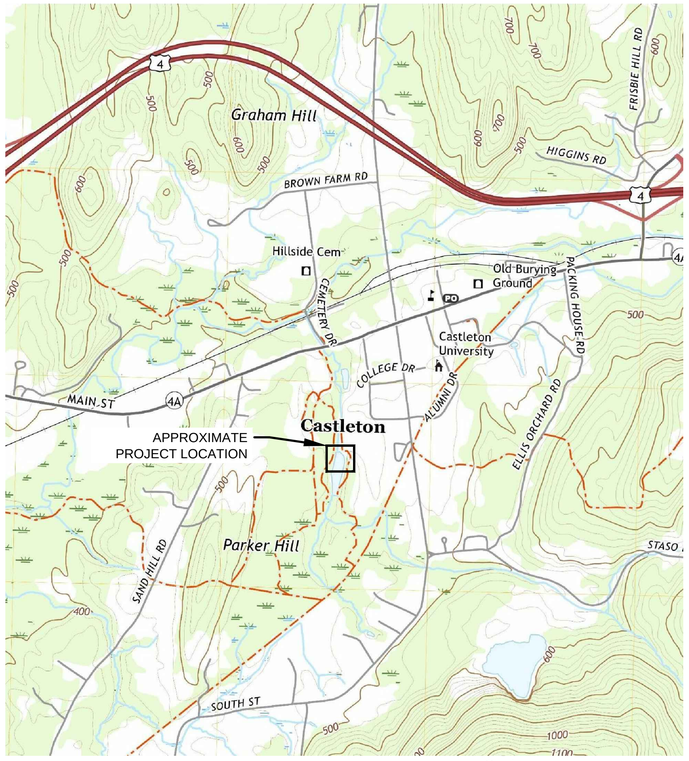
PARTIAL DAM REMOVAL
CASTLETON STATE COLLEGE DAM

CASTLETON, VERMONT
VT ID 43.04
SA PROJECT NO: 141-20-001

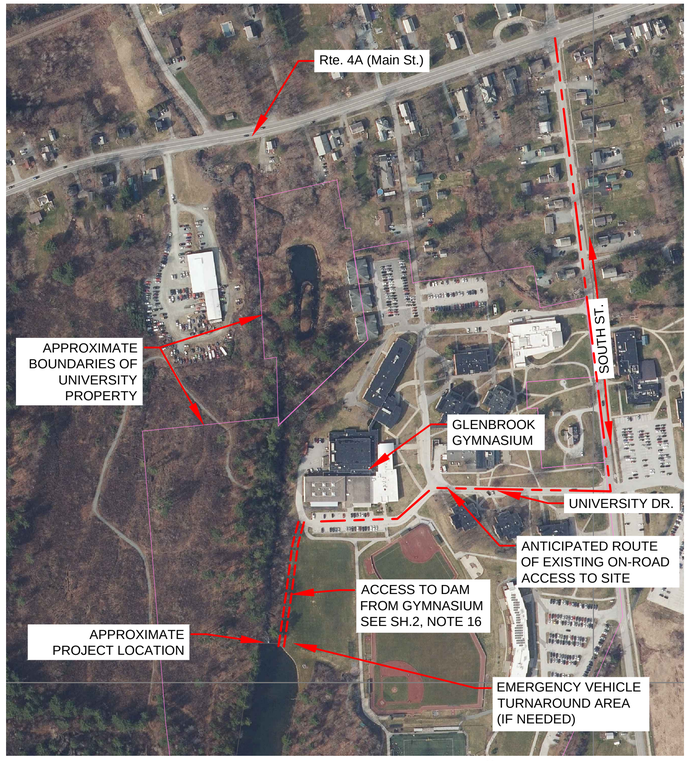
MINIMAL HAZARD CLASSIFICATION (PROPOSED)



A SITE LOCATION MAP
SCALE: 1" = 1000'

Scale
0 1,000 2,000 ft.

NOTES:
1. Site location map is excerpt of USGS Poultney, VT/NY quadrangle, dated 2021.



B SITE AERIAL PHOTOGRAPH
SCALE: 1" = 250'

Scale
0 250 500 ft.

NOTES:
1. Base image is aerial photograph taken in 2022, accessed by SA on August 8, 2023 at https://maps.vcgi.vermont.gov/OrthoFinder/.
2. Approximate boundaries of University property downloaded from https://maps.vermont.gov/vcgi/html5viewer/?viewer=vtmapviewer by SA on November 18, 2025. Boundaries are approximate, shown only for context in vicinity of the Project, are not surveyed, and should not be used for measurement.

CONTENTS:

Vertical Datum:
NAVD 88
Horizontal Datum:
NAD 83

Original Drawing Size = 11 x 17 in.

OWNER
VERMONT STATE UNIVERSITY - CASTLETON
Castleton, VT 05735

CLIENT
VERMONT STATE UNIVERSITY - CASTLETON
Castleton, VT 05735

By: NAO/BMB Date: 01/05/2026
Checked By: JET Date: 01/05/2026
Checked By: RSS/BAHS Date: 01/05/2026
Checked By: Date:

Revisions:
1. By: Date:
Checked By: Date:
2. By: Date:
Checked By: Date:
3. By: Date:
Checked By: Date:

Digitally signed by Bethel A.H. Stephens
Date: 2026.04.21 10:23:59 -04'00'

ISSUED FOR CONSTRUCTION

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668 Main Street, Ste. 250, Wilmington, MA 01887
Phone (978)988-2115

Project:
Number: 141-20-001
Sheet 1 of 7

Name: **Castleton State College Dam, VT ID 43.04 Castleton, VT**
Subject: **Cover**

GENERAL NOTES:

1. The Technical Contract Documents include:
   1.1. Design Drawings (also referred to as Sheets, Plans, Contract Plans, Contract Drawings, etc.)
   1.2. VTAOT Specifications (referenced below). Replace “Department” and “Department of Transportation” with “University of Vermont - Castleton.”
2. If discrepancies exist between the VTAOT Specifications and these Drawings, the provisions of the Drawings govern. All such discrepancies shall be brought to the attention of the Engineer in a timely fashion before proceeding with the affected portion of the work, and shall be resolved to the sole judgment of the Engineer.
3. Safe and successful completion of the work shown is the sole responsibility of the Contractor.
4. Contractor shall perform all necessary layout and survey to perform the work, in sole judgment of Engineer.
5. Make no deviations from design without approval of the Owner (University of Vermont - Castleton, Owner) and Engineer (Stephens Associates Consulting Engineers, LLC).
6. Neither review nor approval by Owner or Engineer of any aspect of the work shall absolve the Contractor of responsibility for that or any other aspect of the work.
7. Comply with all applicable local, state and federal statutes, laws, regulations and permits, including but not limited to, OSHA Standards. Contractor shall comply with conditions of regulatory permits issued for the Project, and any and all interpretations of such by Engineer.
8. Verify all dimensions and conditions in the field. Notify Engineer of any possible discrepancies before proceeding with the affected portion of the work.
9. Perform no work except in the presence of the Engineer. Provide Owner and Engineer with free access at all times to observe the work.
10. Secure construction site, any off-site staging areas, and all safety hazards, from the public at all times.
11. Unless otherwise noted, details shown on Drawings are typical for similar conditions.
12. Unless otherwise noted, install products per manufacturer's instructions. Where Drawings and/or Specifications conflict with manufacturer's instructions, use whichever is more stringent in sole judgment of Engineer.
13. Protect all work from damage caused by flooding.
14. Do not damage existing structures to remain, nor new structures, including but not limited to portions of Spillway to remain, buried and overhead utilities, existing athletic fields, etc. Promptly repair any damage at no additional expense to Owner.
15. Protect all utilities, public and private, and coordinate with utility companies impacted by construction.
16. Access, construction equipment and stockpiling limits:
    16.1. Do not stockpile soil or store equipment in wetlands.
    16.2. Contractor may not operate vehicles and/or equipment outside of Limit of Work.
    16.3. Access Dam from Glenbrook Gymnasium parking lot shall be along the existing unpaved, grassed path along the western edge of the grassed field, as shown on Sheet 1. Vehicles shall not enter the brush/vegetated area west of the path nor the athletic field east of the path. Restore grassed surface of access path at end of construction, per Sheet 4 notes.
    16.4. Contractor may operate vehicles/equipment in delineated wetland within Limit of Work only in the dry, and only on construction mats or frozen ground, following guidance of applicable regulations and project permits.
    16.5. Do not trespass on adjacent private properties.
17. Control dust resulting from construction, using common means and methods (e.g. water treatment, etc.), to satisfaction of Owner.
18. Provide and maintain secure, portable sanitary facility on-site throughout construction.
19. After construction completion and prior to demobilizing, clean up and restore Site, including access, parking and staging areas, to satisfaction of Owner.
20. Comply with all requirements of the permits and regulatory directions obtained by the Owner. Where these permits require submittal to the respective agency, submit required information to Engineer at least two weeks prior to the date required by agency for Engineer's review. Submit to the agency once Engineer completes review and takes no exception. Where these permits require notification of the respective agency, notify Engineer of the required information at least one week prior to notification deadline specified in the permit.
21. Maintain a copy of Drawings, Specifications, all Permits, and EPSCP, Flood Control Plan, and Water Control Plan, including amendments, on-site at all times. Provide same to each subcontractor and ensure each subcontractor is familiar with, and complies with, all permit requirements.
22. Burning of forest, construction debris, or any other material, is prohibited.
23. Unless otherwise approved by the Owner, allowable work hours shall be 7 am to 6 pm weekdays.

REFERENCES:

24. Vermont Agency of Transportation (VTAOT) Standard Specifications for Construction, 2024.
25. Vermont Statutes Annotated, Title 10, Chapter 43 (VT Statutes) and Dam Safety Program Administrative Rules (DSP Rules), Vermont Agency of Natural Resources, Department of Environmental Conservation, https://dec.vermont.gov/water-investment/dam-safety

DESIGN BASIS:

26. Pre-Construction: Castleton State College Dam, aka Glen Brook Dam, is classified as Significant hazard potential, in accordance with VT Statutes and DSP Rules.
27. Purpose of Project is to partially remove dam to achieve "Minimum Hazard Potential" classification under VT Statutes and DSP Rules.
28. Post-Construction, combined, impounded volume of sediment and water is designed to be Less than 500,000 cubic feet with water at El. 449.5 ft. - top of spillway concrete.

EROSION PREVENTION AND SEDIMENT CONTROL PLAN (EPSCP):

29. Prepare and submit an Erosion Prevention and Sediment Control Plan (referred to herein as EPSCP), at least three weeks before start of dewatering and any land-disturbing activity. Contractor shall allow time for Owner and regulatory authorities to review EPSCP. No additional compensation will be made for time, effort, or expense incurred by Contractor during review, revision, and approval. Owner and regulators will review EPSCP. Contractor shall revise and resubmit EPSCP as required by Owner. Owner will submit completed EPSCP to regulatory agencies generally as required. No work shall commence prior to approval of the EPSCP by the regulatory agencies as relayed by Owner to Contractor.
30. The EPSCP shall conform to the following standards and references:
    30.1. VTAOT 653
    30.2. Vermont Erosion Prevention and Sediment Control Plan Checklist, available at https://dec.vermont.gov/watershed/wetlands/bmps.
    30.3. Contract Specifications
31. The EPSCP shall further include the following information:
    31.1. Controls to protect quality (e.g. turbidity, etc.) of Glen Brook Pond and Pond Hill Brook.
    31.2. Means and methods to retain spoils and debris from work on the Dam and to prevent discharge of such to the surrounding environment.

WATER AND FLOOD MANAGEMENT

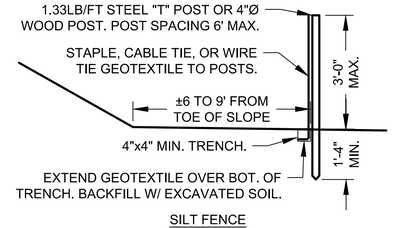
32. Construction shall be performed in the dry. Control water at all times throughout construction, including delays, so as not to inundate the work and to prevent release of impounded sediment.
33. Pond may be temporarily lowered by use of low-level outlet, diversion, siphons, and/or pumps. Temporary cofferdams shall also be used, as needed, either in conjunction with or separate from pond lowering, to maintain dry work areas.
34. Contractor shall be solely responsible for water control during construction. Design, provide, install, maintain, and remove all temporary water control measures necessary for construction and to prevent uncontrolled release of impounded sediment. Contractor may use commonly accepted means of water management and construction sequence, pending successful review by Engineer of Contractor's Water Control Plan, ESCP and other related submittals.
35. Submit temporary water control plan detailing water management means and methods for pond lowering (drawdown), cofferdams, dewatering, and handling of water in Glen Brook Pond and Pond Hill Brook during construction in normal and flood conditions. Plan shall include detailed design (e.g. dimensions, elevations, etc.) of cofferdams, temporary bypass and/or siphons or pumps if proposed, and design water levels as well as detailed plans for removal of temporary water controls.
36. Submit flood contingency plan. Flood contingency plan shall detail Contractor's monitoring of forecasts, procedures to be taken in advance of floods, Contractor's monitoring and procedures during floods, and methods to prevent damage to the work, and to existing structures caused by the work.
37. Commence no construction of temporary water controls until Engineer has reviewed all applicable submittals and taken no exception.
38. Cofferdams and other water diversion may consist of sandbags, jersey barriers, or other non-erodible barriers, and shall not consist of erodible fill. Remove and properly dispose of all cofferdams at the end of construction.
39. Breaching of the dam, accompanied by release of impounded sediment, is prohibited. Maintain structural stability of dam to prevent uncontrolled dam breach and uncontrolled release of impounded sediment. Do not remove structural components unless impoundment is dewatered or retained by cofferdams.
40. The Contractor shall fulfill the requirements of their insurance with respect to all aspects of construction, including flooding.
41. Monitor local weather daily (e.g. using weather.gov hourly weather forecast graph for the Project Site. https://forecast.weather.gov/MapClick.php?lat=43.6126&lon=-73.1743.)
42. Pond drawdown should be conducted in a gradual manner to prevent erosion of the streambed and damage to downstream structures and properties. At minimum, maintain the following criteria:
    42.1. Maintain a minimum downstream flow sufficient to maintain a wet streambed during construction and refilling.
    42.2. Contractor's water controls shall not exacerbate flooding if heavy precipitation occurs.
    42.3. Minimum pond elevation: 448 ft.
42. Regardless of Contractor's cofferdam design, Contractor shall protect the work from damage caused by flooding. During work on the Dam, Contractor shall protect the work from flooding to prevent uncontrolled dam breach and uncontrolled release of impounded sediment.
43. Contractor shall remove all temporary water controls before demobilizing from Site. Cofferdam removal shall not commence without express written consent of Engineer. At minimum, construction shall be completed at the structure dewatered by the cofferdam. Removal of cofferdam is at Contractor's sole risk. Reinstallation of water controls and any other temporary construction necessary to fix, or replace work failing to meet requirements of the contract documents, shall be at the Contractor's sole expense.

SEDIMENT AND EROSION CONTROL

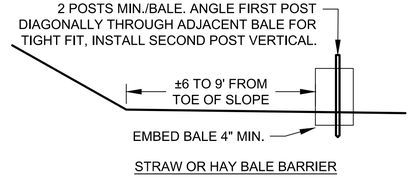
44. Design temporary erosion/sediment control in conjunction with and consideration of water control. Locations of temporary erosion controls shown are schematic.
45. Sediment controls shall be located between the work and edges of adjacent water bodies in accordance with local, state, and federal regulations.
46. Prior to performing any land-disturbing activity, furnish and install temporary erosion and sedimentation controls in accordance with Design Drawings, permit requirements, and EPSCP, and any additional requirements imposed by regulators. Inspect and maintain sediment and erosion controls during construction. Remove sediment and erosion controls at end of construction after grass and landscaping are established for all disturbed ground.
47. Work may take place only with sediment and erosion controls in place, and only in-the-dry. If any in-water work is necessary in sole judgment of Engineer, turbidity curtains shall be in place around any and all areas of in-water work.
48. Dewatering:
    48.1. Construction, including partial demolition of dam, regrading of pond, and regrading of downstream area shall be performed in the dry.
    48.2. Contractor shall be prepared to dewater as needed to keep work areas free of standing water. Additionally, prevent water from entering work areas from adjacent pond (e.g. by cofferdams, etc.)
    48.3. Prevent separation (loss) of fines from dewatered material, and prevent discharge of silty/turbid water to wetlands. All dewatering discharges shall be treated to remove sediment using a dewatering filter bag, such as DirtBag by ACF Environmental or equivalent, properly sized by Contractor to accommodate inflow. Install filter bag on filter base consisting of crushed stone or hay and/or straw mulch in accordance with manufacturer's instructions.
49. The Contractor shall place only crushed stone fill underwater, and only if deemed necessary in sole judgment of Engineer. Place no other fill on wet or disturbed subgrade.
50. Capture spoils and debris from the work, and prevent discharge of such to the surrounding environment.
51. Protect all discharge points of temporary water controls (e.g. pump/siphon pipes, etc.) from erosion.
52. Prevent tracking or flowing of sediment onto public rights of way. Clean public rights of way of soil daily.
53. Turf establishment and Seeding: See Sheet 6.
54. Vehicle Operation within wetlands: Comply with the following conditions from USACE General Permit Conditions, including, but not limited to Condition 14 and the following:
    54.1. Minimize operating heavy equipment (excavators, etc.) within wetlands and dewatered Pond. Do not store, maintain or repair equipment in wetlands.
    54.2. Where construction requires heavy equipment operation in wetlands, the equipment shall: a) have low ground pressure (typically <3 psi); b) be placed on swamp/construction/timber mats (herein referred to as “construction mats” or “mats”) that are adequate to support the equipment in such a way as to minimize disturbance of wetland soil and vegetation; or c) be operated on adequately dry or frozen wetlands such that shear pressure does not cause subsidence of the wetlands immediately beneath equipment and upheaval of adjacent wetlands in sole judgement of Engineer.
    54.3. Comply with Construction Mat Notes from USACE General Permit Condition 14, including, but not limited to:
        54.3.1. Place mats in the wetland from the upland or from equipment positioned on swamp mats if working within a wetland. Construction mats should be carried, and not dragged, into position, where feasible.
        54.3.2. Mats should be in good condition to ensure proper installation, use and removal.
        54.3.3. Where feasible, place mats in a location that would minimize the amount needed for the wetland crossing.
        54.3.4. Minimize impacts to wetland areas during installation, use, and removal.
        54.3.5. Install adequate erosion and sediment controls at approaches to mats to promote a smooth transition to, and minimize sediment tracking onto, mats.
        54.3.6. In most cases, mats should be placed along the travel area so that the individual boards are resting perpendicular to the direction of traffic. No gaps should exist between mats. Mats should be placed far enough on either side of the resource area to rest on firm ground.
        54.3.7. Provide standard construction mat BMP details to work crews.
        54.3.8. Construction mats shall be thoroughly cleaned before re-use to minimize spread of invasive species.

POLLUTION PREVENTION:

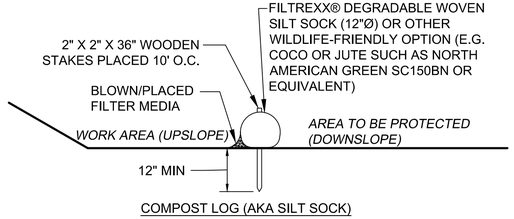
55. Inspect vehicles and construction equipment daily for leaking fuel, oil and hydraulic fluid. Repair and refuel equipment outside of wetland/surface waters. Maintain oil spill kits on-site and readily accessible at all times during construction.
56. Clean up spills immediately upon discovery and properly dispose of used absorbent materials and other hazardous waste in accordance with local, state, and federal regulations.
57. Separate hazardous or toxic waste (e.g. paints, solvents, petroleum- based products, wood preservatives, additives, curing compounds, acids, etc.) from other construction or domestic waste. Properly store hazardous or toxic waste in structurally sound, watertight and sealed containers, with secondary containment (e.g. spill pallets or equivalent).
58. Cover all building materials, pesticides, herbicides, insecticides, fertilizers, landscape materials, diesel fuel, oil, hydraulic fluids, other petroleum products, and other chemicals with anchored plastic sheeting or tarps to minimize exposure to precipitation and stormwater.
59. Provide waste containers on site (e.g. dumpster, trash receptacle, etc.), clean up and dispose of waste in waste containers, and minimize discharge of pollutants from waste containers (e.g. with cover or secondary containment).
60. Provide and maintain portable toilets or other sanitary facilities on site, positioned so that they are secure and stable, and located away from wetlands, stormwater inlets or conveyances.
61. Washing of concrete trucks and/or mixers, and containers, tools and applicators used for paint, concrete, oils, curing compounds, and other materials: Direct wash water from washing into a leak-proof container or a leak-proof and lined pit, appropriately sized for the washing operation, and located away from delineated wetlands, in a designated area. Dispose of wash water properly in accordance with local, state, and federal regulations.
62. Do not apply fertilizer in wetlands or within 50-ft. wetland buffer zone. Outside of 50-ft. wetland buffer zone, apply fertilizer per VTAOT 651 and manufacturer's specifications in accordance with local, state, and federal regulations. Do not apply fertilizer to frozen ground, to stormwater conveyance channels, or before heavy rain.



SILT FENCE



STRAW OR HAY BALE BARRIER



COMPOST LOG (AKA SILT SOCK)

B/3 SEDIMENT CONTROLS
NOT TO SCALE

Original Drawing Size = 11 x 17 in.

OWNER
VERMONT STATE UNIVERSITY - CASTLETON
Castleton, VT 05735

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By: NAO/BMB Date: 01/05/2026
Checked By: JET Date: 01/05/2026
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Checked By: _____ Date: _____

Revisions:
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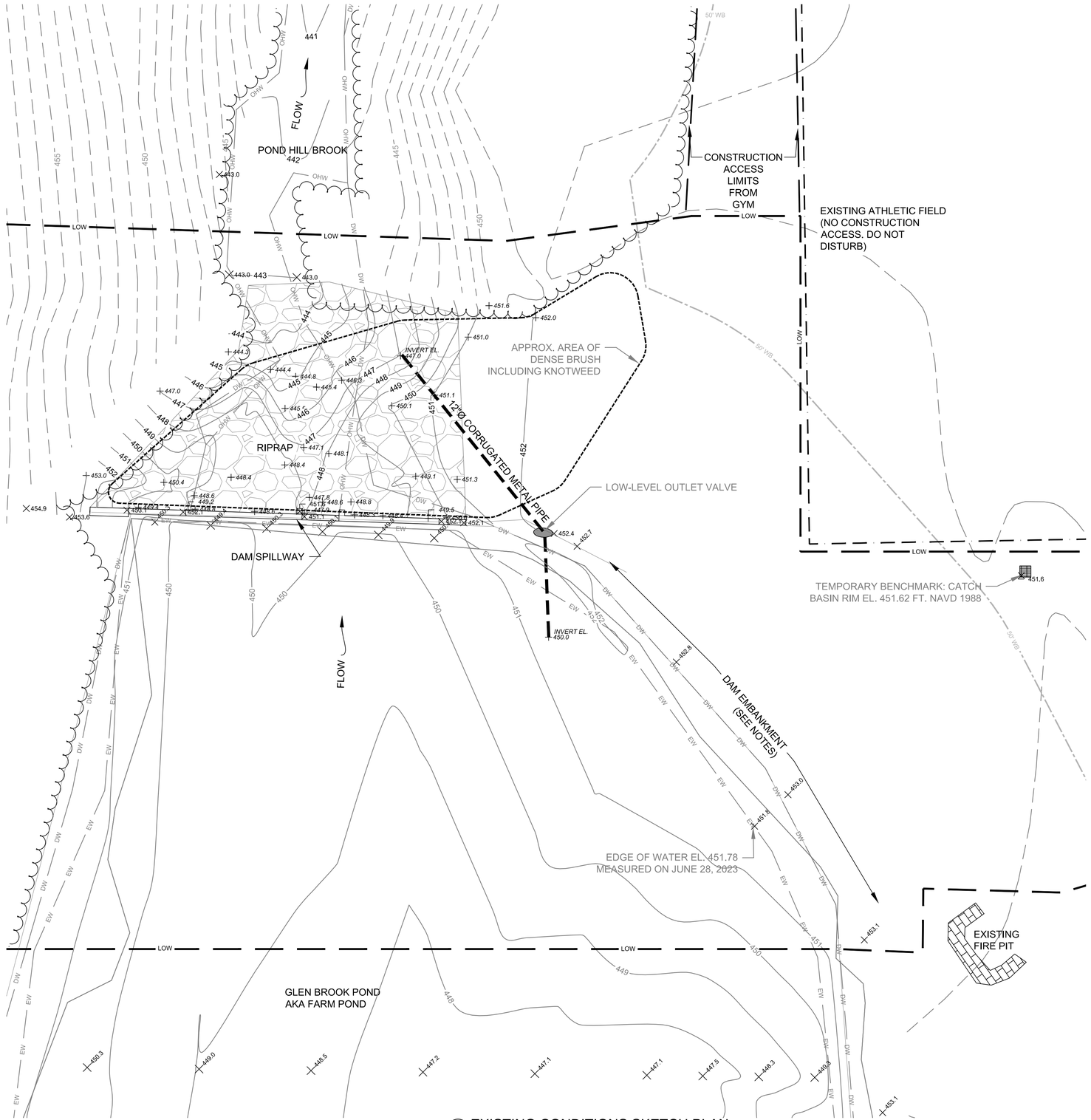
Project: Sheet 2 of 7
Number: 141-20-001
Name: **Castleton State College Dam, VT ID 43.04 Castleton, VT**
Subject: **Notes**



A/2 EXISTING CONDITIONS SKETCH PLAN
SCALE: 1" = 10'

LEGEND:

- EW — Edge of Water surveyed on June 25, 2023
- DW — Delineated Wetland
- OHW — Ordinary High Water
- Treeline
- 452.5 — Spot elevation from 2023 SA Survey
- 452.0 — Spot elevation from 2009 Survey
- Contour from Survey data
- Contour from LiDAR
- Edge of Athletic Field (Approx.)
- Buried Pipe (Approx.)
- 50' WB — 50-ft. Buffer to Delineated Wetland

NOTES:

1. SA did not perform a subsurface survey for utilities. Prior to commencing work in this area, Contractor shall take all necessary precautions to protect utilities potentially affected by the Work. At minimum, Contractor shall notify DigSafe, other utility providers (e.g. Town of Castleton, Castleton University, etc.) and comply with all applicable laws, rules, codes, and standards.
2. Sketch plan compiled by SA from the following sources:
   - 2.1. Wetlands (e.g. delineated wetland, edge of water, and ordinary high water) delineated and GPS surveyed by GM2 Associates, Inc. on June 25, 2023 and provided to SA in AutoCAD shapefile format in drawing with compiled GIS files titled "Data to SA.zip" in Vermont State Plane horizontal datum, which AutoCAD converted to NAD 83 State Plane (feet).
   - 2.2. Spot Elevations of the Dam spillway and embankment ground surface east of the Pond taken by SA on June 28, 2023 by engineer's optical level, angle and stadia. Pond bathymetry elevations measured by SA relative to water surface elevation using fiberglass rod and located horizontally using fiberglass tape measurements.
   - 2.3. Previous topographic Survey of Dam vicinity titled "Pond, Castleton State College, Castleton, Vermont," dated December 16, 2009, prepared by Coleman Survey, provided to SA in pdf format (referred to herein as 2009 Survey). SA reproduced locations of spot elevations downstream of Dam and locations of selected site features (e.g. CMP pipe culvert) from 2009 Survey. SA converted elevations in apparent local vertical datum to NAVD 1988 as described below.
   - 2.4. Contours from LiDAR from LiDAR data "ElevationContours_CN1TGEN," consisting of 1-ft. contours generated from 'bare earth' DEM Lidar data, downloaded by SA from VT Center for Geographic Information Lidar Program website on May 25, 2023. Metadata indicates LiDAR for the Project vicinity was obtained in 2013. SA did not reconcile differences between contours from LiDAR and Contours from 2009 Survey.
   - 2.5. SA aligned our 2023 survey and the 2009 survey horizontally with the survey of delineated wetlands using a common point on the Dam and rotated the respective surveys using historical magnetic declination from https://www.ngdc.noaa.gov/geomag/calculators/magcalc.shtml.
   - 2.6. Other site features (e.g. athletic field, treeline, knotweed, etc) sketched by visual correlation with existing site features (e.g. dam, edge of water, etc.), and engineering judgment.
   - 2.7. This Figure, including but not limited to elevations, locations, and dimensions of site features, should be considered accurate only to the degree implied by the measurement methods and plotting technique used. Contours are interpolated by AutoCAD Civil 3D from widely-spaced spot elevations and are approximate.
3. Elevation Relationships: Drawing elevations are relative to NAVD 1988. SA referenced our 2023 survey and the previous 2009 survey to NAVD 1988 datum using elevation from the following sources:
   - 3.1. Elevation of adjacent Catch Basin 208 shown on drawing titled "Utility Record Drawing, Castleton State College," sheet 1 of 8 prepared by Engelberth Construction, Inc., dated November 23, 2009;
   - 3.2. Drawing titled "Existing Conditions Plan, Castleton State College," Drawing No. C-101, prepared by Stantec Consulting Services, Inc., labeled "Act 250 Submission," dated April 14, 2008;
   - 3.3. VT Agency of Transportation benchmark J25 (aka USGS benchmark stamped J 25 1955), set in foundation of a building located on Castleton University campus (as referenced on drawing C-101, indicated above). Elevation of benchmark is 462.21 ft. (NGVD 1929) = 461.83 ft. (NAVD 1983).
4. Wetlands: Based on our meeting with VT Wetland Bureau on June 28, 2023, we understand that the Wetlands at the Site are Class II.
5. Construction records circa 1967 indicate an earthen embankment (aka emergency spillway) 3 to 5 ft. tall along the east side of the pond. Construction of the adjacent athletic fields subsequently filled behind the embankment, in effect, making the embankment the right bank of the stream/pond.

Vertical Datum: NAVD 88
Horizontal Datum: NAD 83

N

Scale
0 10 20 ft.
Original Drawing Size = 11 x 17 in.

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STATE OF VERMONT BETHEL A.H. STEPHENS No. 7729 Structural PROFESSIONAL ENGINEER

Digitally signed by Bethel A.H. Stephens
Date: 2026.04.21 10:25:05 -04'00'

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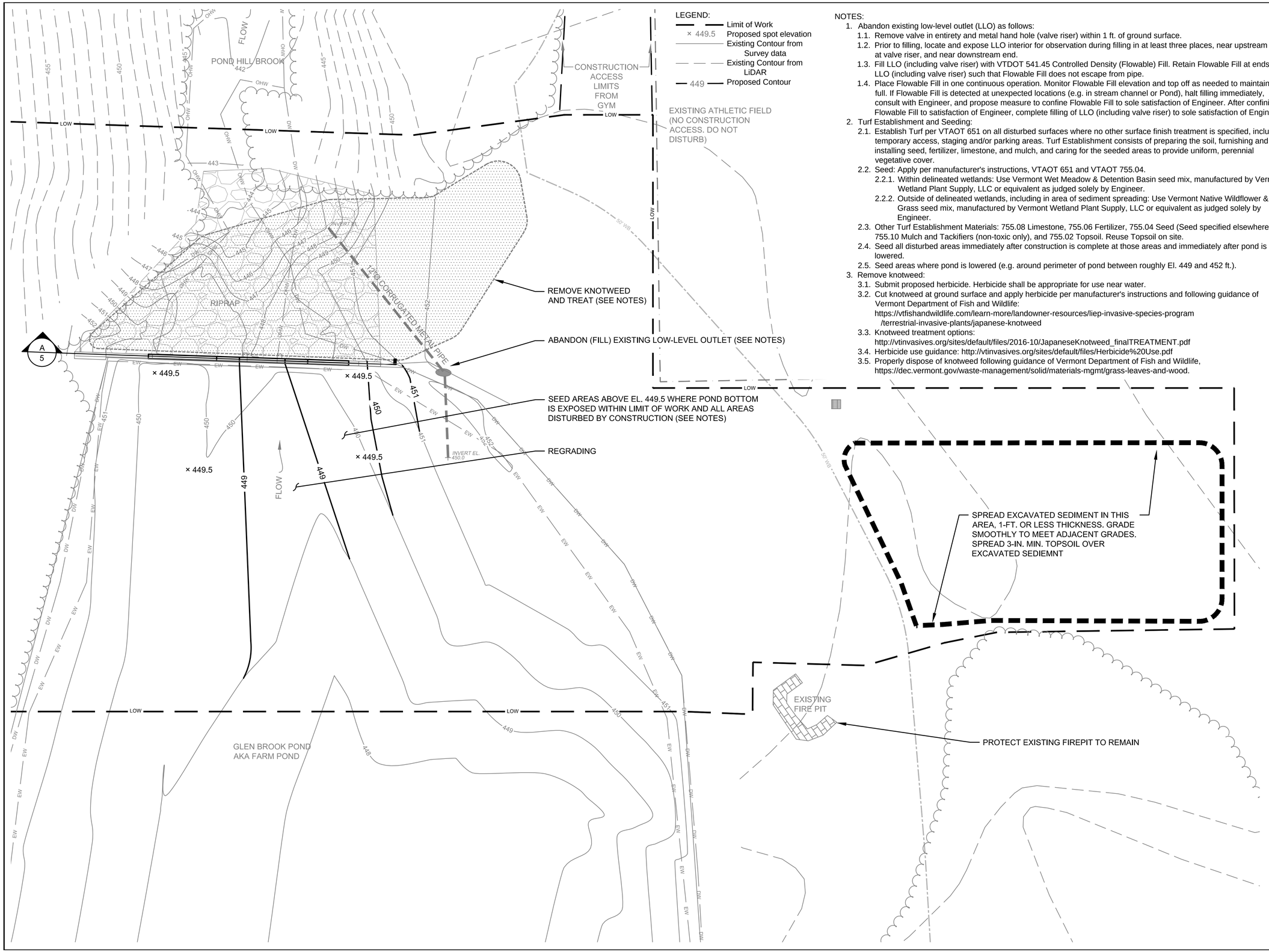
Project:
Number: 141-20-001
Sheet 3 of 7
Name: **Castleton State College Dam, VT ID 43.04 Castleton, VT**
Subject: **Existing Conditions Sketch**



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Project:
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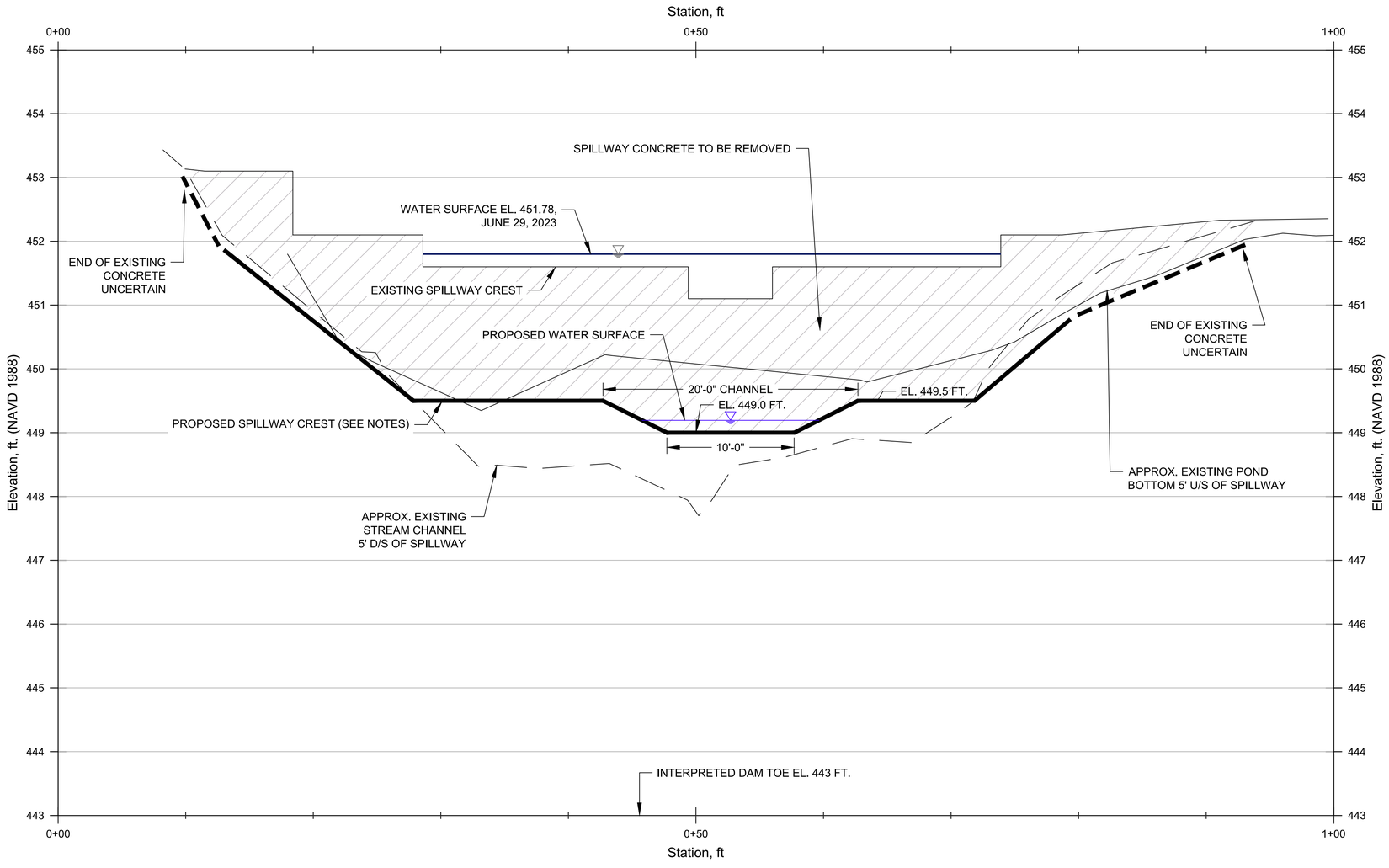
Name: **Castleton State College Dam, VT ID 43.04 Castleton, VT**
Subject: **Proposed Plan**



A/5 SPILLWAY PROFILE
VERTICAL SCALE: 1" = 5'
HORIZONTAL SCALE: 1" = 25'

Horizontal Scale
0 5 10 ft.

Vertical Scale
0 1 2 ft.

NOTES:
1. Spillway partial removal:
   - 1.1. Remove portions of existing concrete spillway and properly dispose.
   - 1.2. Sawcut top surface of concrete to form channel and overflow at elevations shown.
   - 1.3. Portions of spillway that extend beneath post-construction finished grade of the banks shall be removed to 0.5 ft. below finished grade. Remove all loose pieces of concrete. Undisturbed portions of concrete may be left in-place below ground surface.

Vertical Datum:
NAVD 88
Horizontal Datum:
NAD 83

Original Drawing Size = 11 x 17 in.

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Castleton, VT 05735

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By: NAO/BMB Date: 01/05/2026
Checked By: JET Date: 01/05/2026
Checked By: RSS/BAHS Date: 01/05/2026
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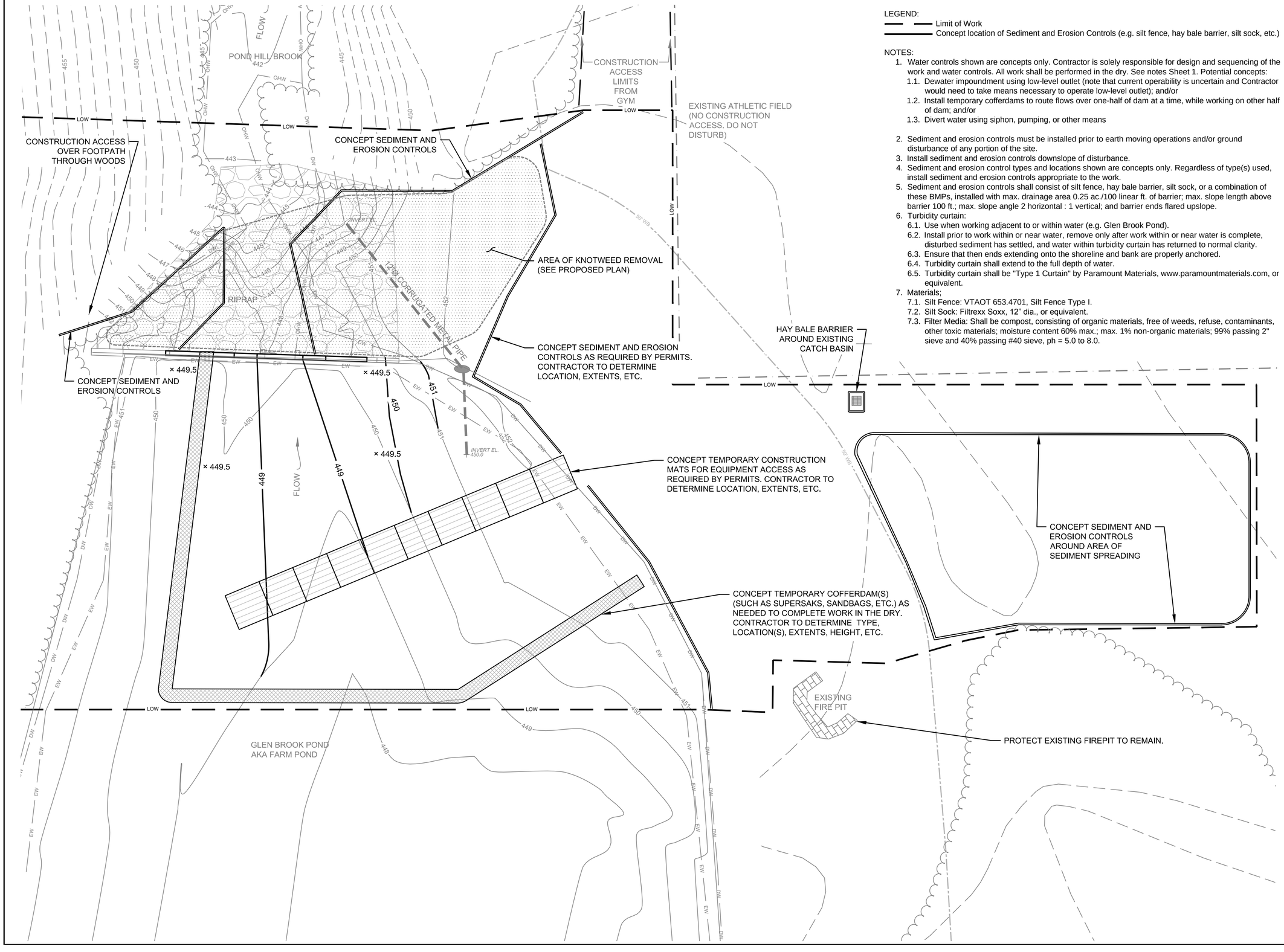
Phone (603)772-1417
668 Main Street, Ste. 250, Wilmington, MA 01887
Phone (978)988-2115

Project:
Number: 141-20-001
Sheet 5 of 7
Name: **Castleton State College Dam, VT ID 43.04 Castleton, VT**
Subject: **Spillway Profile**



LEGEND:

Limit of Work

Concept location of Sediment and Erosion Controls (e.g. silt fence, hay bale barrier, silt sock, etc.)

NOTES:

1. Water controls shown are concepts only. Contractor is solely responsible for design and sequencing of the work and water controls. All work shall be performed in the dry. See notes Sheet 1. Potential concepts:
   - 1.1. Dewater impoundment using low-level outlet (note that current operability is uncertain and Contractor would need to take means necessary to operate low-level outlet); and/or
   - 1.2. Install temporary cofferdams to route flows over one-half of dam at a time, while working on other half of dam; and/or
   - 1.3. Divert water using siphon, pumping, or other means
2. Sediment and erosion controls must be installed prior to earth moving operations and/or ground disturbance of any portion of the site.
3. Install sediment and erosion controls downslope of disturbance.
4. Sediment and erosion control types and locations shown are concepts only. Regardless of type(s) used, install sediment and erosion controls appropriate to the work.
5. Sediment and erosion controls shall consist of silt fence, hay bale barrier, silt sock, or a combination of these BMPs, installed with max. drainage area 0.25 ac./100 linear ft. of barrier; max. slope length above barrier 100 ft.; max. slope angle 2 horizontal : 1 vertical; and barrier ends flared upslope.
6. Turbidity curtain:
   - 6.1. Use when working adjacent to or within water (e.g. Glen Brook Pond).
   - 6.2. Install prior to work within or near water, remove only after work within or near water is complete, disturbed sediment has settled, and water within turbidity curtain has returned to normal clarity.
   - 6.3. Ensure that then ends extending onto the shoreline and bank are properly anchored.
   - 6.4. Turbidity curtain shall extend to the full depth of water.
   - 6.5. Turbidity curtain shall be "Type 1 Curtain" by Paramount Materials, www.paramountmaterials.com, or equivalent.
7. Materials;
   - 7.1. Silt Fence: VTAOT 653.4701, Silt Fence Type I.
   - 7.2. Silt Sock: Filtrexx Soxx, 12" dia., or equivalent.
   - 7.3. Filter Media: Shall be compost, consisting of organic materials, free of weeds, refuse, contaminants, other toxic materials; moisture content 60% max.; max. 1% non-organic materials; 99% passing 2" sieve and 40% passing #40 sieve, ph = 5.0 to 8.0.

Vertical Datum:
NAVD 88
Horizontal Datum:
NAD 83

N

Scale

0 10 20 ft.

Original Drawing Size = 11 x 17 in.

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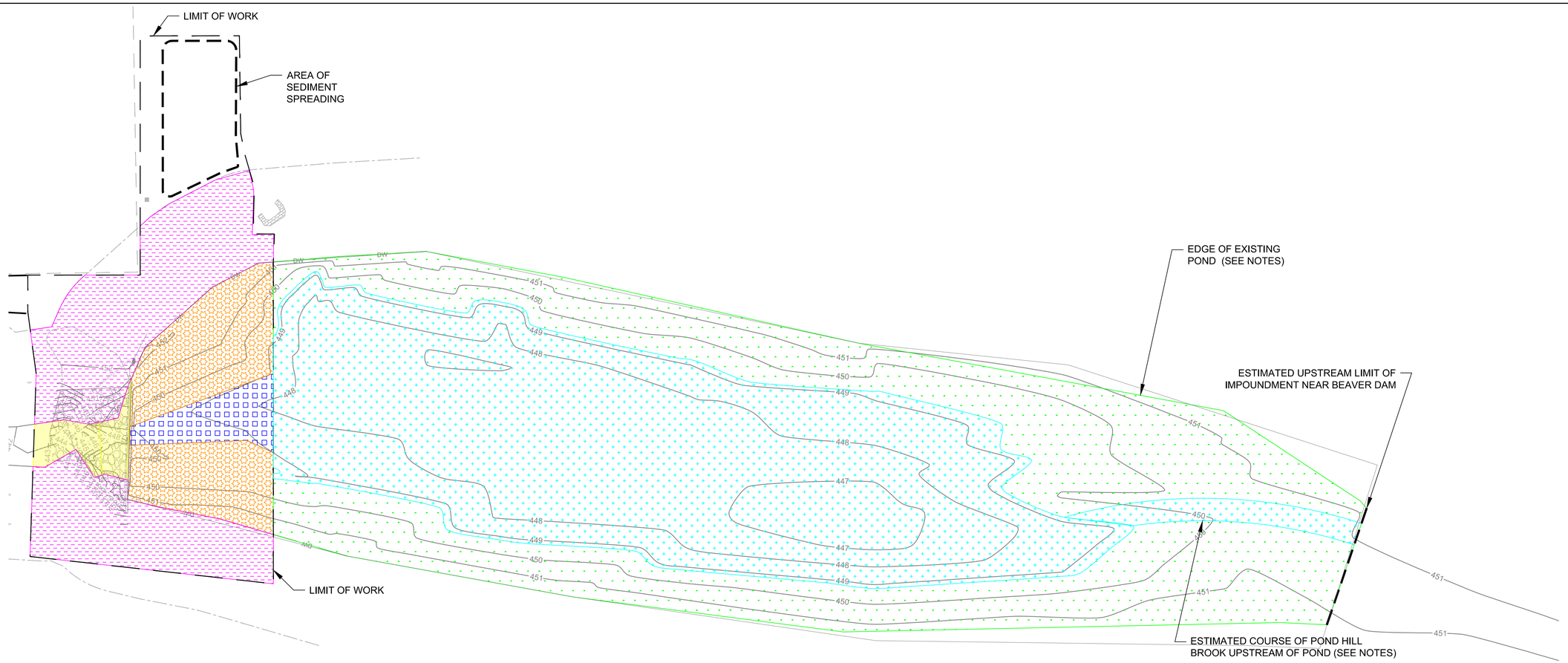
Project:
Number: 141-20-001

Name: **Castleton State College Dam, VT ID 43.04 Castleton, VT**

Subject: **Temporary Construction Plan and Details**



LEGEND		
Location	Area	Description
Downstream of Limit of Work	0 sf	
Downstream side of Dam, within Limit of Work	1,300 sf	Temporary access to perform work downstream of dam. Motorized equipment use not anticipated
Upstream side of Dam, within Limit of Work	6,900 sf 1,800 sf	Temporary access for grading and cofferdam and area converted from pond to vegetation Temporary access for grading and cofferdam and area of pond water level lowered from El. 451.8 ft.± to 449 ft.±
Upstream of Limit of Work	41,000 sf 37,600 sf	Area converted from pond to vegetation Area of pond water level lowered from El. 451.8 ft.± to 449.2 ft.±
Access and Staging Areas within 50-ft. Buffer Zone	13,000 sf	Temporary access and staging. Spreading of excavated sediment.
Totals	101,600 sf	

NOTES:
1. Purpose of this sheet is to show Project relative to delineated wetlands and 50-ft. wetland buffer zone, for preliminary review by regulators.
2. Refer to Existing Conditions Sketch for details of wetland delineation and topographic and bathymetric surveys.
3. Edge of existing pond sketched approximately using engineering judgment based on bathymetric contours, aerial photo, and SA field observations.
4. Estimated course of Pond Hill Brook upstream of pond is sketched approximately using engineering judgment based on bathymetric contours and aerial photo. No grading or sediment removal is proposed in this area of the pond, or upstream of Limit of Work. Actual post-construction course of stream may differ from estimated course shown herein.

Vertical Datum:
NAVD 88
Horizontal Datum:
NAD 83

Scale
0 30 60 ft.

Original Drawing Size = 11 x 17 in.

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Project: Sheet 7 of 7
Number: 141-20-001
Name: **Castleton State College Dam, VT ID 43.04 Castleton, VT**
Subject: **Project Relative to Wetland and Buffer Zones**