signal at this time. The proposed project will generate 42 AM and 64 PM peak hour trips, which is less than the 75 peak hour trips that would require further evaluation.

As part of this application, we are requesting Conditional Use review to approve the single-family homes (first floor residential) the square footage of which is offset by Commercial space. We are also requesting two waivers; 1) to increase the maximum setback from 16' to 20' for the single-family homes on Lots 8-13 (to make room for required driveway turn-arounds in front of the homes); and 2) to install sidewalk on only one side of the proposed public road across from Lots 7-11.

Please find the following information attached:

- 1) Signed Preliminary Plan Review Application;
- 2) Signed Conditional Use Application;
- 3) Signed Site Plan Application;
- 4) Application Review Fee: \$4,710.00
 - a. Preliminary Review: \$4,500.00 (\$900 + (\$50/Unit x 72 Units)
 - b. Conditional Use: \$500.00
 - c. Site Plan Review: \$500.00
 - d. Waiver Request: \$800.00 (\$400 per Waiver x 2)
 - e. Recording Fee: \$60.00
- 5) Abutters list;
- 6) Site Transportation Assessment by Wall Consulting Group;
- 7) One (1) 11" x 17" paper copy of full Preliminary Plan set;
- 8) Digital copies of all application materials via email.

If you have any questions or need additional information, please let me know.

Sincerely,



Graham Tidman, E.I.



GEORGIA

VERMONT

Date Received: _____ Fee Paid \$ _____ Ck # _____ CU - _____ - _____

Tax Parcel ID: _____ Hearing Date: _____

TOWN OF GEORGIA DEVELOPMENT REVIEW BOARD CONDITIONAL USE APPLICATION

Applicant(s)

Greenfield Growth, LLC
Name (c/o Benjamin Avery)
Address 68 Randall Street
City/State/Zip South Burlington, VT 05403
Phone 802-316-0004
Email ben@greenfieldgrowthllc.com

Property Owner(s) if different

864 Ethan Allen Highway, LLC
Name (c/o Rick Bove)
Address 218 Overlake Drive
City/State/Zip Colchester, VT 05446
Phone 802-864-3430
Email rickbove@comcast.net

CERTIFICATION OF APPLICANT

The undersigned applicant(s) hereby certifies that all information submitted on this application is true and accurate and that the information provided is complete.

1/29/24
Date

[Signature]
Applicant

Applicant

PROPERTY OWNER AUTHORIZATION

The undersigned property owner(s) hereby certifies that the information submitted in this application regarding the property is true, accurate, and complete and that the Applicant(s) has full authority to request approval for the proposed use of the property and any proposed structures.

1/31/2024
Date

[Signature]
Property Owner

Property Owner

1. ABUTTING PROPERTY OWNERS

List names and mailing addresses of all adjacent property owners including those across the road right-of-way and all property owners on a shared private right-of-way whether or not they abut the subject parcel. Please submit a stamped, addressed envelope for each property owner listed, together with a stamped, addressed envelope for Applicant/owner (use a separate sheet if necessary).

SEE ATTACHED ABUTTERS LIST

2. REQUEST FOR CONDITIONAL USE:

Section(s) 2.2, 3.6 of the Town of Georgia Development Regulations.

3. PROPERTY IDENTIFICATION:

E911 Address 864 Ethan Allen Highway or

Other identification: Former Homestead Campground

Deed Reference: Book 316, Page 289

Subdivision Name (if applicable): _____

4. ZONING DISTRICT: South Village

5. PROPERTY DIMENSIONS:

Lot size: 12.3 acres; or dimensions: _____

Lot frontage: 291'

6. NATURE OF PROPOSED REQUEST: Please provide a complete narrative on a separate sheet of paper describing the nature of the proposed request explaining in detail the proposed use(s) of the property. Please also address each of the following applicable elements in a descriptive manner: building size(s), type(s) and use(s) thereof, landscaping and/or screening, access to property, impact on traffic, internal circulation of vehicular and pedestrian traffic, parking requirements, lighting (size, type, location and number), number, size and location of proposed sign(s), proposed days and hours of operation, and proposed number of employees.

7. **Title(s) of plans(s) submitted with application;** and, if applicable, firm which prepared plan; project number; date of plans and revisions. Site plans shall include, where applicable, the following:

- a) Identifying information including record owner of land, north arrow, date (including any revision dates), and scale.
- b) Property lines and abutting streets.
- c) Rights of way or easements affecting the property.
- d) Location of existing and proposed buildings or structures including Interior floor plans indicating location and floor area of individual uses.
- e) Height of existing and proposed buildings or structures.
- f) Existing and proposed setbacks of all buildings or structures to property lines and/or public or private rights-of-way.
- g) Existing and proposed lot coverage (in square feet) of all structures and hard surfaces.
- h) Existing natural features of the site including water courses and applicable buffers, wetlands and applicable buffers, floodplains, trees, and other vegetation, etc.
- i) Existing and proposed contours at no more than 5-foot intervals.
- j) Location of existing and proposed utilities and facilities (water, septic, electric, telephone).
- k) Location of existing and proposed roads, driveways, loading areas, outside storage areas, and pedestrian walkways.
- l) Location and number of parking spaces pursuant to the requirements of Section 5.6 of the Development Regulations.
- m) Location, type, size, and number of existing and proposed lighting fixtures.
- n) Location and size of existing and proposed sign(s) (please provide sketch of each sign).
- o) A landscaping plan indicating location, species, size and spacing of existing and proposed landscaping elements.
- p) Building elevations drawings to scale for all proposed and/or modified buildings and any related buildings.

Please provide one full size copy to scale, eight 11' x 17" copies & one electronic copy with application.

8. **SPECIFIC AND GENERAL STANDARDS FOR CONDITIONAL USES:** Applicant must be prepared to address the specific standards for Conditional Use as set forth in each zoning district in the Town of Georgia Zoning Regulations. In addition, applicant must address the general standards for all uses as set forth in Title 24 V.S.A. Chapter 117 Section 4414(3) and Section 3.2 of the Town of Georgia Development Regulations as follows:

a. Public facilities and services (including, but not limited to fire protection, schools, roads, and other municipal infrastructure) are reasonably available to serve the proposal or are planned and included in the Town Capital Budget and program to serve the proposal at the time anticipated for its completion:

The project will be served by public access off Ethan Allen Highway, Georgia fire & rescue, and local elementary and middle schools.

b. The character of the neighborhood, area, or district affected will not be adversely impacted and that:

i) A nuisance or hazard will not be created to the detriment of the health, safety, or welfare of the intended users, neighbors, or the citizens of the town;

The proposed 12,000 SF of commercial space and thirty-nine (39) residential units will not create a nuisance or hazard to the detriment of health, safety, or welfare of the users, neighbors or citizens of Georgia.

ii) The proposed use or building and the relationship between the buildings and the land will be compatible with the purposes of the district and the character of the surrounding neighborhood and will not unduly detract from abutting residences or other property;

The proposed project is in line with the South Village district's purpose of creating a compact settlement of small-scale business, civic, and residential uses with pedestrian-friendly streetscapes. The proposed commercial and residential uses are compatible with the existing surrounding commercial and residential uses.

iii) Appropriate use or development of adjacent property will not be impeded; i.e., the scale of the proposed development in relation to existing and proposed uses and buildings and the effect of the proposed use on the continued enjoyment of and access to existing and approved uses in the vicinity of the proposed use will not be adversely impacted.

This project will not impede the development of adjacent properties. The proposed project includes a public road that extends to the property of the abutting parcel to the north as well as sidewalks that will provide vehicle and pedestrian access to that property. The project also includes an easement providing access to the abutting Dollar General store. All other surrounding uses are existing residential homes.

c. Traffic generated or patterns of ingress or egress will not cause congestion, hazard or detriment to the neighborhood or nearby intersections (the DRB may require a traffic study to determine compliance with this standard).

A traffic study by Wall Consultant Group (attached) has determined that the proposed development will not cause congestion, hazard, or detriment to neighboring or nearby intersection and does not warrant turning lanes or a traffic light.

d. The proposed use is consistent with the purpose of the district, the Town Plan, the Town of Georgia Development Regulations, and other bylaws and ordinances adopted by the Town of Georgia. The purpose of the South Village district is to create compact, pedestrian-friendly mixed-use

developments containing commercial and residential uses. The proposed project is mixed use with 12,000 SF of commercial space and 39 residential units

e. That the utilization of renewable energy resources will not be adversely affected.

The utilization of renewable energy resources will not be adversely affected.

9. PERFORMANCE STANDARDS:

The proposed use:

- a. will will not emit noise in excess of 70 decibels at the property line or a noise which is considered offensive;
- b. will will not emit any odor, dust, dirt, or smoke which is considered offensive;
- c. will will not emit any noxious gases that endanger the health, comfort, safety or welfare of any person or that could cause injury or damage to property, business or vegetation;
- d. will will not cause as a result of normal operations a vibration that creates a displacement of 0.002 inches within the ground at the property lines;
- e. will will not have lighting or signs that create glare that could impair the vision of a driver of any motor vehicle;
- f. will will not cause a fire, explosion or safety hazard;
- g. will will not create an unsafe or unhealthy condition as determined by the Town of Georgia Health Officer;
- h. will will not interfere with a renewable energy resource or the ability to utilize a renewable energy resource.

10. OTHER PERMITS REQUIRED:

This project will also require the following permits (local, state, federal):

Water & Wastewater, Erosion Control, Act 250, Stormwater

Decision of the Board

Date: _____

Approved:

Denied:

Note: You will receive a written Decision and Findings of Fact within 45 days of the close of the hearing.



Town of Georgia

47 Town Common Road North • St. Albans, VT 05478
• Phone: 802-524-3524 • Fax: 802-524-3543 • website: townofgeorgia.com

Site Plan Application Application #SP _____

Submission Requirements: An application for Sketch Plan Review will consist of one set 11"x17" site plan maps plus a digital file in *.pdf format which includes scale, north arrow, legend, abutters, title block, with supporting data to include items listed on the attached checklist, and as approved in the original Site Plan. The application will not be deemed complete until all required materials have been submitted. Failure to submit a complete application, as defined herein, shall be grounds for denial of the application by the DRB.. Applicant must also submit a list for all abutters, including those across a public or private right of way. **Incomplete applications will be returned and will delay scheduling your hearing.**

SECTION 1: OWNER/APPLICANT INFORMATION (complete all)

864 Ethan Allen Highway, LLC	Greenfield Growth, LLC
Owner(s): (c/o) Rick Bove _____	Applicant(s): (c/o Benjamin _____
Address: 218 Overlake Drive _____	Address: 68 Randall Street _____
Colchester, VT _____	South Burlington, VT _____
Zip Code 05446 Telephone 802-864-3430	Zip Code 05403 Telephone 802-316-0004
Email rickbove@comcast.net _____	Email ben@greenfieldgrowthllc.com _____
Tax Parcel ID: 117200000	Zoning District: SV PUD <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

CERTIFICATION OF APPLICANT(S)

AFFIRMATION: The undersigned hereby certifies that the information submitted in this application is true, accurate, and complete.

Signature of Applicant: [Signature] Date: 1/29/24

Signature of Applicant: _____ Date: _____

PROPERTY OWNERS' AUTHORIZATION

The undersigned property owner(s) hereby certify that the information submitted in this application regarding this property is true, accurate and complete and that the Applicant(s) have full authority to request approval for the proposed use of the property and any proposed structure(s).

Signature of Owner: [Signature] Date: 1/31/24

Signature of Owner: _____ Date: _____

Location of Property: 864 Ethan Allen Highway, Georgia, VT _____

Parcel ID No.: 117200000 Zoning District: SV

Deed Reference: Volume 316 Page 289 Size of Parcel: 12.30 acres

Previous subdivision of parcel (if applicable)

Permittee name: _____

Date: _____ Map # _____

Previous Site Plan Approval (if applicable)

Permittee name: _____

Date: _____ Map # _____

If applicable:

Engineer: Bryan Currier (O'Leary-Burke Civil Assoc.)

Surveyor: Doug Henson

Phone: 802-878-9990

Phone: 802-878-9990

Email: bcurrier@olearyburke.com

Email: dhenson@olearyburke.com

Description of proposed project: (Please describe here or attach a separate proposal)

Project involves a 15-Lot subdivision with public road. Lots 1 and 3 will contain mixed use buildings (1st floor commercial, 2nd floor residential). Lots 2, 4, and 7 will contain a total of five (5) 5-plex buildings. Lots 5 and 6 will be left open for future development. Lots 8-13 will contain single-family homes. See attached cover letter.

Names and addresses of abutting property owners:

SEE ATTACHED ABUTTERS LIST

Existing and/or proposed means of access to the site:

A new access is proposed off Ethan Allen Highway with a 24' wide public road serving the project. See plan sheet 2.

List of plans, sketches, or other information submitted with this application:

1-Existing Conditions, 2-Overall Plan, 3-20 Scale plan "A", 4-20 Scale Plan "B", 5-20 Scale Plan "C", 6-20 Scale Plan "D", 7-Plan & Profile, 8-Landscaping, 9-Lighting, 10-Road Details, 11-Individual Sewage, 12-Shared Sewage, 13-Pump Station "A", 14-Pump Station "B", 15-Water & Sewer Details, 16-Erosion Control Details, 17-Storm Details, Plat

Location of parking and proposed number of spaces:

There are five (5) separate parking areas serving the 5-plex buildings and/or mixed-use buildings. Each parking area has ten (10) parking spaces except the parking area behind the mixed-use building on Lot 3 which has 14. There are also eight (8) parallel parking spaces on the public road in front of 5-plex buildings "C", "D", and "E". (62) spaces total.

Existing and/or proposed road & driveway access to site:

A new access is proposed off Ethan Allen Highway with a 24' wide public road serving the project. See attached Overall Plan Sheet #2 and Plan & Profile sheet 7.

Existing and/or proposed easements and rights-of-way:

An access easement is to be provided over Lot #3 to the abutting Dollar General store for future access through the proposed project should it be required by VTRANS. See attached plan sheet 2 and survey plat.

Proposed and/or existing wastewater disposal and water supply:

The six (6) single-family homes on Lots 8-13 are to be served by individual on-lot sewage disposal systems. All other proposed uses shall be served by two (2) shared sewage disposal systems located on common land Lot #14 in the rear of the parcel. See attached site plans, sewage detail, and pump station detail sheets.

Proposed drainage/storm water runoff (if required):

Stormwater runoff for the proposed project shall be collected by a network of catch basins and roadside swales (where the road is not curbed). Stormwater will be conveyed to an infiltration basin in the southern corner of the parcel. See plan sheets 2, 4, and 17.

Proposed landscaping (if applicable):

Street trees are proposed along both sides of the public road with spacing of 40' on center. Landscaping shrubs are proposed around the 5-plex units. A row of cedars is proposed along the southern boarder of the project to provide screening for abutting homes. See landscaping plan sheet 8.

Size and location of proposed and/or existing buildings:

Lots 1 and 3 will contain 6,000 SF mixed use buildings. Lots 2, 4, and 7 will contain 5-plex buildings with footprints of approximately 4,850 SF. The six (6) single-family homes will have footprints of roughly 1,920 SF. The size of the senior living building will be decided in the future but is currently shown at approximately 8,320 SF.

State permits required and/or obtained for this project:

This project will require the following State permits: Water & Wastewater; Erosion Control, Stormwater, Act 250, and possibly a public community water system permit for the well to potentially serve the future senior living building.

Proposed lighting (if any):

Five (5) pole mounted street lights are proposed along the public road. See Overall Plan sheet 2 and Lighting Plan sheet 9.

Notes

- 1) Narratives which summarize the purpose, scope and key proposed changes to the approved subdivision and/or site plan are encouraged & may be attached.
- 2) Application standards for subdivision approval appear in the Georgia Development Regulations as Article 4. Site Plan Review and Approval standards appear in Article 3.

Site Plan Review Checklist:

This checklist is intended to be used as an aid in developing a complete application for Site Plan Review before the DRB. An application for Site Plan Review will consist of eight (8) sets of site plan maps and supporting data which will include the following information, and such information as indicated in the Concept Plan Recommendation, if applicable. The DRB may require additional information as necessary to determine compliance with the regulations.

- 1. Address of subject property.
- 2. Name and address of the owners of record of the subject property
- 3. Name and address of the owners of record of adjoining lands.
- 4. Map or survey, drawn to scale, showing existing features, including contours, land use, structures, large trees, roads, easements, rights of way, deed restrictions, name and address of person or firm preparing the map, scale of map, north point, date of map/revisions, and legend.

5. Site Plan, 24" by 36" digital file in PDF format in size and drawn to an appropriate scale proposed land use areas including proposed structures, roads, driveways, traffic circulation, parking and loading spaces, and pedestrian walkways; landscaping plans including site grading, culverts, drainage, landscape design, screening, signs and lighting; name and address of person or firm preparing the map, scale of map, north point, date of map and revisions, legend, and name, address and interest of the applicant in the subject property.
6. The DRB may require that the map or survey and site plan be prepared by a landscape architect, registered land surveyor, registered civil engineer, or registered architect if the proposed project utilizes more than 3,500 square feet, including parking area, or is a complex proposal that could have impacts on surrounding property owners, major roads, or important resources.
7. Construction sequence and timing schedule for completion of each phase for buildings, parking spaces, and landscaped areas of the entire project.
8. Specifications of the materials and plantings to be used.
9. A site location map showing the location of the project in relation to nearby town highways and developed areas at scale of one inch equals one thousand feet.
10. Uses that will generate more than one hundred and fifty (150) vehicle trip-ends per day (estimates shall be based on the most recent rates provided by the Institute of Transportation Engineers) shall include a traffic study conducted by a professional traffic engineer. The study will include details of existing and proposed ingress and egress, expected traffic volumes, turning movements, existing, and resulting levels of service, and proposed traffic control measures. The DRB may require a traffic study for projects generating less than 150 vehicle trip-ends where it finds there is a potential traffic safety issue.
10. A letter from the Georgia Fire Chief indicating any fire and rescue concerns with the proposed project.
11. A lighting plan including the location and height of mountings and/or light poles, fixture type, lamp type, wattage, level of illumination (footcandles). The DRB may require that the lighting plan be developed by a qualified professional. This plan shall show light levels, evenness, and patterns of light distribution, and should also indicate the lamp type, wattage, and lamp loss factors applied.
12. Sign details including dimensions, height, material, and proposed lighting.
13. At the request of the applicant, the DRB may waive any of the above submission requirements, but only where it finds that the size and scope of the application is such that the requirements represent an undue burden on the applicant and are clearly not necessary for the Commission to make findings on the application consistent with the requirements of these Zoning Regulations.
14. All fees according to the Permit Fee Schedule on the website at:

[Fee Schedule](#)

Decisions

The DRB shall act to approve or disapprove Site Plan applications in writing within forty-five (45) days after closure of the public hearing. Failure to act within the 45-day period shall constitute deemed approval on the 46th day. The DRB may recess and continue a hearing pending receipt of requested information, and non-submittal of requested information shall constitute grounds for Site Plan denial. The DRB shall prepare written findings-of-fact and conclusions setting forth background and rationale for their decision. The DRB may attach conditions of approval to ensure the intent of applicable bylaws and the municipal plan are met.

Site Plan decisions shall be distributed per requirements in Title 24, Chapter 117, Section 4464(b) Vermont Statutes Annotated.

Section 3. Item #B.

(FOR TOWN USE ONLY):

Date received: _____ Fee paid: _____ Check # _____

Returned (incomplete) _____ Date: _____

Signed: _____

Douglas Bergstrom
Zoning Administrator
Planning, DRB & 911 Coordinator

You will receive a written Decision and Finding of Fact within 45 days of the close of the hearing.

Date: 20 November 2023
To: Benjamin Avery, Greenfield Growth Consulting
From: Corey Mack, PE, PTOE, Consultant Transportation Engineer
Subject: Homestead Campground – Site Transportation Assessment

WCG has reviewed the proposed mixed-use redevelopment of the Homestead Campground at 864 Ethan Allen Highway (US-7) in Georgia, Vermont. Following the Town of Georgia Development Regulations, TIS Guidelines from the Vermont Agency of Transportation (VTTrans) and standard engineering practice outlined by the Institute of Transportation Engineers (ITE) and other sources, WCG has prepared the following assessment of the likely transportation impacts.

In summary:

- The Homestead Campground Redevelopment Project proposes the construction of 39 residential units, 33 senior living units, and 12,000 SF of commercial space in a mixed use planned unit development.
- The proposed site is adjacent to two high crash locations based on data from 2012 through 2016. Since this time, the total number of crashes has decreased substantially, and the roadway has been reclassified. It is unlikely the roadway segments would continue to be considered high crash locations.
- The proposed project is estimated to generate 56 AM peak hour trip ends, 112 PM peak hour trip ends, and 1,166 trip ends over the course of an average weekday. After accounting for internal capture, pass-by trip making, and the effects of transportation demand management, the proposed project is estimated to generate 42 AM, 64 PM, and 755 new, external primary vehicle peak hour trip ends on an average weekday.
- The full build out of the proposed project is expected to operate acceptably in the 2025 build year and the 2030 future year scenarios. When the site driveway is combined with the Dollar General driveway, and with the addition of an unidentified volume of traffic to approximate additional development along Ballard Road, the level of service along the eastbound Ballard Road approach to US-7 falls below the VTTrans standard for acceptable operations.
- The available sight distance at the proposed access opposite the existing Ballard Road approach to US-7 exceeds the minimum stopping sight distance and design target intersection sight distance for the location.
- Turn lanes at the site access are not warranted by traffic volumes and are also not recommended based on site context and characteristics.

- The Georgia South Village Transportation Master Plan recommended the installation of a traffic signal based on community context and transportation network considerations.
- A traffic signal is not warranted by volume in both the existing / no-build condition and proposed build condition if the site context is considered urbanized.
- A traffic signal is warranted by volume in both the existing / no-build condition and proposed build condition if the site’s location is considered a built up area of an isolated community of less than 10,000 people.
- The site may be assessed an Act 145 Transportation Impact Fee of \$10,206 to project STP 5800(3) in Milton.

Based on our analysis, the proposed project is not expected to cause or worsen undue traffic congestion or safety issues. No roadway infrastructure mitigation is recommended as a result of the Homestead Campground redevelopment project. At 50% build out, we recommend the project prepare an updated trip generation estimate, traffic capacity analysis, turn lane warrant assessment and traffic signal warrant assessment to evaluate and confirm the resulting transportation impacts at the observed and projected occupancy levels.

Following review of the site plan, we offer the following recommended revisions:

- The proposed site plan does not indicate if on-street parking is allowed. If allowed, we recommend the site design team consider the installation of curb extensions into the parking aisle to reduce the crossing width and define the parking aisle.
- To help meet local and regional vehicle electrification goals, we recommend the site design team consider installation of Level 2 electric vehicle charging infrastructure in off-street parking lots available for use to the multifamily and townhouse residential units.

Based on the analysis conducted for this report, the proposed project will not cause or exacerbate any unreasonable congestion or unsafe conditions on the local roadway network and will not unnecessarily or unreasonably endanger the public's investment in any local roads, highways, or related infrastructure.

BACKGROUND

Greenfield Development proposes to construct a mixed-use planned unit development on approximately 12.3 acres along US-7 opposite the southern end of Ballard Road in Georgia, Vermont. The mixed-use development project consists of:

- (8) 2-bedroom units within multifamily / mixed use buildings
- (25) 2-bedroom townhouse-style attached units
- (6) 3-bedroom single family units
- 33 senior living units
- 12,000 SF of first floor commercial

The site proposes direct access to US-7 from a new public road directly opposite Ballard Road near US-7 mile point 0.83, and through internal roadways to the existing Dollar General. The proposed site plan is illustrated in Figure 1.

FIGURE 1: PROPOSED HOMESTEAD CAMPGROUND REDEVELOPMENT SITE PLAN, DATED 7/7/23 (SOURCE: O’LEARY-BURKE CIVIL ASSOCIATES, PLC)



The proposed site plan illustrates four surface parking lots with a total of 137 parking spaces, plus parking for two vehicles in each single-family lot driveway, for a total of 149 off street parking spaces. The roadways are approximately 28-feet wide, which would allow for parking on one side of the street and two 10-foot travel lanes, which would be consistent with narrow, traffic-calmed neighborhood roadways.

The site is located within the Town of Georgia’s “South Village” zoning district. The Town of Georgia, Northwest Regional Planning Commission, and VTtrans have developed the South Village Transportation Master Plan¹ identifying preferred infrastructure treatments adjacent to the project area, including a new traffic signal and crosswalk at US-7 & Ballard Road and a

¹ Georgia South Village Transportation Master Plan, 17 May 2019
https://vtrans.vermont.gov/sites/aot/files/planning/documents/corridor/FINAL%20-%20Georgia%20South%20Village%20Transportation%20Master%20Plan_05.17.19_redux.pdf

“potential future connector public” road through the proposed development at Homestead Campground.

The South Village zoning district is not a state designated neighborhood or center.

There are no identified active or planned highway construction projects on US-7 near the project area.

EXISTING TRANSPORTATION NETWORK

The roadway context along US-7 in Georgia is primarily commercial with some single-family residential driveways south of Ballard Road. Adjacent and nearby commercial land uses include a free-standing discount retail store, a seasonal ice cream window, an urgent care medical facility, gas station / convenience stores / grocery stores, a bank, and other office and commercial space.

US Route 7 is a state-controlled highway under Vermont Agency of Transportation jurisdiction. The roadway is classified as an urban minor arterial from Milton through the project area to I-89 Exit 18, about ½ mile north of the project site. At Ballard Road, the roadway consists of an 11-foot travel lane and 3-foot shoulder in both directions, for a total roadway width of 28-feet. The roadway is uncurbed on both sides with an open drainage system. The speed limit of US-7 is 40 mph.

Ballard Road is a Class 3 Town Highway under local jurisdiction, classified as a local road. The road is 24-feet wide, with no striped centerline or fog line. Ballard Road intersects with US-7 at mile point 0.83. The Ballard Road approach to US-7 flares widely in a large asphalt radius, extending the pedestrian crossing distance significantly. The corners are striped with hatching to discourage high speed turns through the wide radius.

The proposed site has easement access through the Dollar General driveway, approximately 150 feet north of Ballard Road. The private driveway is approximately 30 feet wide, consisting of one lane in both the entering and exiting direction.

There are limited pedestrian walkways and no dedicated bicycle infrastructure along US-7. US-7 is designated as a “High Use / Priority” bicycle corridor by the VTrans On-Road Bicycle Plan. There are no transit stops proximate to the project area, but Green Mountain Transit (GMT) operates two routes near I-89 Exit 18:

- Route 96: St Albans Link Express: 2 morning and 2 evening services in the northbound and southbound directions from the Exit 18 park and ride located on Skunk Hill Road, approximately ½ mile north of the project site.
- Route 115: Alburgh – Georgia Commuter with one morning and one evening service to the Exit 18 park and ride on Skunk Hill Road (nearest stop), plus the Arrowhead and Georgia Regional Business Parks.

Automatic traffic recorder site ATR F378 located about 1,000-feet north of the project site (south of VT-104A) reported a 2022 average annual daily traffic (AADT) volume of 6,621 vehicles per day (vpd). This is based on 7 days of data in late June and early July 2022. However, there

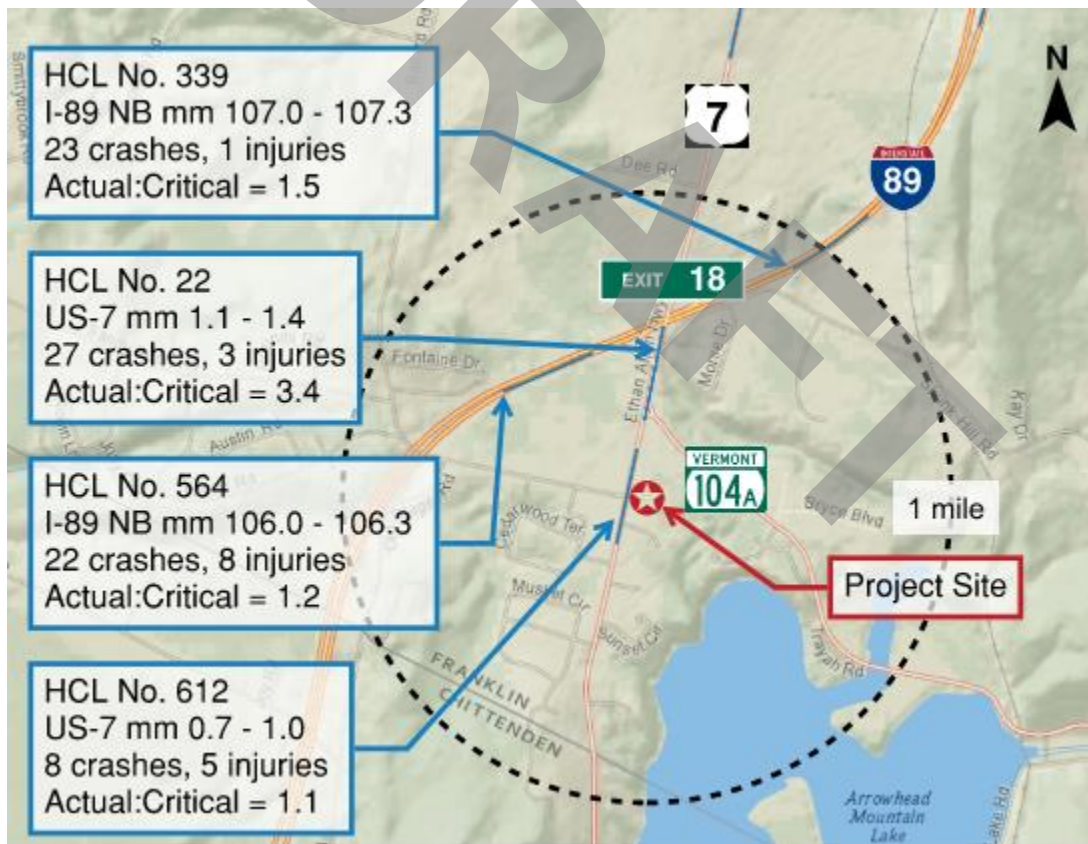
appears to be an anomaly within the dataset, with one of the days recording a significantly lower volume than expected. WCG estimated a corrected 2022 AADT of 7,240 vpd, with documentation provided in Attachment B.

The observation in 2022 recorded a peak hour volume of 836 vehicles per hour (vph), a resulting corrected %K of 11.5%, and a northbound directional split (%D) of 58% in the PM peak. With data available in 1-hour increments, the morning peak hour was observed from 8:00 AM to 9:00 AM, and the afternoon peak hour was observed from 4:00 PM to 5:00 PM.

CRASH REVIEW

High crash locations (HCLs) are intersections or roadway segments where the actual crash rate over a five-year period exceeds the critical crash rate. WCG reviewed the most HCL report prepared by VTrans, which uses 2012-2016 crash data. Four HCLs are reported within 1 mile of the project site (Figure 2), including an HCL directly adjacent to the proposed site.

FIGURE 2: 2012-2016 HIGH CRASH LOCATION SEGMENTS WITHIN 1 MILE OF THE PROJECT SITE



- Two of the HCLs are on I-89 northbound: one near the northbound exit ramp diverge, and the other near the northbound entrance ramp merge.

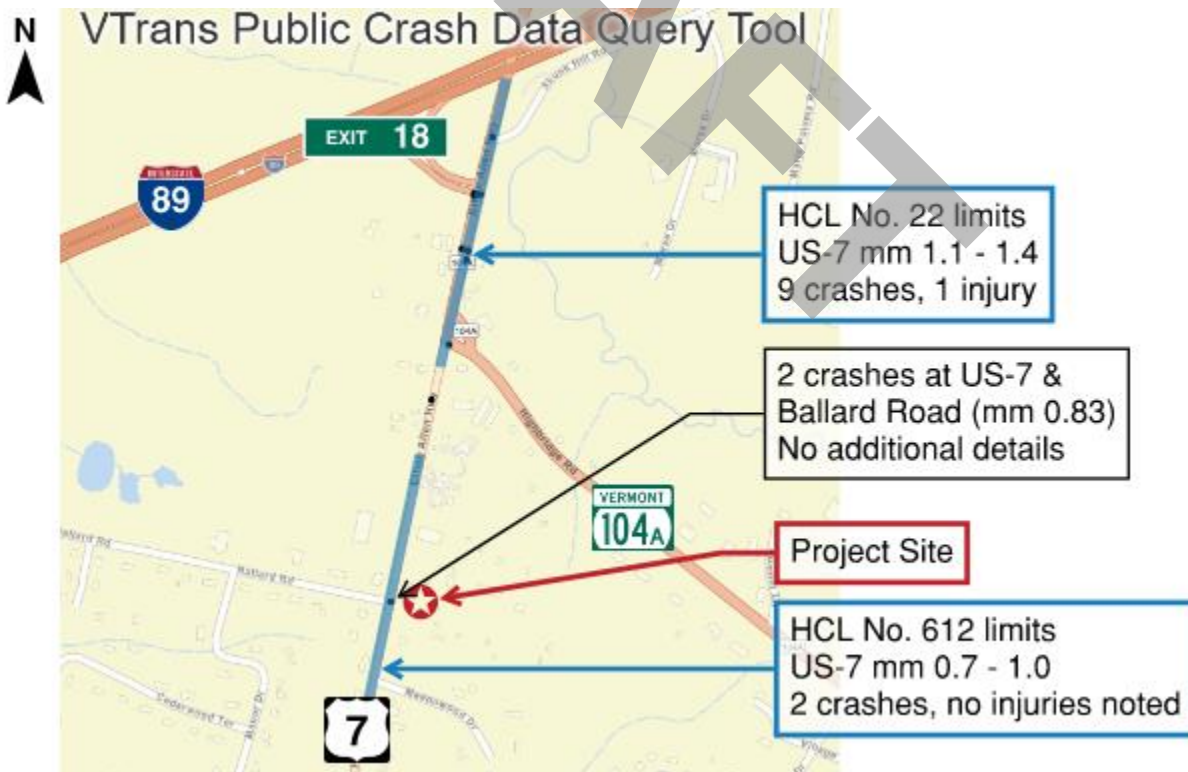
- One HCL is a segment of US-7 that includes multiple high volume intersections including Skunk Hollow Road, the Exit 18 northbound ramp intersections, a gas station / convenience store with two driveways, and the VT-104A intersection.
- The HCL nearest the site includes the Ballard Road intersection. This HCL is ranked #612 out of 772 HCL segments throughout the state. There were 8 crashes over five years, with five injuries resulting.

WCG reviewed reported crashes from 1 January 2018 through 31 December 2022 within the same limits of the HCLs along US-7. These crashes, as mapped by the VTrans Public Crash Query Tool, are shown in Figure 5. The number of reported crashes decreased substantially:

- Within the limits of the HCL nearest the project site (#612), 2 crashes were reported with no reported injuries from 2018 through 2022, down 75% from 8 crashes and five injuries from 2012 through 2016.
- There were 9 reported crashes with one injury within the limits of HCL #22 further north on US-7, down 67% from 27 crashes and 3 injuries from 2012 through 2016.

With such a reduction in reported crashes, as well as a recent reclassification of US-7 to an urban minor arterial with an associated increase in the critical crash rate, the two segments of road would no longer be considered high crash locations.

FIGURE 3: REPORTED CRASHES NEAR PROJECT SITE, 2018 THROUGH 2022



ESTIMATED TRAFFIC VOLUMES

Traffic Analysis Scenarios

Consistent with the VTrans TIS Guidelines, traffic analyses should consider the base year (year in which the project is completed) and the planning year (base year plus five years). For this project, the base year is assumed to be 2025 and the planning year is 2030. VTrans recommends a baseline growth rate of 8% over 20 years at sites across the state, or about 0.4% per year. WCG applied this growth rate to the estimated 2022 AADT on US-5 to estimate the 2025 and 2030 AADT volumes, documented in Attachment B.

Design Hour Volume

Consistent with the VTrans TIS Guidelines, traffic analysis will be conducted with traffic volumes representing the 30th highest hour. From the VTrans TIS Guidelines²:

Since it is impractical to design a highway for the highest volume encountered during the year, highway engineers have sought a compromise between capacity and cost. Thus, a highway is designed for the 30th highest hourly volume of the year, commonly known as the "Design Hour Volume" (DHV).

WCG estimated the 2025 and 2030 DHV using TIS Guideline method C, "VTrans 'Alternative DHV Determination Method' by Poll Group" using the correct estimated AADT. The resulting estimated 2025 DHV was 3% greater than the observed 2022 highest hour. Attachment B documents the recommended DHV estimate methodology.

No Build Traffic Volumes

WCG conducted 13-hour turning movement counts at the US-7 & Ballard Road intersection, and the US-7 & Dollar General intersection on Thursday 17 August 2023. Weather conditions were clear and sunny, and temperatures were seasonably warm. The AM peak hour was observed from 7:15 AM to 8:15 AM, and PM peak hour was observed from 4:30 to 5:30 PM.

WCG adjusted the observed traffic volumes to represent the base year and planning year DHV. The total adjustment to the observed volumes was +6.3% and +8.3% to represent PM peak DHV in 2025 and 2030, respectively, and +29.4% and +31.4% to represent AM peak hour conditions in 2025 and 2030, respectively.

Other Development Volumes

Town Planning and Zoning staff identified the proposed Black Walnut mixed-use development project located at 26-104 Ballard Road as a potential Other Development Volume (ODV) to include as existing in the current study. The Black Walnut mixed-use development is described in a TIS:

² Traffic Impact Study Guidelines, April 2019, Page 18

“The proposed redevelopment program consists of removing the go-kart track, bumper boat pool, mini golf course and driving range, barn and silo, and constructing a 3,000 square-foot daycare, 1,500 square-foot pharmacy, 32 residential units, 60 elderly housing units, 172 parking spaces, and new water and sewer lines.”³

The estimated trip generation resulting from the proposed project as detailed in the Black Walnut TIS is included as an ODV in this analysis.

Town staff further recommended doubling the trip generation associated with the Black Walnut development to account for further development along Ballard Road. An additional amount of traffic equal to the Black Walnut trip generation is included in a separate 2030 high-growth analysis scenario.

No Build Scenario Volumes

The 2025 and 2030 No-Build Scenario Design Hour Volumes are illustrated in **XXX**, respectively. The traffic volume development spreadsheet is presented in **XXX**.

Base Vehicle Trip Generation

Trip generation refers to the number of vehicle trips originating at or destined for a particular land use development. The proposed project will generate new trip ends from the land use being developed, as detailed in Table 1.

TABLE 1: LAND USE DEVELOPMENT PROGRAM

Development Program Description	ITE Land Use Code (LUC)	Units
(8) 2-bedroom units within multifamily / mixed use buildings	220: Multifamily Housing (Low-Rise)	8 dwelling units
(25) 2-bedroom townhouse-style attached units	215: Single-Family Attached Housing	25 dwelling units
(6) 3-bedroom single family units	210: Single-Family Detached Housing	6 dwelling units
(33) senior living units	252: Senior Adult Housing - Multifamily	33 dwelling units
12,000 SF of first floor commercial	822: Strip Retail Plaza (<40k)	12 KSF GFA

Data from the Institute of Transportation Engineers (ITE) can be applied to estimate trip generation associated with the existing and proposed land uses. WCG consulted the ITE Trip Generation Manual, 11th Edition to estimate base vehicle trips, documented in Table 3.

³ 26-104 Ballard Road Redevelopment Traffic Impact Study, May 14, 2019

Base vehicle trip generation refers to the total site trip generation prior to any adjustment associated with internal capture, pass-by trip characteristics, walk, bike, or transit mode share, or other transportation demand management strategies. Given the mixed land uses of the proposed development, the South Village neighborhood context, and the project’s investment in walking infrastructure, we recommend adjustments to the base vehicle trip generation to account for internal capture, pass-by trip making, and transportation demand management strategies.

Internally Captured Trips

Because of the scale and complementary nature of the commercial and residential land uses on the proposed site, some trips are expected to be made entirely on-site. This capture of trips internal to the site has the net effect of reducing external vehicle trip generation from the overall development site on the external street system. For these internally captured trips, the origin, destination, and travel path are all within the site.

Internally captured trips have been estimated using a modified methodology in the ITE Trip Generation Handbook⁴ and are shown in Table 3. Internal capture trips are estimated prior to splitting site generated trips into pass-by and non-pass-by trips or estimating the effect of TDM strategies.

Pass-By and Primary Trips

According to standard engineering practice, external trips may be separated into pass-by and non-pass-by trips. Non-pass-by trips can be further classified into primary trips and diverted network trips. In this study, all non-pass-by trips are considered primary trips. Primary trips are dedicated, intentional trips between origins and destinations, while pass-by trips are trips siphoned from the existing traffic flow. As defined by the ITE Trip Generation Handbook, 3rd Edition:

“A pass-by trip is made as an intermediate stop on the way from an origin to a primary trip destination without a route diversion. Pass-by trips are attracted from traffic passing the site on an adjacent street...”

In essence, a primary trip is a new trip on the road network, whereas a pass-by trip results in a change in turning traffic at project intersections but does not add to the traffic volume of the adjacent street network.

Pass-by trips are estimated using the average pass-by rates surveyed by ITE for that land use. Pass-by trip making data is available for LUC 821: Shopping Plaza (40-150k) in the weekday PM peak hour, with an average pass-by rate of 40%. These data were applied to the AM and PM peak hour external trips to estimate a pass-by and primary external trip classification for the proposed site.

⁴ NCHRP Report 684 - Enhancing Internal Trip Capture Estimation for Mixed-Use Developments

Transportation Demand Management

Transportation demand management (TDM) encompasses a broad set of strategies to reduce or reallocate personal vehicle travel to achieve specific goals such as congestion mitigation, air quality improvements and emissions reductions, reduced parking demand, and improved public health. TDM strategies may generally be grouped into four categories: physical, operational, financial, and organizational.

At this site specifically, there is limited transit service, bicycle infrastructure, or pedestrian facilities along US-7 near the site. The site is located in a mixed-use zoning district with existing, planned, and permitted complimentary land uses and sidewalk infrastructure requirements that would leverage walk-bike trips. To support future non-vehicle access to the site, Table 2 documents recommended TDM features as detailed in the VTrans TDM Guidance⁵ for mixed-use / low transit sites to be considered for implementation on the Homestead Campground site.

TABLE 2: RECOMMENDED TDM FEATURES ON SITE

TDM Measure	Percent Trip Reduction	Details
Physical		
Design site to support transit and walk access	2%	Minimal setbacks, main entrance fronting streets
Secure bicycle parking	1%	In residential multifamily buildings
Exterior bicycle racks	0.5%	At each building
Sidewalk / shared-use path improvements	2%	Sidewalks throughout site and along US-7 frontage connecting to Dollar General site
On-site amenities	1%	Mixed use commercial
Organizational		
Marketing / information program	2%	Include TDM materials in leasing documents
Total	8.5%; Max. 4%	

As noted in the VTrans TDM Guidance, a site with physical measures only (without organizational and operational, and/or financial measures), the maximum TDM credit is 4%. This credit is applied to new, primary vehicle trip generation.

⁵ VTrans Transportation Demand Management (TDM) Guidance, February 2016

Summary of Trip Generation and Classification

TABLE 3: ESTIMATED TRIP GENERATION AND CLASSIFICATION

Homestead Campground Redevelopment Proposed Build				AM Peak Hour			PM Peak Hour			Weekday
				Base			Base			Base
ITE LUC	Description	Size	Unit	Enter	Exit	Total	Enter	Exit	Total	Total
210	Single-Family Detached Housing	6	DU	1	5	6	4	3	7	76
215	Single-Family Attached Housing	25	DU	3	9	12	8	6	14	180
220	Multifamily Housing (Low-Rise)	8	DU	1	2	3	3	1	4	54
252	Senior Adult Housing - Multifamily	33	DU	2	5	7	5	3	8	120
822	Strip Retail Plaza (<40k)	12	KSF	17	11	28	40	39	79	736
Estimated Base Trip Generation, Proposed Site				24	32	56	60	52	112	1166
Internally Captured Trips (NCHRP 684 Model)				1	1	2	9	9	18	114
Total External Trips				23	31	54	51	43	94	1052
Pass-by Trips				6	4	10	14	14	28	266
Non-pass-by (Primary) Trips				17	27	44	37	29	66	786
TDM Mitigated Trips 4%				1	1	2	1	1	2	31
Total New External Primary Vehicle Trips				16	26	42	36	28	64	755

VTrans guidelines specify that a traffic study should be considered if the proposed development will generate 75 or more new peak hour trips.⁶ The estimated new primary external vehicle trip generation is 42 AM and 64 PM peak hour trips, just below the threshold meriting further evaluation.

Estimated Trip Distribution

The estimated external vehicle trip generation presented in Table 3 was distributed proportionally to the no-build traffic volumes. We assumed 25% of primary trips originating from or destined to points north would access the site through the existing Dollar General driveway, and all pass-by trips would use the new driveway access opposite Ballard Road. The resulting trip generation and distribution of the primary and pass-by vehicle trips is illustrated in XXX.

Build Scenario Traffic Volumes

The estimated trip distribution illustrated in XXX is added to the 2025 and 2030 adjusted weekday no build design hour volumes in XXX and XXX, respectively, to estimate build scenario traffic volumes. These build scenario turning movement volumes are presented in XXX and XXX.

⁶ Vermont Agency of Transportation, Policy and Planning Division, Development Review and Permitting Services, *Traffic Impact Study Guidelines* (April 2019).

Combined Driveway Traffic Volumes

Future development along the corridor may require that the existing Dollar General driveway is closed at the discretion of VTrans. In this scenario, the existing Dollar General traffic would be routed through the proposed development at the proposed driveway opposite Ballard Road. In addition, the unknown / unplanned additional development equal and in addition to the Black Walnut project is included in this scenario. The volumes associated with the combined driveway and future Ballard Road development have been estimated for the 2030 build scenarios in **XXX**.

CAPACITY ANALYSIS

Intersection capacity analyses were performed at the US-7 & Ballard Road and US-7 & Dollar General driveway intersections. Analyses evaluated average control delay, level of service (LOS), and volume to capacity (v/c) ratios consistent with methodologies documented in the Highway Capacity Manual.

Level of Service Definition

Level of service (LOS) is a qualitative measure describing the operating conditions as perceived by motorists driving in a traffic stream. LOS is calculated using the procedures outlined in the Highway Capacity Manual, Sixth Edition: A Guide for Multimodal Mobility Analysis⁷ (HCM6). In addition to traffic volumes, key inputs include the number of lanes at each intersection, traffic control type (signalized or unsignalized), and the traffic signal timing plans, if applicable.

The HCM6 defines six qualitative grades to describe the level of service at an intersection. Level-of-service is based on the average control delay per vehicle; average control delay is a function of a gap acceptance model. Table 4 shows the various LOS grades and descriptions for unsignalized intersections. According to HCM procedures, an overall LOS cannot be calculated for two-way stop-controlled intersections, such as US-7 & Ballard Road and US-7 & Dollar General driveway intersections, because not all movements experience delay.

The VTrans policy on level of service is:

- Overall LOS C should be maintained for state-maintained highways and other streets accessing the state’s facilities.
- Reduced LOS may be acceptable on a case-by-case basis when considering, at minimum, current and future traffic volumes, delays, volume to capacity ratios, crash rates, and negative impacts resulting from improvements necessary to achieve LOS C.

⁷ The HCM6 does not provide methodologies for calculating intersection delays at certain intersection types including signalized intersections with exclusive pedestrian phases and signalized intersections with non NEMA-standard phasing. Because of these limitations, HCM 2000 and HCM 2010 methodologies are employed where necessary and as noted.

- LOS D should be maintained for side roads with volumes exceeding 100 vehicles/hour for a single lane approach (150 vehicles/hour for a two-lane approach) at two-way stop-controlled intersections.

TABLE 4: LEVEL-OF-SERVICE CRITERIA FOR UNSIGNALIZED AND SIGNALIZED INTERSECTIONS

LOS	CHARACTERISTICS	UNSIGNALIZED AVERAGE DELAY (SEC)	SIGNALIZED AVERAGE DELAY (SEC)
A	Little or no delay	≤ 10.0	≤ 10.0
B	Short delays	10.1-15.0	10.1-20.0
C	Average delays	15.1-25.0	20.1-35.0
D	Long delays	25.1-35.0	35.1-55.0
E	Very long delays	35.1-50.0	55.1-80.0
F	Extreme delays	> 50.0	> 80.0

Volume to Capacity Ratio Definition

The volume to capacity ratio (v/c) represents the sufficiency of an approach leg to accommodate the vehicular demand. According to FHWA:

“As the v/c ratio approaches 1.0, traffic flow may become unstable, and delay and queuing conditions may occur. Once the demand exceeds the capacity (a v/c ratio greater than 1.0), traffic flow is unstable and excessive delay and queuing is expected.”⁸



VTrans does not have a v/c policy. Typically, v/c is used as an alternative indicator of performance, with preferred values below 0.95.

Results of Capacity Analysis: 2025 Scenarios

WCG evaluated average control delay, LOS, and v/c for the 2025 build year AM and PM peak hour conditions in the build and no build scenarios. These analysis scenarios include the proposed Black Walnut traffic volumes as an existing development included in all scenarios. The resulting capacity analyses are summarized in Table 5 and included as Attachment E.

⁸ Federal Highway Administration (FHWA), *Signalized Intersections: Informational Guide*, 2004

TABLE 5: RESULTS OF INTERSECTION CAPACITY ANALYSES USING THE 2025 DESIGN HOUR VOLUMES IN NO-BUILD AND BUILD SCENARIOS

2025 Scenarios												
Intersections	AM Peak Hour						PM Peak Hour					
	LOS	No Build Delay	v/c	LOS	Build Delay	v/c	LOS	No Build Delay	v/c	LOS	Build Delay	v/c
 US-7 & Dollar General WB L/R, along Dollar General SB L, along US-7	B	14	0.01	B	13	0.02	B	15	0.06	B	15	0.07
	A	8	0.01	A	8	0.01	A	8	0.01	A	8	0.02
 US-7 & Ballard Road EB L/T/R, along Ballard Rd WB L/T/R, along Prop Ballard Rd Ext NB L, along US-7 SB L, along US-7	C	23	0.61	D	27	0.67	C	25	0.47	D	32	0.56
		n/a		B	12	0.06		n/a		C	17	0.12
	A	8	0.02	A	8	0.02	A	9	0.06	A	9	0.06
		n/a		A	8	0.01		n/a		A	8	0.02

With no conflicting traffic volumes, the northbound shared through / right turn lane does not experience delay. Left turning vehicles along US-7 experience an average of 8-9 seconds of delay, resulting in a LOS A; the new trips associated with the project do not result in any significant increase in delay along US-7. The stop-controlled westbound approach from the existing Dollar General driveway and proposed site access experience acceptable delay. In the AM peak hour, the average delay for the Dollar General approach decreases, as more right turning vehicles are expected on this approach. Since right turning vehicles experience less delay, the average delay for all movements decreases.

The average control delay along the eastbound Ballard Road approach in the AM peak hour is expected to increase from 23 seconds / LOS C to 26 seconds / LOS D. In the PM peak hour, the average control delay along this approach increases from 25 seconds / LOS C to 32 seconds, LOS D. In both cases, the average control delay and resulting LOS is within the VTrans Guidelines as acceptable.

Results of Capacity Analysis: 2030 Scenarios

WCG evaluated average control delay, LOS, and v/c for the 2030 build year AM and PM peak hour conditions in the build and no build scenarios. These analysis scenarios include the proposed Black Walnut traffic volumes as an existing development included in all scenarios.

Furthermore, VTrans requested that the analysis consider the impacts of potential access management modifications along US-7 that would result in consolidating the Dollar General driveway into the proposed westbound Ballard Road approach to US-7. This analysis scenario is identified as the Build Combined Driveway scenario.

The Build Combined Driveway scenario also includes traffic from an unidentified and unplanned project to ensure spare capacity in the future planning of the US-7 & Ballard Road intersection. The added traffic is equal to the traffic estimated in the Black Walnut traffic study intended to represent a high-growth scenario.

The resulting 2030 capacity analyses are summarized in Table 6 and included as Attachment F.

TABLE 6: RESULTS OF INTERSECTION CAPACITY ANALYSIS USING THE 2030 DESIGN HOUR VOLUMES IN NO-BUILD AND BUILD SCENARIOS

2030 Scenarios									
Intersections	AM Peak Hour						Build High Growth Combined Driveway		
	LOS	No Build Delay	v/c	LOS	Build Delay	v/c	LOS	Delay	v/c
STOP US-7 & Dollar General WB L/R, along Dollar General SB L, along US-7	B	14	0.01	B	13	0.02	n/a		
	A	8	0.01	A	8	0.01			
STOP US-7 & Ballard Road EB L/T/R, along Ballard Rd WB L/T/R, along Prop Ballard Rd Ext NB L, along US-7 SB L, along US-7	C	24	0.63	D	28	0.68	E	37	0.78
		n/a		B	12	0.05	B	12	0.06
	A	8	0.02	A	8	0.02	A	8	0.02
		n/a		A	8	0.01	A	8	0.01

2030 Scenarios									
Intersections	PM Peak Hour						Build High Growth Combined Driveway		
	LOS	No Build Delay	v/c	LOS	Build Delay	v/c	LOS	Delay	v/c
STOP US-7 & Dollar General WB L/R, along Dollar General SB L, along US-7	B	15	0.07	B	15	0.07	n/a		
	A	8	0.01	A	8	0.02			
STOP US-7 & Ballard Road EB L/T/R, along Ballard Rd WB L/T/R, along Prop Ballard Rd Ext NB L, along US-7 SB L, along US-7	D	26	0.49	D	34	0.58	F	53	0.74
		n/a		C	18	0.12	C	20	0.22
	A	9	0.06	A	9	0.06	A	9	0.07
		n/a		A	8	0.02	A	8	0.03

With no conflicting traffic volumes, the northbound shared through / right turn lane does not experience delay. Left turning vehicles along US-7 experience an average of 8-9 seconds of delay, resulting in a LOS A; the new trips associated with the project do not result in any significant increase in delay along US-7. The stop-controlled westbound approach from the existing Dollar General driveway and proposed site access experience acceptable delay. In the AM peak hour, the average delay for the Dollar General approach decreases, as more right turning vehicles are expected on this approach. Since right turning vehicles experience less delay, the average delay for all movements decreases.

The average control delay along the eastbound Ballard Road approach in the AM peak hour is expected to increase from 24 seconds and LOS C to 28 seconds and LOS D. In the combined driveway scenario with high traffic growth along Ballard Road, the delay and LOS increases to 37 seconds and LOS E.

In the PM peak hour, the average control delay and level of service along the eastbound Ballard Road approach is expected to increase from 26 seconds and LOS D to 34 seconds, remaining LOS D. Under the combined driveway scenario and high traffic growth along Ballard Road scenario, this delay and LOS is expected to increase to 57 seconds and LOS F.

Under the build scenario, the intersection meets the VTrans Level of Service policy. The combined driveway and high traffic growth along Ballard Road scenario does not meet the VTrans Level of Service policy along the eastbound Ballard Road approach to US-7.

SIGHT DISTANCE REVIEW

As defined in the 2018 publication *A Policy on Geometric Design of Highways and Streets*, from the American Association of State Highway and Transportation Officials (AASHTO), sight distance is the “the length of roadway ahead that is visible to the driver.”⁹ Sight distances of sufficient length are necessary at all points along a roadway to ensure vehicles can safely stop or avoid colliding with potential obstructions or other vehicles on the roadway.

Standard practice in assessing intersection safety and operations involves measuring two separate sight distances – **stopping sight distance** and **intersection sight distance**.

Stopping sight distance (SSD) is the visible distance along a roadway between an advancing motorist and a potential obstacle in the roadway. It is measured from a point representing the approaching driver’s eye and a point representing an obstacle in the roadway.¹⁰ Stopping sight distances of adequate length are needed along all roadways, both at and away from intersections, so that drivers travelling at design speeds can react to potential obstacles and safely brake to avoid collisions. Design minimum stopping sight distances are calculated based on factors such as design speed, response times, and grades as reported in the *2018 Policy on Geometric Design of Highways and Streets*.¹¹

Intersection sight distance (ISD) is the distance available along the major road travelled way corresponding with the maximum visibility between an advancing motorist on the major road and an entering motorist on an intersecting minor road. It is measured between a point representing the advancing driver’s eye above the major road and a point representing the entering driver’s eye above the intersecting road.¹²

⁹ American Association of State Highway and Transportation Officials, *A Policy on Geometric Design of Highways and Streets*, Seventh Edition (Washington D.C.: American Association of State Highway and Transportation Officials, 2018). Page 3-2.

¹⁰ As noted in the 2018 *Policy on Geometric Design of Highways and Streets* (page 3-15), the height of the driver’s eye is assumed to be 3.5’ above the road surface and the height of a potential obstacle is 2.0’ above the road surface.

¹¹ American Association of State Highway and Transportation Officials, *A Policy on Geometric Design of Highways and Streets*, Seventh Edition (Washington D.C.: American Association of State Highway and Transportation Officials, 2018). Page 3-5 to 3-6.

¹² As noted in the 2018 *Policy on Geometric Design of Highways and Streets* (page 3-16), the height of the driver’s eye of the approaching vehicle is assumed to be 3.5’ above the road surface of the major road and the height of the driver’s eye of the entering vehicle is assumed to 3.5’ above the minor road surface. The decision point offset from the travel way varies with sight conditions (page 9-38); in this case we assume the decision point is 15-feet from the travel way.

The 2018 Policy on Geometric Design of Highways and Streets states that the available intersection sight distance should be at least equal to the required stopping sight distance along the major road.

“Sight distance is also provided at intersections to allow the drivers of stopped vehicles a sufficient view of the intersecting highway to decide when to enter the intersecting highway or to cross it. If the available sight distance for an entering or crossing vehicle is at least equal to the appropriate stopping sight distance for the major road, then drivers have sufficient sight distance to anticipate and avoid collisions.”

However, when possible, it is desirable to have intersection sight distances that exceed the design minimum stopping sight distances to offer improved operations, such that major road traffic need not decelerate to accommodate entering traffic.

“However, in some cases a major-road vehicle may need to stop or slow to accommodate the maneuver by a minor road vehicle. To enhance traffic operations, intersection sight distances that exceed stopping sight distances are desirable along the major road.”

Based on the posted speed limit of 40 MPH and a relatively level grade (<3%), the design minimum stopping sight distance is 250 feet along US-5. The target minimum intersection sight distance for turning traffic is 335 feet to the left and 390 feet to the right.

ISD and SSD were measured at the approximate proposed site driveway location. The resulting ISD and SSD observations are detailed in the following pictures and table.

FIGURE 4: STOPPING SIGHT DISTANCE PERSPECTIVE TO THE NORTH (LEFT) AND SOUTH (RIGHT) AT US-7 & BALLARD ROAD



TABLE 7: REQUIRED AND MEASURED SIGHT DISTANCES AT THE PROPOSED NORTHERN FULL ACCESS SITE DRIVEWAY

	Required Minimum	Design Target	Measured
Stopping Sight Distance	250'	n/a	>500' (met)
Intersection Sight Distance	left, to south: 250' right, to north: 250'	left, to south: 335' right, to north: 390'	left, to south: >500' (met) right, to north: >500' (met)

The required minimum stopping sight distance and design target intersection sight distance is met at the US-7 & Ballard Road intersection.

WARRANT ANALYSES

Turn Lane Warrant Evaluation

WCG conducted left- and right-turn lane volume warrant evaluations for the 2030 build scenarios with the combined driveway and high traffic growth along Ballard Road during the AM and PM peak hour. The volume warrant evaluations were conducted following standard practice outlined in the VTrans Transportation Impact Study Guidelines. The results of the turn lane volume warrant evaluation are summarized in Table 8. Left- and right-turn lanes are not warranted by volume in any scenario.

TABLE 8: TURN LANE WARRANT EVALUATION SUMMARY

	2030 AM Build	2030 PM Build
Left Turn Lane Warrant Met?	No	No
Right Turn Lane Warrant Met?	No	No

The proposed project does not warrant the installation of a left turn lane by volume. Installation of a turn lane would widen the roadway, increase pedestrian crossing distances, and likely lead to higher travel speeds. A turn lane was not included in the conceptual schematic drawings of the intersection in the South Village Transportation Master Plan. With adequate sight distances on approach to the intersection, left and right turn lanes are not recommended.

Traffic Signal Warrant Evaluation

A signal warrant evaluation is a set of tests run to determine if a traffic signal would significantly improve operations, mobility, and safety at an intersection. There are a total of 8 warrants:

- 1) Eight-Hour Vehicular Traffic Warrant: when a large amount of intersecting traffic occurring over an 8-hour period is the principal reason for installing a traffic signal, or where excessive delays occur on minor approaches to an intersection.
- 2) Four-Hour Vehicular Traffic Warrant: when a large amount of intersecting traffic occurring over a 4-hour period is the principal reason for installing a traffic signal.

- 3) Peak Hour Warrant: when the minor-street traffic suffers unduly delay when entering or crossing the major-street during the average peak hour is the principal reason for installing a traffic signal.
- 4) Pedestrian Volume Warrant: when the traffic volumes on a major street are so heavy that pedestrians experience excessive delays.
- 5) School Crossing Warrant: when school children crossing a major street are the principal reason for installing a traffic signal.
- 6) Coordinated Signal System Warrant: when maintaining proper platooning of vehicles is the principal reason for installing a traffic signal.
- 7) Crash Experience Warrant: when the severity and frequency of accidents is the principal reason for installing a traffic signal.
- 8) Roadway Network Warrant: when the concentration and organization of traffic flow is the principal reason for installing a traffic signal.

A signal warrant analysis is considered advisory only. This means that simply meeting any warrant may not be sufficient cause for installing a traffic signal. For example, meeting the peak hour warrant is usually not sufficient in and of itself to warrant installing a traffic signal. The rationale for this is that one hour (or less) of congestion in a day is probably not severe enough to justify the potential crash risk and investment in the traffic signal controller and related equipment and software.

With only two crashes occurring at the US-7 & Ballard Road intersection in a five-year period, only the first three traffic volume-related warrants are applicable at the site. Using the twelve-hour count data collected on 17 August 2023 the following adjustments and modifications were made to represent 2030 no-build and build scenario volumes. The build scenario includes the combined driveway and high growth along Ballard Road traffic volumes.

Adjustments to the observed traffic volumes include:

- Adjusted the count to represent 2030 design hour volumes following the methodology described earlier.
- Applied a 0.85 adjustment factor to represent average traffic volumes.
- Added in the Black Walnut and an equal sized ODV along Ballard Road, with trip demand and distribution estimated proportional to the traffic volume outside of the peak hours.
- Distributed the non-peak hour, non-pass-by trips proportionally based on the adjusted traffic volumes over a 24-hour period.
- Distributed the non-peak hour, pass-by trips proportionally based on the adjusted traffic volumes over a 12-hour period from 7 AM to 9 PM.
- Distributed all project generated traffic proportional to the observed entering and exiting traffic volumes at the US-7 & Ballard Road intersection.

The detailed traffic signal warrant evaluations are available in Attachment H. Table 9 summarizes the results of the signal warrant evaluation.

TABLE 9: SUMMARY OF TRAFFIC SIGNAL WARRANT ANALYSIS

	2030 No Build	2030 Build
Warrant 1: Eight-Hour Vehicular Traffic Warrant	Hours met: 3 Hours needed: 8 NOT MET	Hours met: 3 Hours needed: 8 NOT MET
Warrant 2: Four-Hour Vehicular Traffic Warrant	Hours met: 1 Hours needed: 4 NOT MET	Hours met: 2 Hours needed: 4 NOT MET
Warrant 3: Peak Hour Warrant	Hours met: 0 Hours needed: 1 NOT MET	Hours met: 0 Hours needed: 1 NOT MET

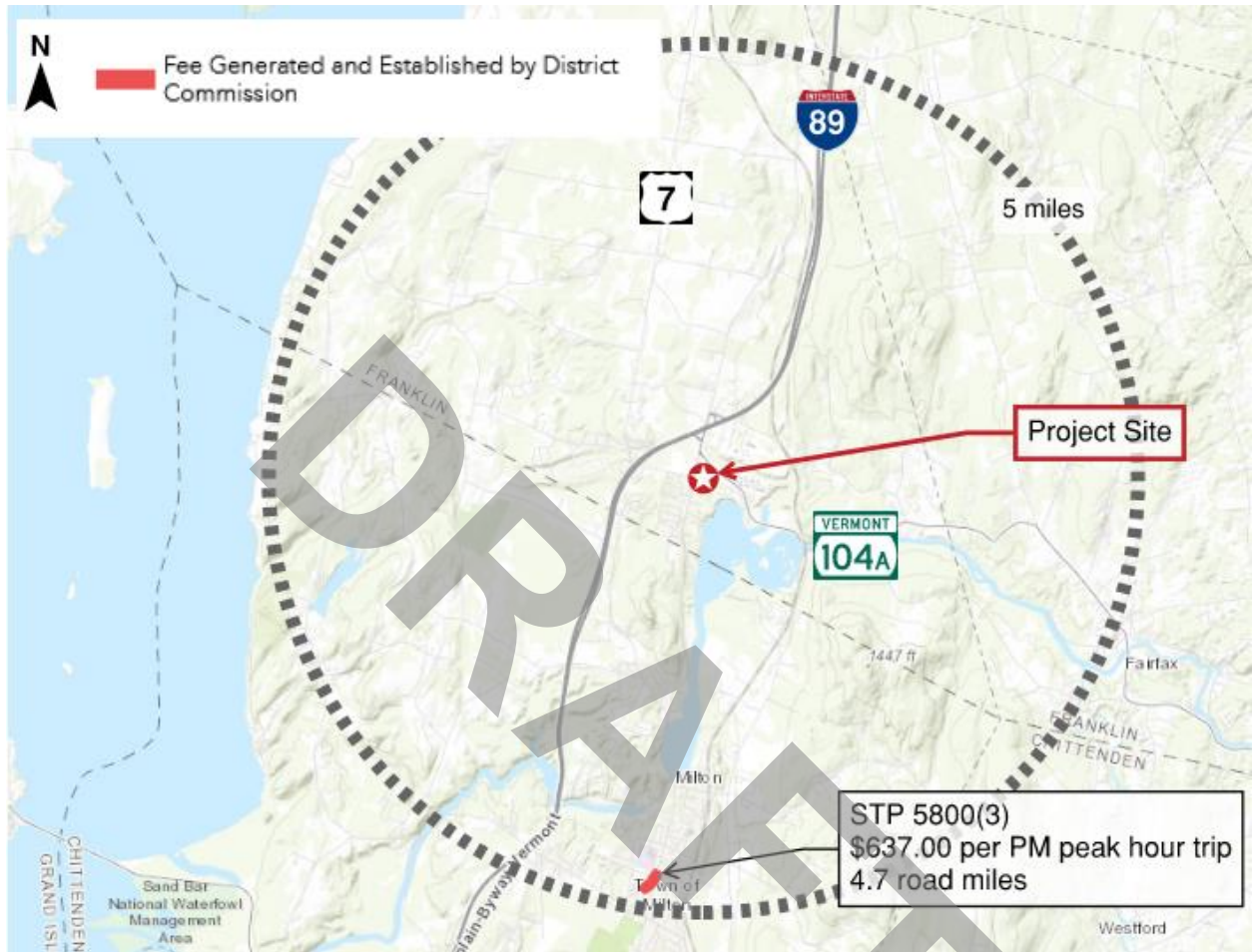
A traffic signal is not warranted by volume in either the build or no build condition.

As the South Village neighborhood develops, the intersection may be considered to “lie within a built up area of an isolated community having a population of less than 10,000.” In these situations, the MUTCD allows for a 70% reduction in the warranting traffic volumes. When considering the reduced volumes, the intersection meets warrants 1, 2, and 3 in both no-build and build scenarios.

TRANSPORTATION IMPACT FEE

A statewide transportation impact fee will likely be assessed to this project. Since the project is generating over 75 new external primary trips, the impact fee is based on fee-generating projects within five road miles. There is one Act 145 Transportation Impact Fee generating project located within 5 road miles: STP 5800(3) - Traffic Signal and Intersection Improvements at US-7 and Middle Rd. / Railroad St.; \$630 per PM peak hour trip.

FIGURE 5: NEAREST ACT 145 TRANSPORTATION IMPACT FEE GENERATING PROJECTS



The Act 145 fee is based on new trip generation. As such, the fee is only applied to external primary trips, not pass-by trips (trips already on the road network). The PM peak hour trips towards through the fee generating project are illustrated in Attachment I.

With proposed sidewalk facilities throughout the site and connections to the existing and future planned South Village sidewalk network, the site qualifies for a 10% reduction in the Act 145 impact fee.¹³

¹³ VTrans Act 145 Transportation Impact Fee Guidance dated January 3, 2022, Table 1

TABLE 10: TRANSPORTATION IMPACT FEE CALCULATION

Project	Fee Rate (\$/PM Trip)	PM Peak Hour Trips	Base Project Fee
STP 5800(3)	\$630	18	\$11,340
Total Base Fee			\$11,340
Impact Fee Adjustment			-10%
Total Act 145 Transportation Impact Fee			\$10,206

POTENTIAL MITIGATION CONSIDERATIONS

The proposed Homestead Campground Redevelopment project in Georgia is estimated to generate a total of 56 AM peak hour trip ends and 112 PM peak hour trip ends, including both internal and external trips. Considering only the new, primary vehicle trip ends, the proposed project is expected to generate 42 AM peak hour primary trip ends and 64 PM peak hour primary trip ends (Table 3).

Roadway Infrastructure Mitigation

As demonstrated in the capacity analysis, the proposed project will not create an undue adverse impact on the transportation system in the future year. All affected intersections are expected to operate within the VTrans Level of Service standards. No mitigation is necessary to avoid causing or worsening safety issues or undue congestion. We recommend that a follow up trip generation assessment, traffic capacity analysis, and signal warrant evaluation is conducted at 50% occupancy to evaluate the resulting transportation impacts at the observed and projected occupancy.

After 100% build out and with continued development along Ballard Road beyond the proposed Black Walnut development, the level of service along Ballard Road falls below the VTrans standard. The Homestead Campground and adjacent development will increase the built up environment around Ballard Road, meriting the use of the lower traffic volume threshold for the signal warrant. A traffic signal at US-7 & Ballard Road is consistent with the Georgia South Village Transportation Master Plan, and a traffic signal would have benefits to pedestrians crossing US-7 and for vehicles exiting driveways and side streets in the vicinity of the intersection. While not warranted or recommended as a result of this project, a traffic signal will likely be warranted and recommended as development continues within the South Village. The capacity increasing traffic signal will likely be eligible for partial reimbursement through Act 145 Statewide Transportation Impact Fees.

Turn lanes are not warranted or recommended. We do recommend that the traffic signal mast arms and are located to allow for future widening and designed for appropriate loading to accommodate turn lanes if needed.

Site Plan Comments

The proposed site plan does not indicate if on-street parking is allowed. If allowed, we recommend considering the installation of curb extensions into the parking aisle to reduce the crossing width and define the parking aisle.

To help meet local and regional vehicle electrification goals, we recommend the site design team consider installation of Level 2 electric vehicle charging infrastructure in off-street parking lots available for use to the multifamily and townhouse residential units.

ATTACHMENTS

- Attachment A – Crash Query Results
- Attachment B – Existing Traffic Volumes
- Attachment C – Traffic Volume Worksheet
- Attachment D – Traffic Volume Figures
- Attachment E – 2025 Synchro Capacity Analysis Worksheets
- Attachment F – 2030 Synchro Capacity Analysis Worksheets
- Attachment G – Turn Lane Warrant Worksheets
- Attachment H – Traffic Signal Warrant Worksheets
- Attachment I – Act 145 Fee Trip Distribution



Town of Georgia

47 Town Common Road North. • St. Albans, VT 05478
• Phone: 802-524-3524 • Fax: 802-524-3543 • website: townofgeorgia.com

Preliminary Plat Application Application # PR _____

Submission Requirements: Within six months of receipt of letter from the Planning Department classifying your project as a major subdivision, complete and submit this application with all required elements from the attached outline & fees. Submit one 11x17" sets of site plan maps, with a digital copy in *.pdf format, incorporating any recommendations made by the Development Review Board (DRB) in its Sketch Plan review letter. Applicant must also provide a list for all abutters, including those across a public or private right of way. **Incomplete applications will be returned and will delay scheduling your hearing.**

SECTION 1: OWNER/APPLICANT INFORMATION (complete all)

864 Ethan Allen Highway, LLC
Owner(s): (c/o Rick Bove)
Address: 218 Overlake Drive
Colchester, VT
Zip Code 05446 Telephone 802-864-3430
Email rickbove@comcast.net

Greenfield Growth, LLC
Applicant(s): (c/o Benjamin Avery)
Address: 68 Randall Street
South Burlington, VT
Zip Code 05403 Telephone 802-316-0004
Email ben@greenfieldgrowthllc.com

Tax Parcel ID: 117200000 Zoning District: SV PUD Yes No

CERTIFICATION OF APPLICANT(S)

AFFIRMATION: The undersigned hereby certifies that the information submitted in this application is true, accurate, and complete.

Signature of Applicant: [Signature] Date: 1/18/24

Signature of Applicant: _____ Date: _____

PROPERTY OWNERS' AUTHORIZATION

The undersigned property owner(s) hereby certify that the information submitted in this application regarding this property is true, accurate and complete and that the Applicant(s) have full authority to request approval for the proposed use of the property and any proposed structure(s).

Signature of Owner: [Signature] Date: 1/19/24

Signature of Owner: _____ Date: _____

Location of Property: 864 Ethan Allen Highway, Georgia, VT

Parcel ID No.: 117200000 Zoning District: SV Is this a PUD? Yes No

Deed Reference: Volume 316 Page 289 Size of Parcel: 12.30 acres

Previous subdivision of parcel (if applicable)

Permittee name: _____
Date: _____ Map # _____

Previous Site Plan Approval (if applicable)

Permittee name: _____
Date: _____ Map # _____

If applicable:

Engineer: Bryan Currier (O'Leary-Burke Civil Assoc.) Surveyor: Doug Henson

Phone: 802-878-9990 Phone: 802-878-9990

Email: bcurrier@olearyburke.com Email: dhenson@olearyburke.com

Project Description: Provide a detailed narrative, on a separate sheet of paper, describing the scope and layout of the proposed development. The narrative should explain the proposed use of the property & all key elements, as presented on the site plan. Please address each of the following elements: building size(s) and type, landscaping and screening, road and driveway access to the property, impact on traffic, internal circulation of vehicular and pedestrian traffic, parking (# of spaces), stormwater and erosion control measures, lighting (size, type, location, and number), and signage, if any. Summarize all details below:

Number and size of proposed lots:

15 Total Proposed Lots. Lot #1 = 0.43 acres. Lot #2 = 0.98 acres. Lot #3 = 0.72 acres. Lot #4 = 0.43 acres.
Lot #5 = 1.00 acres. Lot #6 = 0.36 acres. Lot #7 = 0.87 acres. Lot #8 = 0.29 acres. Lot #9 = 0.28 acres. Lot #10 = 0.22 acres.
Lot #11 = 0.24 acres. Lot #12 = 0.31 acres. Lot #13 = 0.28 acres. Lot #14 = 3.88 acres. Lot #15 = 0.13 acres.

Names and addresses of abutting property owners:

SEE ATTACHED ABUTTERS LIST

Existing and/or proposed means of access to the site:

A new access is proposed off Ethan Allen Highway with a 24' wide public road serving the project. See plan sheet 2.

List of plans, sketches, or other information submitted with this application:

1-Existing Conditions, 2-Overall Plan, 3-20 Scale plan "A", 4-20 Scale Plan "B", 5-20 Scale Plan "C", 6-20 Scale Plan "D",
7-Plan & Profile, 8-Landscaping, 9-Lighting, 10-Road Details, 11-Individual Sewage, 12-Shared Sewage,
13-Pump Station "A", 14-Pump Station "B", 15-Water & Sewer Details, 16-Erosion Control Details, 17-Storm Details

Location of parking and proposed number of spaces:

There are five (5) separate parking areas serving the 5-plex buildings and/or mixed-use buildings. Each parking area has ten (10) parking spaces except the parking area behind the mixed-use building on Lot 3 which has 14. There are also eight (8) parallel parking spaces on the public road in front of 5-plex buildings "C", "D", and "E". (62) spaces total.

Existing and/or proposed road & driveway access to site:

A new access is proposed off Ethan Allen Highway with a 24' wide public road serving the project. See attached Overall Plan Sheet #2 and Plan & Profile sheet 7.

Existing and/or proposed easements and rights-of-way:

An access easement is to be provided over Lot #3 to the abutting Dollar General store for future access through the proposed project should it be required by VTRANS. See attached plan sheet 2 and survey plat.

Proposed and/or existing wastewater disposal and water supply:

The six (6) single-family homes on Lots 8-13 are to be served by individual on-lot sewage disposal systems. All other proposed uses shall be served by two (2) shared sewage disposal systems located on common land Lot #14 in the rear of the parcel. See attached site plans, sewage detail, and pump station detail sheets.

Proposed drainage/storm water runoff (if required):

Stormwater runoff for the proposed project shall be collected by a network of catch basins and roadside swales (where the road is not curbed). Stormwater will be conveyed to an infiltration basin in the southern corner of the parcel. See plan sheets 2, 4, and 17.

Proposed landscaping (if applicable):

Street trees are proposed along both sides of the public road with spacing of 40' on center. Landscaping shrubs are proposed around the 5-plex units. A row of cedars is proposed along the southern boarder of the project to provide screening for abutting homes. See landscaping plan sheet 8.

Size and location of proposed and/or existing buildings:

Lots 1 and 3 will contain 6,000 SF mixed use buildings. Lots 2, 4, and 7 will contain 5-plex buildings with footprints of approximately 4,850 SF. The six (6) single-family homes will have footprints of roughly 1,920 SF. The size of the senior living building will be decided in the future but is currently shown at approximately 8,320 SF.

State permits required and/or obtained for this project:

This project will require the following State permits: Water & Wastewater; Erosion Control, Stormwater, Act 250, and possibly a public community water system permit for the well to potentially serve the future senior living building.

Proposed lighting (if any):

Five (5) pole mounted street lights are proposed along the public road. See Overall Plan sheet 2 and Lighting Plan sheet 9.

Notes

- 1) * Per Sec. 3.5.B.2, major subdivisions in the AR-1, AR-2, AR-3, and L-2 districts must be submitted under Planned Unit Development (PUD) rules. PUDs optional in other districts.
- 2) Application standards for subdivision approval appear in the Georgia Development Regulations as Article 4. Site Plan Review and Approval standards appear in Article 3.

**Application Submission Requirements
Preliminary Plat for Major Subdivisions**

The Preliminary Subdivision Plat shall consist of one or more maps or drawings which may be printed or reproduced on paper with all dimensions shown in feet or decimals of a foot, drawn to a scale of not more than one hundred (100) feet per inch, showing or accompanied by the following information:

1. Proposed subdivision name or identifying title and the name of the town.
2. Name and address of the record owner, subdivider and designer of the preliminary plat, and any option holders of the proposed subdivision.
3. Number of acres within the proposed subdivision, location of property lines, existing easements, buildings, watercourses, and other essential existing physical features.
4. The names of all subdivision immediately adjacent and the names of owners of record and deed reference of adjacent acreage.
5. The zoning district designation of the area to be subdivided and any zoning district boundaries affecting the tract.
6. Deed reference, tax map reference.
7. The location and size of any existing sewers and water mains, culverts and drains on the property to be subdivided.
8. Location, names and present widths of existing and proposed streets, highways, easements, building lines, alleys, parks, and other public open spaces as well as similar facts regarding adjacent property two hundred (200) feet from property lines. Street names are to be submitted to the Georgia Selectboard. The approval is to be documented by means of a letter.
9. Contour lines at intervals of five (5) feet for existing grades and for proposed finished grades where changes of existing ground elevation will be five (5) feet or more.
10. Typical cross sections of the proposed grading and roadways and of sidewalks.
11. Complete survey of subdivision tract by a licensed land surveyor.
12. Date, true north point and scale.
13. Means of providing water supply to the proposed subdivision.
14. Means of on-site disposal of septic wastes including location and results of tests to ascertain subsurface soil, rock and ground water conditions, depth to ground water unless pits are dry at depth of five (5) feet, location and results of percolation tests on each lot.
15. Provisions for collecting and discharging storm drainage, in the form of a drainage plan.
16. Preliminary designs of any bridge or culverts which may be required.
17. The proposed lot lines with approximate dimensions and suggested locations of buildings. 4
18. The location of temporary markers adequate to enable the Commission to location readily and appraise the basic layout in the field. Unless an existing street intersection is shown, the distance along a street from one corner of the property to the nearest existing street intersection shall be show.
19. All parcels of land proposed to be dedicated to public use and the conditions of such dedication.
20. The location of natural features or site elements to be preserved.
21. Fire protection letter of requirements from the Fire Department.

22. List of waivers, if any, the subdivider desires from the requirements of these regulations.

The preliminary plat shall be accompanied by a vicinity map drawn at the scale of not over four hundred (400) feet to the inch to show the relation of the proposed subdivision to the adjacent properties and to the general surrounding area. The vicinity map shall show all the area within two thousand (2,000) feet of any property line of the proposed subdivision or any smaller area between the tract and all surrounding existing streets, provided any part of such a street used as part of the perimeter for the vicinity map is at least five hundred (500) feet from any boundary of the proposed subdivision. Within such area, the vicinity map shall show:

1. All existing subdivisions and approximate tract lines of parcels together with the names of the record owners of all adjacent parcels of land; namely, those directly abutting or directly across any street adjoining the proposed subdivision.
2. Locations, widths, and names of existing, filed or proposed streets, easements, building lines and alleys pertaining to the proposed subdivision and to the adjacent properties as designated in Paragraph (1) above.
3. An outline of the platted area together with its street system and an indication of the future probable street system of the remaining portion of the tract, if the preliminary plat submitted covers only part of the subdivider's entire holding.

Please include all fees according to the Permit Fee Schedule on the website at: [Fee Schedule](#)

Decisions

The DRB shall act to approve or disapprove Preliminary Plat Applications in writing within forty-five (45) days after closure of the public hearing. Failure to act within the 45-day period shall constitute deemed approval on the 46th day. The DRB shall prepare written findings-of-fact and conclusions setting forth background and rationale for their decision. The DRB may attach conditions of approval to ensure the intent of applicable bylaws and the municipal plan are met.

Decisions shall be distributed per requirements in Title 24, Chapter 117, Section 4464, Vermont Statutes Annotated.

(FOR TOWN USE ONLY):

Date received: _____ Fee paid: _____ Check # _____

Returned (incomplete) _____ Date: _____ Date Application Accepted: _____

Date of Hearing: _____

Signed: _____

Douglas Bergstrom
 Zoning Administrator
 Planning, DRB & 911 Coordinator

You will receive a written Decision and Finding of Fact within 45 days of the close of the hearing.

**PRELIMINARY PLAT, CONDITIONAL USE AND SITE PLAN REVIEW
 Proposed 15-Lot Residential and Commercial Development
 PR-001-24, CU-001-24 & SP-001-24**

<p>Owner: 864 Ethan Allen Highway LLC c/o Rick Bove 218 Overlake Drive Colchester, VT 05446 PH: 802-864-3430 Email: rickbove@comcast.net</p>	<p>Applicant: Greenfield Growth, LLC c/o Benjamin Avery 68 Randall Street South Burlington, VT 05403 PH: 802-316-0004 Email: ben@greenfieldgrowthllc.com</p>
<p>Engineer: Bryan Currier Email: bcurrier@olearyburke.com Surveyor: Doug Henson Email: dhenson@olearyburke.com O’Leary-Burke Civil Associates, PLC 13 Corporate Drive Essex Junction, VT 05452 PH: 802-878-9990</p>	<p>Property Tax Parcel & Location: 864 Ethan Allen Highway Georgia VT Parcel#117200000 Zone: SV</p>

BACKGROUND

864 Ethan Allen Highway LLC, hereafter referred to as Applicant, is requesting Review for a proposed multi-unit residential and commercial development. The parcel is located at 864 Ethan Allen Highway and consists of ±12.3 acres to be subdivided into fifteen (15) Lots with proposed public road. The parcel is located within the South Village (SV) zoning district.

Applicant is proposing the creation of a 15-lot subdivision:

- Proposed Lot 1 will consist of ±.43 acres, with one mixed use building, consisting of 6,000 sf footprint, first floor commercial, 2nd floor residential with four (4) two (2) bedroom residential units and a 10-space parking lot.
- Proposed Lot 2 will consist of ±.98 acres with two five-plex 2-BR units 4,850 sf footprint, and a shared 10-space parking lot.
- Proposed Lot 3 will consist of ±.72 acres, with one mixed use building, consisting of 6,000 sf footprint, first floor commercial, 2nd floor with four (4) two (2) bedroom residential units and a parking lot with 14 parking spaces.
- Proposed Lot 4 will consist of ±.43 acres with one five-plex 2-BR units 4,850 sf footprint, and a 10-space parking lot.
- Proposed Lot 5 will consist of ±1.00 acres, with potential for future development.
- Proposed Lot 6 will consist of ±.36 acres with potential for future development.
- Proposed Lot 7 will consist of ±.87 acres with two five-plex 2-BR units 3,640 sf footprint, and a shared 10-space parking lot.
- Proposed Lots 8 will consist of ±.29 acres with one 3-BR single family home 1,920 sq ft footprint with individual septic systems and driveway with hammerhead.
- Proposed Lot 9 will consist of ±.28 acres with one 3-BR single family home 1,920 sq ft footprint with individual septic systems and driveway with hammerhead.

- Proposed Lot 10 will consist of ±.22 acres with one 3-BR single family home 1,920 sq ft footprint with individual septic systems and driveway with hammerhead.
- Proposed Lot 11 will consist of ±.24 acres with one 3-BR single family home 1,920 sq ft footprint with individual septic systems and driveway with hammerhead.
- Proposed Lot 12 will consist of ±.31 acres with one 3-BR single family home 1,920 sq ft footprint with individual septic systems and driveway with hammerhead.
- Proposed Lot 13 will consist of ±.28 acres with one 3-BR single family home 1,920 sq ft footprint with individual septic systems and driveway with hammerhead.
- Proposed Lot 14 will consist of ±3.88 acres Open Space and will contain the possible future public community water system and shared on-site wastewater disposal systems that will serve the project (other than the individual homes).
- Proposed Lot 15 will consist of ±.13 acres of open space that will contain one or more shared wells.
- Proposed 24 ft wide Public Road with 60 ft future Right-of-way (ROW).

COMMENTS
General Subdivision Review Requirements

1. **Dimensional Requirements.** The dimensional requirements of the South Village (SV) zoning district and the proposed dimensional measurements are as follows:

	Minimum Lot Size	Lot Frontage (min)	Front Yard Setbacks (min)	Side Setbacks (min)	Rear Setbacks (min)	Building Size (max)	Building Height (min)
SV Zone Requirements	3,000 sq ft (.069 acres)	30 ft	8 ft from edge of road ROW max 16 ft	0* ft or 10 ft	10 ft	20,000 sf footprint	2-3 stories (min) & 50 ft (max)
LOT 1	±0.43 acres	±174.4 ft	±34 ft	±10 ft	±10 ft	6,000 sq ft	2 stories
LOT 2	±0.98 acres	±205.8 ft	±34 ft	±10 ft	±10 ft	9,700 sq ft	2 stories
LOT 3	±0.72 acres	±229.6 ft	±34 ft	±10 ft	±16 ft	6,000 sq ft	2 stories
LOT 4	±0.43 acres	±149.3 ft	±28 ft	±10 ft	±10 ft	4,850 sq ft	2 stories
LOT 5	±1.00 acres						
LOT 6	±0.36 acres						
LOT 7	±0.87 acres	±308.3 ft	±27 ft	±8 ft	±8 ft	9,700 sq ft	2 stories
LOT 8	±0.29 acres	±76.5 ft	±40 ft	±10 ft	±78 ft	1,920 sq ft	2 stories
LOT 9	±0.28 acres	±58.7 ft	±40 ft	±10 ft	±77 ft	1,920 sq ft	2 stories
LOT 10	±0.22 acres	±61.0 ft	±40 ft	±10 ft	±77 ft	1,920 sq ft	2 stories

LOT 11	±0.24 acres	±61.0 ft	±40 ft	±10 ft	±79 ft	1,920 sq ft	2 stories
LOT 12	±0.31 acres	±61.0 ft	±40 ft	±10 ft	±116 ft	1,920 sq ft	2 stories
LOT 13	±0.28 acres	±61.0 ft	±40 ft	±10 ft	116 ft	1,920 sq ft	2 stories
LOT 14	Open space totaling ± 3.88 acres						
LOT 15	±0.13 acres						

***The 0 ft setback shall apply if buildings on adjoining properties will be attached such as with townhouse-style structures. The 10 ft setbacks shall apply to all other types of development.**

2. Waivers Requested.

- A. Waiver to increase the maximum setback from 16 ft to 20 ft for the single-family homes on Lots 8-13 to make room for required driveway turn-arounds in front of the homes.

Section 3.7 (A) Setback Waiver (Town of Georgia Development Regulations 2/27/2023)
In conjunction with a subdivision and/or site plan application, the DRB may waive setback standards up to 50% in any district to allow for single story attached garages, decks, porches, and/or accessory structures if all of the following conditions are satisfied:

1. *The property has circumstances or conditions which prevent the applicant from meeting the setback requirement. Such circumstances or conditions may include, but are not limited to, irregular lot size, poor soil conditions, existing vegetation or historic structures, and the location of pre-existing structures.*
2. *Due to such circumstances or conditions, the property cannot reasonably be developed in conformance with the setback standard and the authorization of a waiver is necessary to enable the permitted use of the property. The applicant must show that other possible alternatives have been considered before the DRB will consider granting a waiver.*
3. *No waiver shall be granted which would have an undue adverse effect on adjacent property, the character of the area, or on public health and safety.*
4. *In the issuance of waivers, the DRB: a. Shall consider and may require design features, screening, or some other remedy in order to mitigate anticipated impacts of any such waiver. The design feature should have a minimum height of five (5) feet above grade level and shall provide adequate privacy to the surrounding use(s). Options shall include but not be limited to a wall, a solid fence, a densely planted hedge or natural and/or man-made landforms. b. May require that all outdoor storage of materials and equipment, including waste storage facilities, not be located within the reduced setback area. c. Shall provide only the minimum waiver that is necessary.*
5. *Applications for waivers shall be considered by the DRB after a public hearing held in accordance with Section 8.4 (Public Hearing/Public Notice Requirements for Development Review Board Approvals)*

- B. Waiver for sidewalks on only one side of the road along Lots 7-13.

Section 7.8 (B) Public Sidewalks (Town of Georgia Development Regulations 2/27/2023)
The following standards shall apply to all sidewalks that are intended to serve the general public in Georgia:

1. *Location. Sidewalks shall be required in the following locations: a. On both sides of all public roads in the South Village Core District. b. On one side of all private roads in the South Village Core District. c. On both sides of all public roads in the AR-3 Zoning Districts (with the exception of Sodom Road). d. On one side of all private roads in the AR-3 Zoning District. e. As required by the DRB within the PUD or subdivision in any zoning district. The DRB may require a sidewalk or sidewalk easement on at least one side of each road approved as a part of a PUD.*
2. *Connection. All sidewalks shall form a link to any existing sidewalks on adjoining properties. This standard shall not apply to the existing People’s Trust property (SPAN# 237-076-11372) in the South Village Core District due to the existing sidewalk on the property being located far outside of the State right-of-way.*
3. *Location Within Right-of-Way. a. Town and Private Roads. All sidewalks along town roads and private roads shall generally be built at the outer edge of the road right of way (within the right-of-way). The DRB shall also consider topographical constraints, existing structure locations, and existing easements (utility, access, etc.) when determining the location of the sidewalk. b. State Roads: The sidewalk should be built within the State right-of-way. However, if this is not possible due to State restrictions, sidewalks shall be built on private property located adjacent to the State right-of-way. If a sidewalk is located on private property, the property owner shall provide the Town of Georgia an easement over the land on which the sidewalk is located. The DRB shall also consider topographical constraints, existing structure locations, and existing easements (utility, access, etc.) when determining the location of the sidewalk and easement.*
4. *Design Standards and Maintenance. All sidewalks and pedestrian infrastructure shall be designed, constructed, and maintained according to the Town of Georgia, VT Sidewalk Ordinance and the following standards: a. Materials. Sidewalks shall be concrete and shall meet all applicable requirements of the Americans with Disabilities (ADA) standards. Base material, surface crowning, surface drainage, embankments, ditching, culverts, and erosion control shall conform to the Vermont Agency of Transportation’s A-76 standard. b. Width. Sidewalks shall be at least 5 feet wide. However, on private roads located outside the South Village Core District, sidewalks shall only be required to be 4 feet wide. c. Buffer or Curbing. Sidewalks shall be separated from adjacent roads or parking areas by a landscaped buffer, curbing, change in elevation, change in surface material and/or crosswalk or surface markings. d. Driveway Crossing. Existing sidewalks, and sidewalks that will be installed as part of the proposed development, must meet the following standards: i. The sidewalk shall continue across driveways and shall be constructed to a minimum depth of 8 inches across the driveway; OR ii. The sidewalks shall be marked with proper crosswalk markings. iii. If the installation of a driveway requires disrupting or damaging an existing sidewalk, the applicant shall be responsible for restoring or replacing the sidewalk in conformance with this standard.*

3. **Site plans.** Applicant submitted PL1: *Resubdivision of Lands from 864 Ethan Allen Highway* dated 1/25/24.

Applicant has submitted 17 site plans prepared by O’Leary-Burke, Civil Associates, PLC dated 1/18/2024:

- Plan 1- *Existing Conditions*
- Plan 2- *Overall Plan*
- Plan 3- *20-Scale Plan “A”*
- Plan 4- *20-Scale Plan “B”*
- Plan 5- *20-Scale Plan “C”*

- Plan 6- 20-Scale Plan “D”
- Plan 7- Plan & Profile
- Plan 8- Landscaping Plan
- Plan 9- Lighting Plan
- Plan 10- Roadway Details
- Plan 11- Individual Sewage Disposal Details
- Plan 12- Shared Sewage Disposal Details
- Plan 13- Pump Station “A” Details and Specifications
- Plan 14- Pump Station “B” Details and Specifications
- Plan 15- Water and Sewer Details and Specifications
- Plan 16- Erosion Control Details and Specifications
- Plan 17- Stormwater Details and Specifications

The site plans submitted collectively address the following areas:

- i. The proposed property lines
 - ii. The proposed boundaries for Lots 1-15
 - iii. The location of proposed Open Spaces
 - iv. Proposed Public Road
 - v. Existing structures and wells
 - vi. Existing wastewater system with proposed access for maintenance
 - vii. Natural features of the land
 - viii. Proposed mounds and proposed wells
 - ix. Proposed driveways, parking spaces and sidewalks
 - x. Proposed landscaping
 - xi. Proposed lighting
4. **Lot layout.** As proposed, the boundary lines are linear and proposed lots are generally regular in shape.
5. **The land is suitable for subdivision or development.** The land meets the requirements for the subdivision with acreage and use, with waiver requests for setbacks and sidewalks.
6. **The proposed development will not result in undue water or air pollution.** Applicant should submit to the Zoning Administrator a state Act 250 permit navigator.
7. **Legal language.** Existing deed of subject parcels and a draft of all newly created or revised deeds, covenants, homeowner agreements, tenant association agreements, or other legal documents associated with the proposed subdivision.
8. **Access permit.** A new access is proposed off Ethan Allen Highway with a 24-foot-wide private/ proposed public road serving the project. (See attached Overall Plan Sheet #2 and Plan & Profile sheet 7.)
9. **State permits.** This project will require the following State permits: Water and wastewater; Erosion Control; Stormwater; Act 250 and possibly a community water system permit for the well to potentially serve the future senior living building. The applicant is responsible for identifying any state additional permits for this proposal. Applicants will need to submit

Permit Navigator Results with their Final Plat application for Act 250 compliance. Copies of all required state permits shall be submitted to the Zoning Administrator upon receipt.

10. **Wastewater Disposal and Water Supply.** The six (6) single-family homes on Lots 8-13 are to be served by individual on-lot sewage disposal systems. All other proposed uses shall be served by two (2) shared sewage disposal systems located on common land Lot #14 in the rear of the parcel. See attached site plans, sewage details and pump station detail sheets.
11. **Easements.** An access easement is to be provided over Lot #3 to the abutting Dollar General store for future access through the proposed project should it be required by VTrans. (See Plan Sheet 2 and Survey Plat).
12. **Fire protection** – The Applicant will need to obtain an Ability to Serve letter from the Town of Georgia Fire Chief.
13. **Financial surety** – As determined by the Development Review Board/Town of Georgia Selectboard.
14. **Performance Standards** - The use must conform to the Performance Standards in Section 3.6 of the Georgia Development Regulations (2/27/2023).
15. **Road Name-** Road name must conform with Town of Georgia regulations as well as State and VTrans standards.
16. **Driveway Standards** – All driveways must conform with Town of Georgia Private Road and Driveway Standards and VTrans B-71A residential and B-71B commercial standards.

ARTICLE 7 PLANNING and DESIGN STANDARDS:

Section 7.1 Energy Efficient Design – Developments are encouraged to incorporate energy-efficient siding of buildings.

Section 7.2 Farm and Forestland Preservation – Not Applicable.

Section 7.3 Site Design – Lots 1 and 3 will contain 6,000 square feet mixed use buildings. Lot 2, 4 and 7 will contain 5-plex buildings with footprints of approximately 4,850 square feet. The six (6) single-family homes will have footprints of roughly 1,920 square feet.

Section 7.4 Exterior Storage of Materials or Equipment – Not Applicable.

Section 7.5 Landscaping and Screening – Street trees are proposed along both sides of the public road with spacing of 40 feet on center. Landscaping shrubs are proposed around the 5-plex units. A row of cedars is proposed along the southern border of the project to provide screening for abutting homes. See landscaping plan sheet 8.

Section 7.6 Outdoor Lighting – Five (5) pole mounted streetlights are proposed along the public road. See Overall Plan sheet 2 and Lighting Plan sheet 9. Exterior lighting shall be

avoided except as required for safe facility operation, and shall incorporate energy-efficient, shielded light fixtures that are cast downward to minimize light trespass, glare and sky glow to the maximum extent feasible.

Section 7.7 Vehicular Circulation – Lots will be accessed by use of private/ proposed public road.

Section 7.8 Pedestrian Accessibility – Sidewalks will be available on both sides of the proposed public road, with sidewalks on one side of the road only along Lots 7-13.

Section 7.8 (B)(4) Design Standards and Maintenance (Town of Georgia Development Regulations 2/27/2023) *All sidewalks and pedestrian infrastructure shall be designed, constructed, and maintained according to the Town of Georgia, VT Sidewalk Ordinance and the following standards:*

- a. Materials. Sidewalks shall be concrete and shall meet all applicable requirements of the Americans with Disabilities (ADA) standards. Base material, surface crowning, surface drainage, embankments, ditching, culverts, and erosion control shall conform to the Vermont Agency of Transportation’s A-76 standard.*
- b. Width. Sidewalks shall be at least 5 feet wide. However, on private roads located outside the South Village Core District, sidewalks shall only be required to be 4 feet wide.*
- c. Buffer or Curbing. Sidewalks shall be separated from adjacent roads or parking areas by a landscaped buffer, curbing, change in elevation, change in surface material and/or crosswalk or surface markings.*
- d. Driveway Crossing. Existing sidewalks, and sidewalks that will be installed as part of the proposed development, must meet the following standards: i. The sidewalk shall continue across driveways and shall be constructed to a minimum depth of 8 inches across the driveway; OR ii. The sidewalks shall be marked with proper crosswalk markings. iii. If the installation of a driveway requires disrupting or damaging an existing sidewalk, the applicant shall be responsible for restoring or replacing the sidewalk in conformance with this standard.*

Section 7.9 Parking, Traffic Access, and Circulation – There are five (5) separate parking areas serving the 5-plex buildings and/or mixed-use buildings. Each parking area has ten (10) parking spaces except the parking area behind the mixed-use building on Lot 3 which has 14. There are also eight (8) parallel parking spaces on the public road in front of 5-plex buildings “C”, “D”, and “E”. (62) spaces total.

Section 7.10 Street Signs – Street signs will be installed in accordance with Town of Georgia and VTrans regulations.

Section 7.11 Public and Private Road Standards – Applicant shall follow VTrans regulations and the Town of Georgia’s Private Road and Driveway Standards.

Section 7.12 Site Preservation and Erosion Control – See Plan 16.

Section 7.13 Stormwater – Stormwater runoff for the proposed project shall be collected by a network of catch basins and roadside swales (where the road is not curbed). Stormwater will be conveyed to an infiltration basin in the southern corner of the parcel. See plan sheets 2, 4 and 17.

CONDITIONAL USE GUIDELINES

Per Town of Georgia Development Regulations, dated February 27, 2023, Sections 2.2 and 3.6.

- 1. Public facilities and services** *are reasonably available to serve the proposal or are planned and included in the Town Capital Budget and program to serve the proposal at the time anticipated for its completion:* Fire protection, schools, roads and municipal infrastructure.
- 2. The character of the neighborhood, area, or district affected will not be adversely impacted and that:** *A nuisance or hazard will not be created to the detriment of the health, safety, or welfare of the intended users, neighbors, or citizens of the town.* The request for mixed residential and commercial use will fit the intended purpose and character of the South Village zoning district. The proposed 12,000 square foot of commercial space and thirty-nine (39) residential units will not create a nuisance or hazard to the detriment of the health, safety or welfare of the users, neighbors, or citizens of Georgia.
- 3. The proposed use or building and the relationship between the buildings and the land will be compatible with the purposes of the district and the character of the surrounding neighborhood and will not unduly detract from abutting residences or other properties:** The proposed project is in line with the South Village district’s purpose of creating a compact settlement of small-scale business, civic and residential uses with pedestrian-friendly streetscapes. The proposed commercial and residential uses are compatible with the existing surrounding commercial and residential uses.
- 4. Appropriate use or development of adjacent property will not be impeded, i.e., the scale of the proposed development in relation to the existing and proposed uses and buildings and the effect of the proposed use on the continued enjoyment of and access to existing and approved uses in the vicinity of the proposed use will not be adversely impacted.** This project will not impede the development of adjacent properties. The proposed project includes a public road that extends to the property of the abutting parcel to the north as well as sidewalks that will vehicle and pedestrian access to that property. The project also includes an easement providing access to the abutting Dollar General store. All other surrounding uses are existing residential homes.
- 5. Traffic generated or patterns of ingress or egress will not cause congestion, hazard or detriment to the neighborhood or nearby intersections (the DRB may require a traffic study to determine compliance with this standard.)** A traffic study by Wall Consultant Group (attached) has determined that the proposed development will not cause congestion, hazard, or detriment to the neighboring or nearby intersection and does not warrant turning lanes or a traffic light.
- 6. The proposed use is consistent with the purpose of the district, the Town Plan, the Town of Georgia Development Regulations, and other bylaws and ordinances adopted by the Town of Georgia.** The purpose of the South Village district is to create compact, pedestrian-friendly mixed-use developments containing commercial and residential uses. The proposed project is mixed use with 12,000 square feet of commercial space and 39 residential units. The utilization of renewable energy resources will not be adversely affected.

7. **Phasing.** Phasing and review timeline should be discussed, as outlined in the Town of Georgia Development Regulations.

Section 4.9 (G) Master Plan Review and Phasing (Town of Georgia Development Regulations 2/27/2023) In its sole discretion, the DRB may require a sketch and description of the potential layout of the entire parcel and adjacent parcels (Master Plan) during sketch plan review for the purpose of promoting orderly development of the Town. The DRB may require the subdivision to be divided into two or more phases to be developed at separate times and may impose such conditions as necessary to assure orderly development in compliance with these Regulations (see Section 4.4 (E)(4) - Sectionalizing and Phasing).

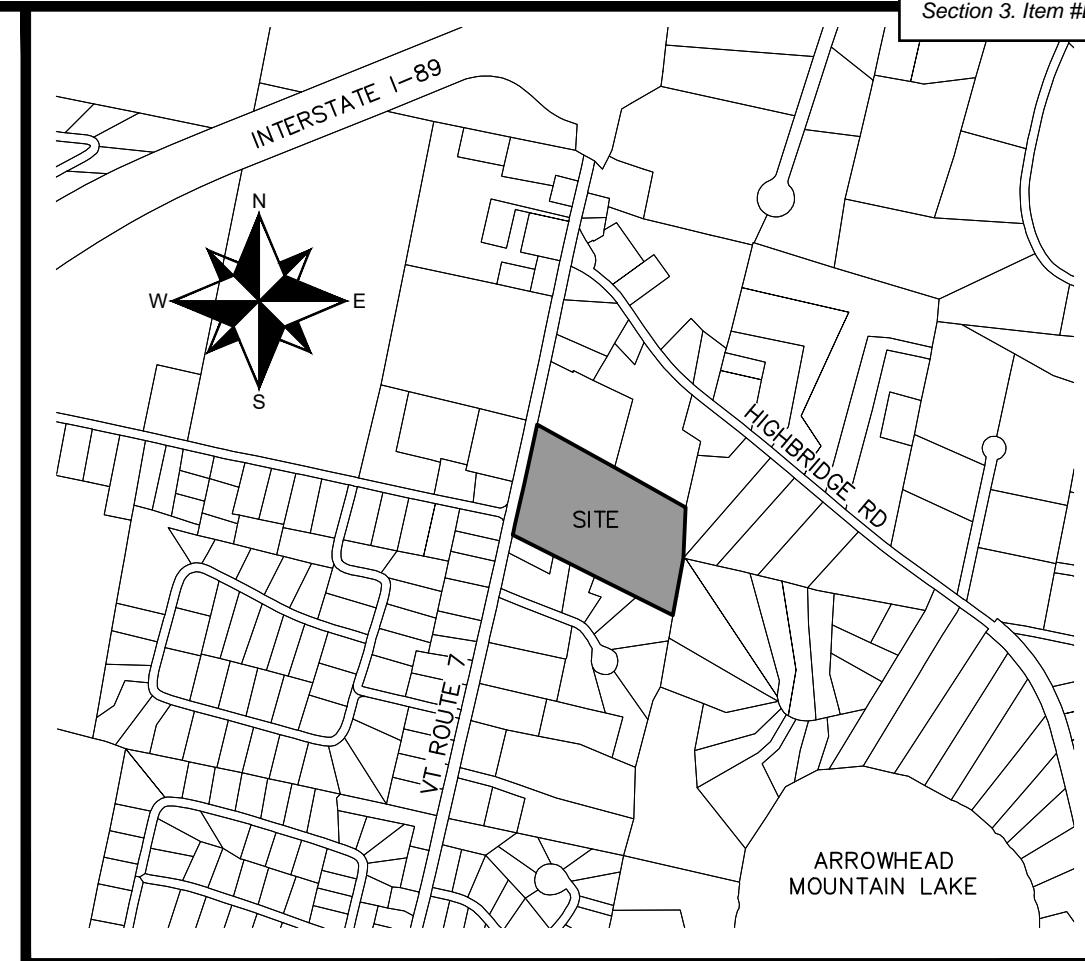
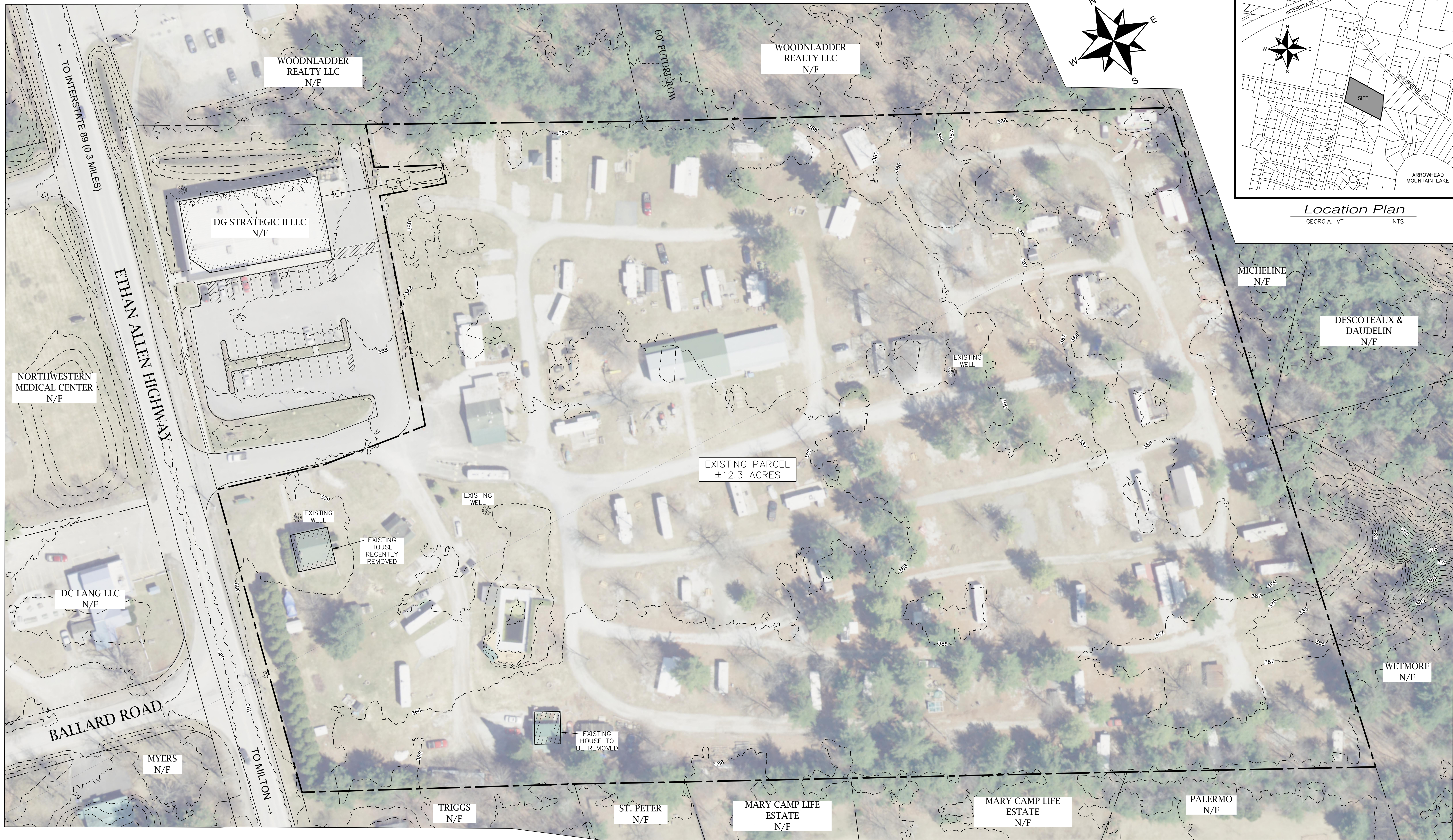
1. Any required Master Plan shall include an indication of proposed roads, driveways or streets, the future probable lot lines and building envelopes of the remaining portion of the parcel, and a description of the probable uses. The Master Plan may be drawn in a sketch plan format. The DRB may require that the Master Plan and any phasing schedule be submitted as part of an extended sketch plan review, or as a part of the final plan/plat review.

2. Review and consideration of a Master Plan as part of any subdivision review does not constitute final approval of all phases of the full Master Plan

Respectfully submitted,

Douglas Bergstrom
Zoning Administrator
Planning, DRB & 911 Coordinator

cc: Applicant and Engineer



Location Plan
GEORGIA, VT NTS

NORTHWESTERN
MEDICAL CENTER
N/F

WOODNLADDER
REALTY LLC
N/F

WOODNLADDER
REALTY LLC
N/F

DG STRATEGIC II LLC
N/F

EXISTING PARCEL
±12.3 ACRES

MICHELINE
N/F

DESCOTEAUX &
DAUDELIN
N/F

DC LANG LLC
N/F

EXISTING HOUSE
RECENTLY
REMOVED

WETMORE
N/F

BALLARD ROAD

MYERS
N/F

EXISTING HOUSE
TO BE REMOVED

TRIGGS
N/F

ST. PETER
N/F

MARY CAMP LIFE
ESTATE
N/F

MARY CAMP LIFE
ESTATE
N/F

PALERMO
N/F

LEGEND

- PROJECT BOUNDARY
- ADJACENT PROPERTY BOUNDARY
- SETBACK
- EXISTING CONTOUR LINE

Zoning Information

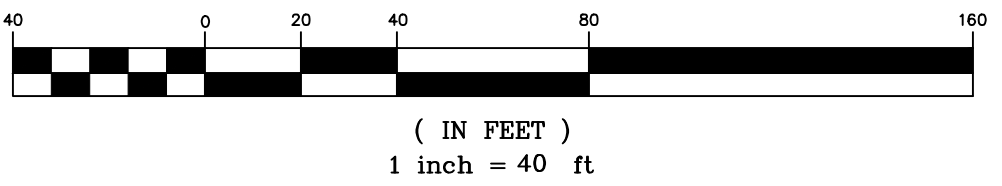
ADDRESS: 864 ETHAN ALLEN HIGHWAY
PARCEL ID: 117200000
DEED RECORDED IN VOLUME 316, PAGE 289

ZONING DISTRICT: SOUTH VILLAGE CORE
DISTRICT DIMENSIONAL REQUIREMENTS:

FRONT YARD 8' MIN. / 16' MAX.
SIDE YARD 10'
REAR YARD 10'

MINIMUM LOT SIZE 3,000 SF

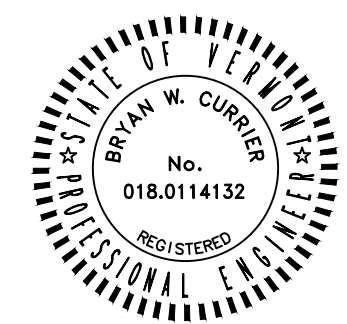
GRAPHIC SCALE



Owner/Applicant

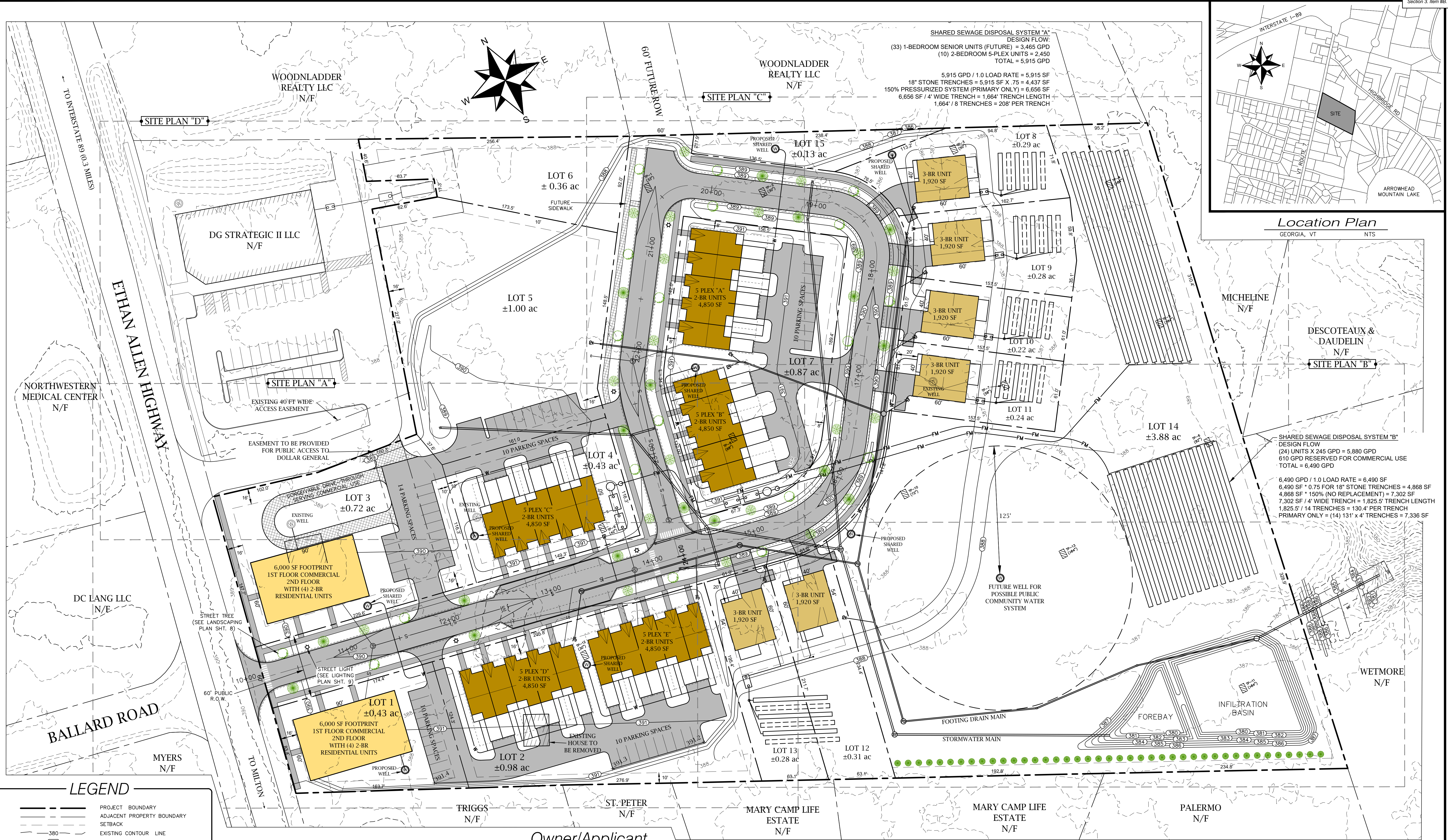
864 ETHAN ALLEN HIGHWAY, LLC
218 OVERLAKE DRIVE
COLCHESTER, VT 05446

THE CONTRACTOR SHALL NOTIFY "DIGSAFE" AT
1-888-DIG-SAFE PRIOR TO ANY EXCAVATION.



DATE	REVISION	BY
1/18/24	DESIGN	2081-44
2018-44-23	FILE	2018-44-23
		SHEET #
		1

<p>O'LEARY-BURKE CIVIL ASSOCIATES, PLC</p> <p>13 CORPORATE DRIVE ESSEX JUNCTION, VT 05452 PHONE: 802-878-9990 FAX: 802-878-9999 E-MAIL: obca@olearyburke.com</p>	<p>HOMESTEAD CAMPGROUND GEORGIA, VERMONT</p> <p>EXISTING CONDITIONS</p>
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Location Plan
GEORGIA, VT NTS

MICHELINE N/F
DESCOTEAUX & DAUDELIN N/F
SITE PLAN "B"

SHARED SEWAGE DISPOSAL SYSTEM "B"
DESIGN FLOW:
(24) UNITS X 245 GPD = 5,880 GPD
610 GPD RESERVED FOR COMMERCIAL USE
TOTAL = 6,490 GPD

6,490 GPD / 1.0 LOAD RATE = 6,490 SF
6,490 SF * 0.75 FOR 18" STONE TRENCHES = 4,868 SF
4,868 SF * 150% (NO REPLACEMENT) = 7,302 SF
7,302 SF / 4" WIDE TRENCH = 1,825.5' TRENCH LENGTH
1,825.5' / 14 TRENCHES = 130.4' PER TRENCH
PRIMARY ONLY = (14) 131' x 4' TRENCHES = 7,336 SF

SHARED SEWAGE DISPOSAL SYSTEM "A"
DESIGN FLOW:
(33) 1-BEDROOM SENIOR UNITS (FUTURE) = 3,465 GPD
(10) 2-BEDROOM 5-PLEX UNITS = 2,450 GPD
TOTAL = 5,915 GPD

5,915 GPD / 1.0 LOAD RATE = 5,915 SF
18" STONE TRENCHES = 5,915 SF X .75 = 4,437 SF
150% PRESSURIZED SYSTEM (PRIMARY ONLY) = 6,656 SF
6,656 SF / 4" WIDE TRENCH = 1,664' TRENCH LENGTH
1,664' / 8 TRENCHES = 208' PER TRENCH

LEGEND

---	PROJECT BOUNDARY
---	ADJACENT PROPERTY BOUNDARY
---	SETBACK
---	EXISTING CONTOUR LINE
---	EXISTING CONTOUR LINE
---	PROPOSED WATER LINE
---	PROPOSED SEWER LINE
---	PROPOSED STORMWATER LINE
---	PROPOSED LANDSCAPING
---	PROPOSED MIXED USE BUILDING
---	PROPOSED MULTI-FAMILY BUILDING
---	PROPOSED SINGLE-FAMILY HOME
---	SOIL TEST PIT

Zoning Information

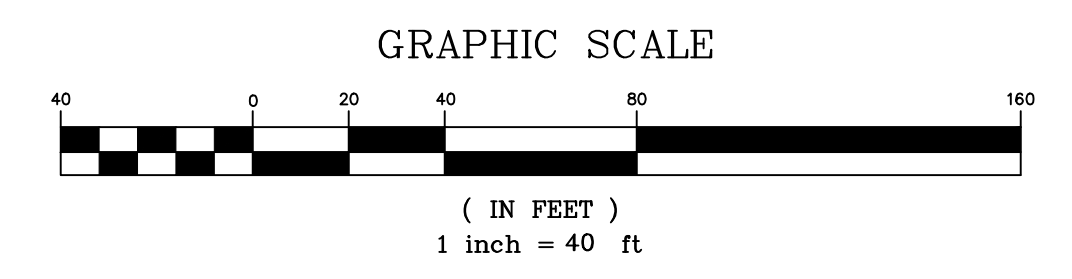
ADDRESS: 864 ETHAN ALLEN HIGHWAY
PARCEL ID: 117200000
DEED RECORDED IN VOLUME 316, PAGE 289

ZONING DISTRICT: SOUTH VILLAGE CORE
DISTRICT DIMENSIONAL REQUIREMENTS:
FRONT YARD 8' MIN. / 16' MAX.
SIDE YARD 10'
REAR YARD 10'
MINIMUM LOT SIZE 3,000 SF

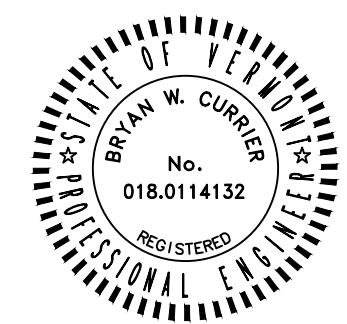
Owner/Applicant
864 ETHAN ALLEN HIGHWAY, LLC
218 OVERLAKE DRIVE
COLCHESTER, VT 05446

(39) TOTAL RESIDENTIAL UNITS

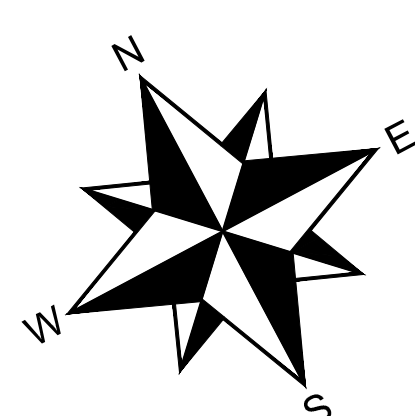
- (8) 2-BR UNITS WITHIN MXD USE BUILDINGS
- (25) 2-BR TOWNHOME UNITS
- (6) 3-BR SINGLE FAMILY UNITS
- 12,000 SF FIRST FLOOR COMMERCIAL SPACE



THE CONTRACTOR SHALL NOTIFY "DIGSAFE" AT 1-888-DIG-SAFE PRIOR TO ANY EXCAVATION.



DATE 1/27/24	REVISION REMOVED FUTURE SENIOR LIVING BUILDING PER TOWN OF GEORGIA REVIEW COMMENTS	BY GRT
DRAWN	DESIGN	DATE 1/18/24
CHECKED	DESIGN	JOB# 2081-44
BWC	GRT	FILE 2018-44-23
GRT		SHEET#
<p>O'LEARY-BURKE CIVIL ASSOCIATES, PLC</p> <p>13 CORPORATE DRIVE ESSEX JUNCTION, VT 05452 PHONE: 802-878-9990 FAX: 802-878-9999 E-MAIL: obca@olearyburke.com</p>		<p>HOMESTEAD CAMPGROUND GEORGIA, VERMONT</p> <p>OVERALL PLAN</p>
1" = 40'		2



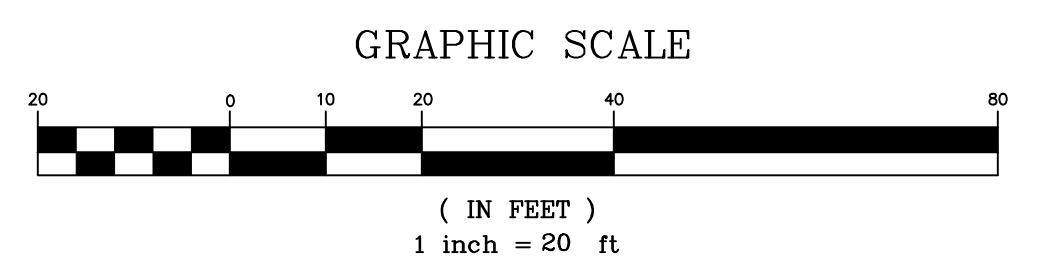
BALLARD ROAD

ETHAN ALLEN HIGHWAY

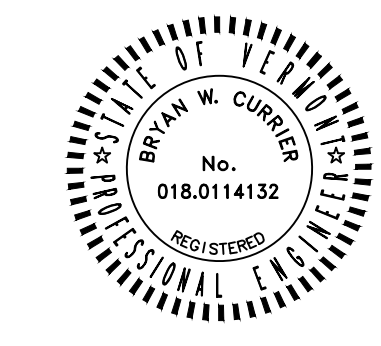
TOM MILL ROAD

LEGEND

- PROJECT BOUNDARY
- ADJACENT PROPERTY BOUNDARY
- SETBACK
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- SOIL TEST PIT



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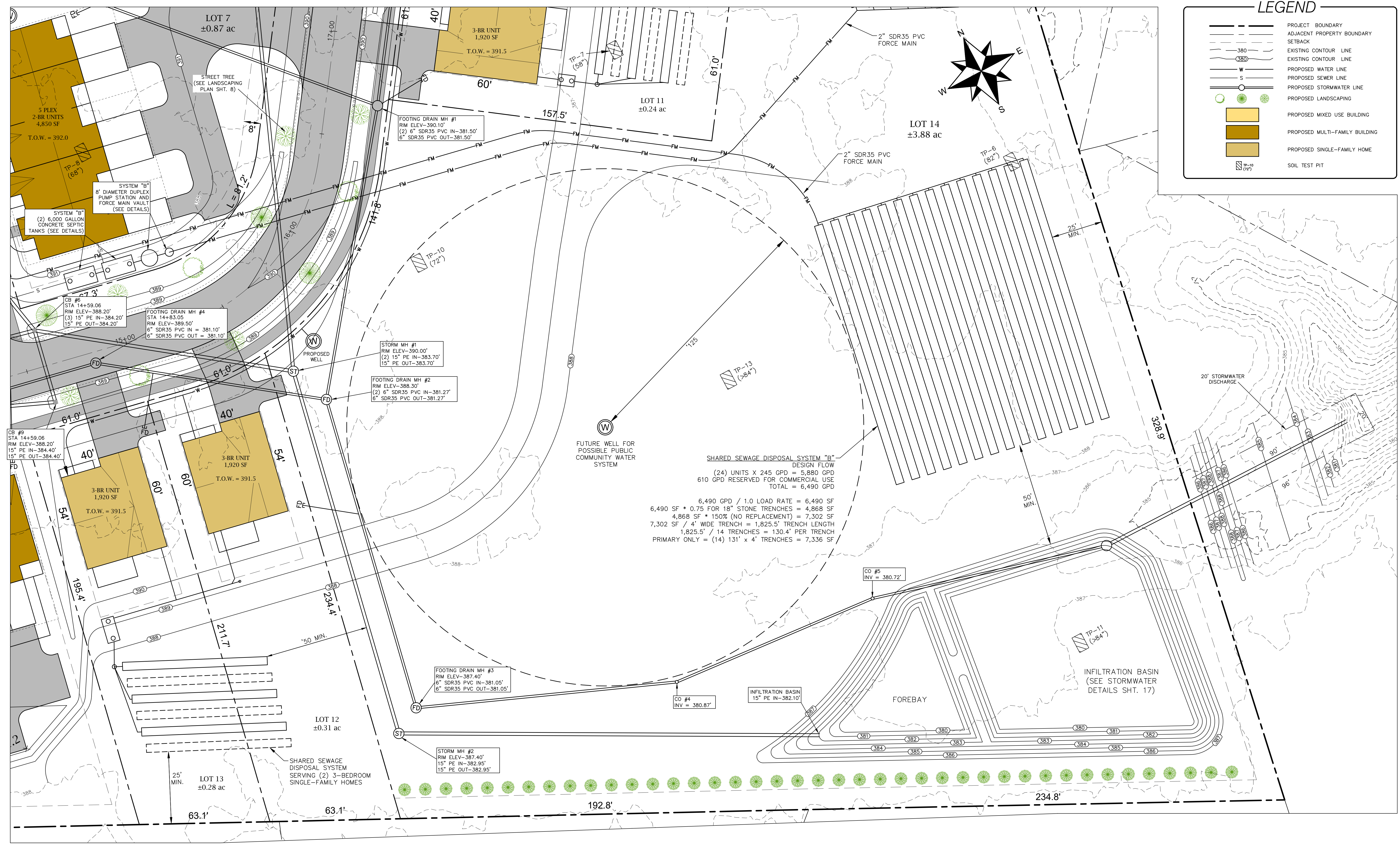
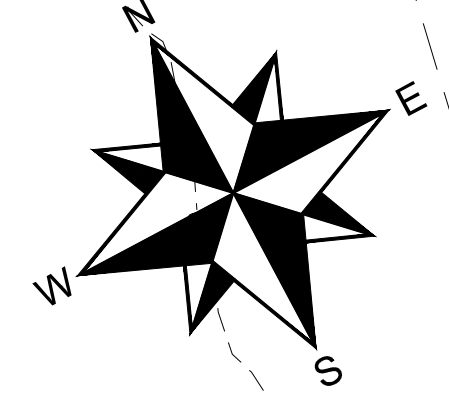
DATE: 1/27/24	REVISION: REMOVED FUTURE SENIOR LIVING BUILDING PER TOWN OF GEORGIA REVIEW COMMENTS	BY: GRT
DRAWN: BWC	DESIGN: BWC	DATE: 1/18/24
CHECKED: GRT	SCALE: 1" = 20'	JOB #: 2081-44
FILE: 2018-44-23		SHEET #: 3

O'LEARY-BURKE CIVIL ASSOCIATES, PLC
 13 CORPORATE DRIVE
 ESSEX JUNCTION, VT 05452
 PHONE: 802-878-9990
 FAX: 802-878-9999
 E-MAIL: obca@olearyburke.com

HOMESTEAD CAMPGROUND
 GEORGIA, VERMONT
20-SCALE PLAN 'A'

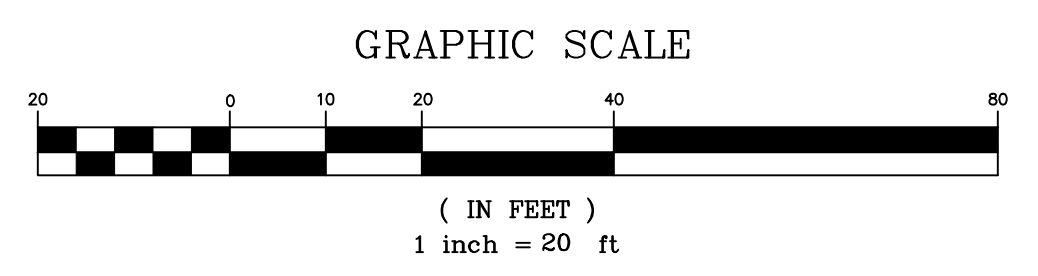
LEGEND

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	ADJACENT PROPERTY BOUNDARY
	SETBACK
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	EXISTING CONTOUR LINE
	PROPOSED WATER LINE
	PROPOSED SEWER LINE
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	SOIL TEST PIT

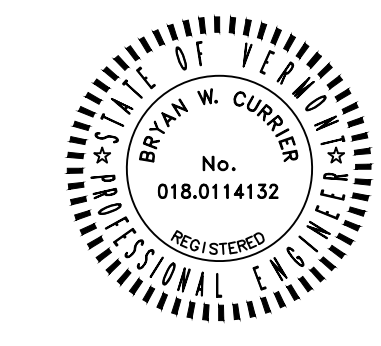


SHARED SEWAGE DISPOSAL SYSTEM "B"
 DESIGN FLOW
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DATE	REVISION	BY
SURVEY	<input type="checkbox"/> RECORD DRAWING <input checked="" type="checkbox"/> PRELIMINARY	DATE
OBSCA	<input type="checkbox"/> FINAL <input checked="" type="checkbox"/> SKETCH/CONCEPT	1/18/24
DESIGN		JOB #
BWC GRT		2081-44
DRAWN		FILE
GRT		2018-44-23
CHECKED		SHEET #
BWC		4
SCALE	1" = 20'	

HOMESTEAD CAMPGROUND
GEORGIA, VERMONT

O'LEARY-BURKE CIVIL ASSOCIATES, PLC

13 CORPORATE DRIVE
ESSEX JUNCTION, VT 05452
PHONE: 802-878-9990
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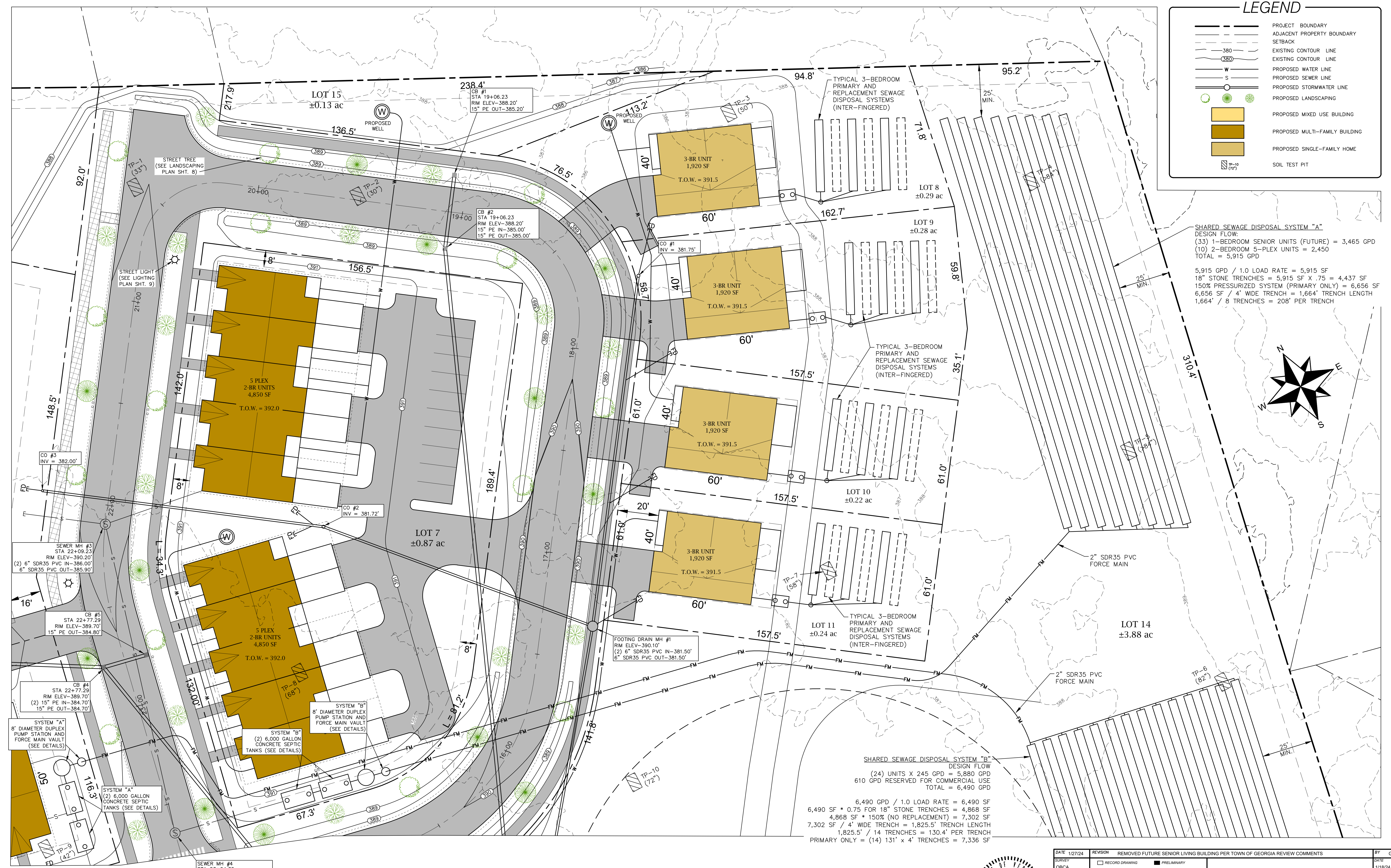
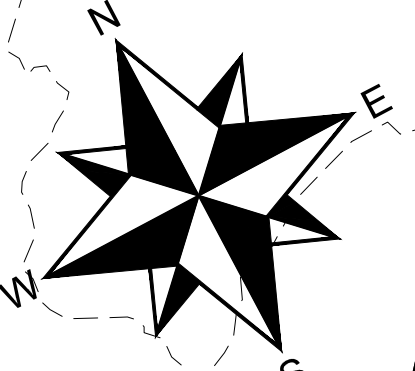
20-SCALE PLAN 'B'

LEGEND

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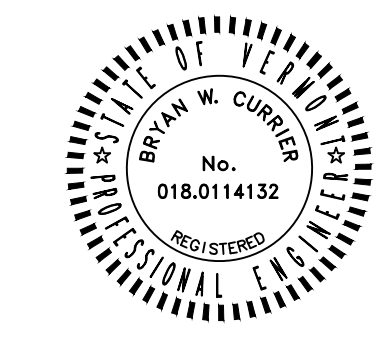
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GRAPHIC SCALE



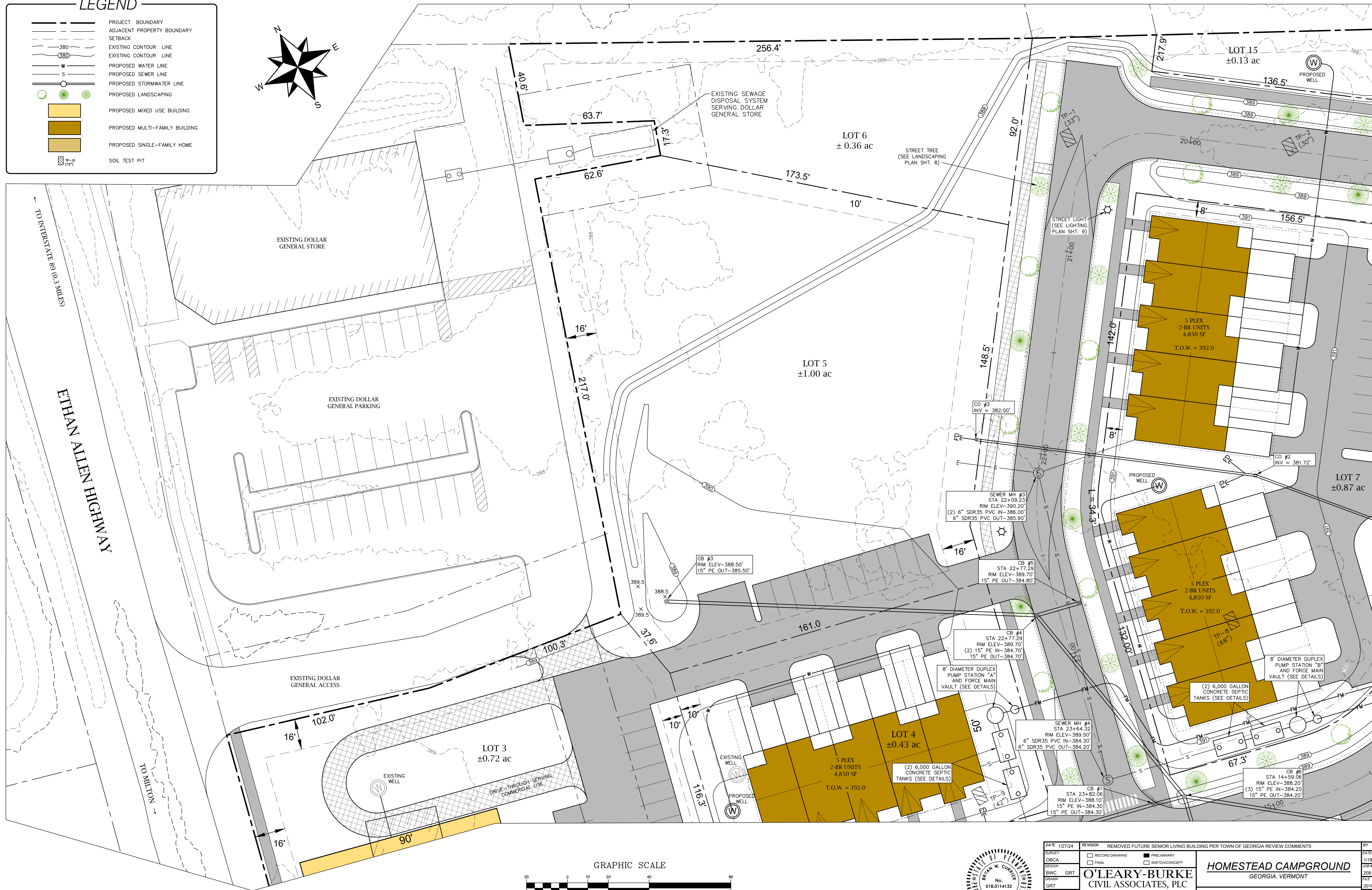
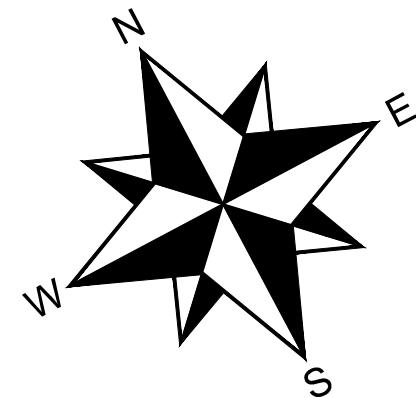
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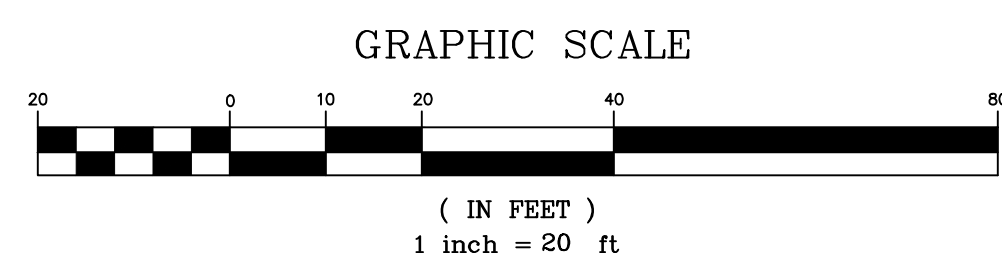
DATE: 1/27/24	REVISION: REMOVED FUTURE SENIOR LIVING BUILDING PER TOWN OF GEORGIA REVIEW COMMENTS	BY: GRT
DRAWN: BWC	DESIGN: GRT	DATE: 1/18/24
CHECKED: GRT	SCALE: 1" = 20'	JOB #: 2081-44
FILE: O'LEARY-BURKE CIVIL ASSOCIATES, PLC	13 CORPORATE DRIVE ESSEX JUNCTION, VT 05452 PHONE: 802-878-9990 FAX: 802-878-9999 E-MAIL: obca@olearyburke.com	FILE: 2018-44-23
HOMESTEAD CAMPGROUND GEORGIA, VERMONT		SHEET #
20-SCALE PLAN 'C'		5

LEGEND

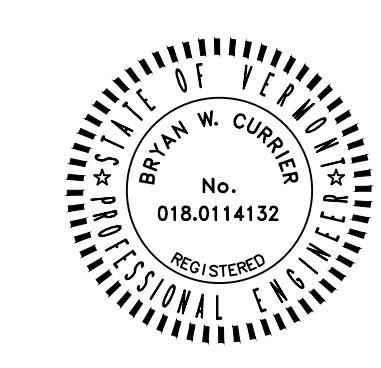
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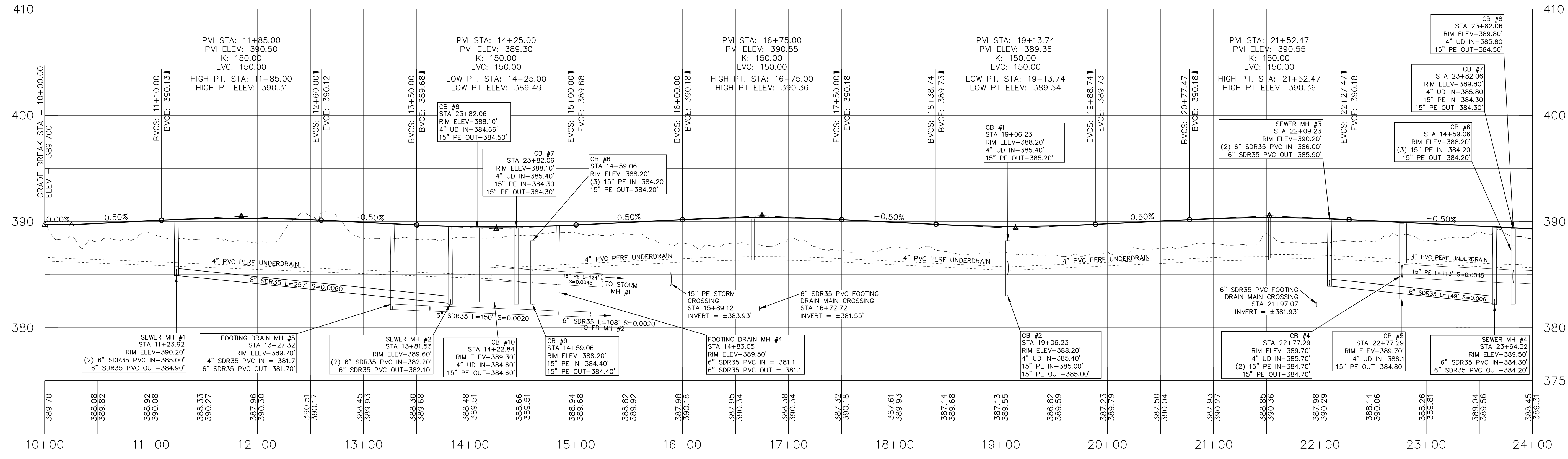
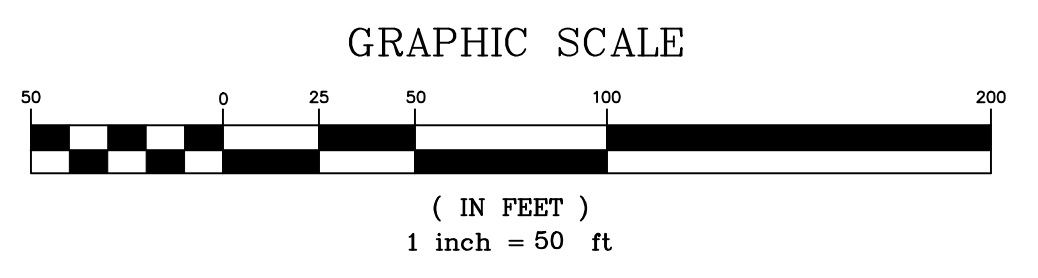
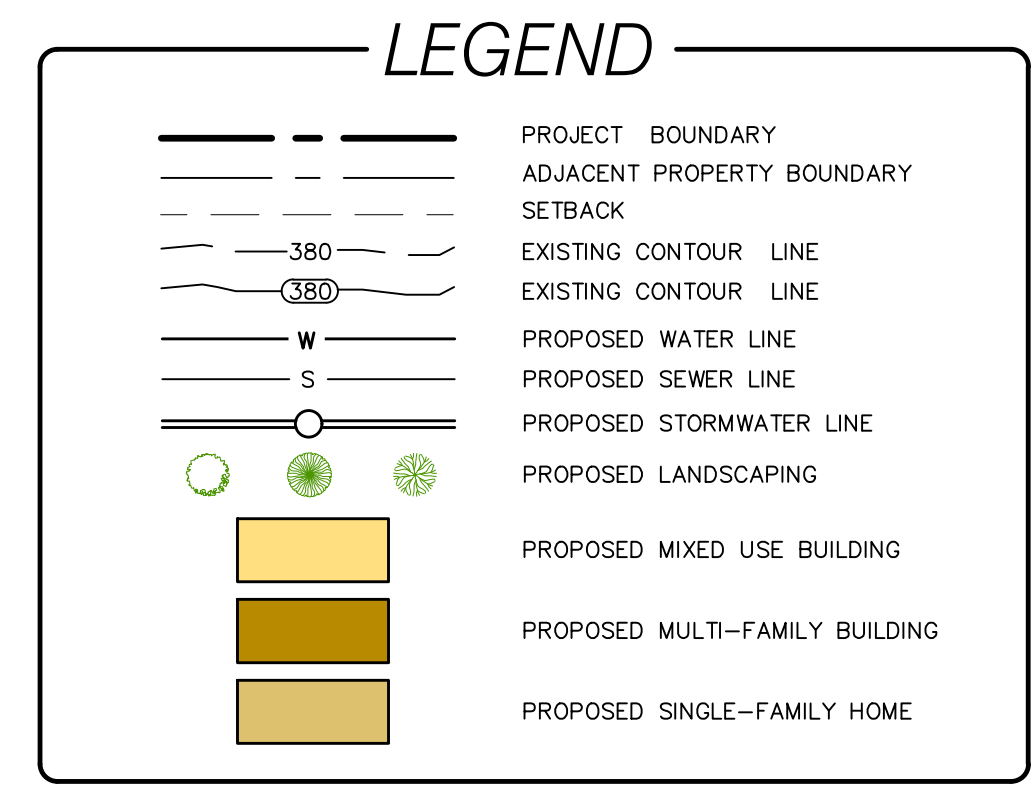
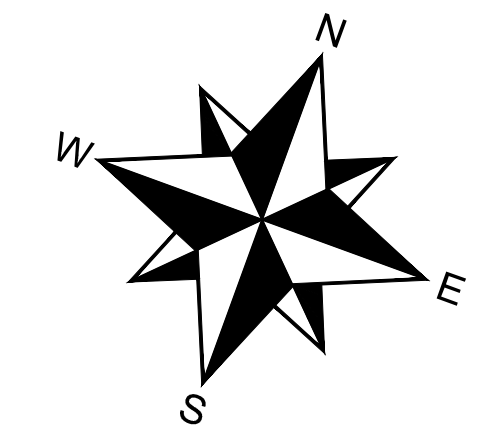
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O'LEARY-BURKE CIVIL ASSOCIATES, PLC 13 CORPORATE DRIVE ESSEX JUNCTION, VT 05452 PHONE: 802-878-9990 FAX: 802-878-9999 E-MAIL: obca@olearyburke.com		HOMESTEAD CAMPGROUND GEORGIA, VERMONT 20-SCALE PLAN 'D'
		SHEET # 6



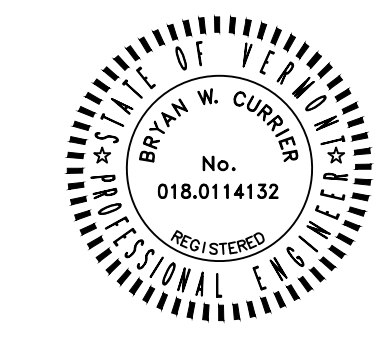
PLAN
SCALE: 1" = 50'



BUTTERNUT LANE
STA. 10+00 - 24+00

HORIZONTAL SCALE: 1" = 50'
VERTICAL SCALE: 1" = 5'

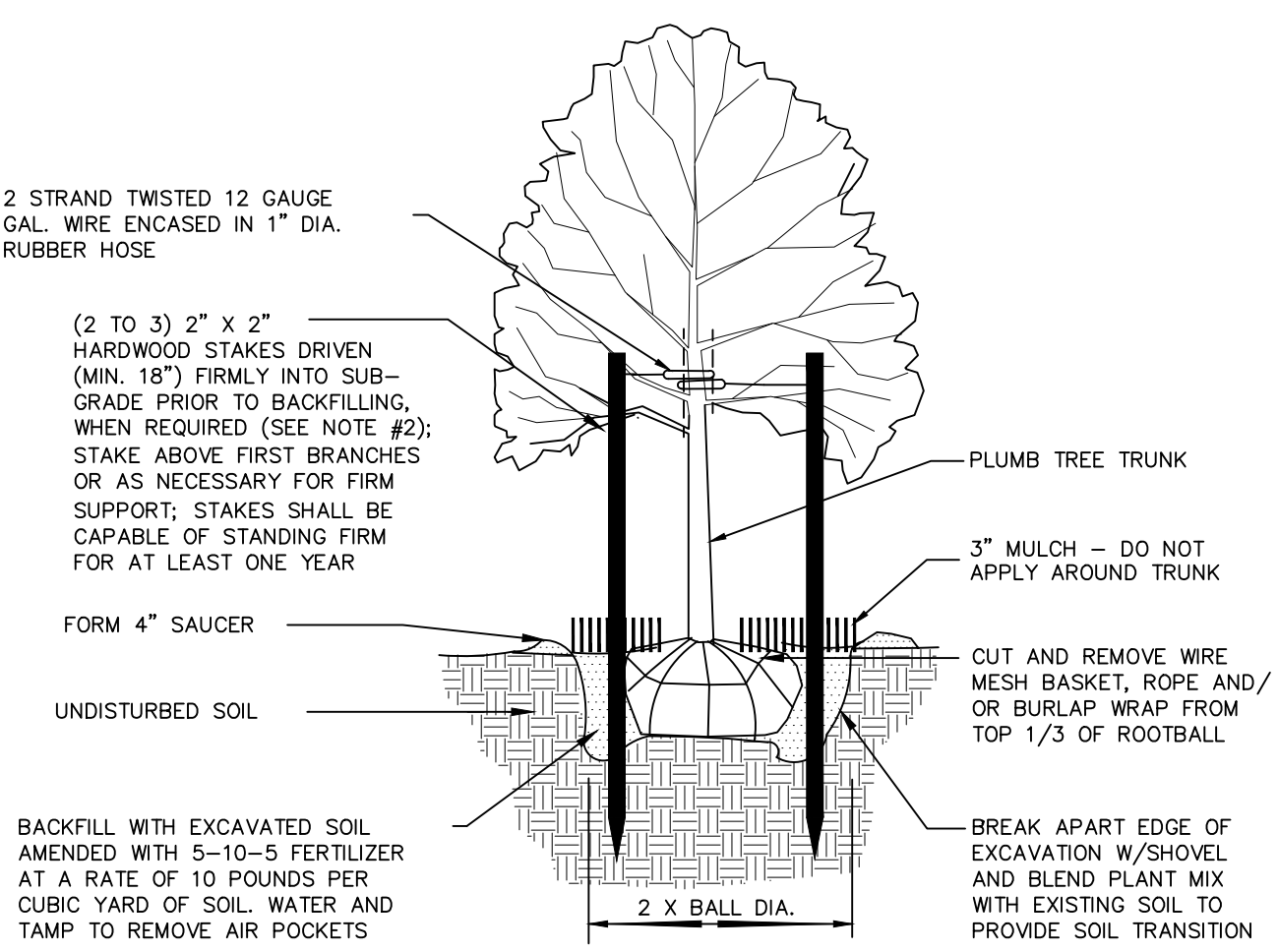
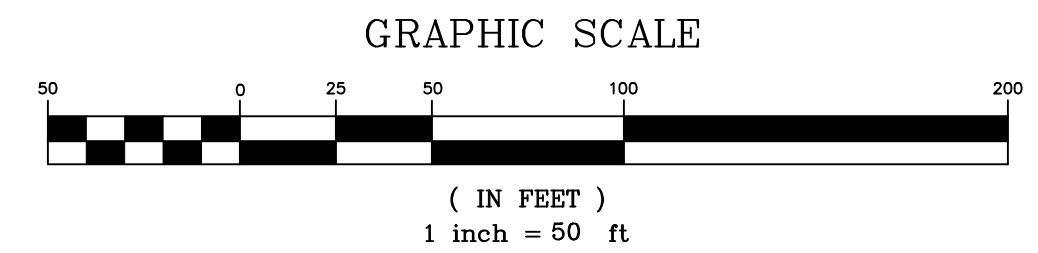
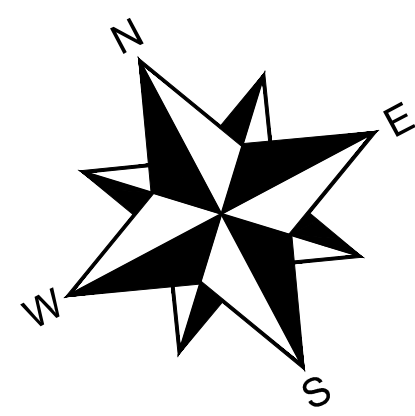
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<p>HOMESTEAD CAMPGROUND GEORGIA, VERMONT</p>		SHEET #:
<p>PLAN & PROFILE</p>		7

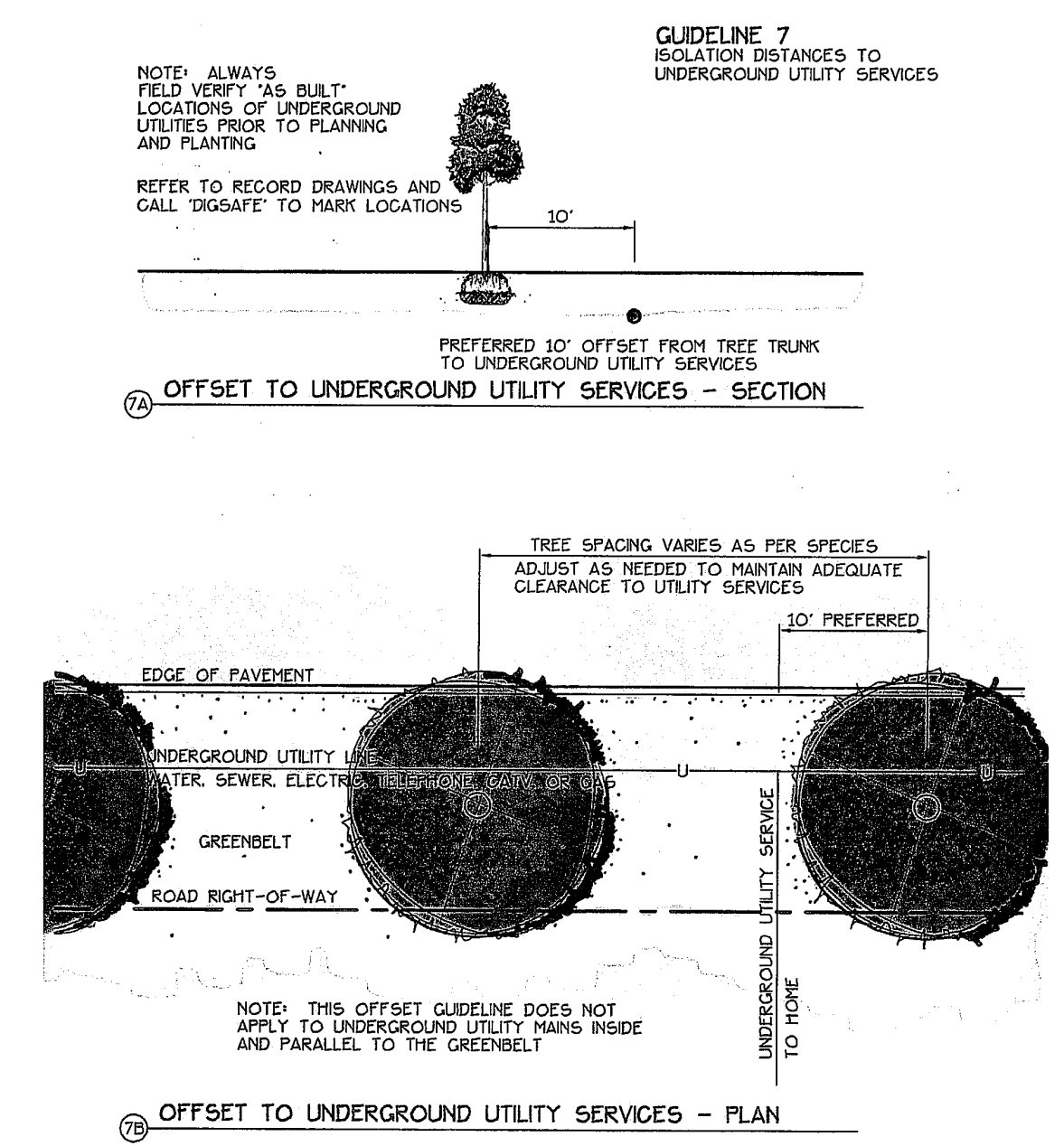
LEGEND

	PROJECT BOUNDARY
	ADJACENT PROPERTY BOUNDARY
	SETBACK
	EXISTING CONTOUR LINE
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	PROPOSED SEWER LINE
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	PROPOSED MIXED USE BUILDING
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	PROPOSED SINGLE-FAMILY HOME
	SOIL TEST PIT



- NOTE:
1. PLANT TREE SO THAT TOP OF ROOT BALL IS EVEN WITH THE FINISHED GRADE.
 2. STAKING AS REQUIRED ONLY IN SITUATIONS WHERE TREES WILL BE SUBJECTED TO WINDY CONDITIONS AS DETERMINED BY THE PROJECT LANDSCAPE ARCHITECT.
 3. TREES SHALL BE GUARANTEED FOR A PERIOD OF TWO YEARS AFTER PLANTING.
 4. EXAMINE ENTIRE TREE AND REMOVE ALL NURSERY TAGS, ROPE, STRING AND SURVEYOR TAPE PRIOR TO PLANTING TO PREVENT GIRDLING.
 5. STREET TREES SHALL BE LOCATED AT LEAST 10' FROM THE NEAREST UTILITY SERVICE.

TREE PLANTING



PROPOSED STREET TREE LANDSCAPING SCHEDULE

SYMBOL	QUANTITY	COMMON NAME	BOTANIC NAME	SIZE	COST
	17	LITTLELEAF LINDEN	TILIA CORDATA	2 - 2 1/2" CALIPER	\$600 EACH / \$10,200
	19	EUROPEAN HORSECHESTNUT	AESCULUS HIPPOCASTANUM	2 - 2 1/2" CALIPER	\$600 EACH / \$11,400
	20	THORNLESS HONEYLOCUST	GLEDITSIA TRIANCANTHOS INERMIS	2 - 2 1/2" CALIPER	\$600 EACH / \$12,000
TOTAL	56;	40' ON CENTER			\$33,600

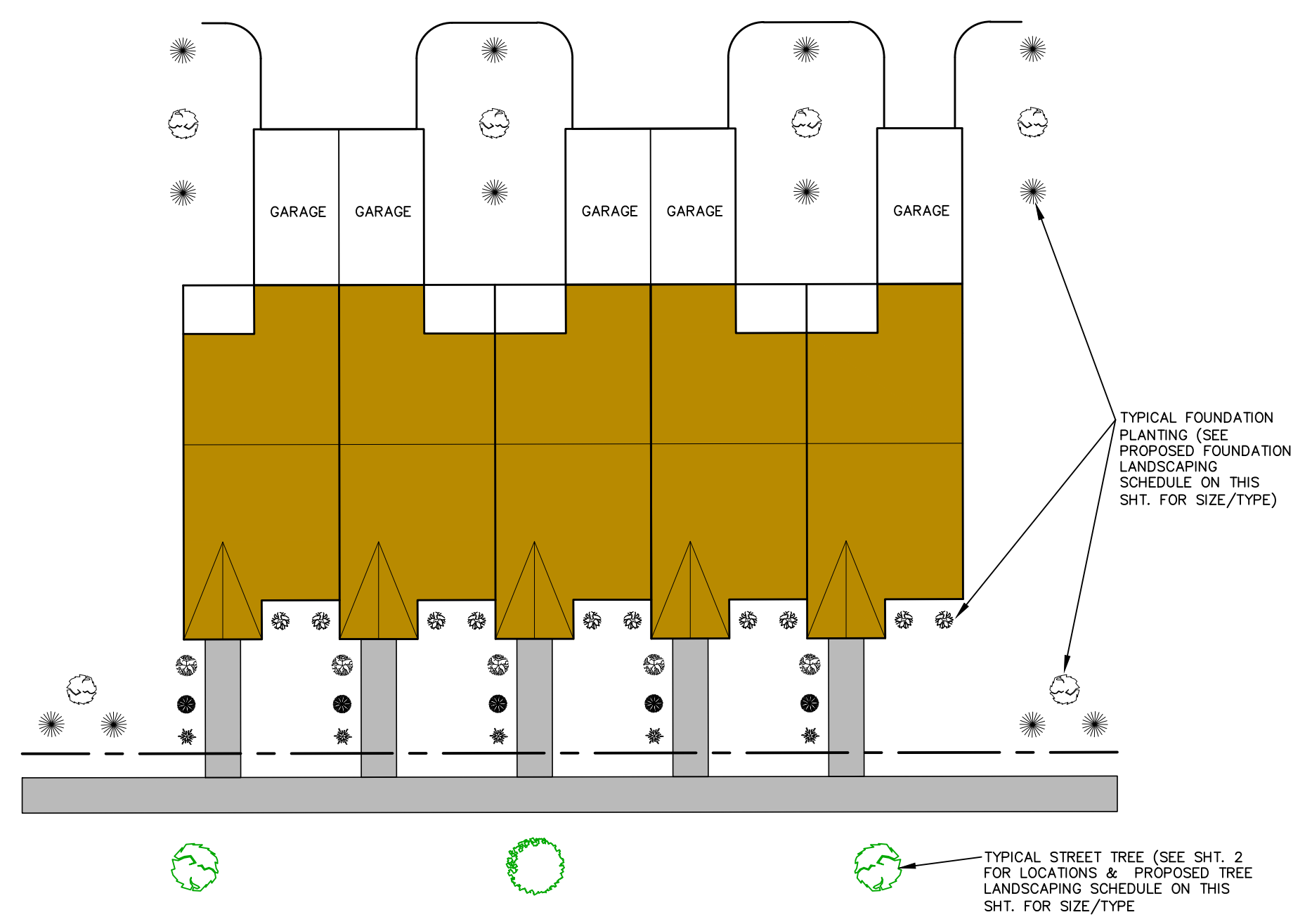
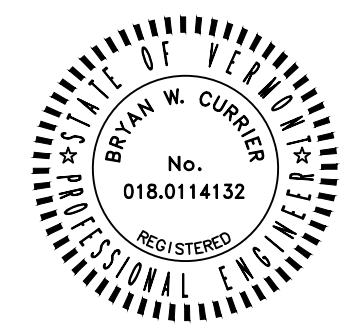
*NOTE: ALL PLANTING SPECIES MAY BE SUBSTITUTED WITH ALTERNATIVE STREET TREES PER TOWN OF GEORGIA REGULATIONS.

LANDSCAPING SPECIFICATIONS

1. ALL DISTURBED AREAS SHALL BE STABILIZED WITH SEEDING AND MULCHING PRIOR TO NOVEMBER 1 OF EACH YEAR. ANY DISTURBED AREAS SHALL BE IMMEDIATELY SEEDED AND MULCHED WITHIN 15 DAYS. ANY WORK PERFORMED AFTER OCTOBER 1 OF EACH YEAR SHALL BE STABILIZED WITH MULCH OR NETTING SUFFICIENT TO PREVENT EROSION AND SHALL BE IMMEDIATELY SEEDED AND REMULCHED AS SOON AS WEATHER PERMITS IN THE SPRING. ALL DISTURBED AREAS SHALL RECEIVE A MINIMUM OF 4" OF TOPSOIL AND BE SEEDED, FERTILIZED, LIMED, AND MULCHED IN ACCORDANCE WITH THE FOLLOWING:
2. SEED MIXTURE IN ALL AREAS SHALL BE URBAN MIX CONFORMING TO THE TABLE SHOWN ON THE PLANS. FOR SEEDING BETWEEN SEPTEMBER 1 AND NOVEMBER 1, WINTER RYE SHALL BE USED AT AN APPLICATION RATE OF 100 POUNDS PER ACRE.
3. FERTILIZER SHALL BE STANDARD COMMERCIAL GRADE CONFORMING TO THE STATE FERTILIZER LAW AND TO THE STANDARDS OF THE ASSOCIATION OF OFFICIAL AGRICULTURAL CHEMISTS. DRY FERTILIZER, IF USED, SHALL BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE. LIQUID FERTILIZER, IF USED, SHALL BE APPLIED IN A 1-2-1 RATIO WITH THE MINIMUM RATE TO INCLUDE 100 POUNDS OF NITROGEN, 200 POUNDS OF PHOSPHATE, AND 100 POUNDS OF POTASH PER ACRE.
4. LIMESTONE SHALL CONFORM TO ALL STATE AND FEDERAL REGULATIONS AND TO THE STANDARDS OF THE ASSOCIATION OF OFFICIAL AGRICULTURAL CHEMISTS. THE LIMESTONE SHALL BE APPLIED AT A RATE OF TWO TONS PER ACRE OR AS DIRECTED.
5. WITHIN 24 HOURS OF APPLICATION OF FERTILIZER, LIME, AND SEED, THE SURFACE SHALL BE MULCHED WITH A HAY MULCH. MULCH SHALL BE SPREAD UNIFORMLY OVER THE AREA AT A RATE OF TWO TONS PER ACRE OR AS ORDERED BY THE ENGINEER.

URBAN MIX GRASS SEED			
% BY WEIGHT	LBS. LIVE SEED PER ACRE	TYPE OF SEED	
37.5	45	CREeping REE FESCUE	
31.25	37.5	KENTUCKY BLUEGRASS	
31.25	37.5	WINTER HARDY, PERENNIAL RYE	
100	120 #	LIVE SEED PER ACRE	

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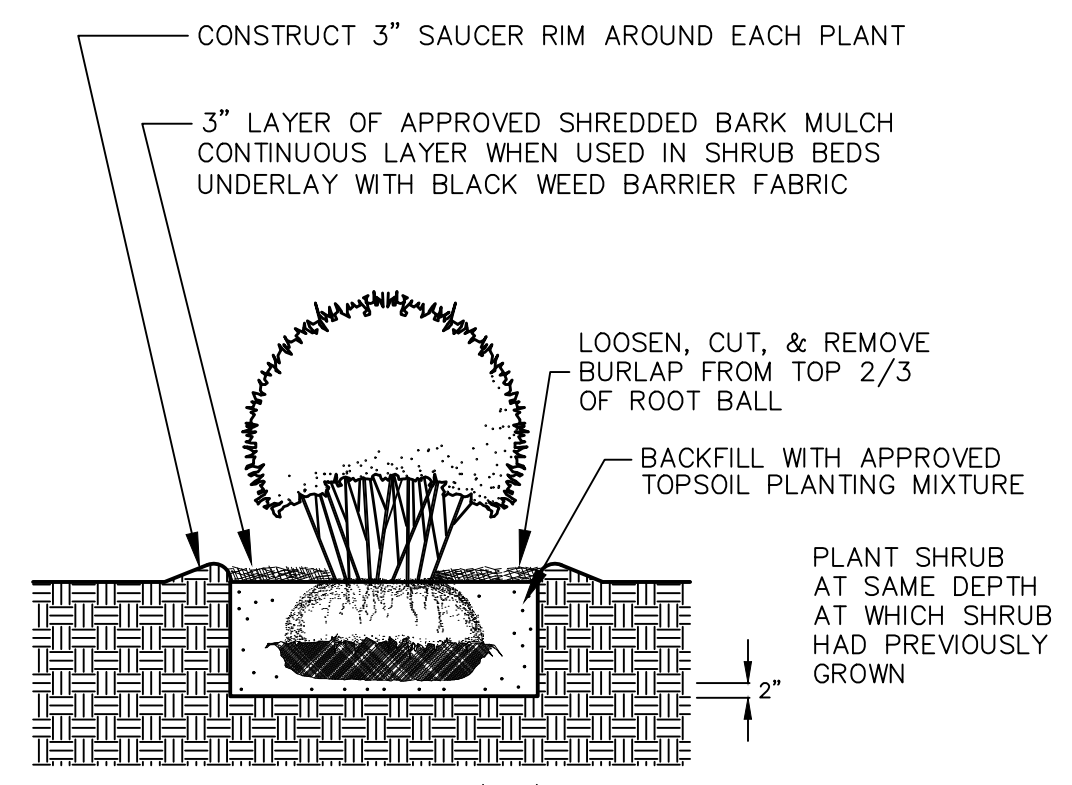
TYPICAL FOUNDATION PLANTING PLAN AND 5-PLEX DRIVEWAY DETAIL

PROPOSED FOUNDATION LANDSCAPE SCHEDULE

SYMBOL	QUANTITY	COMMON NAME	BOTANIC NAME	SIZE	COST
	5	SUMMER WINE NINEBARK	PHYSOCARPOS	5 GAL.	\$60 EA. / \$2,880
	5	ANNABELLE HYDRANGEA	HYDRANGEA	5 GAL.	\$60 EA. / \$1,440
	5	BLUESTAR JUNIPER	JUNIPERUS SABINA	5 GAL.	\$60 EA. / \$1,440
	10	GOLDEN PRINCESS SPIREA	SPIRAEA	5 GAL.	\$60 EA. / \$2,880
	12	NORTHLAND BLUEBERRY	VACCINIUM	5 GAL.	\$60 EA. / \$2,880
	6	BLACK LACE ELDERBERRY	SAMBUCCUS	5 GAL.	\$60 EA. / \$1,440
					TOTAL \$12,960

PROPOSED SCREENING LANDSCAPE SCHEDULE

SYMBOL	QUANTITY	COMMON NAME	BOTANIC NAME	HEIGHT	COST
	41	EASTERN WHITE CEDAR	THUJA OCCIDENTALIS	6 FT	\$300 EA. / \$12,300
					TOTAL \$12,300



SHRUB PLANTING

DATE: 1/27/24	REVISION: REMOVED FUTURE SENIOR LIVING BUILDING PER TOWN OF GEORGIA REVIEW COMMENTS	BY: GRT
DRAWN: O'LEARY-BURKE CIVIL ASSOCIATES, PLC	CHECKED: O'LEARY-BURKE CIVIL ASSOCIATES, PLC	DATE: 1/18/24
DESIGN: O'LEARY-BURKE CIVIL ASSOCIATES, PLC	SCALE: 1" = 50'	JOB #: 2081-44
<p>O'LEARY-BURKE CIVIL ASSOCIATES, PLC</p> <p>13 CORPORATE DRIVE ESSEX JUNCTION, VT 05452 PHONE: 802-878-9990 FAX: 802-878-9999 E-MAIL: obca@olearyburke.com</p>		<p>HOMESTEAD CAMPGROUND</p> <p>GEORGIA, VERMONT</p> <p>FILE: 2018-44-23</p> <p>SHEET #:</p>
		8



ALED5T52N

High output LED pole top area light withIES type V circular distribution. Wide and uniform 360 degree pattern ideal for large outdoor areas such as parking lots, corporate parks, and retail settings.
Color: Bronze
Weight: 22.1 lbs

Project:		Type:
Prepared By:		Date:

Driver Info		LED Info	
Type	Constant Current	Watts	52W
120V	0.45A	Color Temp	4000K (Neutral)
208V	0.36A	Color Accuracy	70 CRI
240V	0.23A	L70 lifespan	100,000 Hours
277V	0.19A	Lumens	6,979
Input Watts	52.8W	Efficiency	132.3 lm/W

Technical Specifications

Compliance: UL Listed: Suitable for wet locations. ESNA LM-79 & ESNA LM-80 Testing: RAB LED luminaires and LED components have been tested by an independent laboratory in accordance with ESNA LM 79 and LM 80. DLC Listed: This product is on the Design Lights Consortium (DLC) Qualified Products List and is eligible for rebates from DLC Member Utilities. Designed to meet DLC S1 requirements. LED Characteristics: LEDs: 40,380 high-output, long-life LEDs. Color Consistency: 3-step MacAdam Ellipse binning to achieve consistent future-to-future color.

Color Stability: LED color temperature is warranted to shift no more than 200K in color temperature over a 5-year period.

Color Uniformity: RAB's range of Controlled Color Temperature follows the guidelines for the American National Standard for Specifications for the Chromaticity of Solid State Lighting (ANSI C78.377-2017).

LifeSpan: 100,000 Hour LED lifespan based on ES LM 80 results and TM-21 calculations.

Construction: Cold Weather Starting: Minimum starting temperature is -40°C (-40°F). Maximum Ambient Temperature: Suitable for use in up to 40°C (104°F).

Effective Projected Area: EPA = 1.2
Housing: Precision die-cast aluminum, Type V distribution.
Support Arms: Corroded aluminum.
Lens: Clear tempered glass lens.

ALED5T52N

Technical Specifications (continued)

Construction: Reflector: Specular vacuum-metallized polycarbonate, Type V distribution. Gaskets: High-temperature silicone. Finish: Formulated for high durability and long-lasting color. Green Technology: Mercury and UV free, RoHS-compliant components.

Optical: IES Rating: 83 IES C2. Other: Equivalent to 150W Metal Halide. Patents: The design of the ALED5T52N is protected by patents pending in US, Canada, China, Taiwan and Mexico. Warranty: RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and future RAB, RAB's warranty is subject to all terms and conditions found at rabbalighting.com/warranty.

Buy American Act Compliance: RAB values USA manufacturing! Upon request, RAB may be able to manufacture this product to be compliant with the Buy American Act (BAA). Please contact customer service to request a quote for the product to be made BAA compliant.

Electrical: Drivers: Consistent Current, Class 2 with 6KV surge protection, 120-277VAC, 50/60 Hz, 120V/0.45A, 208V/0.36A, 240V/0.23A, 277V/0.19A. Power Factor: 3.27% at 120V, 6.42% at 277V. 99.9% at 120V, 96.4% at 277V.

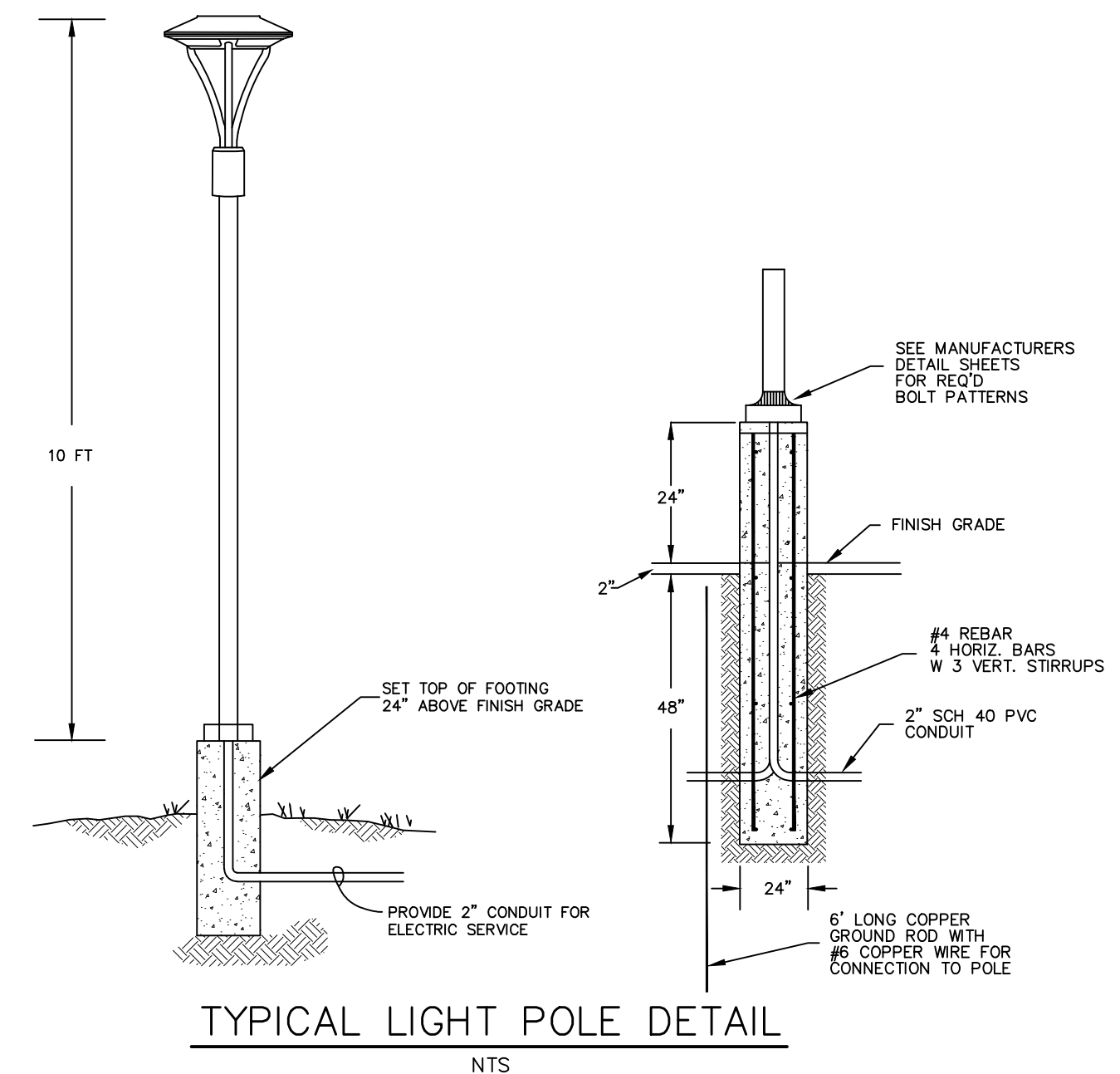
Dimensions: IES type V (circular) distribution. 100,000 Hour LED lifespan. Compatible with standard 2.5" and 3" sensors. "Air-Flow" fins for maximum heat dissipation. 5-Year, No-Compromise Warranty.

Ordering Matrix:

Family	Distribution	Wattage	Color Temp	Finish	Driver Option	Options	Other Options
ALED	ST	52	N				

ST = Type V
52 = 52W
N = 4000K Neutral
78 = 78W
Blank = 5000K Cool
W = White
K = Black
G = Gray
Blank = No Option
/JCT = Commercial
/R = R Level
/H = 400V
/HSD10 = 400V w/ Dimmable
Blank = No Option
/A.C. = Lightroom/ Controller Protocol
/JCT = 120-277V Tuitstock Protocol
/JCT4 = 480V Tuitstock Protocol
Blank = Standard
USA = BAA Compliant

LIGHTING CUT SHEETS
NTS

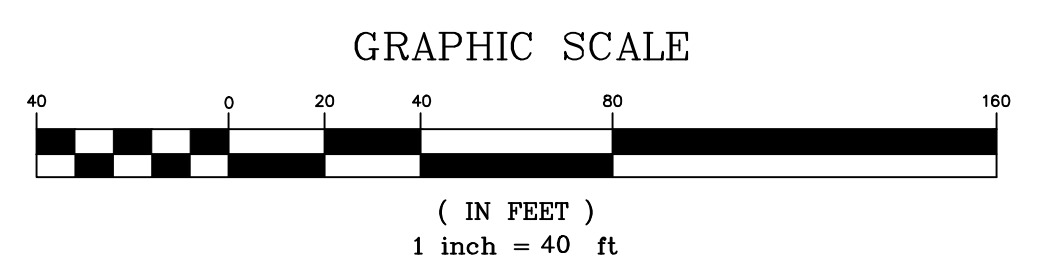


CALCULATION SUMMARY

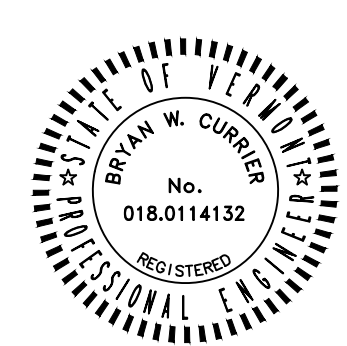
AREA NAME	DIMENSIONS	GRID NAME	AVE	MAX	MIN	MAX/MIN	AVE/MIN
SITE PLAN		NEW GRID	<+> 0.53	2.16	0.10	22.6	5.57

LUMINAIRE SCHEDULE

TYP	SYMB	DESCRIPTION	LAMP	LUMENS	MOUNTING	LLF	QTY
AREA	☆	RAB ALED5T52N POLE TOP AREA LIGHT	52W	6495	12' POLE MOUNT	1.00	5



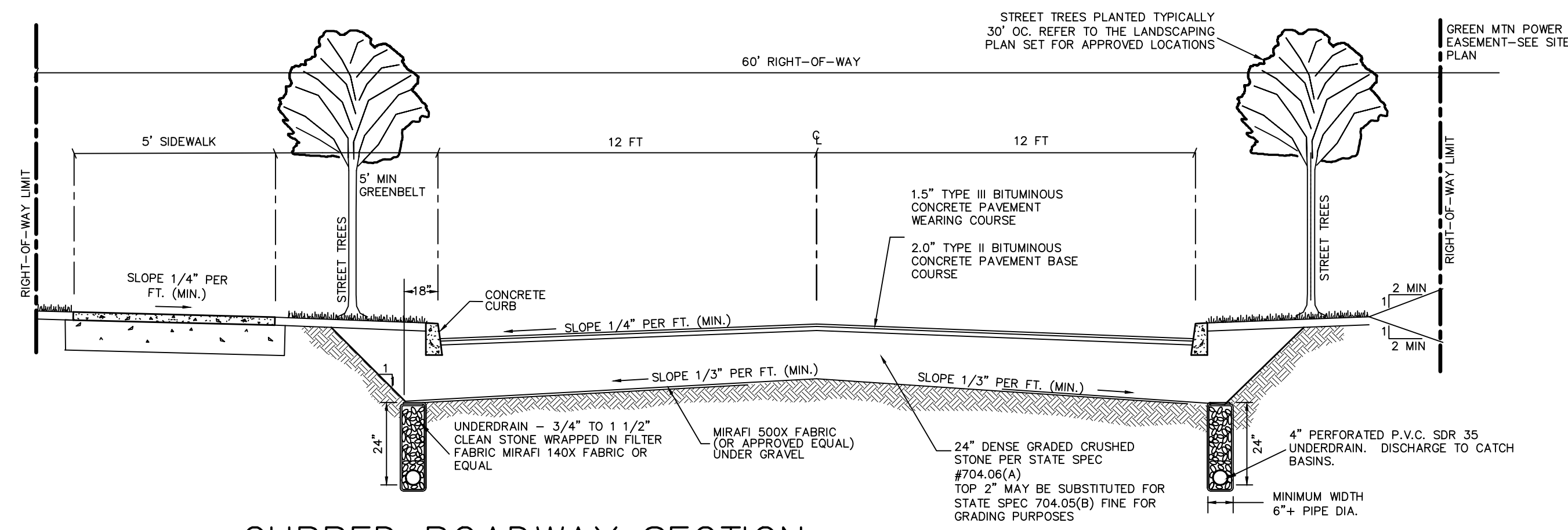
THE CONTRACTOR SHALL NOTIFY "DIGSAFE" AT 1-888-DIG-SAFE PRIOR TO ANY EXCAVATION.



DATE: 1/27/24	REVISION: REMOVED FUTURE SENIOR LIVING BUILDING PER TOWN OF GEORGIA REVIEW COMMENTS	BY: GRT
DESIGN: O'LEARY-BURKE CIVIL ASSOCIATES, PLC	RECORD DRAWING: [] PRELIMINARY: [] SKETCH/CONCEPT: []	DATE: 1/18/24
DRAWN: GRT	FILE: 2081-44	JOB #: 2081-44
CHECKED: BWC	SCALE: 13 CORPORATE DRIVE, ESSEX JUNCTION, VT 05452, PHONE: 802-878-9990, FAX: 802-878-9999, E-MAIL: obca@olearyburke.com	FILE: 2018-44-23
<p>HOMESTEAD CAMPGROUND GEORGIA, VERMONT</p> <p>LIGHTING PLAN</p>		SHEET # 9

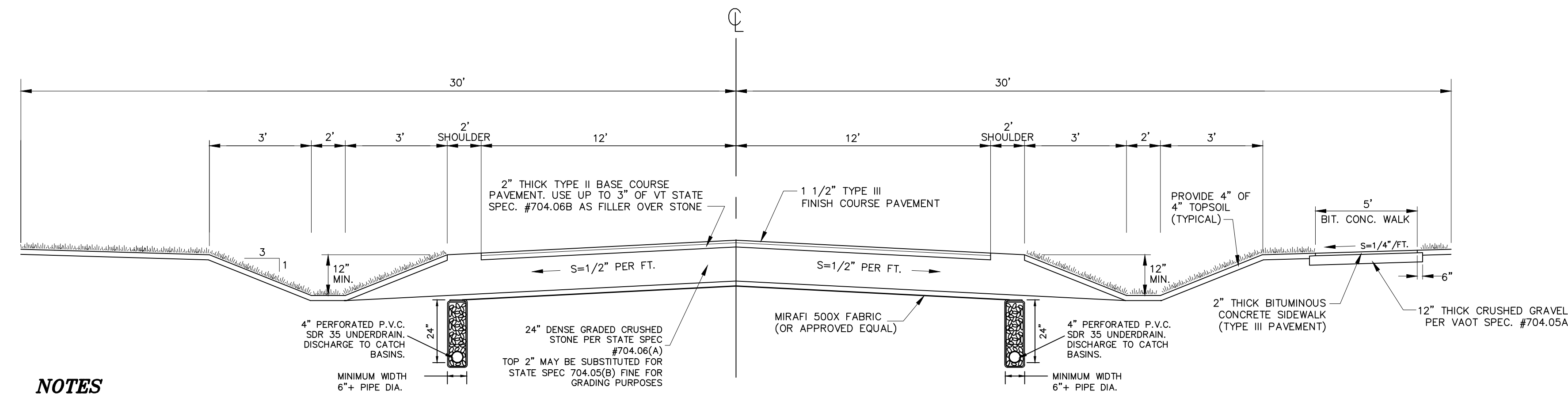
ROADWAY NOTES:

- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH LOCAL REGULATIONS, THE VERMONT STATE STANDARD SPECIFICATIONS FOR CONSTRUCTION, AND THE APPROVED ENGINEERING PLANS AND SPECIFICATIONS.
- SOIL BORINGS AND TEST PITS ARE RECOMMENDED TO CONFIRM DESIGN CONDITIONS AND APPLICABLE ROADWAY SECTIONS.
- THE ROADWAY FINISH GRADE SHALL BE AS SHOWN ON THE DRAWING BUT NOT LESS THAN A SLOPE OF 0.5%.
- IF THE TOP COURSE OF PAVEMENT IS NOT INSTALLED WITHIN 60 DAYS OF THE BASE COURSE, THE CONTRACTOR SHALL APPLY EMULSION TO THE FULL WIDTH OF THE BASE COURSE BEFORE INSTALLING THE TOP COURSE.
- IF LEDGE EXISTS IN A SUBGRADE IT SHALL BE SHATTERED TO 12 INCHES BELOW GRAVEL BASE.
- UNDERDRAINS, UNDERDRAINS SHALL BE CONSTRUCTED ON ALL ROADWAYS AND SHALL FOLLOW THE ROADWAY SLOPE AND DAYLIGHT INTO CATCH BASINS UNLESS OTHERWISE NOTED.
- ALL HANDICAP RAMPS ARE TO HAVE EXPOSED AGGREGATE SURFACES, WITH 1/4" CURB REVEAL.
- RECREATION PATHS ARE TO CONTINUE AT CONSTANT GRADE ACROSS DRIVEWAYS.
- PAVED PARKING AREAS SHALL BE CONSTRUCTED TO THE SAME CONFIGURATION AS THIS ROADWAY SECTION.
- GAS MAIN LOCATED BY VERMONT GAS SYSTEMS.
- 10' UTILITY EASEMENT FOR POWER, CABLE AND PHONE. ONE SIDE ONLY. SEE SITE PLAN.
- ALL LINES AND MARKINGS TO BE TAPE.
- ALL INTERSECTIONS WITH STOP CONTROL TO COMPLY WITH LATEST MUTOS.
- THE ROAD WIDTH, GREENBELT WIDTH, AND TYPE OF PEDESTRIAN WALKWAY SHALL BE DETERMINED FROM THE SITE PLANS.



CURBED ROADWAY SECTION

NTS

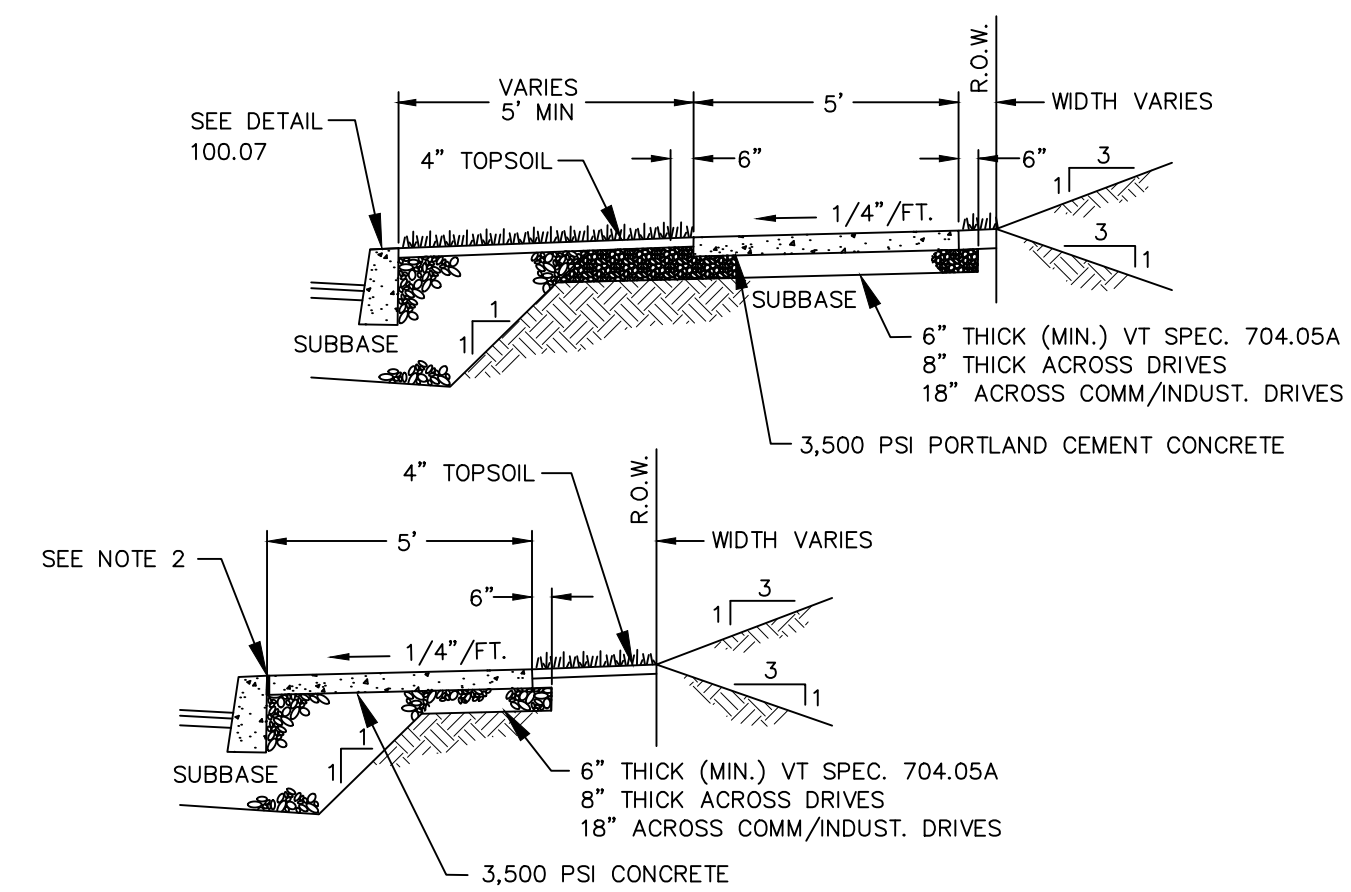


NOTES

- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE TOWN PUBLIC WORKS REQUIREMENTS, THE VERMONT STATE STANDARD SPECIFICATIONS FOR CONSTRUCTION, AND THE APPROVED ENGINEERING PLANS AND SPECIFICATIONS.
- THE ROAD FINISH GRADE SHALL HAVE A MINIMUM SLOPE OF 0.5%.
- IF THE TOP COURSE OF PAVEMENT IS NOT INSTALLED WITHIN 60 DAYS OF THE BASE COURSE, THE CONTRACTOR SHALL APPLY EMULSION TO THE FULL WIDTH OF THE BASE COURSE BEFORE INSTALLING THE TOP COURSE.
- YELLOW OR ORANGE WARNING TAPE SHALL BE BURIED 15" ABOVE ALL GAS, ELECTRIC, TELEPHONE AND T. V. LINES.
- PRIOR TO PLACEMENT OF GRAVEL, A MINIMUM OF ONE (1) GRADATION TEST SHALL BE PERFORMED AT THE CONTRACTOR'S EXPENSE FOR EACH DIFFERENT BASE MATERIAL USED EVERY 500' SECTION OF ROAD. A COMPACTION TEST SHALL ALSO BE PERFORMED AT THE CONTRACTOR'S EXPENSE EVERY 200' SECTION OF ROAD OR MORE OFTEN IF THE TEST FAILS TO MEET THE COMPACTION REQUIREMENTS. THE TEST LOCATIONS SHALL BE SELECTED BY THE ENGINEER.

UNCURBED ROADWAY SECTION

NTS

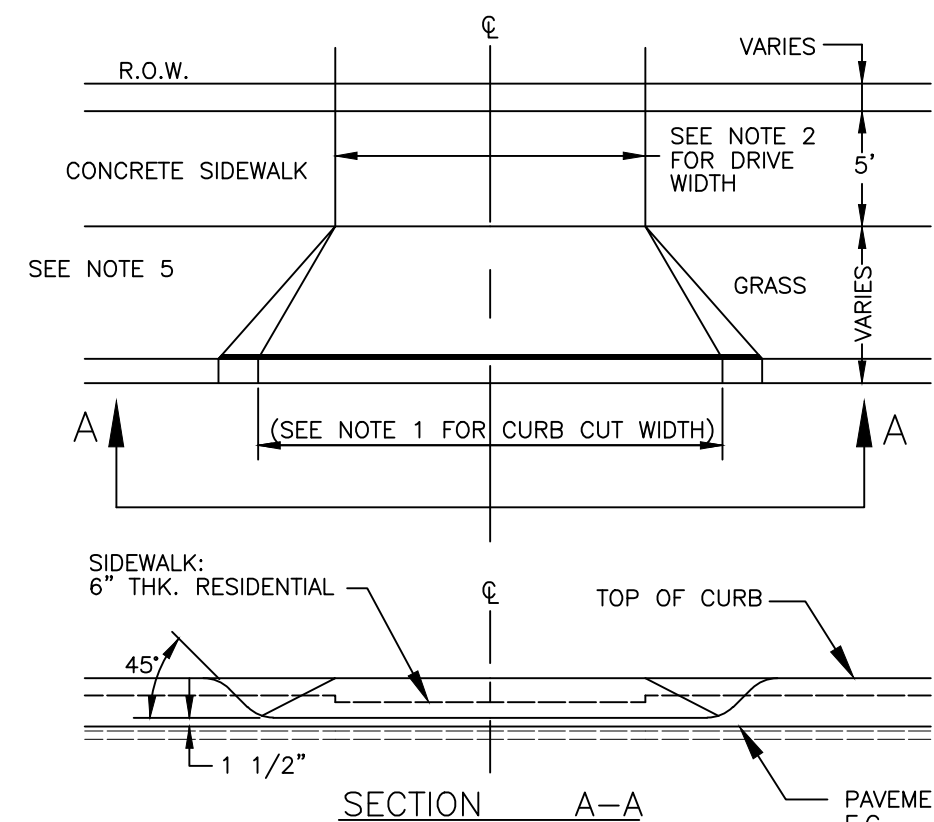


NOTES

- CONCRETE SHALL HAVE A MINIMUM STRENGTH OF 3,500 PSI AT 28 DAYS AND SHALL BE AIR ENTRAINED WITH AN ADMIXTURE PRODUCING AN AIR CONTENT OF 5% TO 7% BY VOLUME.
- HALF INCH (1/2") TRANSVERSE EXPANSION JOINTS SHALL BE PLACED AT INTERVALS NOT EXCEEDING TWENTY FEET (20'). SIDEWALKS SHALL BE SCORED TO A DEPTH OF ONE INCH (1") EVERY FIVE (5') FEET. CURB AND SIDEWALK SECTIONS SHALL BE SEPARATED BY A PREMOLDED JOINT FILLER.
- AFTER THE INITIAL CURING PERIOD IS OVER (APPROXIMATELY 28 DAYS), ALL EXPOSED SURFACES SHALL RECEIVE TWO COATS OF ANTI-SPLALLING COMPOUND.
- SEE WRITTEN SPECIFICATION FOR APPROVED CONSTRUCTION METHODS AND MATERIAL REQUIREMENTS.
- SIDEWALK BASE SHALL BE V.T. SPEC. 704.05A OR APPROVED EQUAL.
- SIDEWALKS AT RESIDENTIAL DRIVEWAY CROSSING SHALL BE AT LEAST 8" THICK.
- WHEN CONNECTING NEW SIDEWALK TO AN EXISTING SIDEWALK, STEEL DOWELS SHALL BE DRILLED INTO THE EXISTING SIDEWALK A MINIMUM OF 6" AND SHALL EXTEND INTO THE NEW SIDEWALK A MINIMUM OF 6".

TYPICAL SIDEWALK SECTION

NTS

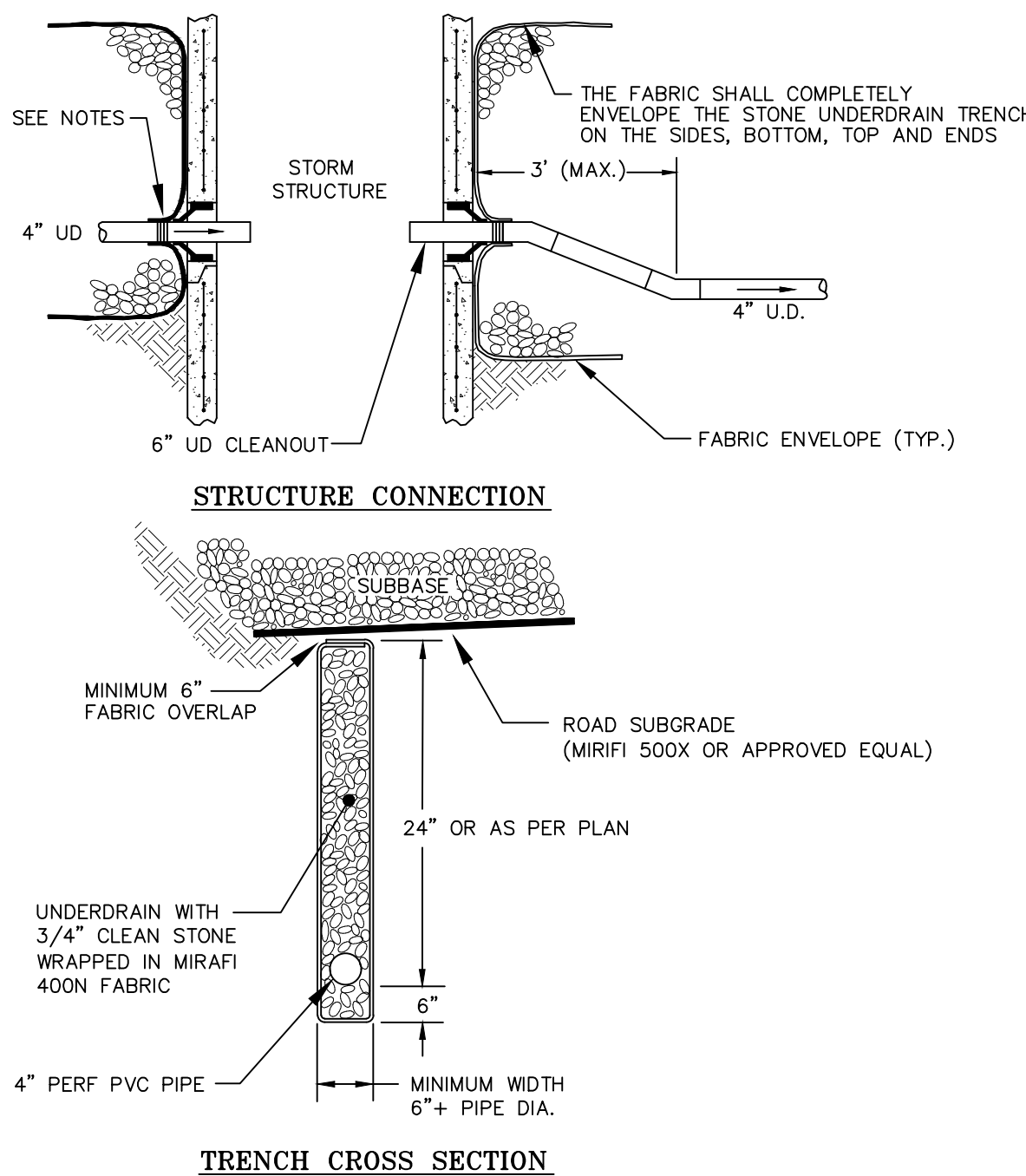


NOTES

- CURB CUT WIDTHS SHALL BE AS FOLLOWS:
SINGLE DRIVE: 15 FEET (MIN.)
DOUBLE DRIVE: 20 FEET (MAX.)
COMMERCIAL DRIVE: 45 FEET (MAX.)
- DRIVE WIDTHS SHALL BE AS FOLLOWS:
SINGLE DRIVE: 10 FEET (MIN.)
DOUBLE DRIVE: 15 FEET (MAX.)
COMMERCIAL DRIVE: 40 FEET (MAX.)
- ALL APRONS WITHIN PUBLIC RIGHTS-OF-WAY SHALL BE PAVED.
- APRON SUBBASE SHALL MATCH THE ROADWAY SUBBASE FOR MATERIALS AND THICKNESS.
- CURBING EXPANSION JOINTS SHALL BE CONSTRUCTED BETWEEN DRIVE APRON AND CURB.

DRIVEWAY APRON

NTS



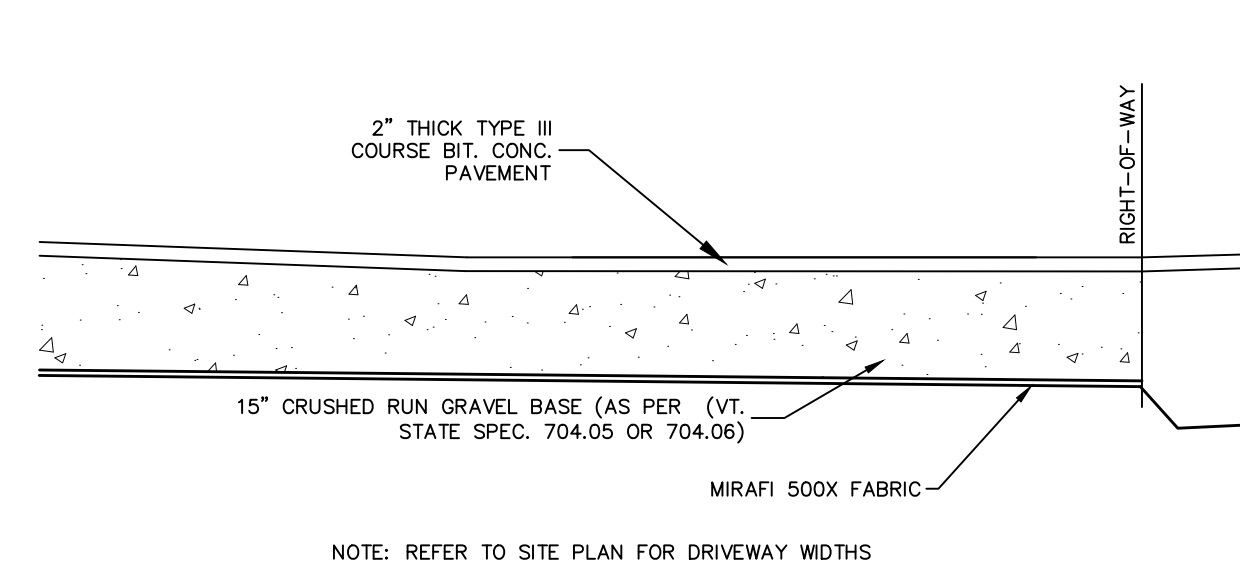
TRENCH CROSS SECTION

NOTE

- THE FABRIC SHALL BE PULLED AROUND THE PIPE AND WRAPPED WITH DUCT TAPE OR WIRE TO PROVIDE A TIGHT ANCHOR.
- CAST IN PLACE RUBBER BOOTS SHALL BE USED AROUND ALL STRUCTURE PENETRATIONS.

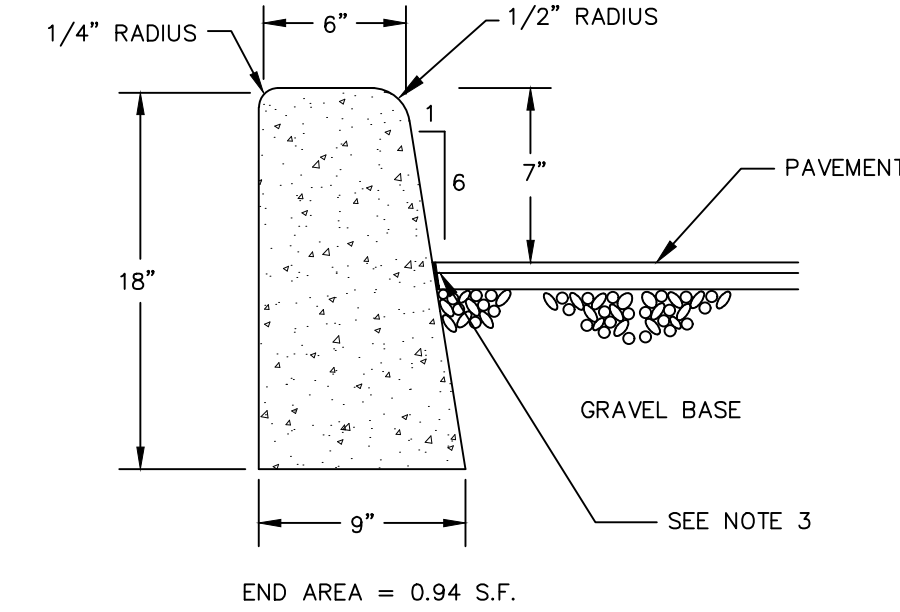
ROADWAY UNDERDRAIN

NTS



DRIVEWAY SECTION

NTS



NOTES

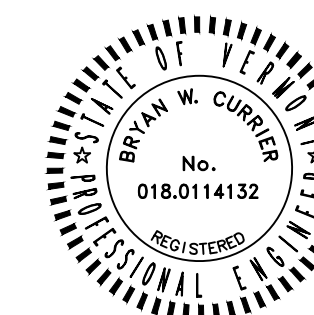
- CURBING SHALL BE CONSTRUCTED WITH 3,500 PSI (CLASS B) CONCRETE IN 10' SECTIONS WITH 1/8" JOINTS BETWEEN SECTIONS.
- CURBING EXPANSION JOINTS SHALL BE CONSTRUCTED EVERY 20' AND SHALL BE CONSTRUCTED OF MATERIAL CONFORMING TO AASHTO DESIGNATION M-153 (1/2" SPONGE RUBBER OR CORK).
- PRIOR TO PAVING, THE PORTION OF CURBING TO BE IN CONTACT WITH THE PAVEMENT SHALL BE COATED WITH EMULSIFIED ASPHALT.
- ALL EXPOSED CONCRETE CURB SHALL RECEIVE TWO COATS OF ANTI-SPLALLING COMPOUND AFTER THE INITIAL CURING PERIOD (APPROXIMATELY 28 DAYS).

CONCRETE CURB

NTS

GENERAL CONSTRUCTION SPECIFICATIONS

- ALL WORK AND MATERIALS SHALL BE APPROVED BY AND IN ACCORDANCE WITH THE LATEST VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION, THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, THE TOWN SPECIFICATIONS AND REQUIREMENTS, THE WRITTEN TECHNICAL SPECIFICATIONS, AND THESE PLANS.
- THE CONTRACTOR SHALL CONTACT ALL UTILITIES BEFORE EXCAVATION TO VERIFY THE LOCATION OF ANY UNDERGROUND LINES. THE CONTRACTOR SHALL NOTIFY "DIGSAFE" AT 1-888-344-7233 AND THE TOWN OF ESSEX PUBLIC WORKS DEPARTMENT PRIOR TO ANY EXCAVATION.
- UTILITIES INFORMATION SHOWN HEREON WERE OBTAINED FROM BEST AVAILABLE SOURCE AND MAY OR MAY NOT BE EITHER ACCURATE OR COMPLETE. CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF EXISTING UTILITIES AND SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ANY UTILITY, PUBLIC OR PRIVATE, SHOWN OR NOT SHOWN HEREON. CONTRACTOR SHALL CONNECT OR RECONNECT ALL UTILITIES TO THE NEAREST SOURCE THROUGH COORDINATION WITH UTILITY OWNER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEMOLITION AND REMOVAL OF ALL EXISTING VEGETATION, PAVEMENT AND STRUCTURES NECESSARY TO CONSTRUCT THIS PROJECT UNLESS OTHERWISE NOTED ON THESE PLANS. THE CONTRACTOR SHALL REMOVE ALL EXCESS MATERIAL, DEBRIS AND TRASH FROM THE SITE UPON COMPLETION OF CONSTRUCTION, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- THE CONTRACTOR SHALL BE RESPONSIBLE AT HIS OWN EXPENSE FOR ENSURING THAT THE DUST CREATED AS A RESULT OF CONSTRUCTION DOES NOT CREATE A NUISANCE OR A SAFETY HAZARD. WHERE AND WHEN DEEMED NECESSARY BY THE ENGINEER, THE CONTRACTOR SHALL BE REQUIRED TO WET SECTIONS OF THE CONSTRUCTION AREA WITH WATER, APPLY CALCIUM CHLORIDE OR SWEEP ASPHALT ROADS WITH A POWER BROOM AS DUST CONTROL.
- ANY SURFACES, LINES, OR STRUCTURES WHICH HAVE BEEN DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED TO THE CONDITION AT LEAST EQUAL TO THAT IN WHICH THEY WERE FOUND IMMEDIATELY PRIOR TO THE BEGINNING OF OPERATIONS.
- THE DESIGN ON THESE PLANS SHALL BE INSPECTED BY O'LEARY-BURKE CIVIL ASSOCIATES, ESSEX JUNCTION, VERMONT, TO ENSURE COMPLIANCE WITH THE PLANS AND REQUIREMENTS. O'LEARY-BURKE WAIVES ANY AND ALL RESPONSIBILITY AND LIABILITY FOR PROBLEMS THAT MAY ARISE FROM THE FAILURE OF THE CONTRACTOR TO FOLLOW THESE PLANS, SPECIFICATIONS AND THE DESIGN INTENT THAT THE PLANS CONVEY, AND FROM FAILURE TO HAVE BEEN NOTIFIED TO INSPECT THE WORKS AND TESTS IN PROGRESS.
- FOR ANY WORK WITHIN THE HIGHWAY RIGHT-OF-WAY A MINIMUM OF ONE-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES. CONTINUOUS TWO-WAY TRAFFIC WILL BE REQUIRED AT NIGHT, DURING PEAK HOURS, AND WHENEVER POSSIBLE DURING ACTUAL CONSTRUCTION ACTIVITIES. UNIFORMED TRAFFIC CONTROL OFFICERS SHALL DIRECT TRAFFIC DURING PEAK HOURS WHEN THERE IS ONE-WAY TRAFFIC OR WHEN DEEMED NECESSARY BY THE TOWN OR STATE. TEMPORARY CONSTRUCTION SIGNS AND TRAFFIC CONTROL SIGNS SHALL BE ERECTED BY THE CONTRACTOR IN ACCORDANCE WITH STATE AND TOWN STANDARDS.
- TO ENSURE COMPLIANCE WITH THE PLAN(S), THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND THE TOWN OF ESSEX PUBLIC WORKS DEPARTMENT 24 HOURS IN ADVANCE OF STARTING ANY WORK, CUTTING THE PAVEMENT, BEGINNING THE INSTALLATION OF ANY UTILITIES, BRINGING IN ANY NEW GRAVEL FOR THE NEW BASE, PAVING, AND FINAL INSPECTION.
- THE HORIZONTAL AND VERTICAL SEPARATION FOR SEWER AND WATER LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF THE "TEN STATE STANDARDS - RECOMMENDED STANDARDS FOR WATER."
- TOPSOIL SHALL BE STOCKPILED, SEEDED, AND MULCHED UNTIL REUSED. SILT FENCES SHALL BE PLACED AND STAKED CONTINUOUSLY AROUND THE BOTTOM OF THE TOPSOIL PILES.
- HEALTHY EXISTING TREES ON AND ADJACENT TO THE SITE SHALL BE SAVED AND PROTECTED AS ORDERED BY THE ENGINEER.
- OPEN CUT AREAS SHALL BE MULCHED OUTSIDE OF ACTUAL WORK AREAS, AND BEST MANAGEMENT PRACTICES SHALL BE EMPLOYED TO CONFINEMENT SHEET WASH AND RUNOFF TO THE IMMEDIATE OPEN AREA AS ORDERED BY THE ENGINEER. THE CONTRACTOR SHALL REFERENCE ALL STORMWATER BMP'S PROVIDED BY THE STATE OF VERMONT.
- AT COMPLETION OF GRADING, SLOPES, DITCHES, AND ALL DISTURBED AREAS SHALL BE SMOOTH AND FREE OF POCKETS WITH SUFFICIENT SLOPE TO ENSURE DRAINAGE.
- FINISH SLOPES, DITCHES AND DISTURBED AREAS SHALL RECEIVE A MINIMUM OF 4 INCHES OF TOPSOIL AND BE FERTILIZED, SEEDED, LIMED, AND MULCHED. TURF ESTABLISHMENT SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 651 OF THE VERMONT HIGHWAY DEPARTMENT SPECIFICATIONS AND THE SPECIFICATIONS INCLUDED ON THESE PLANS.
- ALL FILL SHALL BE PLACED IN 6 INCH LIFTS AND THOROUGHLY COMPACTED TO 95% OF MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT AS DETERMINED BY ASTM D698 STANDARD PROCTOR, UNLESS OTHERWISE SPECIFIED.
- DRAINAGE COURSES AND STREAMS SHALL BE CONTROLLED IN DISTURBED CONSTRUCTION AREAS BY THE FOLLOWING METHODS:
A) PRESERVING NATURAL VEGETATION WHENEVER POSSIBLE;
B) AVOIDING UNNECESSARY DISTURBANCE OF SOILS;
C) EARLY INSTALLATION OF STORM PIPES AND DITCHES;
D) SEEDING AND MULCHING DIRECTLY UPON COMPLETION OF CONSTRUCTION;
E) CONSTRUCTION OF EROSION CONTROL DEVICES AS DIRECTED BY THE ENGINEER.
- THE SILT FENCES, DITCHES, AND OTHER EROSION CONTROL DEVICES, SHALL BE INSPECTED, MAINTAINED AND REPAIRED BY THE CONTRACTOR AFTER EVERY RAINFALL OR AS ORDERED BY THE ENGINEER UNTIL ALL DISTURBED AREAS HAVE BEEN GRASSSED AND APPROVED BY THE ENGINEER. THE MAINTENANCE OF THE EROSION CONTROL DEVICES WILL INCLUDE REMOVAL OF ANY ACCUMULATED SEDIMENTATION.
- PRIOR TO CONSTRUCTION, ALL MATERIALS SHALL BE APPROVED BY THE ENGINEER. ALL MATERIALS TO BE TAKEN OVER BY THE TOWN SHALL BE APPROVED BY THE PUBLIC WORKS DEPARTMENT.
- ALL WORK INCLUDING BUT NOT LIMITED TO SHALL CONFORM TO THE WILLISTON PUBLIC WORKS STANDARD SPECIFICATIONS



DATE	REVISION	BY
01/18/24	RECORD DRAWING	DATE
01/18/24	PRELIMINARY	1/18/24
01/18/24	SKETCH/CONCEPT	1/18/24
01/18/24	DESIGN	01/18/24
01/18/24	BWC GRT	2081-44
01/18/24	DRAWN	FILE
01/18/24	GRT	2018-44-23
01/18/24	CHECKED	SHEET #
01/18/24	BWC	
01/18/24	SCALE	
1" = 40'		

O'LEARY-BURKE CIVIL ASSOCIATES, PLC

13 CORPORATE DRIVE
ESSEX JUNCTION, VT 05452
PHONE: 802-878-9990
FAX: 802-878-9999
E-MAIL: obca@olearyburke.com

HOMESTEAD CAMPGROUND
GEORGIA, VERMONT

ROADWAY DETAILS

Soil Logs - Homestead Campground - Georgia, VT
Logged by Graham R. Tidman, BW on 8/31/18

Table with 2 columns: Test Pit # and Soil Log details (depth, soil type, water table).

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SEWAGE DESIGN INFORMATION

- 1. IT IS THE OPINION OF THE ENGINEER THAT THE SOIL CONDITIONS WITHIN THE PROPOSED SEWAGE DISPOSAL AREAS MEET THE STATE OF VERMONT EPR RULES & ARE SUITABLE FOR CONVENTIONAL SEWAGE DISPOSAL AS SHOWN ON THIS PLAN.
2. THE SEWAGE DISPOSAL SYSTEM SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE TOWN OF COLCHESTER REGULATIONS AND THE VERMONT ENVIRONMENTAL PROTECTION RULES.
3. THE FOLLOWING MINIMUM ISOLATION DISTANCES SHALL BE MAINTAINED FROM THE DISPOSAL AREA TO:

Table showing isolation distances: PROPERTY LINE (25 FEET), BUILDINGS (UPSLOPE / SIDESLOPE) (20 FEET), BUILDINGS (DOWNSLOPE) (75 FEET), DRIVEWAYS (10 FEET), TREES (10 FEET).

- 4. BASIS OF DESIGN:
SYSTEM A: DESIGN FLOW: (33) 1-BEDROOM SENIOR UNITS (FUTURE) = 3,465 GPD, (10) 2-BEDROOM 5-PLEX UNITS = 2,450 GPD, TOTAL = 5,915 GPD
APPLICATION RATE (FINE SAND): 1.0 GAL/DAY/SF
REQUIRED ABSORPTION AREA: 5,915 GPD / 1.0 GAL/DAY/SF = 5,915 SF

- SYSTEM B: DESIGN FLOW: (24) 2-BEDROOM 5-PLEX UNITS = 5,800 GPD, (2) COMMERCIAL USES (TBD) = 610 GPD, TOTAL = 6,490 GPD
APPLICATION RATE (FINE SAND): 1.0 GAL/DAY/SF
REQUIRED ABSORPTION AREA: 6,490 GPD / 1.0 GAL/DAY/SF = 6,490 SF

- PROPOSED SYSTEM: EIGHT (8) TRENCHES @ 4 FT X 208 FT = 6,656 SF PROVIDED

- SYSTEM B: DESIGN FLOW: (24) 2-BEDROOM 5-PLEX UNITS = 5,800 GPD, (2) COMMERCIAL USES (TBD) = 610 GPD, TOTAL = 6,490 GPD
APPLICATION RATE (FINE SAND): 1.0 GAL/DAY/SF
REQUIRED ABSORPTION AREA: 6,490 GPD / 1.0 GAL/DAY/SF = 6,490 SF

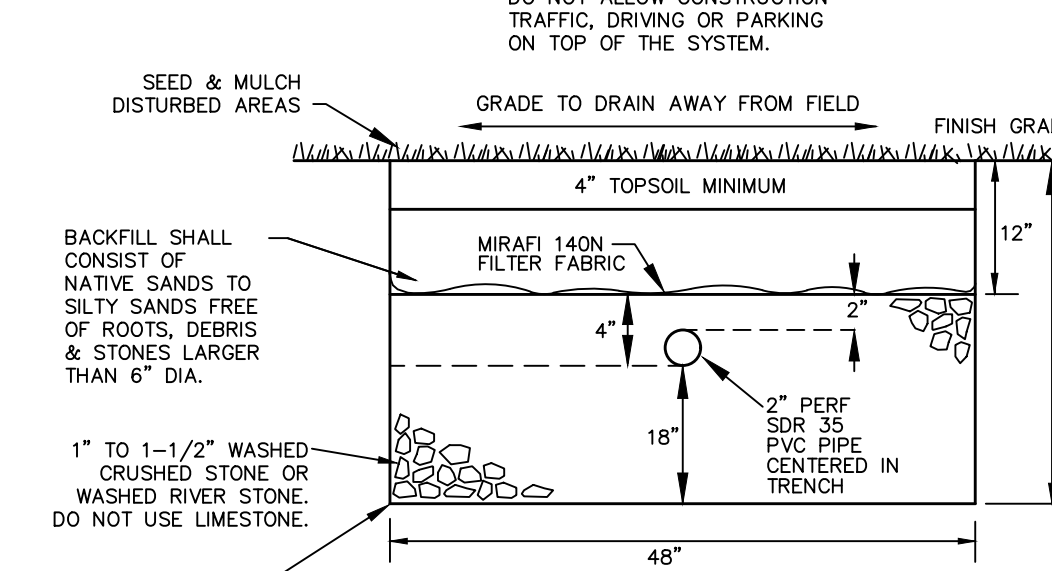
- PROPOSED SYSTEM: FOURTEEN (14) TRENCHES @ 4 FT X 131 FT = 7,336 SF PROVIDED

- 5. SEPTIC TANK: SYSTEM A: 5,915 GPD X 2 = 11,830 GAL MINIMUM

- A. USE TWO (2) 6,000 GALLON PRECAST CONCRETE SEPTIC TANKS IN SERIES, CAMP PRECAST OR APPROVED EQUAL, WITH TWO ACCESS COVERS, 4,000 PSI CONCRETE, WATERPROOF JOINTS AND SET ON THOROUGHLY COMPACTED SUBBASE. THE OUTLET BAFFLE OF THE SECOND TANK SHALL HAVE AN EFFLUENT FILTER.

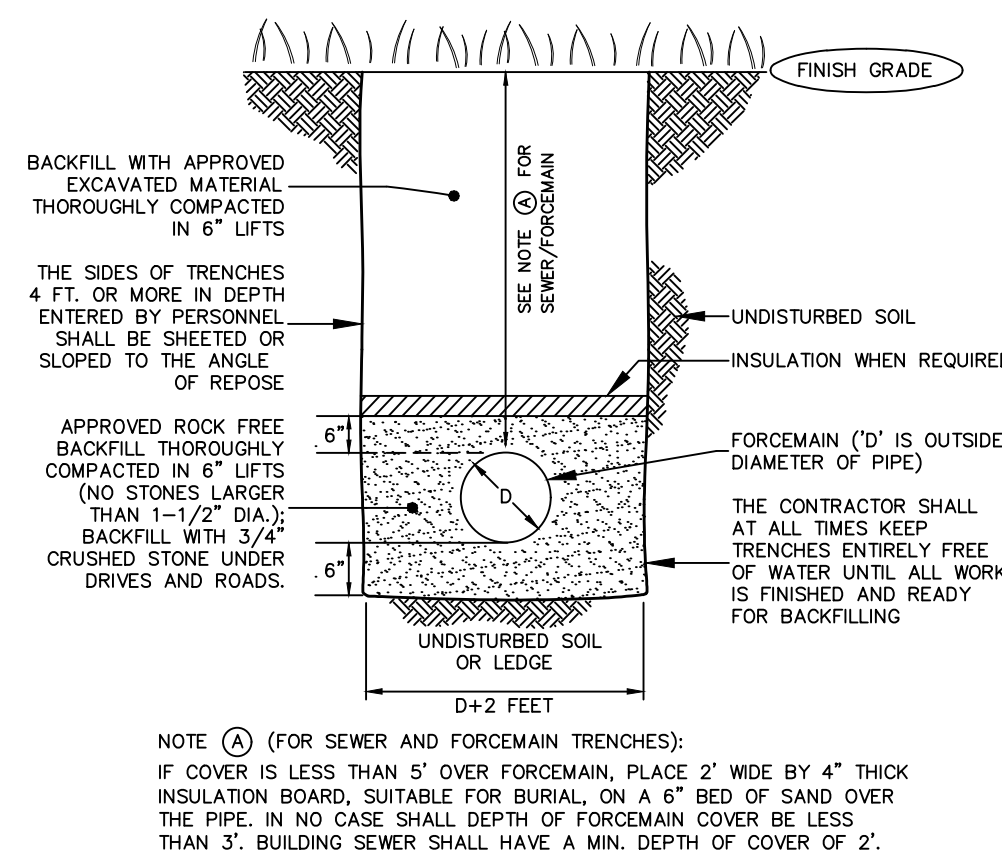
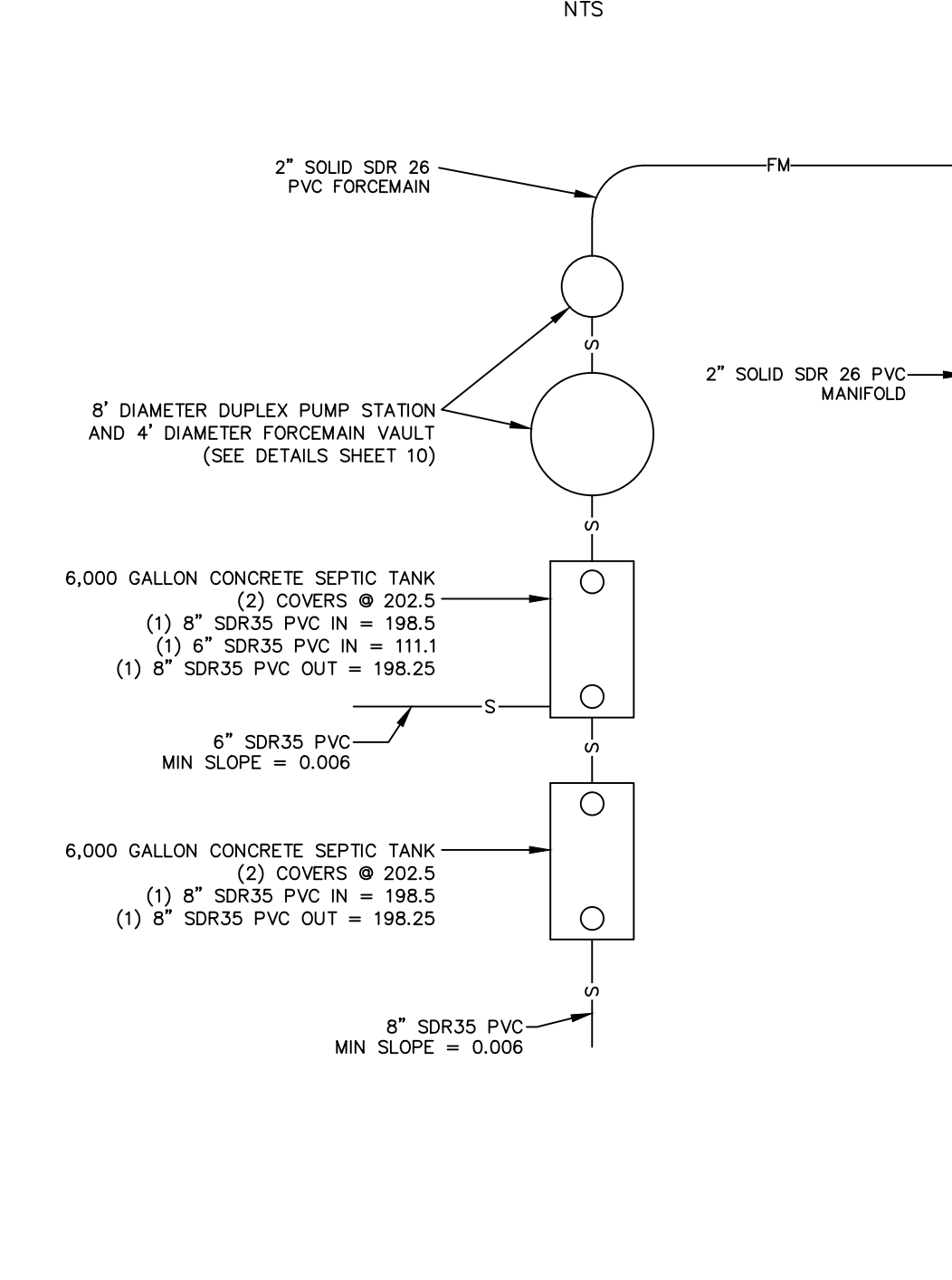
- B. THE USE OF GARBAGE DISPOSALS IS NOT ALLOWED.

- 6. PUMP STATION: SEE DUPLEX PUMP STATION DETAILS SHEET 10.



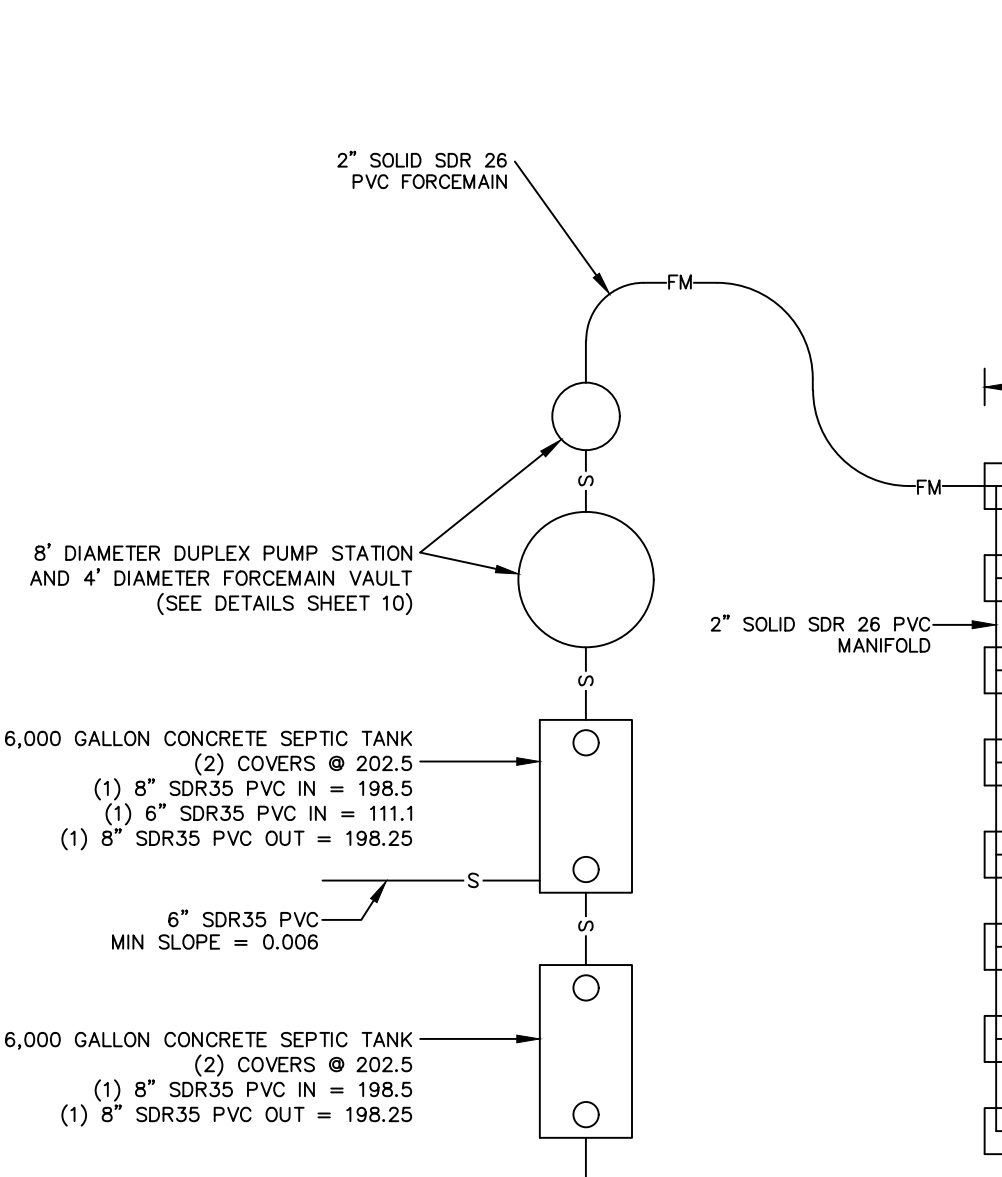
TRENCH EXCAVATIONS SHALL BE LEVEL OVER THE ENTIRE LENGTH & LEVEL ACROSS THE TRENCHES. THE TRENCH SIDEWALLS AND BOTTOM SHALL BE UNDISTURBED. PRIOR TO BACKFILLING CALL FOR INSPECTION. MAKE ANY SMEARED SOILS.

ABSORPTION TRENCH (SHARED SYSTEMS "A" AND "B")



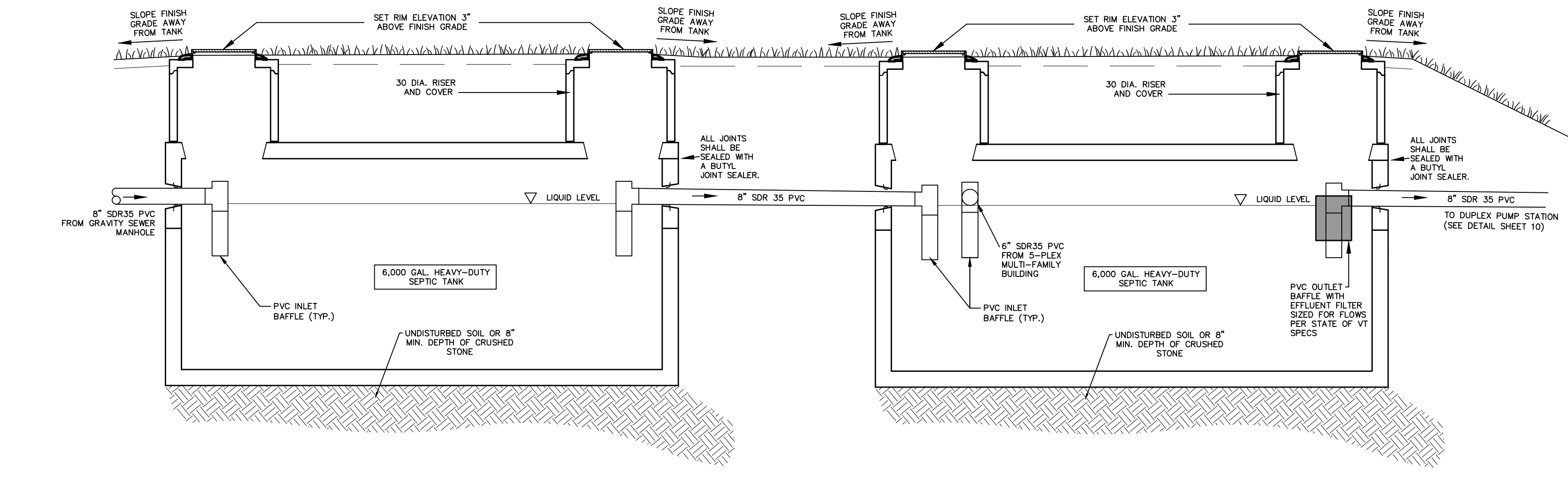
TYPICAL SEWER & FORCEMAIN TRENCH

NTS



SHARED SYSTEM "B" LAYOUT

NTS



SYSTEM "A" AND "B" DUAL 6,000 GALLON SEPTIC TANKS IN SERIES

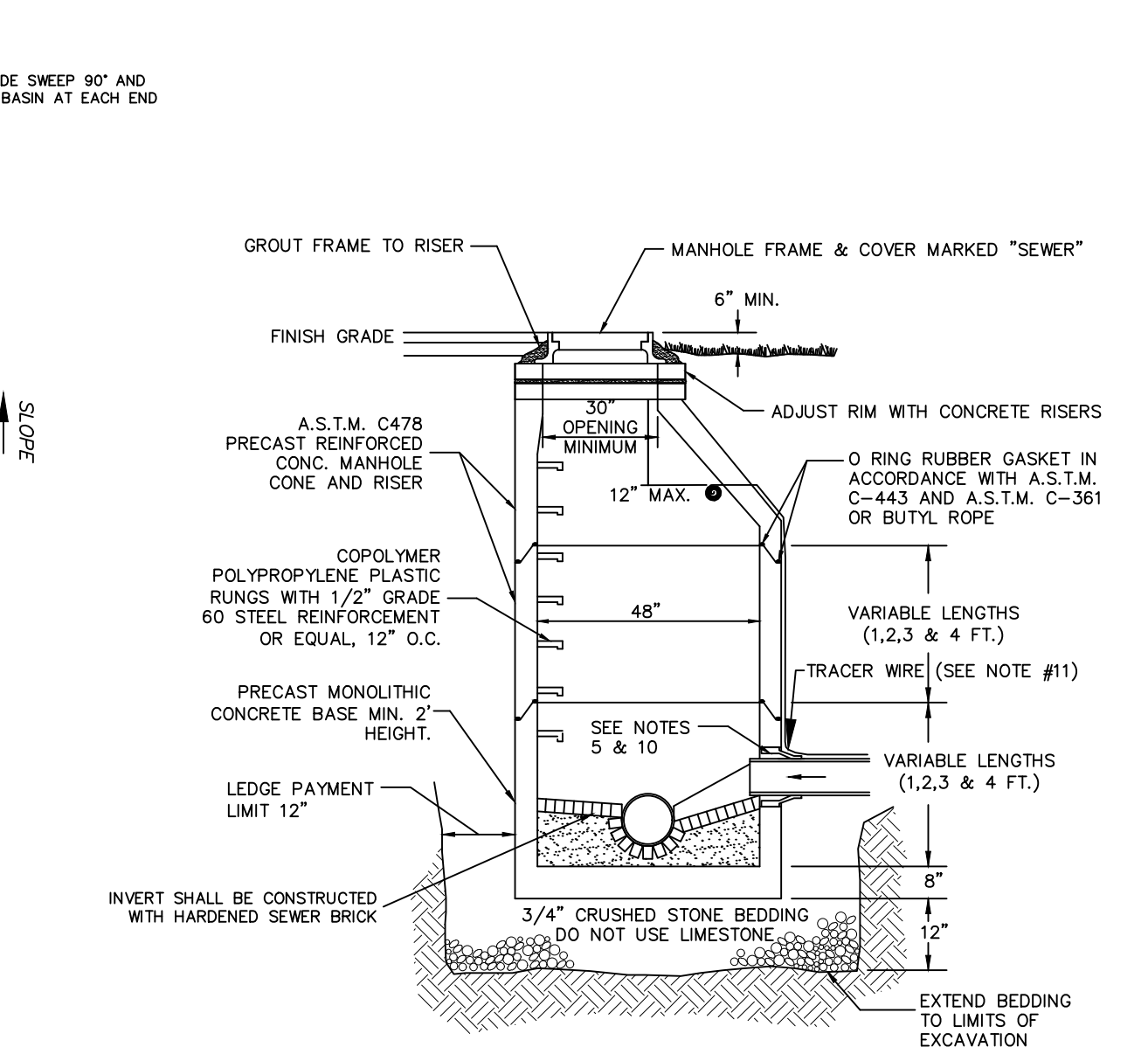
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- NOTES: 1. 6,000 GAL SEPTIC TANK SHALL BE CAMP PRECAST H07-14-6000 OR APPROVED EQUIVALENT.



SHARED SYSTEM "A" LAYOUT

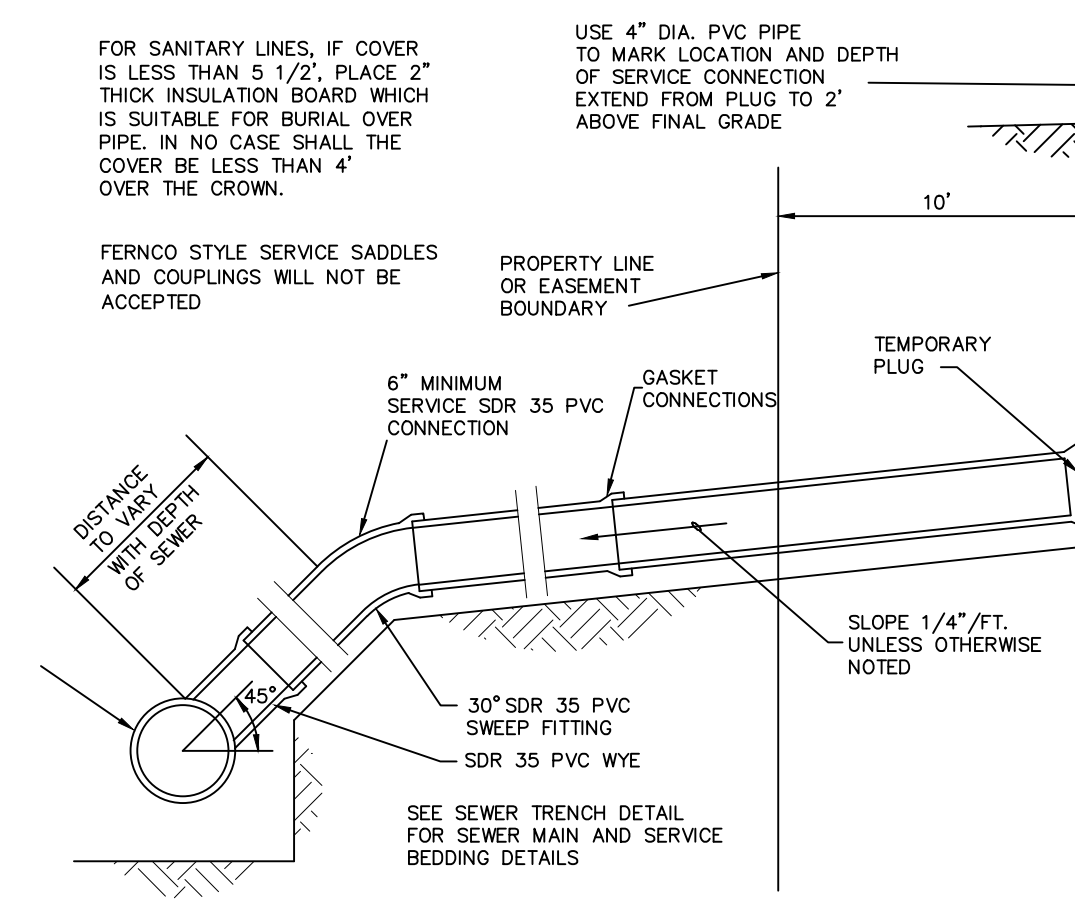
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PRECAST SANITARY MANHOLE

NTS

- NOTES: 1. THERE SHALL BE NO PARING OF INTERIOR SURFACES WITH MORTAR. ALL JOINTS SHALL BE SEALED ON EXTERIOR SURFACES ONLY. 2. REFER TO THE WRITTEN SPECIFICATIONS FOR BACKFILL AND COMPACTION REQUIREMENTS. 3. REFER TO THE WRITTEN SPECIFICATIONS FOR SANITARY SEWER STRUCTURE MATERIAL REQUIREMENTS AND TESTING REQUIREMENTS. 4. RAISE FRAME TO FINISH GRADE ONLY AFTER BASE COURSE OF PAVEMENT IS IN PLACE. RAISE FRAME TO BASE COURSE GRADE IF WEARING COURSE IS TO BE PLACED NEXT CONSTRUCTION SEASON. 5. CAST IN PLACE RUBBER BOOTS SHALL BE USED ON ALL SEWER CONNECTIONS. A CORE-N-SEAL STYLE BOOT MAY BE USED UPON TOWN APPROVAL. 6. HIGH STRENGTH NON-SHRINK GROUT SHALL BE USED TO SET FRAME AND GRADE RINGS. 7. IN GRASS AREAS, FRAME AND COVER ARE TO BE INSTALLED A MINIMUM OF 6\"/>



SANITARY SEWER SERVICE CONNECTION

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SHARED SYSTEM "B" LAYOUT

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THE CONTRACTOR SHALL NOTIFY "DIGSAFE" AT 1-888-DIG-SAFE PRIOR TO ANY EXCAVATION.

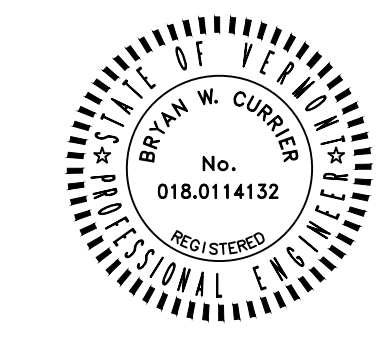


Table with columns: DATE, REVISION, REMOVED FUTURE SENIOR LIVING BUILDING PER TOWN OF GEORGIA REVIEW COMMENTS, BY, DATE. Includes project info for O'Leary-Burke Civil Associates, PLC and Homestead Campground Georgia, Vermont.

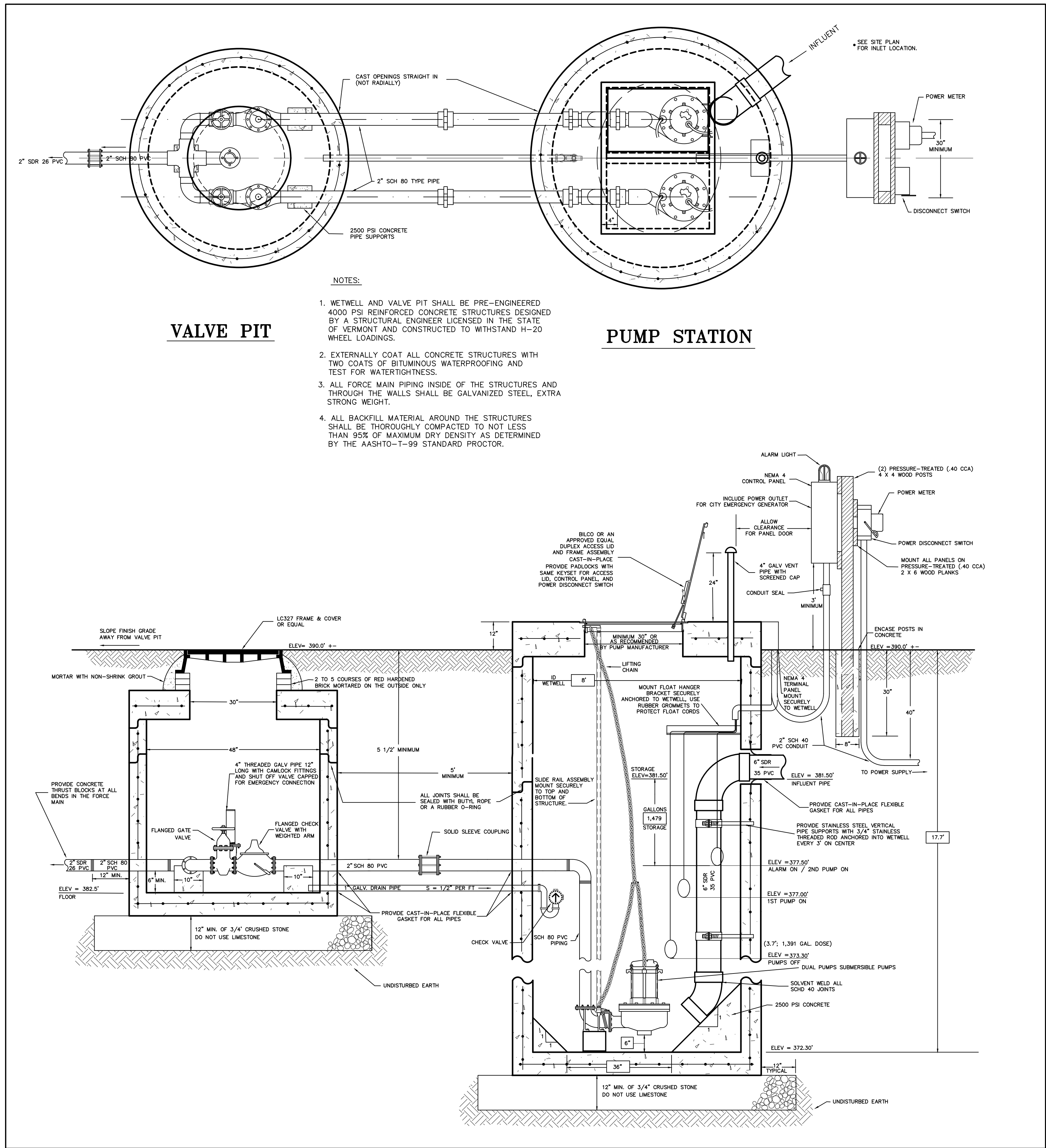
PUMP STATION 'A' DATA

- A. TOTAL DESIGN FLOW (USING EPR RULES):
 (33) SENIOR LIVING UNITS @ 105 GPD/UNIT = 3,465 GPD
 (10) 2-BEDROOM CONDO UNITS @ 245 GPD/UNIT = 2,450 GPD
TOTAL DESIGN FLOW FOR SIZING PUMP STATION = 5,915 GPD
- B. AVERAGE DAILY FLOW :
 $\frac{5,915 \text{ GPD}}{24 \text{ HR/DAY} \times 60 \text{ MIN/HR}} \times 4 = 16.43 \text{ GPM}$
- C. HEAD LOSSES:
 STATIC LIFT (389' - 382') = 7.0 FT
 FRICTION LOSSES = 7.0 FT (FORCE MAIN)
 MINOR LOSSES = 3.0 FT (PUMP STATION)
 PRESSURE HEAD TO BE MAINTAINED = 3.0 FT
TOTAL HEAD LOSS = 20.0 FT
 PROVIDE A PUMP CAPABLE OF 80 GPM @ 20' TDH; VELOCITY > 2.0 FT/SEC
- D. CYCLE TIME
 16 HR DELIVERY RATE
 $\frac{5,915 \text{ GPD}}{(16 \text{ HR/DAY})(60 \text{ MIN/HR})} = 6.16 \text{ GPM}$
 FILL TIME = 376 GAL/VF / 6.16 GPM INFLOW = 61.0 MINUTES
 PUMP TIME = 376 GALLONS/(80 GPM-6.16 GPM) = 5.1 MINUTES
TOTAL CYCLE TIME = 61.0 + 5.1 = 66.1 MINUTES
- E. CONTROLS: NEMA 4 DUPLEX CONTROL PANEL FOUR FLOAT SYSTEM CONTROL LOGIC; AUTOMATIC PUMP ALTERNATOR; 115 VAC CONTROL CIRCUIT; INDIVIDUAL PUMP RUN INDICATOR LIGHTS; INDIVIDUAL H-O-A SWITCHES; 115 VAC ALARM LIGHT AND HORN MOUNTED ON TOP OF PANEL; 0-5 SEC ADJUSTABLE TIME DELAY FOR EACH PUMP; PANEL HEATER WITH THERMOSTAT; INDIVIDUAL CIRCUIT BREAKERS FOR EACH PUMP; CONTROL CIRCUIT TRANSFORMER IF REQUIRED, HEATER, AND ONE SPARE; INDIVIDUAL ELAPSED TIME METERS. ALL ELECTRIC WIRING SHALL MEET THE REQUIREMENTS OF THE NATIONAL ELECTRIC CODE.
- F. FLOATS: MERCURY SWITCH TO BE COMPLETELY SEALED, MADE OF CORROSIVE RESISTANT SOLUTION AND INTRINSICALLY SAFE. ELECTRICAL CABLE TO BE FLEXIBLE TWO CONDUCTOR WITH NEOPRENE JACKET.
- G. EMERGENCY STORAGE
 PROVIDE FOUR (4) HOUR STORAGE BASED ON A 16 HR DELIVERY RATE
 $\frac{5,915 \text{ GPD}}{(16 \text{ HR/DAY})} \times 4 \text{ HR/DAY} = 1,479 \text{ GALLONS}$
- H. SUBMITTALS REQUIRED: PUMPS, ACCESS LID, WETWELL, VALVE PIT, FLOATS AND FLOAT HANGER BRACKET, CHECK VALVES, GATE VALVES AND OPERATION AND MAINTENANCE MANUALS.

TESTING DATA

- A. FORCE MAIN PRESSURE TEST: ALL FORCE MAINS SHALL BE PRESSURE TESTED TO NOT LESS THAN 50 PSI AT THE HIGHEST POINT OF THE TEST SECTION. THE TEST SHALL BE OF A TWO HOUR DURATION AND THE TEST PRESSURE SHALL NOT VARY BY MORE THAN +/- 5 PSI. A LEAKAGE TEST SHALL BE PERFORMED CONCURRENTLY WITH THE PRESSURE TEST. THE ALLOWABLE LEAKAGE SHALL BE DETERMINED BY THE FOLLOWING FORMULA:

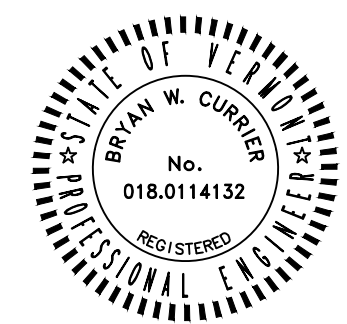
$$L = \frac{ND\sqrt{P}}{7400}$$
 WHERE L = THE ALLOWABLE LEAKAGE IN GALLONS PER HOUR, N IS THE NUMBER OF JOINTS, D IS THE NOMINAL DIAMETER OF THE PIPE IN INCHES, AND P IS THE AVERAGE TEST PRESSURE IN PSI.
- B. VALVE PIT AND PUMP STATION TEST: THE STRUCTURES SHALL BE TESTED IN THE PRESENCE OF THE ENGINEER FOR EXFILTRATION BY FILLING THE STRUCTURES TO 1' BELOW THE ACCESS LID. A STABILIZATION PERIOD OF 1 HR SHALL BE PROVIDED TO ALLOW FOR ABSORPTION. AT THE END OF THE STABILIZATION PERIOD THE STRUCTURES SHALL BE REFILLED IF NECESSARY AND THE TEST PERIOD OF 48 HOURS SHALL BEGIN. AT THE END OF THE TEST PERIOD, THERE SHALL BE NO VISIBLE OR MEASURABLE EXFILTRATION OR INFILTRATION OR THE TEST FAILS. IF THE TEST FAILS, THE CONTRACTOR SHALL REPAIR OR WATERPROOF AND RETEST.
- C. PUMP STATION: AN AUTHORIZED REPRESENTATIVE OF THE PUMP MANUFACTURER OR AN ELECTRICIAN FAMILIAR WITH THE OPERATION AND SETTING OF THE PUMP STATION AND THE ENGINEER SHALL BE PRESENT DURING STARTUP. AMPERAGE READINGS ON EACH MOTOR LEAD SHALL BE MEASURED AND RECORDED. THE CONTRACTOR SHALL PROVIDE A WATER SOURCE TO PERFORM A FULL OPERATIONAL CHECK OF THE STATION INCLUDING ALL FLOAT FUNCTIONS, ALARM TESTING, INDICATOR LIGHTS, H-O-A SWITCHES, PUMP ALTERNATOR AND PHASE MONITOR IF THREE PHASE PUMPS ARE USED. THE CONTROL SYSTEM SHALL BE CYCLED THROUGH MORE THAN ONCE TO INSURE PROPER SEQUENCING AND OPERATION OF THE PUMPS. EACH PUMP SHALL BE FIELD TESTED TO INSURE THE PUMPING CAPACITY MEETS THE PROJECT REQUIREMENTS.
- D. ENGINEER SHALL BE GIVEN AT LEAST 24 HOURS NOTICE PRIOR TO TESTING.



PUMP STATION 'A' DETAIL

NTS

THE CONTRACTOR SHALL NOTIFY "DIGSAFE" AT 1-888-DIG-SAFE PRIOR TO ANY EXCAVATION.



DATE	REVISION	BY
01/18/24	RECORD DRAWING	DATE
	PRELIMINARY	1/18/24
	SKETCH/CONCEPT	JOB #
		2081-44
		FILE
		2018-44-23
		SHEET #
		13

O'LEARY-BURKE CIVIL ASSOCIATES, PLC

13 CORPORATE DRIVE
 ESSEX JUNCTION, VT 05452
 PHONE: 802-878-9990
 FAX: 802-878-9999
 E-MAIL: obca@olearyburke.com

HOMESTEAD CAMPGROUND
 GEORGIA, VERMONT

PUMP STATION "A" DETAILS AND SPECIFICATIONS

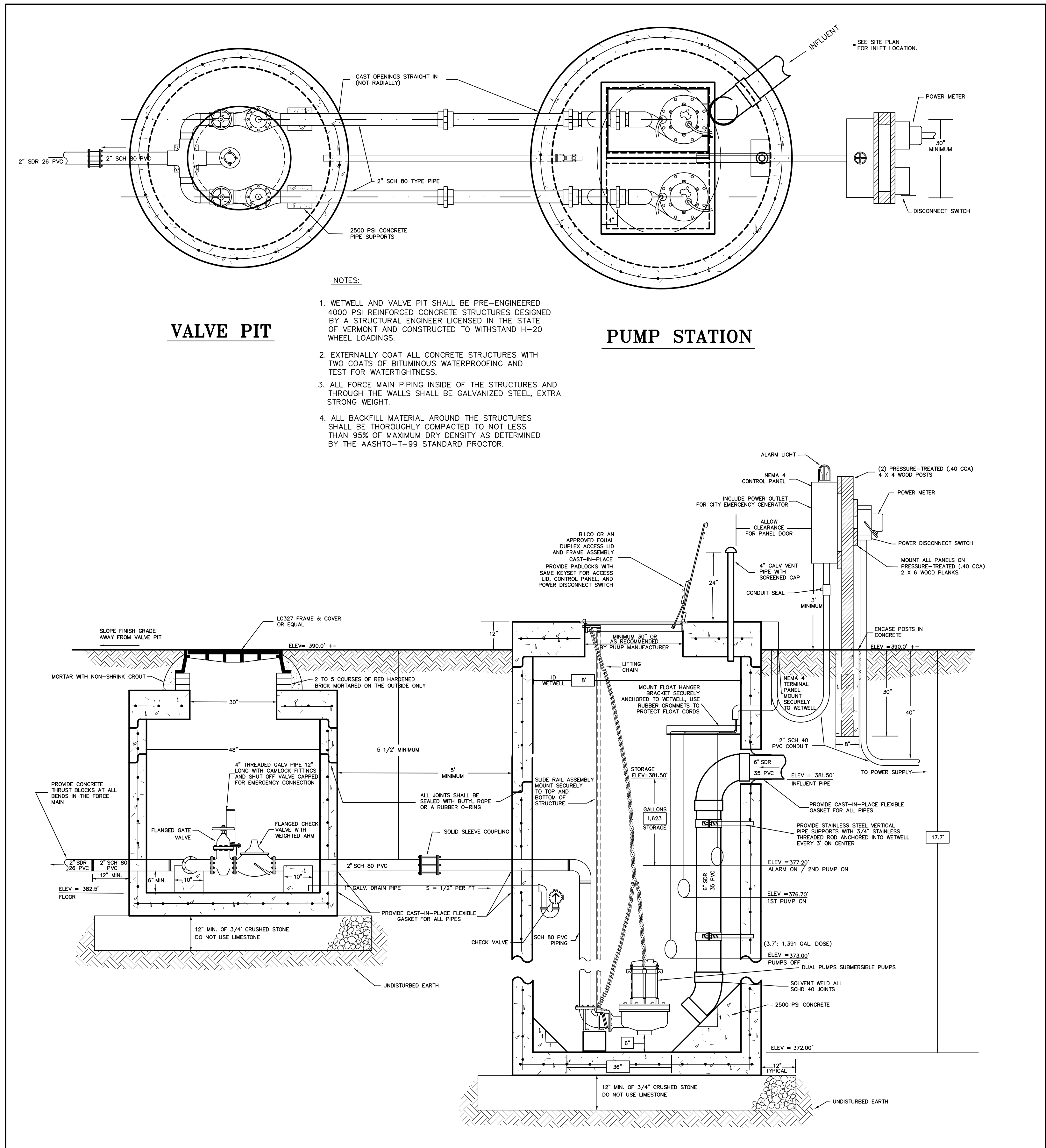
PUMP STATION 'B' DATA

- A. TOTAL DESIGN FLOW (USING EPR RULES):
 COMMERCIAL USES (TBD) = 610 GPD
 (24) 2-BEDROOM CONDO UNITS @ 245 GPD/UNIT = 5,880 GPD
 TOTAL DESIGN FLOW FOR SIZING PUMP STATION = 6,490 GPD
- B. AVERAGE DAILY FLOW :
 $\frac{6,490 \text{ GPD}}{24 \text{ HR/DAY} \times 60 \text{ MIN/HR}} \times 4 = 18.03 \text{ GPM}$
- C. HEAD LOSSES:
 STATIC LIFT (389' - 382') = 7.0 FT
 FRICTION LOSSES = 7.0 FT (FORCE MAIN)
 MINOR LOSSES = 3.0 FT (PUMP STATION)
 PRESSURE HEAD TO BE MAINTAINED = 3.0 FT
 TOTAL HEAD LOSS = 20.0 FT
 PROVIDE A PUMP CAPABLE OF 80 GPM @ 20' TDH; VELOCITY > 2.0 FT/SEC
- D. CYCLE TIME
 16 HR DELIVERY RATE
 $\frac{6,490 \text{ GPD}}{(16 \text{ HR/DAY})(60 \text{ MIN/HR})} = 6.76 \text{ GPM}$
 FILL TIME = 376 GAL/VF / 6.76 GPM INFLOW = 55.6 MINUTES
 PUMP TIME = 376 GALLONS/(80 GPM-6.76 GPM) = 5.1 MINUTES
 TOTAL CYCLE TIME = 55.6 + 5.1 = 60.7 MINUTES
- E. CONTROLS: NEMA 4 DUPLEX CONTROL PANEL FOUR FLOAT SYSTEM CONTROL LOGIC; AUTOMATIC PUMP ALTERNATOR; 115 VAC CONTROL CIRCUIT; INDIVIDUAL PUMP RUN INDICATOR LIGHTS; INDIVIDUAL H-O-A SWITCHES; 115 VAC ALARM LIGHT AND HORN MOUNTED ON TOP OF PANEL; 0-5 SEC ADJUSTABLE TIME DELAY FOR EACH PUMP; PANEL HEATER WITH THERMOSTAT; INDIVIDUAL CIRCUIT BREAKERS FOR EACH PUMP; CONTROL CIRCUIT TRANSFORMER IF REQUIRED; HEATER, AND ONE SPARE; INDIVIDUAL ELAPSED TIME METERS. ALL ELECTRIC WIRING SHALL MEET THE REQUIREMENTS OF THE NATIONAL ELECTRIC CODE.
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- G. EMERGENCY STORAGE
 PROVIDE FOUR (4) HOUR STORAGE BASED ON A 16 HR DELIVERY RATE
 $\frac{6,490 \text{ GPD}}{(16 \text{ HR/DAY})} \times 4 \text{ HR/DAY} = 1,623 \text{ GALLONS}$
- H. SUBMITTALS REQUIRED: PUMPS, ACCESS LID, WETWELL, VALVE PIT, FLOATS AND FLOAT HANGER BRACKET, CHECK VALVES, GATE VALVES AND OPERATION AND MAINTENANCE MANUALS.

TESTING DATA

- A. FORCE MAIN PRESSURE TEST: ALL FORCE MAINS SHALL BE PRESSURE TESTED TO NOT LESS THAN 50 PSI AT THE HIGHEST POINT OF THE TEST SECTION. THE TEST SHALL BE OF A TWO HOUR DURATION AND THE TEST PRESSURE SHALL NOT VARY BY MORE THAN +/- 5 PSI. A LEAKAGE TEST SHALL BE PERFORMED CONCURRENTLY WITH THE PRESSURE TEST. THE ALLOWABLE LEAKAGE SHALL BE DETERMINED BY THE FOLLOWING FORMULA:

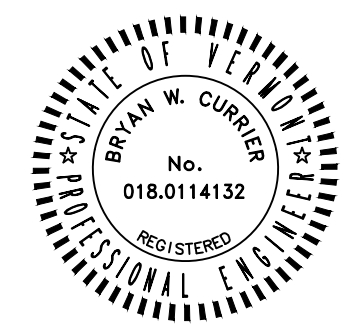
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- D. ENGINEER SHALL BE GIVEN AT LEAST 24 HOURS NOTICE PRIOR TO TESTING.



PUMP STATION 'B' DETAIL

NTS

THE CONTRACTOR SHALL NOTIFY "DIGSAFE" AT 1-888-DIG-SAFE PRIOR TO ANY EXCAVATION.



DATE	REVISION	BY
DATE	REVISION	DATE
DESIGN	RECORD DRAWING	1/18/24
BWC	FINAL	JOB #
DRAWN	SKETCH/CONCEPT	2081-44
GRT		FILE
CHECKED		2018-44-23
BWC		SHEET #
SCALE		14
1" = 40'		

HOMESTEAD CAMPGROUND
 GEORGIA, VERMONT

PUMP STATION "B" DETAILS
 AND SPECIFICATIONS

GENERAL SEWER SPECIFICATIONS

GENERAL:

THIS ITEM SHALL CONSIST OF THE EXCAVATION AND BACKFILLING REQUIRED FOR THE COMPLETE CONSTRUCTION OF GRAVITY SANITARY SEWERS, FORCE MAINS, AND ALL APPURTENANT CONSTRUCTION RELATED THERETO, INCLUDING CHIMNEYS, SERVICE CONNECTIONS, THRUST BLOCKS, AND OTHER ITEMS NECESSARY FOR A COMPLETE SANITARY SEWER SYSTEM AS INDICATED ON THE DRAWINGS. ALL SEWER INFRASTRUCTURE SHALL MEET OR EXCEED THE TOWN OF ESSEX STANDARDS FOR CONSTRUCTION. THE TESTING OF TAPS, SERVICE CONNECTIONS, AIR TESTING, ETC., SHALL BE WITNESSED BY THE TOWN OF ESSEX.

MATERIALS:

- A. TYPES OF PIPE
 - TYPES OF PIPE WHICH SHALL BE USED FOR THE VARIOUS PARTS OF WORK ARE AS FOLLOWS: GRAVITY SEWERS SHALL BE PVC SOLID WALL PIPE MEETING ASTM SPECIFICATIONS D-3034 OR F679.
- B. PVC SEWER PIPE
 - PVC SEWER PIPE SHALL CONFORM IN ALL RESPECTS TO THE LATEST REVISION OF ASTM SPECIFICATIONS D-3034 OR F679. TYPE PSM POLYVINYL CHLORIDE (PVC) SEWER PIPE AND FITTINGS, SDR35, WALL THICKNESS OF ALL PVC SHALL MEET ASTM SPECIFICATIONS FOR SDR35 PIPE. ALL PIPE AND FITTINGS SHALL BE CLEARLY MARKED AS FOLLOWS:

MANUFACTURER'S NAME AND TRADEMARK
 NOMINAL PIPE SIZE
 MATERIAL DESIGNATION 12454C PVC
 LEGEND "TYPE PSM SDR35 PVC SEWER PIPE" OR
 "PS 46 PVC SEWER PIPE"
 DESIGNATION ASTM D-3034 OR F679

JOINTS SHALL BE PUSH-ON TYPE USING ELASTOMERIC GASKETS AND SHALL CONFORM TO ASTM D-3212. THE GASKETS SHALL BE FACTORY INSTALLED.

THE PIPE SHALL BE FURNISHED IN NOMINAL 13 FOOT LENGTHS. SUFFICIENT NUMBERS OF SHORT LENGTHS AND FULL MACHINE FITTINGS SHALL BE PROVIDED FOR USE AT MANHOLES, CHIMNEYS AND SERVICE CONNECTIONS. ALL CONNECTIONS WILL REQUIRE THE USE OF MANUFACTURED FITTINGS. FIELD FABRICATED, SADDLE-TYPE CONNECTIONS WILL NOT BE CONSIDERED ACCEPTABLE.

ANY PIPE OR FITTING HAVING A CRACK OR OTHER DEFECT OR WHICH HAS RECEIVED A SEVERE BLOW SHALL BE MARKED REJECTED AND REMOVED AT ONCE FROM THE WORK SITE. ALL FIELD CUTS ARE TO BE MADE WITH SAW AND 90 DEGREE MITRE BOX. BEVEL THE CUT END TO THE SAME AS THE FACTORY BEVEL AND REMOVE ALL INTERIOR BURRS. MEASURE AND PLACE A HOPKIN MARK ON THE PIPE BEFORE ASSEMBLING.

THE PIPE INSTALLED UNDER THIS SPECIFICATION SHALL BE INSTALLED SO THAT THE INITIAL DEFLECTION, MEASURED AS DESCRIBED BELOW, SHALL BE LESS THAN FIVE PERCENT (5%).

DEFLECTION TESTS SHALL BE PERFORMED ON ALL FLEXIBLE PIPE AFTER THE FINAL BACKFILL HAS BEEN IN PLACE FOR AT LEAST 30 DAYS. THE DEFLECTION TEST SHALL BE RUN USING A RIGID BALL OR MANDREL HAVING A DIAMETER EQUAL TO 95 PERCENT OF THE INSIDE DIAMETER OF THE PIPE. NO MECHANICAL PULLING DEVICES SHALL BE USED DURING THE DEFLECTION TESTS. ALL PIPE NOT MEETING THE DEFLECTION TEST SHALL BE REEXCAVATED AND REPLACED AT THE CONTRACTOR'S EXPENSE.

THE MANHOLE WATER STOP GASKET AND STAINLESS STEEL CLAMP ASSEMBLY MUST BE APPROVED BY THE ENGINEER PRIOR TO THE INSTALLATION OF ANY PIPE.

THE CONTRACTOR WILL SUBMIT CERTIFICATION THAT THE MATERIALS OF CONSTRUCTION HAVE BEEN SAMPLED, TESTED, AND INSPECTED, AND THAT THEY MEET ALL THE REQUIREMENTS--INCLUDING WALL THICKNESS--IN ACCORDANCE WITH ASTM C-3034 OR ASTM F679 FOR ALL PIPE AND FITTINGS TO BE INCLUDED IN THE PROJECT WORK.

PVC PIPE SHALL NOT BE INSTALLED WHEN THE TEMPERATURE DROPS BELOW 32 DEGREES FAHRENHEIT OR GOES ABOVE 100 DEGREES FAHRENHEIT. DURING COLD WEATHER, THE FLEXIBILITY AND IMPACT RESISTANCE OF PVC PIPE IS REDUCED.

EXTRA CARE IS REQUIRED WHEN HANDLING PVC PIPE DURING COLD WEATHER. PVC PIPE SHALL NOT BE STORED OUTSIDE AND EXPOSED TO PROLONGED PERIODS OF SUNLIGHT AS PIPE DISCOLORATION AND REDUCTION IN PIPE IMPACT STRENGTH WILL OCCUR. CANVAS OR OTHER OPAQUE MATERIAL SHALL BE USED TO COVER PVC PIPE STORED ONSITE.

E. MANHOLES

THE CONTRACTOR SHALL CONSTRUCT REINFORCED CONCRETE MANHOLES AND DROP MANHOLES TO THE DIMENSIONS SHOWN ON THE LOCATIONS SHOWN ON THE CONTRACT DRAWINGS. ALL PRECAST REINFORCED CONCRETE MANHOLE SECTIONS SHALL CONFORM TO THE LATEST REVISION OF THE ASTM SPECIFICATIONS C478. THE EXTERIOR OF THE MANHOLE SHALL BE COATED WITH A WATERPROOF SEALANT.

THE FOOTING SHALL BE CLASS B PRECAST CONCRETE AND SHALL CONFORM TO THE DIMENSIONS INDICATED ON THE PLANS.

SHELVES SHALL BE CONSTRUCTED WITH HARDENED RED SEWER BRICK. ALL BRICK SHALL BE TYPE SS MEETING THE STANDARDS IN ASTM C32. INVERTS FOR SEWER MANHOLES SHALL BE AS SHOWN ON THE PLANS AND DETAILS.

INVERTS SHALL HAVE THE EXACT SHAPE OF THE SEWER TO WHICH THEY ARE CONNECTED, AND ANY CHANGE IN SIZE OR DIRECTION SHALL BE GRADUAL AND EVEN.

ALL CONSTRUCTION OF SEWER MANHOLES MUST BE CARRIED OUT TO ENSURE WATERTIGHT WORK. ANY LEAKS IN MANHOLES SHALL BE CALKED AND COMPLETELY REPAIRED TO THE SATISFACTION OF THE ENGINEER. ON THE ENTIRE STRUCTURE SHALL BE REMOVED AND REBUILT. REPAIRS SHALL ONLY BE ALLOWED TO THE EXTERIOR OF THE MANHOLE.

ALL MANHOLES ARE TO BE PROVIDED WITH COPOLYMER POLYPROPYLENE PLASTIC RUNGS WITH STEEL REINFORCING TUBES. ALL MANHOLES SHALL BE PROVIDED WITH TIGHT, GRAY, CAST IRON MANHOLE FRAMES AND COVERS. ALL IRON CASTINGS SHALL BE THOROUGHLY CLEANED AND THEN COATED WITH HOT TAR BEFORE BEING DELIVERED. FRAMES AND COVERS SHALL BE LEBARON LC 266 TYPE C, OR AN APPROVED EQUAL, AND HAVE A MINIMUM WEIGHT OF 400 POUNDS. MANHOLE COVERS SHALL HAVE THE WORD SEWER PRINTED ON THEM.

PRECAST RISERS AND BASES FOR MANHOLES SHALL CONFORM TO ASTM SPECIFICATIONS C-361. THE PIPE OPENING IN THE PRECAST MANHOLE RISER SHALL HAVE A CAST-IN-PLACE FLEXIBLE GASKET OR AN EQUIVALENT SYSTEM FOR PIPE INSTALLATION AS APPROVED BY THE ENGINEER. JOINTS BETWEEN MANHOLE RISERS SHALL BE RUBBER O-RING SEALS OR SOFT BUTYL JOINT SEALER (ROPE FORM).

THE MANHOLE COVER FRAMES SHALL BE SET TO FINAL GRADE ONLY AFTER THE BASE COURSE PAVING HAS BEEN COMPLETED. MANHOLES SHALL BE CONSTRUCTED TO GRADE WITH AT LEAST TWO, AND NOT MORE THAN FIVE, COURSES OF BRICK. WITH THE EXCEPTION OF INVERTS, ALL SURFACES OF MANHOLE BRICKWORK SHALL BE PLASTERED WITH GEMER MORTAR, THE PLASTER BEING CARRIED UP AS THE BRICKWORK PROGRESSES, AND ALL MANHOLE LIFT HOLES SHALL BE GROUTED INSIDE AND OUT WITH EXPANDABLE GROUT.

MANHOLES SHALL BE PLACED AT ALL CHANGES IN SLOPE, SIZE, ALIGNMENT OF PIPE, AT THE ENDS OF EACH LINE, AND AT LEAST EVERY 300 FEET.

F. MASONRY

EACH BRICK SHALL BE WETTED AND COMPLETELY BEDDED IN MORTAR AT ITS BOTTOM, SIDES, AND ENDS IN ONE OPERATION WITH CARE BEING TAKEN TO FILL EVERY JOINT. BRICKWORK SHALL BE WELL-BONDED, AND JOINTS SHALL BE AS CLOSE AS PRACTICABLE. NO BRICK MASONRY SHALL BE LAID IN WATER NOR SHALL ANY WATER BE ALLOWED TO RISE ON OR AROUND ANY BRICK MASONRY UNTIL IT HAS SET AT LEAST 24 HOURS. NO MASONRY SHALL BE LAID IN FREEZING WEATHER.

THE BRICK FOR ORDINARY BRICKWORK SHALL BE COMMON HARD-BURNED CLAY BRICK. ALL BRICK SHALL BE REGULAR AND UNIFORM IN SHAPE AND SIZE WITH PLANE, PARALLEL BEDS, AND FACES. ORDINARY BRICK SHALL CONFORM TO ASTM SPECIFICATION C-32, LATEST VERSION, AND SHALL BE GRASS SS.

BRICK MASONRY SHALL BE LAID IN PORTLAND CEMENT MORTAR COMPOSED OF ONE PART PORTLAND CEMENT AND TWO PARTS OF SAND, MEASURED BY VOLUME, TO WHICH NOT MORE THAN 10 POUNDS OF LIME SHALL BE ADDED FOR EACH BAG OF CEMENT. WATER FOR MORTAR SHALL BE CLEAN AND ONLY AN AMOUNT SUFFICIENT TO PRODUCE A WORKABLE MORTAR SHALL BE USED. MORTAR SHALL BE USED WITHIN ONE HOUR FROM THE TIME THE CEMENT WAS ADDED TO THE MIX.

THE SAND FOR MORTAR FOR BRICK MASONRY SHALL BE UNIFORMLY GRADED, CLEAN, SHARP, AND CONTAIN NO GRADES LARGER THAN WILL PASS A ONE-EIGHTH INCH (1/8") MESH SCREEN.

CONSTRUCTION METHODS:

A. EXCAVATION:
 EXCAVATIONS SHALL BE MADE TO A POINT AT LEAST SIX INCHES (6") BELOW THE PIPE INVERT TO ACCOMMODATE THE BEDDING MATERIAL. ALL EXCAVATIONS ARE TO BE KEPT DRY WHILE PIPE IS BEING LAID AND UNTIL EACH JOINT AND PIPE HAS BEEN INSPECTED BY THE ENGINEER AND APPROVAL GIVEN TO COMMENCE BACKFILLING OPERATIONS.

B. LAYING SEWER PIPE:
 THE BELL END OF THE PIPE SHALL FACE UPGRADE AT ALL TIMES AND BE PLACED IN SUCH A POSITION AS TO MAKE THE INVERT EVEN WHEN THE SUCCEEDING SECTION IS INSERTED. WHERE REQUIRED BY ADVERSE GRADING CONDITIONS, THE CONTRACTOR SHALL FILL ANY GULLY TO MAKE A SUITABLE BEDDING FOR THE SEWER PIPE. THE FILL SHALL BE PNEUMATICALLY COMPACTED TO A 95 PERCENT DRY DENSITY BY THE ASHTO-T-99, METHOD A (STANDARD PROCTOR) TEST, UPON WHICH THE SIX INCHES (6") OF BEDDING MATERIAL SHALL BE PLACED.

ANY PIPE WHICH IS NOT LAID TO GRADE AND ALIGNMENT SHALL BE RELIED TO THE SATISFACTION OF THE ENGINEER. THE BEDDING MATERIAL SHALL BE PLACED AND COMPACTED ON EACH SIDE OF THE PIPE TO A HEIGHT EQUAL TO ONE-HALF THE PIPE DIAMETER AND FOR THE FULL WIDTH OF THE EXCAVATED TRENCH AND AS SHOWN ON THE ACCEPTED PLANS.

C. BACKFILL:
 BACKFILL SHALL CONSIST OF APPROVED MATERIAL PLACED IN SIX INCH (6") LAYERS WITH EACH LAYER BEING THOROUGHLY COMPACTED TO NOT LESS THAN 95 PERCENT OF MAXIMUM DRY DENSITY AS DETERMINED BY THE ASHTO-T-99 STANDARD PROCTOR BY MEANS APPROVED BY THE ENGINEER.

THE BACKFILL SHALL BE BROUGHT UP EVENLY ON BOTH SIDES OF THE PIPE FOR ITS FULL LENGTH. WALKING OR WORKING ON THE COMPLETED PIPELINE, EXCEPT AS MAY BE NECESSARY IN TAMPING OR BACKFILLING, SHALL NOT BE PERMITTED UNTIL THE TRENCH HAS BEEN BACKFILLED TO A HEIGHT OF AT LEAST TWO FEET (2') ON THE TOP OF THE PIPES. DURING CONSTRUCTION, ALL OPENINGS TO THE PIPELINES SHALL BE PROTECTED FROM THE ENTERING OF EARTH OR OTHER MATERIALS.

THE CONTRACTOR SHALL CONTACT THE TOWN OF ESSEX PRIOR TO BACKFILLING ANY NEW SEWER INFRASTRUCTURE FOR INSPECTION AND APPROVAL.

D. CONCRETE CRADLE AND ENCASEMENT FOR PIPE:
 WHERE REQUIRED ON THE PLANS OR AS DIRECTED BY THE ENGINEER, A CONCRETE CRADLE SHALL BE USED TO BOLSTER AND STRENGTHEN PIPE. WHERE REQUIRED ON THE PLANS OR AS DIRECTED BY THE ENGINEER, CONCRETE ENCASEMENT OR SEWER WILL BE MADE TO PROTECT NEARBY WELLS OR WATERLINES FOR STREAM CROSSINGS OR FOR SIMILAR PURPOSES. ALL CONCRETE WILL BE CLASS B AS DEFINED IN THE VERMONT STANDARD SPECIFICATIONS FOR CONSTRUCTION, SECTION 501, AND WILL MEET THE REQUIREMENTS OF THAT SECTION.

E. FROST PROTECTION FOR SHALLOW SEWERS:

SEWERS WITH LESS THAN FIVE AND ONE-HALF FEET (5 1/2') OF COVER OVER THE CROWN OR WHERE INDICATED ON THE PLANS SHALL BE PROTECTED AGAINST FREEZING BY INSTALLATION OF TWO, 2" THICK (4") TOTAL STYROFOAM SM INSULATING SHEETS WITH A TOTAL WIDTH OF TWO FEET (4') OR TWICE THE PIPE DIAMETER, WHICHEVER IS GREATER. THE SHEETS SHALL BE PLACED SIX INCHES (6") ABOVE THE CROWN OF THE SEWER AFTER COMPACTION OF THE SIX INCH LIFT IMMEDIATELY ABOVE THE CROWN. CARE SHALL BE EXERCISED BY THE CONTRACTOR DURING BACKFILL, AND COMPACTION OVER THE STYROFOAM SM SHEETS SHALL MEET THE COMPRESSIVE STRENGTH REQUIREMENTS OF ASTM D1821-73 AND SHALL BE AS MANUFACTURED BY DOW CHEMICAL COMPANY, MIDLAND, MICHIGAN, OR EQUAL. IN NO CASE SHALL THE SEWER LINES HAVE LESS THAN FOUR (4') FEET OF COVER OVER THE TOP OF THE PIPE.

F. LEAKAGE TESTS AND ALLOWANCES FOR GRAVITY SEWERS:

THE LOW PRESSURE AIR TEST WILL BE USED TO SIMULATE INFILTRATION OR EXFILTRATION RATES INTO OR OUT OF ALL GRAVITY SEWERS. THE CONTRACTOR WILL FURNISH ALL FACILITIES AND PERSONNEL FOR CONDUCTING THE TEST.

FINAL ACCEPTANCE OF THE SEWER SHALL DEPEND UPON THE SATISFACTORY PERFORMANCE OF THE SEWER UNDER TEST CONDITIONS. THE TEST SHALL BE PERFORMED ON PIPE BETWEEN ADJACENT MANHOLES AFTER BACKFILLING HAS BEEN COMPLETED AND COMPACTED.

ALL WYES, TEES, LATERALS, OR END-OF-SIDE SEWER STUBS SHALL BE PLUGGED WITH FLEXIBLE-JOINT CAPS, OR AN ACCEPTABLE ALTERNATE, SECURELY FASTENED TO WITHSTAND THE INTERNAL TEST PRESSURE. SUCH PLUGS OR CAPS SHALL BE READILY REMOVABLE, AND THEIR REMOVAL SHALL PROVIDE A SLOTTED SUITABLE FOR MAKING A FLEXIBLE-JOINTED LATERAL CONNECTION OR EXTENSION.

PRIOR TO TESTING FOR ACCEPTANCE, THE PIPE SHOULD BE CLEANED BY PASSING THROUGH THE PIPE A FULL GAUGE SQUEEGER. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE THE PIPE CLEANED. IMMEDIATELY FOLLOWING THE PIPE CLEANING, THE PIPE INSTALLATION SHALL BE TESTED WITH LOW-PRESSURE AIR.

AIR SHALL BE SLOWLY SUPPLIED TO THE PLUGGED AIR INSTALLATION UNTIL THE INTERNAL AIR PRESSURE REACHES FOUR POUNDS PER SQUARE INCH (4.0 PSI) GREATER THAN THE AVERAGE BACK PRESSURE OF ANY GROUNDWATER THAT MAY SUBMERGE THE PIPE. AT LEAST TWO MINUTES SHALL BE ALLOWED FOR TEMPERATURE STABILIZATION BEFORE PROCEEDING FURTHER.

THE PIPELINE SHALL BE CONSIDERED ACCEPTABLE WHEN TESTED AT AN AVERAGE PRESSURE OF THREE POUNDS PER SQUARE INCH (3.0 PSI) GREATER THAN THE AVERAGE BACK PRESSURE OF ANY GROUNDWATER THAT MAY SUBMERGE THE PIPE. (P)

1. THE TOTAL RATE OF AIR LOSS FROM ANY SECTION TESTED IN ITS ENTIRETY BETWEEN MANHOLE AND CLEANOUT STRUCTURES DOES NOT EXCEED 2.0 CUBIC FEET PER MINUTE; OR

2. THE SECTION UNDER TEST DOES NOT LOSE AIR AT A RATE GREATER THAN 0.0030 CUBIC FEET PER MINUTE PER SQUARE FOOT OF INTERNAL PIPE SURFACE.

THE REQUIREMENTS OF THIS SPECIFICATION SHALL BE CONSIDERED SATISFIED IF THE TIME REQUIRED IN SECONDS FOR THE PRESSURE TO DECREASE FROM 3.5 OR 2.5 PSI GREATER THAN THE AVERAGE BACK PRESSURE OF ANY GROUNDWATER THAT MAY SUBMERGE THE PIPE IS NOT LESS THAN THAT COMPUTED ACCORDING TO THE FOLLOWING TABLE:

DIAMETER (INCHES)	TIME (SEC./100 FT.)
3	10
4	18
6	40
8	70
10	110
12	158
15	248
18	358
21	485
24	634
27	785
30	951
33	1125
36	1,020
39	1,105
42	1,190

THE TABLE GIVES THE REQUIRED TEST TIME IN SECONDS PER 100 FOOT LENGTHS OF PIPE FOR A GIVEN DIAMETER. IF THERE IS MORE THAN ONE PIPE SIZE IN THE SECTION OF LINE BEING TESTED, COMPUTE THE TIME FOR EACH DIAMETER; AND SUM THE TIMES TO FIND THE TOTAL REQUIRED TEST TIME.

IF THE PIPE INSTALLATION FAILS TO MEET THESE REQUIREMENTS, THE CONTRACTOR SHALL DETERMINE AT HIS OR HER OWN EXPENSE THE SOURCE OR SOURCES OF LEAKAGE AND SHALL REPAIR (IF THE EXTENT AND TYPE OF REPAIRS PROPOSED BY THE CONTRACTOR APPEAR REASONABLE TO THE ENGINEER) OR REPLACE ALL DEFECTIVE MATERIALS OR WORKMANSHIP. THE COMPLETED PIPE INSTALLATION SHALL MEET THE REQUIREMENTS OF THIS TEST BEFORE BEING CONSIDERED ACCEPTABLE.

SINCE THIS TEST DOES NOT DETERMINE THE TIGHTNESS OF MANHOLES, THEY SHALL BE TESTED SEPARATELY. THE EXFILTRATION LEAKAGE ALLOWANCE OUT OF MANHOLES SHALL BE NO GREATER THAN ONE GALLON PER DAY PER VERTICAL FOOT TO DEPTH. THE MANHOLE SHALL BE FILLED WITH WATER TO A POINT ONE FOOT (1') ABOVE THE HIGHEST POINT BETWEEN MANHOLE SECTIONS. IN AREAS OF HIGH GROUNDWATER, THERE SHALL BE NO VISIBLE LEAKAGE DUE TO INFILTRATION. IF A VACUUM TEST IS DESIRED, THE FOLLOWING PROCEDURE SHALL BE FOLLOWED: (THIS PREFERRED METHOD OF TESTING MANHOLES FOR LEAKAGE INVOLVES THE USE OF A DEVICE FOR SEALING THE TOP OF THE MANHOLE CONE SECTION AND PUMPING AIR OUT OF THE MANHOLE, CREATING A VACUUM AND HOLDING THIS VACUUM FOR A PRESCRIBED PERIOD OF TIME.)

ALL LIFTING HOLES AND EXTERIOR JOINTS SHALL BE FILLED AND POINTED WITH AN APPROVED NON-SHRINKING MORTAR. THE COMPLETED MANHOLE SHALL NOT BE BACKFILLED PRIOR TO TESTING. MANHOLES WHICH HAVE BEEN BACKFILLED SHALL BE EXCAVATED TO EXPOSE THE ENTIRE EXTERIOR PRIOR TO VACUUM TESTING OR THE MANHOLE SHALL BE TESTED FOR LEAKAGE BY MEANS OF A HYDROSTATIC TEST. REPAIRS SHALL ONLY BE MADE TO THE EXTERIOR OF THE MANHOLE.

ALL PIPE AND OTHER OPENINGS INTO THE MANHOLE SHALL BE SUITABLY PLUGGED IN A MANNER TO PREVENT DISPLACEMENT.

3. A PLATE WITH AN INFLATABLE RUBBER RING THE SIZE OF THE TOP OF THE MANHOLE SHALL BE INSTALLED BY INFLATING THE RING WITH AIR TO PRESSURE ADEQUATE TO PREVENT LEAKAGE OF AIR BETWEEN THE RUBBER RING AND MANHOLE WALL.

4. AIR SHALL THEN BE PUMPED OUT OF THE MANHOLE THROUGH AN OPENING IN THE PLATE UNTIL A VACUUM IS CREATED INSIDE OF THE MANHOLE EQUAL TO TEN INCHES (10") OF MERCURY ON AN APPROVED VACUUM GAUGE. THE REMOVAL OF AIR SHALL THEN BE STOPPED AND THE TEST TIME BEGUN.

5. THE VACUUM MUST NOT DROP TO BELOW NINE INCHES (9") OF MERCURY WITH A TWO MINUTE TEST PERIOD. IF MORE THAN A ONE INCH (1") DROP IN VACUUM OCCURS WITHIN THE TWO MINUTE TEST PERIOD, THE MANHOLE HAS FAILED AND SHALL BE REPAIRED OR RECONSTRUCTED AND THEN RETESTED.

6. FOLLOWING SATISFACTORY TEST RESULTS, THE MANHOLE MAY BE BACKFILLED.

IT IS NOTED THAT ALL EXISTING SANITARY SEWERS SHALL BE KEPT OPERATIONAL UNTIL NEW WORK HAS BEEN TESTED AND APPROVED BY THE ENGINEER. AT SUCH TIME, EXISTING SEWERS AND SEWER SERVICES SHALL BE CONNECTED TO THE NEW SEWERS.

G. LEAKAGE AND PRESSURE TESTING FOR FORCE MAIN

ALL PIPELINES SHALL BE TESTED IN ACCORDANCE WITH THE VERMONT DEPARTMENT OF WATER RESOURCES ENVIRONMENTAL PROTECTION RULES, LATEST EDITION. A LEAKAGE AND PRESSURE TEST SHALL BE PERFORMED CONCURRENTLY.

THE HYDROSTATIC TEST PRESSURE SHALL BE A MINIMUM OF 50 PSI AT THE HIGHEST POINT ALONG THE TEST SECTION AND SHALL NOT VARY BY MORE THAN FIVE PSI DURING THE ENTIRE TWO HOUR TEST. IF AND WHEN DURING THE TEST THE PRESSURE DROPS BY FIVE PSI, THE QUANTITY OF WATER REQUIRED TO RESTORE THE TEST PRESSURE SHALL BE MEASURED.

AT THE END OF THE TWO HOUR TEST, THE PRESSURE SHALL BE RETURNED TO THE TEST PRESSURE AND THE ADDITIONAL VOLUME OF WATER MEASURED. THE TOTAL AMOUNT OF WATER USED DURING AND AT THE END OF THE TEST SHALL CONSTITUTE THE ACTUAL LEAKAGE. THE MAXIMUM ALLOWABLE LEAKAGE SHALL BE DETERMINED BY THE FOLLOWING FORMULA:

$$L = \frac{SD(P)^5}{133,200}$$

WHERE: L = LEAKAGE IN GALLONS PER HOUR

D = DIAMETER OF PIPE IN INCHES

P = AVERAGE TEST PRESSURE IN PSI

S = LENGTH OF PIPE BEING TESTED

H. CLEANING PIPELINES AND APPURTENANCES:

UPON COMPLETION OF CONSTRUCTION, ALL DIRT AND OTHER FOREIGN MATERIAL SHALL BE REMOVED FROM PIPELINES AND THEIR APPURTENANT CONSTRUCTIONS. NO MATERIALS SHALL BE LEFT IN THE PIPELINES TO IMPEDIE NORMAL FLOW THROUGH THEM.

I. SEWER SERVICE CONNECTIONS:

WHERE REQUIRED ON THE PLANS, SEWER SERVICE CONNECTIONS FOR ONE HOUSE SHALL BE CONSTRUCTED OF SIX INCH (6") PIPE UNLESS OTHERWISE NOTED ON THE PLANS OF THE TYPE MATERIAL SPECIFIED UNDER THIS SECTION. THE PIPE SHALL BE LAID AND ITS JOINTS MADE AS REQUIRED FOR SEWER CONSTRUCTION IN THIS SPECIFICATION.

OPEN ENDS OF PIPES SHALL BE PROPERLY SEALED TO PREVENT DAMAGE AND INTRUSION OF FOREIGN MATTER WHERE HOOKUP TO THE BUILDING SEWER IS NOT CONCURRENT WITH SEWER MAIN CONSTRUCTION. ADDITIONALLY, THE CONTRACTOR WILL PROVIDE A PVC PIPE TEMPORARY MARKER APPROVED BY THE ENGINEER FROM THE SEWER SERVICE INVERT UP TO TWENTY-FOUR INCHES (24") ABOVE THE FINISHED GRADE. THE MARKER SHALL BE SEATED SECURELY INTO THE GROUND FOR EASE IN RELOCATING THE END OF SEWER SERVICE CONNECTION FOR HOOKUP UP THE BUILDING SEWER.

IN THE CASE OF RECONNECTION OF EXISTING SERVICES, SUCH RECONNECTIONS WILL BE MADE ONLY AFTER THE NEW SEWER MAIN HAS BEEN COMPLETED, TESTED, AND ACCEPTED. THE EXCAVATION, BEDDING MATERIAL, INSTALLATION, AND BACKFILL FOR SERVICE CONNECTIONS SHALL BE THE SAME AS FOR SEWER MAINS.

J. CLEANOUTS FOR SEWERS:
 CLEANOUTS FOR GRAVITY SEWERS AND FORCE MAINS SHALL BE PROVIDED EVERY 100 FT OR WHERE THE SUM OF BENDS = 45 DEGREES. CLEANOUT FRAMES AND COVERS SHALL BE OF TOUGH GRAY CAST IRON. CASTINGS SHALL BE TRUE TO PATTERN AND FREE FROM FLAWS. THE BEARING SURFACE OF CLEANOUT FRAMES AND COVERS AGAINST EACH OTHER SHALL BE MACHINED TO GIVE CONTINUOUS CONTACT THROUGHOUT THEIR APPROXIMATE LIFE. IRON CASTINGS SHALL BE THOROUGHLY CLEANED AND THEN COATED WITH HOT COAL TAR BEFORE BEING DELIVERED.

GENERAL WATER SPECIFICATIONS

1. CONTRACTOR SHALL CONTACT ALL UTILITIES BEFORE EXCAVATION TO VERIFY THE LOCATION OF ANY UNDERGROUND LINES. THE CONTRACTOR SHALL NOTIFY "DIGSAFE" AT 1-800-DIG-SAFE PRIOR TO ANY EXCAVATION. UTILITIES INFORMATION SHOWN ON THESE PLANS WERE OBTAINED FROM THE BEST AVAILABLE SOURCE AND MAY OR MAY NOT BE EITHER BE ACCURATE OR COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ANY UTILITY, PUBLIC OR PRIVATE, SHOWN OR NOT SHOWN HEREON.
2. THE HORIZONTAL AND VERTICAL SEPARATION FOR SEWER AND WATER LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF THE "VERMONT WATER SUPPLY RULE".
3. THE WATER MAINS SHALL BE CONSTRUCTED, TESTED, AND DISINFECTED IN ACCORDANCE WITH AWWA STANDARDS C-600 AND C-651 WITH THE EXEMPT METHOD OF DISINFECTION. THE CONTRACTOR SHALL FURNISH ALL GAUGES, TESTING PLUGS, CAPS, AND ALL OTHER NECESSARY EQUIPMENT AND LABOR TO PERFORM LEAKAGE, PRESSURE AND DISINFECTION TESTS IN SECTIONS OF AN APPROVED LENGTH. EACH VALVED SECTION OR A MAXIMUM OF ONE THOUSAND FEET (1,000') OF THE PIPE SHALL BE TESTED. ALL WATER REQUIRED FOR TESTING SHALL BE POTABLE. ALL TESTING SHALL BE CONDUCTED IN THE PRESENCE OF THE ENGINEER.

FOR THE PRESSURE TEST, THE CONTRACTOR SHALL DEVELOP AND MAINTAIN 200 POUNDS PER SQUARE INCH FOR TWO HOURS. FAILURE TO HOLD THE DESIGNATED PRESSURE FOR THE TWO-HOUR PERIOD CONSTITUTES A FAILURE OF THE SECTION TESTED. THE LEAKAGE TEST SHALL BE PERFORMED CONCURRENTLY WITH THE PRESSURE TEST. DURING THE TEST, THE CONTRACTOR SHALL MEASURE THE QUANTITY OF WATER REQUIRED TO MAINTAIN THE TEST PRESSURE. LEAKAGE SHALL NOT EXCEED THE QUANTITY GIVEN BY:

$$L = \frac{SD}{148,000}$$

L = LEAKAGE IN GALLONS/HOUR

S = LENGTH OF PIPELINE TESTED

D = DIAMETER OF PIPE IN INCHES

P = AVERAGE TEST PRESSURE IN PSI

ALL TESTING SHALL BE CONDUCTED IN ACCORDANCE WITH AWWA C600 LATEST REVISION. SHOULD ANY SECTION OF THE PIPE FAIL EITHER THE PRESSURE OR LEAKAGE TESTS, THE CONTRACTOR SHALL DO EVERYTHING NECESSARY TO LOCATE AND REPAIR OR REPLACE THE DEFECTIVE PIPE, FITTINGS, OR JOINTS AT NO EXPENSE TO THE OWNER. IF, FOR ANY REASON, THE ENGINEER SHOULD ALTER THE FOREGOING PROCEDURES, THE CONTRACTOR SHALL REMAIN RESPONSIBLE FOR THE TIGHTNESS OF THE LINE WITH THE ABOVE REQUIREMENTS. THE METHOD OF DISINFECTION SHALL BE BY THE CONTINUOUS FEED METHOD UNLESS OTHERWISE APPROVED BY THE ENGINEER. AFTER FILLING, FLUSHING, AND THE INITIAL ADDITION OF CHLORINE SOLUTION, THE FREE CHLORINE CONCENTRATION WITHIN THE PIPE SHALL BE AT LEAST 20 MG/L. THE CHLORINATED WATER SHALL REMAIN IN THE MAIN FOR A PERIOD OF AT LEAST 24 HOURS. AT THE END OF THIS PERIOD, THE TREATED WATER IN ALL PORTIONS OF THE PIPE SHALL BE AT A RESIDUAL OF NOT LESS THAN 10 MG/L FREE CHLORINE. ALL DISINFECTION SHALL BE PERFORMED UNDER THE SUPERVISION OF THE ENGINEER. THE DISINFECTION PROCESS SHALL BE DEEMED ACCEPTABLE ONLY AFTER SAMPLES OF WATER FROM THE FLUSHED, DISINFECTED MAIN TAKEN BY THE ENGINEER AND TESTED AT AN APPROVED LABORATORY SHOW NO EVIDENCE OF BACTERIOLOGICAL CONTAMINATION. DISINFECTION SHALL CONFORM TO THE LATEST AWWA C651 REVISION. THE PIPELINE AND APPURTENANCES SHALL BE MAINTAINED IN AN UNCONTAMINATED CONDITION UNTIL FINAL ACCEPTANCE. DISINFECTION SHALL BE REPEATED WHEN AND WHERE REQUIRED AT NO EXPENSE TO THE OWNER UNTIL FINAL ACCEPTANCE BY THE OWNER.

4. ALL NEW WATER MAIN PIPE SHALL BE OF THE SIZE AND TYPE SHOWN ON THE PLANS. ALL C900 PVC PIPE IS TO BE CLASS DR14 WITH A PRESSURE RATING OF 305 PSI. PVC PIPE SHALL BE IN ACCORDANCE WITH AWWA C-901. ALL FITTINGS SHALL BE CEMENT-LINED DUCTILE IRON, 350 POUNDS WORKING PRESSURE, AND CONFORM TO AWWA C-104, C-111, AND C-110 OR C-153 FOR COMPACT FITTINGS. MECHANICAL JOINT NUTS AND BOLTS SHALL BE HIGH STRENGTH, LOW ALLOY STEEL PER ANSI A-21.11. ALL CURB STOPS AND CORPORATION STOPS SHALL MEET AWWA C-800 STANDARDS.

5. ALL HYDRANTS SHALL BE KENNEDY MODEL K-81D MUELLER SUPER CENTURION 250 AND CONFORM TO AWWA C-502 WITH A 5 1/4" VALVE OPENING, A MECHANICAL JOINT INLET, A 6" MECHANICAL JOINT SHOE, AND BE LEFT OPENING WITH NATIONAL STANDARD THREADS AND 4" STORZ CONNECTION. THE CONTRACTOR SHALL PROVIDE AND INSTALL AN AUXILIARY VALVE OF THE TYPE INDICATED ON THE CONTRACT DRAWINGS AND A LENGTH OF 6" DUCTILE IRON PIPE SUFFICIENT TO CONNECT THE HYDRANT TO THE MAIN.

6. ALL GATE VALVES SHALL BE CEMENT-LINED AND MEET THE REQUIREMENTS OF AWWA C-509. ALL VALVES SHALL BE MECHANICAL JOINT, CAST IRON BODY, PARALLEL BRASS SEATS, NON-RISING STEM, INSIDE SCREW, RESILIENT SEAT CONSTRUCTION WITH O-RING STEM SEALS.

7. ALL WATER MAIN THRUST BLOCKS SHALL BE CONSTRUCTED OF 3,500 PSI CONCRETE.

8. THE WATER MAINS SHALL HAVE A MINIMUM DEPTH OF COVER OF 6'.

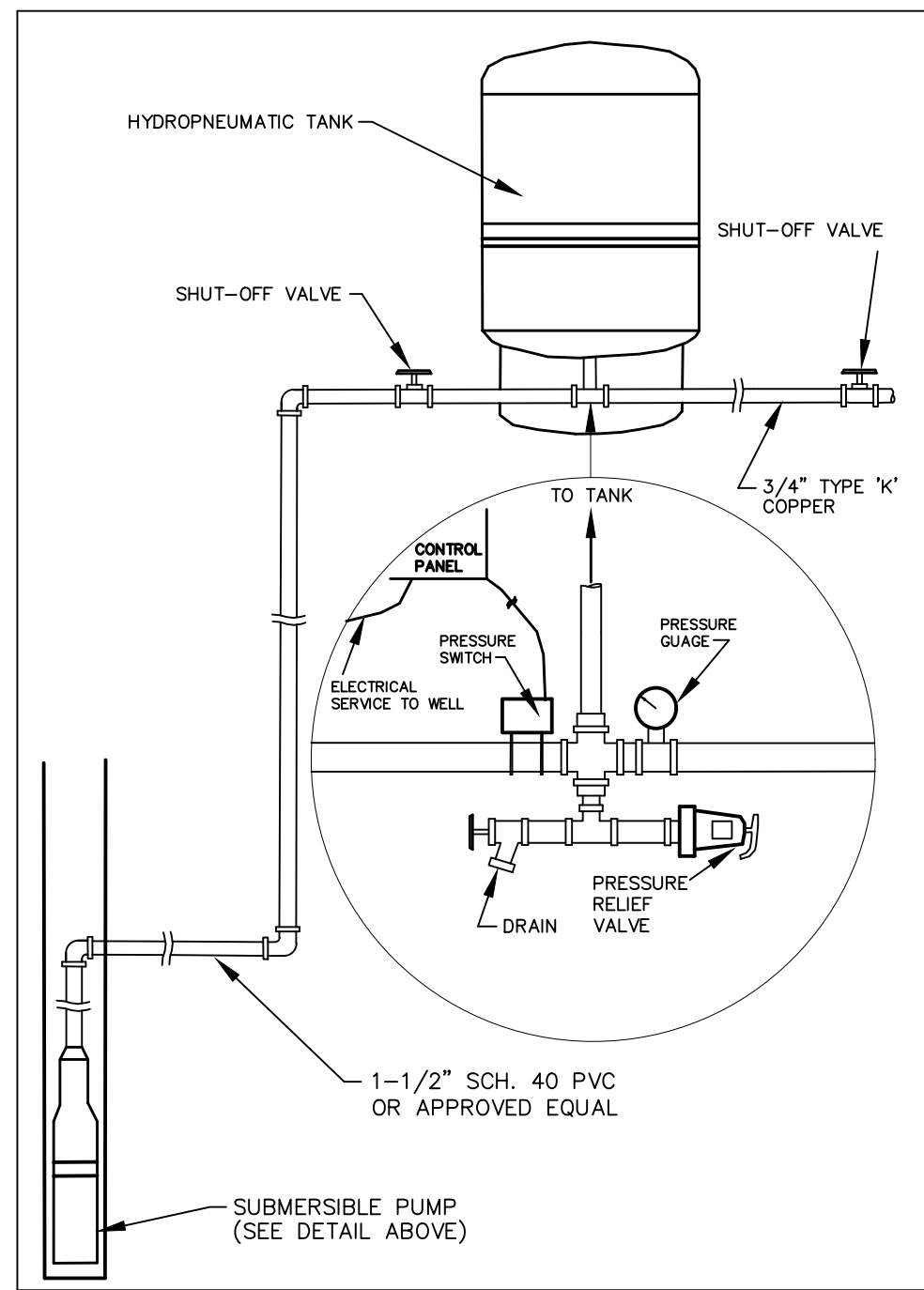
9. ANY SURFACES, LINES, OR STRUCTURES WHICH HAVE BEEN DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED TO A CONDITION AT LEAST EQUAL TO THAT IN WHICH THEY WERE FOUND IMMEDIATELY PRIOR TO THE BEGINNING OF CONSTRUCTION.

10. THE CONTRACTOR SHALL COORDINATE THE LOCATION AND INSTALLATION OF THE INDIVIDUAL LOT WATER LINE SERVICES WITH THE OWNER AT THE TIME OF CONSTRUCTION.

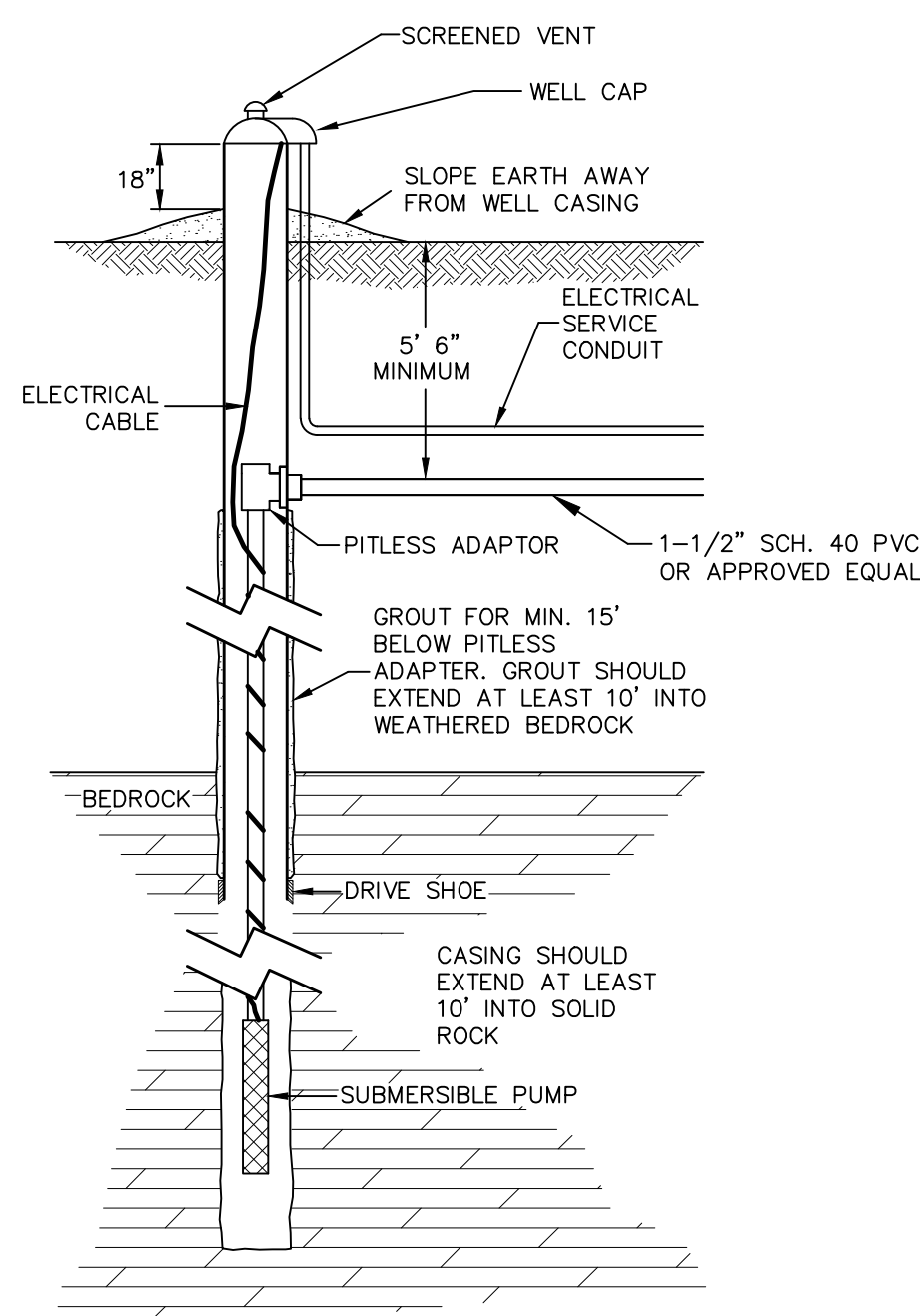
11. THE CONTRACTOR SHALL USE "MEGALUG" RESTRAINTS ON ALL M.J. FITTINGS.

12. ALL MAIN LINE GATE VALVES SHALL BE BEDDED IN A MINIMUM OF 6" OF 3/4" - 1" STONE. CONCRETE SHALL NOT BE USED.

13. PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY FOR THE 1ST NEW UNIT, THE EXISTING WATER SERVICES, CURB STOPS AND EXISTING WATER METERING INFRASTRUCTURE MUST BE UPGRADED TO THE TOWN OF ESSEX CURRENT STANDARDS.



TYPICAL SHARED WATER SYSTEM



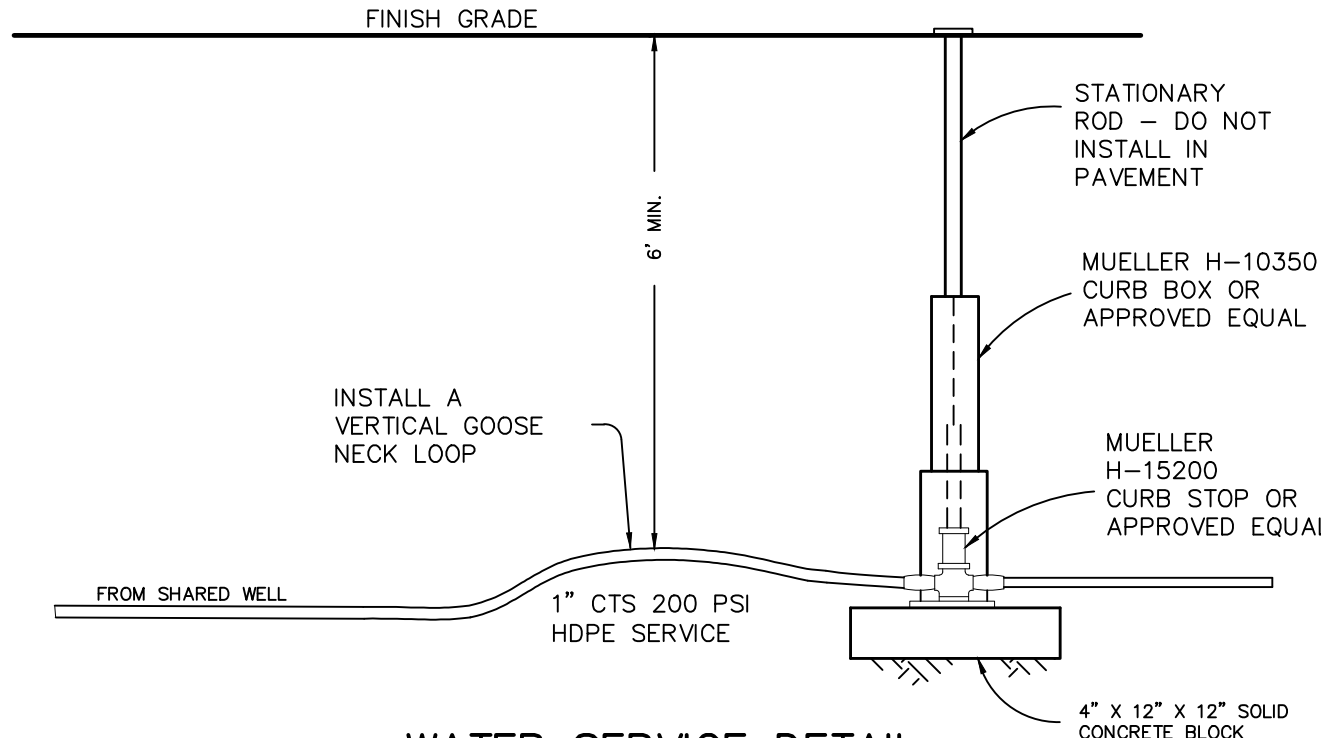
TYPICAL SHARED DRILLED WELL

DRILLED WELL ISOLATION DISTANCES

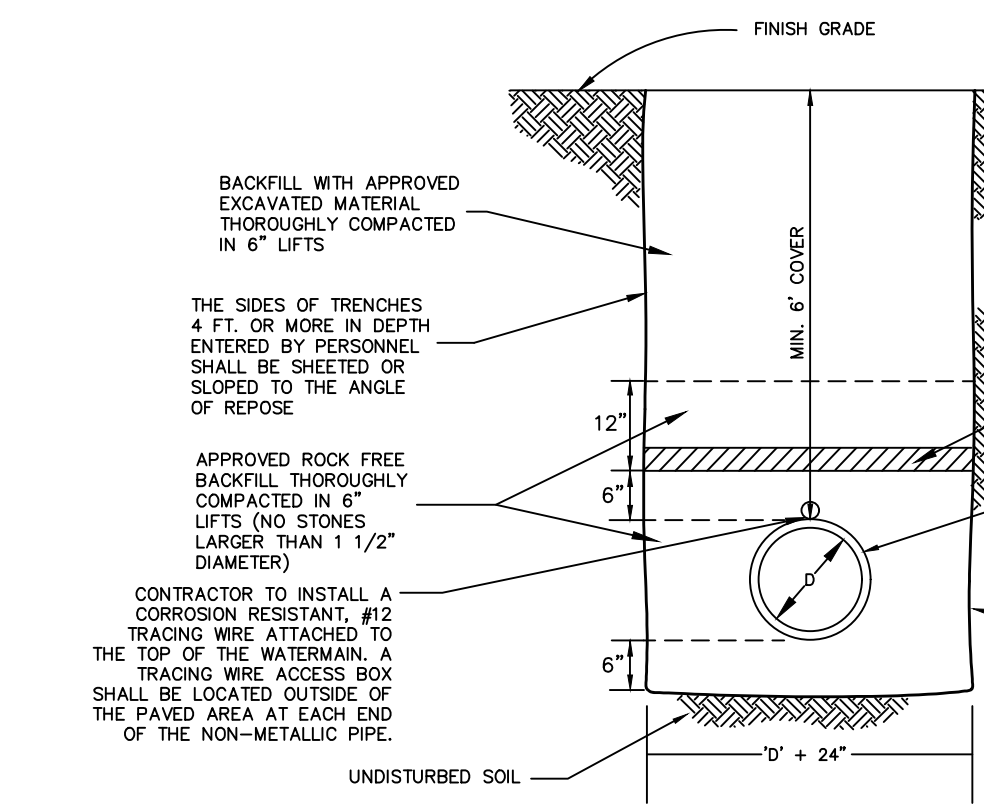
ROADWAY, PARKING DRIVES, < 3 RESIDENCES	25 FEET
SEWAGE PIPING / TANKS	15 FEET
PROPERTY LINE	50 FEET
SURFACE WATER	10 FEET
BUILDINGS	10 FEET
SEWAGE SYSTEM: DOWNSLOPE WELL	200 FEET
UPSLOPE WELL	100 FEET

SHARED DRILLED WELL DESIGN DATA

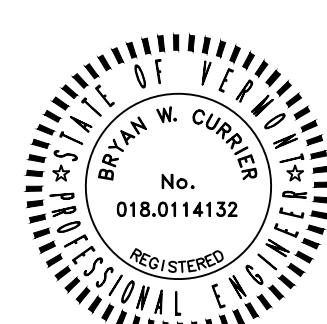
1. THE DRILLED WELL(S) CONSTRUCTION, LOCATION, DISINFECTION AND TESTING SHALL BE IN ACCORDANCE WITH THE STATE OF VERMONT - WATER SUPPLY
2. THE BASIS OF DESIGN FOR THE DRILLED WELL IS
 - A. AVG. DAY DEMAND : 1,400 GPD (5 x 2-BEDROOM UNITS)
 - B. MAX. DAY DEMAND : 1,400 GPD/720 MIN/DAY = 1.94 GPM
 - C. INSTANTANEOUS PEAK DEMAND: 5 GPM X 5 UNITS = 25 GPM
 - D. SOURCE CAPACITY: TO BE DETERMINED
 - E. STORAGE CAPACITY: SIZE TO BE DETERMINED BASED ON WELL YIELD (IF REQUIRED)
 - F. PUMP CAPACITY AT UNITS: 5 UNITS @ 5 GPM = 25 GPM MINIMUM
 - G. OPERATING PRESSURE RANGE: 40 - 60 PSI AT PRESSURE SWITCH



WATER SERVICE DETAIL



WATER TRENCH



DATE	REVISION	BY
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MULCHING SPECIFICATIONS

DISTURBED AREAS ARE TO BE MULCHED WITHIN A WEEK OF DISTURBANCE. HAY MULCH SHALL BE SPREAD UNIFORMLY OVER THE AREA AT A RATE OF TWO TONS PER ACRE OR AT A RATE THAT IS SUFFICIENT TO PROVIDE ADEQUATE COVERAGE.
WITHIN 48 HOURS OF FINAL GRADING, THE EXPOSED SOIL MUST BE SEEDED AND MULCHED.

LANDSCAPING SPECIFICATIONS

ALL DISTURBED AREAS SHALL BE STABILIZED WITH SEEDING AND MULCHING PRIOR TO NOVEMBER 1 OF EACH YEAR. ANY DISTURBED AREAS SHALL BE IMMEDIATELY SEEDED AND MULCHED WITHIN 15 DAYS. ANY WORK PERFORMED AFTER NOVEMBER 1 OF EACH YEAR SHALL BE STABILIZED WITH MULCH OR NETTING SUFFICIENT TO PREVENT EROSION AND SHALL BE IMMEDIATELY SEEDED AND REMULCHED AS SOON AS WEATHER PERMITS IN THE SPRING. ALL DISTURBED AREAS SHALL RECEIVE A MINIMUM OF 4" OF TOPSOIL AND BE SEEDED, FERTILIZED, LIMED, AND MULCHED IN ACCORDANCE WITH THE FOLLOWING:

- SEED MIXTURE IN ALL AREAS SHALL BE URBAN MIX CONFORMING TO THE TABLE SHOWN ON THE PLANS. FOR SEEDING BETWEEN SEPTEMBER 1 AND NOVEMBER 1, WINTER RYE SHALL BE USED AT AN APPLICATION RATE OF 100 POUNDS PER ACRE.
- FERTILIZER SHALL BE STANDARD COMMERCIAL GRADE CONFORMING TO THE STATE FERTILIZER LAW AND TO THE STANDARDS OF THE ASSOCIATION OF OFFICIAL AGRICULTURAL CHEMISTS. DRY FERTILIZER, IF USED, SHALL BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE. LIQUID FERTILIZER, IF USED, SHALL BE APPLIED IN A 1-2-1 RATIO WITH THE MINIMUM RATE TO INCLUDE 100 POUNDS OF NITROGEN, 200 POUNDS OF PHOSPHATE, AND 100 POUNDS OF POTASH PER ACRE.
- LIMESTONE SHALL CONFORM TO ALL STATE AND FEDERAL REGULATIONS AND TO THE STANDARDS OF THE ASSOCIATION OF OFFICIAL AGRICULTURAL CHEMISTS. THE LIMESTONE SHALL BE APPLIED AT A RATE OF TWO TONS PER ACRE OR AS DIRECTED.
- WITHIN 24 HOURS OF APPLICATION OF FERTILIZER, LIME, AND SEED, THE SURFACE SHALL BE MULCHED WITH A HAY MULCH. MULCH SHALL BE SPREAD UNIFORMLY OVER THE AREA AT A RATE OF TWO TONS PER ACRE OR AS ORDERED BY THE ENGINEER.

URBAN MIX GRASS SEED		
% BY WEIGHT	LBS. LIVE SEED PER ACRE	TYPE OF SEED
37.5	45	CREeping RED FESCUE
31.25	37.5	KENTUCKY BLUEGRASS
31.25	37.5	WINTER HARDY, PERENNIAL RYE
100	120 #	LIVE SEED PER ACRE

SNOW MANAGEMENT PLAN :

FOLLOWING THE ACCUMULATION OF ANY SNOW FALL EVENT WHICH GENERATES MORE THAN 1" OF SNOW OR ICE THE SITE SHALL BE KEPT CLEAR OF SNOW AND ICE. ALL SNOW STORAGE AREAS ON THE EPC CONSTRUCTION PLANS. ALL SNOW STORAGE AREAS SHALL BE DOWN GRADIENT OF ANY DISTURBED AREAS AND THE STORAGE OF SNOW IN STORMWATER TREATMENT STRUCTURES IS PROHIBITED.

WINTER CONSTRUCTION REQUIREMENTS

- ALL WORK SHALL BE IN ACCORDANCE WITH THE LOW RISK SITE HANDBOOK FOR EROSION PREVENTION AND SEDIMENT CONTROL.
- PROVIDE ENLARGED ACCESS POINTS, STABILIZED TO PROVIDE FOR SNOW STOCKPILING.
- A MINIMUM 25 FT BUFFER SHALL BE MAINTAINED FROM PERIMETER CONTROLS SUCH AS SILT FENCE.
- DRAINAGE STRUCTURES MUST BE KEPT OPEN AND FREE OF SNOW AND ICE DAMS.
- SILT FENCE AND OTHER PRACTICES REQUIRING EARTH DISTURBANCE MUST BE INSTALLED AHEAD OF FROM GROUND.
- MULCH USED FOR TEMPORARY STABILIZATION MUST BE APPLIED AT DOUBLE THE STANDARD RATE, OR A MINIMUM OF 3 INCHES WITH AN 80-90% COVER.
- TO ENSURE COVER OF DISTURBED SOIL IN ADVANCE OF A MELT EVENT, AREAS OF DISTURBED SOIL MUST BE STABILIZED AT THE END OF EACH WORK DAY, WITH THE FOLLOWING EXCEPTIONS:
 - IF NO PRECIPITATION WITHIN 24 HOURS IS FORECAST AND WORK WILL RESUME IN THE SAME DISTURBED AREA WITHIN 24 HOURS, DAILY STABILIZATION IS NOT NECESSARY.
 - DISTURBED AREAS THAT COLLECT AND RETAIN RUNOFF, SUCH AS HOUSE FOUNDATIONS OR OPEN UTILITY TRENCHES.
- PRIOR TO STABILIZATION, SNOW OR ICE MUST BE REMOVED TO LESS THAN 1 INCH THICKNESS.
- USE STONE TO STABILIZE AREAS SUCH AS THE PERIMETER OF BUILDINGS UNDER CONSTRUCTION OR WHERE CONSTRUCTION VEHICLE TRAFFIC IS ANTICIPATED. STONE PATHS SHOULD BE 10-20 FEET WIDE TO ACCOMMODATE VEHICULAR TRAFFIC.
- IN AREAS OF DISTURBANCE THAT DRAIN TO A WATER BODY WITHIN 100 FEET, TWO ROWS OF SILT FENCE MUST BE INSTALLED ALONG THE CONTOUR.

WINTER INSPECTION SCHEDULE	AFTER A THAW OR A RAINFALL GENERATING RUNOFF FROM SITE
INSPECT SILT FENCING WITH SKI TAPE	X
INSPECT AREAS TEMPORARILY MULCHED	X
INSPECT TEMPORARY STOCKPILES	X
INSPECT STABILIZED CONSTRUCTION ENTRANCES	X
INSPECT AREAS THAT HAVE BEEN TOPSOILED & MULCHED	X
INSPECT STORMWATER SWALES, SPREADERS, OUTFLOW DEVICES	X

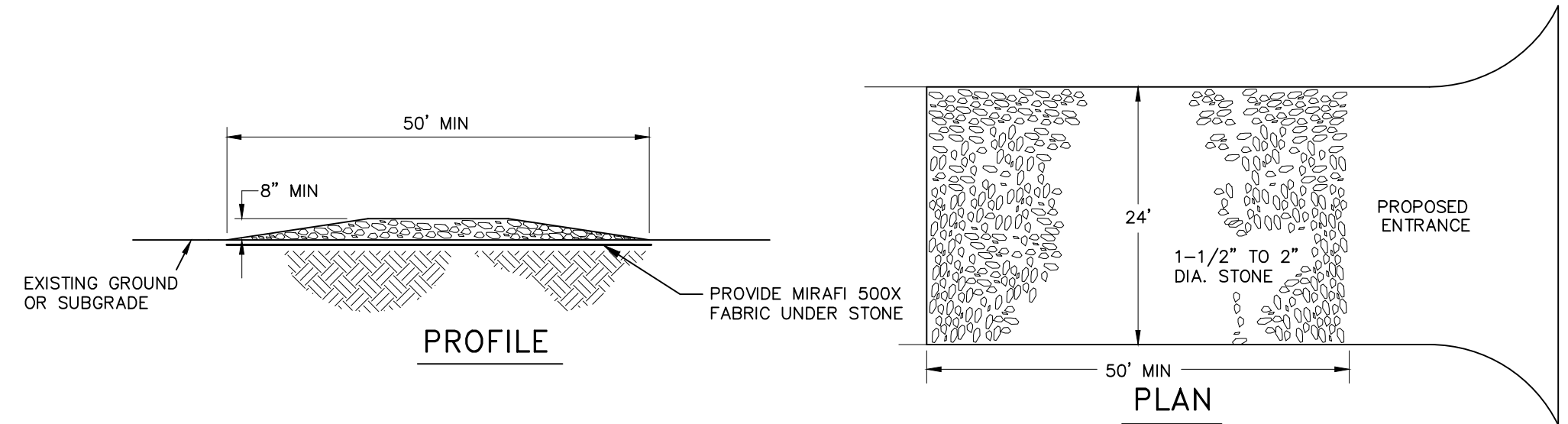
STUMP DISPOSAL SPECIFICATIONS

ALL SUITABLE TREES THAT MUST BE CUT WILL BE USED AS FIREWOOD. THE STUMPS, BRUSH, & EXCESS UNSUITABLE EARTH WILL BE DISPOSED OF AT THE LOCATION DESIGNATED BY THE ENGINEER, CONTINGENT UPON APPROVAL FROM THE TOWN BUILDING INSPECTOR. SAID AREA(S) SHALL BE A MINIMUM OF TWO FEET ABOVE THE SEASONAL HIGH GROUNDWATER OR THE STUMPS SHALL BE HAILED OFF-SITE TO A STATE-APPROVED LANDFILL. IF ON-SITE STUMP DISPOSAL IS IMPLEMENTED, THE FOLLOWING GUIDELINES SHALL BE MET:

- WHENEVER POSSIBLE, STUMP DISPOSAL SITES SHOULD BE LOCATED ON NEARLY LEVEL TO MODERATELY SLOPING LANDS (SLOPES LESS THAN 12%).
- DISPOSAL SITES WILL NOT BE LOCATED IN OR WITHIN 100 FEET OF FLOWING WATERCOURSES OR STREAMS OR IN ACTIVELY ERODING GULLIES.
- DISPOSAL SITES SHALL NOT BE LOCATED IN FLOODED OR FLOOD-PRONE LANDS, MARSHES, OR OTHER AQUIFER RECHARGE AREAS.
- STUMPS WILL BE PLACED ON THE SITE IN A SINGLE LIFT PRIOR TO BACKFILLING. WHEN ADDITIONAL STUMPS ARE TO BE DEPOSITED ON THE SAME SITE, EACH SUCCESSIVE LAYER OR LIFT OF STUMPS WILL BE BACKFILLED.
- STUMPS DEPOSITED IN DRAINAGEWAYS OR DEPRESSIONS SHALL BE BACKFILLED AND BERMED SO AS TO DIVERT OVERLAND FLOWS FROM THE DISPOSAL AREA.
- A MINIMUM OF TWO FEET (2") OF OVERBURDEN WILL BE PLACED OVER ALL DISPOSAL SITES.
- THE TWO FEET OF OVERBURDEN WILL BE COVERED WITH A MINIMUM OF FOUR INCHES (4") OF TOPSOIL, GRADED, SEEDED, AND MULCHED IN ACCORDANCE WITH THE SPECIFICATIONS.

EROSION CONTROL SPECIFICATIONS

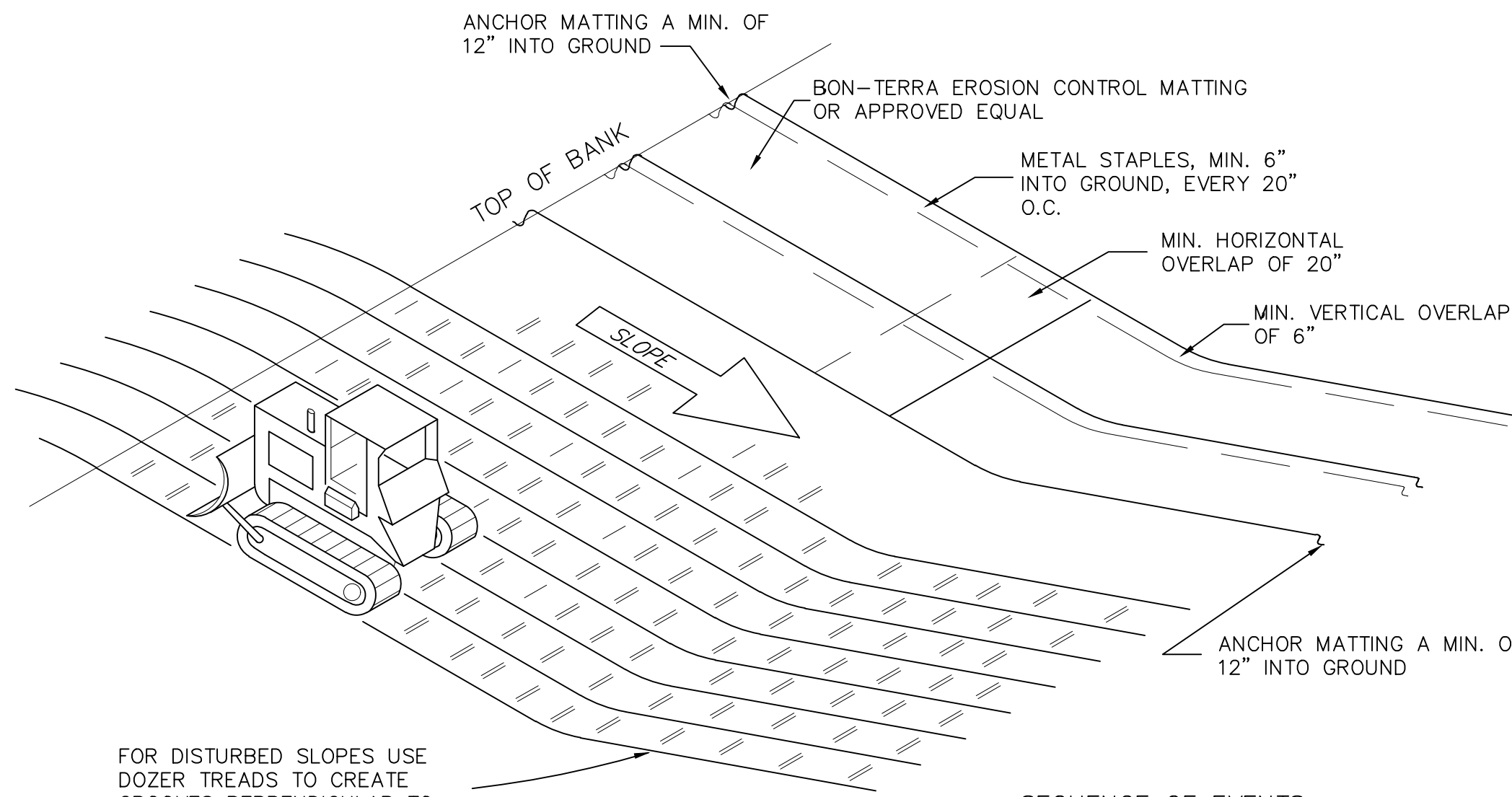
- SEE OTHER DRAWINGS OF THESE PLANS FOR ADDITIONAL STORMWATER AND EROSION CONTROL SPECIFICATIONS AND DETAILS.
- THE ROADWAY AND YARD FINISH GRADE SLOPES SHALL NOT BE STEEPER THAN 3 ON 1. THE FINISHED GRADE SLOPES SHALL BE IMMEDIATELY GRADED AND MULCHED.
- ALL DISTURBED AREAS SHALL BE STABILIZED WITH SEEDING AND MULCHING PRIOR TO NOVEMBER 1 OF EACH YEAR. ANY DISTURBED AREAS OUTSIDE OF THE ROADWAY SHALL BE IMMEDIATELY SEEDED AND MULCHED WITHIN 15 DAYS.
- THE EROSION CONTROL METHODS USED DURING CONSTRUCTION OF THE DEVELOPMENT SHALL PROCEED IN THE FOLLOWING SEQUENCE:
 - THE CONTRACTOR SHALL INSTALL AND MAINTAIN SILT FENCES, AND OTHER EROSION CONTROL MEASURES IF REQUIRED, AS ORDERED BY THE ENGINEER. THE EROSION CONTROL MEASURES SHALL BE MAINTAINED AND REPAIRED AFTER EVERY RAINFALL UNTIL THE NEW IMPROVEMENTS ARE PAVED AND ALL DISTURBED AREAS HAVE BEEN GRASSED. THE REPAIR OF THE EROSION CONTROL MEASURES WILL INCLUDE REMOVING ANY SEDIMENTATION. THE SEDIMENT MAY BE PLACED AS FILL IN THE LOW AREAS, IF APPROVED BY THE ENGINEER.
 - THE TOPSOIL SHALL BE REMOVED FROM THE AREAS TO BE GRADED AND STOCKPILED. A SILT FENCE SHALL BE PLACED CONTINUOUSLY AROUND THE BOTTOM OF THE PILE.
 - IN AREAS NEAR THE NEW CONSTRUCTION, THE CONTRACTOR SHALL ENCLOSE THE TRUNKS OF TREES TO BE SAVED WITH WOODEN SNOW FENCING ALONG THE DRIPLINE TO PROTECT THE FROM INJURY.
 - THE SITE GRADING AND BUILDING/UTILITY INFRASTRUCTURE SHALL BE CONSTRUCTED. THE CONTRACTOR WILL INSTALL INLET PROTECTION AROUND THE CATCH BASINS UNTIL THE ROADWAY HAS BEEN PAVED AND GRASS HAS BEEN ESTABLISHED ON THE SLOPES.
 - THE CONTRACTOR WILL TOPSOIL, SEED, AND MULCH THE DISTURBED AREAS AS SOON AS POSSIBLE FOLLOWING COMPLETION OF ADJACENT CONSTRUCTION.
 - OPEN CUT AREAS SHALL BE MULCHED OUTSIDE OF ACTUAL WORK AREAS, AND SILT FENCE SHALL BE EMPLOYED TO CONFINE SHEET WASH AND RUNOFF TO THE IMMEDIATE OPEN AREA AS ORDERED BY THE ENGINEER.
- DURING CONSTRUCTION, THE PROJECT SHALL BE IN COMPLIANCE WITH THE LOW RISK SITE HANDBOOK FOR EROSION PREVENTION AND SEDIMENT CONTROL.



- NOTES:**
- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT TRACKED, SPILLED, OR WASHED ONTO PUBLIC RIGHTS-OF-WAY SHALL BE REMOVED IMMEDIATELY BY THE CONTRACTOR.
 - THE USE OF CALCIUM CHLORIDE OR WATER MAY BE NECESSARY TO CONTROL DUST DURING DRY PERIODS.
 - PROVIDE APPROPRIATE TRANSITION BETWEEN CONSTRUCTION ENTRANCE AND THE EXISTING ROADWAY

STABILIZED CONSTRUCTION ENTRANCE

NTS

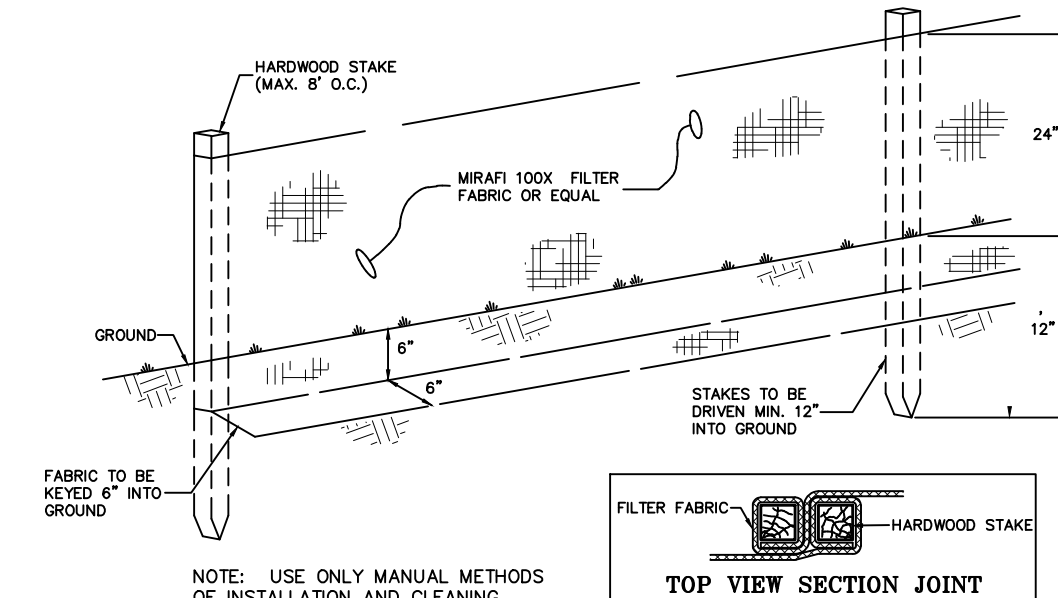


EROSION MATTING

NTS

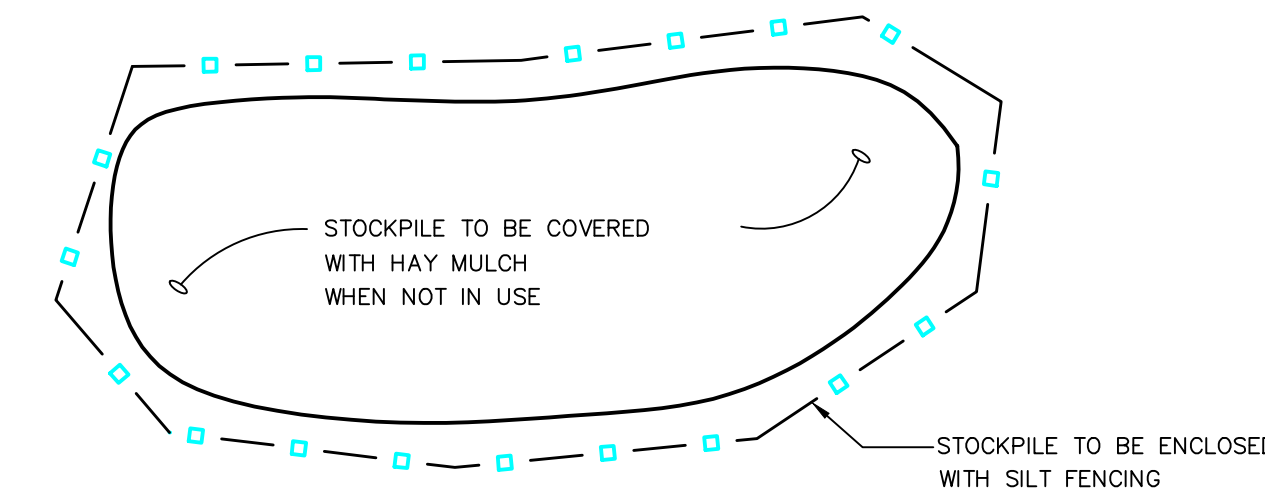
FOR DISTURBED SLOPES USE DOZER TREADS TO CREATE GROOVES PERPENDICULAR TO SLOPE DIRECTION TO MINIMIZE RUNOFF VELOCITIES.

SEQUENCE OF EVENTS:
SEED, FERTILIZE, MULCH, AND APPLY EROSION CONTROL MATTING



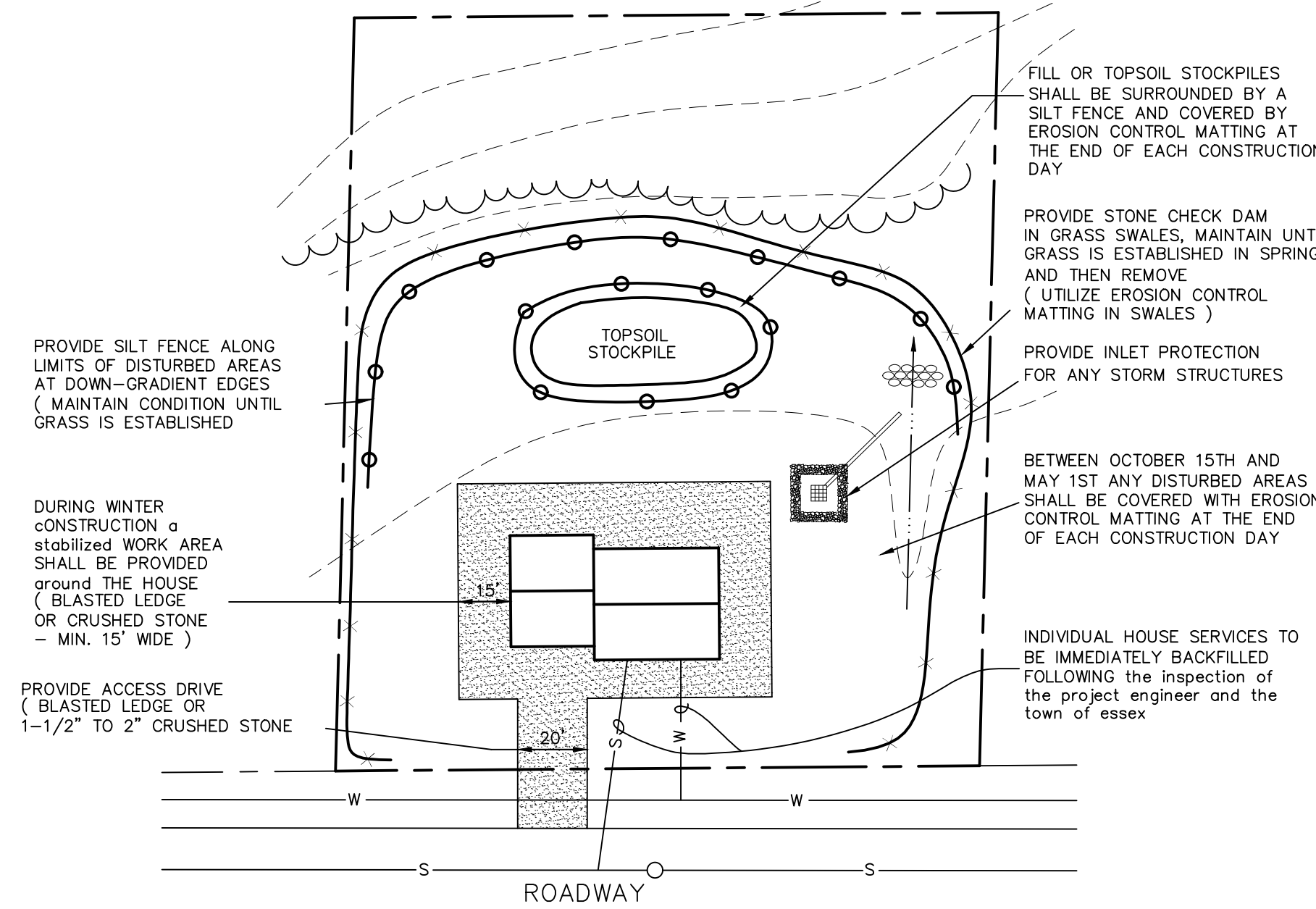
TEMPORARY SILT FENCE

NTS



TEMPORARY FILL MATERIAL STOCKPILE

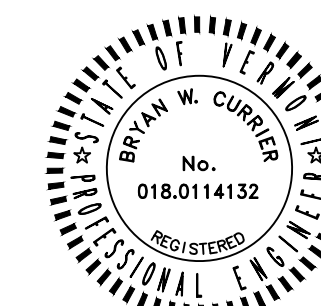
NTS



**INDIVIDUAL LOT
EROSION AND SEDIMENT CONTROL
(FOR WINTER CONSTRUCTION)**

NTS

THE CONTRACTOR SHALL NOTIFY "DIGSAFE" AT 1-888-DIG-SAFE PRIOR TO ANY EXCAVATION.



DATE	REVISION	BY	DATE
SURVEY	RECORD DRAWING		1/18/24
DESIGN	PRELIMINARY		JOB #
BWC	FINAL		2081-44
GRT	SKETCH/CONCEPT		FILE
CHECKED			2018-44-23
BWC			SHEET #
SCALE			16

HOMESTEAD CAMPGROUND
GEORGIA, VERMONT

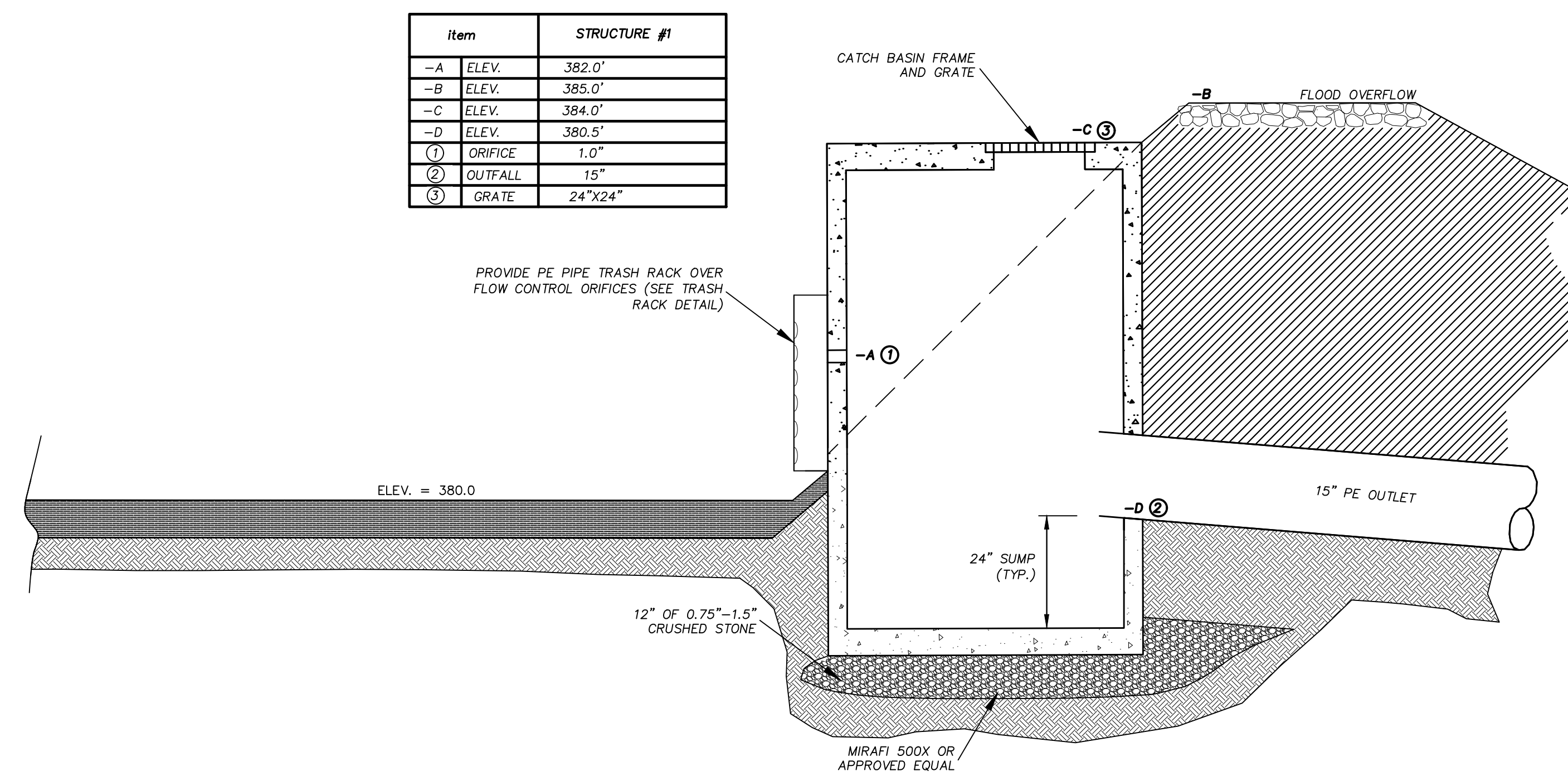
**EROSION CONTROL DETAILS
AND SPECIFICATIONS**

**O'LEARY-BURKE
CIVIL ASSOCIATES, PLC**
13 CORPORATE DRIVE
ESSEX JUNCTION, VT 05452
PHONE: 802-878-9990
FAX: 802-878-9999
E-MAIL: obca@olearyburke.com

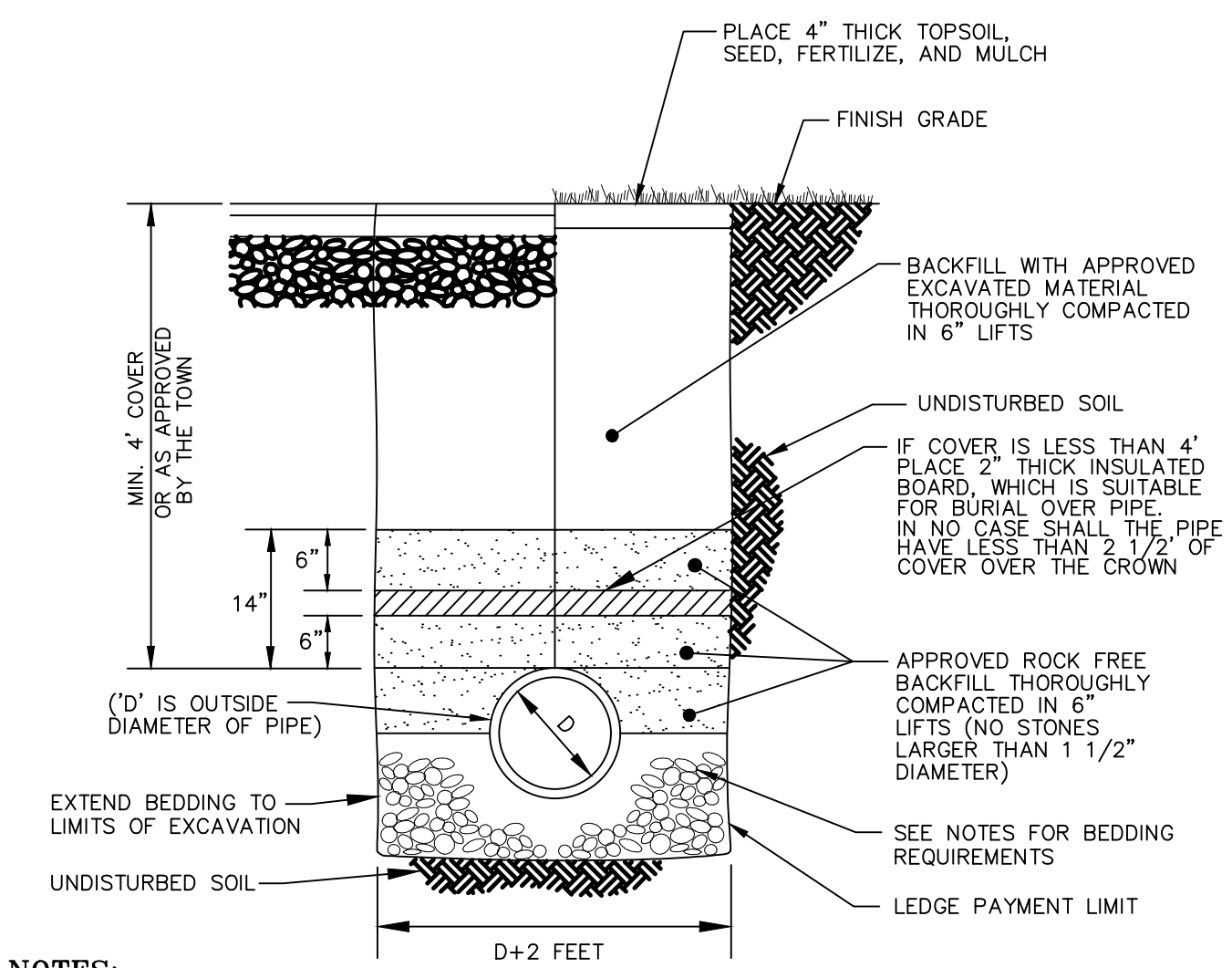
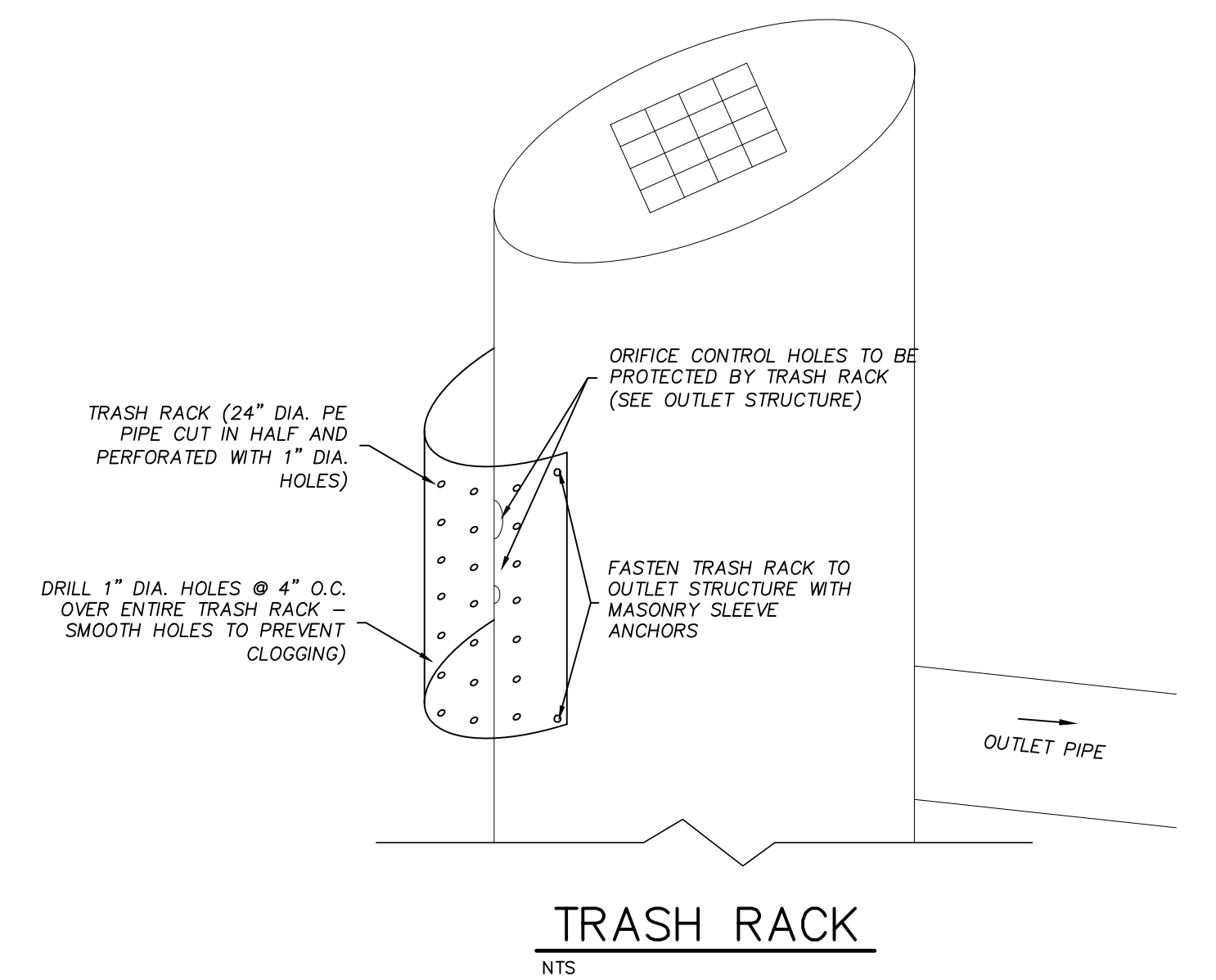
STORM SYSTEM MAINTENANCE

- MAINTENANCE PLAN**
- SYSTEM MAINTENANCE IS IMPORTANT FOR TREATMENT AND CONTROL OF STORM RUNOFF FROM THE IMPERVIOUS SURFACES (ROAD, PARKING, BUILDING AND WALKWAY). THE FOLLOWING ELEMENTS FORM THE MINIMUM REQUIREMENTS:
1. THE OWNER (OR REPRESENTATIVE) SHALL PERFORM INSPECTIONS ANNUALLY AND FOLLOWING SIGNIFICANT (LARGE) STORM EVENTS. THE FOLLOWING ITEMS SHALL BE REVIEWED: CONDITION OF THE VEGETATION, CONDITION OF THE DITCH SURFACES, DEPTH OF ACCUMULATED SEDIMENT (IF ANY), THE PRESENCE OF EROSION (IF ANY), CONDITION OF THE STORM PIPES, AND THE CONDITION OF THE PIPE INLETS AND OUTLETS. ANY OBSERVABLE DEGRADATION OF THE STORM SYSTEM SHALL BE NOTED.
 2. THE OWNER (OR REPRESENTATIVE) SHALL COMPLETE REPAIR OF ANY ITEMS, AS REQUIRED TO MAINTAIN OPTIMAL SYSTEM OPERATION. AT A MINIMUM, THE FOLLOWING ITEMS SHALL BE INCLUDED:
 - A. ANY EROSION GULLIES 6 INCHES OR DEEPER SHALL BE FILLED AND VEGETATION ESTABLISHED IN THE DISTURBED AREA.
 - B. SEDIMENT ACCUMULATED TO A DEPTH OF MORE THAN 6 INCHES IN THE ROAD DITCHES SHALL BE REMOVED AND DISPOSED OF IN AN UPLAND AREA THAT IS NOT WITHIN 100 FEET OF WATERS OF THE STATE. VEGETATION SHALL BE ESTABLISHED IN ALL DISTURBED AREAS.
 - C. VEGETATION SHALL BE ESTABLISHED AS NEEDED, IN AREAS OF BARE SOIL. THIS IS PARTICULARLY IMPORTANT IN FLOW AREAS WHERE VEGETATION PROVIDES SEDIMENT REMOVAL.
 - D. SILT FENCES SHALL BE USED IF NEEDED TO PREVENT EROSION AND AID IN THE ESTABLISHMENT OF VEGETATION. THESE TEMPORARY MEASURES SHALL BE REMOVED AFTER THE SITE IS STABILIZED AND THE RISK OF EROSION IS REDUCED.
 - E. THE GRASSED AREAS SHALL BE MOWED AS NEEDED TO PREVENT THE ESTABLISHMENT OF WOODY VEGETATION.

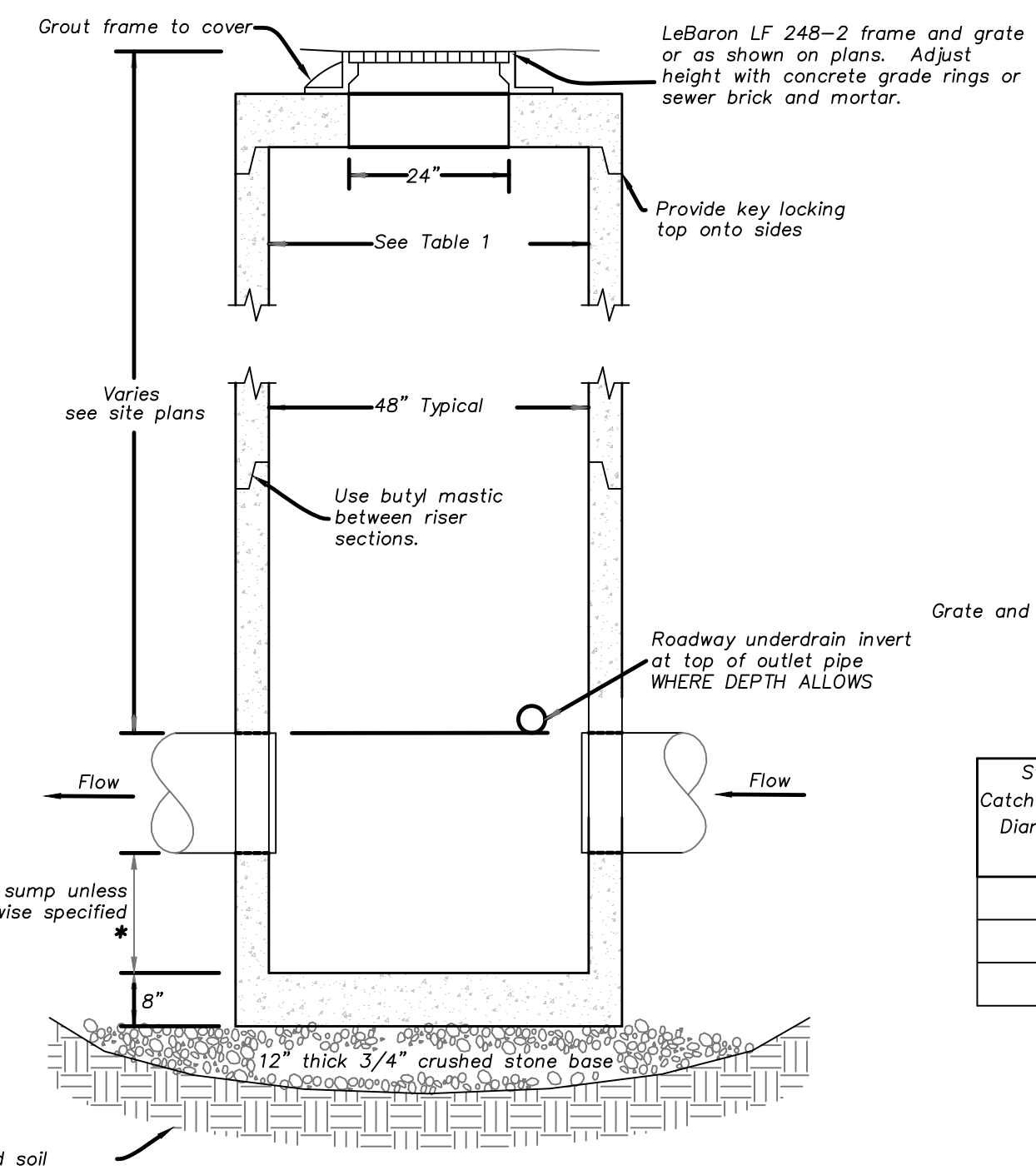
Item	STRUCTURE #1
-A	ELEV. 382.0'
-B	ELEV. 385.0'
-C	ELEV. 384.0'
-D	ELEV. 380.5'
①	ORIFICE 1.0"
②	OUTFALL 15"
③	GRATE 24"x24"



- STORMWATER POND SECTION NOTES:**
1. MINIMUM CONCRETE STRENGTH - 5,000 PSI @ 28 DAYS
 2. PLUG OUTLET ORIFICES UNTIL SITE IS STABILIZED
 3. SEE PLANS FOR POND, PIPE, CHANNEL, WEIR, AND BASIN LOCATIONS.
 4. FOREBAY SEDIMENT SHALL BE REMOVED EVERY 10 YEARS OR WHEN FOREBAY VOLUME IS REDUCED BY 50%.



- NOTES:**
1. THE CONTRACTOR SHALL AT ALL TIMES KEEP THE TRENCHES ENTIRELY FREE OF WATER UNTIL ALL WORK IS FINISHED AND READY FOR BACKFILLING.
 2. REFER TO THE WRITTEN SPECIFICATIONS FOR BACKFILL AND COMPACTION REQUIREMENTS.
 3. REFER TO THE WRITTEN SPECIFICATIONS FOR STORM DRAINAGE PIPE REQUIREMENTS.
 4. THE SIDES OF THE TRENCHES 4 FEET OR MORE IN DEPTH TO BE ENTERED BY PERSONNEL SHALL BE SHEETED, SLOPED, OR PROPERLY SUPPORTED, CONFORMING TO VOSHIA REQUIREMENTS.
 5. PIPE BEDDING SHALL BE CRUSHED STONE, FROM 6" BELOW THE INVERT, TO THE SPRINGLINE OF THE PIPE.



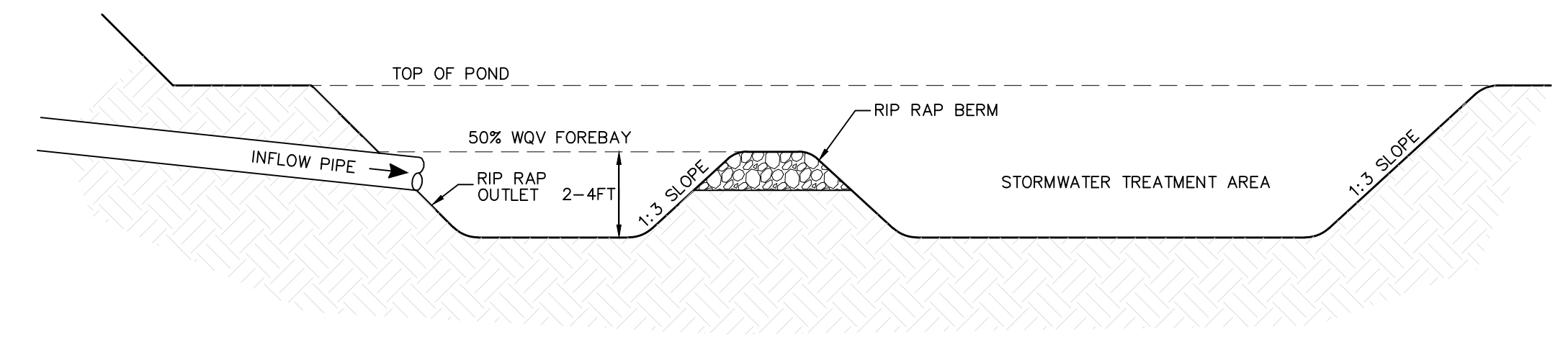
Raise frame to finished grade only after base course of pavement is in place - raise frame to base course grade if wear course is to be placed during the following construction season.

4000 psi concrete by SD IRELAND, CAMP PRECAST or approved equal.

Flexible manhole sleeves shall be provided for all pipe penetrations.

Backfill structure with Granular backfill VAOT 703.04

STRUCTURE SHALL BE H20 RATED WITHIN ROADWAYS



- NOTES:**
- 1) CONTRACTOR SHALL SUB-CUT THE INFILTRATION AREA AS SHOWN ON THE PLANS. WHERE POSSIBLE, EXCAVATION SHOULD BE PERFORMED WITH A BACKHOE AND WORK SHOULD BE DONE FROM THE SIDES AND OUTSIDE THE FOOTPRINT OF THE INFILTRATION AREA TO AVOID SOIL COMPACTION. IF IT IS NECESSARY TO WORK IN THE INFILTRATION AREA, ONLY LOW GROUND PRESSURE TRACKED EQUIPMENT SHOULD BE ALLOWED TO COMPLETE THE WORK. RUBBER TIRE EQUIPMENT SHALL BE STRICTLY PROHIBITED WITHIN THE INFILTRATION AREA, UNLESS WORKING FROM PAVEMENT OUTSIDE OF THE BASIN OR TRENCH. THE CONTRACTOR SHALL START THE WORK AT THE FAR SIDE OF THE TRENCH OR BASIN AND WORK THEIR WAY OUT.
 - 2) SUBSOIL DECOMPACTION IS REQUIRED IN ALL INFILTRATION AREAS. DECOMPACT SUBSOIL WITH A BACKHOE RIPPER ATTACHMENT OR OTHER APPROVED METHOD TO A DEPTH OF AT LEAST 18 INCHES BELOW SUBGRADE.
 - 3) THE CONTRACTOR SHALL TOPSOIL, SEED, AND MULCH THE DISTURBED AREAS AS SOON AS POSSIBLE FOLLOWING COMPLETION OF ADJACENT CONSTRUCTION. TOPSOIL SHALL MEET THE POST-CONSTRUCTION SOIL DEPTH AND QUALITY STANDARD.

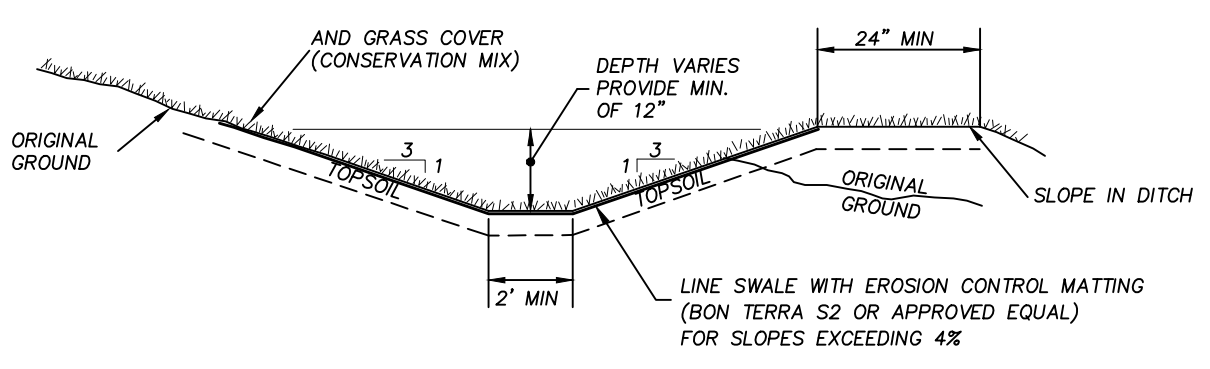
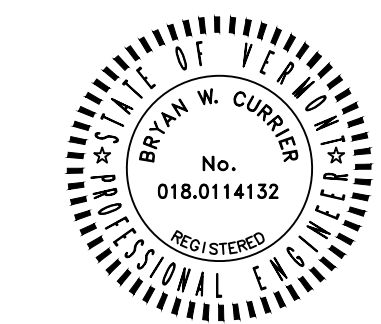


TABLE 1

Storm Catch Basin Diameter	Minimum Wall Thickness	Largest Pipe Dia. Allowed	Minimum Concrete Cover Thickness
48"	5"	30"	10"
60"	6.75"	36"	12"
72"	7"	48"	18"

C:\Users\Employee\O'Leary, Burke Civil Associates, PLC\O'Leary Burke Shared - Documents\2018\2018-44.dwg, 2018-44-S25.dwg



DATE	REVISION	BY
SURVEY	RECORD DRAWING	DATE
DESIGN	PRELIMINARY	1/18/24
BWC	FINAL	JOB #
GR	SKETCH/CONCEPT	2081-44
DRAWN		FILE
GR		2018-44-23
CHECKED		SHEET #
BWC		17
SCALE		
1" = 40'		

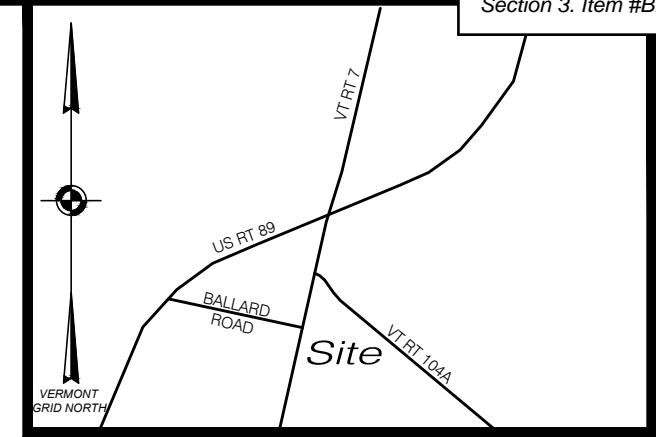
THE CONTRACTOR SHALL NOTIFY "DIGSAFE" AT 1-888-DIG-SAFE PRIOR TO ANY EXCAVATION.

HOMESTEAD CAMPGROUND
GEORGIA, VERMONT

STORMWATER DETAILS AND SPECIFICATIONS

Legend

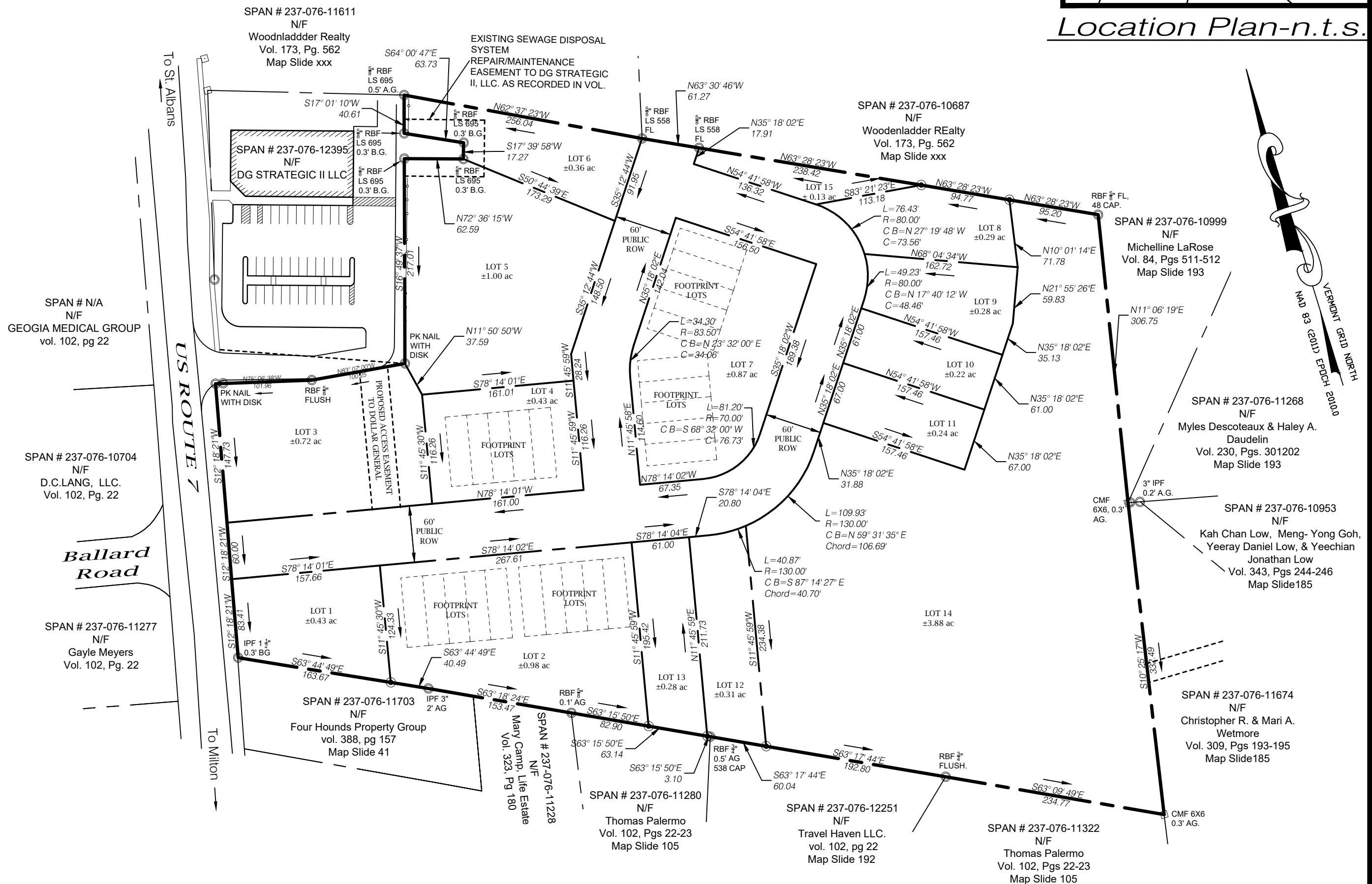
- BOUNDARY LINE
- ABUTTER LINE
- SPLIT RAIL FENCE (PVC)
- CONCRETE MONUMENT FOUND
- IRON PIPE FOUND
- PK NAIL WITH BRASS DISK
- IRON BAR FOUND
- IRON BAR SET
- ABOVE GRADE
- BELOW GRADE
- FLUSH
- CHORD BEARING
- CHORD DISTANCE
- UNMONUMENTED CORNER, NO MARKER FOUND OR SET



Location Plan-n.t.s.

GENERAL SURVEY NOTES

1. The purpose of this plan is to depict the re-subdivision of the property known as 864 Ethan Allen Highway in Georgia, Vermont.
2. Reference is made to the following plats and plans recovered within the Town of Georgia Land Records
 - a. "ALTA/ACSM Land Title Survey and Boundary Line Adjustment, DG Strategic II, LLC, Portion of Lands of S. T. Mack Inc, Volume 151, Page 738" 864 Ethan Allen Highway, Georgia, Vermont, sheet 1 of 2," dated 9-26-12, last revised 4-23-14, by Button Professional Land Surveyors, P.C. as recorded in Slide 230A of the Town of Georgia Land Records.
 - b. "ALTA/ACSM Land Title Survey, DG Strategic II, LLC, Volume 262, Page 246", 864 Ethan Allen Highway, Georgia, Vermont, sheet 1 of 2,"dated 10-27-14, by Button Professional Land Surveyors, P.C. as recorded in Slide ??? of the Town of Georgia Land Records.
 - c. "ALTA/ACSM Land Title Survey, Dearborn Land Investment LLC, Portion of Lands of S. T. Mack Inc, Volume 151, Page 738", 864 Ethan Allen Highway, Georgia, Vermont, sheet 1 of 2, dated 9-28-12, last revised 8-8-13, by Button Professional Land Surveyors, P.C. as recorded in Slide 228A of the Town of Georgia Land Records.
 - d. "ALTA/ACSM Land Title Survey, Dearborn Land Investment LLC, Portion of Lands of S. T. Mack Inc, Volume 151, Page 738", 864 Ethan Allen Highway, Georgia, Vermont, Sheet 2 of 2" dated 9-28-12, last revised 8-8-13, by Button Professional Land Surveyors, P.C. as recorded in Slide 228B of the Town of Georgia Land Records.
 - e. Sheet 2 of Project Georgia ST 237 M as prepared by the State of Vermont Department of Highways, undated as filed with the Vermont Agency of Transportation.
 - f. Sheet 9 of 12 of Project Georgia BP 237 M as prepared by the State of Vermont Department of Highways, undated as filed with the Vermont Agency of Transportation.
 - g. Sheet 9 of 12 of Project Georgia BP 019-5 6676 as prepared by the State of Vermont Department of Highways, undated as filed with the Vermont Agency of Transportation.
 - h. "Arrowhead Lake Village, (Property Plat West)Vermont Route 104A, Georgia, Vermont", dated 7-11-94, as prepared by Lamoureux & Dickinson and recorded in slide 185 of the Town of Georgia Land Records
 - i. "Arrowhead Lake Village, (Property Plat East)Vermont Route 104A, Georgia, Vermont", dated 7-11-94, as prepared by Lamoureux & Dickinson and recorded in slide 185A of the Town of Georgia Land Records
 - j. "Plat of Survey, Raymond & Ethel Bovat Property, 11.04 acres" as prepared by Warren A. Robenstien, L.S. dated November, 1982 and recorded in slide 150 of the Town of Georgia Land Records.
 - k. "David M. & Julie M. Malloy property" as prepared by John E. Buck dated 12 May, 1966 and recorded in slide 41 of the Town of Georgia Land Records.
 - l. "Meadowood Park, Proposed Five Lot Subdivision", as prepared by JHStuart, dated Feb, 1986 and recorded in slide 105 of the Town of Georgia Land Records.
 - m. "Myott Subdivision" as prepared by David A. Tudhope L.S., dated 5-17-08, and recorded in slide 192 of the Town of Georgia Land Records.
3. The variable Rights-of-Way widths for Route 7 and Route 104A are based on the plans referenced in notes 1E-G above.
4. This property was conveyed to 864 Ethan Allen Highway, LLC.by deed recorded in Vol. 316, Pgs 289-290 of the Town of Georgia Land Records.
5. The key deed for this property is recorded in Vol. 151, Pg 738 of the Town of Georgia Land Records.
6. All iron bars set are 5/8" iron bars with aluminum caps marked OBCA property corner, LS 656. all monumentation found is as noted.
7. This property may be subject to other easements or rights of way.
8. Bearings shown on this plat are based on the Vermont State Plane Coordinate System and are given in U.S. Survey Foot values (NAD83 (2011), VT-4400). Bearings were determined by Network RTK-GPS observations made on site January 25, 2024.

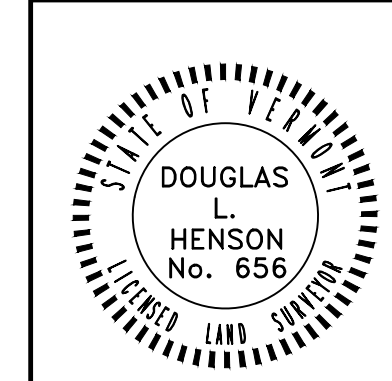


"Approved by the Development Review Board of the Town of Georgia Vermont, on the _____ day of _____, 2024, subject to all requirements and conditions of said approval. Signed this _____ day of _____, 2024 by _____
Chair"

TOWN CLERK'S OFFICE
TOWN OF GEORGIA, VT. _____, 2024
RECEIVED FOR RECORD AT _____ O'CLOCK
____ M., AND RECORDED IN SLIDE# _____
ATTEST: _____ TOWN CLERK

TO THE BEST OF MY KNOWLEDGE, THIS PLAT IS BASED ON INFORMATION ABSTRACTED FROM PERTINENT DEEDS AND/OR OTHER OFFICIAL RECORDS, AND MARKERS EVIDENT ON THE PROPERTY, AND CONFORMS WITH THE REQUIREMENTS OF 27 VSA & 1403.

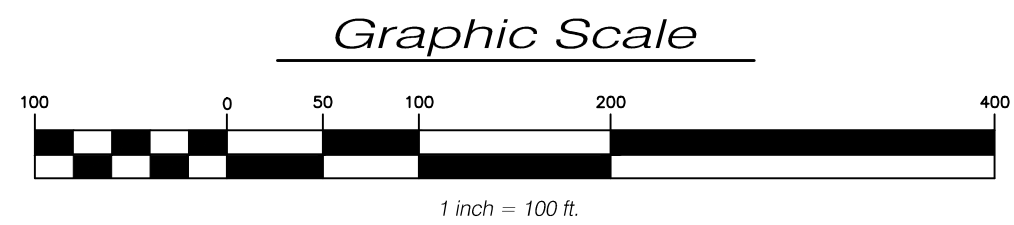
DATED THIS _____ DAY OF _____, 2024



DATE	REVISION	BY
SURVEY	<input type="checkbox"/> RECORD DRAWING <input checked="" type="checkbox"/> PRELIMINARY	
DESIGN	<input type="checkbox"/> FINAL <input type="checkbox"/> SKETCH/CONCEPT	
DRAWN	O'LEARY-BURKE CIVIL ASSOCIATES, PLC	
DLH		
CHECKED	13 Corporate Drive Essex, VT, VT Phone: 878-9990 FAX: 878-9989 E-MAIL: obca@olearyburke.com	
DWB	SCALE 1"=100'	

Resubdivision of lands of 864 Ethan Allen Highway LLC.
Vol. 316, Pgs 289-290
864 U.S. ROUTE 7 - Georgia, Vermont

DATE	01/25/24
JOB#	2018-44
FILE	2018-44
SUBPLAT	
PLAN SHEET #	PL1



This is an Original Mylar



GEORGIA VERMONT

DRB Meeting
Tuesday, December 19, 2023
Chris Letourneau Meeting Room and via Zoom
Minutes

Zoom Details:

<https://us02web.zoom.us/j/6165843896?pwd=STduU2JzTmпиVmE1MXZSaWZWLzVadz09>

Meeting ID: 616 584 3896 | **Passcode:** 5243524

Dial by your Location: 1 929 205 6099 (New York)

1. CALL TO ORDER - 7:00 PM

Call to order 7:00pm

DRB BOARD PRESENT

- Chair Suzanna Brown
- Charles Cross
- Greg Drew
- Gilles Rainville
- Glenn Sjoblom (via Zoom)

DRB BOARD ABSENT

- Vice Chair James Powell
- Lisa Faure

GUESTS PRESENT

- Tim Reed
- Alex Byrne
- Haley Spillane
- Jill Morgeon
- Brad Ruderman (via Zoom)
- Jacob Laramée (via Zoom)

2. ADDITIONS, DELETIONS, OR CHANGES TO THE AGENDA

3. PUBLIC HEARINGS

- A. Sketch Plan Review (SK-006-23) for Sandy Birch Road LLC proposed 7-Lot Major PUD subdivision on the 34-acre property between Sandy Lane and 1085 Sandy Birch Road, Parcel ID# 113220014 in the AR-3 Zoning district.

Sketch Plan Review Sandy Birch Lane, LLC

- Brad Ruderman, Engineer, explained the proposed subdivision with proposed new road off Sandy Birch Road utilizing an existing old farm access. The road will be approximately 550 ft long, ending in a cul-de-sac. Applicant will reduce the size of proposed cul-de-sac to conform to A-76 standards. Onsite drilled wells will be made for each lot, and each lot will have individual driveways. Applicants will get Act 250 and all the necessary permits, much like constructing Phase 1.
- Will ask for a waiver for Lot 17 Road frontage. Yet, using a private road off Sandy Birch so lot frontage requirements are not necessary. Need to request a waiver for using 60' right of way in lieu of road frontage. Lot 13 is Open Space for Phase 1. Lot 14 is acreage for Open Space, but wetlands are ? % of the open space, when 20% is needed.
- S. Brown questioned the large lots for 17 & 18. B. Ruderman explained the marketability of a larger being easier. DRB requested a sidewalk along Sandy Birch in the ROW but not encroaching in the wetlands, 3/4 of the road frontage. Sidewalk will not connect to the Phase 1 sidewalks (approx. 220 ft of sidewalk).
- Two existing mound systems are located in Phase 1 of Sandy Birch LLC, and a third one will be installed during construction.
- 4 interested parties/abutters present, no questions presented during the meeting.

Motion to close hearing at 7:15p.m.

Motion made by Drew, Seconded by Cross.

Voting Yea: Chair Brown, Cross, Drew, Rainville, Sjoblom

4. APPROVAL OF MINUTES

- A. DRB Meeting Minutes November 21, 2023

Motion to approve minutes with minor edits to Final Plat Review (FP-005-23), Site Plan Review (SP-002-23) and Conditional Use (CU-004-23) at 7:25p.m.

Motion made by Ranville, Seconded by Drew.

Voting Yea: Chair Brown, Cross, Drew, Rainville, Sjoblom

5. OTHER BUSINESS

Review and signature of Decision Letters, Gamache (FP-005-23, SP-002-23 & CU—004-23) and Martin (FP-006-23)

Motion to approve all letters with additions of wetland buffer and deed information.

Motion made by Drew, Seconded by Rainville.
Voting Yea: Chair Brown, Cross, Drew, Rainville, Sjoblom

6. PLAN NEXT MEETING AGENDA

A. January 2, 2024

January 2, 2024 DRB Meeting Cancelled, nothing has been submitted for the agenda. Next meeting on January 16, 2024. S. Brown will be out of town, G. Drew will be available via Zoom. Vice Chair James Powell will run the meeting.

7. DELIBERATIONS

Motion to go into deliberative session at 8:08 p.m.

Motion made by Rainville, Seconded by Cross.
Voting Yea: Chair Brown, Cross, Drew, Rainville, Sjoblom

Motion to exit deliberative session at 8:55 p.m.

Motion made by Rainville, Seconded by Drew.
Voting Yea: Chair Brown, Cross, Drew, Rainville, Sjoblom

8. ADJOURN

Motion to adjourn at 9:00 p.m.

Motion made by Rainville, Seconded by Drew.
Voting Yea: Chair Brown, Cross, Drew, Rainville, Sjoblom

Phone: 802-524-3524 | Fax: 802-524-3543 | Website: townofgeorgia.com



Town of Georgia

Section 5. Item #A.

47 Town Common Road North. • St. Albans, VT 05478

• Phone: 802-524-3524 • Fax: 802-524-3543 • website: townofgeorgia.com

December 20, 2023

Sandy Birch Road LLC
55 Reed Road
Fairfield, VT 05455

RE: SK-006-23
Sketch Plan Review

Dear Applicant,

On December 19, 2023, the DRB reviewed your Sketch Plan Application for the proposed 7-lot subdivision of your 34-acre parcel located on Sandy Birch Road between Sandy Lane and 1085 Sandy Birch Road, in the AR-3 Zoning district of Georgia, Vermont.

The DRB has classified your proposal as a major PUD subdivision pursuant to the definition of *Planned Unit Development (PUD)* and *Subdivision, Major* in Article 10 of the Town of Georgia Development Regulations (02.27.23).

Your proposal will require a publicly warned Preliminary Plat hearing & Final Plat hearing before the DRB. Your Preliminary Plat application is due within 6 months of the sketch plan review. Therefore, if you wish to proceed, you must submit your Preliminary Plat application prior to **June 28, 2024 for the July 16, 2024 DRB meeting.**

Prior to submitting your Preliminary Plat application, the DRB has concluded that the following issues shall be considered and/or addressed:

1. Preliminary Plat plans shall include all the requirements outlined under Section 4.4 (E) of the Georgia Development Regulations.
2. One scaled 24"x36" paper copy and eight 11"x17" sets of the preliminary survey plat must be completed by a licensed land surveyor and engineer and submitted to the Planning Coordinator with the Preliminary Plat application. The survey plat and site plan shall contain the following:
 - a) Proposed subdivision name or identifying title, the name of the municipality, the name and address of the record owner, the name, license number and seal of the licensed land surveyor, the boundaries of the subdivision and its general location in relation to existing street, scale, date, and true north point.

- b) The zoning district designation of the area to be subdivided and any zoning district boundaries affecting the parcel within the blocks.
 - c) The length of all straight lines, the deflection angles, radii, length of curves and central angles of all curves, tangent distance, and tangent bearings for each street.
 - d) Lots within the subdivision numbered in alternating order.
 - e) Building envelopes showing proposed setbacks and the protection of natural features.
 - f) A 50' wide setback around the entire perimeter of the parcel.
 - g) Wastewater easements with metes and bounds.
 - h) Wastewater locations with isolation areas.
 - i) Drilled wells and well isolation areas.
 - j) Drainage details.
 - k) Erosion control details.
 - l) Stormwater details.
 - m) Contour lines at minimum of 5' intervals.
 - n) Existing and proposed utilities (power lines serving each proposed dwelling).
 - o) Existing and proposed private road and driveways.
 - p) Landscaping details.
 - q) Natural features of the proposed site, including wetlands with associated required buffers, streams with associated required river corridors and or buffers, prime agricultural soils, rock outcroppings, and slopes > 25%.
 - r) Permanent reference monuments and lot corner markers shall be clearly indicated. Monuments shall be set at all corners and angle points of the boundaries of the subdivision.
 - s) Rights of way and utility easements with metes and bounds calculated.
 - t) Deed reference, tax map reference.
 - u) Names and deed reference of all abutting landowners.
 - v) DRB and Town Clerk signature blocks.
3. The property boundary of the subject parcel will need to be surveyed and accurately plotted on all survey and site plan drawings prior to filing a final plat application.
4. Copies of all required State permits including, but not limited to, Act 250, wastewater and potable water supply permits, and wetland permits will need to be submitted to the Zoning Administrator for inclusion in the project file prior to the issuance of any zoning permits.
5. Private road to be built to A76 standards and Town of Georgia Private Road and Driveway Standards (4.24.2023). A road name application will need to be submitted to the Zoning Administrator for e911 review and approval. E911 coordinator will ensure all residences have been properly addressed. Applicant will label each property according to e911 standards to include reflective address signs at each residence.
6. Preliminary Plat Review application shall include a statement setting forth the nature of all proposed waivers/modifications of these Regulations and justification for why the DRB should grant such waivers/modifications. The Preliminary Plat application shall also include draft deed language for each lot subject to waivers/modifications to the dimensional requirements.

7. Require a request in writing for a waiver use of the 60' right of way in lieu of lot frontage to the DRB as listed in Article 3 & in Article 5 of the Town of Georgia Development Regulations.
8. Applicant shall provide an "Ability to Serve" letter from the Town of Georgia Fire Chief indicating the ability to provide emergency services to the proposed subdivision.

Once your Preliminary Plat plans are complete, please submit one full-sized copy (24"x 36") and eight reduced copies (11"x17") of your subdivision plat and site plans. Also, please include a single copy of any supporting documents (e.g., legal language regarding easements, State level correspondence, correspondence with utility provider, etc.), addressed and stamped envelopes for all abutting property owners, and a completed Final Plat application form with the appropriate fees.

If you have questions concerning the above requirements or the application and review process, please contact the Zoning Administrator at the Town Office or zoning@townofgeorgia.com.

Sincerely,

Suzanna Brown,
Georgia DRB Chair

cc: Engineer, Interested Parties