263 Bedford-Banksville Rd.
North Castle, NY

Submission to Planning Board

February 10, 2023

JAY FAIN & ASSOCIATES, LLC
Environmental Consulting Services

Jay Fain
Principal
elmst@optonline.net

Victoria Landau
Principal, ASLA
vplandau@optonline.net

2000 Post Rd, Ste 201
Fairfield, CT 06824
203-254-3156
jfassociates@optonline.net

February 10, 2023

Mr. Christopher Carthy, Chairman
And Members of the Planning Board
Town of North Castle
17 Bedford Banksville Road
Armonk, NY 10504

Re: **Special Permit / Site Plan**
263 Bedford Banksville Road
Town of North Castle, NY

On behalf of Chloe & Mikhail Gasiorowski, we are pleased to submit additional information in support of the Special Use Application/Site Plan Application for additional horses for the property situated at 263 Bedford Banskville Road.

1. Landscape Plans / Tree Removal Plans by Jay Fain & Associates, LLC, dated June 13, 2022, and last revised February 10, 2023.
   - CO Cover Sheet
   - S-1 Special Permit - Site Plan
   - L-1 Special Permit - Landscape Plan
   - L-2 Special Permit - Landscape Details
   - TR-1 Special Permit - Tree Removals
   - TR-2 Special Permit - Tree Removals Lists
2. Site Development Plans Prepared by, and Signed & Sealed by, DiMarzo & Bereczky, Inc, dated 06/10/2022 and last revised February 10, 2023.
   - C-0 Zoning Site Plan
   - C-1 Site Development Plan
   - C-2 Gross Land Coverage Plan
   - C-3A Site Plan - 3A
   - C-3B Site Plan - 3B
   - C-4 Erosion & Sediment Control Plan
   - C-5 Notes & Details
   - C-6 Details - 1
   - C-7 Details - 2
   - C-8 Turning Templates & Sight Distance Plan

3. Average Grade Calculations Prepared by, and Signed & Sealed by, DiMarzo & Bereczky, Inc, dated 02/07/23.
   - Primary Structure - Main House
   - Accessory Structures - Pool House, Stable, Addition to Exist. Stable, Garage
4. Architectural Plans Prepared by Teo Siguenza Architect, Signed & sealed by Teo Siguenza
   A. Proposed Main House Single Family Residence, dated 5-16-22 and last revised February 10, 2023.
      - A100.00 Proposed Basement Plan
      - A101.00 Proposed First Floor Plan
      - A102.00 Proposed Second Floor Plan
      - A200.00 Proposed Exterior Elevations
      - A201.00 Proposed Exterior Elevations
      - A101.10 Floor Area Calculation
      - Proposed Section
   B. Proposed Pool House, dated 5-16-22 and last revised February 10, 2023.
      - P101.00 Proposed Floor Plans & Exterior Elevations
5. Architectural Plans with Floor Area Calculations, Prepared by Old Town Barns, Signed & sealed by Mark Bergeron, PE
   A. Proposed Stable for 263 Bedford Banksville Road, dated 2/23/22 and last revised February 10, 2023.
      - Cover Sheet
      - A-100 Floor Plans
      - A-200 Elevations
      - A-210 Elevations
   B. Proposed Stable Addition for 263 Bedford Banksville Road, dated 2/23/22 and last revised February 10, 2023.
      - Cover Sheet
      - A-100 Floor Plans
      - A-200 Elevations
   C. Proposed Garage for 263 Bedford Banksville Road, dated 2/23/22 and last revised February 10, 2023.
      - Cover Sheet
      - A-100 Floor Plans
      - A-200 Elevations
6. Floor Area Calculations
   - Main House & Pool House by Teo Siguenza Architect, Signed & sealed by Teo Siguenza, dated 12-16-22
   - Stable, Stable Addition & Garage by Old Town Barns dated February 9, 2023

7. Gross Land Coverage Calculations Worksheet by DiMarzo & Bereczky, Inc. and last revised February 10, 2023.
8. Stormwater Pollution Prevention Plan (SWPPP) by DiMarzo & Bereczky

The Applicant would like to inform the Planning Board of the following Project changes since the initial project submittal:

- The main residence has been reduced in size from its original square footage from 11,014 to 9,095.
- The proposed 'Servants Quarters' have been eliminated from consideration. This results in a reduction in both Gross Floor Area and Gross Land Coverage.
- Full Engineered Plans have been provided for review by the Town Engineer.
- The plans have been revised to show no disturbance and /or tree removal in the 150' setback between the Applicants' property and the adjacent Geist property.

The revisions depicted on the above noted plans reflect responses to comments outlined in the Town of North Castle Planning Board Memorandum, dated October 4, 2022, and the Town Consulting Engineer's Comments dated October 7, 2022. For ease of review, we have repeated and enumerated the comments and responded in italic print:

<u>TOWN ENGINEER OCTOBER 7, 2022</u>
<u>GENERAL COMMENTS:</u>

1. Comment: The project site includes a NYSDEC regulated wetland, which borders the Mianus River within the western portion of the project site. A pond and adjacent locally-regulated wetlands also exists within the western portion of the project site. A locally-regulated watercourse and adjacent wetlands exists within the northeastern portion of the project site.

The applicant has had the NYSDEC wetland boundary confirmed by Josh Fisher on June 8, 2021. The applicant has provided a copy of the wetland survey and signed validation block by the NYSDEC.

Our office has field inspected the wetland flagging of the local wetlands and we confirm its accuracy with regard to the Town Wetland Code.

Proposed improvements and site disturbance illustrated on the proposed site plan, are located more than 100 feet from the flagged wetland boundary. No wetland permitting is therefore required based on the proposed site plan.

Response: *Comment noted. Documentation regarding location and verification of the State and Town regulated wetland areas was provided in the Applicants' original submission. The Applicant confirms*

that no Regulated Wetland Activity is proposed and therefore no Wetland Activity Permit is being sought at this time.

2. Comment: A portion of the project site along the Mianus River and along the unnamed tributary at the property frontage is within a 100-year FEMA Floodplain. The application does not propose any work within the floodplain, however, since the property is within a Flood Zone, a Floodplain Development Permit must be filed with the Building Department prior to a Building Permit.

Response: *Comment noted. A Floodplain Development Permit Application will be submitted as part of the Building Department Application process. No structure or alteration of grades is proposed within any FEMA designated flood zone area.*

3. Comment: The applicant is proposing to access the project via an existing driveway with an existing curb cut onto Bedford-Banksville Road, a Westchester County Roadway. The applicant should demonstrate that the existing curb cut can accommodate ingress and egress for the horse trailers and fire apparatus. A review of the curb cut should be provided by Westchester County Department of Public Works.

Response: *Comment noted. The Applicants' Professional Engineers, DiMarzo and Bereczky, have prepared plans addressing the sight distances, turning radii, and drainage improvements, at the drive intersection of Bedford Banksville Road. The plans will be provided to the Westchester County Department of Public Works after review by the Town Engineering Consultants.*

4. Comment: The applicant is proposing septic systems and wells to service the proposed facilities. Westchester County Department of Health (WCHD) Approval is required for the proposed sanitary and water supply needs of the project. Please submit WCHD subsurface sewage disposal and well approvals when obtained.

Response: *The Applicants' Engineer has performed deep hole testing in conjunction with Westchester County Health Department. Septic and Well permits will be provided to the Town as soon as they're issued by the WCHD.*

5. Comment: The project will require the removal of 497 Town-regulated trees. The majority of the trees to be removed are Black Locust, a species identified by New York State as an invasive, noxious plant.

The applicant has provided plans, which include tree removals and a tree removal list plan.

A landscape plan has been provided for the project.

The Planning Board should determine whether the proposed tree removal is appropriate for the development proposed and if any tree preservation or replacement is required in addition to the landscaping proposed by the applicant.

Response: *Comment noted. Tree removal is unavoidable both due to the proposed use but primarily to the fact that the existing trees are black locusts, an IPANE listed invasive species, and due to the fact the trees are senescent, in poor health, and therefore are prone to wind throw making them a threat to health and property. The Conservation Board has reviewed this application including the tree removal and agrees with this assessment.*

6. Comment: The project proposes 1-5 acres of disturbance, which will require the owner to obtain coverage under the NYSDEC General Permit (GP-0-20-001) for Stormwater Discharges from Construction Activities. The applicant will need to prepare a Stormwater Pollution Prevention Plan (SWPPP) and Erosion and Sediment Control Plan.

Response: *Comment noted. The Applicant acknowledges a SWPPP is required. To avoid duplication of work, the SWPPP will be prepared after the initial Site Engineering review by the Town Engineer.*

7. Comment: The applicant will need to prepare site engineering plans detailing proposed site grading, erosion and sediment controls, storm drainage improvements and mitigation, site layout, construction details, etc. Upon submission of the required documents, our office will provide a detailed review.

Response: *Comment noted, the requested information has been provided.*

The revisions depicted on the above noted plans reflect responses to comments outlined in the Town of North Castle Planning Department Staff Report, dated October 4, 2022.

<u>TOWN PLANNER STAFF REPORT OCTOBER 4, 2022</u>
<u>PROCEDURAL COMMENTS</u>

1. Comment: The Proposed Action would be classified as a Type II Action pursuant to the State Environmental Quality Review Act (SEQRA).

Response: *Comment noted. The Planning Board has initiated the SEQR Process by declaring its intent to be Lead agency.*

2. Comment: The Planning Board will need to provide a recommendation with respect to the requested Special Use Permit to the Town Board.

Response: *Comment noted. The Applicant expects that the Planning Board will make the referral at the appropriate time. It should also be noted that the Town Board cannot act to approve the Special Permit Application until the Planning Board issues a negative Declaration under SEQRA.*

3. Comment: Pursuant to Section 12-18.A of the Town Code, all site development plans submitted to the Planning Board are required to be referred to the Architectural Review Board (ARB) for review and comment.

Response: *The Applicant appeared before the Architectural Review Board on January 18, 2023, and the ARB subsequently voted unanimously to recommend approval of the project.*

4. Comment: A public hearing regarding the site plan and wetlands permits will need to be scheduled.

Response: *Comment noted. If the Planning Board and its Consultants agree, the Applicant is asking for the Public Hearing to be scheduled for the next available Planning board Meeting.*

5. Comment: Since this lot is in excess of 10 acres, the project should be referred to the Conservation Board, pursuant to Section 239-y.3.a of NY General Municipal Law.

Response: *The Applicant appeared before the Conservation board on January 17, 2023 and the Conservation Board subsequently issued a memo dated January 26, 2023 (Exhibit 1) recommending approval of the project.*

6. Comment: The property is located within a Flood Zone. A Floodplain Development Permit must be filed with the Building Department prior to the issuance of a Building Permit.

Response: *Comment noted. A Floodplain Development Permit Application will be submitted as part of the Building Department Application process. No structure or alteration of grades is proposed within any FEMA designated flood zone area.*

<u>STAFF REPORTS GENERAL COMMENTS</u>

1. Comment: A significant portion of the property is located in the Mianus River Critical Environmental Area. A Critical Environmental Area (CEA) is a State-, County- or locally designated geographic area with exceptional or unique environmental character that requires a more rigorous review than other areas. The site plan should be revised to depict the CEA boundary. The Applicant should quantify the total amount of disturbance within the CEA as well as the amount of disturbance associated with each individual feature. While construction within the CEA is not prohibited, the

Town Board and Planning Board will need to evaluate whether all, or some, of the proposed construction within the CEA should be approved.

Response: *As explained in the Applicant's original submission, per the NYS DEC "Consideration of CEAs only applies to Type I or Unlisted actions under SEQR. Type II actions such as construction of a single-family dwelling and approved lot, are not subject to such review." (Exhibit 2). In spite of this caveat, the proposed action provides the best protection for the on-site resources. The Applicants have on their volition, eliminated the proposed Servant Quarters and associated improvements including septic, drive and stormwater appurtenances. This minimizes site activities significantly and embraces the intent of the CEA process.*

2. Comment: Of the 516 trees located within the area of disturbance, 497 are proposed to be removed. In addition, of the 27 Significant Trees located within the area of disturbance, 24 are proposed to be removed. The Applicant has provided a landscape plan that includes 104 trees, 110 shrubs, grasses, and perennials.

Response: *Comment noted. Tree removal is unavoidable both due to the proposed use and primarily to the fact that the existing trees are Black Locusts, an IPANE listed invasive species and also due to the fact the trees are senescent, in poor health and therefore are prone to wind throw making them a threat to health and property. The Conservation Board has reviewed this application including the tree removal and agrees with this assessment.*

3. Comment: All proposed elevations should depict proposed building height (average grade to roof midpoint) and maximum exterior wall height (lowest grade to roof midpoint).

Response: *Comment noted. Grade Plane calculations have been prepared and the average grade has been labeled on the Architectural plans along with building height an maximum building height. This information shows that all the proposed (and existing) structures are in conformance with h Town Zoning height requirements.*

4. Comment: The submitted principal house elevations indicate that the proposed building height exceeds the maximum permitted amount of 30 feet as measured from average grade to roof mid-point. The elevations should be revised, or the Applicant will need to seek a variance from the Zoning Board of Appeals.

Response: *Comment noted. Grade plane analysis has bene provided and shows the principal structure is in conformance with the Town height regulations and therefore a variance will not be necessary.*

5. Comment: The site plans depict one of the outdoor riding areas as having a gravel surface. If the gravel surface is proposed to remain, it will need to be counted as gross land coverage. If the surface is proposed to be removed, the site plan should be revised to state such.

Response: *The depiction of the outdoor area as "gravel" is not correct. The existing surface is sand and is to remain and therefore should not be considered coverage under the Town Zoning Ordinance. The term "gravel" was used in the generic sense (designating other than impervious) by the Site Surveyor without the knowledge that the Town Zoning Ordinance denotes gravel by definition, as coverage.*

6. Comment: It appears that Town-regulated wetland and wetland buffer disturbance is not proposed as all existing paddock areas within the wetland buffer are outside of the proposed area of disturbance. The Applicant shall confirm that a wetland permit is not required.

Response: *Comment noted, the applicant confirms that a Wetland Activity Permit is not being sought with the current application.*

7. Comment: Pursuant to Section 355-14.A(2) of the Town Code, the Applicant must demonstrate that the proposed servants' quarters shall be located so that the site upon which it is situated could, in the opinion of the Planning Board, be subdivided in the future from the remainder of the parcel in such a way as to create a separate conforming lot for each dwelling unit, and provided further that each such dwelling unit shall comply with all other applicable requirements of the Town Code.

Response: *Comment noted. The applicant has determined that the Servants Quarters are not necessary at this time and will be removed from this and all subsequent submissions.*

8. Comment: Pursuant to Section 355-40.D(1) of the Town Code, the facility can't have a commercial component. The Applicant should provide the Town Board and Planning Board with a description of the proposed use of the facility and confirm there will not be a commercial component to the proposed use. The Applicant should specifically address whether any commercial activity will occur (including payment, bartering, etc.) and whether all horses are owned by the Applicant.

Response: *Comment noted. The proposed facility is for the use and enjoyment of the Applicant and their guests and will be strictly for not-for profit. No shows will be permitted, including not-for profit, and no commercial activities, including for payment or by barter, will be permitted.*

The Applicant has worked closely with neighboring property owners on an agreement to ensure that the current and future property owners will abide and conform the not-for profit status of the facility. The substance of this agreement is proposed to be monumented within the Special Permit to be issued by the Town Board.

9. Comment: The Applicant should demonstrate to the satisfaction of the Planning Board how horses will be contained to property.

Response: *Comment noted. The Applicant is a dedicated Equestrian, and the health and safety of the animals is of the utmost importance. All horses will be confined to fenced paddock areas and monitored on a continuing basis by the professional groom staff.*

10. Comment: The current main access to the property is in disrepair. In addition, adequate drainage is not provided and is negatively impacting adjacent neighbors and Bedford Banksville Road. The site plan should be revised to address these issues.

Response: *Comment noted. Engineering plans have been prepared to address the stability and drainage at the property intersection of Bedford Banksville Road. These plans will be shared and reviewed by the Town Engineering Consultant to ensure that it addresses to the extent practicable the existing deficiencies at the drive intersection.*

11. Comment: Pursuant to Section 355-40.D(2) of the Town Code, all buildings and grazing and exercising areas shall be set back from adjacent residential property boundaries at least twice the minimum distance required for residential buildings in said district, except that the Town Board may either increase or decrease this setback requirement because of relationships to neighboring properties, topography or the installation of buffer, landscaping and/or fencing. In no case, however, shall the minimum setback from adjacent residential property boundaries be less than 25 feet.

The Applicant should provide a plan and narrative regarding compliance with this section of the Town Code.

Response: *Comment noted. With the exception of the existing paddocks and indoor arena, the plans demonstrate compliance with Section 355-40.D(2).*

12. Comment: The site plan should be revised to depict all existing and proposed lighting. The lighting plan shall be designed to be residential in nature and not create impacts upon adjacent properties.

Response: *Comment noted. Proposed lighting will only consist of residential type fixtures affixed to the buildings and will be located as to not be visible from off-site locations.*

13. Comment: A detail of proposed fencing should be included for review.

Response: *Comment noted. As requested, details of the fence have been provided.*

14. Comment: Pursuant to Section 355-40.D(4) of the Town Code, horses must be fenced and shall not be permitted to graze, exercise or in any way intrude into any areas designated as controlled areas under Chapter 340, Wetlands and Watercourse Protection, of the Town Code.

Response: *Comment noted. No new or additional paddock areas are being proposed within Controlled areas per Chapter 340. There are existing paddocks within the controlled area adjacent to Bedford Banksville Road that are proposed to be maintained.*

This condition was discussed in a previous application (Kent Farrington), and it was determined by the Town Planner and Town Attorney that they would be "grandfathered" if the use was not intensified. For that reason, the number of horses on the property is being maintained at the status quo of 20, rather than the theoretical maximum of 23.

15. Comment: The Applicant should confirm that all existing structures proposed to remain have valid Certificates of Occupancy issued by the Building Department.

Response: *Comment noted. All structures other than the indoor ring are in poor repair and will be removed. The current riding ring is the subject of a Town building permit for repair and presumably a Certificate of Occupancy will be issued when the repairs ae completed.*

16. Comment: The Applicant conducted a Phase 1A Archaeological Assessment and a Phase IB Archaeological Investigation. Based upon the investigation, no archaeological sites were identified on the property.

Response: *Comment noted. The investigations are complete, and no further action is necessary.*

17. Comment: The gross land coverage exhibit does not include the gravel outdoor riding area. If the gravel area is to remain, the gravel area must be counted as gross land coverage.

Response: *Comment noted. Please see response to comment 5.*

18. Comment: The pool house elevations should depict the height of the proposed structure. If over 15 feet, the Planning Board will need to issue an accessory building special permit. In addition, the Applicant must demonstrate that the pool house is less than 25% of the gross floor area of the main house.

Response: *Comment noted. The plans have been revised to depict the overall height is below 15 feet. The Pool House is 797 sq ft, which is below 800 sq ft and below 25% of the gross floor area of the main structure, so a Special Permit will not be necessary. The proposed height is below the maximum height of 22 feet. A grade plan analysis documenting the height calculation has been provided.*

19. Comment: The proposed stable is in excess of 800 square feet and the Applicant must secure a Planning Board special permit for this structure. The elevations should be revised to demonstrate that the stable does not exceed a height of 22 feet (maximum permitted) and is less than 25% of the gross floor area of the main house.

Response: *Comment noted, the Applicant acknowledges a Special Permit from the Planning Board is necessary and is part of the current application. The Proposed Main House is 9,095 sq ft, 25% of which is 2,274 sq ft and the proposed is 4,656 sq ft which therefore exceeds 25 percent. The Applicant will discuss with the Planning Board the mechanism which this structure can be permitted as with similar past Additional Horse Special Permit Applications. A Grade Plan Analysis, documenting the height is in conformance with the 22 foot maximum, has been provided.*

20. Comment: The proposed addition of the riding ring will increase the size of this accessory structure. The Planning Board will need to issue a special permit for this addition. The elevations should be revised to depict building height. In addition, the Applicant will need to demonstrate that the indoor riding ring is less than 25% of the gross floor area of the main house.

Response: *The indoor riding arena exists and is actually being reduced in size by 590 sq ft. At 16,640 sq ft the area will exceed 25% of the main residence (2,274 sq ft) but is currently considered to a grandfathered structure by the Building Department and is currently the subject of a building permit to facilitate repairs. The current Architectural Plans depict the maximum height to the peak are under 17 feet which is well below the 22-foot maximum.*

21. Comment: The Servant's Quarters elevations should depict the height of the proposed structure. The structure can't exceed a height of 22 feet. Since this structure is over 800 square feet in size, the Planning Board will need to issue an accessory building special permit. In addition, the Applicant must demonstrate that the pool house is less than 25% of the gross floor area of the main house.

Response: *The Servants Quarters are no longer being proposed and all references to this structure have been removed from the plan set.*

22. Comment: The grooms quarters/garage elevations should depict the height of the proposed structure. The structure can't exceed a height of 22 feet. Since this structure is over 800 square feet in size, the Planning Board will need to issue an accessory building special permit. In addition, the Applicant must demonstrate that the garage is less than 25% of the gross floor area of the main house.

Response: *The Groom's Quarters are currently calculated at 2,578 sq ft although some of that may be considered to be basement space and therefore not counted toward the building FAR. A Grade Plan Analysis has been included to document the height is in conformance with the 22-foot maximum.*

23. Comment: The Applicant has submitted multiple gross floor area calculations worksheets. The worksheets shall be combined and one worksheet shall be submitted for the entire property.

Response: *Comment noted. Multiple professionals have contributed to this project. At the appropriate time the Applicant will select a single professional to act as the Project Lead and will subsequently provide a consolidated Gross Floor Area worksheet.*

24. Comment: The Applicant shall submit gross land coverage and gross floor area backup exhibits for review.

Response: *As requested these documents have been prepared by the Project Engineer and have been included for review.*

If you have questions, please do not hesitate to contact me.

Sincerely,

Jay Fain MS, PSS, CERP, CPESC
Registered Soil Scientist

Exhibit 1

TOWN OF
NORTH CASTLE
CONSERVATION
BOARD

17 BEDFORD ROAD
ARMONK, NY 10504
TEL: 914 273 0346
FAX: 914 273 3554
www.northcastleny.com

DATE: January 26, 2023

MEMO TO: Christopher Carthy, Chairman
& Planning Board members

FROM: Jane Black, Co-Chair
John Krupa, Co-Chairman
Conservation Board

RE: **Permit Approval**
263 Bedford-Banksville Road
Sec. 95.03-, Lot 2 Block 56

The applicant's representative appeared before the Conservation Board on January 17, 2023, and presented a revised plan based on feedback from the Planning Board and the Conservation Board. The applicant was before the board in 2019 with his former client who was a professional equestrian who has since sold the property because he was not permitted to have a commercial business on the property. The Conservation Board walked the property with the Planning Board in 2019.

This project is before the Board because the property is over 10 acres, which requires an automatic referral from the Planning Board to the Conservation Board. Although there are wetlands on the property, no disturbance in the wetlands or buffers are planned.

The applicant's representatives stated that the new owner is also an equestrian and competes professionally. The new owner had meetings with the surrounding neighbors to seek approval of his plan and he committed to not include a commercial use of the site. In addition, the applicant plans to remove the caretakers' quarters from the plan and arenas for the horses would be located indoors. The house will be renovated, and plans call for maintaining a private residence on the property with paddocks and training areas for the horses owned by the homeowner. The applicant is also willing to impose a deed restriction to keep the property from becoming a commercial equestrian enterprise and one that must remain as residential use.

The applicant stated that at some later date, the plan will include restoration of some of the areas that have been taken over by invasive species, but a specific plan has not been developed.

The Conservation Board was satisfied that the proposed plan preserved much of the open space and unanimously approved the proposed plan.

JM/JB/JK

cc: Mr. & Mrs. Gasiorowski
A. Kaufman, Town Planner
R. Baroni, Town Attorney
S. Roth, Town Wetlands Consultant
A. Simon, Town Clerk
J. Berra, Town Board Liaison
Conservation Board

Exhibit 2

CRITICAL ENVIRONMENTAL AREAS

Tools for Conservation in Your Community

NEW YORK STATE | Hudson River Estuary Program

What are Critical Environmental Areas?

A Critical Environmental Area (CEA) is a geographic area with exceptional or unique character with respect to one or more of the following:

- a benefit or threat to **human health**;
- a **natural setting** such as fish and wildlife habitat, forest and vegetation, open space, and areas of important aesthetic or scenic quality;
- **agricultural, social, cultural, historic, archeological, recreational,** or **educational values**; or
- an inherent **ecological, geological, or hydrological sensitivity** that may be adversely affected by any change.

CEAs are defined under subdivision 6 NYCRR 617.14(g) of the State Environmental Quality Review (SEQR) regulations. Counties and municipalities may designate specific geographic areas within their boundaries as CEAs. State agencies may also designate specific geographic areas that they own, manage, or regulate as CEAs.

The Town of Pine Plains in Dutchess County designated Stissing Mountain CEA to raise and formalize awareness of this important ecosystem. Stissing Mountain is also a defining natural landmark and viewshed for Pine Plains that contains sensitive steep slopes and protects drinking water supplies. Photo: Daniel Case.

What are the benefits of CEA designation?

CEA designation alerts landowners, developers, and regulatory agencies to features of importance or concern contained within the CEA. When evaluating potential project impacts under SEQR, the lead agency (typically the Planning Board) must specifically consider how proposed projects might affect the qualities of the designated area. CEA designation thus ensures that exceptional or unique features are not overlooked during SEQR, and that any potentially harmful impacts to them are evaluated. CEA designation can encourage more proactive planning and design to conserve critical resources, avoid hazards, and keep track of "big picture" issues like habitat connectivity and watershed protection.

What are the limitations of CEA designation?

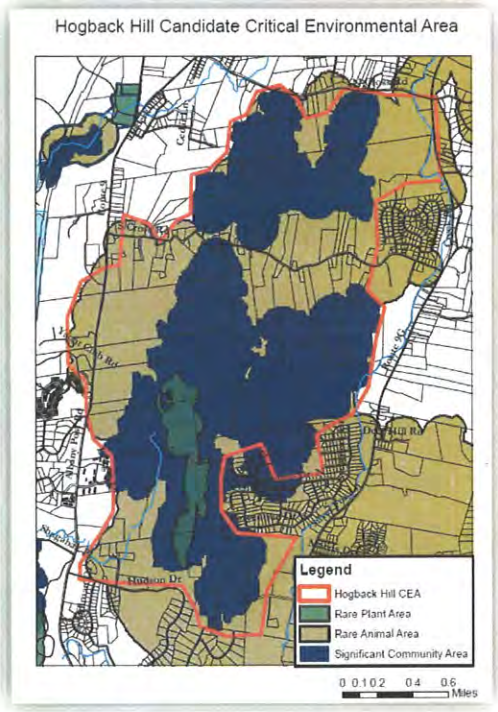
CEA Designation does not substitute for, nor does it provide, governmental protection afforded by land use controls such as zoning or land acquisition. It does not grant any agency permitting authority or other jurisdictions that did not already exist before the designation of the CEA. There are no automatic restrictions on any activities in a CEA. In making a determination of significance, the lead agency must evaluate potential impacts on attributes or resources that led to the designation of the area as a CEA. Targeted land use controls may be desirable to achieve specific protections within a CEA; however, CEA designation can be a valuable first step to achieve recognition and consideration during SEQR.

The Town of Wawarsing in Ulster County designated the Catskill-Shawangunk Greenway Corridor CEA to bring attention to a critical ecological corridor providing regional habitat connectivity between the Catskill Mountains and the Shawangunk Ridge. The corridor had previously been recognized as a high priority for conservation in the 2018 Town Open Space Plan and the 2016 New York State Open Space Conservation Plan. Photo: Laura Heady

How do lead agencies evaluate potential impacts to CEAs during SEQR?

Consideration of CEAs only applies to Type I or Unlisted actions under SEQR. Type II actions such as construction of a single-family dwelling on an approved lot are not subject to such review. The short and full Environmental Assessment Forms (EAFs) identify whether proposed actions are within or adjacent to a designated CEA. If so, the lead agency must identify and evaluate the magnitude of potential adverse impacts to the qualities of the CEA. Evaluation should include the original purpose of the designated area, its characteristics, the proposed project goals, and the proximity and extent of the proposed action in relation to the CEA boundaries. Will the proposed action affect the quantity and quality of the resource or characteristics of the designated area? As for other questions during SEQR, the lead agency may request additional information to make an informed decision. If a moderate or large impact is identified, the lead agency must decide if the impact is significant, whether the impact will be avoided or substantially mitigated, and whether or not to require an environmental impact statement. DEC's SEQR Handbook and EAF Workbooks provide additional guidance.

It is also important to note that CEA designation does not affect the classification of actions under SEQR (i.e., it does not change actions from Unlisted to Type I or otherwise). Actions within a CEA likewise do not automatically trigger a declaration of a positive impact or automatically require preparation of an environmental impact statement.



The Town of Hyde Park CAC used natural heritage data to delineate CEAs.

What is the process for designating a CEA?

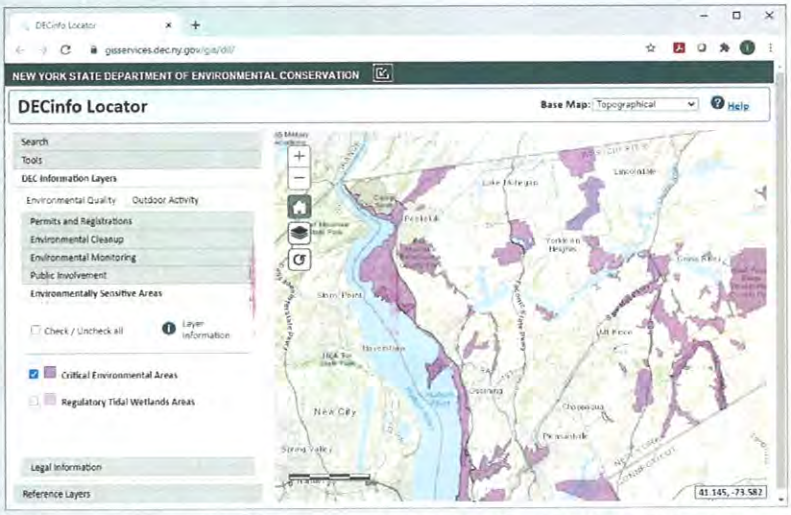
617.14(g) provides the specific procedures for designating a CEA. The regulations require preparation of a map at an appropriate scale to readily locate the CEA boundaries and a written justification supporting the designation. The municipal comprehensive plan, a natural resources inventory, or an open space plan may be valuable references in preparing materials for CEA designation. Though not required, an agency may consider first holding an informational meeting with affected landowners, other interested agencies, and the public to present and discuss the proposal. The designating agency must provide written public notice and hold a public hearing prior to the designation. The act of designating a CEA is a discretionary decision by the designating agency and is, therefore, subject to SEQR. After the agency approves the designation, the map, written justification, and proof of public hearing must be filed with the DEC Commissioner and others. The designation takes effect 30 days after these filings.

Where can I view designated CEAs?

- DEC Website
  https://www.dec.ny.gov/permits/6184.html
- DECinfo Locator
  (under Environmentally Sensitive Areas)
  https://www.dec.ny.gov/pubs/109457.html

Additional Resources

- DEC SEQR Handbook
  https://www.dec.ny.gov/permits/6188.html
- DEC EAF Workbooks
  https://www.dec.ny.gov/permits/90125.html
- Town of Wawarsing CEA video
  https://www.youtube.com/watch?v=PrB-0CvRNJM&feature=youtu.be



Current CEA boundaries are shown on the DECinfo Locator.

Survey/Site Plan,

Landscape Plan,

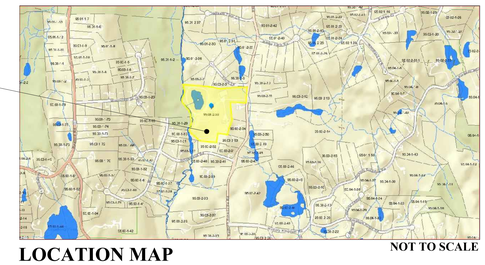
&

Tree Removal Plans

by: DiMarzo & Bereczky, Inc.

by: T.C. Merritts Land Surveyors

by: Jay Fain & Associates, LLC



LOCATION MAP NOT TO SCALE

DRAWINGS PREPARED FOR:

CHLOE & MIKHAIL GASIOROWSKI FAMILY FARM

263 BEDFORD BANKSVILLE RD.
NORTH CASTLE, NY

List of Sheets:

REGISTERED LANDSCAPE ARCHITECT VICTORIA P. LANOU 001548 STATE OF NEW YORK

DATE	SHEET	REVISION NOTES
02/10/23	CO	SUBMISSION TO PLANNING BOARD

COVER SHEET

263 BEDFORD BANKSVILLE RD.
North Castle, NY

JAY FAIN & ASSOCIATES, LLC
Environmental Consulting Services
2000 Post Rd., Ste. 201, Fairfield, CT 06824
Phone: 203-254-3156 - Email: jfassociates@optonline.net

Date: **06/13/22**

Sheet No.: CO

GENERAL NOTES

1. PROPERTY BOUNDARY, TOPOGRAPHY, TREES & EXISTING CONDITIONS FROM SURVEY BY T.C. MERRITTS LAND SURVEYORS, DATED JAN. 15, 2021, TITLED 'TOPOGRAPHY OF PROPERTY PREPARED FOR KENT FARRINGTON, LLC, SITUATE IN THE TOWN OF NORTH CASTLE, NY.'
2. PROPOSED STABLE, GARAGE, SERVANTS' QUARTERS AND RENOVATIONS OF INDOOR RING BY OLD TOWN BARNS OF PAWLING, NY
3. SITE PLAN, GRADING, DRAINAGE, ENGINEERING & SEPTIC DESIGN BY DIMARZO & BERECZKY, CIVIL ENGINEERING
4. THIS PLAN IS FOR ILLUSTRATIVE PURPOSES ONLY. FOR ZONING & COVERAGE, SEE PLANS BY DIMARZO & BERECZKY, C-0, C-1, & C-2, DATED 06/10/22
5. ALL SITE LIGHTING TO BE BUILDING MOUNTED - SEE ARCHITECTURAL PLANS

LEGEND

- Removal of Structure
- Adjusted Contour/Grade
- New Fencing / Relocated Fencing
- Existing Fencing To Remain
- Existing Tree To Remain (within Tree Removal Limit, sheet TR.1)

N
W E
S

0 20' 40' 80' 120'

SCALE: 1" = 40'-0"±

REGISTERED LANDSCAPE ARCHITECT VICTORIA P. LANDAU 001548 STATE OF NEW YORK

DATE	SHEET	REVISION NOTES
01/06/23	S.1	MAIN HOUSE FOOTPRINT CHANGE
01/11/23	S.1	REMOVE SERVANTS' QUARTERS, ADJUST GRAVEL DRIVE & MOWN PATH
02/10/23	S.1	SUBMISSION TO PLANNING BOARD

SPECIAL PERMIT - SITE PLAN

263 BEDFORD-BANKSVILLE ROAD
NORTH CASTLE, NY

JAY FAIN & ASSOCIATES, LLC
Environmental Consulting Services
134 Round Hill Road Fairfield, CT 06824
203-254-3156 - fax: 203-254-3167

Date: 06/13/22

Sheet No.: S.1

PLANT NOTES

1. SEE SHEET L.2 FOR PLANT LIST AND DETAILS
2. VERIFY THE LOCATION OF ALL UTILITY LINES PRIOR TO ANY PLANTING PIT EXCAVATION. CONTACT 'CALL BEFORE YOU DIG' 72-HOURS PRIOR TO THE COMMENCEMENT OF ANY DIGGING OPERATIONS. COORDINATE WITH PROPERTY MANAGER REGARDING OTHER UNDERGROUND SYSTEMS.
3. NOTIFY THE LANDSCAPE ARCHITECT AT LEAST FIVE (5) DAYS IN ADVANCE OF PLANT MATERIAL DELIVERY TO THE SITE.
4. LAYOUT ALL PLANT MATERIAL WITH THE LANDSCAPE ARCHITECT PRIOR TO PLANT PIT EXCAVATION. SET UP OF ALL MATERIAL IN BEDS REQUIRED FOR OWNERS AND LANDSCAPE ARCHITECTS APPROVAL PRIOR TO PLANTING. SEE PLAN FOR PLANT LAYOUT. IF ANY DISCREPANCY OCCURS BETWEEN THE QUANTITIES CALLED FOR ON THE PLAN, NOTIFY THE LANDSCAPE ARCHITECT PRIOR TO BID.
5. ALL PLANT MATERIAL IS TO CONFORM TO THE REQUIREMENTS OF THE STANDARDS OF THE AMERICAN ASSOCIATION OF NURSERYMEN FOR EXTRA HEAVY GRADE UNLESS OTHERWISE SPECIFIED, TRUE TO NAME AND SIZE. INVESTIGATE SOURCES OF SUPPLY AND BE CERTAIN IT WILL BE POSSIBLE TO PROVIDE ALL PLANT MATERIALS SPECIFIED IN THE QUALITY AND QUANTITY REQUIRED PRIOR TO BIDDING.
6. ANY PLANT REQUIRED UNDER THIS CONTRACT THAT IS DEAD, DYING, NOT TRUE TO NAME OR SIZE,AS SPECIFIED, OR NOT IN SATISFACTORY GROWTH, OR HAVING BRANCHED OR DEFORMED STRUCTURE DUE TO LOSS OF LIMBS OR BRANCHED AS DETERMINED BY THE LANDSCAPE ARCHITECT, THAT PLANT MUST BE REMOVED FROM THE PROJECT SITE AND REPLACED WITH AN APPROVED PLANT OF EQUAL SIZE AND SPECIES. PLANT VARIETY AND SIZE SUBSTITUTIONS WILL NOT BE PERMITTED UNLESS PROVED THAT THE SPECIFIED PLANT MATERIAL IS UNATTAINABLE OR CANNOT MEET SPECIFICATION REQUIREMENTS, THEN THE USE OF THE NEAREST EQUIVALENT SIZE OR VARIETY WILL BE CONSIDERED. PLANT MATERIAL LARGER THAN SPECIFIED MAY BE USED AT NO INCREASE IN COST. PROPOSED SUBSTITUTIONS MUST RECEIVE THE LANDSCAPE ARCHITECT'S AUTHORIZATION PRIOR TO BID AND PRIOR TO PURCHASE.
7. STAKE TREES ONLY AS NECESSARY TO ENSURE STABILITY.
8. ALL PLANT MATERIALS ARE TO BE GUARANTEED FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE AS DETERMINED BY THE LANDSCAPE ARCHITECT OR PROJECT MANAGER.
9. RESTORE ALL DISTURBED OR DAMAGED AREAS RESULTING FROM PLANTING OPERATIONS TO ORIGINAL CONDITIONS.
10. SEE PLAN FOR TREE LOCATIONS, SET UP TREES FOR APPROVAL FROM OWNER AND LANDSCAPE ARCHITECT PRIOR TO INSTALLATION. RESEED ANY DISTURBED TURF AREAS WITH APPROVED MIX, MULCH WITH CHOPPED STRAW. INSTALL SEEDING IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATION.

DATE	SHEET	REVISION NOTES
12-6-22		REVISED MAIN HOUSE SIZE REDUCTION
1-11-23		REMOVE SERVANTS QUARTERS / GRAVEL DRIVE
2-10-23	L.1	SUBMISSION TO PLANNING BOARD

REGISTERED LANDSCAPE ARCHITECT VICTORIA P. LANDAU 001548 STATE OF NEW YORK

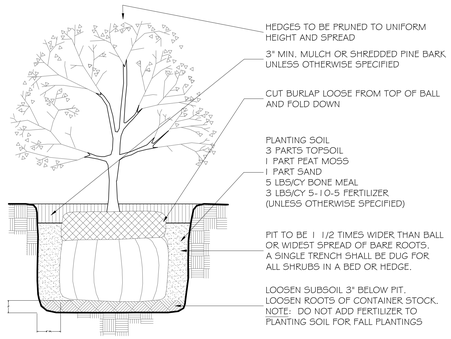
SPECIAL PERMIT - LANDSCAPE PLAN

263 BEDFORD-BANKSVILLE ROAD
NORTH CASTLE, NY

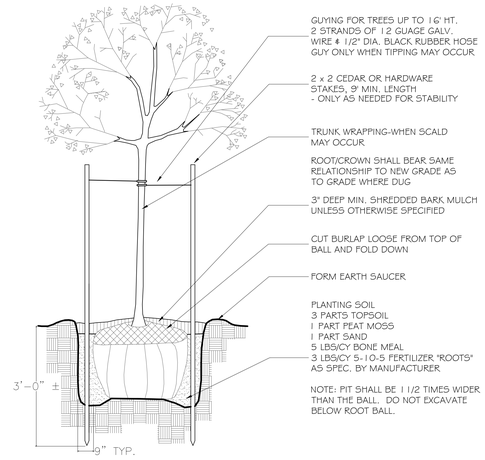
JAY FAIN & ASSOCIATES, LLC
Environmental Consulting Services
134 Round Hill Road Fairfield, CT 06824
203-254-3156 - fax: 203-254-3167

Date: DATE 06/2022

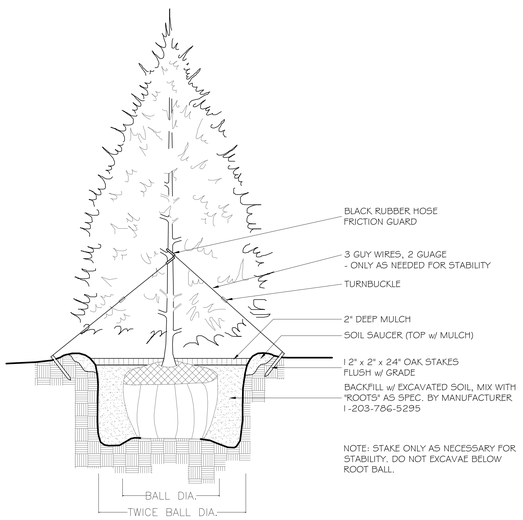
Sheet No.: L.1



1 **SHRUB PLANTING SECTION - NTS**



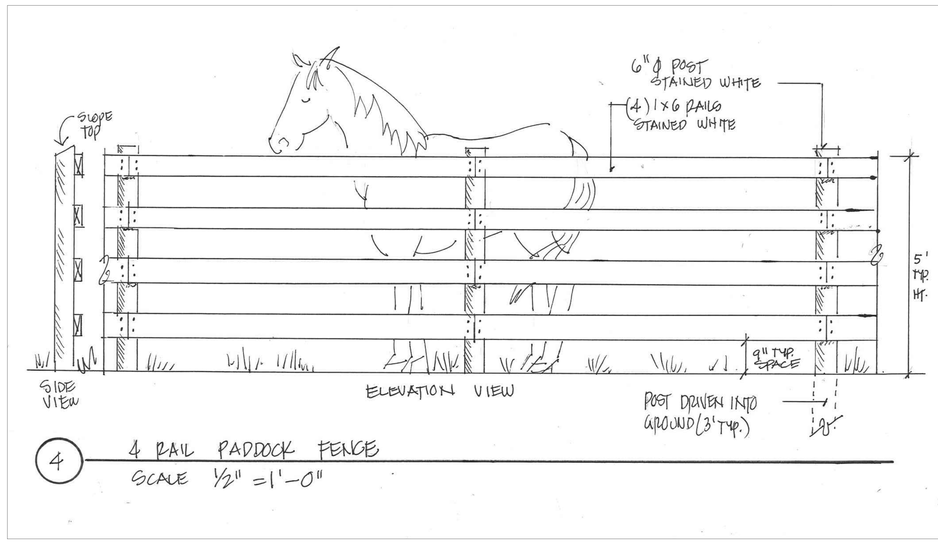
2 **TREE PLANTING SECTION - NTS**



3 **EVERGREEN TREE PLANTING SECTION - NTS**

PLANT LIST

Quan.	Sym.	Botanical/ Common Name	Size/ Root	Remark
TREES				
13	AS	Acer saccharum 'Green Mountain'	2½-3" cal./BB	Drive alle
8	QP	Quercus palustris / Pin Oak	2½-3" cal. / BB	Drive alle
4	NS	Nyssa sylvatica / Black Gum	2½-3" cal. / BB	At stable
6	UA	Ulmus americana 'Princeton'	2½-3" cal. / BB	Arena access
14	SP	Picea abies/ Norway Spruce	8-10' Ht / BB	screening
50	GG	Thuja plicata 'Green Giant' / Green Giant Arborvitae	8-10' Ht. / BB	screening
6	CF	Cornus florida / Flowering Dogwood	2-2½" cal./ BB	flowering
3	BN	Betula nigra 'Heritage'/ River Birch	10-12'ht/clump BB	courtyard
3	AC	Amelanchier candensis/ Shadblow	7-8' clump/BB	flowering
SHRUBS				
6	CA	Cletha alnifolia/ Summerweet	5 gal	pool
2	HQ	Hydrangea quercifolia/ Oakleaf Hydrangea	4 ft /BB	pool
6	LA	Leucothoe axillaris/ Coastal Leucothoe	5 gal	house
5	PLS	Prunus l. schipkanenesis/ Schip Laurel	4-5' / BB	dumpster
48	IG	Ilex glabra' Shamrock' / Inkberry	7 gal cont.	hedges
2	IDL	Ilex x 'Dragon Lady' /Holly	6-7'Ht/ BB	house
16	ITV	Itea virginica ' Henry's Garnet'/ Virginia Sweetspire	5 gal cont.	Indoor and house
16	PJM	Rhododendron PJM	5 gal	courtyard
9	SO	Spirea t. 'Ogon'	5 gal	house
GRASSES				
12	Pv	Panicum virgatum 'Heavy Metal' / Switchgrass	3 gal. cont.	Accents, groups by barn
12	Pv2	Panicum v. ' Ruby Ribbons'/ Switchgrass	3 gal. cont.	House and indoor
PERENNIALS/FERNS				
20	P	Penstemon digitalis/ Smooth Penstemon	1 gal	House
20	P	Chelone glabra/ Turrtle head	1 gal	house
20	F	Polystichum acrostichoides / Christmas Fern	1 gal.	house



4 **4 RAIL PADDOCK FENCE**
SCALE 1/2" = 1'-0"

REGISTERED LANDSCAPE ARCHITECT VICTORIA P. LANDAU 001548 STATE OF NEW YORK

DATE	SHEET	REVISION NOTES
02/10/23	L.2	ADDED 4-RAIL PADDOCK FENCE
02/10/23	L.2	SUBMISSION TO PLANNING BOARD

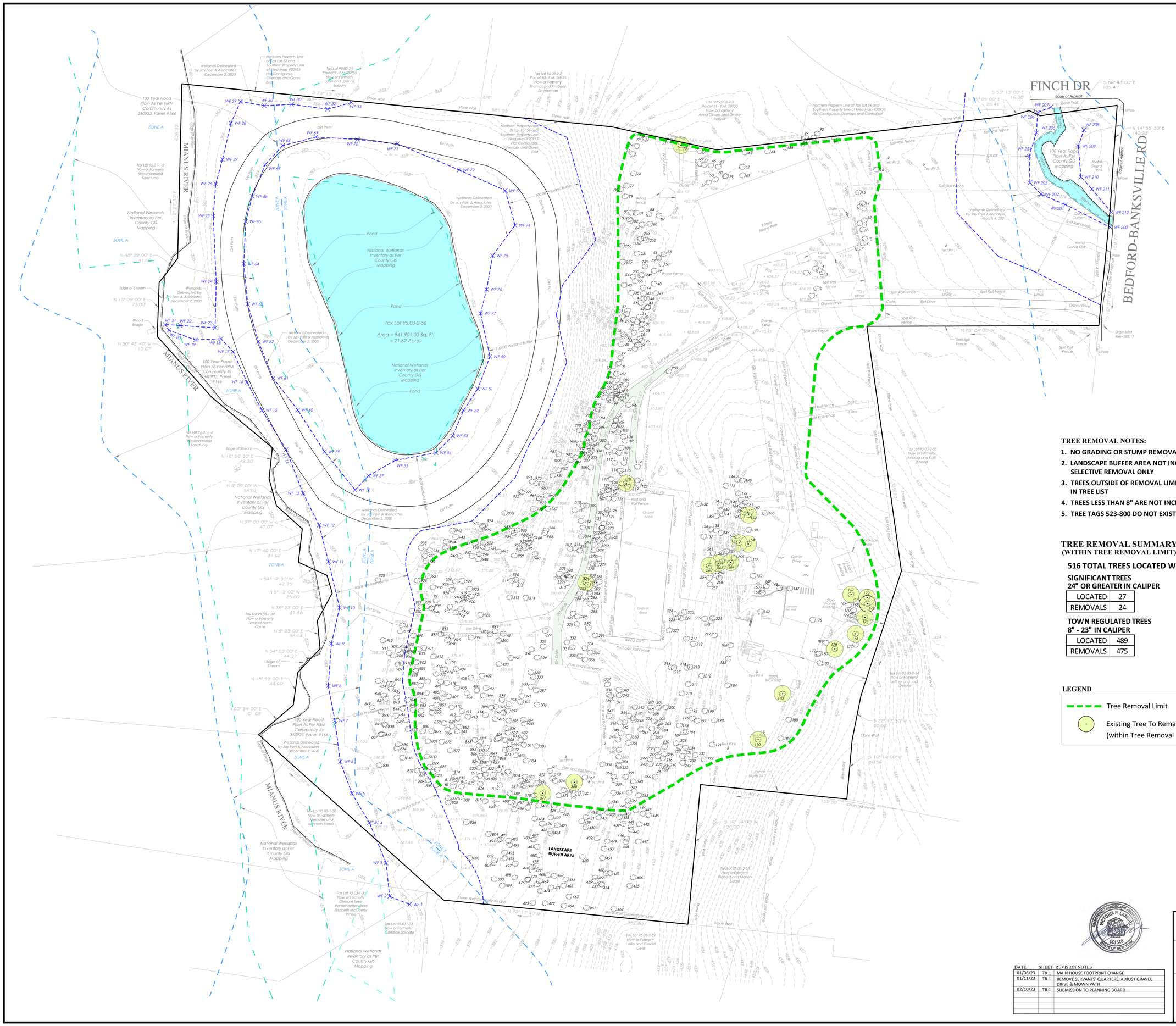
SPECIAL PERMIT
- LANDSCAPE DETAILS

263 BEDFORD BANKSVILLE RD.
North Castle, NY

JAY FAIN & ASSOCIATES, LLC
Environmental Consulting Services
2000 Post Rd., Ste. 201, Fairfield, CT 06824
Phone: 203-254-3156 - Email: jfassociates@optonline.net

Date: **06/13/22**

Sheet No.: **L.2**



TREE REMOVAL NOTES:

1. NO GRADING OR STUMP REMOVAL ON STEEP SLOPES
2. LANDSCAPE BUFFER AREA NOT INCLUDED IN TREE LIST, SELECTIVE REMOVAL ONLY
3. TREES OUTSIDE OF REMOVAL LIMIT ARE NOT INCLUDED IN TREE LIST
4. TREES LESS THAN 8" ARE NOT INCLUDED IN TREE LIST
5. TREE TAGS 523-800 DO NOT EXIST

TREE REMOVAL SUMMARY TABLE
(WITHIN TREE REMOVAL LIMIT)

516 TOTAL TREES LOCATED WITHIN LIMIT

SIGNIFICANT TREES
24" OR GREATER IN CALIPER

LOCATED	27
REMOVALS	24

TOWN REGULATED TREES
8" - 23" IN CALIPER

LOCATED	489
REMOVALS	475

LEGEND

- Tree Removal Limit
- Existing Tree To Remain (within Tree Removal Limit)

N

W E

S

0 20' 40' 80' 120'

SCALE: 1" = 40'-0"±

REGISTERED LANDSCAPE ARCHITECT VICTORIA P. LAMONT 001548 STATE OF NEW YORK

DATE	SHEET	REVISION NOTES
01/06/23	TR.1	MAIN HOUSE FOOTPRINT CHANGE
01/11/23	TR.1	REMOVE SERVANTS' QUARTERS, ADJUST GRAVEL DRIVE & MOWN PATH
02/10/23	TR.1	SUBMISSION TO PLANNING BOARD

SPECIAL PERMIT
- TREE REMOVALS

263 BEDFORD-BANKSVILLE ROAD
NORTH CASTLE, NY

JAY FAIN & ASSOCIATES, LLC
Environmental Consulting Services
134 Round Hill Road Fairfield, CT 06824
203-254-3156 - fax: 203-254-3167

Date: **06/13/22**

Sheet No.: **TR.1**

TREE SURVEY / TREE REMOVALS
Sorted by DBH: 8" - 23" Town Regulated Trees

Tree Count Within Limit	Tree Tag #	Common Name	Scientific Name	DBH (dia. Inches)	Structure	Condition	Health	Notes	X - Remove
1	29	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
2	35	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
3	40	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
4	45	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
5	60	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
6	70	Shagbark Hickory	Carya ovata	8	S	G	H		
7	80	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
8	87	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
9	108	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
10	116	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
11	128	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
12	138	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
13	140	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
14	159	Shagbark Hickory	Carya ovata	8	S	G	H		
15	160	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
16	163	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
17	168	Japanese Maple	Acer palmatum	8	S	G	H	Ornamental	X
18	169	Japanese Maple	Acer palmatum	8	TW	G	H	Ornamental, too close to building	X
19	173	Japanese Maple	Acer palmatum	8	S	G	H	Ornamental	
20	178	Sugar Maple	Acer saccarum	8	S	F	A		
21	180	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
22	199	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
23	210	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
24	221	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
25	230	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
26	231	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
27	235	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
28	236	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
29	239	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
30	244	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
31	251	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
32	253	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
33	258	Shagbark Hickory	Carya ovata	8	S	F	A		X
34	262	American Elm	Ulmus americana	8	S				X
35	263	Shagbark Hickory	Carya ovata	8	S				
36	270	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
37	274	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
38	283	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
39	290	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
40	295	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
41	301	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
42	308	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
43	309	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
44	315	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
45	316	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
46	318	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
47	322	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
48	324	Red Maple	Acer rubrum	8	S	P	A	NYS Invasive Species in decline	
49	333	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
50	338	Red Maple	Acer rubrum	8	S	F	A		X
51	339	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
52	340	Red Maple	Acer rubrum	8	S	F	A		X
53	348	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
54	349	Black Locust	Robinia pseudoacacia	8	TW	P	A	NYS Invasive Species in decline	X
55	352	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
56	358	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
57	360	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
58	374	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
59	401	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
60	405	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
61	406	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
62	407	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
63	413	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
64	417	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
65	435	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
66	488	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
67	508	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
68	516	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
69	810	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
70	814	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
71	816	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
72	820	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
73	822	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
74	824	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
75	825	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
76	829	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
77	860	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
78	861	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
79	864	Black Cherry	Prunus serotina	8	S	P	A		X
80	866	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
81	869	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
82	875	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
83	878	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
84	884	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
85	888	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
86	893	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
87	895	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
88	898	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
89	901	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
90	915	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
91	917	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
92	918	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
93	922	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
94	950	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
95	953	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
96	955	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
97	956	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
98	957	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
99	958	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
100	960	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
101	962	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
102	963	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
103	966	Black Locust	Robinia pseudoacacia	8	S	P	A	NYS Invasive Species in decline	X
104	6	Black Cherry	Prunus serotina	10	S	P	SA	Broken Leader, Barn hazard	X
105	19	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
106	21	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
107	27	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
108	28	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
109	30	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
110	34	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
111	36	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
112	37	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
113	52	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
114	54	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
115	58	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
116	66	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
117	67	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
118	72	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
119	81	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
120	86	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
121	96	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
122	107	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
123	109	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
124	110	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
125	115	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
126	130	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
127	131	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
128	134	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
129	139	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
130	153	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
131	176	Sugar Maple	Acer saccarum	10	S	F	A		
132	177	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
133	179	Sugar Maple	Acer saccarum	10	S	P	SA	Girdles	X
134	182	Black Locust	Robinia pseudoacacia	10	TW	P	A	NYS Invasive Species in decline	X
135	185	American Elm	Ulmus americana	10	L	P	SA	Topped	X
136	188	Black Locust	Robinia pseudoacacia	10	S	P	A		X
137	192	Black Locust	Robinia pseudoacacia	10	S	P	A		X
138	198	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
139	205	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
140	206	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
141	207	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
142	212	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
143	216	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
144	222	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
145	228	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
146	229	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
147	241	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
148	243	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
149	246	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
150	248	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
151	252	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
152	254	Black Locust	Robinia pseudoacacia	10	TW	P	A	NYS Invasive Species in decline	X
153	261	Black Cherry	Prunus serotina	10	S/L	F	A		X
154	269	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
155	280	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
156	284	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
157	292	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
158	294	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
159	299	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
160	306	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
161	307	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
162	310	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
163	311	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
164	313	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
165	314	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
166	317	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
167	320	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
168	326	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
169	332	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
170	334	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
171	343	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
172	344	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
173	350	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
174	359	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
175	363	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
176	364	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
177	366	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
178	371	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
179	382	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
180	383	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
181	385	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
182	397	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
183	400	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
184	409	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
185	411	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
186	419	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
187	434	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
188	436	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
189	507	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
190	509	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
191	510	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
192	807	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
193	808	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
194	812	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
195	828	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
196	830	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
197	857	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
198	872	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
199	879	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
200	896	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
201	897	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
202	913	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
203	927	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
204	951	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
205	954	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
206	959	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
207	961	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
208	964	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
209	991	Black Locust	Robinia pseudoacacia	10	S	P	A	NYS Invasive Species in decline	X
210	22	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
211	24	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
212	26	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
213	31	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
214	42	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
215	46	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
216	51	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
217	53	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
218	57	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
219	59	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
220	61	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
221	65	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
222	68	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
223	82	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
224	97	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
225	98	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
226	112	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
227	120	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
228	125	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
229	126	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
230	155	Sugar Maple	Acer saccarum	12	S	G	H	Good	
231	165	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
232	196	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
233	197	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
234	200	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
235	202	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
236	213	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
237	220	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
238	223	Black Locust	Robinia pseudoacacia	12	TW	P	A	NYS Invasive Species in decline	X
239	226	Black Locust	Robinia pseudoacacia	12	TW	P	A	NYS Invasive Species in decline	X
240	232	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
241	233	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
242	234	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
243	238	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
244	240	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
245	242	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
246	249	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
247	260	Shagbark Hickory	Carya ovata	12					
248	291	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
249	300	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
250	319	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
251	321	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
252	330	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
253	347	Red Maple	Acer rubrum	12	S	F	A		X
254	351	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
255	355	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
256	361	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
257	367	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
258	395	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
259	398	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
260	399	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
261	403	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
262	408	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
263	415	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
264	416	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
265	418	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
266	485	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
267	486	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
268	487	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
269	489	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
270	490	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
271	505	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
272	506	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
273	512	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
274	515	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
275	811	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
276	819	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
277	821	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
278	823	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
279	858	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
280	859	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
281	863	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
282	870	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
283	873	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
284	874	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
285	876	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
286	881	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
287	890	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
288	891	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
289	894	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
290	900	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
291	925	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
292	926	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
293	930	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
294	939	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
295	941	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
296	949	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
297	965	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
298	994	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
299	996	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
300	999	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
301	1000	Black Locust	Robinia pseudoacacia	12	S	P	A	NYS Invasive Species in decline	X
302	2	Black Locust	Robinia pseudoacacia	14	TW	P	A	NYS Invasive Species in decline	X
303	18	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
304	23	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
305	33	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
306	38	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
307	39	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
308	41	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
309	71	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
310	74	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
311	76	Black Cherry	Prunus serotina	14	TR	F	A		X
312	78	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
313	84	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
314	85	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
315	99	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
316	100	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
317	106	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
318	113	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
319	114	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
320	118	Shagbark Hickory	Carya ovata	14	TR	F	A	Save	
321	124	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
322	129	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
323	135	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
324	136	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
325	142	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
326	145	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
327	154	Shagbark Hickory	Carya ovata	14	S	G	H	Good	
328	162	Yew	Tasus cuspidada	14	TR	F	A	Shrub, overgrown ornamental	X
329	167	Japanese Maple	Acer palmatum	14	S	G	H	Ornamental	
330	187	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
331	193	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
332	209	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
333	215	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
334	217	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
335	218	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
336	219	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
337	224	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
338	225	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
339	245	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
340	255	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
341	259	Black Cherry	Prunus serotina	14	S	P	A		X
342	271	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
343	272	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
344	275	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
345	276	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
346	279	Black Locust	Robinia pseudoacacia	14	TW	P	A	NYS Invasive Species in decline	X
347	281	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
348	286	Black Locust	Robinia pseudoacacia	14	TW	P	A	NYS Invasive Species in decline	X
349	289	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
350	293	Norway Maple	Picea abies	14	S	P	A		X
351	303	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
352	323	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
353	346	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
354	370	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
355	375	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
356	379	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
357	380	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
358	384	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
359	393	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
360	394	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
361	396	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
362	402	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
363	420	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
364	504	Black Locust	Robinia pseudoacacia	14	TW	P	A	NYS Invasive Species in decline	X
365	511	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
366	815	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
367	817	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
368	827	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
369	867	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
370	902	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
371	914	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
372	919	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
373	920	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
374	921	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
375	967	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
376	989	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
377	990	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
378	995	Black Locust	Robinia pseudoacacia	14	S	P	A	NYS Invasive Species in decline	X
379	16	Black Locust	Robinia pseudoacacia	16	S	P	A	NYS Invasive Species in decline	X
380	17	Black Locust	Robinia pseudoacacia	16	S	P	A	NYS Invasive Species in decline	X
381	25	Black Locust	Robinia pseudoacacia	16	S	P	A	NYS Invasive Species in decline	X
382	44	Black Locust	Robinia pseudoacacia	16	S	P	A	NYS Invasive Species in decline	X
383	77	Black Locust	Robinia pseudoacacia	16	S	P	A	NYS Invasive Species in decline	X
384	88	Black Locust	Robinia pseudoacacia	16	S	P	A	NYS Invasive Species in decline	X
385	95	Black Locust	Robinia pseudoacacia	16	S	P	A	NYS Invasive Species in decline	X
386	104	Black Locust	Robinia pseudoacacia	16	S	P	A	NYS Invasive Species in decline	X
387	105	Black Locust	Robinia pseudoacacia	16	S	P	A	NYS Invasive Species in decline	X
388	121	Black Locust	Robinia pseudoacacia	16	S	P	A	NYS Invasive Species in decline	X
389	144	Black Locust	Robinia pseudoacacia	16	S	P	A	NYS Invasive Species in decline	X
390	149	Hemlock	Tsuga canadensis	16	TW	F	A	Planted at house	X
391	184	Black Locust	Robinia pseudoacacia	16	S	P	A	NYS Invasive Species in decline	X
392	195	Black Locust	Robinia pseudoacacia	16	S	P	A	NYS Invasive Species in decline	X
393	214	Black Locust	Robinia pseudoacacia	16	TW	P	A	NYS Invasive Species in decline	X
394	268	Black Locust	Robinia pseudoacacia	16	S	P	A	NYS Invasive Species in decline	X
395	277	Black Locust	Robinia pseudoacacia	16	S	P	A	NYS Invasive Species in decline	X
396	278	Black Locust	Robinia pseudoacacia	16	S	P	A	NYS Invasive Species in decline	X
397	282	Black Locust	Robinia pseudoacacia	16	TR	P	A	NYS Invasive Species in decline	X
398	331	Black Locust	Robinia pseudoacacia	16	S	P	A	NYS Invasive Species in decline	X
399	342	Black Locust	Robinia pseudoacacia	16	S	P	A	NYS Invasive Species in decline	X
400	345	Black Locust	Robinia pseudoacacia	16	S	P	A	NYS Invasive Species in decline	X
401	354	Black Locust	Robinia pseudoacacia	16	S	P	A	NYS Invasive Species in decline	X
402	362	Black Locust	Robinia pseudoacacia	16	S	P	A	NYS Invasive Species in decline	X
403	365	Black Locust	Robinia pseudoacacia	16	S	P	A	NYS Invasive Species in decline	X
404	388	Black Locust	Robinia pseudoacacia	16	S	P	A	NYS Invasive Species in decline	X
405	389	Black Locust	Robinia pseudoacacia	16	S	P	A	NYS Invasive Species in decline	X
406	391	Black Locust	Robinia pseudoacacia	16	S	P	A	NYS Invasive Species in decline	X
407	392	Black Locust	Robinia pseudoacacia	16	S	P	A	NYS Invasive Species in decline	X
408	414	Black Locust	Robinia pseudoacacia	16	S	P	A	NYS Invasive Species in decline	X
409	502	Black Locust	Robinia pseudoacacia	16	S	P	A	NYS Invasive Species in decline	X
410	503	Black Locust	Robinia pseudoacacia	16	S	P	A	NYS Invasive Species in decline	X
411	513	Black Locust	Robinia pseudoacacia	16	S	P	A	NYS Invasive Species in decline	X
412	877	Black Locust	Robinia pseudoacacia	16	S	P	A	NYS Invasive Species in decline	X
413	892	Black Locust	Robinia pseudoacacia	16	S	P	A	NYS Invasive Species in decline	X
414	931	Black Locust	Robinia pseudoacacia	16	S	P	A	NYS Invasive Species in decline	X
415	940	Black Locust	Robinia pseudoacacia	16	S	P	A	NYS Invasive Species in decline	X
416	993	Black Locust	Robinia pseudoacacia	16	S	P	A	NYS Invasive Species in decline	X
417	20	Black Locust	Robinia pseudoacacia	18	S	P	A	NYS Invasive Species in decline	X
418	32	Black Locust	Robinia pseudoacacia	18	S	P	A	NYS Invasive Species in decline	X
419	43	Black Locust	Robinia pseudoacacia	18	S	P	A	NYS Invasive Species in decline	X
420	48	Black Locust	Robinia pseudoacacia	18	S	P	A	NYS Invasive Species in decline	X
421	49	Black Locust	Robinia pseudoacacia	18	S	P	A	NYS Invasive Species in decline	X
422	50	Black Locust	Robinia pseudoacacia	18	S	P	A	NYS Invasive Species in decline	X
423	69	Black Locust	Robinia pseudoacacia	18	S	P	A	NYS Invasive Species in decline	X
424	73	Black Locust	Robinia pseudoacacia	18	S	P	A	NYS Invasive Species in decline	X
425	101	Black Locust	Robinia pseudoacacia	18	S	P	A	NYS Invasive Species in decline	X
426	103	Black Locust	Robinia pseudoacacia	18	S	P	A	NYS Invasive Species in decline	X
427	117	Black Locust	Robinia pseudoacacia	18	S	P	A	NYS Invasive Species in decline	X
428	119	Black Locust	Robinia pseudoacacia	18	S	P	A	NYS Invasive Species in decline	X
429	122	Black Locust	Robinia pseudoacacia	18	S	P	A	NYS Invasive Species in decline	X
430	143	Black Locust	Robinia pseudoacacia	18	S	P	A	NYS Invasive Species in decline	X
431	147	Aborvitae	Thuja sp.	18	TR	G	A	Ornamental	X
432	150	Hemlock	Tsuga canadensis	18	S	F	A	Planted at house	X
433	171	Japanese Maple	Acer palmatum	18	S	G	H	Ornamental	
434	201	Black Locust	Robinia pseudoacacia	18	S	P	A	NYS Invasive Species in decline	X
435	264	Shagbark Hickory	Carya ovata	18	S				
436	265	Black Locust	Robinia pseudoacacia	18	S	P	A	NYS Invasive Species in decline	X
437	273	Black Locust	Robinia pseudoacacia	18	S	P	A	NYS Invasive Species in decline	X
438	335	Black Locust	Robinia pseudoacacia	18	S	P	A	NYS Invasive Species in decline	X
439	353	Black Locust	Robinia pseudoacacia	18	S	P	A	NYS Invasive Species in decline	X
440	373	Black Locust	Robinia pseudoacacia	18	S	P	A	NYS Invasive Species in decline	X
441	376	Black Locust	Robinia pseudoacacia	18	S	P	A	NYS Invasive Species in decline	X
442	377	White Oak	Quercus alba	18	S	G	A		
443	378	Black Locust	Robinia pseudoacacia	18	S	P	A	NYS Invasive Species in decline	X
444	387	Black Locust	Robinia pseudoacacia	18	S	P	A	NYS Invasive Species in decline	X
445	390	Black Locust	Robinia pseudoacacia	18	S	P	A	NYS Invasive Species in decline	X
446	428	Black Locust	Robinia pseudoacacia	18	S	P	A	NYS Invasive Species in decline	X
447	517	Black Locust	Robinia pseudoacacia	18	S	P	A	NYS Invasive Species in decline	X
448	855	Black Locust	Robinia pseudoacacia	18	S	P	A	NYS Invasive Species in decline	X
449	924	Black Locust	Robinia pseudoacacia	18	S	P	A	NYS Invasive Species in decline	X
450	923	Black Locust	Robinia pseudoacacia	18	S	P	A	NYS Invasive Species in decline	X
451	946	Black Locust	Robinia pseudoacacia	18	S	P	A	NYS Invasive Species in decline	X
452	947	Black Locust	Robinia pseudoacacia	18	S	P	A	NYS Invasive Species in decline	X
453	4	Black Locust	Robinia pseudoacacia	20	S	P	A	NYS Invasive Species in decline	X
454	13	Black Locust	Robinia pseudoacacia	20	S	P	A	NYS Invasive Species in decline	X
455	62	Black Locust	Robinia pseudoacacia	20	S	P	A	NYS Invasive Species in decline	X
456	79	Black Locust	Robinia pseudoacacia	20	S	P	A	NYS Invasive Species in decline	X
457	102	Black Locust	Robinia pseudoacacia	20	S	P	A	NYS Invasive Species in decline	X
458	123	Black Locust	Robinia pseudoacacia	20	TW	P	A	NYS Invasive Species in decline	X
459	146	Black Locust	Robinia pseudoacacia	20	S	P	A	NYS Invasive Species in decline	X
460	148	Aborvitae	Thuja sp.	20	S	G	A	Ornamental	X
461	151	Hemlock	Tsuga canadensis	20	S	F	A	Planted at house	X
462	152	Black Locust	Robinia pseudoacacia	20	S	P	A	NYS Invasive Species in decline	X
463	158	Black Locust	Robinia pseudoacacia	20	TW			NYS Invasive Species in decline	X
464	164	Black Locust	Robinia pseudoacacia	20	S	P	A	NYS Invasive Species in decline	X
465	166	Japanese Maple	Acer palmatum	20	S	G	H	Ornamental	X
466	189	Black Locust	Robinia pseudoacacia	20	S	P	A	NYS Invasive Species in decline	X
467	327	Black Locust	Robinia pseudoacacia	20	TR	P	A	NYS Invasive Species in decline	X
468	328	Black Locust	Robinia pseudoacacia	20	S	P	A	NYS Invasive Species in decline	X
469	341	Black Locust	Robinia pseudoacacia	20	S	P	A	NYS Invasive Species in decline	X
470	372	Black Locust	Robinia pseudoacacia	20	S	P	A	NYS Invasive Species in decline	X
471	421	Black Cherry	Prunus serotina	20			Dead		X
472	501	Black Locust	Robinia pseudoacacia	20	S	P	A	NYS Invasive Species in decline	X
473	3	Black Locust	Robinia pseudoacacia	22	S	P	A	NYS Invasive Species in decline	X
474	5	American Elm	Ulmus americana	22	L	P	SA	Leaning	X
475	10	Black Locust	Robinia pseudoacacia	22	S	P	A	NYS Invasive Species in decline	X
476	11	Black Locust	Robinia pseudoacacia	22	S	P	A	NYS Invasive Species in decline	X
477	47	Black Locust	Robinia pseudoacacia	22	S	P	A	NYS Invasive Species in decline	X
478	55	Black Locust	Robinia pseudoacacia	22	S	P	A	NYS Invasive Species in decline	X
479	63	Black Locust	Robinia pseudoacacia	22	S	P	A	NYS Invasive Species in decline	X
480	94	Black Locust	Robinia pseudoacacia	22	S	P	A	NYS Invasive Species in decline	X
481	133	Black Locust	Robinia pseudoacacia	22	S	P	A	NYS Invasive Species in decline	X
482	157	Ash	FraXinus americana	22			Dead	Hazard	X
483	211	Black Locust	Robinia pseudoacacia	22	TW	P	A	NYS Invasive Species in decline	X
484	329	Black Locust	Robinia pseudoacacia	22	S	P	A	NYS Invasive Species in decline	X
485	368	White Oak	Quercus alba	22	M	G	A		
486	369	Black Locust	Robinia pseudoacacia	22	S	P	A	NYS Invasive Species in decline	X
487	386	Black Locust	Robinia pseudoacacia	22	S	P	A	NYS Invasive Species in decline	X
488	952	Black Locust	Robinia pseudoacacia	22	S	P	A	NYS Invasive Species in decline	X
489	998	Black Locust	Robinia pseudoacacia	22	S	P	A	NYS Invasive Species in decline	X

TREE SURVEY / TREE REMOVALS
Sorted by DBH: 24" DBH & Greater, Significant Trees

Tree Count Within Limit	Tree Tag #	Common Name	Scientific Name	DBH (dia. Inches)	Structure	Condition	Health	Notes	X - Remove
1	8	Black Locust	Robinia pseudoacacia	24	S	P	A	NYS Invasive Species in decline	X
2	12	Black Locust	Robinia pseudoacacia	24	S	P	A	NYS Invasive Species in decline	X
3	75	Black Cherry	Prunus serotina	24	S	F	A		X
4	137	Black Locust	Robinia pseudoacacia	24	S	P	A	NYS Invasive Species in decline	X
5	186	Black Birch	Betula lenta	24	TW/L	F	A	Close to new house, Leaning	X
6	460	Black Locust	Robinia pseudoacacia	24	S	P	A	NYS Invasive Species in decline	X
7	1	Black Locust	Robinia pseudoacacia	26	S	P	A	NYS Invasive Species in decline	X
8	15	Black Locust	Robinia pseudoacacia	26	S	P	A	NYS Invasive Species in decline	X
9	64	Black Locust	Robinia pseudoacacia	26	S	P	A	NYS Invasive Species in decline	X
10	111	Black Locust	Robinia pseudoacacia	26	S	P	A	NYS Invasive Species in decline	X
11	132	Black Locust	Robinia pseudoacacia	26	S	P	A	NYS Invasive Species in decline	X
12	141	Black Locust	Robinia pseudoacacia	26	S	P	A	NYS Invasive Species in decline	X
13	172	Japanese Maple	Acer palmatum	26	S	G	H	Ornamental	
14	191	Black Locust	Robinia pseudoacacia	26	S	P	A	NYS Invasive Species in decline	X
15	227	American Elm	Ulmus americana	26	TR	F	A		X
16	337	Poplar	Populus sp.	26	S	F	A		X
17	7	Black Locust	Robinia pseudoacacia	28	S	P	A	NYS Invasive Species in decline	X
18	161	Black Locust	Robinia pseudoacacia	28	S	P	A	NYS Invasive Species in decline	X
19	997	Black Locust	Robinia pseudoacacia	28	S	P	A	NYS Invasive Species in decline	X
20	9	Black Locust	Robinia pseudoacacia	30	S	P	A	NYS Invasive Species in decline	X
21	14	Black Locust	Robinia pseudoacacia	30	S	P	A	NYS Invasive Species in decline	X
22	175	American Elm	Ulmus americana	30	S	G	H	Too close to house	X
23	183	Red Maple	Acer rubrum	30	S	F	A		
24	190	Red Maple	Acer rubrum	30	S	F	A	Save, on edge of yard	
25	514	Black Locust	Robinia pseudoacacia	30	S	P	A	NYS Invasive Species in decline	X
26	988	Apple	Malus Domestica	32	S	F	A		X
27	256	Black Cherry	Prunus serotina	36	S/L	P	SA		X

TREE REMOVAL SUMMARY TABLE
(WITHIN TREE REMOVAL LIMIT)

516 TOTAL TREES LOCATED WITHIN LIMIT

SIGNIFICANT TREES
24" OR GREATER IN CALIPER

LOCATED	27
REMOVALS	24

TOWN REGULATED TREES
8" - 23" IN CALIPER

LOCATED	489
REMOVALS	475

DATE	SHEET	REVISION NOTES
02/10/23	TR.2	SUBMISSION TO PLANNING BOARD

SPECIAL PERMIT - TREE REMOVALS LIST

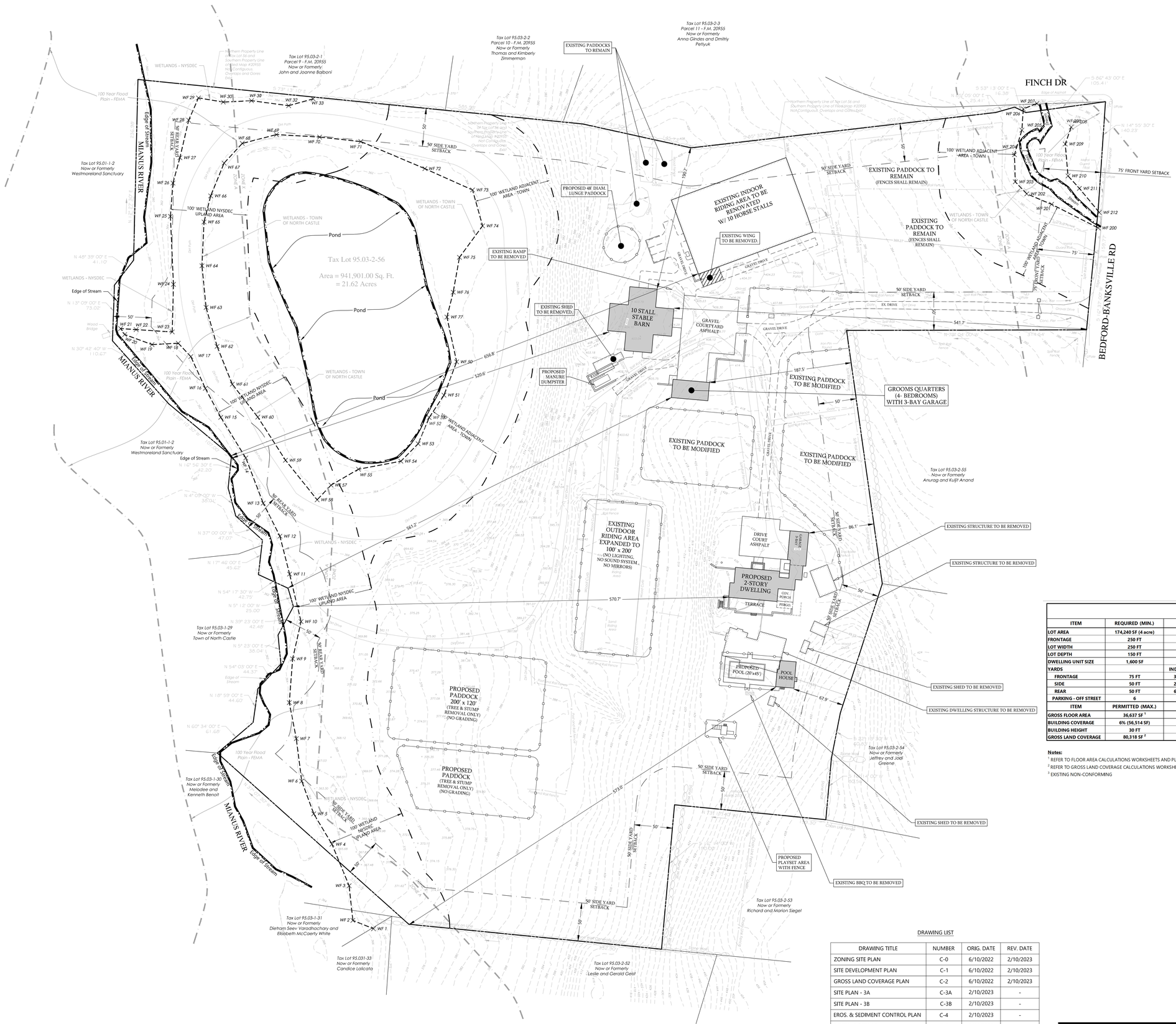
263 BEDFORD-BANKSVILLE ROAD
NORTH CASTLE, NY

JAY FAIN & ASSOCIATES, LLC
Environmental Consulting Services
134 Round Hill Road Fairfield, CT 06824
203-254-3156 · fax: 203-254-3167

Date: 06/13/22
Sheet No.: TR.2

Site Development Plans

by: DiMarzo & Bereczky, Inc.



ORIENTATION

BEDFORD, NY SCALE: 1"=1,000'

GENERAL NOTES:

1. THE INTENT OF THESE DRAWINGS IS TO DEMONSTRATE THE GENERAL SITE DEVELOPMENT FOR THE LOT. REFER TO OTHER DESIGN DOCUMENTS FOR ADDITIONAL DETAILS.
2. ALL SURVEY DATA, BOUNDARY LINES, TOPOGRAPHY, WETLAND LOCATIONS AND BUILDING LOCATIONS ARE PER A SURVEY PREPARED BY T.C. MERRITTS LAND SURVEYORS. THE SURVEY IS TITLED "TOPOGRAPHY OF PROPERTY PREPARED FOR KENT FARRINGTON LLC SITUATE IN THE TOWN OF NORTH CASTLE, WESTCHESTER COUNTY, NEW YORK". IT IS DATED 6/21/2021. ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM 1988 (NAVD '88).
3. REFERENCE IS MADE TO TAX ID: 95.03-2-56, ZONE: R-4A.
4. THE OWNER OF RECORD IS MARENGO FARMS LLC.
5. INFORMATION ON EXISTING UTILITIES HAS BEEN COMPILED FROM FIELD SURVEY AND IS NOT GUARANTEED CORRECT OR COMPLETE. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETERMINING ACTUAL LOCATIONS AND ELEVATIONS OF ALL UTILITIES INCLUDING SERVICES. THE CONTRACTOR IS REQUIRED TO CONTACT "DIAL 811" AND CONTACT SHOULD BE MADE BEFORE ANY EXCAVATION OR DIGGING.
6. LOCAL AND NYSDEC WETLANDS WERE IDENTIFIED AND LOCATED ON THE PARCEL.
7. ALL CONSTRUCTION SHALL COMPLY WITH THE TOWN OF NORTH CASTLE REQUIREMENTS, THE STATE OF NEW YORK BASIC BUILDING CODE, THE NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL AND O.S.H.A.
8. THE PROPERTY IS SERVED BY PRIVATE WELL WATER AND A PRIVATE ON-SITE WASTEWATER TREATMENT SYSTEM (O.W.T.S.).
9. PROPERTY LIES WITHIN THE MIANUS RIVER WATERSHED.
10. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE AND EXCAVATION SAFEGUARDS, NECESSARY BARRICADES, FLAG MEN, ETC. FOR TRAFFIC CONTROL AND SITE SAFETY. ALL WORK SHALL BE DONE IN ACCORDANCE WITH O.S.H.A. REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH O.S.H.A. REQUIREMENTS.
11. WHEN PREPARING THE EXISTING SITE FOR PROPOSED DEVELOPMENT, ALL MATERIALS REMOVED SHALL BE DISPOSED OF IN CONFORMANCE WITH ALL GOVERNING AGENCIES.
12. SPECIAL ATTENTION OF THE CONTRACTOR IS CALLED TO THE REQUIRED TYPE AND COMPACTION OF PIPE BEDDING AND BACKFILL SPECIFIED ON THESE DRAWINGS. THESE REQUIREMENTS WILL BE STRICTLY ENFORCED.
13. ALL DEVELOPMENT ACTIVITIES TO BE UNDERTAKEN WITHIN THE STREET RIGHT-OF-WAY AND OTHER PUBLIC LANDS SHALL COMPLY FULLY WITH TOWN STANDARDS UNLESS APPROVED DEVIATION IS SPECIFICALLY SET FORTH AS PART OF THIS APPLICATION.
14. CONTRACTOR SHALL SUPPLY COMPLETE SHOP DRAWINGS INCLUDING MANUFACTURER'S PRODUCT DATA SHEETS TO THE SITE ENGINEER, FOR ALL CONSTRUCTION MATERIAL USED IN CONJUNCTION WITH THESE DRAWINGS. CONTRACTOR SHALL ALLOW A 5 DAY REVIEW PERIOD, PRIOR TO FABRICATION AND INSTALLATION.
15. PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY, THE CITY MAY REQUIRE A CERTIFICATION LETTER STATING THAT THE DEVELOPMENT WAS CONSTRUCTED IN ACCORDANCE TO THE APPROVED PLANS, AND AN "AS-BUILT" DRAWING SHALL BE SUBMITTED
16. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH A LICENSED SURVEYOR TO PREPARE AN "AS-BUILT" PLAN. THE CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH A SITE ENGINEER 48 HOURS PRIOR TO ANY INSPECTIONS.
17. ANY MATERIAL, MAN-MADE OR NATURAL, WHICH IS IN ANY WAY DISTURBED AND/OR UTILIZED DURING WORK SHALL NOT BE DEPOSITED IN ANY WETLAND OR WATERCOURSE, EITHER ON OR OFF-SITE, UNLESS SPECIFICALLY AUTHORIZED BY A DOCUMENTED PERMIT.
18. THE WORK SHALL BE DONE IN CONFORMANCE WITH THE CONTRACT DOCUMENTS/PLANS UNLESS CHANGES HAVE BEEN APPROVED IN WRITING BY THE DESIGN ENGINEER PRIOR TO THE WORK BEING DONE.
19. AN ON-SITE PRE-CONSTRUCTION MEETING SHALL BE ATTENDED BY THE TOWN ENGINEER, TOWN BUILDING INSPECTOR, THE INSPECTING ENGINEER OF RECORD, CONTRACTOR, AND OWNER TO REVIEW THE SCOPE OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE THE PRE-CONSTRUCTION MEETING.

ZONING DATA TABLE
Zoning District: R-4A

ITEM	REQUIRED (MIN.)	PROPOSED CONDITIONS					
LOT AREA	174,240 SF (4 acre)	941,901 SF (21.62 acres)					
FRONTAGE	250 FT	300.0 FT					
LOT WIDTH	250 FT	261.1 FT					
LOT DEPTH	150 FT	1,255.4 FT					
DWELLING UNIT SIZE	1,600 SF	8,748 SF					
YARDS		INDOOR RIDING -	10 STALL BARN -	GROOMS QUARTERS -	NEW DWELLING -	POOL HOUSE	
FRONTAGE	75 FT	369.2 FT	541.7 FT	-	-	-	
SIDE	50 FT	26.98 FT [3]	190.7 FT	187.5 FT	86.1 FT	67.9 FT	
REAR	50 FT	656.8 FT	520.6 FT	561.2 FT	570.7 FT	573.0 FT	
PARKING - OFF STREET	6	12					
ITEM	PERMITTED (MAX.)	PROPOSED CONDITIONS					
GROSS FLOOR AREA	36,637 SF [1]	32,642 SF [1]					
BUILDING COVERAGE	6% (56,514 SF)	2.9% (27,430 SF)					
BUILDING HEIGHT	30 FT	30 FT (NEW DWELLING)					
GROSS LAND COVERAGE	80,318 SF [2]	59,007 SF [2]					

Notes:
[1] REFER TO FLOOR AREA CALCULATIONS WORKSHEETS AND PLANS BY OLD TOWN BARNS AND TEODORO EZEQUIEL SIGUENZA FOR GROSS FLOOR AREA INFORMATION
[2] REFER TO GROSS LAND COVERAGE CALCULATIONS WORKSHEET AND SHEET C-2 BY DIMARZO & BERECZKY
[3] EXISTING NON-CONFORMING

DRAWING LIST

DRAWING TITLE	NUMBER	ORIG. DATE	REV. DATE
ZONING SITE PLAN	C-0	6/10/2022	2/10/2023
SITE DEVELOPMENT PLAN	C-1	6/10/2022	2/10/2023
GROSS LAND COVERAGE PLAN	C-2	6/10/2022	2/10/2023
SITE PLAN - 3A	C-3A	2/10/2023	-
SITE PLAN - 3B	C-3B	2/10/2023	-
EROS. & SEDIMENT CONTROL PLAN	C-4	2/10/2023	-
NOTES & DETAILS	C-5	2/10/2023	-
DETAILS -1	C-6	2/10/2023	-
DETAILS -2	C-7	2/10/2023	-
TURNING TEMPLATES PLAN	C-8	2/10/2023	-

REV. NO.	DATE:	REVISION DESCRIPTION:
2	2/10/2023	REMOVE GUEST HOUSE
1	12/12/2022	REVISE MAIN DWELLING FOOTPRINT
0	6/22/2022	INITIAL SUBMISSION

NORTH CASTLE TAX ID: 95.03-2-56
ZONE: R-4A AREA: 941,901 SF

ZONING SITE PLAN
DEPICTING
263 BEDFORD BANKSVILLE ROAD
BEDFORD, NY (NORTH CASTLE MUNICIPALITY)
PREPARED FOR
MARENGO FARMS LLC

DATE: 2/10/2023
JOB NO. 179

SCALE: 0 50 100
1"=50'

To my knowledge and belief this map is substantially correct as noted hereon

KARL H. WEGNER, P.E. #103418
2/10/2023

This document is valid only if signed with the blue ink signature of the designated licensed professional. Unauthorized alteration or addition to this document renders the contents null and void.

DIMARZO & BERECZKY
191 LLOYD DRIVE
FAIRFIELD, CT 06825
203.857.4110
LAND SURVEYING
CIVIL ENGINEERING
PERMITTING

C-0

N

W E

SITE PLAN 3B INSET

SITE PLAN 3A INSET

Tax Lot 95.03-2-56
Area = 941,901.00 Sq. Ft.
= 21.62 Acres

FINCH DR

BEDFORD-BANKSVILLE RD

MIANUS RIVER

Pond

WETLANDS - NYSDEC

WETLANDS - TOWN OF NORTH CASTLE

100 Year Flood Plain - FEMA

100' WETLAND NYSDEC UPLAND AREA

100' WETLAND ADJACENT AREA - TOWN

Edge of Stream

Edge of Asphalt

Tax Lot 95.01-1-2
Now or Formerly
Westmoreland Sanctuary

Tax Lot 95.03-2-1
Parcel 9 - F.M. 20955
Now or Formerly
John and Joanne Balboni

Tax Lot 95.03-2-2
Parcel 10 - F.M. 20955
Now or Formerly
Thomas and Kimberly Zimmerman

Tax Lot 95.03-2-3
Parcel 11 - F.M. 20955
Now or Formerly
Anna Gindes and Dmitriy Petlyuk

Tax Lot 95.03-2-55
Now or Formerly
Anurag and Kuljit Anand

Tax Lot 95.03-2-54
Now or Formerly
Jeffrey and Joel Greene

Tax Lot 95.03-2-53
Now or Formerly
Richard and Marion Siegel

Tax Lot 95.03-2-52
Now or Formerly
Leslie and Gerald Geist

Tax Lot 95.03-1-31
Now or Formerly
Dietram Seev Varadhachary and Elilabeth McCaerty White

Tax Lot 95.031-33
Now or Formerly
Candice Lalicata

Tax Lot 95.03-1-29
Now or Formerly
Town of North Castle

Tax Lot 95.03-1-30
Now or Formerly
Melodee and Kenneth Benoit

EXISTING PADDOCKS TO REMAIN

PROPOSED GENERATOR

PROPOSED POTABLE WATER WELL

EXISTING INDOOR RIDING AREA TO BE RENOVATED W/ 10 HORSE STALLS

EXISTING PADDOCK TO REMAIN
(FENCES SHALL REMAIN)

PROPOSED DRAINAGE INFILTRATION

PROPOSED 48' DIAM. LUNGE PADDOCK

EXISTING RAMP TO BE REMOVED

EXISTING WING TO BE REMOVED.

PROPOSED PROPANE TANK BURIED

10 STALL STABLE BARN

ASPHALT COURTYARD

GRAVEL DRIVE

EX. DRIVE

EXISTING SHED TO BE REMOVED.

PROPOSED MANURE DUMPSTER

RELOCATE EX. FENCE

GROOMS QUARTERS (4- BEDROOMS) WITH 3-BAY GARAGE

PROPOSED PIERS WITH GATE

PAVE EX. GRAVEL DRIVE WITH ASPHALT FROM PIERS TO PROPERTY LINE

REMOVE EXISTING PIERS

EXISTING PADDOCK TO BE MODIFIED

PROPOSED POTABLE WATER WELL

PROPOSED PROPANE TANK BURIED

EXISTING OUTDOOR RIDING AREA EXPANDED TO 100 x 200'
(NO LIGHTING, NO SOUND SYSTEM , NO MIRRORS)

DRIVE COURT ASPHALT

PROPOSED 2-STORY DWELLING

COV. PORCH

TERRACE

PERGO

EX. WALLS TO BE REMOVED

PROPOSED GENERATOR

EXISTING STRUCTURE TO BE REMOVED

EXISTING STRUCTURE TO BE REMOVED

PROPOSED POOL (20'x45')

POOL HOUSE

EXISTING SHED TO BE REMOVED

EXISTING DWELLING STRUCTURE TO BE REMOVED

PROPOSED POOL EQUIPMENT AND CONC. PAD

PROPOSED PADDOCK 200' x 120'
(TREE & STUMP REMOVAL ONLY)
(NO GRADING)

PROPOSED SEPTIC RESERVE AREA

PROPOSED SEPTIC PRIMARY AREA AND BARN, GROOMS QUARTERS

PROPOSED SEPTIC PRIMARY AREA FOR MAIN HOUSE AND POOL HOUSE

PROPOSED DRAINAGE INFILTRATION

EXISTING SHED TO BE REMOVED

PROPOSED PLAYSET AREA WITH FENCE

EXISTING BBQ TO BE REMOVED

REV. NO.	DATE:	REVISION DESCRIPTION:
2	2/10/2023	REMOVE GUEST HOUSE
1	12/12/2022	REVISE MAIN DWELLING FOOTPRINT
0	6/22/2022	INITIAL SUBMISSION

SITE DEVELOPMENT PLAN

DEPICTING

263 BEDFORD BANKSVILLE ROAD

BEDFORD, NY (NORTH CASTLE MUNICIPALITY)

PREPARED FOR

MARENGO FARMS LLC

DATE: 2/10/2023
JOB NO. 179

SCALE: 0 50 100
1"=50'

To my knowledge and belief this map is substantially correct as noted hereon

KARL H. WEDOW, PE
2/10/2023

STATE OF NEW YORK · LICENSED · PROFESSIONAL ENGINEER

This document is valid only in color. Any prints not of the designated licensed professional, unauthorized alteration or addition to this document renders its contents null and void.

DiMARZO & BERECZKY
LAND SURVEYING
CIVIL ENGINEERING
PERMITTING

191 LLOYD DRIVE
FAIRFIELD, CT 06825
203.857.4110

C-1

NORTH CASTLE TAX ID: 95.03-2-56
ZONE: R-4A AREA: 941,901 SF

GROSS LAND COVERAGE TABLE		
I.D.	DESCRIPTION	AREA (SF)
5	PRINCIPAL BUILDING	4,130
6	ACCESSORY BUILDING	23,342
7	DECKS	0
8	PORCHES	510
9	DRIVES & WALKWAYS	28,110
10	TERRACES	1,645
11	POOL & MECHANICAL	1,065
12	OTHER STRUCTURES	205
-	TOTAL	59,007

Notes:

1. ID NUMBERS CORRESPOND TO THE TOWN OF NORTH CASTLE GROSS LAND COVERAGE CALCULATIONS WORKSHEET
2. DUE TO IRRREGULAR SHAPES, AREAS HAVE BEEN CALCULATED BY UTILIZING COMPUTER AIDED DRAFTING TECHNIQUES

REV. NO.	DATE:	REVISION DESCRIPTION:
2	2/10/2023	REMOVE GUEST HOUSE
1	12/12/2022	REVISE MAIN DWELLING FOOTPRINT
0	6/22/2022	INITIAL SUBMISSION

GROSS LAND COVERAGE PLAN

DEPICTING

263 BEDFORD BANKSVILLE ROAD

BEDFORD, NY (NORTH CASTLE MUNICIPALITY)

PREPARED FOR

MARENGO FARMS LLC

DATE: 2/10/2023
JOB NO. 179

SCALE: 0 50 100
1"=50'

To my knowledge and belief this map is substantially correct as noted hereon

KARL H. WEDOW, P.E., L.S.
2/10/2023

STATE OF NEW YORK — KARL H. WEDOW — LICENSED PROFESSIONAL ENGINEER

This document is valid only if it bears the original signature and seal of the designated licensed professional. Unauthorized alteration or addition to this document renders it null and void.

DIMARZO & BERECZKY
191 LLOYD DRIVE
FAIRFIELD, CT 06825
203.857.4110
LAND SURVEYING
CIVIL ENGINEERING
PERMITTING

UNAUTHORIZED ALTERATION OR ADDITION TO A DOCUMENT BEARING THE SEAL OF AN ENGINEER IS A VIOLATION OF SECTION 7209 SUBDIVISION 2 OF THE NEW YORK STATE EDUCATION LAW ARTICLE 145.

C-2

PROPOSED DOWNSPOUT CONNECTION TO 4" PVC ROOF LEADER PIPE W/ CLEANOUT AT GRADE (TYP.)

PROPOSED 4" PVC ROOF LEADER PIPE @ 2.0% MIN. SLOPE (TYP.)

PROPOSED CATCH BASIN INLET (CB#12)
GRATE = 406.2
INV.IN = 401.7
INV.OUT = 401.6
SUMP = 399.6

PROPOSED 12 UNITS OF BURIED CULTEC 330XLHD GALLERIES (BMP-W3)
(4 ROWS x 3 UNITS LONG)
GRADE = 404.1
TOP OF STONE = 403.1
TOP OF CHAMBERS = 402.6
BOT OF CHAMBERS & INV.IN = 400.0
BOT OF STONE = 399.5
INV OUT TO LVL.SPrW3 = 402.6

PROPOSED LEVEL SPREADER (LVL.SPrW3)
24.5 LF x 2 FT x 2 FT (L x W x D)
AT GRADE = 404.6
WITH A 6" PERFORATED PVC PIPE
AT 22 LF AND CAPPED AT BOTH ENDS
WITHIN CLEAN CRUSHED STONE
INVERT PERF PIPE = 403.1

EXISTING SHED TO BE REMOVED.

35 LF 12" PVCP @0.035 FPF

PROPOSED MANURE DUMPSTER
(8' x 22' x 6'H) w/PERIMETER WALLS

PROPOSED AREA DRAIN (AD#W2)
GRATE = 403.5
INV.OUT = 400.5

PROPOSED 2 UNITS OF BURIED CULTEC 330XLHD GALLERIES (BMP-W2)
(1 ROW x 2 UNITS LONG)
GRADE = 400.1
TOP OF STONE = 399.1
TOP OF CHAMBERS = 398.6
BOT OF CHAMBERS & INV.IN = 396.0
BOT OF STONE =395.0

PROPOSED CATCH BASIN INLET (CB#W3)
GRATE = 404.2
INV. OUT = 401.2
SUMP = 399.2

PROPOSED SEPTIC JUNCTION BOX (TYP.)

PROPOSED 4" PVC ROOF LEADER PIPE @ 2.0% MIN. SLOPE (TYP.)

PROPOSED SEPTIC EFFLUENT 4" PVC CLEANOUT AT PIPE BEND.

PROPOSED 10 STALL STABLE BARN
F.F.E.=406.5

COURTYARD ASPHALT

PROPOSED SEPTIC EFFLUENT 4" PVC CLEANOUT AT GRADE AT PIPE BEND.

65 LF 12" PVCP @0.026 FPF

RAMP

MANURE DUMPSTER

PROPOSED GROOMS QUARTERS (4 BEDROOMS)
F.F.E.=407.0

GRAVEL DRIVE

PROPOSED DOWNSPOUT CONNECTION TO 4" PVC ROOF LEADER PIPE W/ CLEANOUT AT GRADE (TYP.)

PROPOSED BUILDING SEWER OF 4" PVC SCH. 40 PIPE @ ¼" PER FOOT SLOPE MIN.

EXISTING PADDOCK TO BE MODIFIED

PROPOSED 1,250 GAL. SEPTIC TANK

EX. DRIVE

PROPOSED POTABLE WATER WELL

PROPOSED WATER SERVICE LINE

EXISTING WELL SHALL BE ABANDONED

EXISTING OUTDOOR RIDING AREA EXPANDED TO 100' x 200' (NO LIGHTING, NO SOUND SYSTEM, NO MIRRORS)

Sand Riding Area

Wood Curb

Post and Rail Fence

Dirt Drive

PROPOSED PAD MOUNTED ELECTRICAL TRANSFORMER

EX. DRIVE

Dirt Drive

Gravel Drive

Split Rail Fence

Gate

Utility Pole

PROPOSED CATCH BASIN INLET (CB#E2)
GRATE = 403.2 EX. GRADE
INV.OUT = 400.5
SUMP = 398.5

PROPOSED LEVEL SPREADER (LVL.SPrE3)
24.5 LF x 2 FT x 2 FT (L x W x D)
AT GRADE = 406.6
WITH A 6' PERFORATED PVC PIPE
AT 22 LF AND CAPPED AT BOTH ENDS
WITHIN CLEAN CRUSHED STONE
INVERT PERF PIPE = 405.1

PROPOSED 9 UNITS OF BURIED CULTEC 330XLHD GALLERIES (BMP-E3)
(3 ROWS x 3 UNITS LONG)
GRADE = 406.6
TOP OF STONE = 405.6
TOP OF CHAMBERS = 405.1
BOT OF CHAMBERS & INV.IN = 402.5
BOT OF STONE =402.0
INV OUT TO LVL.SPrE3 =405.1

50 LF 12" PVCP @0.13 FPF

PROPOSED CATCH BASIN INLET (CB#E3)
GRATE = 412.0 EX. GRADE
INV.IN = 409.1
INV.OUT = 409.0
SUMP = 407.0

200 LF 12" PVCP @0.10 FPF

PROPOSED ELECTRICAL & COMM. SERVICES BURIED.

PROPOSED CATCH BASIN INLET (CB#E1)
GRATE = 389.2 EX. GRADE
INV.OUT = 386.2
SUMP = 384.2

EX. WELL

EX. SEPTIC SYSTEM

PROPOSED CATCH BASIN INLET (CB#11)
GRATE = 432.5
INV.IN = 429.6
INV.OUT = 429.5
SUMP = 427.5

PROPOSED ELECTRICAL SERVICE BURIED

PROPOSED PROPANE TANK BURIED

PROPOSED DOWNSPOUT CONNECTION TO 4" PVC ROOF LEADER PIPE W/ CLEANOUT AT GRADE (TYP.)

PROPOSED 4" PVC ROOF LEADER PIPE @ 2.0% MIN. SLOPE (TYP.)

PROPOSED GENERATOR

EXISTING BARN TO BE REMOVED

PROPOSED AREA DRAIN (AD#2)
GRATE = 433.9
INV.OUT =431.0

EX. WALL TO BE REMOVED.

PROPOSED ELECTRICAL SERVICE BURIED

PROPOSED BUILDING SEWER OF 4" PVC SCH. 40 PIPE @ ¼" PER FOOT SLOPE MIN.

PROPOSED 2-STORY PRINCIPAL DWELLING
F.F.E. = 435.0

GARAGE
F.F.E. = 433.5

DRIVE COURT ASPHALT

TERRACE

COV. PORCH

PROPOSED AREA DRAIN (AD#1)
GRATE = 433.9
INV.IN = 430.4
INV.OUT = 430.3

GRADING LIMIT IN THIS AREA SHALL BE 1 VERT : 3 HORIZ.

EX. WALL TO BE REMOVED

105 LF 12" PVCP @0.05 FPF

PROPOSED AREA DRAIN (AD#5)
GRADE = 433.7
INV.OUT = 430.5

GRADING LIMIT IN THIS AREA SHALL BE 1 VERT :3 HORIZ.

PROPOSED AREA DRAIN (AD#3)
GRATE = 433.7
INV.IN =430.0
INV.OUT = 429.9

PROPOSED SEPTIC DOSING CHAMBER WITH SIPHON.

PROPOSED 10 UNITS OF BURIED CULTEC 330XLHD GALLERIES (BMP-W1)
(2 ROWS x 5 UNIT LONG)
GRADE = 429.1
TOP OF STONE = 428.1
TOP OF GALS = 427.6
BOT OF GALS & INV.IN = 425.0
BOT OF STONE =424.5
INV. OUT TO LVL.SPrW1 = 427.6

PROPOSED SEPTIC DISTRIBUTION BOX.

PROPOSED LEVEL SPREADER (LVL.SPrW1)
38.5 LF x 2 FT x 2 FT (L x W x D)
AT GRADE = 429.1
WITH A 6' PERFORATED PVC PIPE
AT 36 LF AND CAPPED AT BOTH ENDS
WITHIN CLEAN CRUSHED STONE
INVERT PERF PIPE = 427.6

PROPOSED PLAYSET

PROPOSED ABSORPTION TRENCHES FOR GROOMS QUARTERS AND TWO BARNS.
4 BEDROOMS PLUS 20 HORSE STALLS (7 ROWS OF 75 FT).
REFER TO O.W.T.S. PLANS BY DIMARZO & BERECZKY

PROPOSED JUNCTION BOX (TYP.)

PROPOSED ABSORPTION TRENCHES FOR MAIN HOUSE AND POOL HOUSE.
8 BEDROOM (8 ROWS OF 65 FT).
REFER TO O.W.T.S. PLANS BY DIMARZO & BERECZKY

PROPOSED SEPTIC EFFLUENT PIPING 4" PVC

PROPOSED SEPTIC DOSING CHAMBER WITH SIPHON.

PROPOSED SEPTIC DISTRIBUTION BOX.

PROPOSED JUNCTION BOX (TYP.)

PROPOSED 100% REPLACEMENT LEACHING TRENCHES (TYP.)
THESE ARE FOR RESERVE AND NOT TO BE CONSTRUCTED AT THIS TIME.
IF RESERVE SHALL BE CONSTRUCTED IN THE FUTURE, THEN THE PADDOCKS SHALL BE REDUCED TO NOT ENCROACH OVER THE RESERVE AREA.

PROPOSED PADDOCK
200' x 120'
(TREE & STUMP REMOVAL ONLY)
(NO GRADING)

PROPOSED 100% REPLACEMENT LEACHING TRENCHES (TYP.)
THESE ARE FOR RESERVE AND NOT TO BE CONSTRUCTED AT THIS TIME.
IF RESERVE SHALL BE CONSTRUCTED IN THE FUTURE, THEN THE PADDOCKS SHALL BE REDUCED TO NOT ENCROACH OVER THE RESERVE AREA.

PROPOSED PADDOCK
(TREE & STUMP REMOVAL ONLY)
(NO GRADING)

PROPOSED PROPANE TANK BURIED

PROPOSED GENERATOR

EXISTING BARN TO BE REMOVED

PROPOSED AREA DRAIN (AD#2)
GRATE = 433.9
INV.OUT =431.0

EX. WALL TO BE REMOVED.

PROPOSED ELECTRICAL SERVICE BURIED

PROPOSED BUILDING SEWER OF 4" PVC SCH. 40 PIPE @ ¼" PER FOOT SLOPE MIN.

EXISTING BARN TO BE REMOVED

PROPOSED WATER SERVICE LINE

EXISTING DWELLING STRUCTURE TO BE REMOVED.

PROPOSED 2,000 GAL. SEPTIC TANK

EXISTING SHED TO BE REMOVED

PROPOSED BUILDING SEWER OF 4" PVC SCH. 40 PIPE @ ¼" PER FOOT SLOPE MIN.

PROPOSED AREA DRAIN (AD#6)
GRATE = 433.7
INV.OUT = 431.2

PROPOSED POOL (20'x45')
COPING ELEV. =434.0

POOL HOUSE
F.F.E. =434.0

PROPOSED POOL FENCE

EXISTING BBQ TO BE REMOVED

15 LF 8" PVCP @0.40 FPF

PROPOSED FENCE

PROPOSED DOWNSPOUT CONNECTION TO 4" PVC ROOF LEADER PIPE W/ CLEANOUT AT GRADE (TYP.)

PROPOSED 4" PVC ROOF LEADER PIPE @ 2.0% MIN. SLOPE (TYP.)

PROPOSED AREA DRAIN (AD#4)
GRATE = 433.7
INV.IN = 430.7
INV.OUT = 430.6

PROPOSED SEPTIC JUNCTION BOX (TYP.)

EXISTING SHED TO BE REMOVED

Stone Wall

Chain Link Fence

Fence North 2/3

Stockade Fence

Split Rail Fence

Stone Wall

Wood Deck

Gate

Utility Pole

Dirt Drive

Gravel Drive

Post and Rail Fence

Wood Curb

Sand Riding Area

Dirt Path

Pond

Acres

WF 76 WF 77 WF 50 WF 51 WF 52 WF 53 WF 54 WF 55

TP#D-1 PH#D-1
TP#D-2 PH#D-2
TP#D-3 PH#D-3
TP#D-4 PH#D-4
TP#D-5 PH#D-5
TP#D-6 PH#D-6
TP#D-7 PH#D-7
TP#D-8 PH#D-8
TP#D-9 PH#D-9
TP#D-10 PH#D-10
TP#D-11 PH#D-11
TP#D-12 PH#D-12
TP#D-13 PH#D-13
TP#D-14 PH#D-14
TP#D-15 PH#D-15
TP#D-16 PH#D-16
TP#D-17 PH#D-17
TP#D-18 PH#D-18
TP#D-19 PH#D-19
TP#D-20 PH#D-20

SITE PLAN 3A INSET

LEGEND

- PROPOSED CONTOUR — 434 —
- PROPOSED SPOT ELEVATION • 435.0
- TC = TOP OF CURB ELEVATION • TC 375.5 / BC = BOTTOM OF CURB ELEVATION BC 375.0
- TW = TOP OF WALL ELEVATION • TW 379.0 / BW = BOTTOM OF WALL ELEVATION BW 375.0
- PROPOSED DOOR LOCATIONS
- TEST PIT, SOILS TP#D-3
- PERC. & INFILL TEST, SOILS PH#D-3
- STORM SEWER, GRAVITY
- SANITARY SEWER, GRAVITY
- SANITARY EFFLUENT PIPE
- PROPOSED LEACHING TRENCH
- RESERVE LEACHING TRENCH
- PROPOSED JUNCTION BOX J#2
- DOMESTIC WATER SERVICE W W
- ELECTRIC SERVICE CONDUITS E E
- GAS SERVICE
- SILT FENCE
- LIMIT OF DISTURBANCE
- TEMP. CONSTRUCTION FENCE
- HAYBALES (SEDIMENT FILTER)
- ANTI-TRACKING PAD
- TREE PROTECTION
- STOCKPILE (TEMPORARY)

SITE PLAN - 3A

DEPICTING

263 BEDFORD BANKSVILLE ROAD

BEDFORD, NY (NORTH CASTLE MUNICIPALITY)

PREPARED FOR

MARENGO FARMS LLC

DATE: 2/10/2023
JOB NO. 179

SCALE: 0 30 60
1"=30'

To my knowledge and belief this map is substantially correct as noted hereon

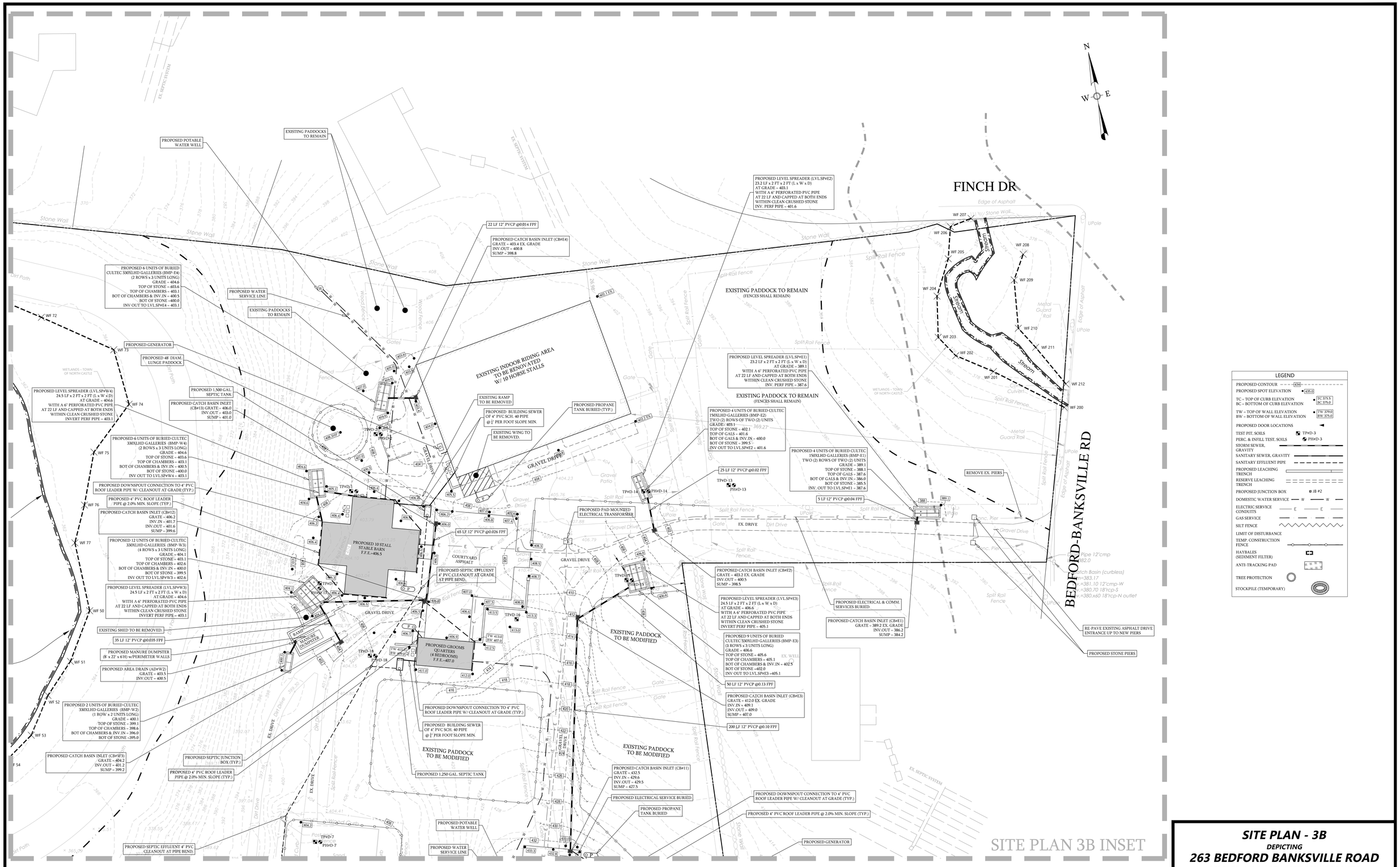
KARL H. WEGNER, PE, LS, LEED AP
2/10/2023

STATE OF NEW YORK — KARL H. WEGNER — 131418 — LICENSED PROFESSIONAL ENGINEER

This document is valid only if bearing the seal/stamp and signature of the designated licensed professional. Unauthorized alteration or addition to this document VOIDS SAME unless the contents null and void.

DIMARZO & BERECZKY
191 LLOYD DRIVE
FAIRFIELD, CT 06825
203.857.4110
LAND SURVEYING
CIVIL ENGINEERING
PERMITTING

C-3A



LEGEND

- PROPOSED CONTOUR — 434 —
- PROPOSED SPOT ELEVATION • 435.0
- TC = TOP OF CURB ELEVATION • TC 375.5 / BC = BOTTOM OF CURB ELEVATION BC 375.0
- TW = TOP OF WALL ELEVATION • TW 379.0 / BW = BOTTOM OF WALL ELEVATION BW 375.0
- PROPOSED DOOR LOCATIONS
- TEST PIT, SOILS TP#D-3
- PERC. & INFILL TEST, SOILS PH#D-3
- STORM SEWER, GRAVITY
- SANITARY SEWER, GRAVITY
- SANITARY EFFLUENT PIPE
- PROPOSED LEACHING TRENCH
- RESERVE LEACHING TRENCH
- PROPOSED JUNCTION BOX JB #2
- DOMESTIC WATER SERVICE — W — W —
- ELECTRIC SERVICE CONDUITS — E — E —
- GAS SERVICE
- SILT FENCE
- LIMIT OF DISTURBANCE
- TEMP. CONSTRUCTION FENCE
- HAYBALES (SEDIMENT FILTER)
- ANTI-TRACKING PAD
- TREE PROTECTION
- STOCKPILE (TEMPORARY)

SITE PLAN - 3B

DEPICTING

263 BEDFORD BANKSVILLE ROAD

BEDFORD, NY (NORTH CASTLE MUNICIPALITY)

PREPARED FOR

MARENGO FARMS LLC

DATE: 2/10/2023
JOB NO. 179

SCALE: 0 30 60
1"=30'

To my knowledge and belief this map is substantially correct as noted hereon

KARL H. WEID, P.E.
2/10/2023

STATE OF NEW YORK KARL H. WEID 93143 LICENSED PROFESSIONAL ENGINEER

This document is valid only if it bears the signature and seal of the designated licensed professional. Unauthorized alteration or addition to this document renders its contents null and void.

UNAUTHORIZED ALTERATION OR ADDITION TO A DOCUMENT BEARING THE SEAL OF AN ENGINEER IS A VIOLATION OF SECTION 7209 SUBDIVISION 2 OF THE NEW YORK STATE EDUCATION LAW ARTICLE 145.

DIMARZO & BERECZKY
191 LLOYD DRIVE
FAIRFIELD, CT 06825
203.857.4110
LAND SURVEYING
CIVIL ENGINEERING
PERMITTING

C-3B

EROSION & SEDIMENT CONTROL PLAN

DEPICTING

263 BEDFORD BANKSVILLE ROAD

BEDFORD, NY (NORTH CASTLE MUNICIPALITY)

PREPARED FOR

MARENGO FARMS LLC

DATE: 2/10/2023
JOB NO. 179

SCALE: 0 50 100
1"=50'

To my knowledge and belief this map is substantially correct as noted hereon

KARL H. WEED, P.E. #95185
2/10/2023

STATE OF NEW YORK · KARL H. WEED · 95185 · LICENSED PROFESSIONAL ENGINEER

This document is valid only if bearing the original signature of the designated licensed professional engineer. Any alteration or addition to this document renders the contents null and void.

DiMARZO & BERECZKY
191 LLOYD DRIVE
FAIRFIELD, CT 06825
203.857.4110
LAND SURVEYING
CIVIL ENGINEERING
PERMITTING

C-4

EARTHWORK & GRADING:

1. GRADE AWAY FROM BUILDING WALLS AT 2% MINIMUM (TYPICAL).
2. EARTH SLOPES SHALL BE NO STEEPER THAN 3:1 (HORZ.:VERT.)
3. NO WORK SHALL COMMENCE UNTIL EROSION CONTROLS HAVE BEEN INSPECTED AND APPROVED BY THE PROJECT ENGINEER OR THEIR DESIGNEE(S).
4. GENERAL FILL BEYOND PAVED AREAS SHALL BE FREE OF BRUSH RUBBISH, STUMPS AND STONES LARGER THAN 6". FILL SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 8" IN THICKNESS. THE DRY DENSITY AFTER COMPACTION SHALL NOT BE LESS THAN 95% OF THE STANDARD PROCTOR TEST AND DONE IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM D698. AFTER COMPACTING, THE FILL SHALL BE 4" BELOW THE REQUIRED GRADE AS SHOWN ON THE PLAN.
5. GENERAL FILL UNDER PAVED AREAS SHALL BE TILL, LOAM, SAND OR GRAVEL MIXTURE CLASSIFIED AS SP, SW, SM, GP, GM, ML PER THE UNITED SOIL CLASSIFICATION SYSTEM. IT SHALL HAVE NOT MORE THAN 40% FINES PASSING THE #100 SIEVE, NOT MORE THAN 8% PASSING THE #200 SIEVE, AND NO STONES LARGER THAN 8".
6. SUBGRADE AND FILL SHALL BE UNIFORMLY COMPACTED BY THE USE OF EQUIPMENT MANUFACTURED FOR THAT PURPOSE.
7. FILL OR TOPSOIL SHALL NOT BE PLACED NOR COMPACTED WHILE IN A FROZEN OR MUDDY CONDITION OR WHILE SUBGRADE IS FROZEN.
8. AFTER THE AREAS TO BE TOPSOIL HAVE BEEN BROUGHT TO GRADE, THE SUBGRADE SHALL BE LOOSENED BY SCARIFYING TO A DEPTH OF AT LEAST 2" TO ENSURE BONDING OF THE TOPSOIL AND SUBSOIL.
9. TOPSOIL SHALL BE FRIABLE AND LOAMY WITH HIGH ORGANIC CONTENT. IT SHALL BE FREE OF DEBRIS, ROCKS LARGER THAN 2" AND ROOTS.
10. CRUSHED STONE UNDERNEATH DRAINAGE AND SEPTIC STRUCTURES SHALL BE GRADATION NO. 2 AS PER NYS DOT STANDARD SPECIFICATION SECTION 703. STONE SHALL CONSIST OF SOUND, TOUGH, DURABLE PARTICLES.

RETAINING WALLS:

11. ANY RETAINING WALLS HIGHER THAN 4 FEET SHALL BE DESIGNED BY A NEW YORK STATE LICENSED PROFESSIONAL ENGINEER, AND AN APPLICATION SHALL BE SUBMITTED FOR BUILDING PERMIT TO THE TOWN OF NORTH CASTLE.
12. RETAINING WALLS (IF APPLICABLE) WITH A GRADE DIFFERENCE EQUAL TO OR GREATER THAN 2.5 FEET MAY REQUIRE A SAFETY BARRIER ON THE TOP OF THE WALL. RETAINING WALLS AND BARRIERS ARE TO BE DESIGNED BY OTHERS.

STORM AND SANITARY SEWER SYSTEMS:

13. ALL PIPE SHALL BE INSTALLED STRAIGHT AND AT THE VERTICAL AND HORIZONTAL ALIGNMENT SHOWN. PIPES SHALL HAVE A UNIFORM SLOPE AS SPECIFIED.
14. MINIMUM COVER ON ALL PIPES SHALL BE TWO FEET (2') UNLESS OTHERWISE NOTED.
15. ALL STORM PIPE SPECIFIED AS POLY VINYL CHLORIDE PIPE (PVCP) SHALL BE SDR 35 WITH RUBBER GASKETED JOINTS AND MEET THE REQUIREMENTS OF ASTM D3034 AND D3212.
16. WHEN CONNECTING NEW PIPES TO EXISTING STRUCTURES SUCH AS MANHOLES AND CATCH BASINS, THE STRUCTURE SHALL BE COMPLETELY CLEANED OUT. THE HOLE MADE IN THE STRUCTURE SHALL BE MADE AS SMALL AS POSSIBLE. THE STRUCTURE SHALL BE REPAIRED TO MATCH ITS ORIGINAL TYPE OF CONSTRUCTION. THE JOINT BETWEEN THE STRUCTURE AND THE PIPE SHALL BE MADE WATERTIGHT BY FILLING THE JOINT WITH MORTAR.
17. FLOW IN EXISTING SEWER SYSTEM MUST NOT BE INTERRUPTED. ANY TEMPORARY ROUTING OF THIS SEWER FLOW MUST BE DONE IN CONFORMANCE WITH ALL APPLICABLE RULES AND REGULATIONS.
18. UNDER NO CIRCUMSTANCES SHALL TRENCH WATER BE ALLOWED TO DRAIN OFF THROUGH HOUSE SEWER OR EFFLUENT LINES.
19. ALL STORMWATER INFILTRATION SYSTEMS SHALL BE INSTALLED PER MANUFACTURERS SPECIFICATIONS.
20. AT THE END OF CONSTRUCTION, AFTER THE SITE HAS BE FULLY STABILIZED, ALL NEW AND PREVIOUSLY EXISTING STORM SEWER FACILITIES INCLUDING, BUT NOT LIMITED TO, CATCH BASINS, AREA DRAINS, MANHOLES, JUNCTION BOXES, FLOW CONTROL STRUCTURES, PIPES, OIL GRIT SEPARATORS, PERMEABLE PAVERS AND POROUS PAVEMENT SHALL BE FULLY CLEANED WITH EQUIPMENT DESIGNED FOR THAT PURPOSE TO THE SATISFACTION OF THE INSPECTING ENGINEER.

UTILITIES:

21. PROPOSED ELECTRIC, TELEPHONE, CABLE, GAS AND WATER SERVICES ARE SHOWN FOR SCHEMATIC PURPOSES ONLY AND ARE SUBJECT TO CHANGE PENDING UTILITY COMPANY REVIEW. THESE UTILITIES SHALL BE DESIGNED BY OTHERS AND INSTALLED IN CONFORMANCE TO THE REQUIREMENTS OF THE GOVERNING UTILITY COMPANIES.
22. UTILITY SERVICES SHALL BE INSTALLED IN CONFORMANCE TO THE REQUIREMENTS OF THE RESPECTIVE GOVERNING UTILITY COMPANY.
23. EASEMENTS MAY BE REQUIRED IN FAVOR OF THE VARIOUS UTILITY COMPANIES.
24. UTILITY CONNECTIONS AT BUILDING FACE SHALL BE COORDINATED WITH THE BUILDING CONTRACTORS.
25. ANY AND ALL UTILITIES ABANDONED SHALL BE CAPPED OR REMOVED IN ACCORDANCE WITH UTILITY COMPANIES' REQUIREMENTS.
26. DETECTABLE TAPE SHALL BE USED TO MARK PIPING LISTED BELOW. THE IDENTIFICATION TAPE SHALL BE BURIED AT LEAST 6-INCHES TO 10-INCHES BELOW FINAL GRADE BUT NO CLOSER THAN 12-INCHES TO THE BURIED UTILITY PIPING OR SERVICE.

HIGH VOLTAGE	RED	CAUTION ELECTRIC LINE BURIED BELOW 600 VOLTS & ABOVE
LOW VOLTAGE	RED	CAUTION ELECTRIC LINE BURIED BELOW 600 VOLTS & BELOW
TELEPHONE & CONTROL	ORANGE	CAUTION TELEPHONE LINE BURIED BELOW
NATURAL GAS	YELLOW	CAUTION GAS LINE BURIED BELOW
WATER SYSTEMS	BLUE	CAUTION WATER LINE BURIED BELOW
FIRE PROTECTION SYSTEMS	BLUE	CAUTION FIRE LINE BURIED BELOW
SPRINKLER MAINS	BLUE	CAUTION SPRINKLER LINE BURIED BELOW
SEWER SYSTEM	GREEN	CAUTION SEWER LINE BURIED BELOW
COMMUNICATION CONDUIT	ORANGE	CAUTION COMM. LINE BURIED BELOW.

27. UNDERGROUND-TYPE PLASTIC LINE MARKER: MANUFACTURER'S STANDARD PERMANENT, BRIGHT-COLORED DETECTABLE TAPE, CONTINUOUS-PRINTED PLASTIC TAPE, INTENDED FOR DIRECT-BURIAL SERVICE; NOT LESS THAN 6" WIDE X 4 MILS THICK.

PAVEMENT:

28. AREAS OF NEW ASPHALT SHALL FOLLOW THE ASPHALT PAVEMENT DETAIL HEREIN.
29. AREAS OF ASPHALT PAVEMENT THAT ARE DISTURBED BY THE CONSTRUCTION OF THIS PROJECT SHALL BE REPLACED IN ACCORDANCE WITH THE ASPHALT PAVEMENT REPAIR DETAIL. THE FINISHED GRADE OF ASPHALT PAVING SHALL BLEND TO EXISTING GRADE AND THE EDGE OF THE CONCRETE PAVEMENT SMOOTHLY WITH NO SLOPES EXCEEDING 4% UNLESS OTHERWISE NOTED.
30. CONTRACTOR IS RESPONSIBLE TO PLACE THE HOT-MIX ASPHALT MIX AS REQUIRED IN THE DRAWINGS AND DETAILS.
31. FINISHED PAVING SHALL BE FREE OF ``BIRD BATHS" AND BE SMOOTH AT THE SLOPES SPECIFIED ON THE PLANS.
32. FINISHED GRADE SHALL BE WITHIN 0.1 FEET OF THAT NOTED ON THE DRAWINGS.
33. THE PAVEMENT SHALL BE PROTECTED FROM VEHICULAR TRAFFIC OF ANY KIND WITH THE USE OF BARRICADES, ETC. FOR A MINIMUM PERIOD OF 24 HOURS AFTER FINAL ROLLING. MAINTAIN AND PROTECT ASPHALT SURFACE FROM SCRAPES, SEARS, SPILLS, HYDRAULIC LEAKS, AND ANY OTHER CONSTRUCTION DAMAGE FOR THE REMAINDER OF CONSTRUCTION UNTIL OWNER'S REPRESENTATIVE ACCEPTANCE. CONTRACTOR IS RESPONSIBLE FOR CLEARING, REPAIRING, SEAL COATING, PATCHING, AND RE-STRIPING AS NECESSARY TO OBTAIN OWNER'S REPRESENTATIVE'S FINAL APPROVAL/ACCEPTANCE.
34. THICKNESSES OF ALL LAYERS SHOWN ARE AFTER COMPACTION. COMPACT ALL LAYERS TO 95% PER ASTM D 1557 (MODIFIED PROCTOR METHOD).

SEDIMENT AND EROSION CONTROL NARRATIVE:

THE PURPOSE OF THE SEDIMENT AND EROSION CONTROL PLAN, DETAILS, AND NOTES IS TO OUTLINE A PROGRAM THAT MINIMIZES SOIL EROSION DURING CONSTRUCTION. THE PRIMARY POLICIES OF THIS PROGRAM ARE:

a) TRAPPING PARTICLES AT SOURCE BY PROMPTLY STABILIZING DISTURBED AREAS;
b) AVOID CONCENTRATION OF WATER;
c) AVOID CONTAMINATION OF EXISTING STORM DRAINS;
d) MAINTENANCE (WEEKLY MAINTENANCE AND AFTER STORM EVENTS) OF CONTROLS TO ENSURE THEY ARE FUNCTIONING PROPERLY;

SEDIMENT AND EROSION CONTROL NOTES:

1. BEFORE COMMENCING CONSTRUCTION ACTIVITY, THE CONTRACTOR MUST OBTAIN COVERAGE UNDER THE NEW YORK STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM (S.P.D.E.S.) GENERAL PERMIT FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITY. (GP-0-20-001). A NOTICE OF INTENT (N.O.I.) FORM IS REQUIRED TO BE SUBMITTED BY THE CONTRACTOR. ADDITIONALLY, A MS4 S.W.P.P.P. ACCEPTANCE FORM MUST BE SUBMITTED. PLEASE CONTACT THE ENGINEER OF RECORD PRIOR TO SUBMITTING THESE FORMS.
2. SHEET C-4 IS INTENDED TO DESCRIBE THE SOIL SEDIMENT AND EROSION CONTROL TREATMENT OF THIS SITE ONLY. FOR OTHER DETAILS WITH RESPECT TO CONSTRUCTION, SEE APPROPRIATE DRAWINGS.
3. THE LIMIT OF DISTURBANCE AS SHOWN ON THE PLAN MUST BE SURVEY-LOCATED AND STAKED IN THE FIELD PRIOR TO ANY CONSTRUCTION ACTIVITY.
4. ALL SEDIMENT AND EROSION CONTROLS SHALL BE DONE IN CONFORMANCE WITH THE "NY STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL" PREPARED BY THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION.
5. THE CONTRACTOR MUST PROVIDE "TRAINED CONTRACTORS" AS DEFINED BY THE NYSDEC GENERAL PERMIT FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITY (GP-0-10-001).
6. THE CONTRACTOR IS ASSIGNED THE RESPONSIBILITY FOR IMPLEMENTING THIS SEDIMENT AND EROSION CONTROL PLAN. THIS RESPONSIBILITY INCLUDES THE INSTALLATION AND MAINTENANCE OF CONTROL MEASURES, INFORMING ALL PARTIES ENGAGED ON THE CONSTRUCTION SITE OF THE REQUIREMENTS AND OBJECTIVES OF THE PLAN NOTIFYING THE TOWN OF NORTH CASTLE OF ANY TRANSFER OF THIS RESPONSIBILITY, AND WHEN CONSTRUCTION IS TO BEGIN THREE (3) DAYS PRIOR TO COMMENCING WORK.
7. TEMPORARY SEDIMENT CONTROL MEASURES MUST BE INSTALLED IN ACCORDANCE WITH DRAWINGS AND MANUFACTURER RECOMMENDATIONS PRIOR TO WORK IN ANY UPLAND AREAS.
8. NO CONSTRUCTION OR CONSTRUCTION EQUIPMENT OR STORAGE OF MATERIALS WILL BE ALLOWED ON THE DOWNHILL SIDE OF THE SILT FENCE OR WITHIN FENCED OFF AREAS, EXCEPT DURING CONSTRUCTION OF THE PROPOSED FACILITIES SHOWN BEYOND THE FENCES.
9. WHERE EXISTING TREES ARE TO BE SAVED, TREE LIMBS SHALL BE TRIMMED AS NEEDED TO PROTECT THE TREES FROM DAMAGE BY CONSTRUCTION OPERATIONS. SUCH TRIMMING SHALL BE MINIMIZED. ARMORING AND ANY LIMB TRIMMING SHOULD BE DONE BEFORE CONSTRUCTION BEGINS. TREE PROTECTION SHOULD BE MAINTAINED DURING CONSTRUCTION. EQUIPMENT TRAFFICKING AND MATERIALS STORAGE OVER THE TREE ROOTS SHALL BE AVOIDED.
10. THE LOCATION OF EACH STOCKPILE WILL VARY THROUGHOUT THE CONSTRUCTION PERIOD. EXCAVATED SILT AND EARTH STOCKPILES SHALL BE STORED ON SITE. SILT FENCE SHALL BE PLACED AT THE BASE OF THE STOCKPILE TO PREVENT SEDIMENT FROM LEAVING THE SITE.
11. SILT FENCE SHALL BE MIRAFI ENVIROFENCE, AMOCO SILTSTOP OR EQUIVALENT APPROVED BY SITE ENGINEER. FILTER FABRIC USED SHALL BE MIRAFI 100X OR EQUIVALENT. INSTALL SILT FENCE ACCORDING TO MANUFACTURER'S INSTRUCTION, PARTICULARLY, BURY LOWER EDGE OF FABRIC INTO GROUND.
12. ALL ROOF LEADER DOWNSPOUTS SHALL TEMPORARILY DISCHARGE ONTO SPLASH PADS MEASURING AT LEAST 8" WIDE BY 18" LONG, OR APPROVED EQUAL.
13. LAND DISTURBANCE SHALL BE KEPT TO A MINIMUM. ALL DISTURBED AREA SHALL BE PLANTED IN WHERE PERMANENT PLANTINGS ARE CALLED FOR AS SOON AS PRACTICABLE. SEED AND MULCH DISTURBED AREAS WITH GRASS SEED WHERE PERMANENT PLANTINGS ARE NOT CALLED FOR, AS SOON AS PRACTICABLE. PREPARE SEEDBED (4" THICK MINIMUM) WITH TOPSOIL. SEED, RAKE, ROLL, WATER AND MULCH AREAS ACCORDING TO MIXES BELOW. WATER AS OFTEN AS NECESSARY (UP TO 3 TIMES PER DAY) TO ESTABLISH COVER. MULCH SEEDED AREAS AT 1 TO 2 TONS/ACRE WITH SALT HAY. MAINTAIN MULCH AND WATERING UNTIL GRASS IS 3" HIGH WITH 85% COVER. RESEED OR OVERSEED IF NECESSARY.

TEMPORARY SEED MIX:
PERENNIAL RYEGRASS — 40 LBS/AC. (1 LB/1000 SF.)
PERMANENT LAWNS:
KENTUCKY BLUEGRASS — 20 LBS/AC.
CREEPING RED FESCUE — 20 LBS/AC.
PERENNIAL RYEGRASS — 5 LBS/AC.
45 LBS/AC. (1 LB/1000 SF.)
OPTIMUM SEEDING DATES:
APRIL 15 THROUGH JUNE 15 - AND - AUGUST 15 THROUGH OCTOBER 1

14. ANY DISTURBED AREA NOT INTENDED FOR PROPOSED CUT/FILL EARTHWORK SHALL BE RESTORED TO THE PRECONSTRUCTION CONDITION.
15. IF DISTURBED AREAS CAN NOT BE SEEDED IMMEDIATELY DUE TO THE TIME OF YEAR, MULCH AREA UNTIL SEEDING CAN OCCUR; REMOVE MULCH AND SEED AND RE-MULCH WHEN SEASON PERMITS.
16. UPON INSTALLATION OF EACH AREA DRAIN, IMMEDIATELY SURROUND IT WITH HAYBALES AS PER SEDIMENT FILTER DETAIL. HAYBALES SHALL BE NEW AND ARE TO BE REPLACED WHENEVER THEIR CONDITION DETERIORATES BEYOND REASONABLE USABILITY.
17. PAVEMENT SHOULD BE PLACED AS SOON AS POSSIBLE AFTER DRAINAGE IS INSTALLED.
18. LOADED TRUCKS SHALL BE COVERED AS REQUIRED TO KEEP DOWN DUST.
19. AFFECTED PORTIONS OF OFF SITE ROADS AND SIDEWALKS MUST BE SWEPT CLEAN WHEN REQUIRED TO KEEP DOWN DUST AND PREVENT SAFETY HAZARDS OR AT LEAST ONCE A WEEK DURING CONSTRUCTION AND AS DIRECTED BY SITE ENGINEER.
20. DUST CONTROL TO BE ACHIEVED WITH WATERING DOWN DISTURBED AREAS AS REQUIRED.
21. AFTER EACH STORM EVENT OR ONCE BI-WEEKLY, ALL SEDIMENT AND EROSION CONTROLS SHALL BE INSPECTED. ANY CORRECTIVE ACTIONS TO MITIGATE ENVIRONMENTAL CONCERNS WILL BE ORDERED BY THE SITE ENGINEER OR ENVIRONMENTAL ENGINEER. IT IS THE OWNER'S RESPONSIBILITY TO RETAIN SUCH CONSULTANT.
22. ADDITIONAL SEDIMENT AND EROSION CONTROL MEASURES MAY BE INSTALLED DURING THE CONSTRUCTION PERIOD IF FOUND NECESSARY BY THE INSPECTING ENGINEER OR ANY GOVERNING AGENCY.
23. ALL PERMANENT AND TEMPORARY SEDIMENT CONTROL DEVICES WILL BE MAINTAINED IN EFFECTIVE CONDITION THROUGHOUT THE CONSTRUCTION PERIOD UNTIL UPLAND DISTURBED AREAS ARE THOROUGHLY STABILIZED. UPON COMPLETION OF WORK AND STABILIZATION OF ALL UPLAND AREAS, ALL TEMPORARY SEDIMENT CONTROL DEVICES AND TREE PROTECTION SHOULD BE REMOVED FROM THE SITE AND ANY SILT DISPOSED OF LEGALLY.
24. PERIODICALLY AND UPON COMPLETION OF THE JOB, CLEAN SILT FROM ANY EFFECTED STORM SEWER SYSTEMS INCLUDING PIPES AND INLETS. USE SILT DURING FINAL LANDSCAPING OR DISPOSE OFF-SITE LEGALLY.

CONSTRUCTION PHASING:

The following description of construction phasing is intended to demonstrate a feasible sequence of construction. The actual sequence may vary due to field conditions if approved by the inspecting engineer.

PHASE 1: PREPARATION (1 WEEK)

- AN ON-SITE PRE-CONSTRUCTION MEETING SHALL BE ATTENDED BY THE TOWN ENGINEER, TOWN BUILDING INSPECTOR, THE INSPECTING ENGINEER OF RECORD, CONTRACTOR, AND OWNER TO REVIEW THE EROSION AND SEDIMENT CONTROL PLANS AND DISCUSS ANY MODIFICATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE THE PRE-CONSTRUCTION MEETING.
- INSTALL SILT FENCES AND TRACKING PAD FOR CONSTRUCTION.
- INSTALL TREE PROTECTION AND TRIM LIMBS THAT MAY BE DAMAGED BY CONSTRUCTION.
- INSTALL INLET PROTECTION ON EXISTING CATCH BASINS AS DEPICTED ON THE PLAN.
- INSTALL A PROTECTION FENCE AROUND THE PROPOSED SEPTIC LEACHING AREA AND THE PROPOSED STORMWATER INFILTRATION GALLERIES.
- CUT TREES TO BE REMOVED.

PHASE 2: DEMOLITION (2 WEEK)
- CAP-OFF AND REMOVE EXISTING UTILITIES TO THE EXISTING HOUSE.
- DEMOLISH AND REMOVE EXISTING HOUSE, SHEDS, STALL BARN, AND SOUTHWEST WING TO THE EXISTING INDOOR RIDING BUILDING

PHASE 3: CONSTRUCTION OF HOUSE AND DRIVE (45 WEEKS)
- EXCAVATE AND CONSTRUCT FOUNDATION FOR HOUSE AND POOL HOUSE
- EXCAVATE AND CONSTRUCT 10 STALL STABLE BARN AND GROOMS QUARTERS
- ROUGH GRADE THE PROPOSED GRAVEL DRIVEWAYS AND THE ASPHALT DRIVE COURT.
- CONSTRUCTION THE HOUSE, POOL HOUSE, BARN AND GROOMS QUARTERS. BACKFILL FOUNDATIONS AS SOON AS POSSIBLE.
- INSTALL SEPTIC LEACHING TRENCHES, TANKS, BOXES, AND ASSOCIATED PIPING.
- INSTALL STORMWATER INFILTRATION GALLERIES.
- INSTALL WATER, ELECTRIC AND COMMUNICATION UTILITIES.
- GRADE PROPOSED PADDOCK AREAS.
- FINAL PAVING FOR THE DRIVES AND DRIVEWAY.
- MAINTAIN ALL SEDIMENT AND EROSION CONTROLS IN AN EFFECTIVE CONDITION DURING THE CONSTRUCTION PERIOD

PHASE 4: LANDSCAPING (3 WEEK)

- FULLY STABILIZE ALL DISTURBED AREAS
- INSTALL SEED AND MULCH

PHASE 5: CLEAN UP AFTER ALL AREAS ARE STABILIZED

- CLEAN EFFECTED PORTION OF OFF-SITE ROADS AND DRIVEWAYS.
- REMOVE ACCUMULATED SILT AND DEBRIS.
- REMOVE TEMPORARY SEDIMENT AND EROSION CONTROL.
- MAKE ANY NECESSARY REPAIRS TO PERMANENT SEDIMENT AND EROSION CONTROLS.

PH#D-1 - INFILTRATION TEST
Date: 7/14/2021 - Inspector: Lou DiMarzo, P.E. - Town: Vinny Federici
Pre-Soak Date: 7/13/2021 — Depth from excavated Bench = 30" Depth from Existing Grade = 66" — Diam. = 8"

Hole Number	Run No.	Start	Stop	Elapse Time Min.	Depth to Water from Bench Surface Start Inches	Depth to Water from Bench Surface Stop Inches	Water Level Drop in Inches	Infiltration Rate inches/hour
D-1	1	11:32	11:33	1	20"	23"	3"	
	2	11:34	11:36	2	20"	23"	3"	
	3	11:38	11:40	2	20"	23"	3"	90" per Hr

PH#D-2 - INFILTRATION TEST
Date: 7/14/2021 - Inspector: Lou DiMarzo, P.E. - Town: Vinny Federici
Pre-Soak Date: 7/13/2021 — Depth from excavated Bench = 30" Depth from Existing Grade = 66" — Diam. = 8"

Hole Number	Run No.	Start	Stop	Elapse Time Min.	Depth to Water from Bench Surface Start Inches	Depth to Water from Bench Surface Stop Inches	Water Level Drop in Inches	Infiltration Rate inches/hour
D-2	1	11:31	11:32	1	20"	23"	3"	
	2	11:32	11:33	1	20"	23"	3"	
	3	11:34	11:35	1	20"	23"	3"	180" per Hr

PH#D-3 - INFILTRATION TEST
Date: 7/14/2021 - Inspector: Lou DiMarzo, P.E. - Town: Vinny Federici
Pre-Soak Date: 7/13/2021 — Depth from excavated Bench = 30" Depth from Existing Grade = 66" — Diam. = 8"

Hole Number	Run No.	Start	Stop	Elapse Time Min.	Depth to Water from Bench Surface Start Inches	Depth to Water from Bench Surface Stop Inches	Water Level Drop in Inches	Infiltration Rate inches/hour
D-3	1	11:56	12:03	7	20"	23"	3"	
	2	12:03	12:12	9	20"	23"	3"	
	3	12:14	12:23	9	20"	23"	3"	20" per Hr

PH#D-4 - INFILTRATION TEST
Date: 7/14/2021 - Inspector: Lou DiMarzo, P.E. - Town: Vinny Federici
Pre-Soak Date: 7/13/2021 — Depth from excavated Bench = 30" Depth from Existing Grade = 66" — Diam. = 8"

Hole Number	Run No.	Start	Stop	Elapse Time Min.	Depth to Water from Bench Surface Start Inches	Depth to Water from Bench Surface Stop Inches	Water Level Drop in Inches	Infiltration Rate inches/hour
D-4	1	11:55	12:03	8	20"	23"	3"	
	2	12:03	12:11	8	20"	23"	3"	
	3	12:12	12:20	8	20"	23"	3"	22.5" per Hr

PH#D-7 - INFILTRATION TEST
Date: 7/14/2021 - Inspector: Lou DiMarzo, P.E. - Town: Vinny Federici
Pre-Soak Date: 7/13/2021 — Depth from excavated Bench = 30" Depth from Existing Grade = 66" — Diam. = 8"

Hole Number	Run No.	Start	Stop	Elapse Time Min.	Depth to Water from Bench Surface Start Inches	Depth to Water from Bench Surface Stop Inches	Water Level Drop in Inches	Infiltration Rate inches/hour
D-7	1	11:23	11:24	1	20"	23"	3"	
	2	11:24	11:25	1	20"	23"	3"	
	3	11:26	11:27	1	20"	23"	3"	180" per Hr

PH#D-8 - INFILTRATION TEST
Date: 7/14/2021 - Inspector: Lou DiMarzo, P.E. - Town: Vinny Federici
Pre-Soak Date: 7/13/2021 — Depth from excavated Bench = 30" Depth from Existing Grade = 66" — Diam. = 8"

Hole Number	Run No.	Start	Stop	Elapse Time Min.	Depth to Water from Bench Surface Start Inches	Depth to Water from Bench Surface Stop Inches	Water Level Drop in Inches	Infiltration Rate inches/hour
D-8	1	11:22	11:23	1	20"	23"	3"	
	2	11:23	11:24	1	20"	23"	3"	
	3	11:24	11:25	1	20"	23"	3"	180" per Hr

PH#D-9 - INFILTRATION TEST
Date: 7/14/2021 - Inspector: Lou DiMarzo, P.E. - Town: Vinny Federici
Pre-Soak Date: 7/13/2021 — Depth from excavated Bench = 30" Depth from Existing Grade = 60" — Diam. = 8"

Hole Number	Run No.	Start	Stop	Elapse Time Min.	Depth to Water from Bench Surface Start Inches	Depth to Water from Bench Surface Stop Inches	Water Level Drop in Inches	Infiltration Rate inches/hour
D-9	1	11:08	11:09	1	20"	23"	3"	
	2	11:10	11:11	1	20"	23"	3"	
	3	11:11	11:12	1	20"	23"	3"	180" per Hr

PH#D-10 - INFILTRATION TEST
Date: 7/14/2021 - Inspector: Lou DiMarzo, P.E. - Town: Vinny Federici
Pre-Soak Date: 7/13/2021 — Depth from excavated Bench = 30" Depth from Existing Grade = 60" — Diam. = 8"

Hole Number	Run No.	Start	Stop	Elapse Time Min.	Depth to Water from Bench Surface Start Inches	Depth to Water from Bench Surface Stop Inches	Water Level Drop in Inches	Infiltration Rate inches/hour
D-10	1	11:09	11:10	1	20"	23"	3"	
	2	11:10	11:11	1	20"	23"	3"	
	3	11:11	11:12	1	20"	23"	3"	180" per Hr

PH#D-11 - INFILTRATION TEST
Date: 7/14/2021 - Inspector: Lou DiMarzo, P.E. - Town: Vinny Federici
Pre-Soak Date: 7/13/2021 — Depth from excavated Bench = 30" Depth from Existing Grade = 60" — Diam. = 8"

Hole Number	Run No.	Start	Stop	Elapse Time Min.	Depth to Water from Bench Surface Start Inches	Depth to Water from Bench Surface Stop Inches	Water Level Drop in Inches	Infiltration Rate inches/hour
D-11	1	10:49	10:53	1	20"	23"	3"	
	2	10:54	10:59	1	20"	23"	3"	
	3	11:00	11:06	1	20"	23"	3"	180" per Hr

PH#D-12 - INFILTRATION TEST
Date: 7/14/2021 - Inspector: Lou DiMarzo, P.E. - Town: Vinny Federici
Pre-Soak Date: 7/13/2021 — Depth from excavated Bench = 30" Depth from Existing Grade = 60" — Diam. = 8"

Hole Number	Run No.	Start	Stop	Elapse Time Min.	Depth to Water from Bench Surface Start Inches	Depth to Water from Bench Surface Stop Inches	Water Level Drop in Inches	Infiltration Rate inches/hour
D-12	1	10:51	10:52	1	20"	23"	3"	
	2	10:56	10:58	2	20"	23"	3"	
	3	10:58	11:00	2	20"	23"	3"	90" per Hr

PH#D-13 - INFILTRATION TEST
Date: 10/18/2022 - Inspector: Lou DiMarzo, P.E. - Town: Steven Sicignano
Pre-Soak Date: 10/17/2022 — Depth from excavated Bench = 24" Depth from Existing Grade = 54" — Diam. = 4" pvc casing

Hole Number	Run No.	Start	Stop	Elapse Time Min.	Depth to Water from Bench Surface Start Inches	Depth to Water from Bench Surface Stop Inches	Water Level Drop in Inches	Infiltration Rate inches/hour
D-13	1	9:42	10:09	27	20"	23"	3"	
	2	10:09	10:35	26	20"	23"	3"	
	3	10:36	11:05	29	20"	23"	3"	6.2" per Hr

PH#D-14 - INFILTRATION TEST
Date: 10/18/2022 - Inspector: Lou DiMarzo, P.E. - Town: Steven Sicignano
Pre-Soak Date: 10/17/2022 — Depth from excavated Bench = 24" Depth from Existing Grade = 75" — Diam. = 4" pvc casing

Hole Number	Run No.	Start	Stop	Elapse Time Min.	Depth to Water from Bench Surface Start Inches	Depth to Water from Bench Surface Stop Inches	Water Level Drop in Inches	Infiltration Rate inches/hour
D-14	1	9:44	9:46	2	20"	23"	3"	
	2	9:48	9:51	3	20"	23"	3"	
	3	9:53	9:57	4	20"	23"	3"	
	4	9:58	10:02	4	20"	23"	3"	45" per Hr

PH#D-15 - INFILTRATION TEST
Date: 10/18/2022 - Inspector: Lou DiMarzo, P.E. - Town: Steven Sicignano
Pre-Soak Date: 10/17/2022 — Depth from excavated Bench = 30" Depth from Existing Grade = 60" — Diam. = 4" pvc casing

Hole Number	Run No.	Start	Stop	Elapse Time Min.	Depth to Water from Bench Surface Start Inches	Depth to Water from Bench Surface Stop Inches	Water Level Drop in Inches	Infiltration Rate inches/hour
D-15	1	10:06	10:08	2	20"	23"	3"	
	2	10:09	10:14	5	20"	23"	3"	
	3	10:15	10:21	6	20"	23"	3"	30" per Hr

PH#D-17 - INFILTRATION TEST
Date: 10/18/2022 - Inspector: Lou DiMarzo, P.E. - Town: Steven Sicignano
Pre-Soak Date: 10/17/2022 — Depth from excavated Bench = 30" Depth from Existing Grade = 60" — Diam. = 4" pvc casing

Hole Number	Run No.	Start	Stop	Elapse Time Min.	Depth to Water from Bench Surface Start Inches	Depth to Water from Bench Surface Stop Inches	Water Level Drop in Inches	Infiltration Rate inches/hour
D-17	1	10:25	10:27	2	20"	23"	3"	
	2	10:27	10:29	2	20"	23"	3"	
	3	10:30	10:32	2	20"	23"	3"	90" per Hr

PH#D-18 - INFILTRATION TEST
Date: 10/18/2022 - Inspector: Lou DiMarzo, P.E. - Town: Steven Sicignano
Pre-Soak Date: 10/17/2022 — Depth from excavated Bench = 30" Depth from Existing Grade = 60" — Diam. = 4" pvc casing

Hole Number	Run No.	Start	Stop	Elapse Time Min.	Depth to Water from Bench Surface Start Inches	Depth to Water from Bench Surface Stop Inches	Water Level Drop in Inches	Infiltration Rate inches/hour
D-18	1	10:35	10:39	4	20"	23"	3"	
	2	10:40	10:44	4	20"	23"	3"	
	3	10:46	10:50	4	20"	23"	3"	45" per Hr

PH#D-19 - INFILTRATION TEST
Date: 10/18/2022 - Inspector: Lou DiMarzo, P.E. - Town: Steven Sicignano
Pre-Soak Date: 10/17/2022 — Depth from excavated Bench = 30" Depth from Existing Grade = 60" — Diam. = 4" pvc casing

Hole Number	Run No.	Start	Stop	Elapse Time Min.	Depth to Water from Bench Surface Start Inches	Depth to Water from Bench Surface Stop Inches	Water Level Drop in Inches	Infiltration Rate inches/hour
D-19	1	11:01	11:02	1	20"	23"	3"	
	2	11:02	11:03	1	20"	23"	3"	
	3	11:03	11:04	1	20"	23"	3"	
	4	11:04	11:05	1	20"	23"	3"	180" per Hr

PH#D-20 - INFILTRATION TEST
Date: 10/18/2022 - Inspector: Lou DiMarzo, P.E. - Town: Steven Sicignano
Pre-Soak Date: 10/17/2022 — Depth from excavated Bench = 30" Depth from Existing Grade = 60" — Diam. = 4" pvc casing

Hole Number	Run No.	Start	Stop	Elapse Time Min.	Depth to Water from Bench Surface Start Inches	Depth to Water from Bench Surface Stop Inches	Water Level Drop in Inches	Infiltration Rate inches/hour
D-20	1	11:08	11:09	1	20"	23"	3"	
	2	11:12	11:11	1	20"	23"	3"	
	3	11:12	11:14	2	20"	23"	3"	
	4	11:15	11:17	2	20"	23"	3"	90" per Hr

TP#D-1 - SOIL TEST PIT
Date: 6/29/2021 - Inspector: Lou DiMarzo, P.E. - Town: Kevin Byrne

Depth	Description
0 - 7"	Topsoil
7" - 27"	Orange Brown Silty Loam
27" - 86"	Gray Sand & Gravel
	Water: None Ledge: None
	Roots: 27" Mottling: None

TP#D-2 - SOIL TEST PIT
Date: 6/29/2021 - Inspector: Lou DiMarzo, P.E. - Town: Kevin Byrne

Depth	Description
0 - 7"	Topsoil
7" - 35"	Orange Brown Silty Loam
35" - 87"	Gray Sand & Gravel
	Water: None Ledge: None
	Roots: 35" Mottling: None

TP#D-3 - SOIL TEST PIT
Date: 6/29/2021 - Inspector: Lou DiMarzo, P.E. - Town: Kevin Byrne

Depth	Description
0 - 24"	Fill
24" - 50"	Orange Brown Silty Loam
50" - 86"	Gray Sand & Gravel
	Water: None Ledge: None
	Roots: 48" Mottling: None

TP#D-4 - SOIL TEST PIT
Date: 6/29/2021 - Inspector: Lou DiMarzo, P.E. - Town: Kevin Byrne

Depth	Description
0 - 24"	Fill
24" - 48"	Orange Brown Silty Loam
48" - 86"	Gray Sand & Gravel
	Water: None Ledge: None
	Roots: 48" Mottling: None

TP#D-5 - SOIL TEST PIT
Date: 6/29/2021 - Inspector: Lou DiMarzo, P.E. - Town: Kevin Byrne

Depth	Description
0 - 21"	Fill
21" - 42"	Brown Silty Loam
42" - 88"	Gray Sand & Gravel
	Water: None Ledge: None
	Roots: 40" Mottling: None

TP#D-6 - SOIL TEST PIT
Date: 6/29/2021 - Inspector: Lou DiMarzo, P.E. - Town: Kevin Byrne

Depth	Description
0 - 6"	Topsoil
6" - 36"	Orange Brown Silty Loam
36" - 48"	Gray Sand & Gravel
	Water: None Ledge: 48"
	Roots: 36" Mottling: None

TP#D-7 - SOIL TEST PIT
Date: 6/29/2021 - Inspector: Lou DiMarzo, P.E. - Town: Kevin Byrne

Depth	Description
0 - 9"	Fill
9" - 33"	Orange Brown Silty Loam
33" - 58"	Brown Sand & Gravel w/ Silts
58" - 96"	Gray Med. Coarse Sand
	Water: None Ledge: None
	Roots: Sparse Mottling: None

TP#D-8 - SOIL TEST PIT
Date: 6/29/2021 - Inspector: Lou DiMarzo, P.E. - Town: Kevin Byrne

Depth	Description
0 - 10"	Fill
10" - 24"	Orange Brown Silty Loam
24" - 60"	Brown Sand & Gravel w/ Silts
60" - 100"	Gray Med. Coarse Sand
	Water: None Ledge: None
	Roots: Sparse Mottling: None

TP#D-9 - SOIL TEST PIT
Date: 6/29/2021 - Inspector: Lou DiMarzo, P.E. - Town: Kevin Byrne

Depth	Description
0 - 8"	Fill
8" - 21"	Orange Brown Silty Loam
21" - 50"	Brown Sand & Gravel w/ Silts
50" - 96"	Gray Med. Coarse Sand
	Water: None Ledge: None
	Roots: Sparse Mottling: None

TP#D-10 - SOIL TEST PIT
Date: 6/29/2021 - Inspector: Lou DiMarzo, P.E. - Town: Kevin Byrne

Depth	Description
0 - 10"	Fill
10" - 30"	Brown Sand & Gravel w/ Silts
30" - 98"	Gray Med. Coarse Sand
	Water: None Ledge: None
	Roots: Sparse Mottling: None

TP#D-11 - SOIL TEST PIT
Date: 6/29/2021 - Inspector: Lou DiMarzo, P.E. - Town: Kevin Byrne

Depth	Description
0 - 8"	Topsoil
8" - 32"	Orange Brown Silty Loam
32"- 48"	Brown Sand & Gravel
48" - 96"	Gray Med. Coarse Sand
	Water: None Ledge: None
	Roots: 32" Mottling: None

TP#D-12 - SOIL TEST PIT
Date: 6/29/2021 - Inspector: Lou DiMarzo, P.E. - Town: Kevin Byrne

Depth	Description
0 - 6"	Topsoil
6" - 27"	Orange Brown Silty Loam
27" - 49"	Gray Med. Coarse Sand
49" - 96"	Tan Sand & Gravel
	Water: None Ledge: None
	Roots: 27" Mottling: None

TP#D-13 - SOIL TEST PIT
Date: 10/14/2022 - Inspector: Lou DiMarzo, P.E. - Town: Steven Sicignano

Depth	Description
0 - 7"	Topsoil
7" - 30"	Orange Brown Silty Loam
30" - 66"	Sand & Gravel
	Water: None Ledge: 66"
	Roots: 30" Mottling: None

TP#D-14 - SOIL TEST PIT
Date: 10/14/2022 - Inspector: Lou DiMarzo, P.E. - Town: Steven Sicignano

Depth	Description
0 - 32"	Fill
32" - 58"	Orange Brown Silty Loam
58" - 87"	Sand & Gravel w/ Angular Stones
	Water: None Ledge: None
	Roots: 58" Mottling: None

TP#D-15 - SOIL TEST PIT
Date: 10/14/2022 - Inspector: Lou DiMarzo, P.E. - Town: Steven Sicignano

Depth	Description
0 - 6"	Topsoil
6" - 34"	Orange Brown Silty Loam
34" - 79"	Brown Sand & Gravel w/ Angular Stones
	Water: None Ledge: None
	Roots: 34" Mottling: None

TP#D-16 - SOIL TEST PIT
Date: 10/14/2022 - Inspector: Lou DiMarzo, P.E. - Town: Steven Sicignano

Depth	Description
0 - 6"	Topsoil
6" - 30"	Orange Brown Silty Loam
30" - 42"	Brown Sand & Gravel w/ Angular Stones
	Water: None Ledge: 42"
	Roots: None Mottling: None

TP#D-17 - SOIL TEST PIT
Date: 10/14/2022 - Inspector: Lou DiMarzo, P.E. - Town: Steven Sicignano

Depth	Description
0 - 7"	Topsoil
7" - 42"	Orange Brown Silty Loam
42" - 86"	Tan Medium Coarse Sand w/ Gravel
	Water: None Ledge: None
	Roots: 42" Mottling: None

TP#D-18 - SOIL TEST PIT
Date: 10/14/2022 - Inspector: Lou DiMarzo, P.E. - Town: Steven Sicignano

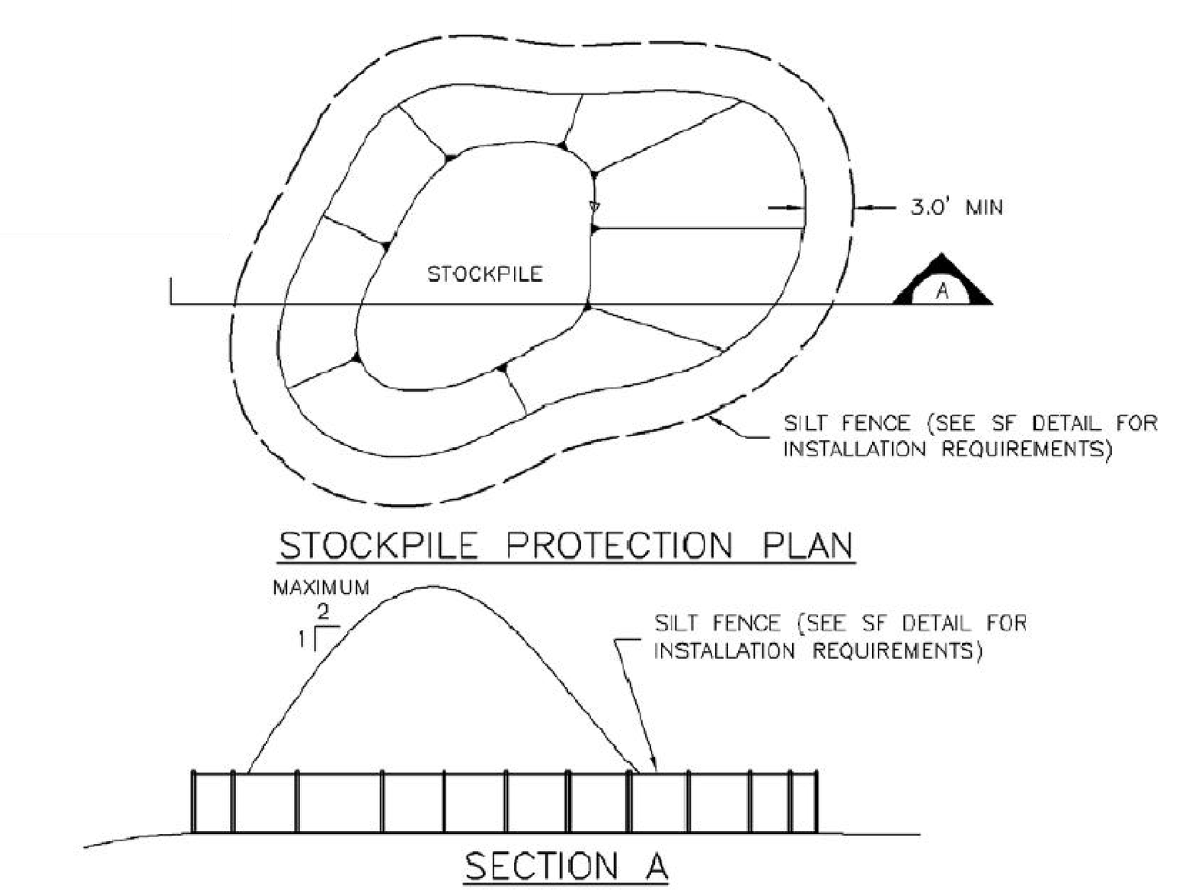
Depth	Description
0 - 7"	Topsoil
7" - 35"	Orange Brown Silty Loam
35" - 84"	Tan Sand & Gravel
	Water: None Ledge: None
	Roots: 35" Mottling: None

TP#D-19 - SOIL TEST PIT
Date: 10/14/2022 - Inspector: Lou DiMarzo, P.E. - Town: Steven Sicignano

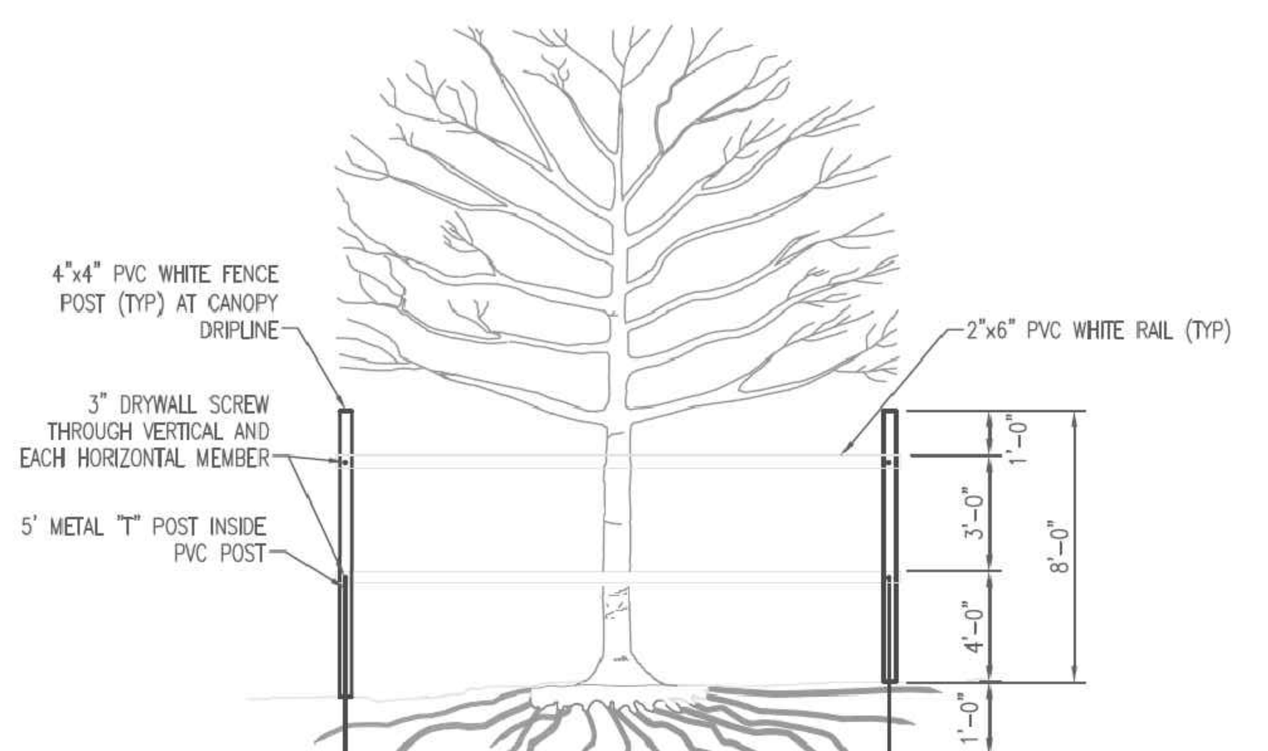
Depth	Description
0 - 7"	Topsoil
7" - 42"	Orange Brown Silty Loam
42" - 96"	Gray Medium Coarse Sand
	Water: None Ledge: None
	Roots: 42" Mottling: None

TP#D-20 - SOIL TEST PIT
Date: 10/14/2022 - Inspector: Lou DiMarzo, P.E. - Town: Steven Sicignano

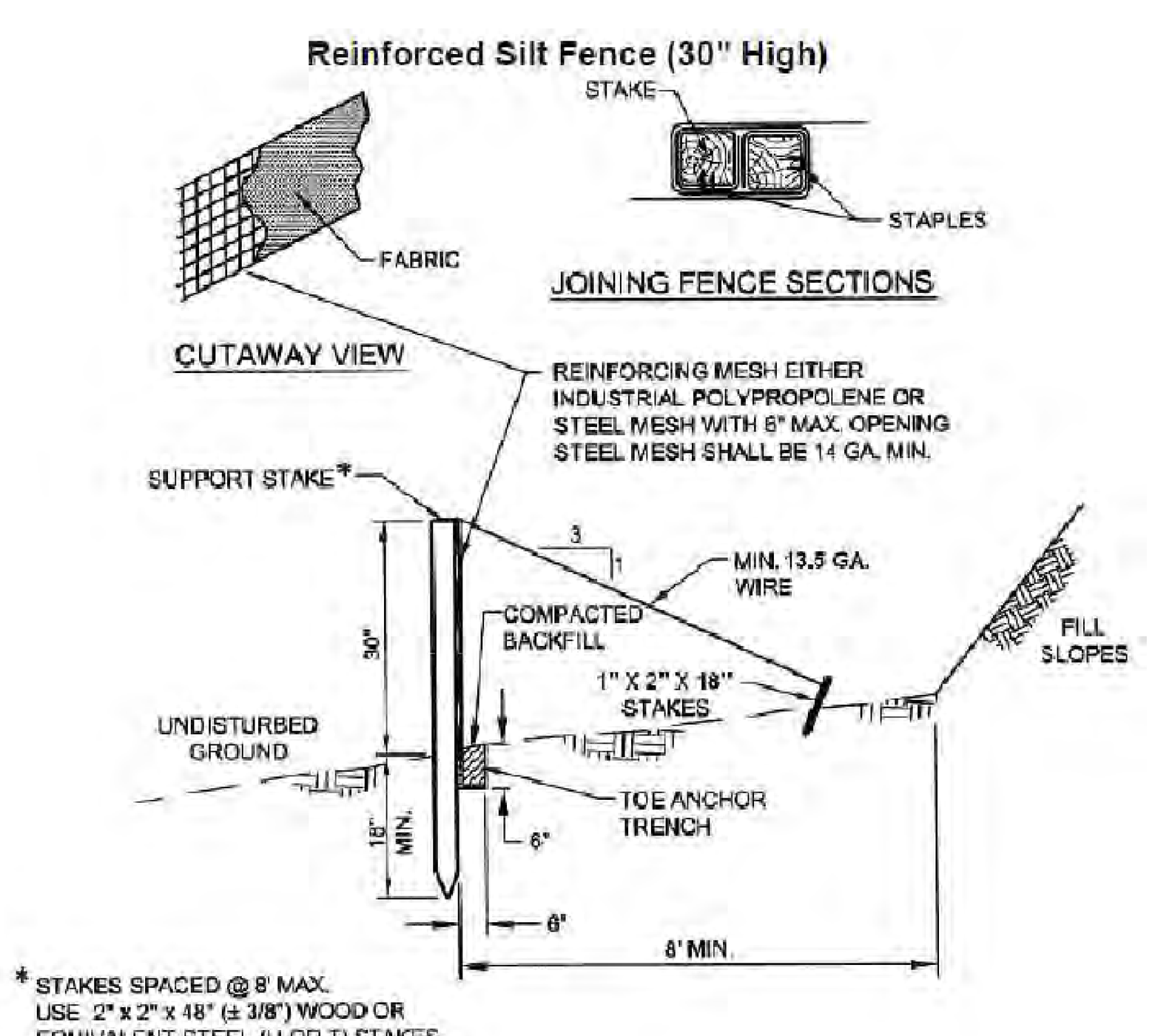
Depth	Description
0 - 6"	Topsoil
6" - 45"	Orange Brown Silty Loam
45" - 98"	Gray Medium Coarse Sand
	Water: None Ledge: None
	Roots: 45" Mottling: None



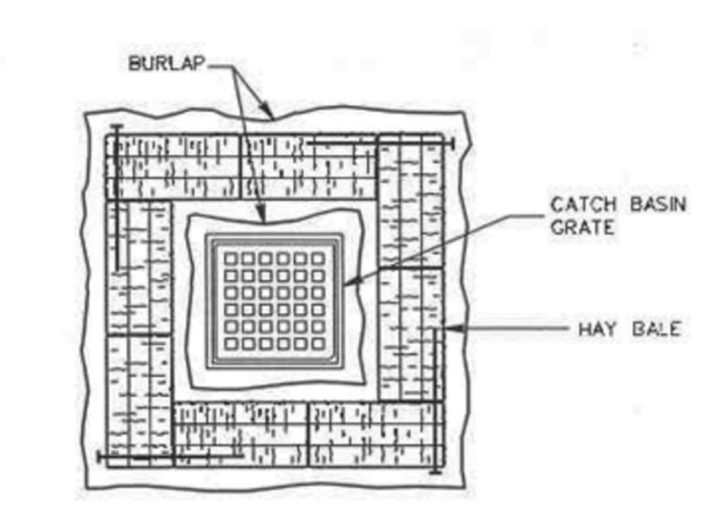
STOCKPILE PROTECTION DETAIL
N.T.S.



TREE PROTECTION DETAIL
N.T.S.



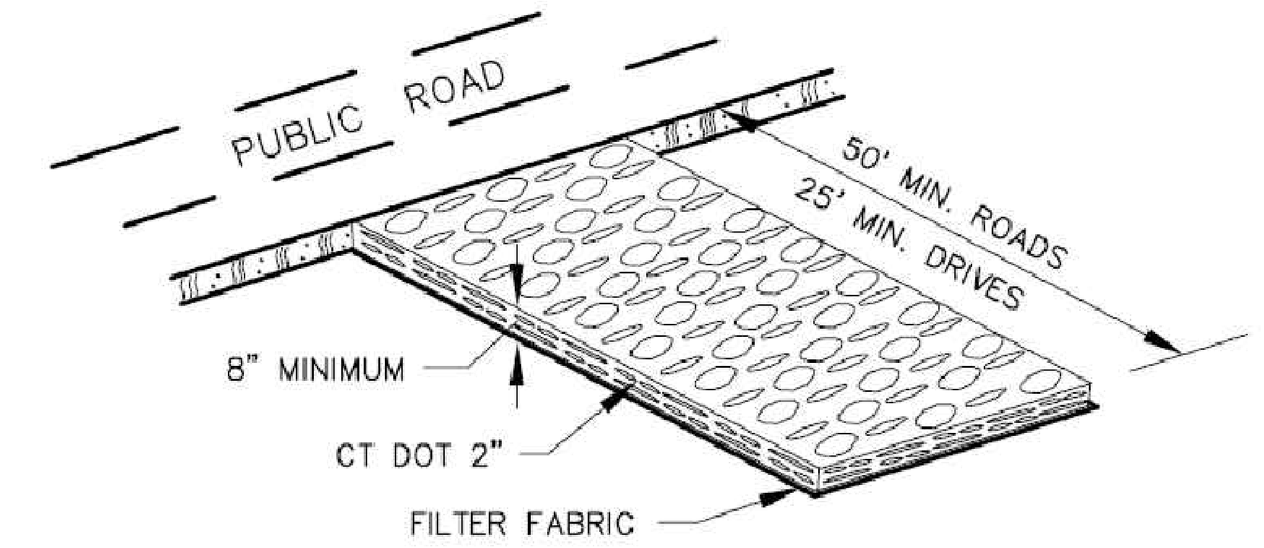
FABRIC & POST SILTATION BARRIER DETAIL
(SILT FENCE)
N.T.S.



SURROUND STREET DRAINAGE STRUCTURE INLET WITH HAY BALES PRIOR TO CONSTRUCTION AND MAINTAIN UNTIL CONSTRUCTION IS COMPLETED. ACCUMULATED SEDIMENTS SHALL BE REMOVED ON A REGULAR SCHEDULE.

IN CERTAIN INSTANCES, HAY BALES MAY BE REMOVED ON THE UP-STREAM SIDE OF THE CATCH BASIN IN ORDER TO CAPTURE RUNOFF.

HAY BALE INLET PROTECTION
SEDIMENT FILTER
N.T.S.



ANTI-TRACKING PAD
CONSTRUCTION ACCESS DETAIL
N.T.S.

UNAUTHORIZED ALTERATION OR ADDITION TO A DOCUMENT BEARING THE SEAL OF AN ENGINEER IS A VIOLATION OF SECTION 7209 SUBDIVISION 2 OF THE NEW YORK STATE EDUCATION LAW ARTICLE 145.

NOTES & DETAILS
DEPICTING
263 BEDFORD BANKSVILLE ROAD
BEDFORD, NY (NORTH CASTLE MUNICIPALITY)
PREPARED FOR
MARENGO FARMS LLC

DATE: 2/10/2023
JOB NO. 179

SCALE: AS NOTED

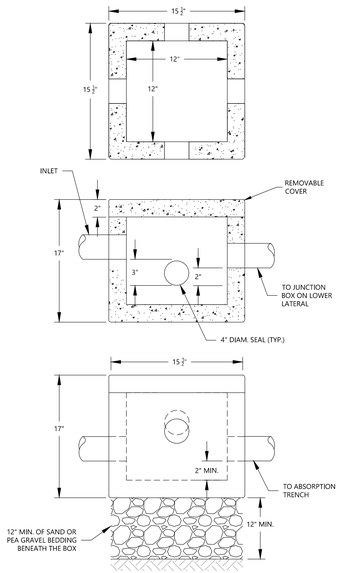
To my knowledge and belief this map is substantially correct as noted hereon

KARL H. WEED NY P.E. 056[illegible]
2/10/2023

This document is valid only if it bears the signature and seal of the designated licensed professional. Unauthorized alteration or addition to this document shall make the contents null and void.

DIMARZO & BERECZKY
191 LLOYD DRIVE
FAIRFIELD, CT 06825
203.857.4110
LAND SURVEYING
CIVIL ENGINEERING
PERMITTING

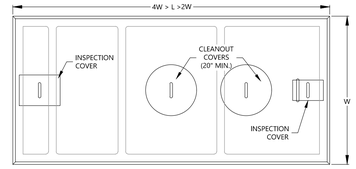
C-5



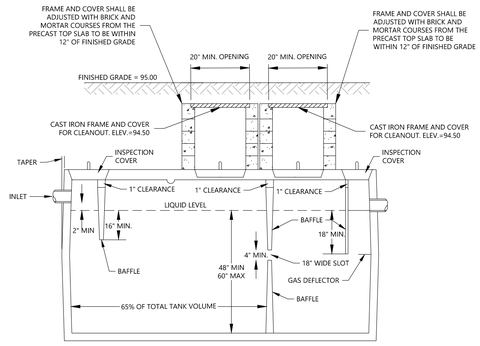
NOTES:

1. BOTTOM OF BOX MUST BE LEVEL AND FIRMLY SUPPORTED TO BELOW FROST LINE. FOOTING TO EXTEND TO 36" BELOW GROUND LEVEL.
2. PLACED ON SINGLE BRANCH DISTRIBUTORS.
3. WATERPROOFED MASONRY OR PRECAST CONCRETE CONSTRUCTION.
4. THE 4" PIPE SEAL SHALL BE TUF-TITE TS-4PRO OR AN EQUIVALENT PRODUCT APPROVED BY THE PROJECT ENGINEER.
5. TIGHT JOINT PIPE FROM SEPTIC TANK TO BOX AND BETWEEN ALL BOXES.
6. SPEED LEVELERS SHALL BE USED FOR OUTLETS. POLYLOK EQUALIZERS ARE SUGGESTED.

JUNCTION BOX
N.T.S.



PLAN VIEW

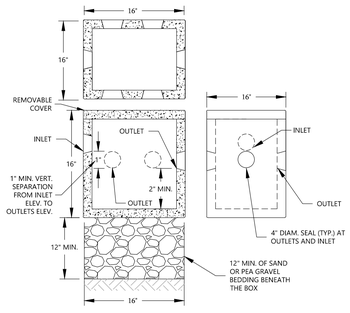


SECTION

NOTES:

1. THE MINIMUM FILL COVER OVER THE TOP OF THE TANK IS SIX (6") TO TWELVE (12") INCHES AND THE MAXIMUM FILL COVER IS TWENTY-FOUR (24") INCHES.
2. CONCRETE TO BE 4,000 PSI PER ASTM STANDARDS.
3. SEPTIC TANK CONSTRUCTION SHALL CONFORM TO ASTM C-1227-95 AND MEET AASHTO H-20 LOADING CONDITIONS.
4. TANKS GREATER THAN TEN FEET IN LENGTH SHALL HAVE ONE MANHOLE PER CHAMBER.
5. MANHOLE COVERS TO HAVE THE FOLLOWING PLACARDS:
   "DANGER! NOXIOUS GASES"
   "TANK CONTAINS TWO COMPARTMENT"
6. ALL COVERS SHALL BE PROVIDED WITH HANDLES CONSISTING OF 3/8" COATED REBAR OR APPROVED PLASTIC WITH AT LEAST 2 OUNCES OF STEEL ATTACHED.
7. SEPTIC TANK SHALL BE WATERTIGHT AND SUPPORT AT LEAST 300 LBS./SF.
8. SEPTIC TANK MUST COMPLY WITH W.C.D.H. RULES AND REGULATIONS.

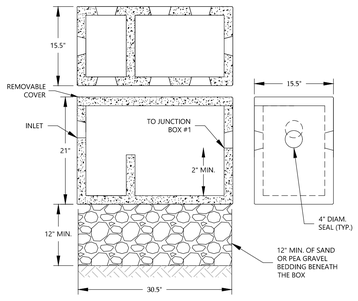
SEPTIC TANK DETAIL
N.T.S.



NOTES:

1. BOTTOM OF BOX MUST BE LEVEL AND FIRMLY SUPPORTED TO BELOW FROST LINE. FOOTING TO EXTEND TO 36" BELOW GROUND LEVEL.
2. WATERPROOFED MASONRY OR PRECAST CONCRETE CONSTRUCTION.
3. NOT LESS THAN TWO OUTLETS WITH ONE OUTLET FOR EACH LATERAL.
4. ALL OUTLETS TO BE AT THE SAME ELEVATION.
5. THE 4" PIPE SEAL SHALL BE TUF-TITE TS-4PRO OR AN EQUIVALENT PRODUCT APPROVED BY THE PROJECT ENGINEER.
6. TIGHT JOINT PIPE FROM SEPTIC TANK TO PUMP CHAMBER TO DISTRIBUTION BOX TO JUNCTION BOXES AND TO LATERALS.
7. SPEED LEVELERS SHALL BE USED FOR OUTLETS. POLYLOK EQUALIZERS ARE SUGGESTED.
8. BAFFLES TO INSURE EQUAL DISTRIBUTION MAY BE REQUIRED.

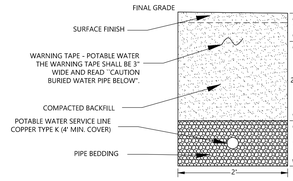
DISTRIBUTION BOX
N.T.S.



NOTES:

1. BOTTOM OF BOX MUST BE LEVEL AND FIRMLY SUPPORTED TO BELOW FROST LINE. FOOTING TO EXTEND TO 36" BELOW GROUND LEVEL.
2. WATERPROOFED MASONRY OR PRECAST CONCRETE CONSTRUCTION.
3. THE 4" PIPE SEAL SHALL BE TUF-TITE TS-4PRO OR AN EQUIVALENT PRODUCT APPROVED BY THE PROJECT ENGINEER.

BAFFLED JUNCTION BOX
N.T.S.



NOTES:

THE PIPE BEDDING SHALL BE ASTM CLASS III SAND AND SHALL NOT CONTAIN ANY COBBLES OR GRAVEL AND SHALL BE CLEAN AND FREE OF UNDESIRABLE MATERIAL.

POTABLE WATER PIPES SHALL BE LAID AT LEAST 10' HORIZONTALLY FROM ANY EXISTING OR PROPOSED SANITARY PIPE.

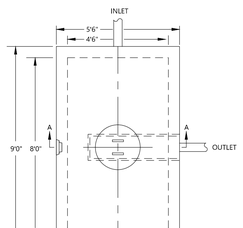
POTABLE WATER PIPES CROSSING SANITARY PIPES SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18" BETWEEN THE OUTSIDE OF THE WATER PIPE AND THE OUTSIDE OF THE SANITARY PIPE. THIS SEPARATION SHALL BE THE CASE WHEN THE WATER PIPE IS EITHER ABOVE OR BELOW THE SEWER WITH PREFERENCE TO THE WATER PIPE LOCATED ABOVE THE SEWER. AT CROSSINGS, ONE FULL LENGTH OF WATER PIPE SHALL BE LOCATED SO BOTH JOINTS WILL BE AS FAR FROM THE SANITARY PIPE AS POSSIBLE.

ALL BURIED PIPE USED FOR POTABLE WATER DISTRIBUTION SHALL BE PRESSURE TESTED UNDER THE SUPERVISION OF THE ENGINEER IN ACCORDANCE WITH AWWA C600 AT 75 PSI.

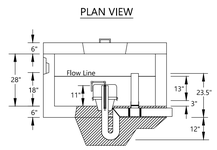
ALL NEW CLEANED OR REPAIRED POTABLE WATER PIPES AND EQUIPMENT SHALL BE DISINFECTED UNDER THE SUPERVISION OF THE ENGINEER IN ACCORDANCE WITH AWWA STANDARD C651-92, EXCEPT SECTION 5.1 (THE TABLET METHOD).

THE POTABLE WATER SUPPLY WELL SHALL BE DISINFECTED IN ACCORDANCE WITH AWWA C654-87 AFTER INSTALLATION AND PRIOR TO PLACING INTO SERVICE. PRIOR TO PLACING INTO SERVICE, A WATER SAMPLE SHALL BE COLLECTED TO DOCUMENT THE ABSENCE OF COLIFORM BACTERIA.

POTABLE WATER SERVICE DETAIL
N.T.S.



PLAN VIEW

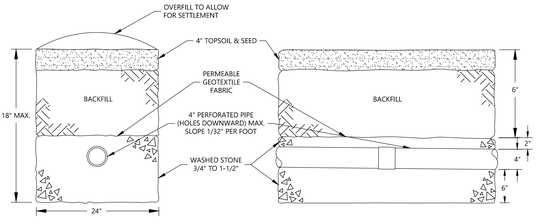


SECTION A-A

NOTES:

1. MAIN HOUSE DOSE VOLUME REQUIRED = 260 GALLONS (0.5 GALLONS PER LINEAR FOOT OF ABSORPTION TRENCH PER DOSE). 520 LF PER DOSE x 0.5 GALLONS = 260 GALLONS PER DOSE.
2. GROOMS QUARTERS DOSE VOLUME REQUIRED = 263 GALLONS (0.5 GALLONS PER LINEAR FOOT OF ABSORPTION TRENCH PER DOSE). 525 LF PER DOSE x 0.5 GALLONS = 263 GALLONS PER DOSE.
3. SINGLE DOSING CHAMBER TO BE KISTNER CONCRETE PRODUCTS INC. TYPE "E" MODEL #413 OR EQUIVALENT.
4. SIPHON SHALL HAVE A GRAVITY OVERFLOW LINE TO THE ABSORPTION SYSTEM IN CASE OF FAILURE.
5. THE OPERATION OF ALL DOSING DEVICES WILL BE INSPECTED BY THE WESTCHESTER COUNTY HEALTH DEPT PRIOR TO PLACING THE SYSTEM IN OPERATION.

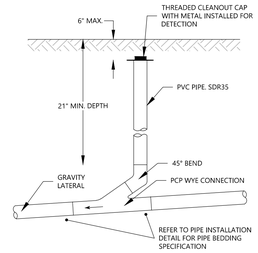
SINGLE DOSING CHAMBER WITH SIPHON
N.T.S.



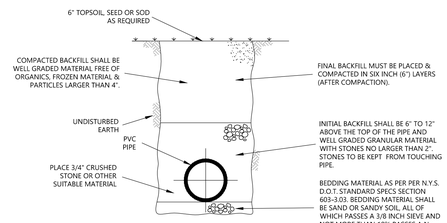
NOTES:

1. THE MINIMUM REQUIRED SEPARATION DISTANCE BETWEEN THE BOTTOM OF THE ABSORPTION TRENCH AND THE PRESENCE OF LEDGE ROCK AND/OR GROUND WATER IS FIVE FOOT (5'). .
2. THE MAXIMUM DEPTH OF THE ABSORPTION TRENCH IS 18".

ABSORPTION TRENCH
N.T.S.



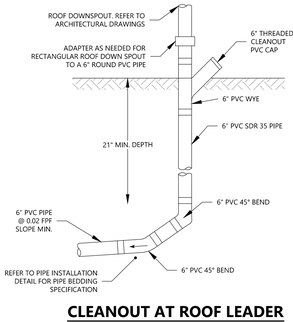
CLEANOUT
N.T.S.



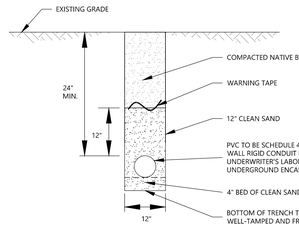
NOTES:

1. ALL MATERIAL TO BE COMPACTED TO 95% OF THE MAX. DRY DENSITY AS DETERMINED BY ASTM D1557, EXCEPT COMPACTED BACKFILL" NOT UNDER PAVEMENT WHICH SHALL BE COMPACTED TO A DENSITY AT LEAST EQUAL TO THAT OF THE ADJACENT UNDISTURBED MATERIAL.
2. ALL FOUNDATION, INITIAL BACKFILL & BACKFILL MATERIAL TO BE APPROVED BY THE INSPECTING ENGINEER.

STORM/SAN PIPE INSTALLATION
(48" DIA. & UNDER)
N.T.S.



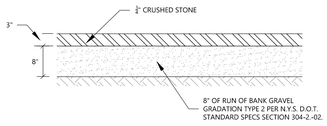
CLEANOUT AT ROOF LEADER
N.T.S.



NOTES:

1. IF 24" OF COVER CANNOT BE OBTAINED OVER THE CONDUIT, CONDUIT SHALL BE CONCRETE ENCASED.
2. ALL BACKFILL MATERIAL SHALL BE COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D1557.
3. ALL WORK SHALL BE PERFORMED ACCORDING TO THE APPROPRIATE UTILITY COMPANY REQUIREMENTS.

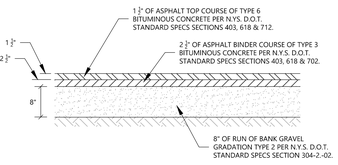
CONDUIT TRENCH (SAND BEDDING)
N.T.S.



NOTES:

1. THICKNESS OF ALL LAYERS ARE SHOWN AFTER PLACEMENT AND COMPACTION.

GRAVEL PAVEMENT DETAIL
N.T.S.



NOTES:

1. THICKNESS OF ALL LAYERS ARE SHOWN AFTER PLACEMENT AND COMPACTION.

ASPHALT PAVEMENT DETAIL
N.T.S.

DETAILS - 1
DEPICTING
263 BEDFORD BANKSVILLE ROAD
BEDFORD, NY (NORTH CASTLE MUNICIPALITY)
PREPARED FOR
MARENGO FARMS LLC

DATE: 2/10/2023
JOB NO. 179

SCALE: AS NOTED

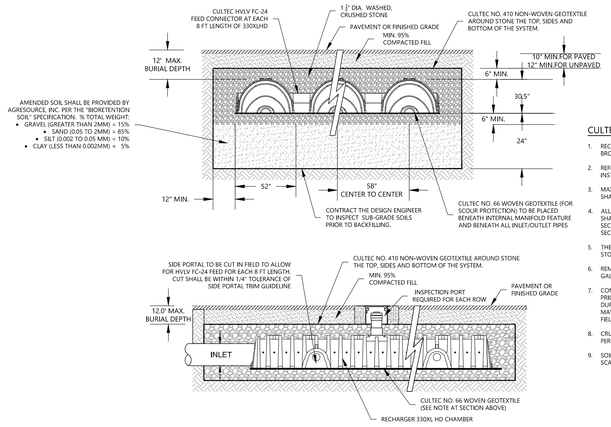
To my knowledge and belief this map is substantially correct as noted hereon

KARL H. WEIDLY P.E. #076644
2/10/2023

This document is valid only if signed with the original seal of the designated licensed professional. Unauthorized alteration or addition to this document renders it void.

DiMARZIO & BERECZKY
191 LLOYD DRIVE
FAIRFIELD, CT 06825
203.857.4110
LAND SURVEYING
CIVIL ENGINEERING
PERMITTING

C-6

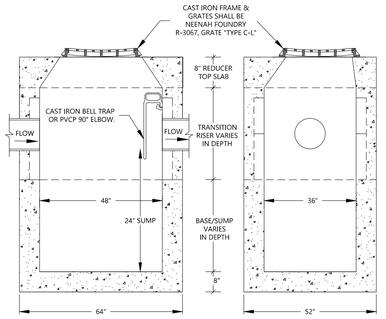


CULTEC SYSTEM NOTES:

1. RECHARGER 330XLHD BY CULTEC, INC. OF BROOKFIELD,CT.
2. REFER TO CULTEC, INC.'S CURRENT RECOMMENDED INSTALLATION GUIDELINES.
3. MAXIMUM ALLOWED COVER OVER TOP OF UNIT SHALL BE 12' (3.65m)
4. ALL GALLERIES TO HANDLE H-20 LOADINGS AND SHALL COMPLY WITH THE DETAIL. INTERIOR SECTIONS TO HAVE NO END WALLS. END SECTIONS TO HAVE ONE END WALL.
5. THERE SHALL BE A 6" LAYER OF 1¼" CRUSHED STONE BELOW ALL UNITS.
6. REMOVE ANY TOPSOIL PRIOR TO INSTALLATION OF GALLERY.
7. CONTACT THE DESIGN ENGINEER THREE DAYS PRIOR TO EXCAVATION FOR THE GALLERIES. DURING THE EXCAVATION, THE DESIGN ENGINEER MAY REVISE THE ELEVATIONS OF THE GALLERIES IF FIELD CONDITIONS DICTATE.
8. CRUSHED STONE SHALL BE GRADATION NO. 3A AS PER N.Y.S. D.O.T. STANDARD SPEC SECTION 703.
9. SOIL BENEATH THE INFILTRATION SYSTEM SHALL BE SCARIFIED OR TILLED TO IMPROVE INFILTRATION.

CULTECH-330XLHD INFILTRATOR
(BMP-E3, E-4, W-1, W-2, W-3, W-4)
(INFILTRATION SYSTEM)
N.T.S.

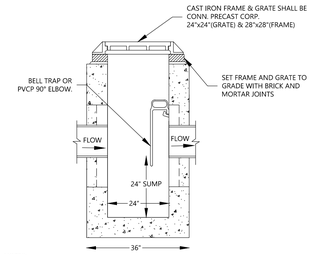
REFER TO C-3A AND C-3B PLAN SHEETS FOR ELEVATION INFORMATION FOR GRATES, PIPE INVERTS, AND SUMPS.



NOTES:

1. CATCH BASIN BASE/SUMP STRUCTURE SHALL BE PLACED ON A 6" MIN. LAYER OF CRUSHED STONE. CRUSHED STONE SHALL BE GRADATION NO. 3A AS PER N.Y.S. D.O.T. STANDARD SPEC SECTION 703.
2. ANY FILL MATERIAL PLACED UNDER THE CATCH BASIN STRUCTURE SHALL BE COMPACTED TO 95% OF THE MAX. DRY DENSITY AS DETERMINED BY ASTM D1557.
3. DESIGN AND REINFORCEMENT OF PRECAST CONCRETE SHALL COMPLY WITH ASTM C 478.
4. CATCH BASIN STRUCTURE SHALL COMPLY WITH AASHTO HS-20 LOADING.
5. THIN WALL KNOCKOUT SPACE ALONG THE PRECAST WALL SHALL BE FILLED WITH BRICK AND MORTAR SO TO MAKE ALL WALL THICKNESS 8" MIN. EXCLUDING THE PIPE PENETRATION.
6. ALL JOINTS AND PENETRATIONS SHALL BE MORTARED SMOOTH WITH THE FACE OF THE ADJACENT PRECAST CONCRETE SURFACE.
7. REFER TO CONNECTICUT PRECAST CORP. CATCH BASIN PRODUCT 36"x48" STANDARD PRECAST CTDOT DROP INLET - 8" WALL TYPE-C FOR PRODUCT SPECIFICATION.

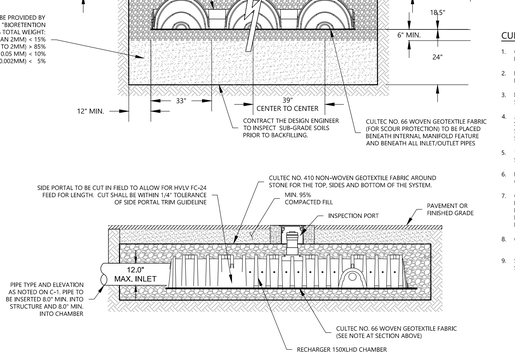
CATCH BASIN DETAIL
N.T.S.



NOTES:

1. AREA DRAIN STRUCTURE SHALL BE PLACED ON A 6" MIN. LAYER OF CRUSHED STONE. CRUSHED STONE SHALL BE GRADATION NO. 3A AS PER N.Y.S. D.O.T. STANDARD SPEC SECTION 703.
2. ANY FILL MATERIAL PLACED UNDER THE CATCH BASIN STRUCTURE SHALL BE COMPACTED TO 95% OF THE MAX. DRY DENSITY AS DETERMINED BY ASTM D1557.
3. DESIGN AND REINFORCEMENT OF PRECAST CONCRETE SHALL COMPLY WITH ASTM C 478.
4. CATCH BASIN STRUCTURE SHALL COMPLY WITH AASHTO HS-20 LOADING.
5. THIN WALL KNOCKOUT SPACE ALONG THE PRECAST WALL SHALL BE FILLED WITH BRICK AND MORTAR SO TO MAKE ALL WALL THICKNESS 6" MIN. EXCLUDING THE PIPE PENETRATION.
6. ALL JOINTS AND PENETRATIONS SHALL BE MORTARED SMOOTH WITH THE FACE OF THE ADJACENT PRECAST CONCRETE SURFACE.
7. REFER TO CONNECTICUT PRECAST CORP. CATCH BASIN PRODUCT 2'x2' AREA DRAIN FOR PRODUCT SPECIFICATION.

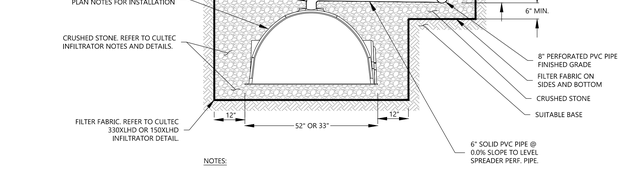
AREA DRAIN (24"x24") DETAIL
N.T.S.



CULTEC SYSTEM NOTES:

1. CONTRACTOR 150XLHD BY CULTEC, INC. OF BROOKFIELD,CT.
2. REFER TO CULTEC, INC.'S CURRENT RECOMMENDED INSTALLATION GUIDELINES.
3. MAXIMUM ALLOWED COVER OVER TOP OF UNIT SHALL BE 12' (3.65m)
4. ALL GALLERIES TO HANDLE H-20 LOADINGS AND SHALL COMPLY WITH THE DETAIL. INTERIOR SECTIONS TO HAVE NO END WALLS. END SECTIONS TO HAVE ONE END WALL.
5. THERE SHALL BE A 6" LAYER OF 1¼" CRUSHED STONE BELOW ALL UNITS.
6. REMOVE ANY TOPSOIL PRIOR TO INSTALLATION OF GALLERY.
7. CONTACT THE DESIGN ENGINEER THREE DAYS PRIOR TO EXCAVATION FOR THE GALLERIES. DURING THE EXCAVATION, THE DESIGN ENGINEER MAY REVISE THE ELEVATIONS OF THE GALLERIES IF FIELD CONDITIONS DICTATE.
8. CRUSHED STONE SHALL BE GRADATION NO. 3A AS PER N.Y.S. D.O.T. STANDARD SPEC SECTION 703.
9. SOIL BENEATH THE INFILTRATION SYSTEM SHALL BE SCARIFIED OR TILLED TO IMPROVE INFILTRATION.

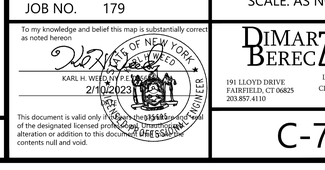
CULTECH-150XLHD INFILTRATOR (BMP-E2)
(INFILTRATION SYSTEM)
N.T.S.



NOTES:

1. CRUSHED STONE SHALL BE GRADATION NO. 3A AS PER N.Y.S. D.O.T. STANDARD SPEC SECTION 703.
2. 8" PVCP PIPE SHALL HAVE PERFORATIONS ON THE BOTTOM OF THE PIPE.
3. REFER TO SITE PLAN SHEETS C-3A AND C-3B FOR ELEVATION INFORMATION ABOUT PIPES, CHAMBERS, CRUSHED STONE, AND FINISHED GRADE.

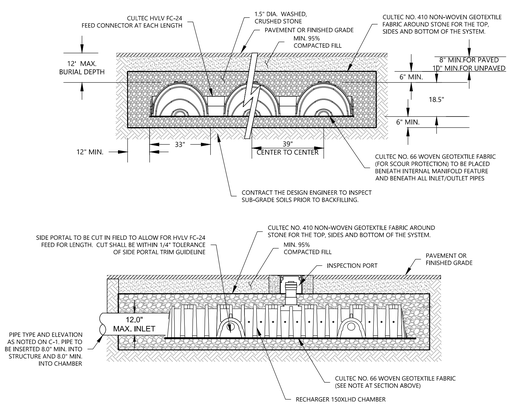
CRUSHED STONE LEVEL SPREADER
N.T.S.



NOTES:

1. AREA DRAIN STRUCTURE SHALL BE PLACED ON A 6" MIN. LAYER OF CRUSHED STONE. CRUSHED STONE SHALL BE GRADATION NO. 3A AS PER N.Y.S. D.O.T. STANDARD SPEC SECTION 703.
2. ANY FILL MATERIAL PLACED UNDER THE CATCH BASIN STRUCTURE SHALL BE COMPACTED TO 95% OF THE MAX. DRY DENSITY AS DETERMINED BY ASTM D1557.
3. DESIGN AND REINFORCEMENT OF PRECAST CONCRETE SHALL COMPLY WITH ASTM C 478.
4. CATCH BASIN STRUCTURE SHALL COMPLY WITH AASHTO HS-20 LOADING.
5. THIN WALL KNOCKOUT SPACE ALONG THE PRECAST WALL SHALL BE FILLED WITH BRICK AND MORTAR SO TO MAKE ALL WALL THICKNESS 6" MIN. EXCLUDING THE PIPE PENETRATION.
6. ALL JOINTS AND PENETRATIONS SHALL BE MORTARED SMOOTH WITH THE FACE OF THE ADJACENT PRECAST CONCRETE SURFACE.
7. REFER TO CONNECTICUT PRECAST CORP. CATCH BASIN PRODUCT "RESIDENTIAL DRAIN" FOR PRODUCT SPECIFICATION.

AREA DRAIN (18"x18") DETAIL
N.T.S.



CULTEC SYSTEM NOTES:

1. CONTRACTOR 150XLHD BY CULTEC, INC. OF BROOKFIELD,CT.
2. REFER TO CULTEC, INC.'S CURRENT RECOMMENDED INSTALLATION GUIDELINES.
3. MAXIMUM ALLOWED COVER OVER TOP OF UNIT SHALL BE 12' (3.65m)
4. ALL GALLERIES TO HANDLE H-20 LOADINGS AND SHALL COMPLY WITH THE DETAIL. INTERIOR SECTIONS TO HAVE NO END WALLS. END SECTIONS TO HAVE ONE END WALL.
5. THERE SHALL BE A 6" LAYER OF 1¼" CRUSHED STONE BELOW ALL UNITS.
6. REMOVE ANY TOPSOIL PRIOR TO INSTALLATION OF GALLERY.
7. CONTACT THE DESIGN ENGINEER THREE DAYS PRIOR TO EXCAVATION FOR THE GALLERIES. DURING THE EXCAVATION, THE DESIGN ENGINEER MAY REVISE THE ELEVATIONS OF THE GALLERIES IF FIELD CONDITIONS DICTATE.
8. CRUSHED STONE SHALL BE GRADATION NO. 3A AS PER N.Y.S. D.O.T. STANDARD SPEC SECTION 703.
9. SOIL BENEATH THE INFILTRATION SYSTEM SHALL BE SCARIFIED OR TILLED TO IMPROVE INFILTRATION.

CULTECH-150XLHD INFILTRATOR (BMP-E1)
(INFILTRATION SYSTEM)
N.T.S.

DETAILS - 2
DEPICTING
263 BEDFORD BANKSVILLE ROAD
BEDFORD, NY (NORTH CASTLE MUNICIPALITY)
PREPARED FOR
MARENGO FARMS LLC

DATE: 2/10/2023
JOB NO. 179

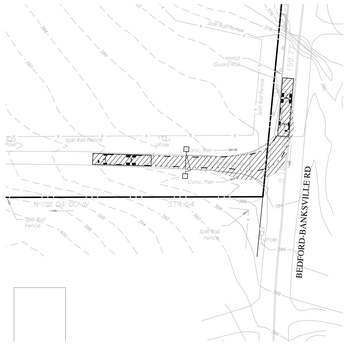
SCALE: AS NOTED

To my knowledge and belief this map is substantially correct as noted hereon

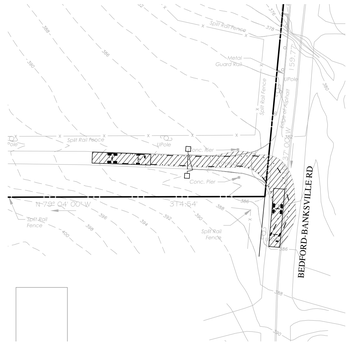
KARL H. WEEVER P.E. #95185
2/10/2023

DiMARZO & BERECZKY
191 LLOYD DRIVE
FAIRFIELD, CT 06825
203.857.4110
LAND SURVEYING
CIVIL ENGINEERING
PERMITTING

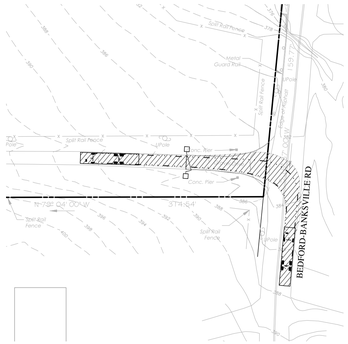
C-7



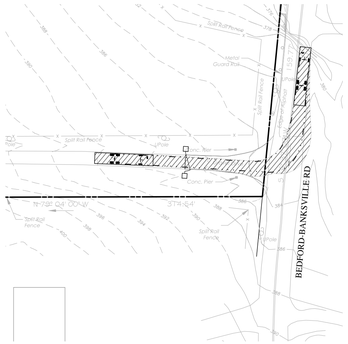
LADDER FIRE TRUCK - ENTER FROM SOUTHBOUND



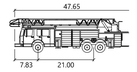
LADDER FIRE TRUCK - EXIT TO SOUTHBOUND



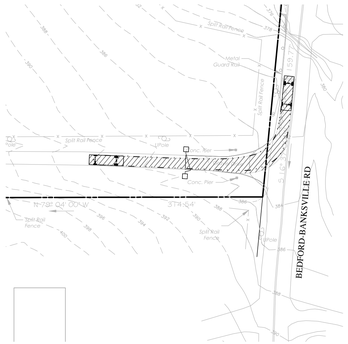
LADDER FIRE TRUCK - ENTER FROM NORTHBOUND



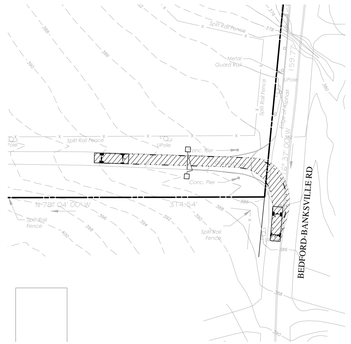
LADDER FIRE TRUCK - EXIT TO NORTHBOUND



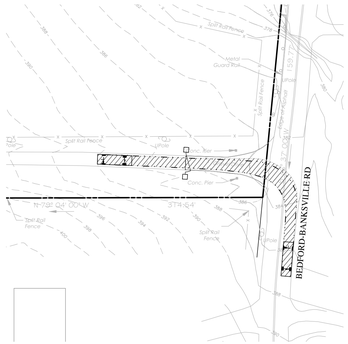
Ladder Fire Truck	
Width	9.00
Track	7.83
Lock to Lock Time	6.0
Steering Angle	38.0



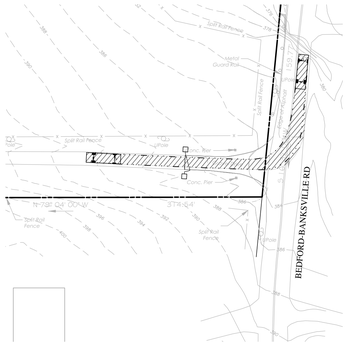
FIRE FIRST RESPONDER - ENTER FROM SOUTHBOUND



FIRE FIRST RESPONDER - - EXIT TO SOUTHBOUND



FIRE FIRST RESPONDER - ENTER FROM NORTHBOUND



FIRE FIRST RESPONDER - EXIT TO NORTHBOUND

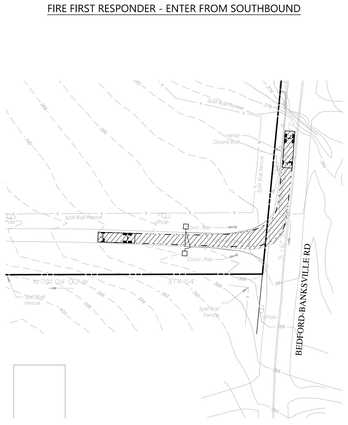
Fire First Responder	
Width	8.00
Track	8.00
Lock to Lock Time	6.0
Steering Angle	28.5

LEGEND

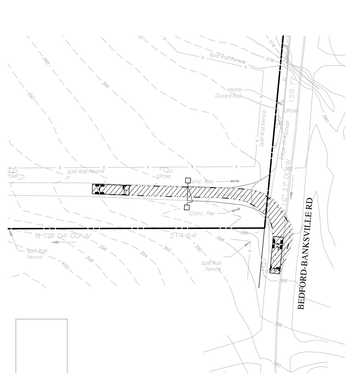
BODY OF VEHICLE

OUTSIDE LIMITS OF VEHICLE BODY

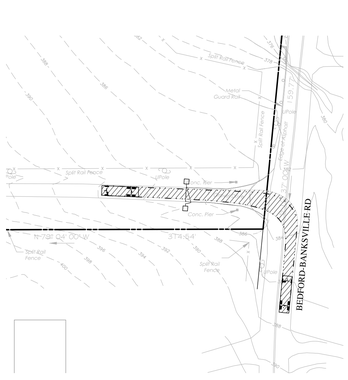
OUTSIDE TIRE LIMITS



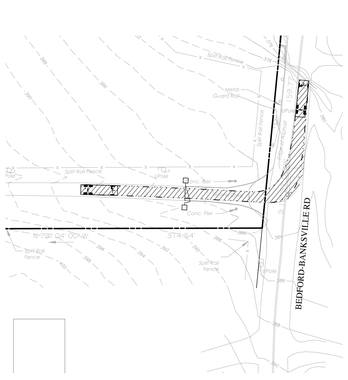
GARBAGE TRUCK - ENTER FROM SOUTHBOUND



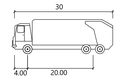
GARBAGE TRUCK - EXIT TO SOUTHBOUND



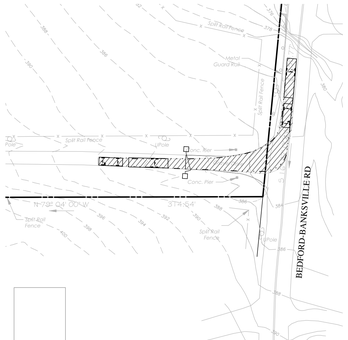
GARBAGE TRUCK - ENTER FROM NORTHBOUND



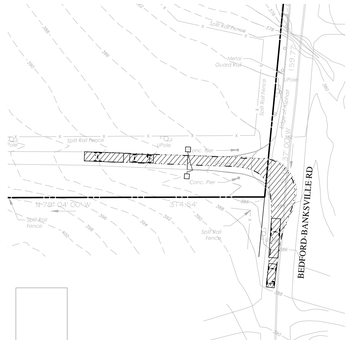
GARBAGE TRUCK - EXIT TO NORTHBOUND



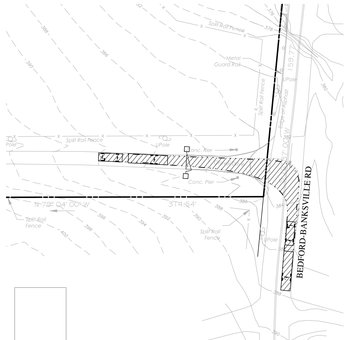
Garbage Truck	
Width	8.00
Track	8.00
Lock to Lock Time	6.0
Steering Angle	38.5



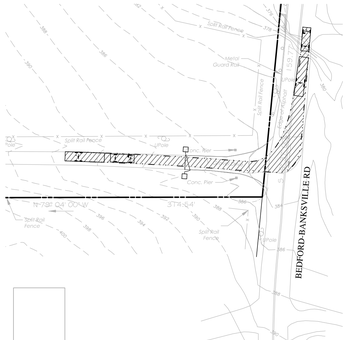
PICKUP TRUCK AND TRAILER - ENTER FROM SOUTHBOUND



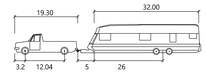
PICKUP TRUCK AND TRAILER - EXIT TO SOUTHBOUND



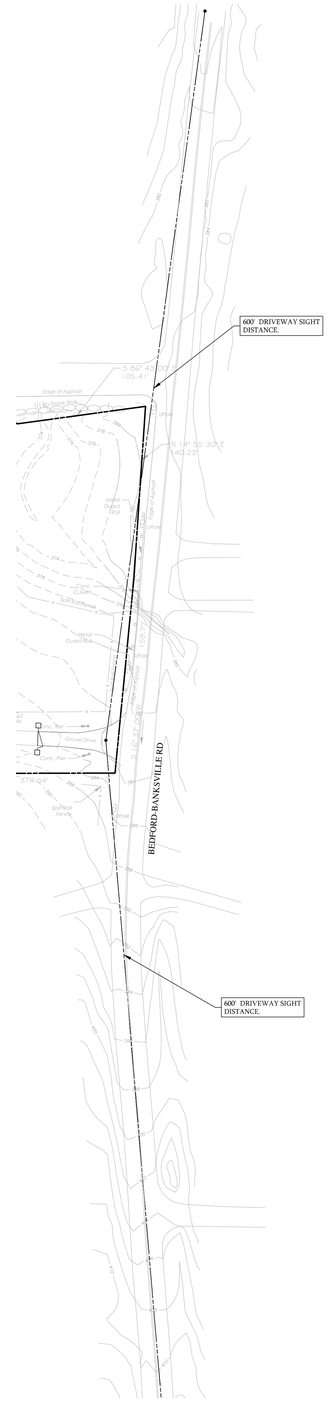
PICKUP TRUCK AND TRAILER - ENTER FROM NORTHBOUND



PICKUP TRUCK AND TRAILER - EXIT TO NORTHBOUND



Pickup Truck and Trailer	
Length	56.30
Width	7.55
Track Width	7.54
Lock-to-lock time	4.0
Curb to Curb Turning Radius	23.5



UNAUTHORIZED ALTERATION OR ADDITION TO A DOCUMENT BEARING THE SEAL OF AN ENGINEER IS A VIOLATION OF SECTION 7209 SUBDIVISION 2 OF THE NEW YORK STATE EDUCATION LAW ARTICLE 145.

TURNING TEMPLATES & SIGHT DISTANCE PLAN

DEPICTING

263 BEDFORD BANKSVILLE ROAD

BEDFORD, NY (NORTH CASTLE MUNICIPALITY)

PREPARED FOR

MARENGO FARMS LLC

DATE: 2/10/2023
JOB NO. 179

SCALE: 0 50 100
1"=50'

To my knowledge and belief this map is substantially correct as noted hereon

KARL H. WEED, P.E.
2/10/2023

STATE OF NEW YORK KARL H. WEED 075113 LICENSED PROFESSIONAL ENGINEER

This document is valid only if it bears the original signature and seal of the designated licensed professional. Unauthorized alteration or addition to this document renders it void and the contents null and void.

DiMARZO & BERECLKY
191 LLOYD DRIVE
FAIRFIELD, CT 06825
203.857.4110
LAND SURVEYING
CIVIL ENGINEERING
PERMITTING

C-8

Average Grade Calculations with Exhibits

Primary Structure

- **Main House**

Accessory Structures

- **Pool House**
- **Stable**
- **Addition to Exist. Stable**
- **Garage**

by: DiMarzo & Bereczky, Inc.

DiMARZO + BERECZKY, INC.
surveying - engineering - permitting
www.dimarzobereczky.com

191 Lloyd Drive
Fairfield, CT 06825
203-857-4110

Average Finished Grade Analysis - **MAIN HOUSE**
263 Bedford Banksville Rd, Bedford (North Castle), NY

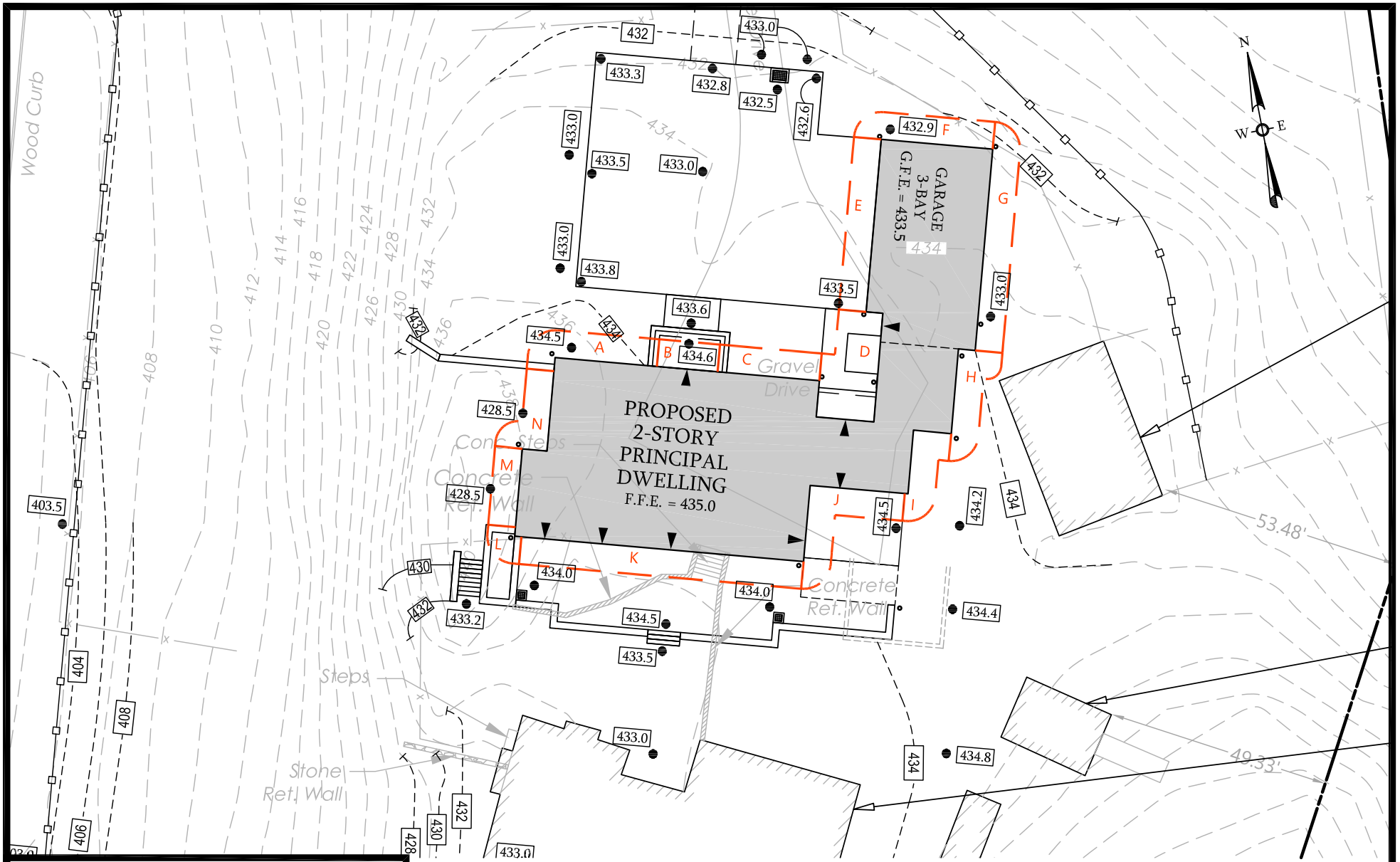
Wall Segment	Elevation (lowest within 6ft of building)	Length (ft)	Length x Elevation
A	433.9	34.8	15099.7
B	434.6	13.4	5823.6
C	433.9	22.4	9719.4
D	433.9	12.9	5597.3
E	433.4	38.0	16469.2
F	431.0	34.0	14654.0
G	432.0	53.8	23241.6
H	433.5	30.5	13221.8
I	434.3	20.4	8859.7
J	434.5	35.0	15207.5
K	434.5	62.2	27025.9
L	432.0	12.9	5572.8
M	428.5	17.4	7455.9
N	428.5	20.8	8912.8
Totals		408.5	176861.2
AVERAGE FINISHED GRADE ELEVATION			**433.0**

Note: Average Finished Grade Analysis is based on proposed topography as depicted on a plan titled "Average Finished Grade Exhibit depicting Main House at 263 Bedford Banksville Rd, Bedford (North Castle), NY" dated 2/10/2023.

By: Karl H Weed 02/10/2023

Karl H. Weed, NY P.E. #075695

This document is valid only if it bears the signature and seal of the designated licensed professional. Unauthorized alteration or addition to this document shall make the contents null and void.



DiMARZO & BERECZKY

191 LLOYD DRIVE
FAIRFIELD, CT 06825
203.857.4110

LAND SURVEYING
CIVIL ENGINEERING
PERMITTING

AVERAGE FINISHED GRADE EXHIBIT

DEPICTING

MAIN HOUSE at 263 BEDFORD BANKSVILLE RD
BEDFORD (NORTH CASTLE), NY

0 30
1"=30'

DATE: 2/10/2023

DiMARZO + BERECZKY, INC.
surveying - engineering - permitting
www.dimarzobereczky.com

191 Lloyd Drive
Fairfield, CT 06825
203-857-4110

Average Finished Grade Analysis - **POOL HOUSE**

263 Bedford Banksville Rd, Bedford (North Castle), NY

Wall Segment	Elevation (lowest within 6ft of building)	Length (ft)	Length x Elevation
A	433.8	35.6	15443.3
B	433.5	23.4	10143.9
C	434.0	17.3	7508.2
D	436.5	34.5	15059.3
E	434.0	20.6	8940.4
F	433.5	22.3	9667.1
Totals		153.7	66762.1
AVERAGE FINISHED GRADE ELEVATION			**434.4**

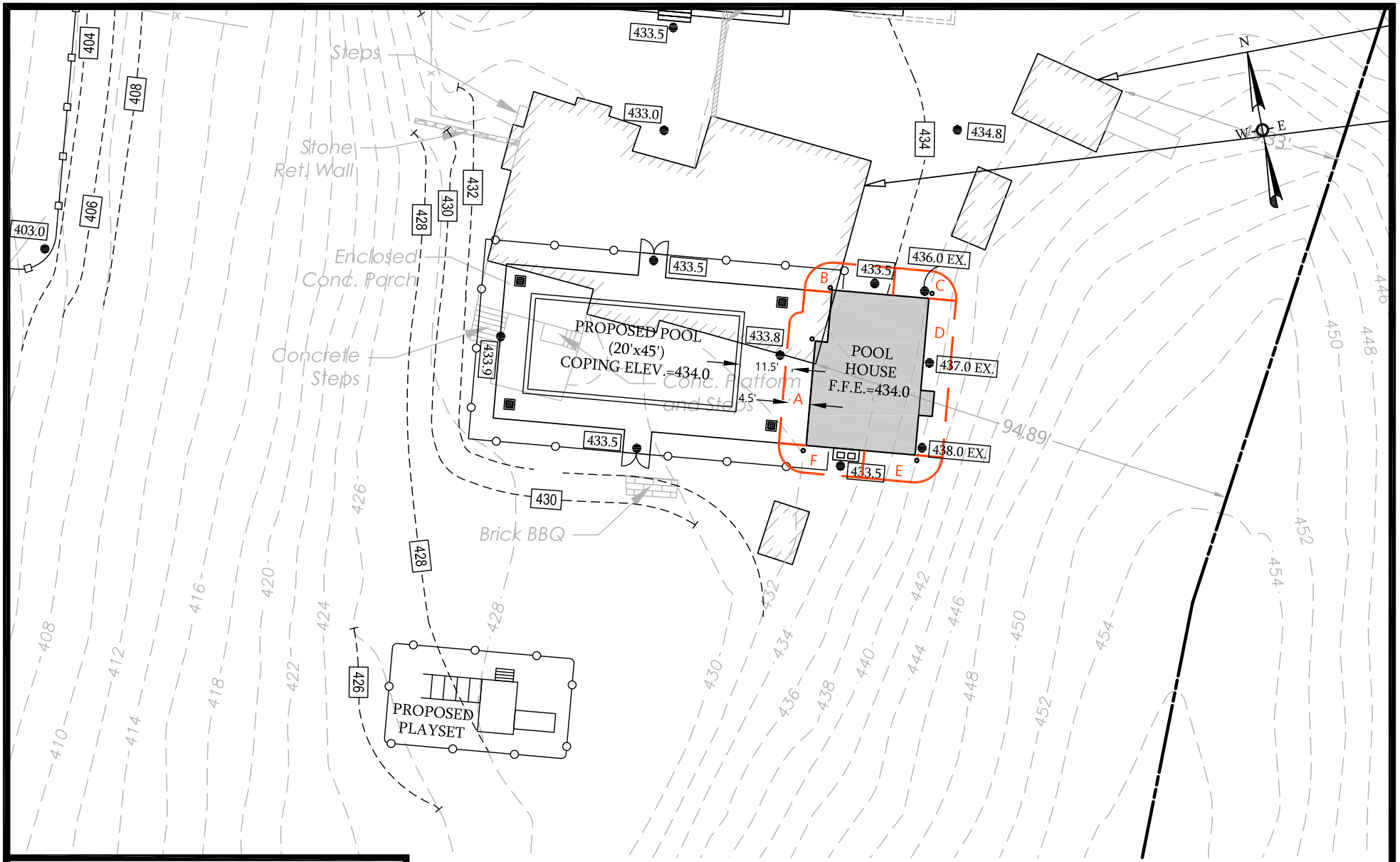
Note: Average Finished Grade Analysis is based on proposed topography as depicted on a plan titled "Average Finished Grade Exhibit depicting Main House at 263 Bedford Banksville Rd, Bedford (North Castle), NY" dated 2/10/2023.

By: Karl H Weed

Karl H. Weed, NY P.E. #075695

Date: 2/10/2023

This document is valid only if it bears the signature and seal of the designated licensed professional. Unauthorized alteration or addition to this document shall make the contents null and void.



DiMARZO & BERECZKY

191 LLOYD DRIVE
FAIRFIELD, CT 06825
203.857.4110

LAND SURVEYING
CIVIL ENGINEERING
PERMITTING

AVERAGE FINISHED GRADE EXHIBIT

DEPICTING

POOL HOUSE at 263 BEDFORD BANKSVILLE RD
BEDFORD (NORTH CASTLE), NY

0 30
1"=30'

DATE: 2/10/2023

DiMARZO + BERECZKY, INC.
surveying - engineering - permitting
www.dimarzobereczky.com

191 Lloyd Drive
Fairfield, CT 06825
203-857-4110

Average Finished Grade Analysis - **BARN of STALL**S
263 Bedford Banksville Rd, Bedford (North Castle), NY

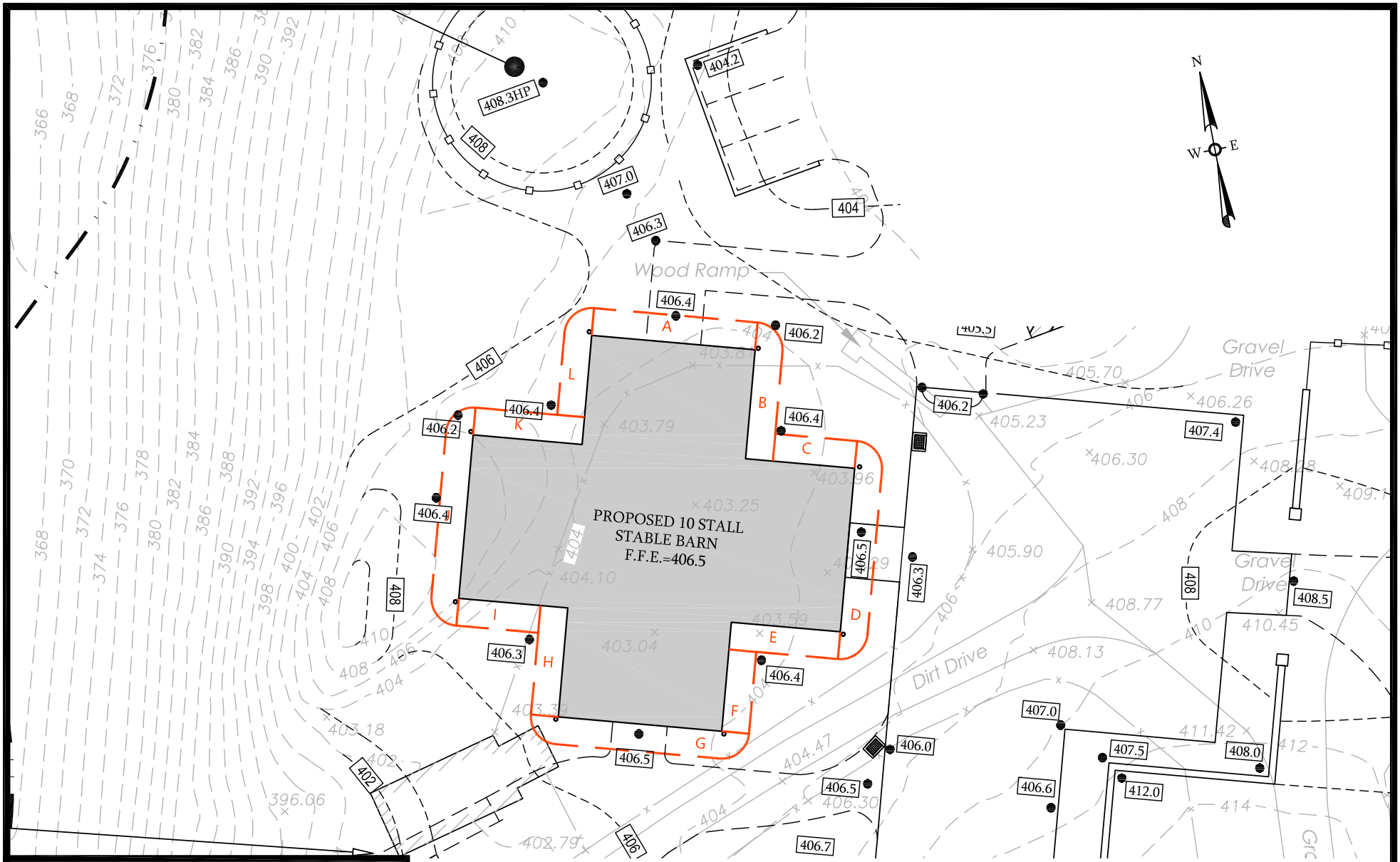
Wall Segment	Elevation (lowest within 6ft of building)	Length (ft)	Length x Elevation
A	406.4	36.0	14630.4
B	406.2	27.4	11129.9
C	406.2	18.0	7311.6
D	406.2	54.8	22259.8
E	406.4	18.0	7315.2
F	406.4	18.0	7315.2
G	406.2	54.8	22259.8
H	406.2	18.0	7311.6
I	406.3	18.0	7313.4
J	406.2	54.8	22259.8
K	406.3	18.0	7313.4
L	406.0	27.4	11124.4
Totals		363.2	147544.4
AVERAGE FINISHED GRADE ELEVATION			**406.2**

Note: Average Finished Grade Analysis is based on proposed topography as depicted on a plan titled "Average Finished Grade Exhibit depicting Main House at 263 Bedford Banksville Rd, Bedford (North Castle), NY" dated 2/10/2023.

By: _____ Date: 2/10/2023

Karl H. Weed, NY P.E. #075695

This document is valid only if it bears the signature and seal of the designated licensed professional. Unauthorized alteration or addition to this document shall make the contents null and void.



DiMARZO & BERECZKY

191 LLOYD DRIVE
FAIRFIELD, CT 06825
203.857.4110

LAND SURVEYING
CIVIL ENGINEERING
PERMITTING

AVERAGE FINISHED GRADE EXHIBIT

DEPICTING

BARN of STALLS at 263 BEDFORD BANKSVILLE RD
BEDFORD (NORTH CASTLE), NY

DATE: 2/10/2023

DiMARZO + BERECZKY, INC.
surveying - engineering - permitting
www.dimarzobereczky.com

191 Lloyd Drive
Fairfield, CT 06825
203-857-4110

Average Finished Grade Analysis - **INDOOR RIDING**

263 Bedford Banksville Rd, Bedford (North Castle), NY

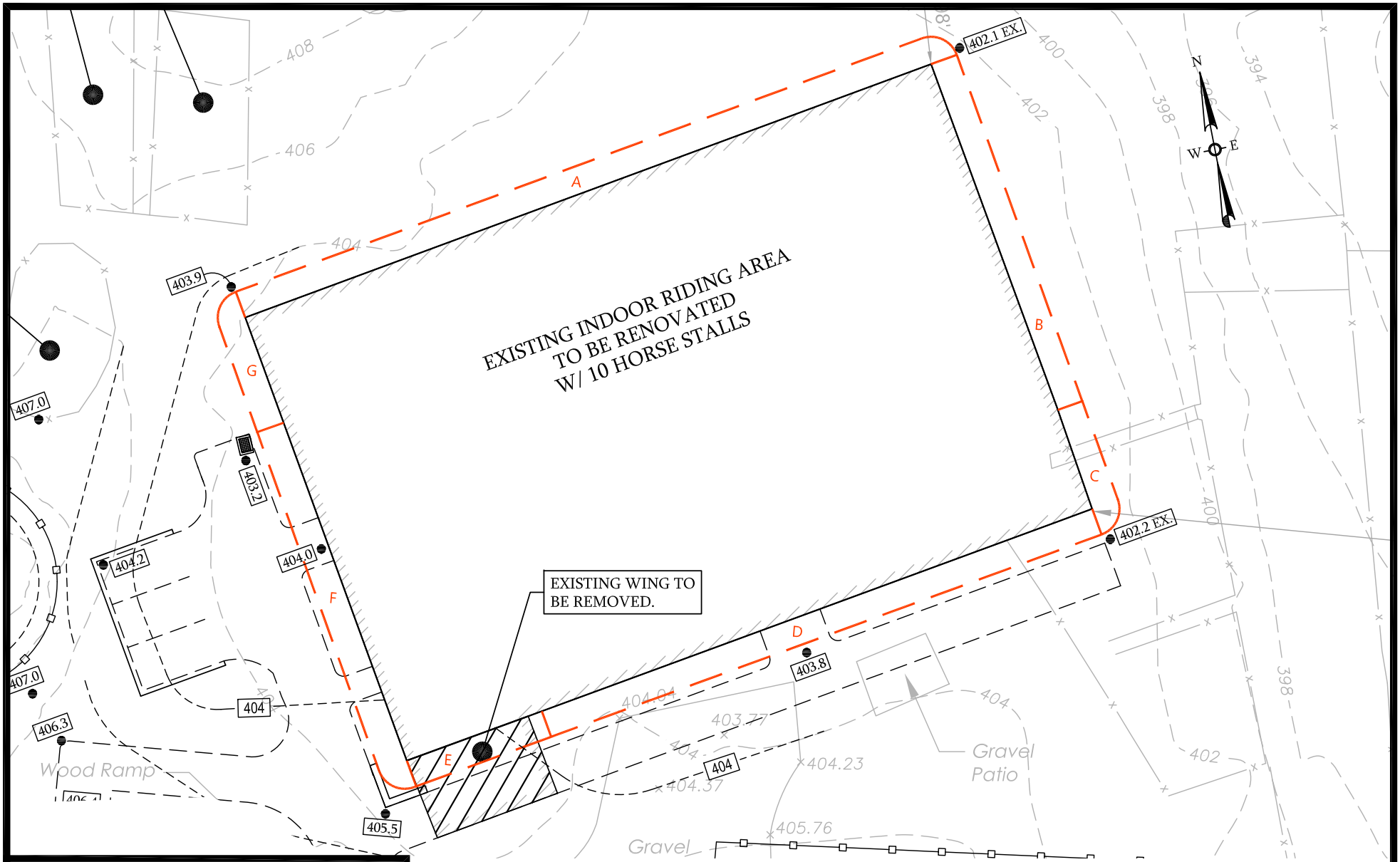
Wall Segment	Elevation (lowest within 6ft of building)	Length (ft)	Length x Elevation
A	402.1	169.8	68276.6
B	402.1	80.8	32489.7
C	402.2	32.4	13031.3
D	402.2	128.6	51722.9
E	403.8	31.5	12719.7
F	403.2	88.9	35844.5
G	403.2	33.9	13668.5
Totals		565.9	227753.1
AVERAGE FINISHED GRADE ELEVATION			**402.5**

Note: Average Finished Grade Analysis is based on proposed topography as depicted on a plan titled "Average Finished Grade Exhibit depicting Main House at 263 Bedford Banksville Rd, Bedford (North Castle), NY" dated 2/10/2023.

By: _____ Date: 2/10/2023

Karl H. Weed, NY P.E. #075695

This document is valid only if it bears the signature and seal of the designated licensed professional. Unauthorized alteration or addition to this document shall make the contents null and void.



DiMARZO & BERECZKY

191 LLOYD DRIVE
FAIRFIELD, CT 06825
203.857.4110

LAND SURVEYING
CIVIL ENGINEERING
PERMITTING

AVERAGE FINISHED GRADE EXHIBIT

DEPICTING

INDOOR RIDING AREA at 263 BEDFORD BANKSVILLE RD

BEDFORD (NORTH CASTLE), NY

0 30

1"=30'

DATE: 2/10/2023

DiMARZO + BERECZKY, INC.
surveying - engineering - permitting
www.dimarzobereczky.com

191 Lloyd Drive
Fairfield, CT 06825
203-857-4110

Average Finished Grade Analysis - **GROOMS QUARTERS**
263 Bedford Banksville Rd, Bedford (North Castle), NY

Wall Segment	Elevation (lowest within 6ft of building)	Length (ft)	Length x Elevation
A	406.8	41.4	16841.5
B	406.9	10.9	4435.2
C	412.5	33.4	13777.5
D	411.0	48.0	19728.0
E	409.0	25.1	10265.9
F	406.7	22.8	9272.8
Totals		181.6	74320.9
AVERAGE FINISHED GRADE ELEVATION			**409.3**

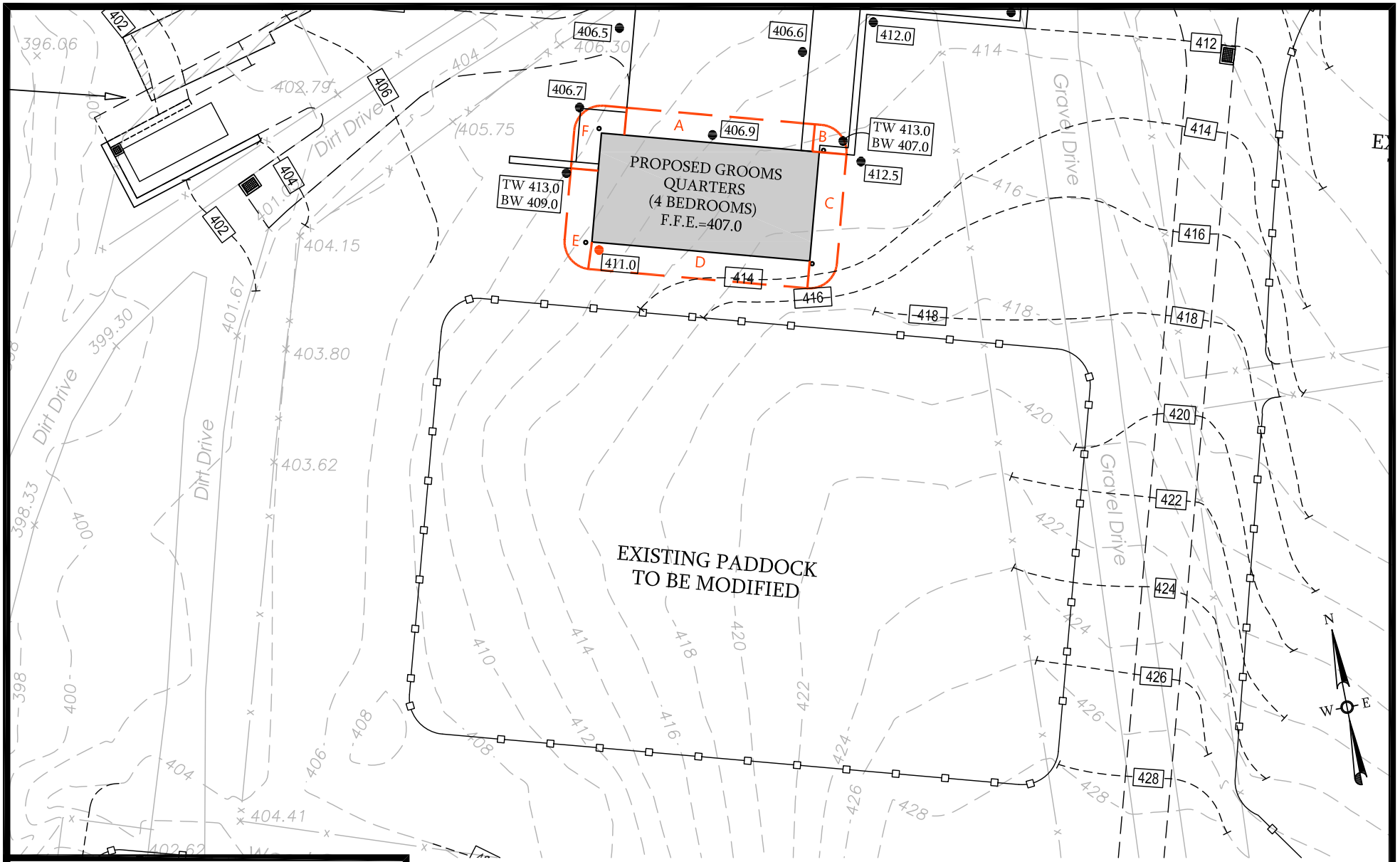
Note: Average Finished Grade Analysis is based on proposed topography as depicted on a plan titled "Average Finished Grade Exhibit depicting Main House at 263 Bedford Banksville Rd, Bedford (North Castle), NY" dated 2/10/2023.

By: Karl H Weed

Karl H. Weed, NY P.E. #075695

Date: 2/10/2023

This document is valid only if it bears the signature and seal of the designated licensed professional. Unauthorized alteration or addition to this document shall make the contents null and void.



DiMARZO & BERECZKY

191 LLOYD DRIVE
FAIRFIELD, CT 06825
203.857.4110

LAND SURVEYING
CIVIL ENGINEERING
PERMITTING

AVERAGE FINISHED GRADE EXHIBIT

DEPICTING

GROOMS QUARTERS at 263 BEDFORD BANKSVILLE RD
BEDFORD (NORTH CASTLE), NY

0 30
1"=30'

DATE: 2/10/2023

Architectural Plans

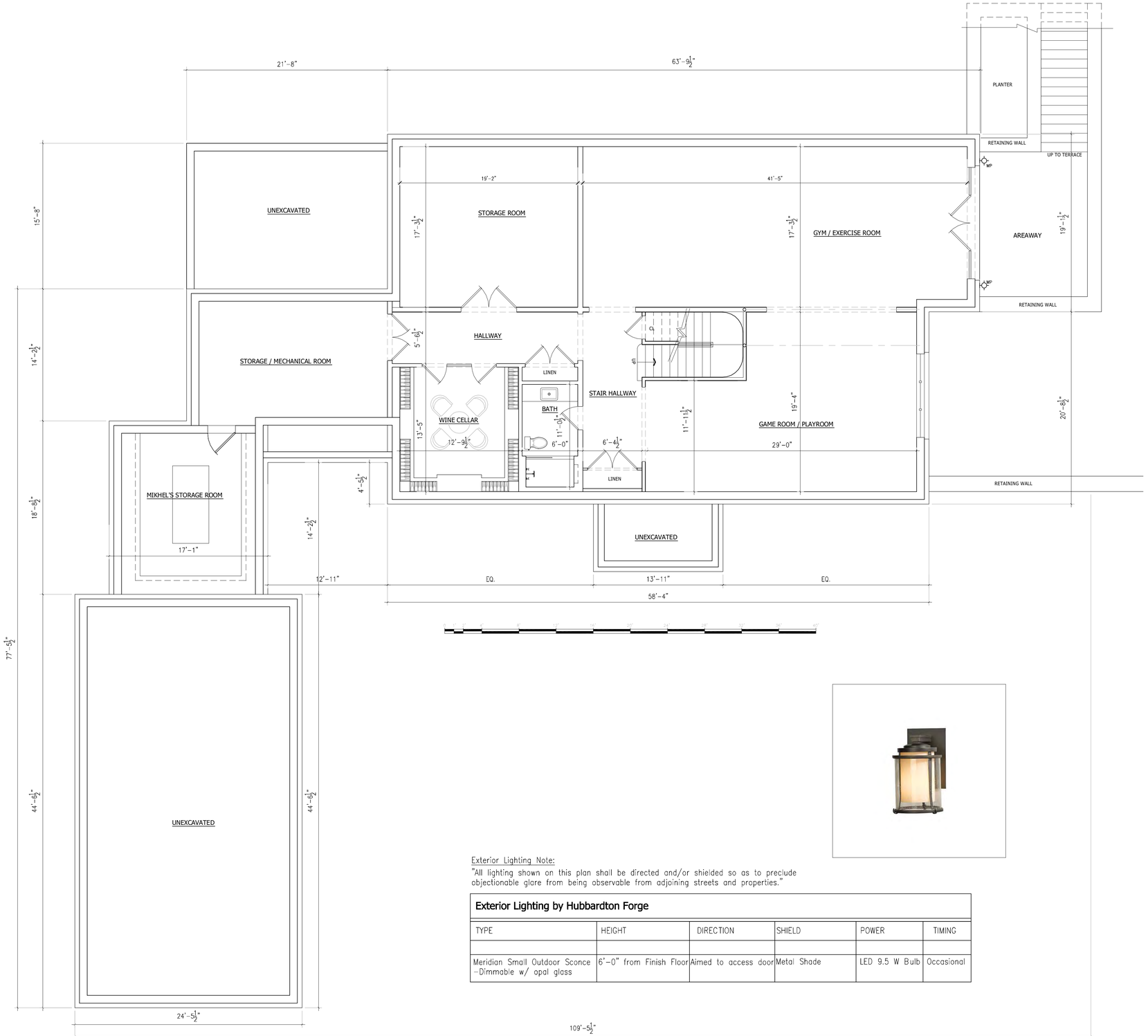
Primary Structure

- **Main House**

Accessory Structure

- **Pool House**

by: Teo Següenza, Architect



Exterior Lighting Note:
"All lighting shown on this plan shall be directed and/or shielded so as to preclude objectionable glare from being observable from adjoining streets and properties."

Exterior Lighting by Hubbardton Forge

TYPE	HEIGHT	DIRECTION	SHIELD	POWER	TIMING
Meridian Small Outdoor Sconce –Dimmable w/ opal glass	6'–0" from Finish Floor	Aimed to access door	Metal Shade	LED 9.5 W Bulb	Occasional

TEO SIGÜENZA
ARCHITECT
460 OLD POST ROAD 2A BEDFORD, N. Y. 10506
TEL: 914.234.6289 FAX: 914.234.0619
www.teosiguenza.com

GENERAL NOTES:

1. DO NOT SCALE DRAWINGS FOR CONSTRUCTION PURPOSES
2. ALL DIMENSIONS TO BE CHECKED
3. CONTRACTOR IS OBLIGED TO REPORT ALL ERRORS AND OMISSIONS TO THE ARCHITECT

	DATE:	REVISION

PROJECT
SINGLE FAMILY RESIDENCE AT BEDFORD-BANKSVILLE RD

263 BEDFORD-BANKSVILLE RD
ARMONK, NY

DRAWING TITLE
PROPOSED BASEMENT PLAN

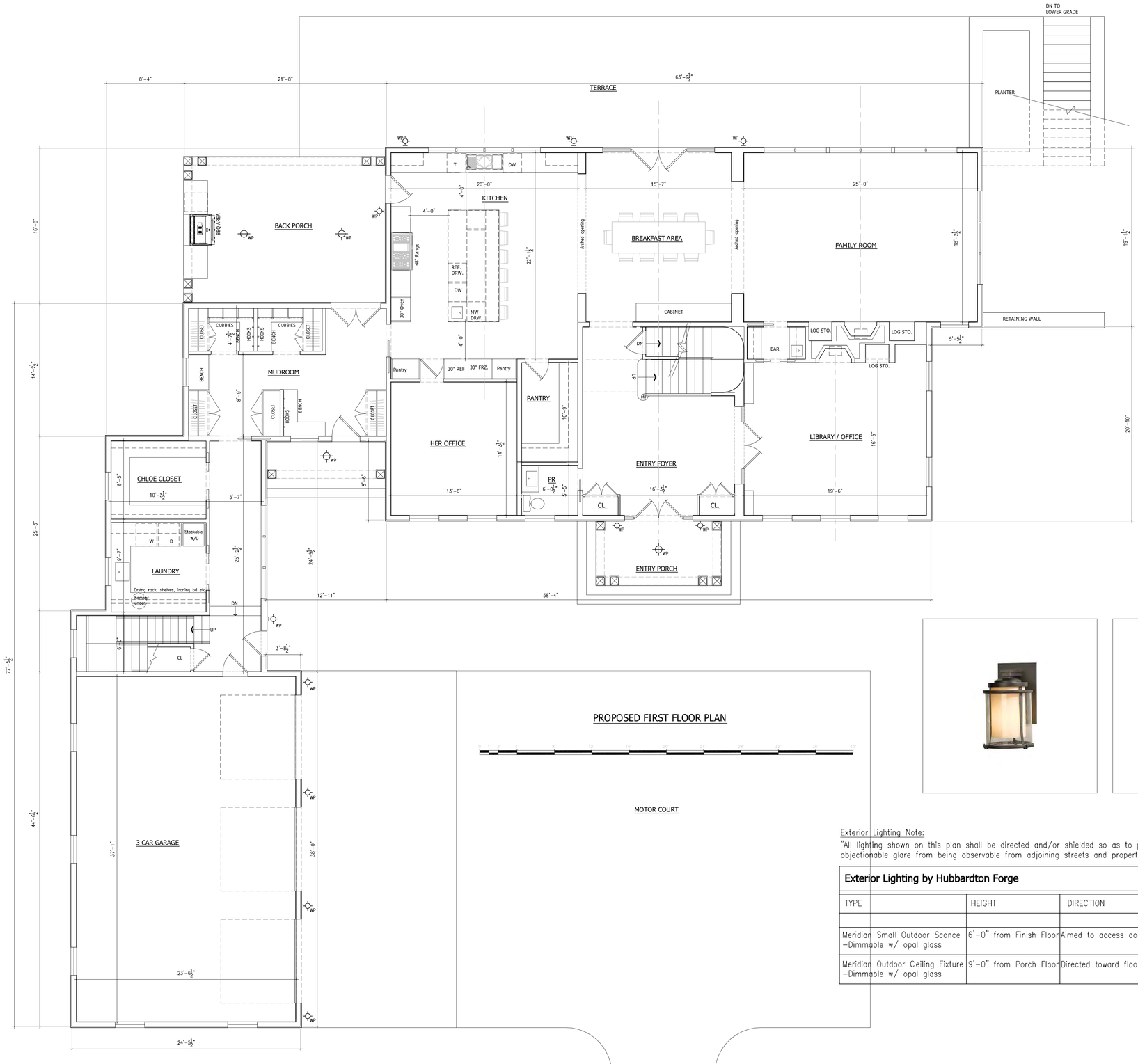
SEAL

DATE
2-10-23

SCALE
3/16" = 1'-0"

DRAWING NO.
A100.00

PAGE NO.



PROPOSED FIRST FLOOR PLAN

Exterior Lighting Note:

"All lighting shown on this plan shall be directed and/or shielded so as to preclude objectionable glare from being observable from adjoining streets and properties."

Exterior Lighting by Hubbardton Forge

TYPE	HEIGHT	DIRECTION	SHIELD	POWER	TIMING
Meridian Small Outdoor Sconce –Dimmable w/ opal glass	6'–0" from Finish Floor	Aimed to access door	Metal Shade	LED 9.5 W Bulb	Occasional
Meridian Outdoor Ceiling Fixture –Dimmable w/ opal glass	9'–0" from Porch Floor	Directed toward floor	Porch Roof Overhang	LED 9.5 W Bulb	Occasional

TEO SIGÜENZA
ARCHITECT
460 OLD POST ROAD 2A BEDFORD, N. Y. 10506
TEL: 914.234.6289 FAX: 914.234.0619
www.teosiguenza.com

GENERAL NOTES:

1. DO NOT SCALE DRAWINGS FOR CONSTRUCTION PURPOSES
2. ALL DIMENSIONS TO BE CHECKED
3. CONTRACTOR IS OBLIGED TO REPORT ALL ERRORS AND OMISSIONS TO THE ARCHITECT

	DATE:	REVISION

PROJECT
SINGLE FAMILY RESIDENCE AT BEDFORD-BANKSVILLE RD

263 BEDFORD-BANKSVILLE RD
ARMONK, NY

DRAWING TITLE
PROPOSED FIRST FLOOR PLAN

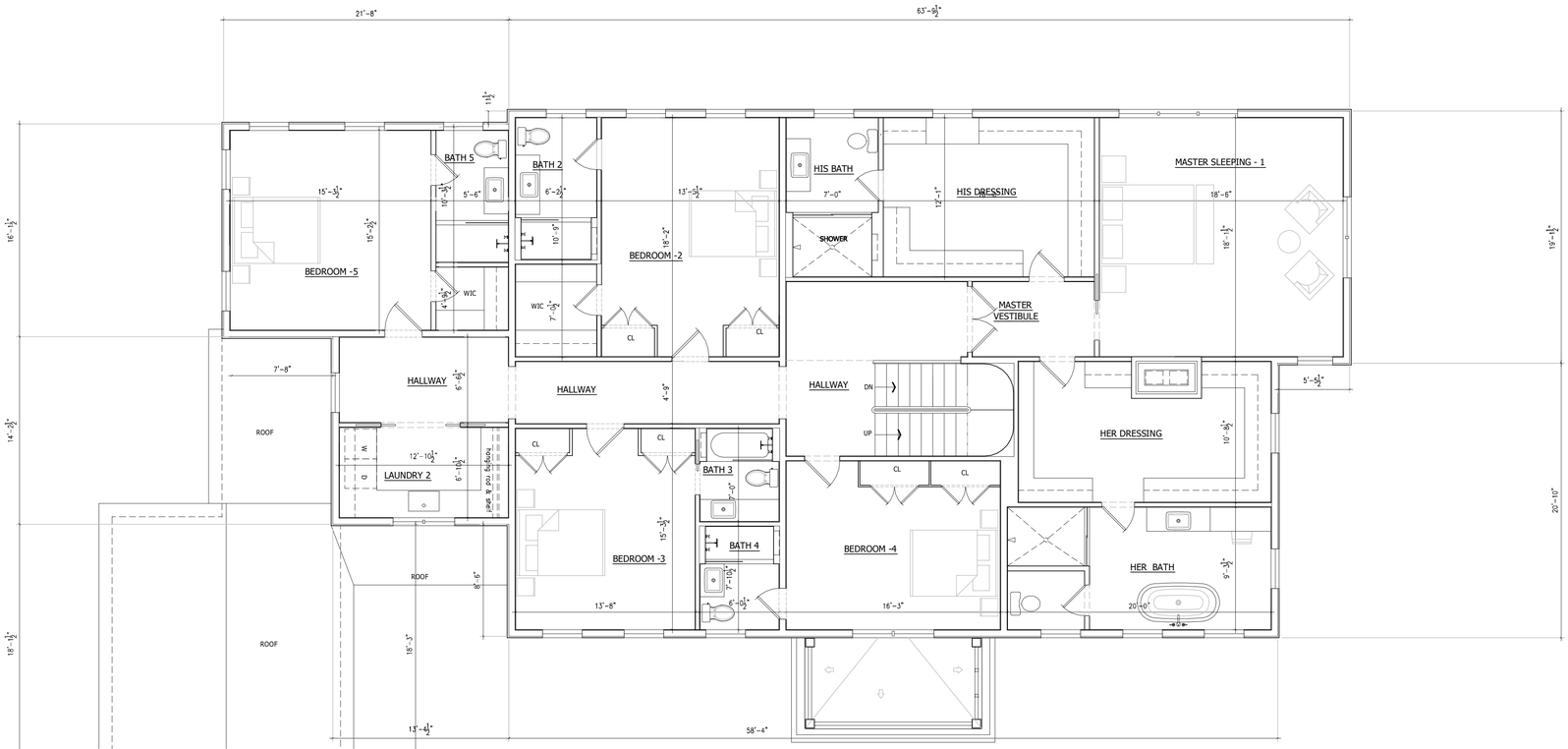
SEAL
REGISTERED ARCHITECT TEODORO SIGÜENZA 023170 STATE OF NEW YORK

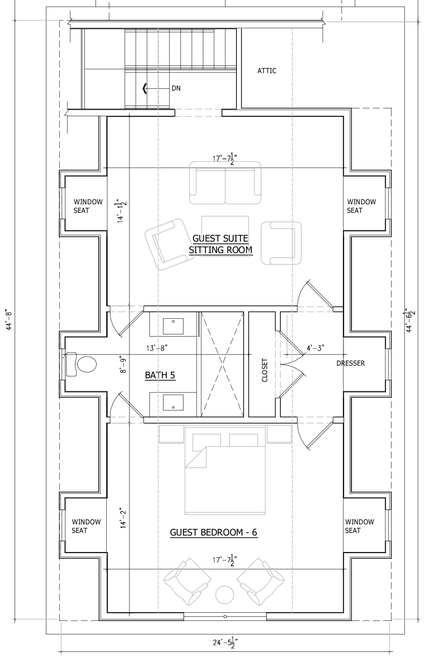
DATE
2-10-23

SCALE
3/16" = 1'-0"

DRAWING NO.
A101.00

PAGE NO.





TEO SIGÜENZA
ARCHITECT
460 OLD POST ROAD 2A BEDFORD, N. Y. 10506
TEL: 914.234.6289 FAX: 914.234.0619
www.teosiguenza.com

GENERAL NOTES:

1. DO NOT SCALE DRAWINGS FOR CONSTRUCTION PURPOSES
2. ALL DIMENSIONS TO BE CHECKED
3. CONTRACTOR IS OBLIGED TO REPORT ALL ERRORS AND OMISSIONS TO THE ARCHITECT

	DATE:	REVISION

PROJECT

SINGLE FAMILY RESIDENCE
AT BEDFORD-BANKSVILLE RD

263 BEDFORD-BANKSVILLE RD
ARMONK, NY

DRAWING TITLE

PROPOSED SECOND FLOOR PLAN

SEAL

DATE

2-10-23

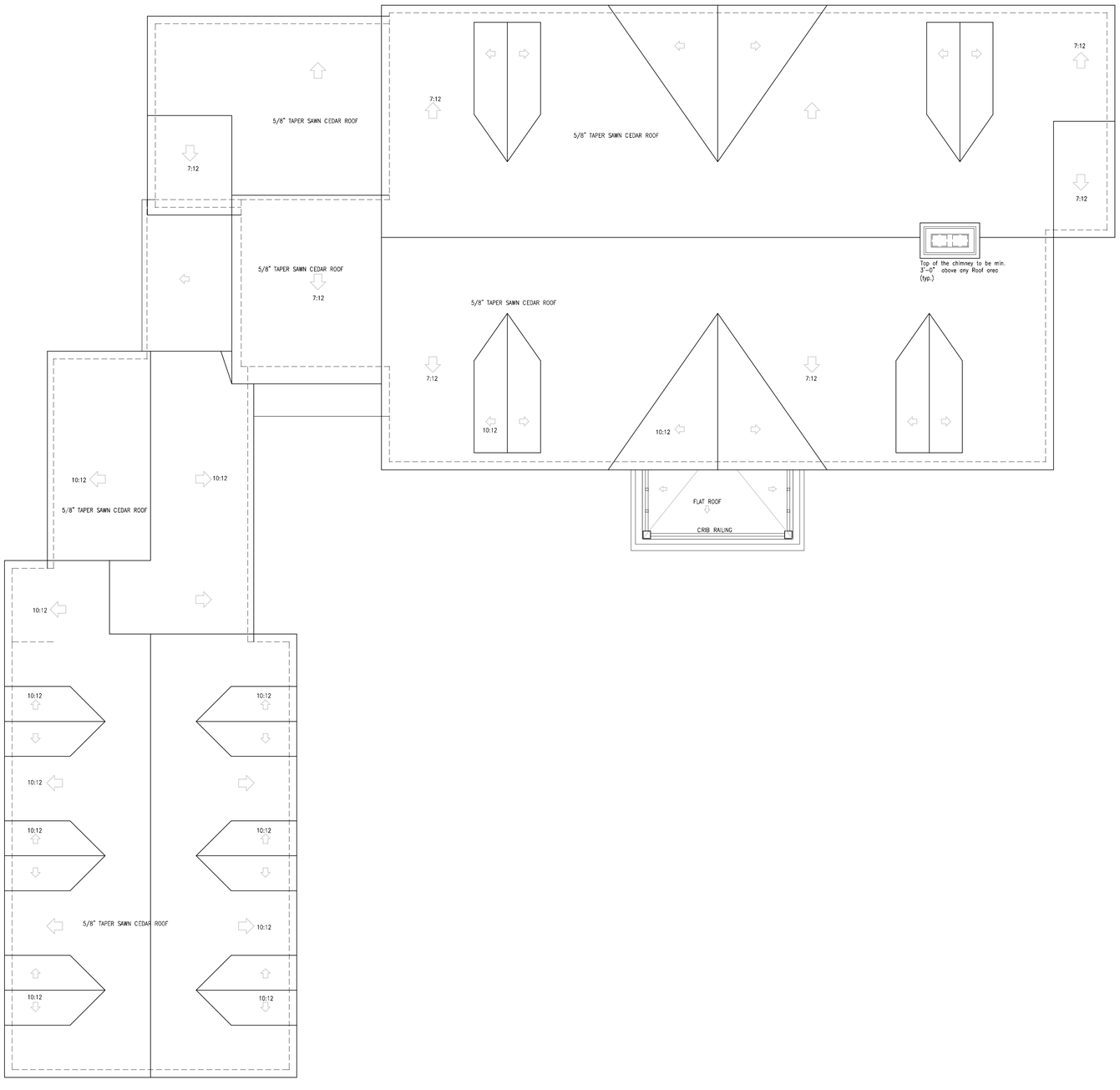
SCALE

3/16" = 1'-0"

DRAWING NO.

A102.00

PAGE NO.



TEO SIGÜENZA
ARCHITECT

460 OLD POST ROAD 2A BEDFORD, N. Y. 10506
TEL: 914.234.6289 FAX: 914.234.0619
www.teosiguenza.com

GENERAL NOTES:

1. DO NOT SCALE DRAWINGS FOR CONSTRUCTION PURPOSES
2. ALL DIMENSIONS TO BE CHECKED
3. CONTRACTOR IS OBLIGED TO REPORT ALL ERRORS AND OMISSIONS TO THE ARCHITECT

	DATE:	REVISION

PROJECT
SINGLE FAMILY RESIDENCE
AT BEDFORD-BANKSVILLE RD

263 BEDFORD-BANKSVILLE RD
ARMONK, NY

DRAWING TITLE
PROPOSED ROOF PLAN

SEAL

DATE
2-10-23

SCALE
3/16" = 1'-0"

DRAWING NO.
A103.00

PAGE NO.

1 PROPOSED FRONT ELEVATION

Scale: 3/16" =1'-0"

2 PROPOSED RIGHT SIDE ELEVATION

Scale: 3/16" =1'-0"

Material Schedule for Proposed Residence		
MATERIAL	TYPE	COLOR
Siding	Painted Cedar	White
Exterior Doors & Windows	Painted Wood	White
Trim, moulding etc.	Painted Mahogany (alternate composite material	White
Roofing	5/8" Taper Sawn Shingle Roof and copper	Natural to patina over time
Stone	Fieldstone Veneer	Warm gray
Bracket	Painted mahogany	White
Gutters & Leaders	Copper	
Lightning Protection	Copper	
Chimney Flues	Terracotta Flue Tiles	
Exterior Railing	Painted mahogany	White

TEO SIGÜENZA
ARCHITECT
460 OLD POST ROAD 2A BEDFORD, N. Y. 10506
TEL: 914.234.6289 FAX: 914.234.0619
www.teosiguenza.com

GENERAL NOTES:

1. DO NOT SCALE DRAWINGS FOR CONSTRUCTION PURPOSES
2. ALL DIMENSIONS TO BE CHECKED
3. CONTRACTOR IS OBLIGED TO REPORT ALL ERRORS AND OMISSIONS TO THE ARCHITECT

	DATE:	REVISION

PROJECT

SINGLE FAMILY RESIDENCE
AT BEDFORD-BANKSVILLE RD

263 BEDFORD-BANKSVILLE RD
ARMONK, NY

DRAWING TITLE

PROPOSED EXTERIOR ELEVATIONS

SEAL

DATE

2-10-23

SCALE

3/16" = 1'-0"

DRAWING NO.

A200.00

PAGE NO.

1 PROPOSED REAR ELEVATION

Scale: 3/16" =1'-0"

2 PROPOSED LEFT SIDE ELEVATION

Scale: 3/16" =1'-0"

Material Schedule for Proposed Residence		
MATERIAL	**TYPE**	**COLOR**
Siding	Painted Cedar	White
Exterior Doors & Windows	Painted Wood	White
Trim, moulding etc.	Painted Mahogany (alternate composite material	White
Roofing	5/8" Taper Sawn Shingle Roof and copper	Natural to patina over time
Stone	Fieldstone Veneer	Warm gray
Bracket	Painted mahogany	White
Gutters & Leaders	Copper	
Lightning Protection	Copper	
Chimney Flues	Terracotta Flue Tiles	
Exterior Railing	Painted mahogany	White

TEO SIGÜENZA
ARCHITECT
460 OLD POST ROAD 2A BEDFORD, N. Y. 10506
TEL: 914.234.6289 FAX: 914.234.0619
www.teosiguenza.com

GENERAL NOTES:

1. DO NOT SCALE DRAWINGS FOR CONSTRUCTION PURPOSES
2. ALL DIMENSIONS TO BE CHECKED
3. CONTRACTOR IS OBLIGED TO REPORT ALL ERRORS AND OMISSIONS TO THE ARCHITECT

	DATE:	REVISION

PROJECT

SINGLE FAMILY RESIDENCE
AT BEDFORD-BANKSVILLE RD

263 BEDFORD-BANKSVILLE RD
ARMONK, NY

DRAWING TITLE

PROPOSED EXTERIOR ELEVATIONS

SEAL

DATE

2-10-23

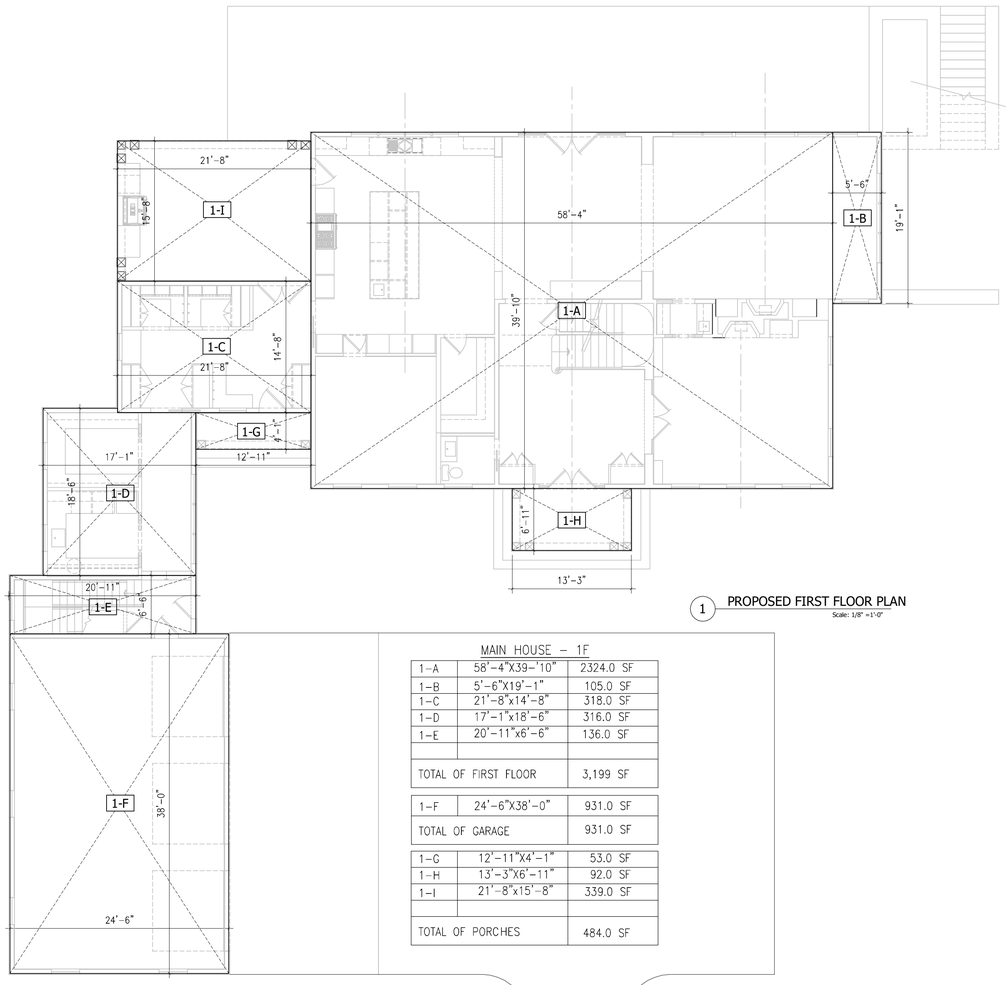
SCALE

3/16" = 1'-0"

DRAWING NO.

A201.00

PAGE NO.



1 PROPOSED FIRST FLOOR PLAN

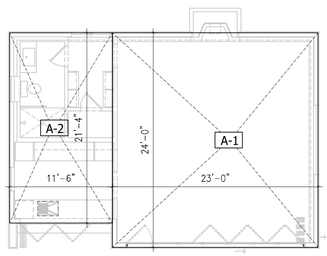
Scale: 1/8" =1'-0"

MAIN HOUSE – 1F

1-A	58'-4"X39-'10"	2324.0 SF
1-B	5'-6"X19'-1"	105.0 SF
1-C	21'-8"x14'-8"	318.0 SF
1-D	17'-1"x18'-6"	316.0 SF
1-E	20'-11"x6'-6"	136.0 SF
TOTAL OF FIRST FLOOR		3,199 SF

1-F	24'-6"X38'-0"	931.0 SF
TOTAL OF GARAGE		931.0 SF

1-G	12'-11"X4'-1"	53.0 SF
1-H	13'-3"X6'-11"	92.0 SF
1-I	21'-8"x15'-8"	339.0 SF
TOTAL OF PORCHES		484.0 SF

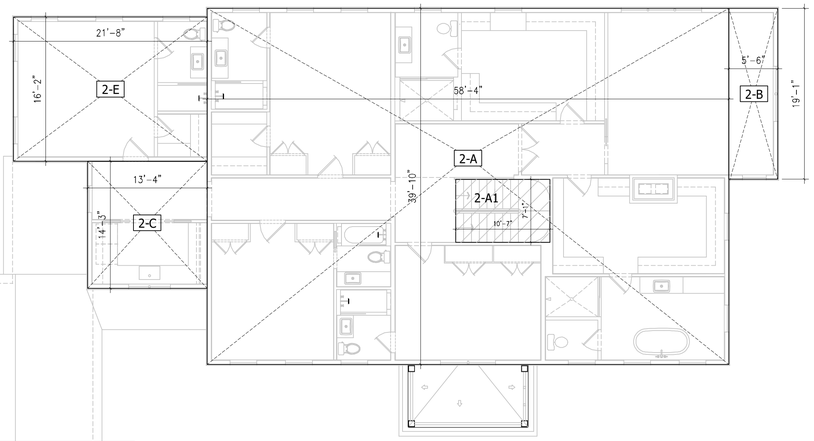


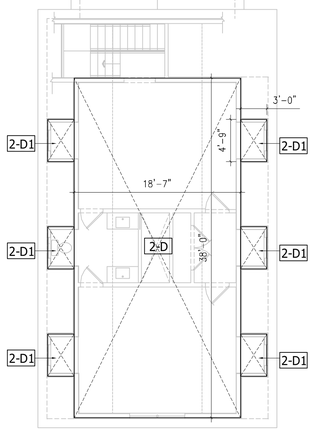
3 PROPOSED POOL HOUSE PLAN

Scale: 1/8" =1'-0"

POOL HOUSE

A-1	23'-0"X24'-0"	552.0 SF
A-2	11'-6"X21'-4"	245.0 SF
TOTAL OF POOL HOUSE		797.0 SF





2 PROPOSED SECOND FLOOR PLAN

Scale: 1/8" =1'-0"

MAIN HOUSE – 2F

2-A	58'-4"X39-'10"	2324.0 SF
2-A1 (Stairs)	10'-7"X7'-1"	-75.0 SF
2-B	5'-6"X19'-1"	105.0 SF
2-C	13'-4"X14'-3"	190.0 SF
2-D	18'-7"X38'-0"	706.0 SF
2-D1	(6) 3'-0"X4'-9"	84.0 SF
2-E	21'-8"X16'-2"	350.0 SF
TOTAL OF FIRST FLOOR		3,684.0 SF

TOTAL FLOOR AREA CALCULATION

MAIN HOUSE 1F	3,199.0 SF
MAIN HOUSE 2F	3,684.0 SF
GARAGE	931.0 SF
PORCHES	484.0 SF
POOL HOUSE	797.0 SF
TOTAL	9,095.0 SF

TEO SIGÜENZA
ARCHITECT
460 OLD POST ROAD 2A BEDFORD, N. Y. 10506
TEL: 914.234.6289 FAX: 914.234.0619
www.teosiguenza.com

GENERAL NOTES:

1. DO NOT SCALE DRAWINGS FOR CONSTRUCTION PURPOSES
2. ALL DIMENSIONS TO BE CHECKED
3. CONTRACTOR IS OBLIGED TO REPORT ALL ERRORS AND OMISSIONS TO THE ARCHITECT

	DATE:	REVISION

PROJECT
SINGLE FAMILY RESIDENCE
AT BEDFORD-BANKSVILLE RD

263 BEDFORD-BANKSVILLE RD
ARMONK, NY

DRAWING TITLE
FLOOR AREA CALCULATION

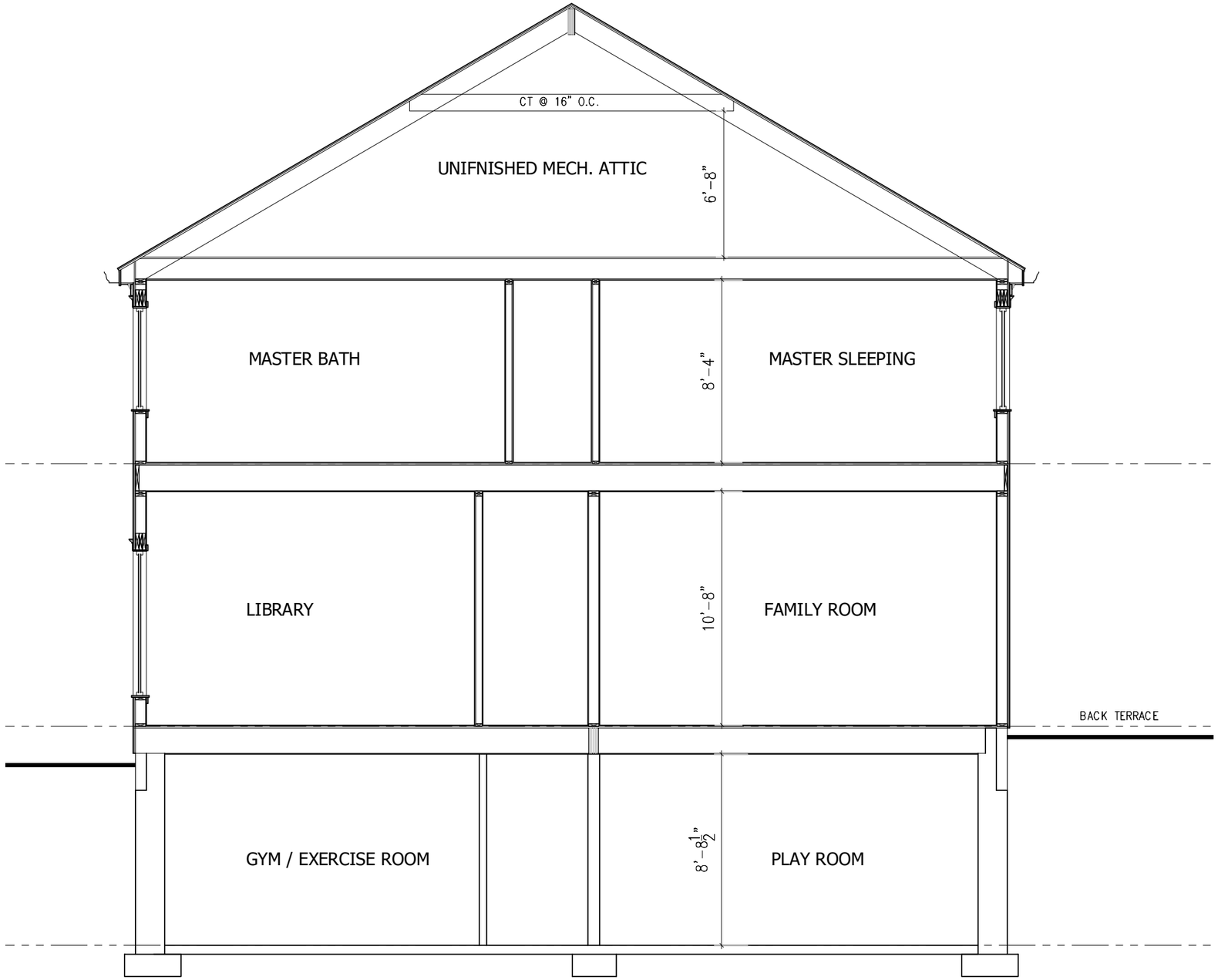
SEAL

DATE
2-10-23

SCALE
1/8" = 1'-0"

DRAWING NO.
A101.10

PAGE NO.



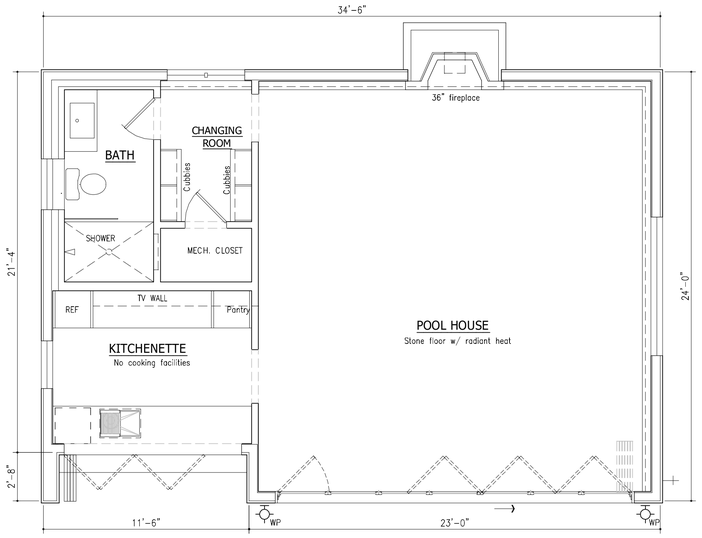
PROPOSED SECTION

3/16" = 1'-0"

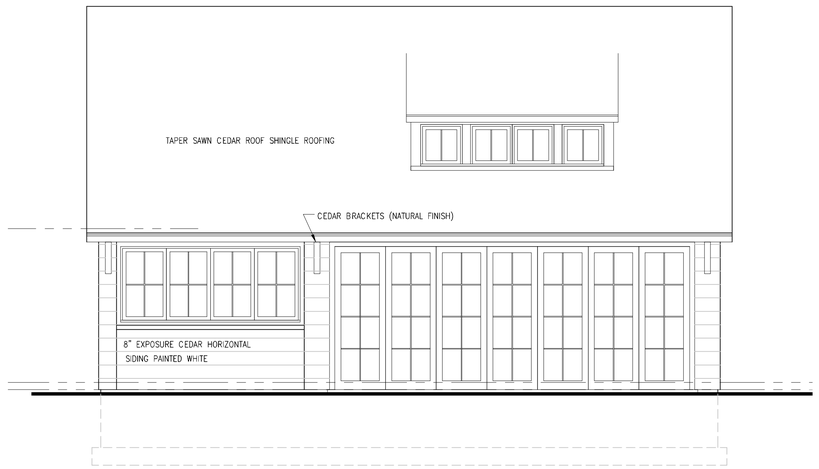
REGISTERED ARCHITECT
DIEGO EZEQUIEL SIGÜENZA
023170-1
STATE OF NEW YORK

263 BEDFORD BANKSVILLE ROAD
SINGLE FAMILY RESIDENCE
ARMONK, NY

TEO SIGÜENZA
ARCHITECT
460 OLD POST ROAD 2A BEDFORD, N. Y. 10506
TEL: 914.234.6289 FAX: 914.234.0619
www.teosiguenza.com



1 PROPOSED FIRST FLOOR PLAN
Scale: 1/4" = 1'-0"



2 PROPOSED FRONT ELEVATION
Scale: 1/4" = 1'-0"

MAIN HOUSE 1F	3,199.0 SF
MAIN HOUSE 2F	3,684.0 SF
TOTAL GROSS FLOOR AREA OF MAIN HOSUE	6,883.0 SF
25% OF GFA	1720.75 SF
POOL HOUSE GFA	797 SF < 1720.75 SF

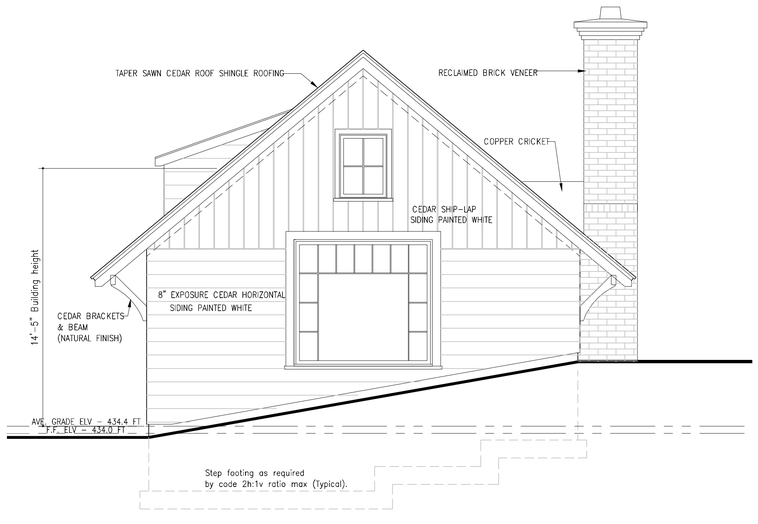
Material Schedule for Proposed Residence

MATERIAL	TYPE	COLOR
Siding	Painted Cedar	White
Exterior Doors & Windows	Painted Wood	White
Trim, moulding etc.	Painted cedar (alternate composite material	White
Roofing	5/8" Taper Sawn Shingle Roof and copper	Natural to patina over time
Bracket	Cedar	Natural
Gutters & Leaders	Copper	
Chimney Flues	Terracotta Flue Tiles	

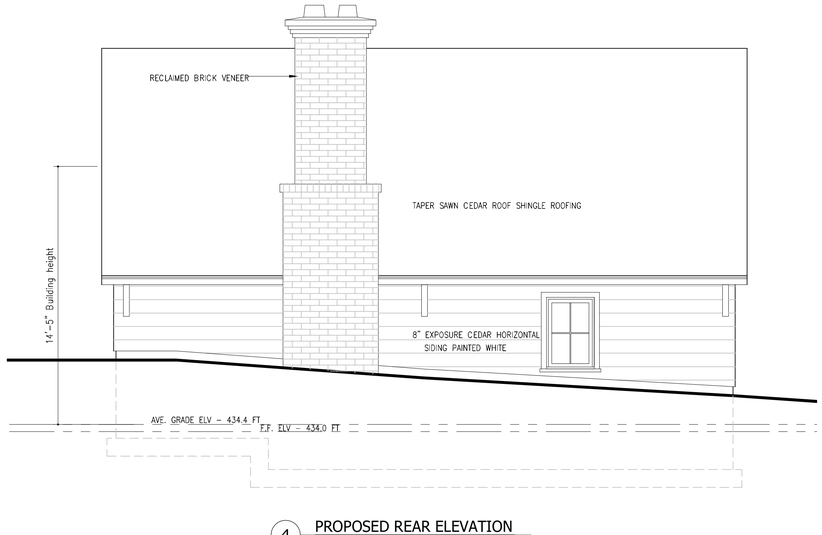
Exterior Lighting Note:
"All lighting shown on this plan shall be directed and/or shielded so as to preclude objectionable glare from being observable from adjoining streets and properties."

Exterior Lighting by Hubbardton Forge

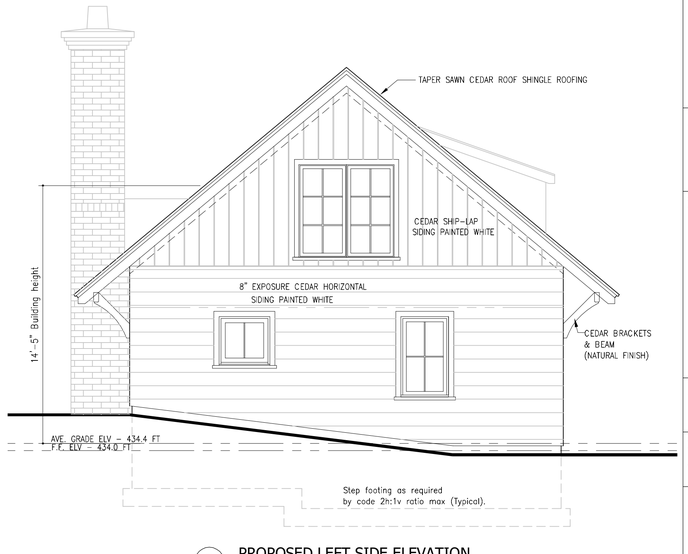
TYPE	HEIGHT	DIRECTION	SHIELD	POWER	TIMING
Meridian Small Outdoor Sconce –Dimmable w/ opal glass	6'-0" from Finish Floor	Aimed to access door	Metal Shade	LED 9.5 W Bulb	Occasional



3 PROPOSED RIGHT SIDE ELEVATION
Scale: 1/4" = 1'-0"



4 PROPOSED REAR ELEVATION
Scale: 1/4" = 1'-0"



5 PROPOSED LEFT SIDE ELEVATION
Scale: 1/4" = 1'-0"

TEO SIGÜENZA
ARCHITECT
460 OLD POST ROAD 2A BEDFORD, N. Y. 10506
TEL: 914.234.6289 FAX: 914.234.0619
www.teosiguenza.com

GENERAL NOTES:

1. DO NOT SCALE DRAWINGS FOR CONSTRUCTION PURPOSES
2. ALL DIMENSIONS TO BE CHECKED
3. CONTRACTOR IS OBLIGED TO REPORT ALL ERRORS AND OMISSIONS TO THE ARCHITECT

	DATE:	REVISION

PROJECT
PROPOSED POOL HOUSE
AT BEDFORD-BANKSVILLE RD

263 BEDFORD-BANKSVILLE RD
ARMONK, NY

DRAWING TITLE
PROPOSED FLOOR PLANS & EXTERIOR ELEVATIONS

SEAL

DATE
2-10-23

SCALE
AS NOTED

DRAWING NO.
P101.00

PAGE NO.

Architectural Plans

Accessory Structures

- Stable
- Addition to Exist. Stable
- Garage

by: Old Town Barns

PROPOSED

STABLE

for

263 BEDFORD BANKSVILLE ROAD
NORTH CASTLE, NEW YORK 10506

by

P.O. Box 36
Pawling, NY 12564
(845)-855-1450
Old Town Barns

DRAWING INDEX:

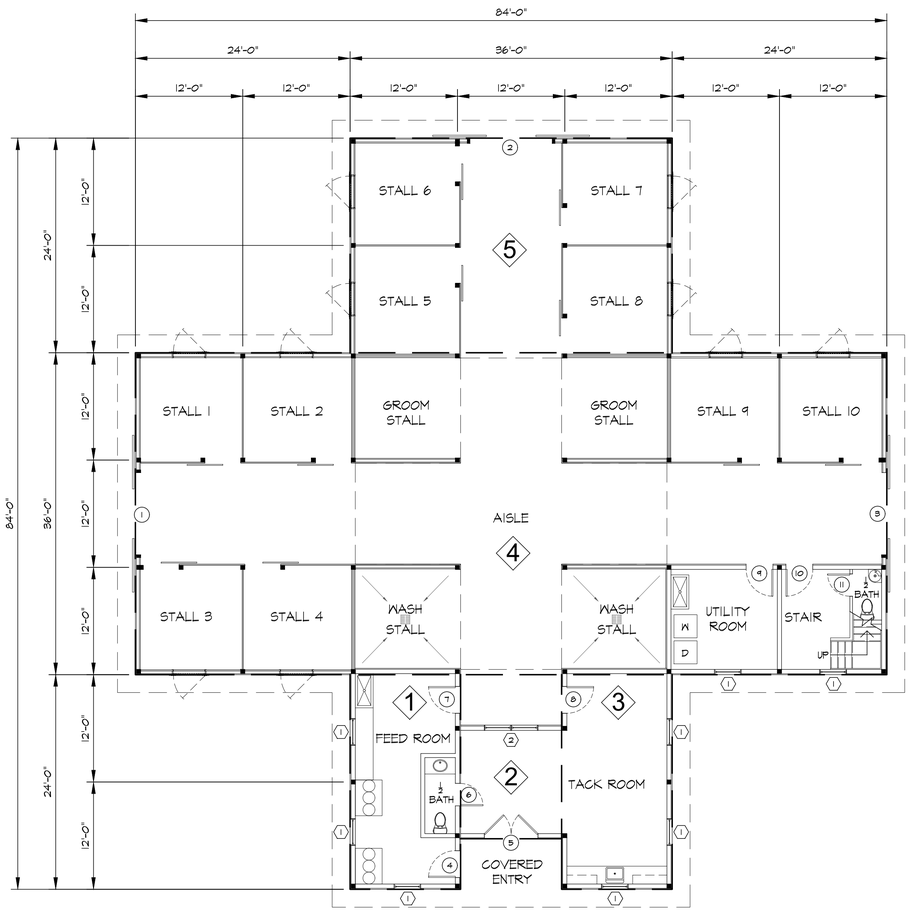
DRAWING TITLE	DWG. No.	DATE
PROJECT COVER SHEET		2/10/23
FLOOR PLANS	A - 100	2/10/23
ELEVATIONS	A - 200	2/10/23
ELEVATIONS	A - 210	2/10/23

STABLE

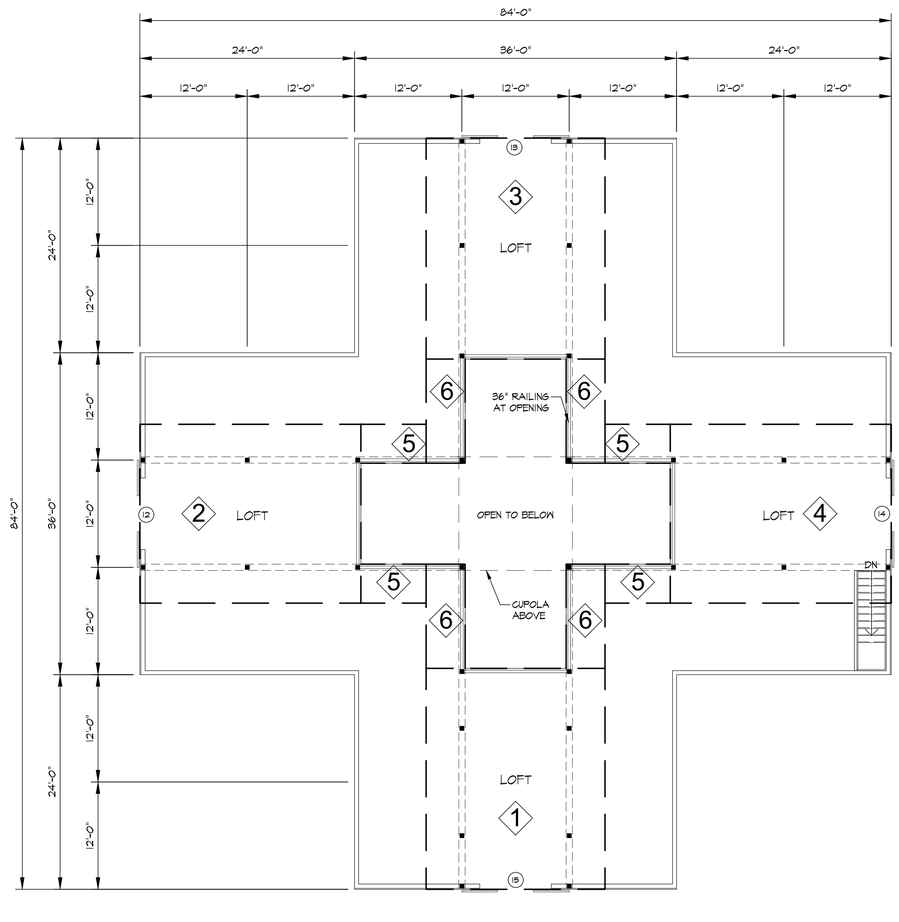
FLOOR AREA CALCULATIONS

PROPOSED : 10 STALL STABLE 4,686 SQFT

FIRST FLOOR PLAN		
BLOCK	DIMENSIONS (FT)	AREA (SQFT)
1	12.3 x 24	296
2	11.3 x 18.3	206
3	12.3 x 24	296
4	84 x 36	3,024
5	36 x 24	864
TOTAL		4,686



FLOOR PLAN
SCALE: 1/8" = 1'-0"



LOFT PLAN
SCALE: 1/8" = 1'-0"

STATE OF NEW YORK
NEWBURGH, NEW YORK
LICENSED PROFESSIONAL ENGINEER
077599

Old Town Barns
P.O. Box 36
Pawling, NY 12564
(845)-855-1450

REV	DATE	DESCRIPTION

PROPOSED STABLE FOR :

263 BEDFORD BANKSVILLE ROAD

NORTH CASTLE, NEW YORK 10506

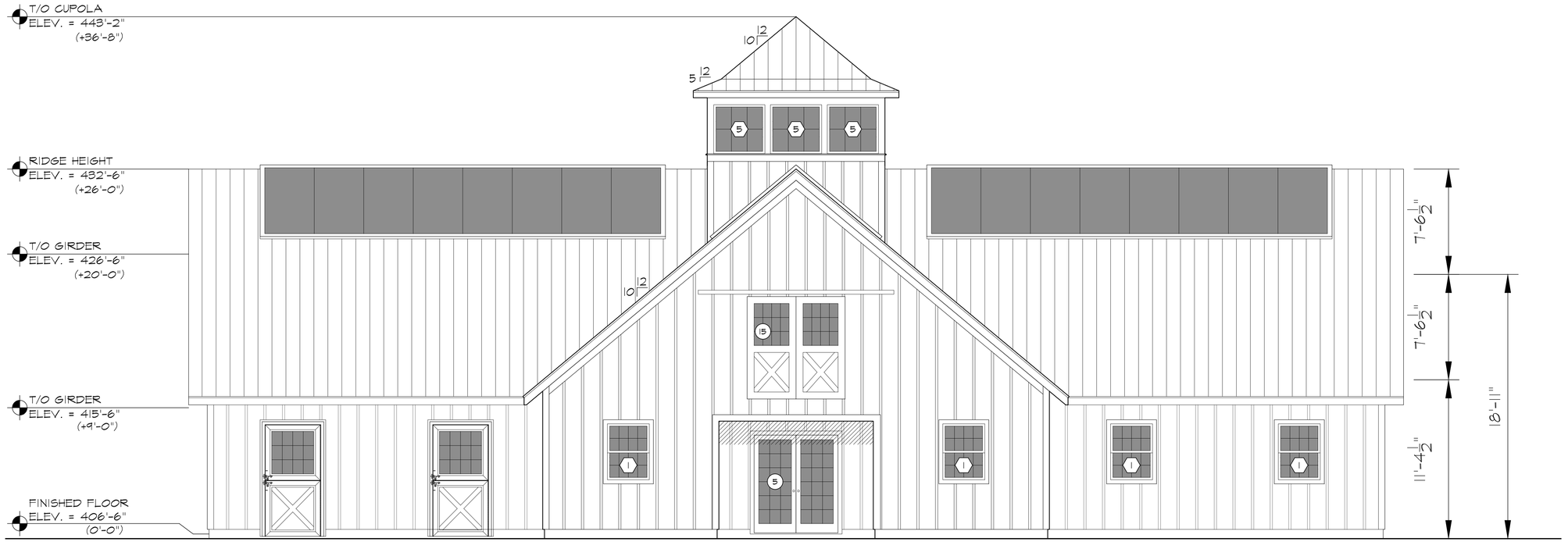
DRAWING NAME: FLOOR PLANS

DATE: 2/10/23

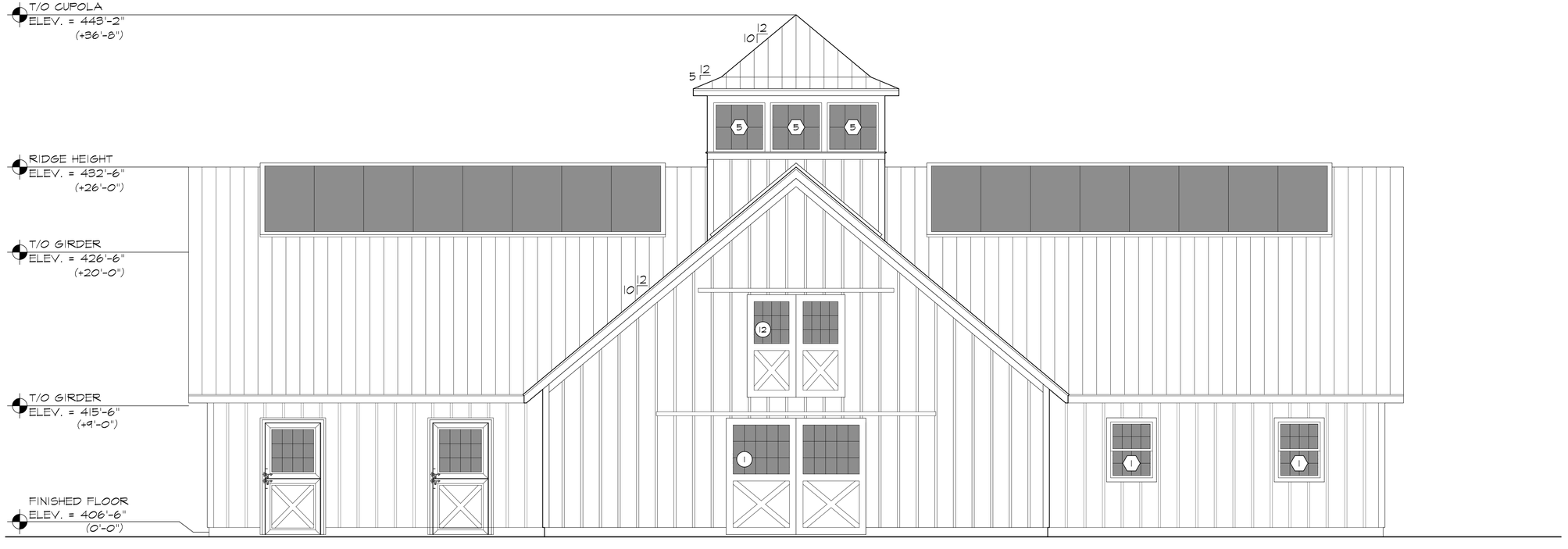
SCALE: as noted

DRAWN BY: KAJ

DRAWING NUMBER: A-100



FRONT ELEVATION
SCALE: 1/4" = 1'-0"



LEFT ELEVATION
SCALE: 1/4" = 1'-0"

STATE OF NEW YORK
MICHELANGELO MOCCIA
077599
LICENSED PROFESSIONAL ENGINEER

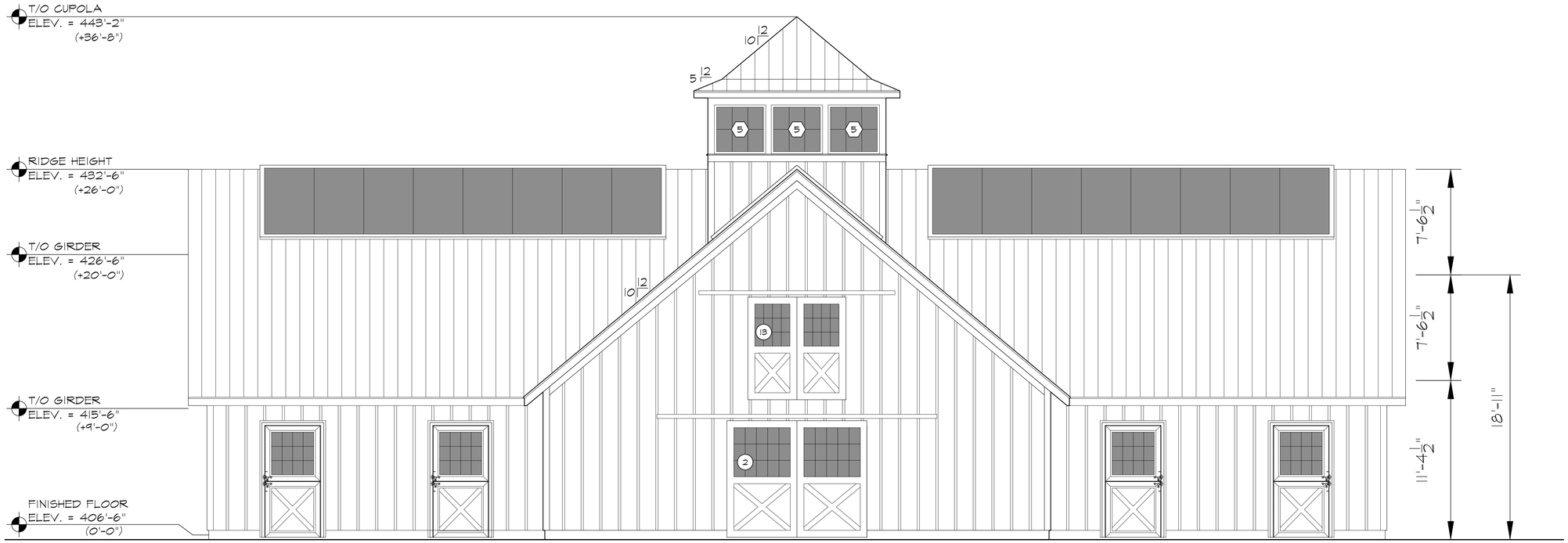
Old Town Barns
P.O. Box 36
Pawling, NY 12564
(845)-855-1450

REV	DATE	DESCRIPTION

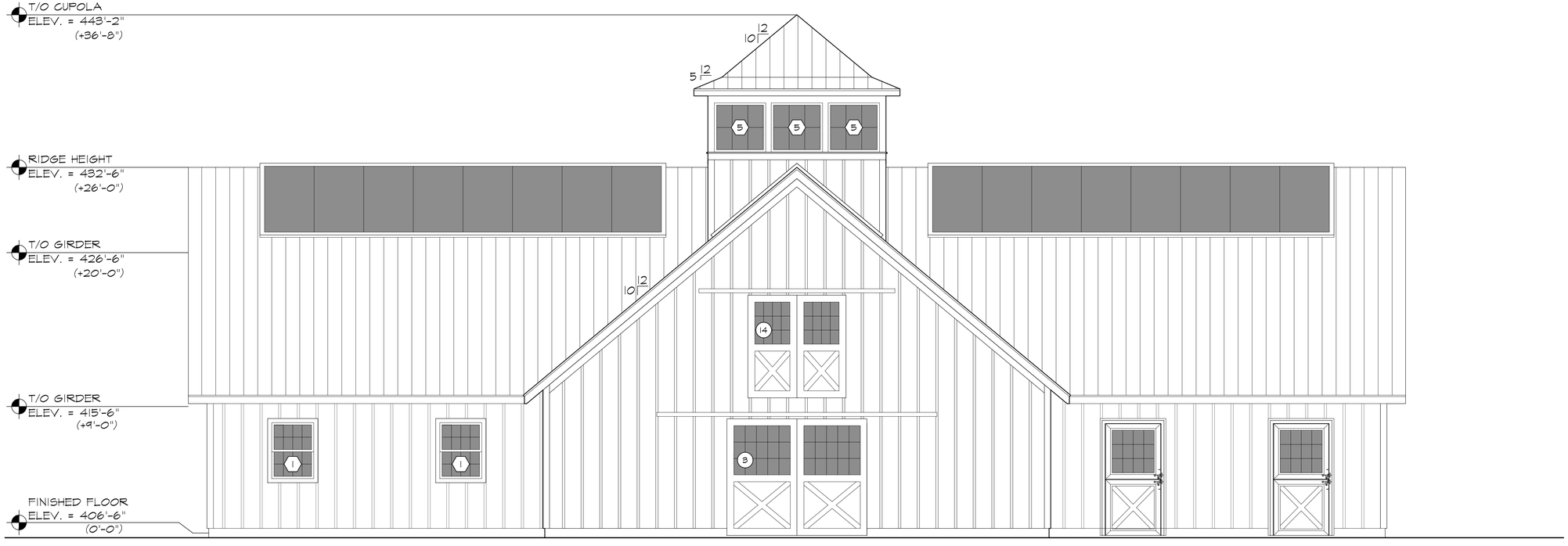
PROPOSED STABLE FOR :
263
BEDFORD BANKSVILLE ROAD
NORTH CASTLE, NEW YORK 10506

DRAWING NAME
ELEVATIONS

DATE	DRAWING NUMBER
2/10/23	A-200
SCALE: as noted	
DRAWN BY: KAJ	



REAR ELEVATION
SCALE: 1/4" = 1'-0"



RIGHT ELEVATION
SCALE: 1/4" = 1'-0"

Old Town Barns
P.O. Box 36
Pawling, NY 12564
(845)-855-1450

REV	DATE	DESCRIPTION

PROPOSED STABLE FOR :
263
BEDFORD BANKSVILLE ROAD
NORTH CASTLE, NEW YORK 10506

DRAWING NAME
ELEVATIONS

DATE	DRAWING NUMBER
2/10/23	A-210
SCALE: as noted	
DRAWN BY: KAJ	

PROPOSED

STABLE ADDITION

for

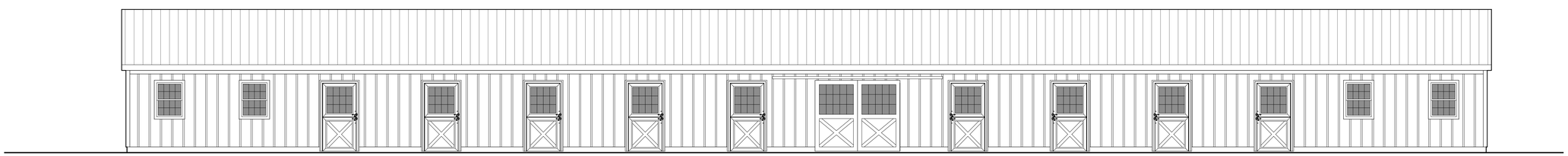
263 BEDFORD BANKSVILLE ROAD
NORTH CASTLE, NEW YORK 10506

by

P.O. Box 36
Pawling, NY 12564
(845)-855-1450
Old Town Barns

DRAWING INDEX:

DRAWING TITLE	DWG. No.	DATE
PROJECT COVER SHEET		2/10/23
FLOOR PLANS	A - 100	2/10/23
ELEVATIONS	A - 200	2/10/23



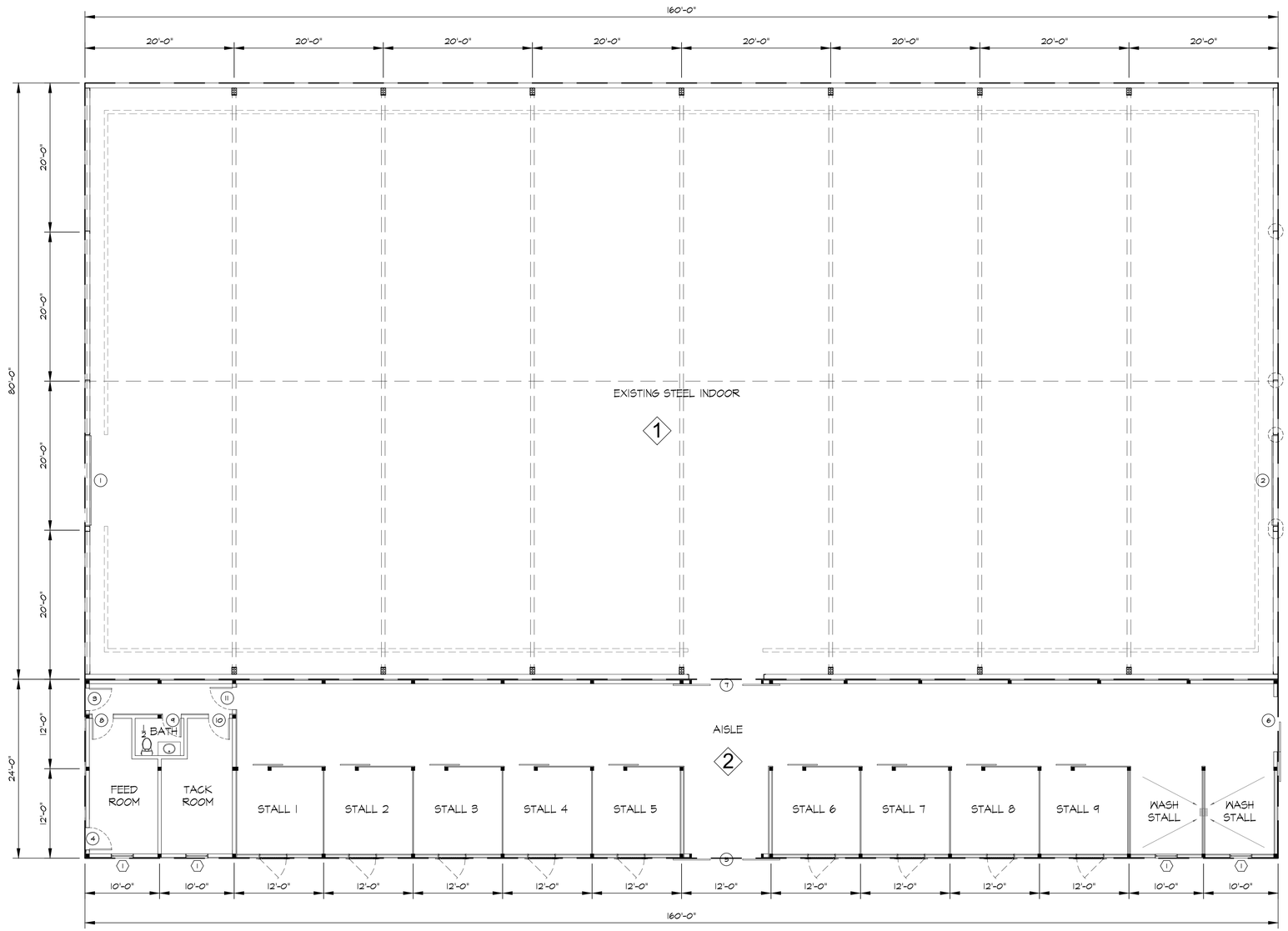
INDOOR/STABLE

FLOOR AREA CALCULATIONS

EXISTING : INDOOR / 12 STALL STABLE 17,230 SQFT

PROPOSED : INDOOR / 9 STALL STABLE 16,640 SQFT

FLOOR PLAN		
BLOCK	DIMENSIONS (FT)	AREA (SQFT)
1	160 x 80	12,800
2	160 x 24	3,840
TOTAL		16,640



FLOOR PLAN
SCALE: 1/8" = 1'-0"

STATE OF NEW YORK
RICHELANGELO GIORGI
071539
LICENSED PROFESSIONAL ENGINEER

Old Town Barns
P.O. Box 36
Pawling, NY 12564
(845)-855-1450

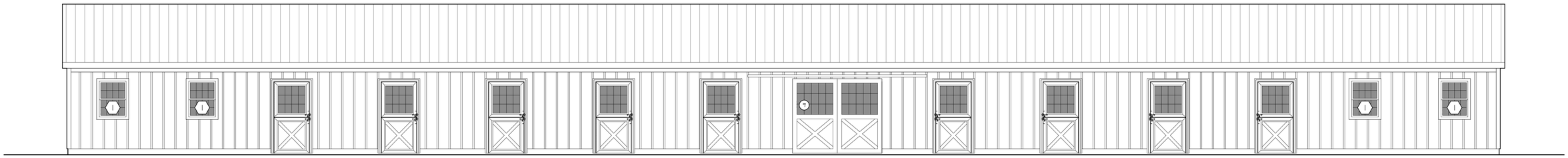
REV	DATE	DESCRIPTION

PROPOSED STABLE ADDITION FOR :

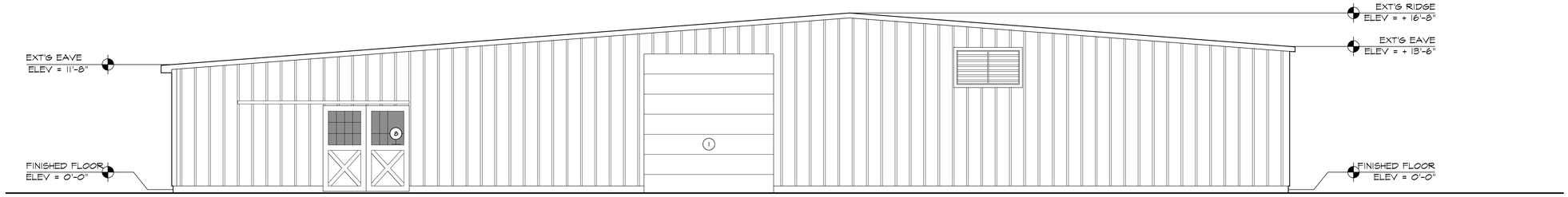
263
BEDFORD BANKSVILLE ROAD
NORTH CASTLE, NEW YORK 10506

DRAWING NAME
FLOOR PLAN

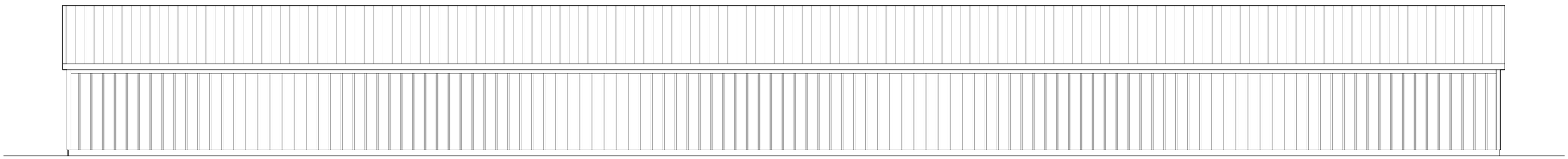
DATE 2/10/23
SCALE as noted
DRAWN BY KAJ
DRAWING NUMBER A-100



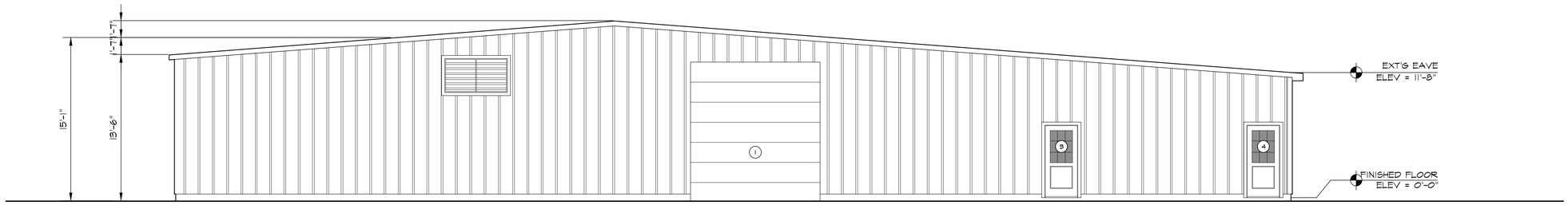
FRONT ELEVATION
SCALE: 3/16" = 1'-0"



RIGHT ELEVATION
SCALE: 3/16" = 1'-0"



REAR ELEVATION
SCALE: 3/16" = 1'-0"



LEFT ELEVATION
SCALE: 3/16" = 1'-0"

RICHARD GEORGE CUSICK
LICENSED PROFESSIONAL ENGINEER
STATE OF NEW YORK
077593

Old Town Barns
P.O. Box 36
Pawling, NY 12564
(845)-855-1450

REV	DATE	DESCRIPTION

PROPOSED STABLE ADDITION FOR :

263 BEDFORD BANKSVILLE ROAD

NORTH CASTLE, NEW YORK 10506

DRAWING NAME
ELEVATIONS

DATE	DRAWING NUMBER
2/10/23	A-200
SCALE: as noted	
DRAWN BY: KAJ	

PROPOSED

GARAGE

for

263 BEDFORD BANKSVILLE ROAD
NORTH CASTLE, NEW YORK 10506

by

P.O. Box 36
Pawling, NY 12564
(845)-855-1450
Old Town Barns

DRAWING INDEX:

DRAWING TITLE	DWG. No.	DATE
PROJECT COVER SHEET		2/10/23
FLOOR PLANS	A - 100	2/10/23
ELEVATIONS	A - 200	2/10/23

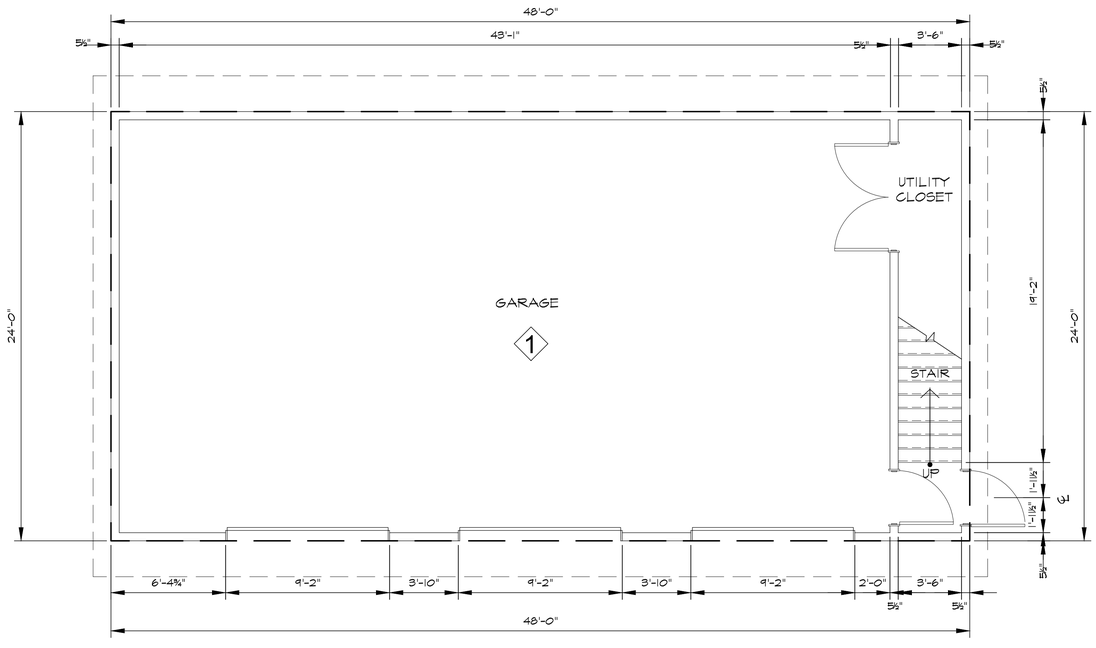
GARAGE

FLOOR AREA CALCULATIONS

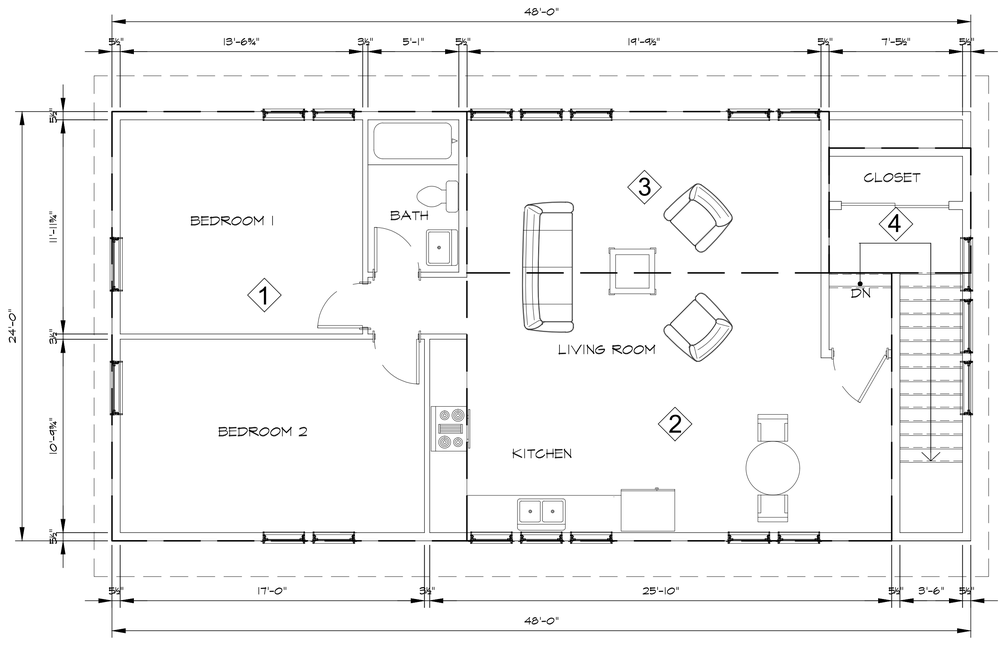
PROPOSED : 3 BAY GARAGE/ 2 BED 1 BATH APT. 2,221 SQFT

GARAGE		
BLOCK	DIMENSIONS (FT)	AREA (SQFT)
1	48 x 24	1,152
TOTAL		1,152

SECOND FLOOR PLAN		
BLOCK	DIMENSIONS (FT)	AREA (SQFT)
1	19.8 x 24	476
2	23.75 x 15	356
3	20.25 x 9	182
4	7.9 x 7	55
TOTAL		1,069



1ST FLOOR PLAN
SCALE: 1/4" = 1'-0"



2ND FLOOR PLAN
SCALE: 1/4" = 1'-0"

Old Town Barns
P.O. Box 36
Pawling, NY 12564
(845)-855-1450

REV	DATE	DESCRIPTION

PROPOSED GARAGE FOR
263
BEDFORD BANKSVILLE ROAD
NORTH CASTLE, NEW YORK 10506

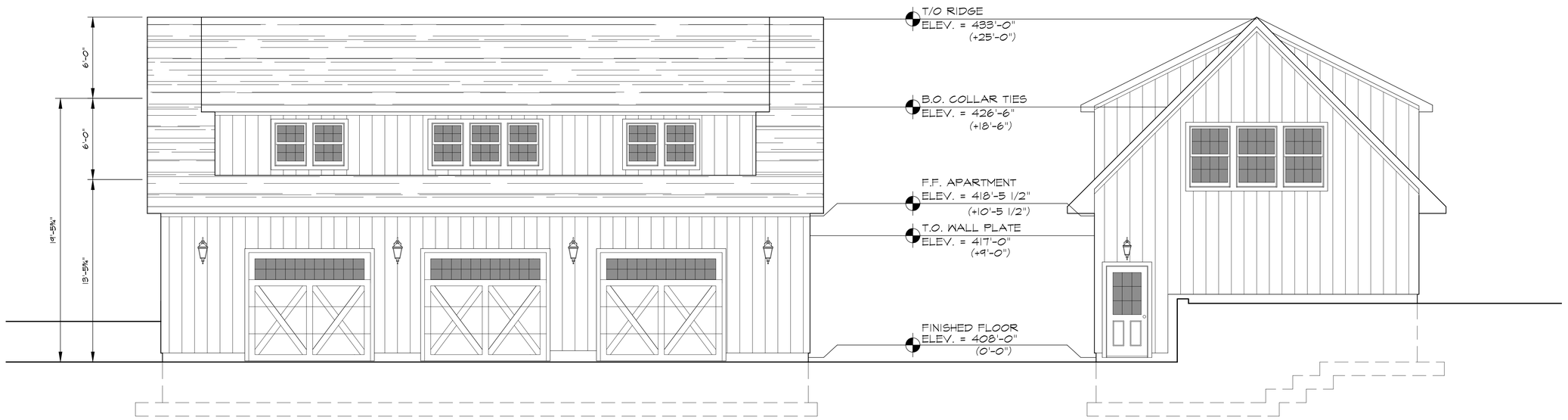
DRAWING NAME
FLOOR PLANS

DATE
2/10/23

SCALE
as noted

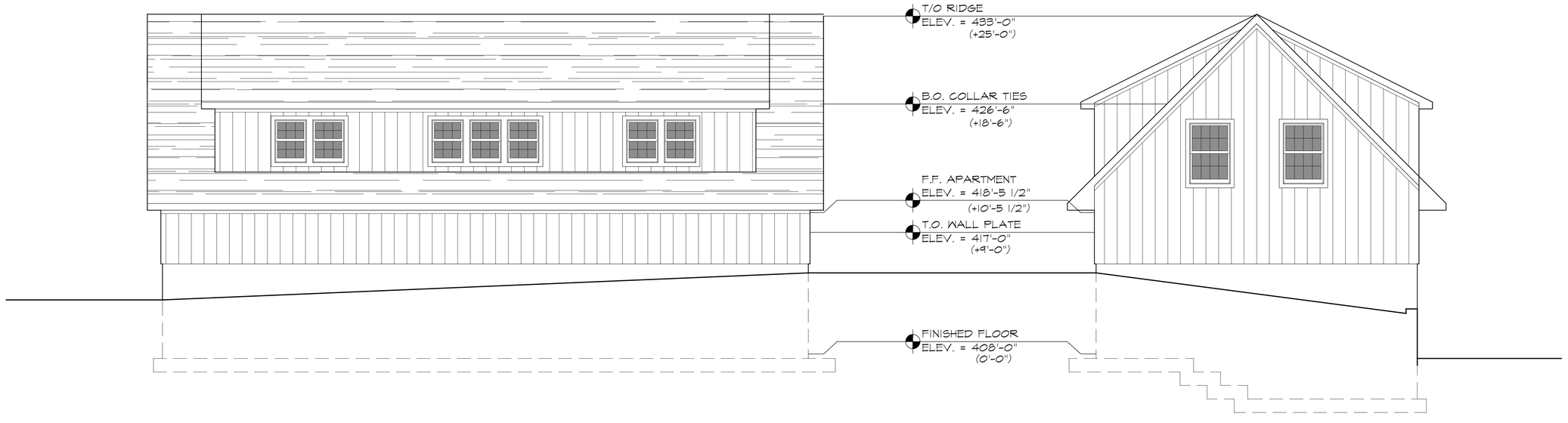
DRAWN BY
KAJ

DRAWING NUMBER
A-100



FRONT ELEVATION
SCALE: 1/4" = 1'-0"

RIGHT ELEVATION
SCALE: 1/4" = 1'-0"



REAR ELEVATION
SCALE: 1/4" = 1'-0"

LEFT ELEVATION
SCALE: 1/4" = 1'-0"

Old Town Barns
P.O. Box 36
Pawling, NY 12564
(845)-855-1450

REV	DATE	DESCRIPTION

PROPOSED GARAGE FOR
263
BEDFORD BANKSVILLE ROAD
NORTH CASTLE, NEW YORK 10506

DRAWING NAME
ELEVATIONS

DATE	DRAWING NUMBER
2/10/23	A-200
SCALE: as noted	
DRAWN BY: DAZ	

Floor Area Calculations

- Main House & Pool House
- Stable, Stable Addition & Garage

by: Teo Següenza, Architect

by: Old Town Barns

TOWN OF NORTH CASTLE
WESTCHESTER COUNTY
Bedford Road
Armonk New York

PLANNING DEPARTMENT
Adam R Kaufman AICP
Director of Planning

January
Telephone
Fax
www.northcastleny.com

FLOOR AREA CALCULATIONS WORKSHEET

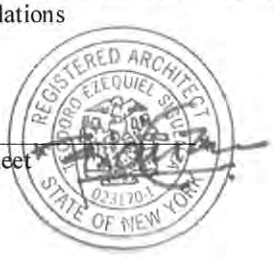
Application Name or Identifying Title Residence at 263 Bedford Banksville Rd Date 12-16-22

Tax Map Designation or Proposed Lot No _____

Floor Area

	Total Lot Area Net Lot Area for Lots Created After	941,901 SF / 21.62AC
	Maximum permitted floor area per Section B	36,637 SF
_	Amount of floor area contained within first floor 0 existing 3,199 proposed _	3,199 SF
_	Amount of floor area contained within second floor 0 existing 3,684 proposed _	3,684 SF
_	Amount of floor area contained within garage 0 existing 931 proposed _	931 SF
_	Amount of floor area contained within porches capable of being enclosed 0 existing 484 proposed _	484 SF
_	Amount of floor area contained within basement if applicable – see definition 0 existing 0 proposed _	0
_	Amount of floor area contained within attic if applicable – see definition 0 existing 0 proposed _	0
_	Amount of floor area contained within all accessory buildings 0 existing 797 proposed Pool House _	797 SF
	Proposed **floor area** Total of Lines – _	9,095 SF

If Line is less than or equal to Line your proposal **complies** with the Town's maximum floor area regulations and the project may proceed to the Residential Project Review Committee for review If Line is greater than Line your proposal does not comply with the Town's regulations



_____ 12-16-22
Signature and Seal of Professional Preparing Worksheet Date

TOWN OF NORTH CASTLE

WESTCHESTER COUNTY
17 Bedford Road
Armonk, New York 10504-1898

PLANNING DEPARTMENT
Adam R. Kaufman, AICP
Director of Planning

Telephone: (914) 273-3542
Fax: (914) 273-3554
www.northcastleny.com

Accessory Structures by OLD TOWN BARNS

FLOOR AREA CALCULATIONS WORKSHEET

Marengo Farms, LLC c/o Chloe Gasiorowski

Application Name or Identifying Title: 263 Bedford Banksville Rd Date: 2/09/2023

Tax Map Designation or Proposed Lot No.: 95.03-2-56

Floor Area

1.	Total Lot Area (Net Lot Area for Lots Created After 12/13/06):	941,901 SF/ 21.62 AC
2.	**Maximum** permitted floor area (per Section 355-26.B(4)):	36,637 SF
3.	Amount of floor area contained within first floor: _____ existing + _____ proposed =	0
4.	Amount of floor area contained within second floor: _____ existing + _____ proposed =	0
5.	Amount of floor area contained within garage: _____ existing + _____ proposed =	0
6.	Amount of floor area contained within porches capable of being enclosed: _____ existing + _____ proposed =	0
7.	Amount of floor area contained within basement (if applicable – see definition): _____ existing + _____ proposed =	0
8.	Amount of floor area contained within attic (if applicable – see definition): _____ existing + _____ proposed =	0
9.	Amount of floor area contained within all accessory buildings: By Old Town Barns 16,640 existing + 6,907 proposed =	23,547 SF
10.	Proposed **floor area:** Total of Lines 3 – 9 =	23,547 SF

If Line 10 is less than or equal to Line 2, your proposal **complies** with the Town's maximum floor area regulations and the project may proceed to the Residential Project Review Committee for review. If Line 10 is greater than Line 2 your proposal does not comply with the Town's regulations.

STATE OF NEW YORK NICOLANGELO CUOCO 077599 LICENSED PROFESSIONAL ENGINEER

Signature and Seal of Professional Preparing Worksheet

9 FEB 2023

Date

Gasiorowski Family Farm

263 Bedford Banksville Road, North Castle, NY

Marengo Farms LLC c/o Chloe Gasiorowski

Accessory Structures Floor Area Calculations Worksheet

Structure Description	Floor Description	Proposed Square Footage
New 10 Stall Stable – By Old Town Barns (OTB)	First Floor	4686 SF
	Second Floor Loft	0 SF
Renovated Existing Indoor Arena- Footprint Reduced by 590SF by OTB	First Floor (Arena and 10 Stalls)	16,640 SF
	No Second Floor	0 SF
New Garage with Grooms Quarters by OTB	First Floor	1,152 SF
	Second Floor	1,069 SF
Total Accessory Floor Area by OTB		**23,547 SF**

Gross Land Coverage Calculations

by: Karl H. Weed, Engineer

TOWN OF NORTH CASTLE

WESTCHESTER COUNTY
17 Bedford Road
Armonk, New York 10504-1898

PLANNING DEPARTMENT
Adam R. Kaufman, AICP
Director of Planning

Telephone: (914) 273-3542
Fax: (914) 273-3554
www.northcastleny.com

GROSS LAND COVERAGE CALCULATIONS WORKSHEET

Application Name or Identifying Title: 263 BEDFORD BANKSVILLE RD Date: 2/10/2023

Tax Map Designation or Proposed Lot No.: 95.03-2-56

Gross Lot Coverage

1.	Total lot Area (Net Lot Area for Lots Created After 12/13/06):	941,901 SF
2.	**Maximum** permitted gross land coverage (per Section 355-26.C(1)(a)):	77,378 SF
3.	**BONUS** maximum gross land cover (per Section 355-26.C(1)(b)):	
	Distance principal home is beyond minimum front yard setback _____ 294 x 10 = _____	2,940 SF
4.	**TOTAL Maximum Permitted gross land coverage** = Sum of lines 2 and 3	80,318 SF
5.	Amount of lot area covered by **principal building:** 0 existing + 4,130 proposed =	4,130 SF
6.	Amount of lot area covered by **accessory buildings:** 16,640 existing + 6,702 proposed =	23,342 SF
7.	Amount of lot area covered by **decks:** 0 existing + 0 proposed =	0 SF
8.	Amount of lot area covered by **porches:** 0 existing + 510 proposed =	510 SF
9.	Amount of lot area covered by **driveway, parking areas and walkways:** 8,415 existing + 19,695 proposed =	28,110 SF
10.	Amount of lot area covered by **terraces:** 0 existing + 1,645 proposed =	1,645 SF
11.	Amount of lot area covered by **tennis court, pool and mechanical equip:** 0 existing + 1,065 proposed =	1,065 SF
12.	Amount of lot area covered by **all other structures:** 0 existing + 205 proposed =	205 SF
13.	Proposed **gross land coverage:** Total of Lines 5 – 12 =	59,007 SF

If Line 13 is less than or eq ual to Line 4, your proposal **complies** with the Town's maximum gross land coverage regulations and the project may proceed to the Residential Project Review Committee for review. If Line 13 is greater than Line 4 your proposal does not comply with the Town's regulations.

Karl H Weed — 2/10/2023

Signature and Seal of Professional Preparing Worksheet — Date

STATE OF NEW YORK · KARL H WEED · 075695 · LICENSED PROFESSIONAL ENGINEER

TOWN OF NORTH CASTLE

WESTCHESTER COUNTY
17 Bedford Road
Armonk, New York 10504-1898

PLANNING DEPARTMENT
Adam R. Kaufman, AICP
Director of Planning

Telephone: (914) 273-3542
Fax: (914) 273-3554
www.northcastleny.com

GROSS LAND COVERAGE WORKSHEET

The following format is to be used for all applications for the purpose of demonstrating the gross land coverage of a property as necessary to show compliance with gross land coverage limitations of the Town Code.

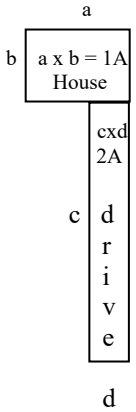
1. Scaled worksheets are to be prepared based upon a site plan which represents existing or proposed conditions as applicable to the particular circumstances of the approval being sought. All site plans and worksheets are required to be prepared by a licensed or registered professional in the State of New York.

2. Each component of the gross land coverage is to be divided into simple polygons (squares, rectangles, etc.) each being drawn on the plan. The area of each polygon is to be shown by providing the dimensions and resulting area measurement. Each polygon is to be assigned an identifying label for reference purposes.

3. A summary table for each component is to be completed. The area of each polygon is to be listed by reference label then added, resulting in the gross land coverage for the entire site.

4. Any exception of land coverage from the gross land coverage must be identified on the floor plans and summary tables. The rationale for any exception must accompany the floor area worksheets.

5. A schematic illustration of the format is shown below (or a schematic illustration with areas computed by CAD)



1A= House
2A= Drive

1A
2A

GROSS LAND COVERAGE

LOT AREA, NET – Lot area minus seventy five (75) percent of the area of any wetlands, waterbodies and, watercourses, but excluding any adjacent areas, all as defined in Chapter 340 Wetlands and Drainage, of the Town Code, and the area of any steep slopes, as defined Chapter 355, except that in the case of one-family lots, the deduction for steep slopes shall be only fifty (50) percent.

Lot Size	Maximum Permitted Gross Land Coverage for One-Family Dwelling Lots[1] (square feet)
Less than 5,000 square feet	50% of the lot area
5,000 to 9,999 square feet	2,500 plus 30% of the lot area in excess of 5,000 square feet
10,000 to 14,999 square feet	4,000 plus 24% of the lot area in excess of 10,000 square feet
15,000 square feet to 0.499 acres	5,200 plus 18% of the lot area in excess of 15,000 square feet
0.5 to 0.749 acres	6,420 plus 15% of the lot area in excess of 0.5 acres
0.75 to 0.999 acres	8,050 plus 12% of the lot area in excess of 0.75 acres
1.0 to 1.999 acres	9,350 plus 9% of the lot area in excess of 1.0 acres
2.0 acres or more	13,270 plus 7.5% of the lot area in excess of 2.0 acres

*Permitted gross land coverage limitations for two-family dwelling lots in the R-2F District shall be twenty five (25) percent greater than that permitted for one-family dwelling lots.

NOTWITHSTANDING ABOVE LIMITATIONS, AN ADDITIONAL 10 SQUARE FEET OF GROSS LAND COVERAGE SHALL BE PERMITTED FOR EACH ONE FOOT OF FRONT YARD SETBACK OF THE PRINCIPAL DWELLING IN EXCESS OF THE MINIMUM FRONT YARD SETBACK REQUIRED.

Stormwater Pollution Prevention Plan (SWPPP)

by: DiMarzo & Bereczky, Inc.

DiMarzo & Bereczky

Land Surveying | Engineering | Permitting

Stormwater Pollution Prevention Plan (SWPPP)

Owner & Operator:

Marengo Farms, LLC
c/o Chloe Gasiorowski
48 Davids Way
Bedford Hills, NY 10507

Project Location:

Marengo Farms, LLC
263 Bedford Banksville Road
Bedford, NY 10506
(Town of North Castle Municipality)

SWPPP Preparer:

DiMarzo & Bereczky Inc.
191 Lloyd Drive
Fairfield, CT 06825

Karl H. Weed, P.E
Registration #075695

SWPPP Preparation Date:

Initial Date: 2/10/2023

Project Dates:

Estimated Start Date: 5/10/2023
Estimated Completion Date: 4/28/2024

Contents

SECTION 1: SITE EVALUATION, ASSESSMENT, AND PLANNING

1.1 Project/Site Information

Project/Site Name: Marengo Farms LLC

Project Street/Location: 263 Bedford Banksville Road

City: North Castle State: NY ZIP Code: 10506

County: Westchester

Latitude/Longitude

Latitude: 41° 10' 01" N Longitude: 73° 39' 32"'' W

Method for determining latitude/longitude: U.S.D.A. National Resources Conservation Service

NPDES project or permit tracking number: T.B.D.

1.2 Contact Information/Responsable Parties

Owner & Operator:

Marengo Farms, LLC c/o Chloe Gasiorowski
48 Davids Way
Bedford Hills, NY 10507
(347) 853-6073

SWPPP Preparer:

DiMarzo & Bereczky, Inc.
Louis DiMarzo, P.E.
191 Lloyd Drive
Fairfield, CT 06825
(203) 857 4110
Fax: (203) 857 4110

Project Manager or Site Supervisor: T.B.D.

Subcontractor(s): T.B.D.

Emergency 24-Hour Contact: T.B.D.

1.3 Introduction

Marengo Farms LLC is the property owner of 263 Bedford Banksville Road in Bedford. The lot is 21.6 acres. The parcel is on the west side of Bedford Banksville Road approximately 300 feet south of its intersection with Finch Drive. An orientation map may be found on drawing sheet C-1. The property is currently developed as an equestrian estate. The owner is proposing to raze the principal dwelling and construct a new single-family residence with a pool, pool house, terrace and a new drive court. The existing indoor riding area building shall be renovated. A new ten (10) horse stall barn is proposed. A Grooms Quarters building with 4 bedrooms is proposed. Existing paddocks shall be expanded, and new paddocks are proposed.

The area of disturbance for the proposed project improvements is 4.9 acres. A majority of the work will be done within the previously developed portion of the site. The project surveyor is T.C. Merritts, and the survey is listed below. Reference is made to the following site design drawings prepared by DiMarzo & Bereczky, Inc.

Topographic of Property prepared for Kent Farrington LLC, dated 6/21/2021

C-0 Zoning Site Plan, dated 2/10/2023

C-1 Site Development Plan, dated 2/10/2023

C-2 Gross Land Coverage Plan, dated 2/10/2023

C-3A Site Plan – 3A, dated 2/10/2023

C-3B Site Plan – 3B, dated 2/10/2023

C-4 Erosion & Sediment Control Plan, dated 2/10/2023

C-5 Notes & Details, dated 2/10/2023

C-6 Details-1, dated 2/10/2023

C-7 Details-2, dated 2/10/2023

C-8 Turning Templates Plan, dated 2/10/2023

1.4 Existing Conditions

The property at 263 Bedford Banksville Road is 21.6 acres and lies within the R-4A Zone. The property is currently developed with a single-family dwelling, sheds, barns, indoor riding area building, paddocks, and conventional utility services.

The Mianus River is the western boundary of the lot. It flows from south to north. A pond is located within the northwest portion of property and within 110 feet from the river. Separately, a stream is located within the northeast corner of the property. It flows from its eastern culvert underneath Bedford Banksville Road to the north towards its culvert with Finch Drive. NYSDEC wetlands are located along the western boundary and associated with the Mianus River. Local wetlands are adjacent to the pond. Additionally, local wetlands are along the stream in the northeast of the property. The wetland investigation and delineation was prepared by Jay Fain & Associates, LLC. Their findings are published in a report titled, "Soils Mapping & Wetland/Watercourse Delineation for 263 Bedford Banksville Road, North Castle, NY 10506" dated 3/04/2021. This report is in Appendix A. The property is tributary to the Mianus River Watershed. Both the western and northeast portions of the site lie within the 100-year flood plain per the Federal Emergency Management Agency (FEMA). The FEMA Flood Insurance Rate Map dated 9/28/2007 is in Appendix B.

The site soils in the central and more developed portion of the property consist of Chatfield-Charlton complex and Chatfield-Charlton fine sandy. The site soils within the western portion of the site are classified as Riverhead loam with areas of Udorthents around the pond. The northeast area along the stream contains Leicester loam soils. These classifications are identified by the U.S. Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) soils map for Westchester County. The NRCS soil survey is in Appendix C. The hydrological soils classifications are primarily type B for the eastern half of the property. The western half is split between type A and D. Refer to Appendix C for a depiction of the hydrological soil classifications.

1.5 Pre-Construction Drainage Analysis

There is a central ridge with a north-south axis on the property. Thus, the site drains in two directions. A larger portion of the site drains to the west towards the pond and the Mianus River via overland flow. This is the West Basin at 16.49 acres. The remaining areas drain with overland flow towards the northeastern stream. This is the East Basin at 5.13 acres.

The West Basin contains gravel and dirt roads, the house, lawn, a barn, paddocks, wooded areas, meadow, and a pond. The East Basin contains gravel drives, sheds, indoor riding area building, paddocks, meadow, some lawn, and wooded areas.

Refer to Table 1 below for information on the existing drainage basin.

Table 1 - Existing Conditions Basin

Existing Conditions			
Basin	Area (ac)	CN	Tc (min.)
Ex West	16.49	67.60	20.2
Ex East	5.13	72.95	13.7

1.6 Post-Construction Drainage Analysis

Under proposed conditions the site drains to the same discharge points as it does under existing conditions. The proposed improvements will increase onsite impervious coverage by 18,855 square feet (SF). The Eastern Basin has an impervious surface reduction of 1,515 SF. The Western Basin has an impervious surface increase of 20,370 SF. For this drainage study, gravel roads are considered as impervious surfaces for both existing and proposed conditions.

Eight (8) infiltration systems are proposed for the re-development. The systems will service to treat the water quality volume generated by the proposed impervious coverage. They will also serve to mitigate peak flow rates of runoff generated by the 100-year storm event. The bottom of proposed infiltration systems shall consist of an amended engineered soil mix. The engineered soil mix shall be provided by Agresource, Inc of Massachusetts. The soil specification is "bioretention soil", and the specification sheets are provided in Appendix C. The infiltration systems are proposed to replace the existing two feet of soil below the bottom of the systems with the engineered soil mix. The "bioretention soil" is manufactured and tested for a minimum required percolation rate of 1.0 inches per hour. This shall provide slower draining time than existing soils to ensure adequate pollutant removal. The peak flow rates leaving the site will be equal to or less than existing conditions.

Under proposed conditions, the Western Basin is divided into five (5) sub-basins. The West-1, West-2, West-3 and West-4 sub-basins are associated with infiltration systems. The remaining areas are within the West Bypass. Similarly, the Eastern Basin is divided into five (5) sub-basins. The East-1, East -2, East -3 and East -4 sub-basins are associated with the infiltration systems. The remaining areas are within the East Bypass.

Refer to Table 2 below for information on the proposed drainage basins.

Table 2 - Proposed Drainage Basins

Proposed Conditions						
Basin	Area (ac)	CN	Sub-Basin	Area (ac)	CN	Tc (min.)
Pr West	16.70	67.8	West Bypass	16.07	66.83	20.2
			West-1	0.19	98.00	5.0
			West-2	0.01	98.00	5.0
			West-3	0.32	88.55	5.0
			West-4	0.11	98.00	5.0
Pr East	4.92	72.8	East Bypass	4.31	71.87	13.7
			East-1	0.05	85.00	5.0
			East -2	0.13	76.17	5.0
			East -3	0.24	84.01	5.0
			East -4	0.19	74.52	5.0

The runoff for the West-1, West-3, and West-4 basins are captured by applicable roof gutters, roof leaders, area drains, and catch basins for the new development. The respective drainage basin areas are piped to the proposed infiltration systems designated as BMP-W1, BMP-W3, and BMP-W4. The systems each consist of Cultec Recharger 330XLHD chamber units and crushed stone. The systems shall have a high-level discharge controlled by an adjacent level spreader on the down gradient slope. The crushed stone of the level spreaders shall daylight at finished grade and provide for non-erosive outlet protection. A conservative exfiltration rate of 1.0 inches per hour is applied for the specified bioretention soil under the BMP.

The runoff for the West-2 basin is captured by an area drain within the proposed dumpster pad area for manure collection. The tributary infiltration system is BMP-W2. It is proposed as a two

(2) chambers of Cultec Recharger 330XLHD. The system has been designed to contain the entire 100 year storm event below the upstream area drain grate.

The runoff for the East-1, East-2, East-3 and Eastt-4 basins are captured by applicable roof gutters, roof leaders, and catch basins for the new development. The respective drainage basin areas are piped to the proposed infiltration systems designated as BMP-E1, BMP-E2, BMP-E3, and BMP-E4. The systems each consist of Cultec Recharger 150XLHD or 330XLHD chamber units and crushed stone. Refer to the Site Plan drawing set. The systems shall have a high-level discharge controlled by an adjacent level spreader on the down gradient slope. The crushed stone of the level spreaders shall daylight at finished grade and provide for non-erosive outlet protection. A conservative exfiltration rate of 1.0 inches per hour is applied for the specified bioretention soil under the BMP.

1.7 Runoff Calculations

Runoff for the drainage analysis is calculated using the computer program HydroCAD version 10.2 produced by HydroCAD Software Solutions, LLC. The 24-hour design storms analyzed include the 10 and 100-year storm events, with rainfall depths of 5.1 and 9.1 inches respectively. The method used is USDA, NRCS TR-20, and the rainfall distribution is defined as Type III.

Weighted curve numbers were determined for each sub-basin based on hydrologic soil type and land cover. Land cover information was determined from aerial photographs and field inspection. Hydrologic soil groups were obtained from the Soil Survey of Westchester County, NY prepared by the USDA, NRCS.

The storage within the proposed infiltration systems and their outlets has been modeled as a part of this drainage study. Refer to Appendix D for drainage maps, water quality calculation and HydroCAD analysis. Table 3 and Table 4 below show a comparison of existing and proposed peak runoff rates and runoff volumes for each respective study point.

Table 3 - Peak Rates of Runoff

Peak Flow (cfs) for 100 yr-storm event				
Study Points	Ex	Pr	Change	% Change
West	66.63	65.82	-0.81	-1.2 %
East	27.22	24.92	-0.37	-8.4 %

Table 4 - Runoff Volume Rates

Runoff Volume (cubic-ft) for 100 yr-storm event				
Study Points	Ex	Pr	Change	% Change
West	305,546	304,452	-1,094	-0.4 %
East	107,547	97,655	-9,892	-9.2 %

Because peak runoff flow rates and runoff volumes are mitigated and the first 1.4" of rainfall over new impervious surfaces will be infiltrated, the rate of downstream erosion will be unaffected by this project.

SECTION 2: EROSION AND SEDIMENT CONTROL BMPS

2.1 Minimize Disturbed Area and Protect Natural Features and Soil

Limiting the amount of disturbance and limiting the amount of time areas are disturbed are the best controls for limiting erosion on the construction site. The Erosion and Sediment Control Plan C-4 depicts the proposed limits of disturbance for the site. The total temporary construction disturbance is 4.9 acres. Most of this disturbance is within areas previously disturbed by the prior development of the lot.

Due to project's disturbance being greater than 5,000, the designated responsible party of this SWPPP must obtain coverage under the New York State Pollution Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity (GP-0-20-001). A Notice of Intent (NOI) shall be submitted electronically to the NYSDEC online NOI. A MS4 SWPPP acceptance form shall be completed, approved and submitted to the NYSDEC.

2.2 Construction Phasing

- Phase 1: Preparation (1 week)
  - An on-site pre-construction meeting shall be attended by the Town Engineer, Town Building Inspector, The inspecting Engineer of Record, Contractor, and Owner to

review the Erosion and Sediment Control Plans and discuss modifications. The contractor shall be responsible for coordinating the pre-construction meeting.
  - Install silt fences and tracking pad for construction.
  - Install tree protection and trim limbs that may be damaged by construction.
  - Install inlet protection on existing catch basins as depicted on the plan.
  - Install a protection fence around the proposed septic leaching area and the proposed stormwater infiltration galleries.
  - Cut trees to be removed.

- Phase 2: Demolition: (2 weeks)
  - Cap-off and remove existing utilities to the house.
  - Demolish and remove existing house, sheds, stall barn, and southwest wing to the existing indoor riding building

- Phase 3: Construction of house, pool house, pool, and drive (30 weeks)
  - Excavate and construct foundation for house and pool house.
  - Excavate and construct 10 stall stable barn and grooms quarters.
  - Rough grade the proposed gravel driveways and the asphalt drive court.
  - Construct the house, pool house, barn, and grooms quarters. Backfill foundations as soon as possible.
  - Install septic leaching trenches, tanks, boxes and associated piping.
  - Install stormwater infiltration galleries.
  - Install water, electric and communication utilities
  - Grade proposed paddock areas.
  - Final paving for the drives and driveway.
  - Maintain all sediment and erosion controls in an effective condition during the construction period.

- Phase 4: Landscaping (3 weeks)
  - Fully stabilize all disturbed areas.
  - Install seed and mulch.

- Phase 5: Clean up after all areas are stabilized (1 week)
  - Clean effected portions of off-site roads and driveways.
  - Remove accumulated silt and debris.
  - Remove temporary sediment and erosion controls.
  - Make any necessary repairs to permanent erosion and sediment controls.

2.3 Anti-Tracking Pad

Anti-tracking pads consisting of crushed stone and a geotextile foundation will be installed at the locations shown on site drawing C-4 to prevent off site transport of sediment by construction

vehicles. The anti-tracking pads will be at least 50 feet long, a minimum of 12 feet wide, flared at the end closest to the paved road, and will consist of a 6-inch-thick layer of crushed stone (1"-4" inch diameter). The crushed stone will be placed over a layer of geotextile filter fabric to reduce the mitigation of sediment from the underlying soil.

The stabilized exits will be installed before construction begins on the site. The anti-tracking pads will be placed on the pavement and will remain until all areas of the site have been stabilized.

The tracking pads will be inspected weekly and after storm events or heavy use. The exits will be maintained in a condition that will prevent tracking or flowing of sediment off site or onto public roads. All sediment tracked, spilled, dropped or washed off site will be swept up immediately and hauled off-site for disposal at the appropriate disposal facility. Sediment will be swept from the anti-tracking pad weekly, or more often if necessary. If excess sediment has clogged the pad, the exit will be top dressed with new crushed stone. Replacement of the entire pad might be necessary when the pad becomes completely filled with sediment. The pad will be reshaped as needed for drainage and runoff control. Broken road pavement as a result of construction activities on roadways immediately adjacent to the project site will be repaired immediately. The stone anti-tracking pad will be removed before the subgrade of pavement is applied to the parking lot. The removed stone and sediment from the pad will be hauled off site and disposed of at the appropriate disposal facility.

2.4 Establish Perimeter Controls and Sediment Barriers

Silt fences will be installed in accordance with drawing C-4 and around any stockpiles. Silt fences will be installed by excavating a 12-inch-deep trench along the line of proposed installation. Wooden posts supporting the silt fence will be spaced 4 to 6 feet apart and driven securely into the ground; a minimum of 18 to 20 inches deep. The silt fence will be fastened securely to the wooden posts with wire ties spaced every 24 inches at the top, middle, and bottom of the wooden post. The bottom edge of the silt fence will extend across the bottom of the trench and the trench will be backfilled and compacted to prevent storm water and sediment from discharging underneath the silt fence.

The silt fences will be installed before construction begins at the site and around stockpiles once they have been established.

Silt fences will be inspected weekly and immediately after a large storm event to ensure it is intact and that there are no gaps where the fence meets the ground or tears along the length of the fence. If gaps or tears are found during the inspection, the fabric will be repaired or replaced immediately. Accumulated sediment will be removed from the fence base if it reaches one-third the

height of the silt fence and hauled off-site for disposal. If accumulated sediment is creating noticeable strain on the fabric and the fence might fail from a sudden storm event, the sediment will be removed more frequently. Before the fence is removed from the project area, the sediment will be removed. The anticipated life span of the silt fence is 6 months and will likely need to be replaced after this period

2.5 Protect Existing and Proposed Storm Drain Inlets

Proposed storm drain inlets on the site will be protected from sediment by filter fabric drop inlet protection per the detail and locations on site drawing C-4. Catch basin drop inlet protection will be installed in proposed catch basins directly after installation of the proposed catch basin or area drain.

The filter fabric drop inlet protection will be inspected weekly and immediately after storm events. If the filter fabric becomes clogged with sediment, the fabric will be removed and replaced.

Storm drain inlets on the site will also be protected from sediment by a perimeter of hay bales per the detail and locations on site drawing C-4. Hay bales will be installed on-site prior to any construction activities beginning. These hay bales serve to prevent any large size particle sediment from reaching the storm drain inlets. These hay bale perimeters will be removed once the site has been permanently stabilized.

The hay bale perimeters will be inspected weekly and immediately after storm events. If the hay bale perimeter is deteriorating or not functioning properly, it will be removed and replaced per recommendation of the site engineer.

SECTION 3: GOOD HOUSEKEEPING BMPS

3.1 Material Handling and Waste Management

Waste Materials

All waste materials will be collected and disposed of into metal trash dumpsters in the materials storage area. Dumpsters will have a secure watertight lid, be placed away from stormwater conveyances and drains, and meet all federal, state, and municipal regulations. Only trash and construction debris from the site will be deposited in the dumpsters. No construction materials will be buried on-site. All personnel will be instructed regarding the correct disposal of trash and construction debris. Notices that state these practices will be posted in the office trailer and the

individual who manages day to day site operations will be responsible for seeing that these practices are followed.

Trash dumpsters will be installed once the material storage area has been established. The dumpsters will be inspected weekly and immediately after storm events. The dumpsters will be emptied weekly and taken to the appropriate disposal facility. If trash and construction debris are exceeding the dumpster's capacity, the dumpsters will be emptied more frequently.

Hazardous Waste Materials

It is not anticipated that this project will produce unusual hazardous wastes; but in an effort to prevent any unanticipated disposal of hazardous materials, then this SWPPP will address the issue as follows: All hazardous waste materials such as oil filters, petroleum products, paint, and equipment maintenance fluids will be stored in structurally sound and sealed shipping containers, within the hazardous materials storage area. Hazardous waste materials will be stored in appropriate and clearly marked containers and segregated from other non-waste materials. Secondary containment will be provided for all waste materials in the hazardous materials storage area and will consist of commercially available spill pallets. Additionally, all hazardous waste materials will be disposed of in accordance with federal, state, and municipal regulations. Hazardous waste materials will not be disposed of into the on-site dumpsters. All personnel will be instructed regarding the proper procedures for hazardous waste disposal. Notices that state these procedures will be posted in the office trailer and the individual who manages day to day site operations will be responsible for seeing that these procedures are followed.

Shipping containers used to store hazardous waste materials will be installed once the site materials storage area has been installed.

The hazardous waste materials storage areas will be inspected weekly and after storm events. The storage areas will be kept clean, organized, and equipped with ample clean up supplies as appropriate for the materials being stored. Material safety data sheets, material inventory, and emergency contact numbers will be maintained in the office trailer.

Sanitary Waste

Temporary sanitary facilities (portable toilets) will be provided at the site throughout the construction phase. The portable toilets will be located away from a concentrated flow paths and traffic flow.

The portable toilets will be brought to the site once the staging area has been established. All sanitary waste will be collected from the portable facilities as necessary. The portable toilets will be

inspected weekly of evidence of leaking holding tanks. Toilets with leaking holding tanks will be removed from the site and replaced with new portable toilets.

3.2 Establish Proper Equipment and Vehicle Fueling and Maintenance Practices

Several types of vehicles and equipment will be used on-site throughout the project, including graders, excavators, backhoes, loaders, paving equipment, rollers, and trucks and trailers. Only minor equipment maintenance will occur on-site. All equipment fluids generated from maintenance activities will be disposed of into designated drums stored on spill pallets in accordance with Part 3.1. Absorbent, spill cleanup materials and spill kits will be available at the combined staging and materials storage area.

BMPs implemented for equipment and vehicle maintenance and fueling activities will begin at the start of the project. Equipment and vehicle storage areas and fuel tanks will be inspected weekly and after major storm events. Vehicles and equipment will be inspected on each day of use. Leaks will be repaired immediately, or the problem vehicle(s) or equipment will be removed from the project site. Ample supply of spill-cleanup materials will be kept on site and will be used to clean up spills immediately and will be disposed of properly.

SECTION 4: CERTIFICATION

4.1 Certification Statement

To the best of my knowledge, and with the proper implementation of the design drawings, construction of this proposed project will not result in adverse hydraulic or hydrologic impacts on adjacent or downstream properties or drainage facilities.

APPENDIX – A

JAY FAIN & ASSOCIATES, LLC
Environmental Consulting Services

Jay Fain
Principal
elmst@optonline.net

Victoria Landau
Principal, ASLA
vplandau@optonline.net

2000 Post Road
Suite 201
Fairfield, CT 06824
203 254-3156
jfassociates@optonline.net

SOILS MAPPING & WETLAND/WATERCOURSE DELINEATION FOR 263 BEDFORD BANKSVILLE ROAD, NORTH CASTLE, NY 10506

PROPERTY LOCATION AND DESCRIPTION:

LAND USE: **Horse Farm** ACRES: **21.0±**

DELINEATION ADDRESS: **263 Bedford Banksville Rd. North Castle, NY 10506**

REPORT COMPLETED FOR:

NAME: Kent Farrington c/o Old Town Barns

MAILING ADDRESS: 125 Rt. 22 Pawling, NY 12564

MAPPING AND DELINEATION METHODOLOGY

Soils analysis, as described in this report, is intended as an inventory and evaluation of the existing soil characteristics on the subject property. A first order soil survey in accordance with the principles and practices noted in the USDA publication Soil Survey Manual (1993) was completed at the site. Soil units mapped in the field correspond with those in the USDA publication *Soil Survey of Putnam and Westchester Counties, New York* (1994).

Wetland identification was based on the presence of poorly and very poorly drained soils and/or a prevalence of hydrophytic vegetation. Soil types were identified by observation of soil morphology (soil texture, color, structure, etc.). To observe the morphology of the property's soils, numerous two-foot deep test pits and/or hand borings were completed throughout the site. Prevalence of hydrophytic vegetation was confirmed by visually determining the dominant plant species in each vegetation community in accordance with the Onsite Routine Determination method as described in the 1989 manual titled Corps of Engineers Wetland Delineation Manual (Manual) by the Environmental Laboratory. Transects were located perpendicular to and at representative points along the perceived boundaries of the wetland areas identified on the property. Soil morphologies and vegetation were observed at sampling points along the transects. Sampling began well outside the bounds of the wetland and continued towards it until hydric soils and/or a prevalence of hydrophytic vegetation were observed. This point on each transect was marked (flagged) with an orange surveyor's tape labeled "Wetland Boundary". The complete boundary of every wetland area is located along the lines that connect these sequentially numbered boundary points.

The wetland and watercourse boundaries are subject to change until adopted by the Town.

DATE AND CONDITIONS AT TIME OF INSPECTION

DATE: **December 02, 2020**
Amended March 4, 2021

INSPECTED BY: **Jay Fain**

WEATHER: **Cool & Cloudy**

SOIL MOISTURE CONDITIONS: [ ] DRY [X] MOIST [ ] WET

FROST DEPTH: **N/A** SNOW DEPTH: **N/A**

CERTIFICATION

JAY FAIN, PRINCIPAL, SOIL SCIENTIST

WETLAND/WATERCOURSE IDENTIFIED

FLAG NUMBERS	WETLAND TYPE	SOIL TYPE	COMMENTS
1-33	Riverine	**Ff – Frequently Flooded**	Mianus River Floodplain
50-77	Aquents	**Aq - Aquents**	Pond, Edge of Pond
200-212	Stream	**RdA – Ridgebury loam**	-

SOIL MAP UNITS

Each soil map unit that was identified on the property represents a specific area on the landscape and consists of one or more soils for which the unit is named. Other soils (inclusions that are generally too small to be delineated separately) may account for 10 to 15 percent of the map unit. The mapped units are identified in the following table by name and symbol and typical characteristics (parent material, drainage class, high water table, depth to bedrock, and slope) of each unit are provided. These are generally the primary characteristics to be considered in land use planning and management. A narrative that defines each characteristic and describes their land use implications follows the table. Complete descriptions of each soil map unit can be found in the *Soil Survey of Putnam and Westchester Counties, New York* (1993).

UPLAND SOILS

SOIL		PARENT MATERIAL	SLOPE %	DRAINAGE CLASS	HIGH WATER TABLE			DEPTH TO BEDROCK (in)
SYM.	NAME				DEPTH (ft)	KIND	MOS.	
CrC	Charleton-Chatfield complex, rolling, very rocky	Loose Glacial Till Loose Glacial Till	2-15 2-15	Well Drained Well Drained & Somewhat Excessively Drained	>6.0 >6.0	-- --	-- --	>60 20-40
RhC	Riverhead loam	Glacial Outwash	0-3 3-8 8-15 15-25 25-50	Well Drained	>6.0	--	--	>60

WETLAND SOILS

SOIL		PARENT MATERIAL	SLOPE %	DRAINAGE CLASS	HIGH WATER TABLE			DEPTH TO BEDROCK (in)
SYM.	NAME				DEPTH (ft)	KIND	MOS.	
Ff	Frequently flooded	Alluvial	0-3	Poorly Drained	<2.0	Apparent	Jan-Dec	>60
Aq	Aquents	-	0-3	Poorly Drained	0.0-1.5	Apparent	Nov-May	>60
RdA	Ridgebury Loam	Compact Glacial Till	0-3 3-8	Poorly Drained, Somewhat Poorly Drained	0.0-1.05	Perched	Nov.-May	>60

SOIL CHARACTERISTICS: DEFINITIONS AND LAND USE IMPLICATIONS

PARENT MATERIAL: Parent material is the unconsolidated organic and mineral material in which soil forms. Soil inherits characteristics, such as mineralogy and texture, from its parent material. Glacial till is unsorted, nonstratified glacial drift consisting of clay, silt, sand and boulders transported and deposited by glacial ice. Glacial outwash consists of gravel, sand and silt, which is commonly stratified, deposited by glacial melt water. Alluvium is material such as sand, silt or clay deposited on land by streams. Organic deposits consist of decomposed plant and animal parts.

A soil's texture affects the ease of digging, filling and compacting and the permeability of a soil. Generally sand and gravel soils, such as outwash soils, have higher permeability rates than most glacial till soils. Soil permeability effects the cost to design and construct subsurface sanitary disposal facilities and, if too slow or too fast, may preclude their use. Outwash soils are generally excellent sources of natural aggregates (sand and gravel) suitable for commercial use, such as construction subbase material. Organic layers in soils can cause movement of structural footings. Compacted glacial till layers make excavating more difficult and may preclude the use of subsurface sanitary disposal systems or increase their design and construction costs if fill material is required.

DRAINAGE CLASS: Drainage class refers to the frequency and duration of periods of soil saturation or partial saturation during soil formation. Seven classes of natural drainage classes exist. They range from excessively drained, where water is removed from the soil very rapidly, to very poorly drained, where water is removed so slowly that free water remains at or near the soil surface during most of the growing season. Soil drainage affects the type and growth of plants found in an area. When landscaping or gardening, drainage class information can be used to assure that proposed plants are adapted to existing drainage conditions or that necessary alterations to drainage conditions (irrigation or drainage systems) are provided to assure plant survival.

HIGH WATER TABLE: High water table is the highest level of a saturated zone in the soil in most years. The water table can effect when shallow excavations can be made; the ease of the excavations, construction, and grading; and the supporting capacity of the soil. Shallow water tables may preclude the use of subsurface sanitary disposal systems or increase design and construction costs if fill material is required.

DEPTH TO BEDROCK: The depth to bedrock refers to the depth to fixed rock. Bedrock depth affects the ease and cost of construction, such as digging, filling, compacting and planting. Shallow depth bedrock may preclude the use of subsurface sanitary disposal systems or increase design and construction costs if fill material is required.

SLOPE: Generally soils with steeper slopes increase construction costs, increase the potential for erosion and sedimentation impacts, and reduce the feasibility of locating subsurface sanitary disposal facilities.

Mapping Westchester County

1-33 river
50-77 pond/wet

ndaries

unicipal Boundaries

Wetland Sketch Map
JFA - 12/2/20
1-33 - Flood plain
50-77 - Pond

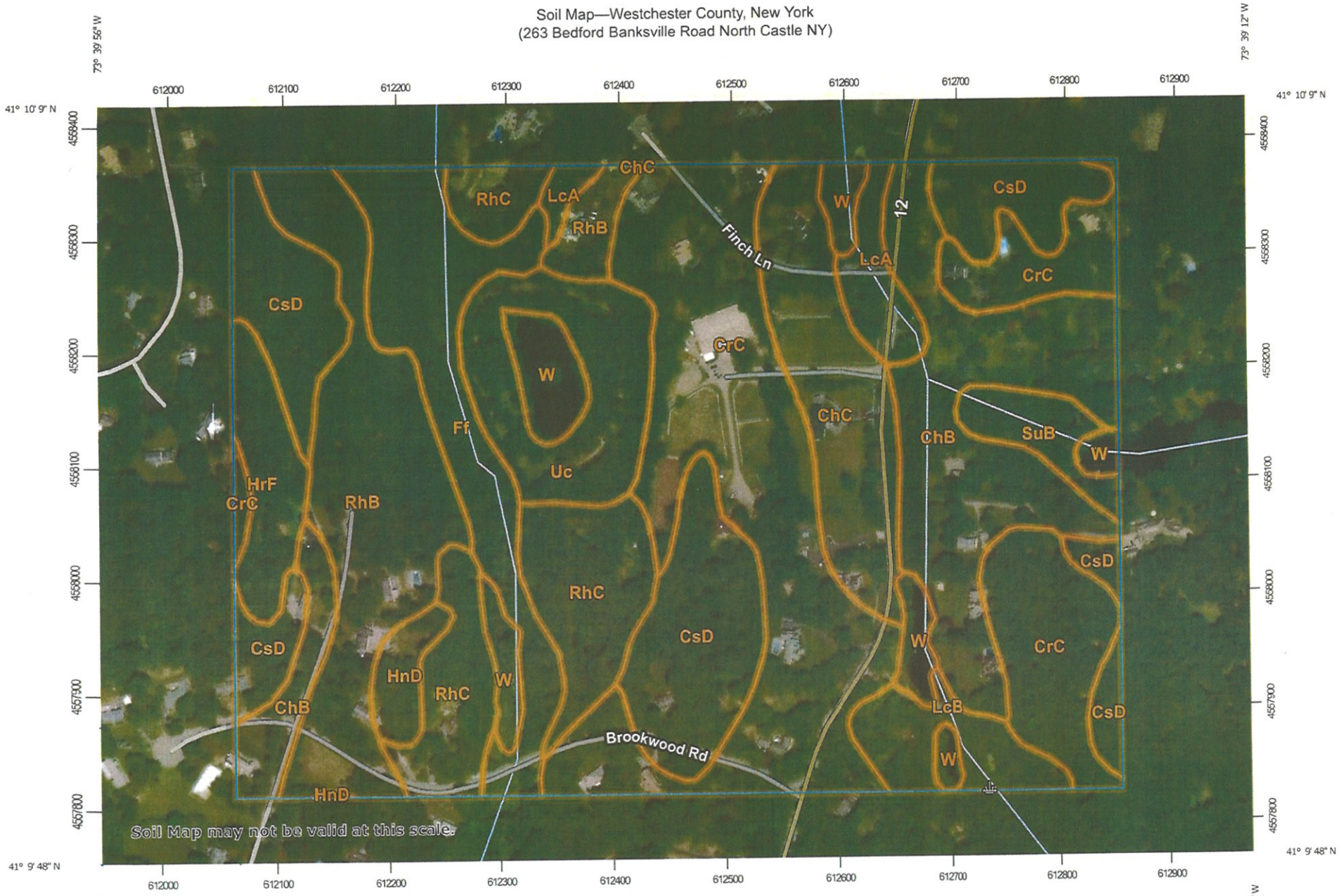
0 110 220 440 ft

1:2,257 December 1, 2020

N

GIS http://giswww.westchestergov.com
Michaelian Office Building
148 Martine Avenue Rm 214
White Plains, New York 10601

Soil Map—Westchester County, New York
(263 Bedford Banksville Road North Castle NY)



Map Scale: 1:4,690 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 50 100 200 300

Feet: 0 200 400 800 1200

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Westchester County, New York
Survey Area Data: Version 16, Jun 11, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

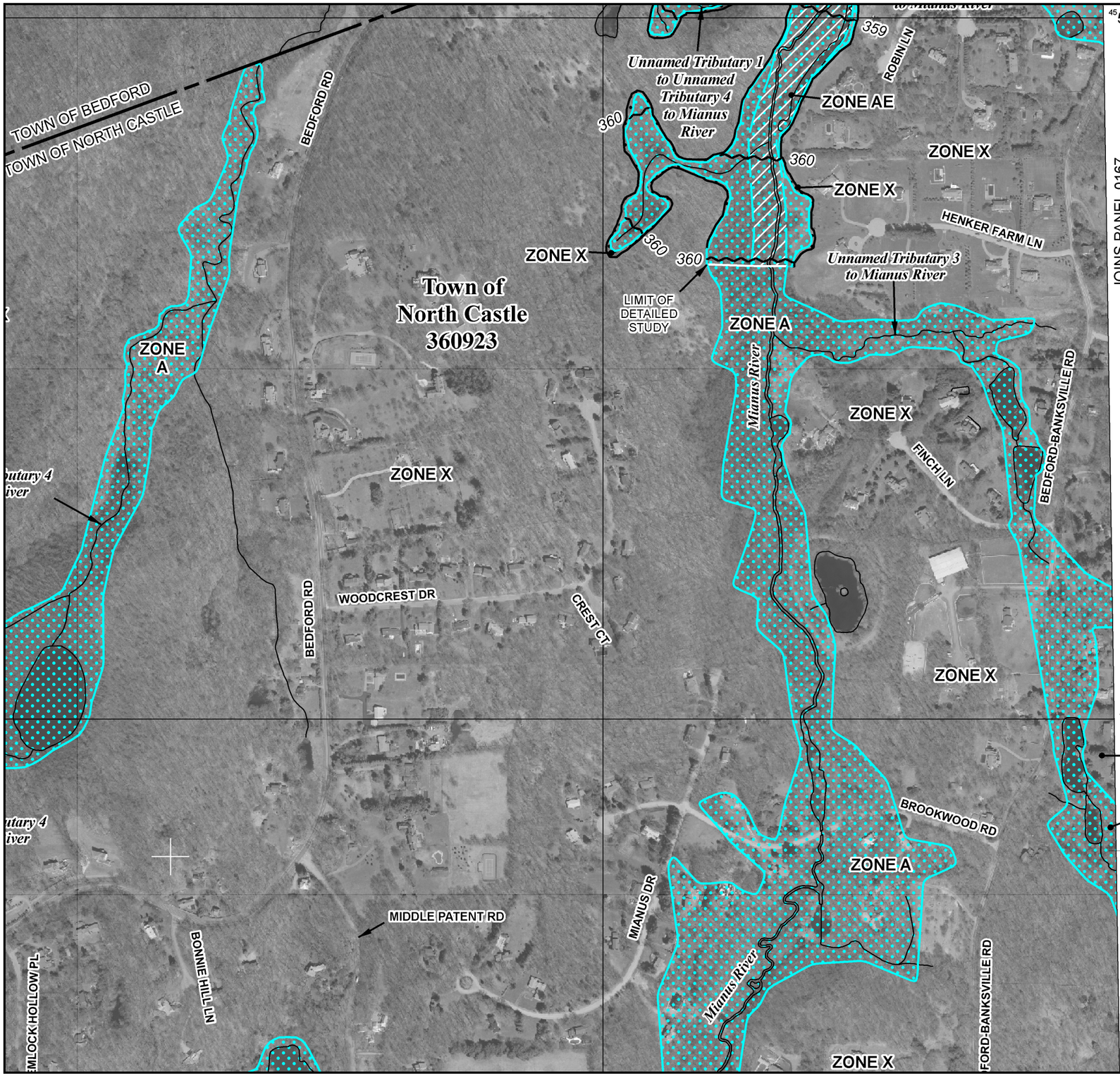
Date(s) aerial images were photographed: Dec 31, 2009—Oct 16, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
ChB	Charlton fine sandy loam, 3 to 8 percent slopes	13.4	12.4%
ChC	Charlton fine sandy loam, 8 to 15 percent slopes	6.8	6.2%
CrC	Charlton-Chatfield complex, 0 to 15 percent slopes, very rocky	25.2	23.2%
CsD	Chatfield-Charlton complex, 15 to 35 percent slopes, very rocky	13.7	12.7%
Ff	Fluvaquents-Udifluvents complex, frequently flooded	8.1	7.4%
HnD	Hinckley loamy sand, 15 to 25 percent slopes	1.3	1.2%
HrF	Hollis-Rock outcrop complex, 35 to 60 percent slopes	2.8	2.6%
LcA	Leicester loam, 0 to 3 percent slopes, stony	2.2	2.0%
LcB	Leicester loam, 3 to 8 percent slopes, stony	2.7	2.5%
RhB	Riverhead loam, 3 to 8 percent slopes	12.0	11.0%
RhC	Riverhead loam, 8 to 15 percent slopes	8.5	7.8%
SuB	Sutton loam, 3 to 8 percent slopes	1.8	1.7%
Uc	Udorthents, wet substratum	5.8	5.3%
W	Water	4.2	3.9%
Totals for Area of Interest		**108.6**	**100.0%**

APPENDIX – B



MAP SCALE 1" = 500'

250 0 500 1000 FEET

150 0 150 300 M

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0166F

FIRM

FLOOD INSURANCE RATE MAP

for WESTCHESTER COUNTY, NEW YORK (ALL JURISDICTIONS)

CONTAINS:

COMMUNITY	NUMBER
BEDFORD, TOWN OF	360903
NORTH CASTLE, TOWN OF	360923

PANEL 166 OF 426

MAP SUFFIX: F

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

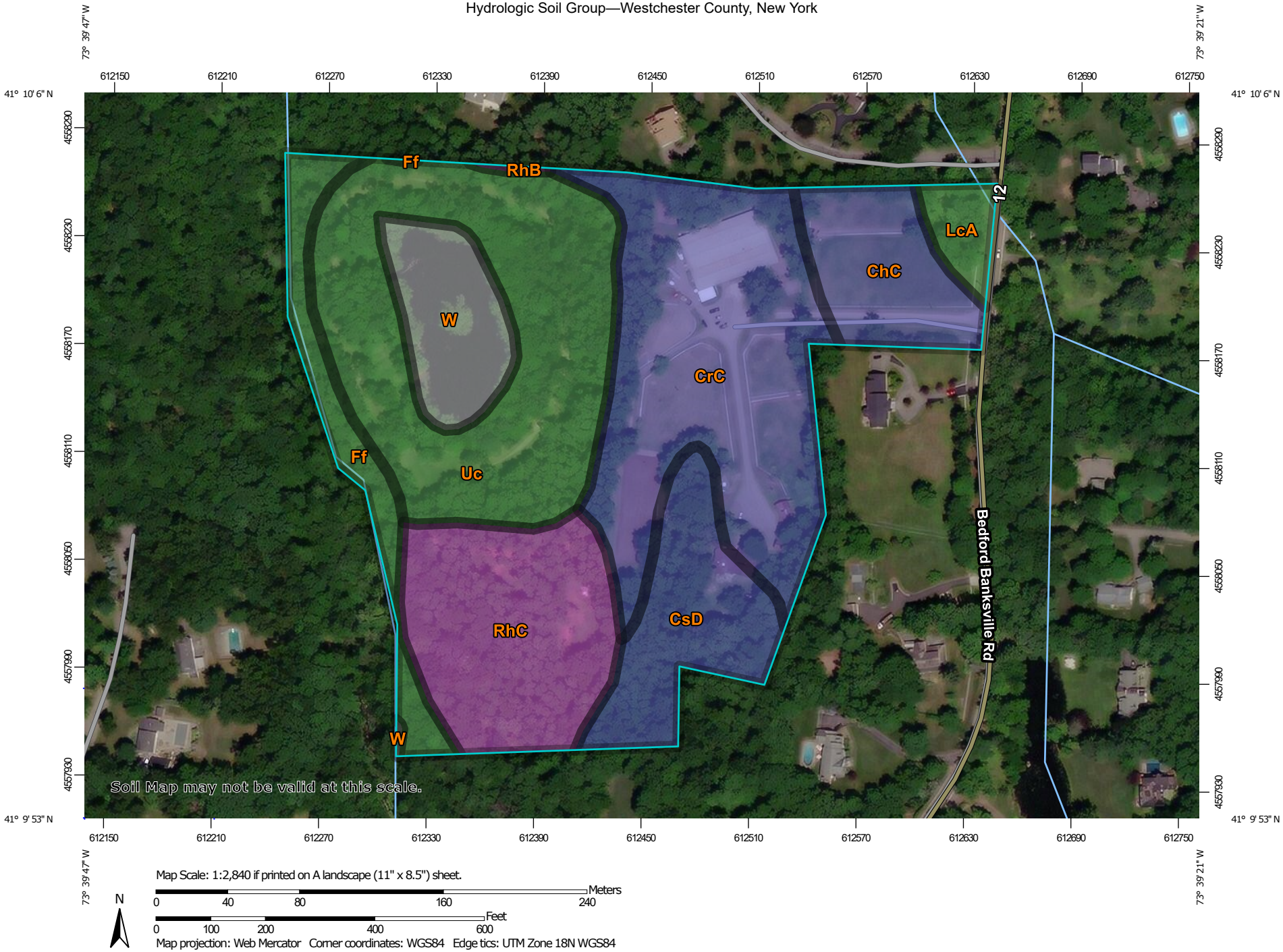
MAP NUMBER
36119C0166F

EFFECTIVE DATE
SEPTEMBER 28, 2007

Federal Emergency Management Agency

APPENDIX – C

Hydrologic Soil Group—Westchester County, New York



Map Scale: 1:2,840 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 40 80 160 240

Feet: 0 100 200 400 600

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

Soil Rating Polygons

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Lines

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Points

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Westchester County, New York
Survey Area Data: Version 16, Jun 11, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Dec 31, 2009—Oct 16, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
ChC	Charlton fine sandy loam, 8 to 15 percent slopes	B	1.7	7.6%
CrC	Charlton-Chatfield complex, 0 to 15 percent slopes, very rocky	B	6.0	26.7%
CsD	Chatfield-Charlton complex, 15 to 35 percent slopes, very rocky	B	2.2	9.7%
Ff	Fluvaquents-Udifluvents complex, frequently flooded	A/D	1.3	6.0%
LcA	Leicester loam, 0 to 3 percent slopes, stony	A/D	0.5	2.2%
RhB	Riverhead loam, 3 to 8 percent slopes	A	0.0	0.1%
RhC	Riverhead loam, 8 to 15 percent slopes	A	3.4	15.1%
Uc	Udorthents, wet substratum	A/D	5.8	25.8%
W	Water		1.5	6.7%
Totals for Area of Interest			**22.4**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

C:N Ratio	15:1 – 30:1
Soluble Salts	< 4.0 mmhos (dS)

Compost shall contain a range of particle sizes that produce a stable mat. Very coarse (>3 inches) composts should be avoided if the slope is to be landscaped or seeded.

Compost generator shall supply documentation showing state approval for intended use.

PRODUCT INFORMATION

This specification covers the properties of AGRESOIL COMPOST® as distributed by: Agresource, 100 Main Street, Amesbury, MA 01913, telephone 800-313-3320.

CONSTRUCTION REQUIREMENTS

Compact (track) the existing slope then uniformly apply compost to a minimum depth of 3 inches to slopes of up to 1:2. Compact (track) the compost layer. On highly unstable soils, use compost with additional structural materials. Follow by seeding or planting if desired.

METHOD OF MEASUREMENT

Compost will be measured by the cubic yard.

> Back to Table of Contents <

SPECIFICATION

BIORETENTION SOIL

DESCRIPTION

Bioretention Soil shall consist of loose, friable soil, free of ice, snow and rubbish with no admixture of refuse or material toxic to plant growth. Soil shall be reasonably free of stones, lumps, roots and weeds or similar objects larger than two inches in diameter. Bioretention soil mixture shall be mixed 50% sand and 50% compost by volume.

The final Bioretention Soil mixture shall meet the following parameters:

Parameters	Range
pH	5.5 – 7.5
Moisture Content	25% – 55%
Organic Matter Content	4 – 7% (dry weight basis)
Stone and Debris	< 5% (by weight)
Soluble Salts	2.5 mmhos (dS)
Foreign Matter	<.05% (by weight)

The bioretention soil mixture shall be a uniform mix, free of stones, stumps, roots or other similar objects larger than 2-in excluding mulch. No other materials or substances shall be mixed or dumped within the bioretention area that may be harmful to plant growth, or prove a hindrance to the planting or maintenance operations. The bioretention soil mixture shall be free of Knotweed, Phragmites, Purple Loosestrife, Bermuda grass, Quackgrass, Johnson grass, Mugwort, Nutsedge, Poison Ivy, Canadian Thistle, Teathumb, or other noxious weeds.

The bioretention soil mixture shall be tested and meet the following criteria:

Textural Class	% of Total Weight
Gravel (greater than 2 mm)	< 15%
Sand (0.05 – 2.0 mm diameter range)	> 85%
Silt (0.002-0.05 mm diameter range)	< 10%
Clay (less than 0.002 mm diameter range)	< 5%

Processed Sand – The sand shall meet the following criteria:

Sand shall be tested for particle size distribution (USGA) very coarse to very fine categories. Evenly graded sand with equal percentage of coarse, medium, and fine particle size should be avoided.

There shall be no more than 15% combined silt and clay.

There shall be no more than 30% fine sand.

There shall be no more that 10% very fine sand.

Bioretention Soil Mixture Ratios and Performance Testing

Upon approval of the processed sand and compost components, the owners testing agents shall blend the components to determine the correct ratio of sand and compost to create the bioretention soil mix. This ratio of sand and compost will be based on laboratory testing and performance guidelines established by these specifications.

The bioretention mix developed by the owners testing agent will establish the required mix ratio and specifications for approval or rejections of all quality control submittals during construction. The construction contractor shall bear the cost of all testing.

Testing Methods

ASTM F1632-B Standard Test Method for Particle-Size Distribution (Gradation) of Soils Using Sieve Analysis shall be used for measurement of particle size distribution and the coefficient of uniformity.

Performance Testing: ASTM F1815 Standard Test Method for Saturated Hydraulic Conductivity shall be used to determine infiltration rate.

Required Infiltration rate > 1.0 (inches per hour)

COMPOST

Compost shall be derived from organic wastes such as leaf and yard waste residues and meet all State Environmental Agency requirements. The product shall be well composted, and contain material of a generally humus nature capable of sustaining growth of vegetation, with no materials toxic to plant growth.

Compost shall have the following properties:

> Back to Table of Contents <

Parameters	Range
ph	5.5 – 8.0
Moisture Content	35% – 55%
Soluble Salts	4.0 mmhos (dS)
C:N ratio	10 – 30:1
Particle Size	< 3/4″
Organic Matter Content	> 25%
Bulk Density	< 1400 lbs./cubic yard
Foreign Matter	< 1% (dry weight)

Compost generator shall also provide minimum available nitrogen and other macro and micro nutrients to determine fertilizer requirements.

Product Information – All parameters listed above can be met by **Agresoil Compost** and **Agresoil Bioretention Soil** or equal as distributed by: Agresource, 100 Main Street, Amesbury, MA 01913, Telephone 800-313-3320.

SPECIFICATION

RAIN GARDEN SOIL

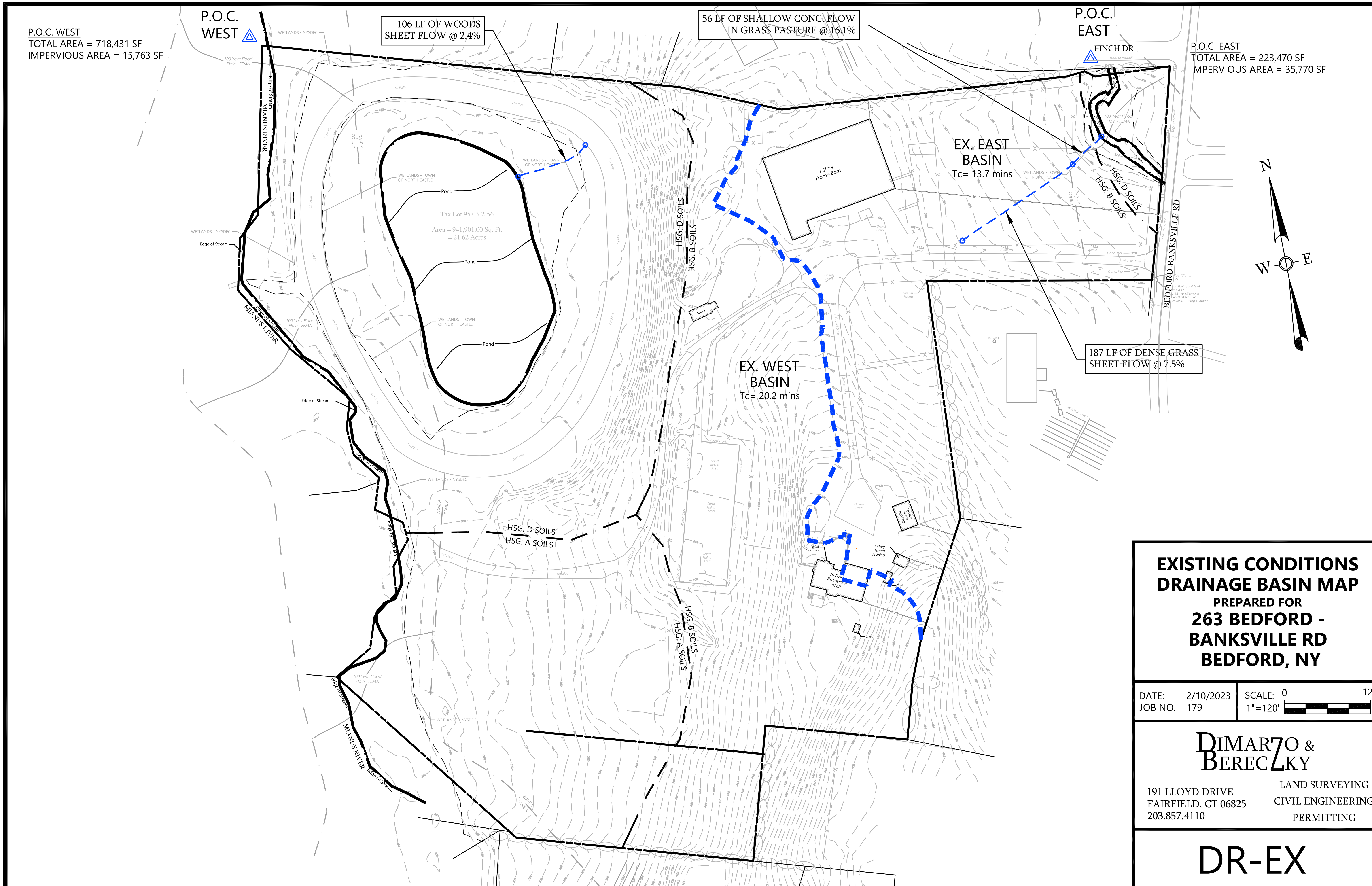
DESCRIPTION

Rain garden soil shall consist of loose, friable soil, free of ice, snow and rubbish with no admixture of refuse or material toxic to plant growth. Soil shall be reasonably free of stones, lumps, roots and weeds or similar objects larger than two inches in diameter. Rain garden soil mixture shall be a mixture of soil and compost to meet the following parameters.

The final Rain Garden Soil mixture shall meet the following parameters:

Parameters	Range
pH	5.5 – 7.5
Moisture Content	25% – 55%
C:N Ratio	15:1 – 30:1
Organic Matter Content	4 – 7% (dry weight basis)
Soluble Salts	2.5 mmhos (dS))
Stone and Debris	< 5% (by weight)
Foreign Matter	<.05% (by weight)

APPENDIX – D



EXISTING CONDITIONS DRAINAGE BASIN MAP

PREPARED FOR

263 BEDFORD - BANKSVILLE RD BEDFORD, NY

DATE: 2/10/2023
JOB NO. 179

SCALE: 1"=120' (0 – 120)

DIMARZO & BERECZKY

191 LLOYD DRIVE
FAIRFIELD, CT 06825
203.857.4110

LAND SURVEYING
CIVIL ENGINEERING
PERMITTING

DR-EX

P.O.C. WEST

P.O.C. WEST
TOTAL AREA = 728,868 SF
IMPERVIOUS AREA = 36,132 SF

106 LF OF WOODS SHEET FLOW @ 2.4%

56 LF OF SHALLOW CONC. FLOW IN GRASS PASTURE @ 16.1%

P.O.C. EAST

FINCH DR

P.O.C. EAST
TOTAL AREA = 213,033 SF
IMPERVIOUS AREA = 34,255 SF

PR. EAST-4 BASIN
Tc=5.0 mins

PR. EAST BASIN
Tc= 13.7 mins

PR. WEST-4 BASIN
Tc=5.0 mins

PR. WEST-3 BASIN
Tc=5.0 mins

PR. WEST-2 BASIN
Tc=5.0 mins

PR. EAST-1 BASIN
Tc=5.0 mins

PR. EAST-2 BASIN
Tc=5.0 mins

PR. EAST-3 BASIN
Tc=5.0 mins

187 LF OF DENSE GRASS SHEET FLOW @ 7.5%

PR. WEST BYPASS BASIN
Tc= 20.2 mins

PR. WEST-1 BASIN
Tc=5.0 mins

HSG: D SOILS
HSG: B SOILS
HSG: A SOILS

MIANUS RIVER

BEDFORD-BANKSVILLE RD

N
W E

PROPOSED CONDITIONS DRAINAGE BASIN MAP

PREPARED FOR

263 BEDFORD - BANKSVILLE RD BEDFORD, NY

DATE: 2/10/2023
JOB NO. 179

SCALE: 1"=120' 0 120

DiMARZO & BERECZKY

191 LLOYD DRIVE
FAIRFIELD, CT 06825
203.857.4110

LAND SURVEYING
CIVIL ENGINEERING
PERMITTING

DR-PR

Water Quality Volume Calculations

Project:	*263 Bedford Banksville Rd - Harrington*	**Project #**	*179*	**Date:**	02/10/2023
Location:	*Bedford, NY*	**By:**	*LD*		

West-1	Total impervious coverage	8,280 0.1901	s.f. acres
BMP-W1 Infiltration System	Area=	0.1901	acres
	Impervious Area=	0.1901	acres
	I=	100.0%	[a]
	R=	0.950	[b]
	WQV=	0.0211	ac. ft. [c]
	West-1 WQV=	**918**	**ft.^{3}**

West-2	Total impervious coverage	450 0.0103	s.f. acres
BMP-W2 Infiltration System	Area=	0.0103	acres
	Impervious Area=	0.0103	acres
	I=	100.0%	[a]
	R=	0.950	[b]
	WQV=	0.0011	ac. ft. [c]
	West-2 WQV=	**50**	**ft.^{3}**

West-3	Total impervious coverage	10,685 0.2453	s.f. acres
BMP-W3 Infiltration System	Area=	0.3259	acres
	Impervious Area=	0.2453	acres
	I=	75.3%	[a]
	R=	0.727	[b]
	WQV=	0.0277	ac. ft. [c]
	West-3 WQV=	**1,205**	**ft.^{3}**

Water Quality Volume Calculations

Project:	*263 Bedford Banksville Rd - Harrington*	**Project #**	*179*	**Date:**	02/10/2023
Location:	*Bedford, NY*	**By:**	*LD*		

West-4	Total impervious coverage	4,752 0.1091	s.f. acres
BMP-W4 Infiltration System	Area=	0.1091	acres
	Impervious Area=	0.1091	acres
	I=	100.0%	[a]
	R=	0.950	[b]
	WQV=	0.0121	ac. ft. [c]
	West-4 WQV=	**527**	**ft.^{3}**

[a] I=Percent Impervious Coverage

[b] R=0.05+0.009(I); Volumetric runoff Coefficient, Equation taken from 2015 New York State Stormwater Management Design Manual section 4.2

[c] WQV=(1.4"xRxA)/12; Water Quality Volume, Equation taken from 2015 New York State Stormwater Management Design Manual section 4.2

Water Quality Volume Calculations

Project:	*263 Bedford Banksville Rd - Harrington*	**Project #**	*179*	**Date:**	02/10/2023
Location:	*Bedford, NY*	**By:**	*LD*		

East-1	Total impervious coverage	2,295 0.0527	s.f. acres
BMP-E1 Infiltration System	Area=	0.0527	acres
	Impervious Area=	0.0527	acres
	I=	100.0%	[a]
	R=	0.950	[b]
	WQV=	0.0058	ac. ft. [c]
	East-1 WQV=	**254**	**ft.^{3}**

East-2	Total impervious coverage	2,455 0.0564	s.f. acres
BMP-E2 Infiltration System	Area=	0.1257	acres
	Impervious Area=	0.0564	acres
	I=	44.8%	[a]
	R=	0.454	[b]
	WQV=	0.0067	ac. ft. [c]
	East-2 WQV=	**290**	**ft.^{3}**

East-3	Total impervious coverage	6,855 0.1574	s.f. acres
BMP-E3 Infiltration System	Area=	0.2383	acres
	Impervious Area=	0.1574	acres
	I=	66.0%	[a]
	R=	0.644	[b]
	WQV=	0.0179	ac. ft. [c]
	East-3 WQV=	**780**	**ft.^{3}**

Water Quality Volume Calculations

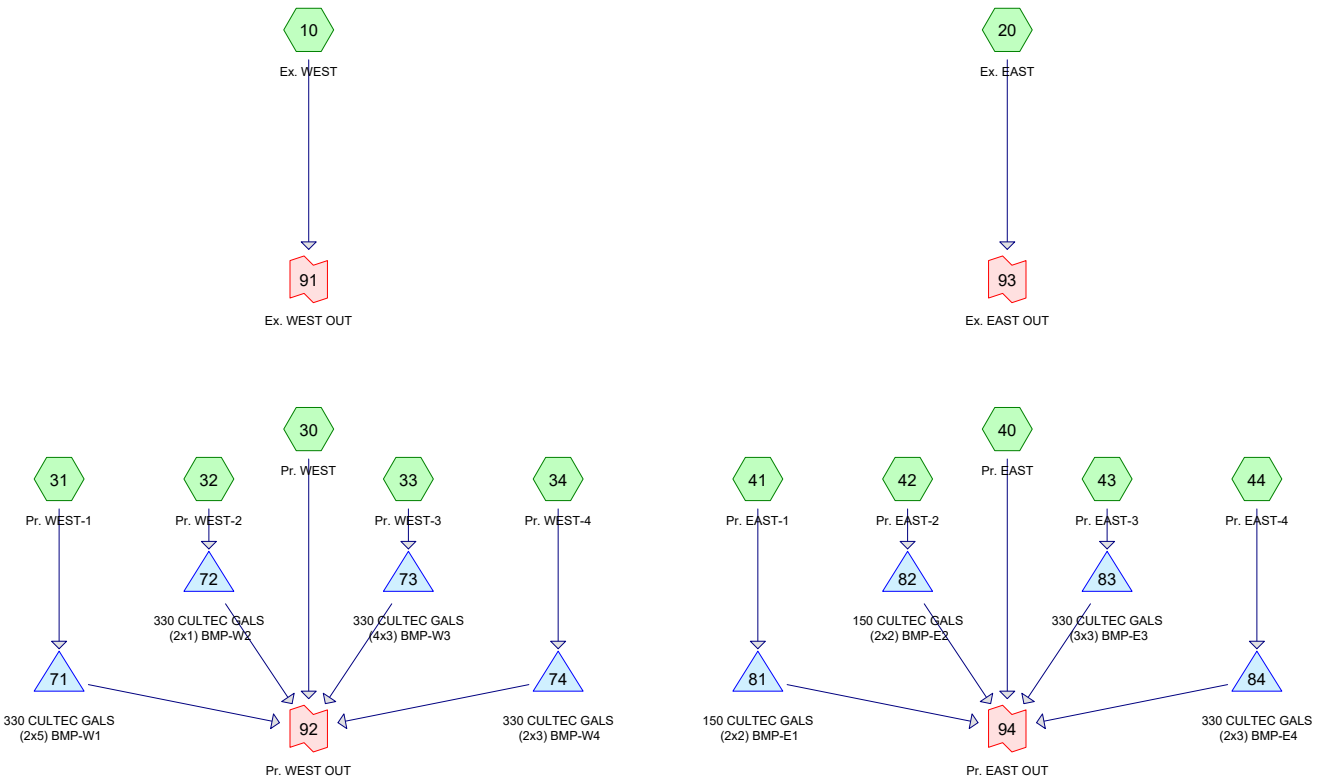
Project:	*263 Bedford Banksville Rd - Harrington*	**Project #**	*179*	**Date:**	02/10/2023
Location:	*Bedford, NY*	**By:**	*LD*		

East-4	Total impervious coverage	3,170 0.0728	s.f. acres
BMP-E4 Infiltration System	Area=	0.1897	acres
	Impervious Area=	0.0728	acres
	I=	38.4%	[a]
	R=	0.395	[b]
	WQV=	0.0087	ac. ft. [c]
	East-4 WQV=	**381**	**ft.^{3}**

[a] I=Percent Impervious Coverage

[b] R=0.05+0.009(I); Volumetric runoff Coefficient, Equation taken from 2015 New York State Stormwater Management Design Manual section 4.2

[c] WQV=(1.4"xRxA)/12; Water Quality Volume, Equation taken from 2015 New York State Stormwater Management Design Manual section 4.2



Subcat Reach Pond Link

Routing Diagram for 179 HydroCAD 2022-02-10
Prepared by DiMarzo & Bereczky, Inc, Printed 02/10/2023

Time span=0.00-24.00 hrs, dt=0.01 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

Subcatchment10: Ex. WEST Runoff Area=718,431 sf 0.52% Impervious Runoff Depth>1.91"
Flow Length=106' Slope=0.0240 '/' Tc=20.2 min CN=67.60 Runoff=24.07 cfs 114,350 cf

Subcatchment20: Ex. EAST Runoff Area=223,470 sf 8.62% Impervious Runoff Depth>2.35"
Flow Length=243' Tc=13.7 min CN=72.95 Runoff=11.00 cfs 43,720 cf

Subcatchment30: Pr. WEST Runoff Area=700,113 sf 0.18% Impervious Runoff Depth>1.85"
Flow Length=106' Slope=0.0240 '/' Tc=20.2 min CN=66.83 Runoff=22.61 cfs 107,952 cf

Subcatchment31: Pr. WEST-1 Runoff Area=8,280 sf 100.00% Impervious Runoff Depth>4.86"
Tc=5.0 min CN=98.00 Runoff=0.98 cfs 3,353 cf

Subcatchment32: Pr. WEST-2 Runoff Area=450 sf 100.00% Impervious Runoff Depth>4.86"
Tc=5.0 min CN=98.00 Runoff=0.05 cfs 182 cf

Subcatchment33: Pr. WEST-3 Runoff Area=14,195 sf 57.73% Impervious Runoff Depth>3.82"
Tc=5.0 min CN=88.55 Runoff=1.47 cfs 4,516 cf

Subcatchment34: Pr. WEST-4 Runoff Area=4,752 sf 100.00% Impervious Runoff Depth>4.86"
Tc=5.0 min CN=98.00 Runoff=0.56 cfs 1,925 cf

Subcatchment40: Pr. EAST Runoff Area=187,696 sf 9.93% Impervious Runoff Depth>2.26"
Flow Length=243' Tc=13.7 min CN=71.87 Runoff=8.85 cfs 35,307 cf

Subcatchment41: Pr. EAST-1 Runoff Area=2,295 sf 0.00% Impervious Runoff Depth>3.46"
Tc=5.0 min CN=85.00 Runoff=0.22 cfs 661 cf

Subcatchment42: Pr. EAST-2 Runoff Area=5,475 sf 0.00% Impervious Runoff Depth>2.63"
Tc=5.0 min CN=76.17 Runoff=0.40 cfs 1,200 cf

Subcatchment43: Pr. EAST-3 Runoff Area=10,380 sf 34.16% Impervious Runoff Depth>3.36"
Tc=5.0 min CN=84.01 Runoff=0.97 cfs 2,906 cf

Subcatchment44: Pr. EAST-4 Runoff Area=8,265 sf 0.00% Impervious Runoff Depth>2.49"
Tc=5.0 min CN=74.52 Runoff=0.57 cfs 1,713 cf

Pond 71: 330 CULTEC GALS (2x5) BMP-W1 Peak Elev=429.14' Storage=1,009 cf Inflow=0.98 cfs 3,353 cf
Discarded=0.01 cfs 840 cf Primary=0.97 cfs 1,519 cf Outflow=0.98 cfs 2,359 cf

Pond 72: 330 CULTEC GALS (2x1) BMP-W2 Peak Elev=396.63' Storage=76 cf Inflow=0.05 cfs 182 cf
Discarded=0.00 cfs 181 cf Primary=0.00 cfs 0 cf Outflow=0.00 cfs 181 cf

Pond 73: 330 CULTEC GALS (4x3) BMP-W3 Peak Elev=404.18' Storage=1,214 cf Inflow=1.47 cfs 4,516 cf
Discarded=0.03 cfs 1,478 cf Primary=1.44 cfs 1,977 cf Outflow=1.47 cfs 3,455 cf

Pond 74: 330 CULTEC GALS (2x3) BMP-W4 Peak Elev=404.64' Storage=635 cf Inflow=0.56 cfs 1,925 cf
Discarded=0.02 cfs 856 cf Primary=0.54 cfs 585 cf Outflow=0.56 cfs 1,441 cf

Pond 81: 150 CULTEC GALS (2x2) BMP-E1 Peak Elev=389.10' Storage=329 cf Inflow=0.22 cfs 661 cf
Discarded=0.01 cfs 413 cf Primary=0.02 cfs 42 cf Outflow=0.03 cfs 456 cf

Pond 82: 150 CULTEC GALS (2x2) BMP-E2 Peak Elev=403.13' Storage=330 cf Inflow=0.40 cfs 1,200 cf
Discarded=0.01 cfs 435 cf Primary=0.39 cfs 485 cf Outflow=0.40 cfs 919 cf

Pond 83: 330 CULTEC GALS (3x3) BMP-E3 Peak Elev=406.66' Storage=907 cf Inflow=0.97 cfs 2,906 cf
Discarded=0.02 cfs 1,067 cf Primary=0.81 cfs 1,055 cf Outflow=0.83 cfs 2,122 cf

Pond 84: 330 CULTEC GALS (2x3) BMP-E4 Peak Elev=403.44' Storage=609 cf Inflow=0.57 cfs 1,713 cf
Discarded=0.01 cfs 630 cf Primary=0.26 cfs 554 cf Outflow=0.28 cfs 1,185 cf

Link 91: Ex. WEST OUT Inflow=24.07 cfs 114,350 cf
Primary=24.07 cfs 114,350 cf

Link 92: Pr. WEST OUT Inflow=23.71 cfs 112,034 cf
Primary=23.71 cfs 112,034 cf

Link 93: Ex. EAST OUT Inflow=11.00 cfs 43,720 cf
Primary=11.00 cfs 43,720 cf

Link 94: Pr. EAST OUT Inflow=9.56 cfs 37,443 cf
Primary=9.56 cfs 37,443 cf

Total Runoff Area = 1,883,802 sf Runoff Volume = 317,786 cf Average Runoff Depth = 2.02"
96.39% Pervious = 1,815,722 sf 3.61% Impervious = 68,080 sf

Time span=0.00-24.00 hrs, dt=0.01 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

Subcatchment10: Ex. WEST Runoff Area=718,431 sf 0.52% Impervious Runoff Depth>5.10"
Flow Length=106' Slope=0.0240 '/' Tc=20.2 min CN=67.60 Runoff=66.63 cfs 305,546 cf

Subcatchment20: Ex. EAST Runoff Area=223,470 sf 8.62% Impervious Runoff Depth>5.78"
Flow Length=243' Tc=13.7 min CN=72.95 Runoff=27.22 cfs 107,547 cf

Subcatchment30: Pr. WEST Runoff Area=700,113 sf 0.18% Impervious Runoff Depth>5.01"
Flow Length=106' Slope=0.0240 '/' Tc=20.2 min CN=66.83 Runoff=63.70 cfs 292,174 cf

Subcatchment31: Pr. WEST-1 Runoff Area=8,280 sf 100.00% Impervious Runoff Depth>8.85"
Tc=5.0 min CN=98.00 Runoff=1.76 cfs 6,109 cf

Subcatchment32: Pr. WEST-2 Runoff Area=450 sf 100.00% Impervious Runoff Depth>8.85"
Tc=5.0 min CN=98.00 Runoff=0.10 cfs 332 cf

Subcatchment33: Pr. WEST-3 Runoff Area=14,195 sf 57.73% Impervious Runoff Depth>7.71"
Tc=5.0 min CN=88.55 Runoff=2.86 cfs 9,118 cf

Subcatchment34: Pr. WEST-4 Runoff Area=4,752 sf 100.00% Impervious Runoff Depth>8.85"
Tc=5.0 min CN=98.00 Runoff=1.01 cfs 3,506 cf

Subcatchment40: Pr. EAST Runoff Area=187,696 sf 9.93% Impervious Runoff Depth>5.64"
Flow Length=243' Tc=13.7 min CN=71.87 Runoff=22.36 cfs 88,234 cf

Subcatchment41: Pr. EAST-1 Runoff Area=2,295 sf 0.00% Impervious Runoff Depth>7.27"
Tc=5.0 min CN=85.00 Runoff=0.45 cfs 1,391 cf

Subcatchment42: Pr. EAST-2 Runoff Area=5,475 sf 0.00% Impervious Runoff Depth>6.18"
Tc=5.0 min CN=76.17 Runoff=0.93 cfs 2,822 cf

Subcatchment43: Pr. EAST-3 Runoff Area=10,380 sf 34.16% Impervious Runoff Depth>7.15"
Tc=5.0 min CN=84.01 Runoff=1.99 cfs 6,186 cf

Subcatchment44: Pr. EAST-4 Runoff Area=8,265 sf 0.00% Impervious Runoff Depth>5.98"
Tc=5.0 min CN=74.52 Runoff=1.37 cfs 4,118 cf

Pond 71: 330 CULTEC GALS (2x5) BMP-W1 Peak Elev=429.17' Storage=1,009 cf Inflow=1.76 cfs 6,109 cf
Discarded=0.01 cfs 906 cf Primary=1.75 cfs 4,192 cf Outflow=1.76 cfs 5,097 cf

Pond 72: 330 CULTEC GALS (2x1) BMP-W2 Peak Elev=397.76' Storage=164 cf Inflow=0.10 cfs 332 cf
Discarded=0.00 cfs 257 cf Primary=0.00 cfs 0 cf Outflow=0.00 cfs 257 cf

Pond 73: 330 CULTEC GALS (4x3) BMP-W3 Peak Elev=404.23' Storage=1,215 cf Inflow=2.86 cfs 9,118 cf
Discarded=0.03 cfs 1,762 cf Primary=2.83 cfs 6,154 cf Outflow=2.86 cfs 7,916 cf

Pond 74: 330 CULTEC GALS (2x3) BMP-W4 Peak Elev=404.66' Storage=635 cf Inflow=1.01 cfs 3,506 cf
Discarded=0.02 cfs 992 cf Primary=0.99 cfs 1,933 cf Outflow=1.01 cfs 2,925 cf

Pond 81: 150 CULTEC GALS (2x2) BMP-E1 Peak Elev=389.14' Storage=330 cf Inflow=0.45 cfs 1,391 cf
Discarded=0.01 cfs 491 cf Primary=0.44 cfs 631 cf Outflow=0.45 cfs 1,122 cf

Pond 82: 150 CULTEC GALS (2x2) BMP-E2 Peak Elev=403.16' Storage=331 cf Inflow=0.93 cfs 2,822 cf
Discarded=0.01 cfs 510 cf Primary=0.92 cfs 1,981 cf Outflow=0.93 cfs 2,491 cf

Pond 83: 330 CULTEC GALS (3x3) BMP-E3 Peak Elev=406.70' Storage=907 cf Inflow=1.99 cfs 6,186 cf
Discarded=0.02 cfs 1,278 cf Primary=1.97 cfs 4,015 cf Outflow=1.99 cfs 5,293 cf

Pond 84: 330 CULTEC GALS (2x3) BMP-E4 Peak Elev=403.53' Storage=620 cf Inflow=1.37 cfs 4,118 cf
Discarded=0.01 cfs 720 cf Primary=1.35 cfs 2,794 cf Outflow=1.37 cfs 3,514 cf

Link 91: Ex. WEST OUT Inflow=66.63 cfs 305,546 cf
Primary=66.63 cfs 305,546 cf

Link 92: Pr. WEST OUT Inflow=65.82 cfs 304,452 cf
Primary=65.82 cfs 304,452 cf

Link 93: Ex. EAST OUT Inflow=27.22 cfs 107,547 cf
Primary=27.22 cfs 107,547 cf

Link 94: Pr. EAST OUT Inflow=24.92 cfs 97,655 cf
Primary=24.92 cfs 97,655 cf

Total Runoff Area = 1,883,802 sf Runoff Volume = 827,083 cf Average Runoff Depth = 5.27"
96.39% Pervious = 1,815,722 sf 3.61% Impervious = 68,080 sf

Summary for Subcatchment 10: Ex. WEST

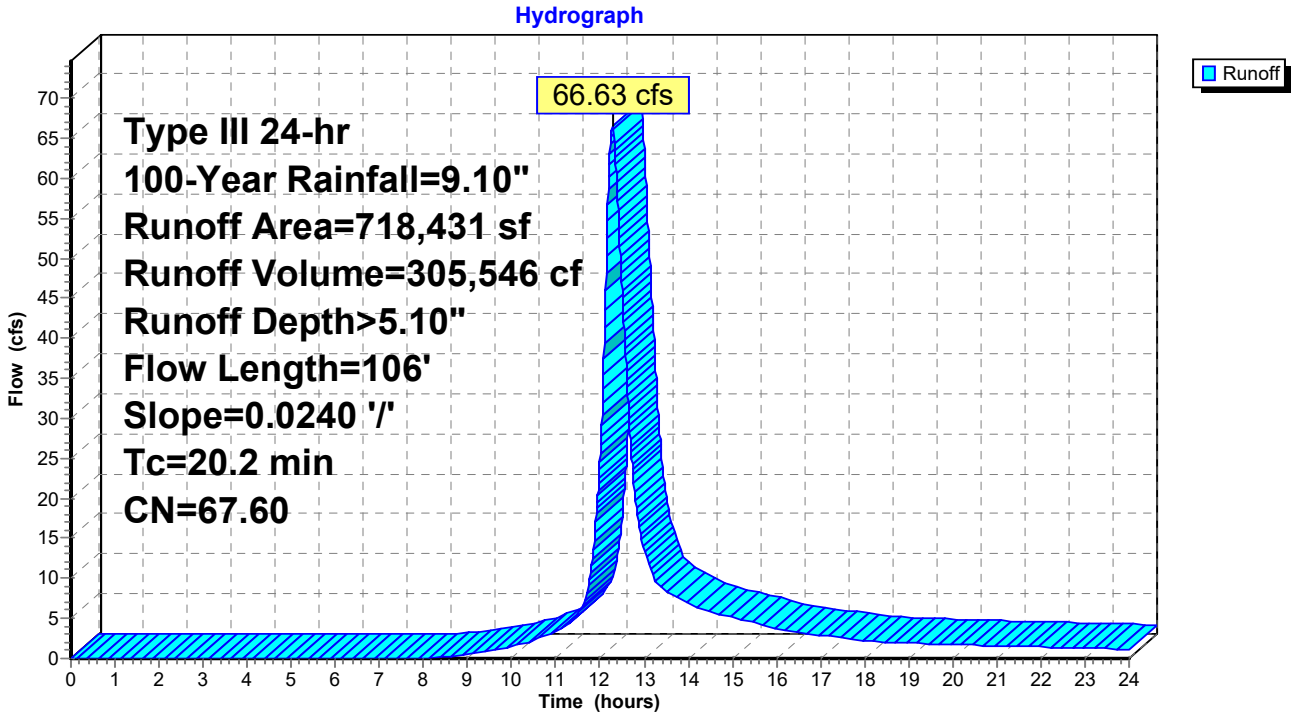
Runoff = 66.63 cfs @ 12.28 hrs, Volume= 305,546 cf, Depth> 5.10"
Routed to Link 91 : Ex. WEST OUT

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=9.10"

	Area (sf)	CN	Description
	3,067	98.00	Roofs, HSG B
	12,045	85.00	Gravel roads, HSG B
	651	98.00	Paved parking, HSG B
	0	49.00	50-75% Grass cover, Fair, HSG A
	14,020	69.00	50-75% Grass cover, Fair, HSG B
	0	84.00	50-75% Grass cover, Fair, HSG D
	16,710	49.00	Pasture/grassland/range, Fair, HSG A
	66,215	69.00	Pasture/grassland/range, Fair, HSG B
	0	84.00	Pasture/grassland/range, Fair, HSG D
	136,825	36.00	Woods, Fair, HSG A
	112,308	60.00	Woods, Fair, HSG B
	279,420	79.00	Woods, Fair, HSG D
	64,205	98.00	Water Surface, 0% imp, HSG D
*	12,965	61.00	Paddock, Good, HSG B
	718,431	67.60	Weighted Average
	714,713		99.48% Pervious Area
	3,718		0.52% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.2	106	0.0240	0.09		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 3.43"

Subcatchment 10: Ex. WEST



Summary for Subcatchment 20: Ex. EAST

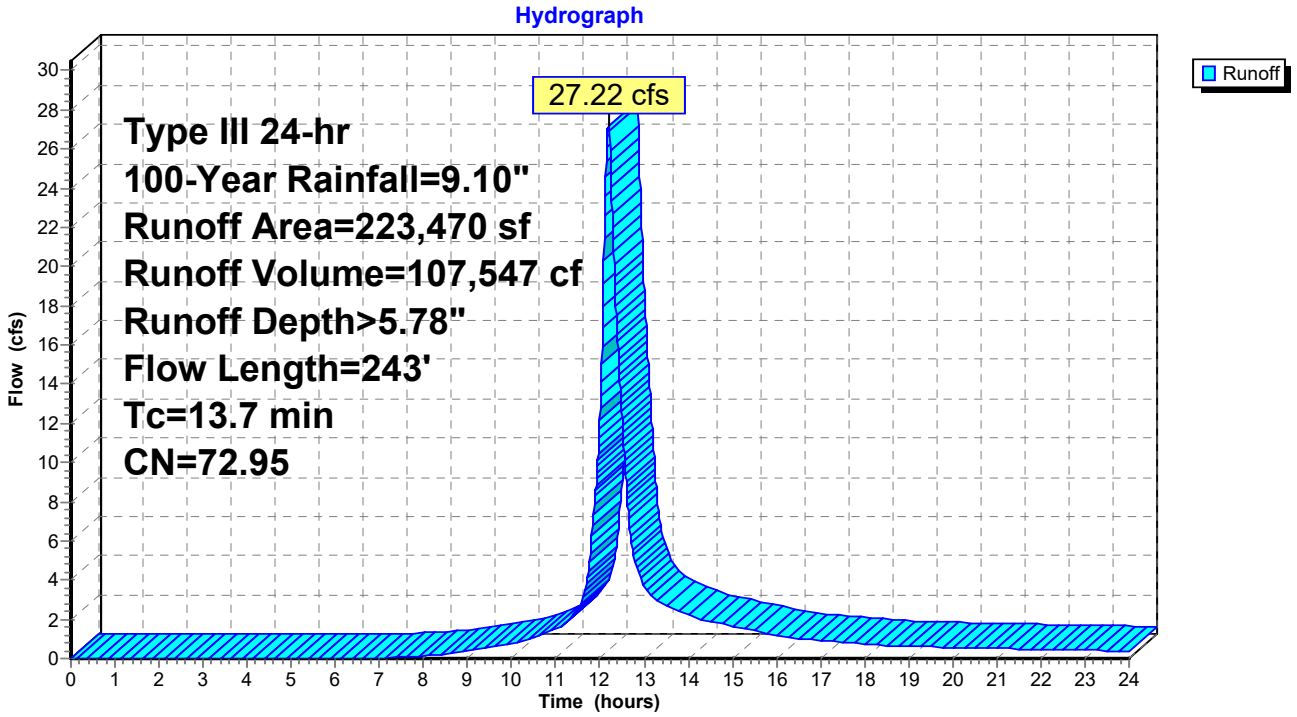
Runoff = 27.22 cfs @ 12.19 hrs, Volume= 107,547 cf, Depth> 5.78"
Routed to Link 93 : Ex. EAST OUT

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=9.10"

Area (sf)	CN	Description
19,190	98.00	Roofs, HSG B
16,500	85.00	Gravel roads, HSG B
80	98.00	Paved parking, HSG B
0	49.00	50-75% Grass cover, Fair, HSG A
15,400	69.00	50-75% Grass cover, Fair, HSG B
0	84.00	50-75% Grass cover, Fair, HSG D
0	49.00	Pasture/grassland/range, Fair, HSG A
139,125	69.00	Pasture/grassland/range, Fair, HSG B
0	84.00	Pasture/grassland/range, Fair, HSG D
0	36.00	Woods, Fair, HSG A
14,350	60.00	Woods, Fair, HSG B
18,825	79.00	Woods, Fair, HSG D
223,470	72.95	Weighted Average
204,200		91.38% Pervious Area
19,270		8.62% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.4	187	0.0750	0.23		**Sheet Flow,** Grass: Dense n= 0.240 P2= 3.43"
0.3	56	0.1610	2.81		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
13.7	243	Total			

Subcatchment 20: Ex. EAST



Summary for Subcatchment 30: Pr. WEST

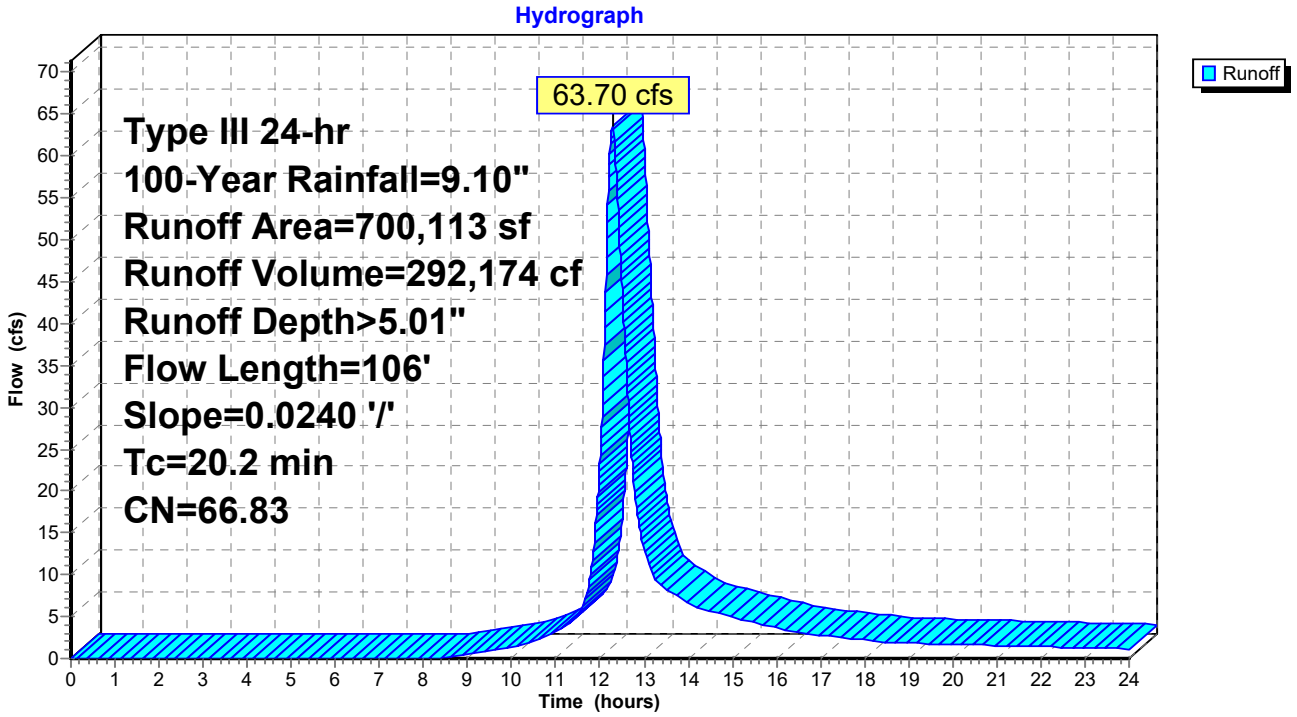
Runoff = 63.70 cfs @ 12.28 hrs, Volume= 292,174 cf, Depth> 5.01"
Routed to Link 92 : Pr. WEST OUT

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=9.10"

	Area (sf)	CN	Description
	0	98.00	Roofs, HSG B
	10,731	85.00	Gravel roads, HSG B
	1,234	98.00	Paved parking, HSG B
*	0	98.00	Pool, HSG B
	0	49.00	50-75% Grass cover, Fair, HSG A
	15,083	69.00	50-75% Grass cover, Fair, HSG B
	0	84.00	50-75% Grass cover, Fair, HSG D
	0	49.00	Pasture/grassland/range, Fair, HSG A
	10,560	69.00	Pasture/grassland/range, Fair, HSG B
	0	84.00	Pasture/grassland/range, Fair, HSG D
	112,979	36.00	Woods, Fair, HSG A
	130,806	60.00	Woods, Fair, HSG B
	279,420	79.00	Woods, Fair, HSG D
	64,205	98.00	Water Surface, 0% imp, HSG D
*	39,905	39.00	Paddock, Good, HSG A
*	35,190	61.00	Paddock, Good, HSG B
	700,113	66.83	Weighted Average
	698,879		99.82% Pervious Area
	1,234		0.18% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.2	106	0.0240	0.09		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 3.43"

Subcatchment 30: Pr. WEST



Summary for Subcatchment 31: Pr. WEST-1

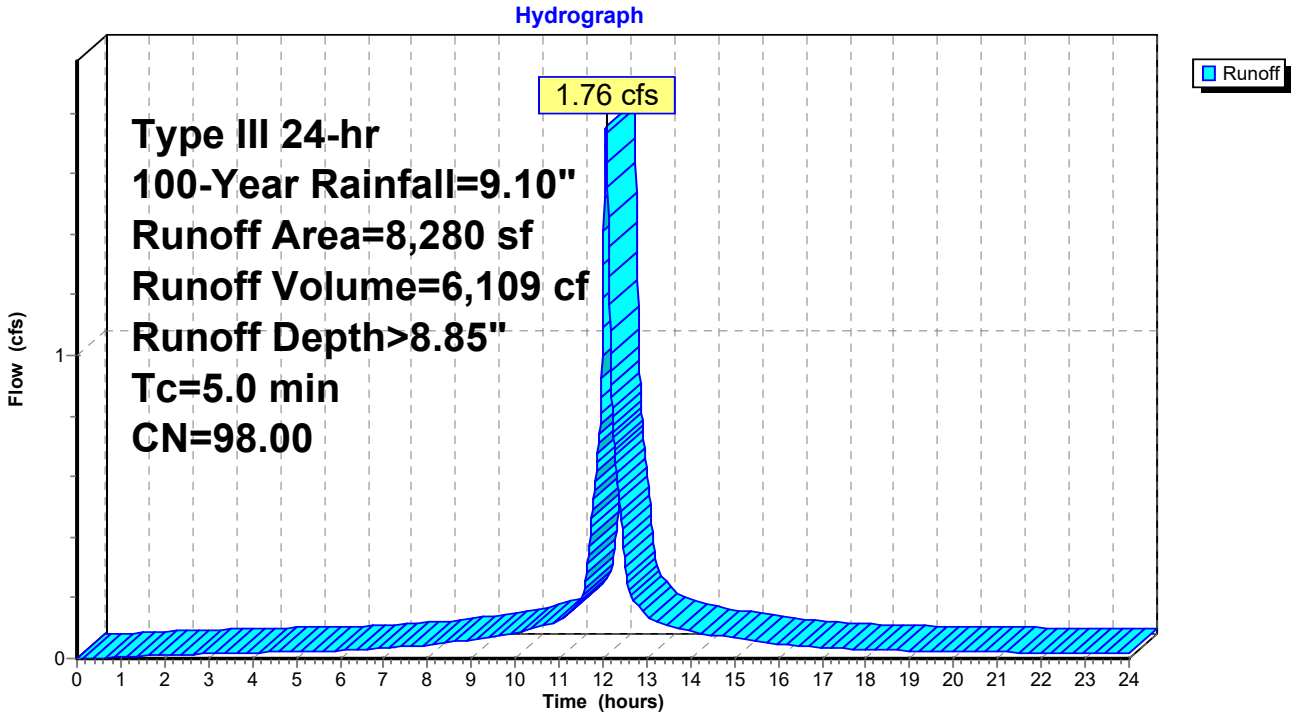
Runoff = 1.76 cfs @ 12.07 hrs, Volume= 6,109 cf, Depth> 8.85"
Routed to Pond 71 : 330 CULTEC GALS (2x5) BMP-W1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=9.10"

	Area (sf)	CN	Description
	4,564	98.00	Roofs, HSG B
	0	85.00	Gravel roads, HSG B
	2,816	98.00	Paved parking, HSG B
*	900	98.00	Pool, HSG B
	0	49.00	50-75% Grass cover, Fair, HSG A
	0	69.00	50-75% Grass cover, Fair, HSG B
	0	84.00	50-75% Grass cover, Fair, HSG D
	0	49.00	Pasture/grassland/range, Fair, HSG A
	0	69.00	Pasture/grassland/range, Fair, HSG B
	0	84.00	Pasture/grassland/range, Fair, HSG D
	0	36.00	Woods, Fair, HSG A
	0	60.00	Woods, Fair, HSG B
	0	79.00	Woods, Fair, HSG D
	0	98.00	Water Surface, 0% imp, HSG D
*	0	39.00	Paddock, Good, HSG A
*	0	61.00	Paddock, Good, HSG B
	8,280	98.00	Weighted Average
	8,280		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 31: Pr. WEST-1



Summary for Subcatchment 32: Pr. WEST-2

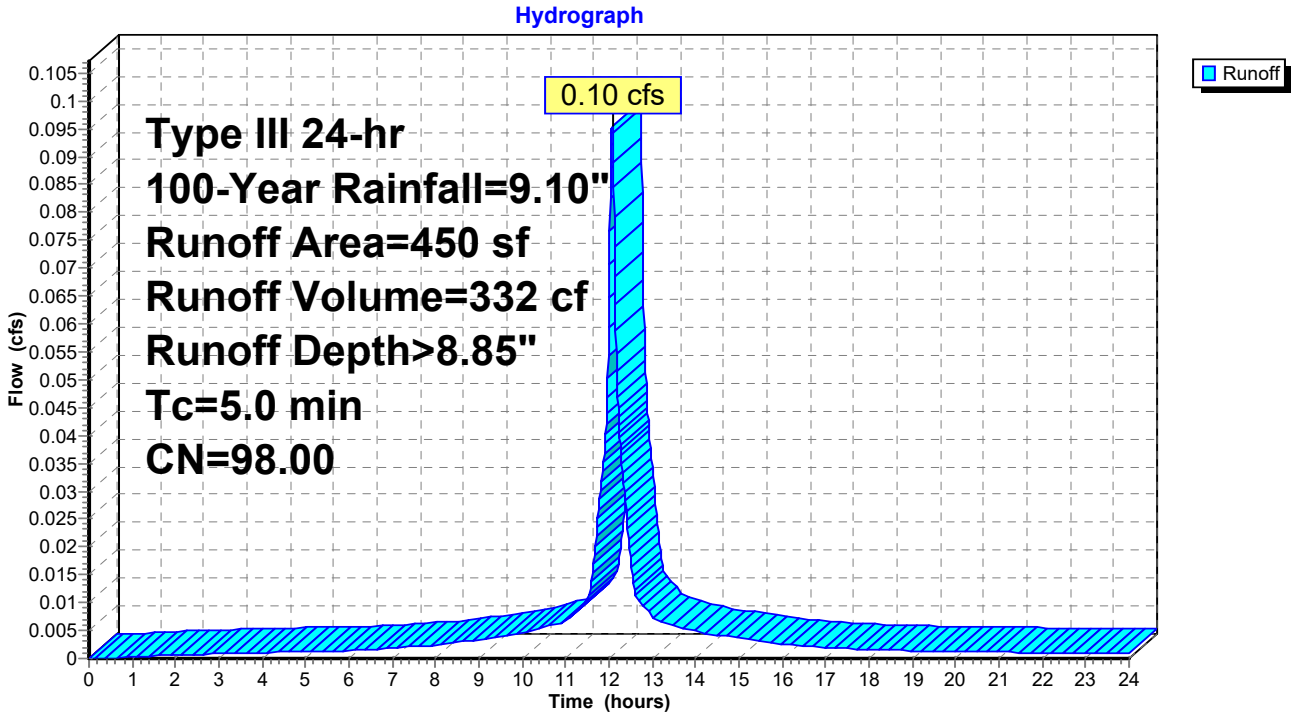
Runoff = 0.10 cfs @ 12.07 hrs, Volume= 332 cf, Depth> 8.85"
Routed to Pond 72 : 330 CULTEC GALS (2x1) BMP-W2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=9.10"

	Area (sf)	CN	Description
	0	98.00	Roofs, HSG B
	0	85.00	Gravel roads, HSG B
	450	98.00	Paved parking, HSG B
*	0	98.00	Pool, HSG B
	0	49.00	50-75% Grass cover, Fair, HSG A
	0	69.00	50-75% Grass cover, Fair, HSG B
	0	84.00	50-75% Grass cover, Fair, HSG D
	0	49.00	Pasture/grassland/range, Fair, HSG A
	0	69.00	Pasture/grassland/range, Fair, HSG B
	0	84.00	Pasture/grassland/range, Fair, HSG D
	0	36.00	Woods, Fair, HSG A
	0	60.00	Woods, Fair, HSG B
	0	79.00	Woods, Fair, HSG D
	0	98.00	Water Surface, 0% imp, HSG D
*	0	39.00	Paddock, Good, HSG A
*	0	61.00	Paddock, Good, HSG B
	450	98.00	Weighted Average
	450		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 32: Pr. WEST-2



Summary for Subcatchment 33: Pr. WEST-3

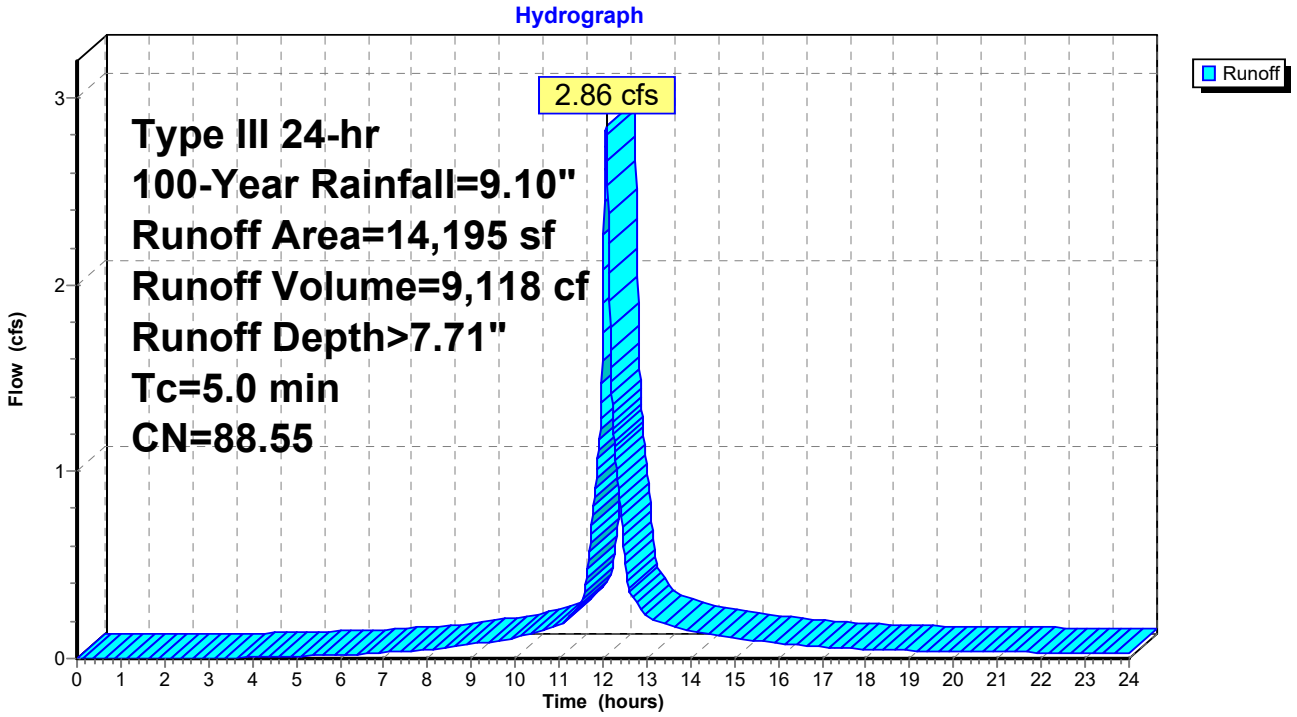
Runoff = 2.86 cfs @ 12.07 hrs, Volume= 9,118 cf, Depth> 7.71"
Routed to Pond 73 : 330 CULTEC GALS (4x3) BMP-W3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=9.10"

	Area (sf)	CN	Description
	1,152	98.00	Roofs, HSG B
	2,490	85.00	Gravel roads, HSG B
	7,043	98.00	Paved parking, HSG B
*	0	98.00	Pool, HSG B
	0	49.00	50-75% Grass cover, Fair, HSG A
	3,510	69.00	50-75% Grass cover, Fair, HSG B
	0	84.00	50-75% Grass cover, Fair, HSG D
	0	49.00	Pasture/grassland/range, Fair, HSG A
	0	69.00	Pasture/grassland/range, Fair, HSG B
	0	84.00	Pasture/grassland/range, Fair, HSG D
	0	36.00	Woods, Fair, HSG A
	0	60.00	Woods, Fair, HSG B
	0	79.00	Woods, Fair, HSG D
	0	98.00	Water Surface, 0% imp, HSG D
*	0	39.00	Paddock, Good, HSG A
*	0	61.00	Paddock, Good, HSG B
	14,195	88.55	Weighted Average
	6,000		42.27% Pervious Area
	8,195		57.73% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 33: Pr. WEST-3



Summary for Subcatchment 34: Pr. WEST-4

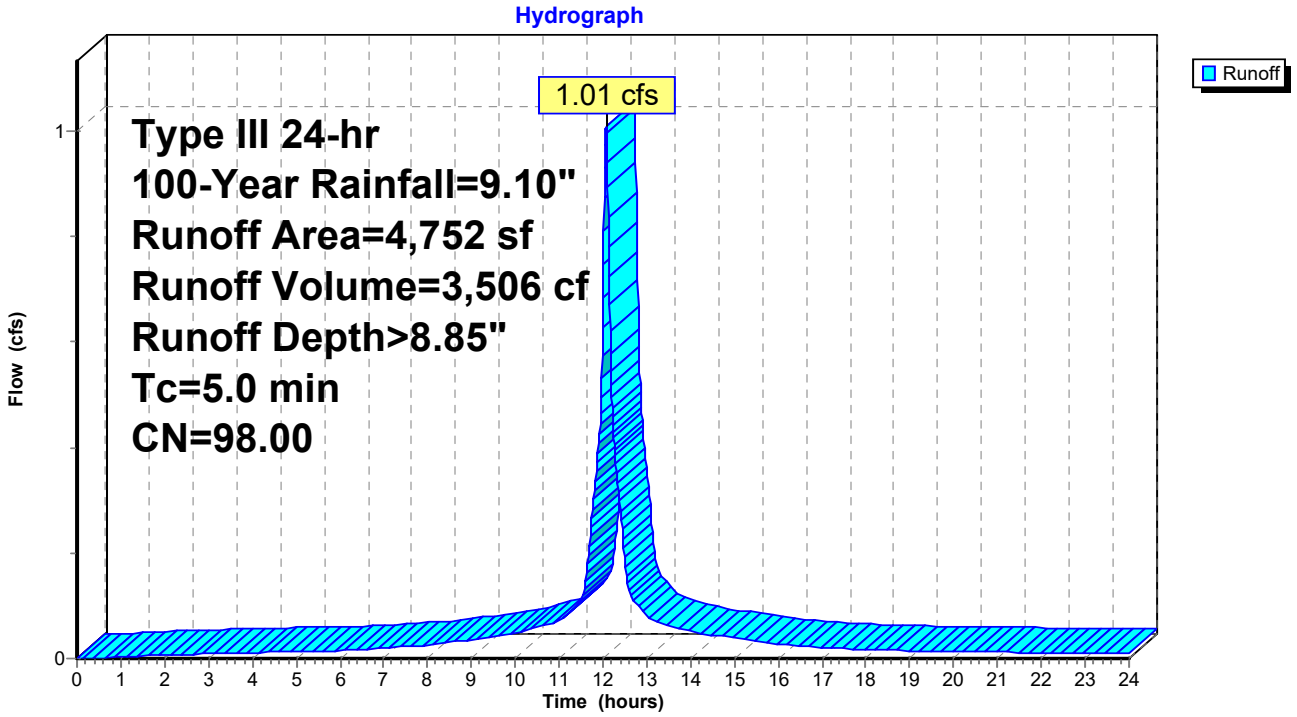
Runoff = 1.01 cfs @ 12.07 hrs, Volume= 3,506 cf, Depth> 8.85"
Routed to Pond 74 : 330 CULTEC GALS (2x3) BMP-W4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=9.10"

	Area (sf)	CN	Description
	4,752	98.00	Roofs, HSG B
	0	85.00	Gravel roads, HSG B
	0	98.00	Paved parking, HSG B
*	0	98.00	Pool, HSG B
	0	49.00	50-75% Grass cover, Fair, HSG A
	0	69.00	50-75% Grass cover, Fair, HSG B
	0	84.00	50-75% Grass cover, Fair, HSG D
	0	49.00	Pasture/grassland/range, Fair, HSG A
	0	69.00	Pasture/grassland/range, Fair, HSG B
	0	84.00	Pasture/grassland/range, Fair, HSG D
	0	36.00	Woods, Fair, HSG A
	0	60.00	Woods, Fair, HSG B
	0	79.00	Woods, Fair, HSG D
	0	98.00	Water Surface, 0% imp, HSG D
*	0	39.00	Paddock, Good, HSG A
*	0	61.00	Paddock, Good, HSG B
	4,752	98.00	Weighted Average
	4,752		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 34: Pr. WEST-4



Summary for Subcatchment 40: Pr. EAST

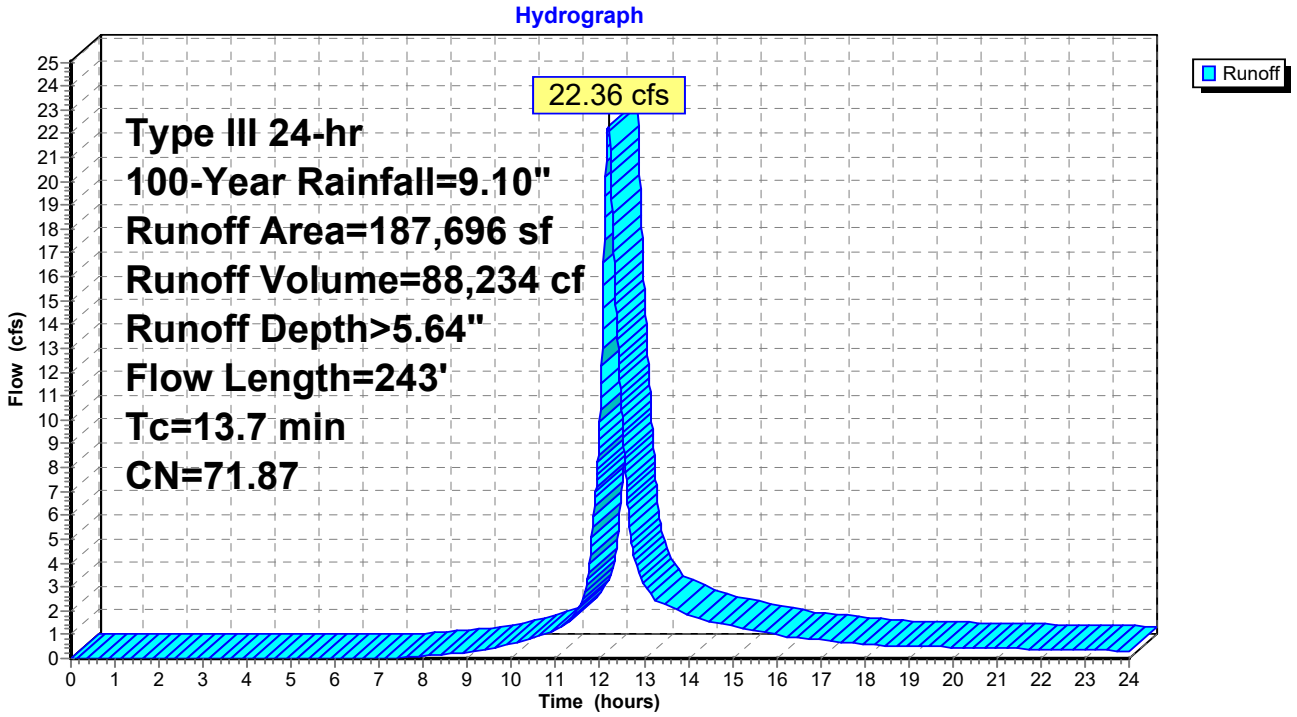
Runoff = 22.36 cfs @ 12.19 hrs, Volume= 88,234 cf, Depth> 5.64"
Routed to Link 94 : Pr. EAST OUT

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=9.10"

	Area (sf)	CN	Description
	17,537	98.00	Roofs, HSG B
	845	85.00	Gravel roads, HSG B
	1,098	98.00	Paved parking, HSG B
	0	49.00	50-75% Grass cover, Fair, HSG A
	9,987	69.00	50-75% Grass cover, Fair, HSG B
	0	84.00	50-75% Grass cover, Fair, HSG D
	0	49.00	Pasture/grassland/range, Fair, HSG A
	116,572	69.00	Pasture/grassland/range, Fair, HSG B
	0	84.00	Pasture/grassland/range, Fair, HSG D
	0	36.00	Woods, Fair, HSG A
	20,730	60.00	Woods, Fair, HSG B
	18,825	79.00	Woods, Fair, HSG D
*	2,102	61.00	Paddock, Good, HSG B
	187,696	71.87	Weighted Average
	169,061		90.07% Pervious Area
	18,635		9.93% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.4	187	0.0750	0.23		**Sheet Flow,** Grass: Dense n= 0.240 P2= 3.43"
0.3	56	0.1610	2.81		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
13.7	243	Total			

Subcatchment 40: Pr. EAST



Summary for Subcatchment 41: Pr. EAST-1

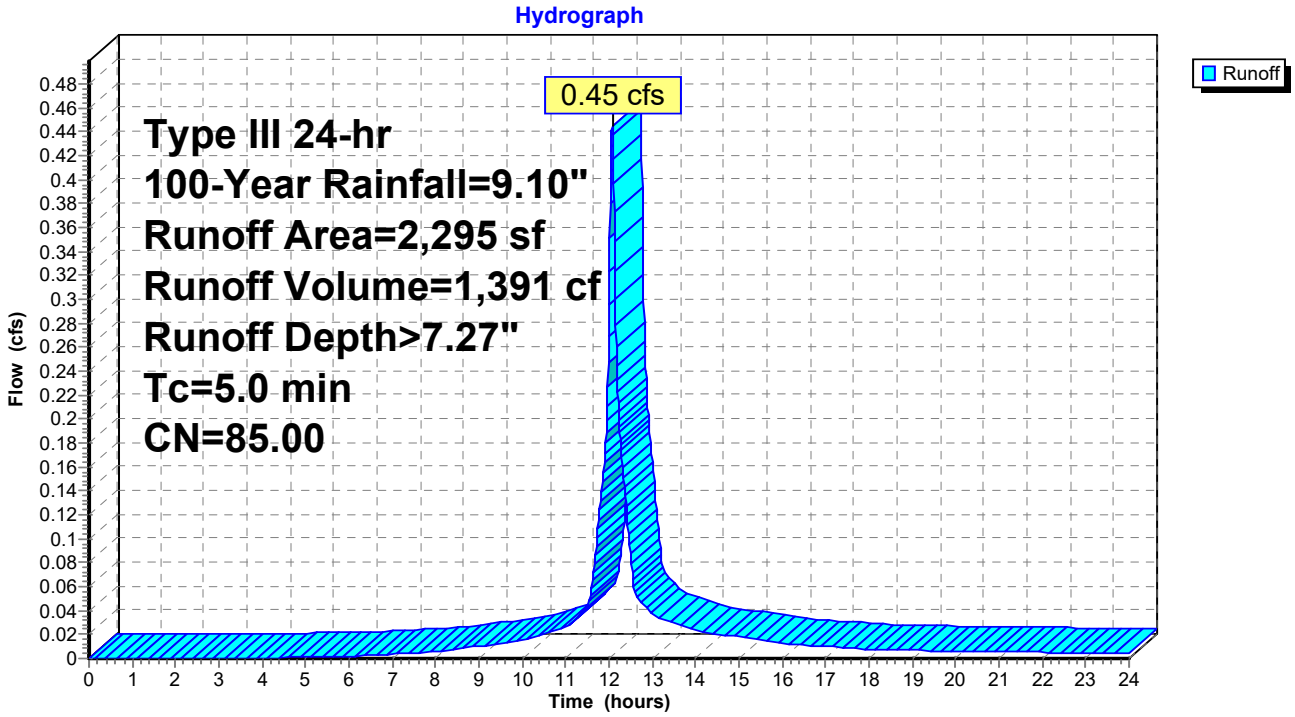
Runoff = 0.45 cfs @ 12.07 hrs, Volume= 1,391 cf, Depth> 7.27"
Routed to Pond 81 : 150 CULTEC GALS (2x2) BMP-E1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=9.10"

	Area (sf)	CN	Description
	0	98.00	Roofs, HSG B
	2,295	85.00	Gravel roads, HSG B
	0	98.00	Paved parking, HSG B
	0	49.00	50-75% Grass cover, Fair, HSG A
	0	69.00	50-75% Grass cover, Fair, HSG B
	0	84.00	50-75% Grass cover, Fair, HSG D
	0	49.00	Pasture/grassland/range, Fair, HSG A
	0	69.00	Pasture/grassland/range, Fair, HSG B
	0	84.00	Pasture/grassland/range, Fair, HSG D
	0	36.00	Woods, Fair, HSG A
	0	60.00	Woods, Fair, HSG B
	0	79.00	Woods, Fair, HSG D
*	0	61.00	Paddock, Good, HSG B
	2,295	85.00	Weighted Average
	2,295		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 41: Pr. EAST-1



Summary for Subcatchment 42: Pr. EAST-2

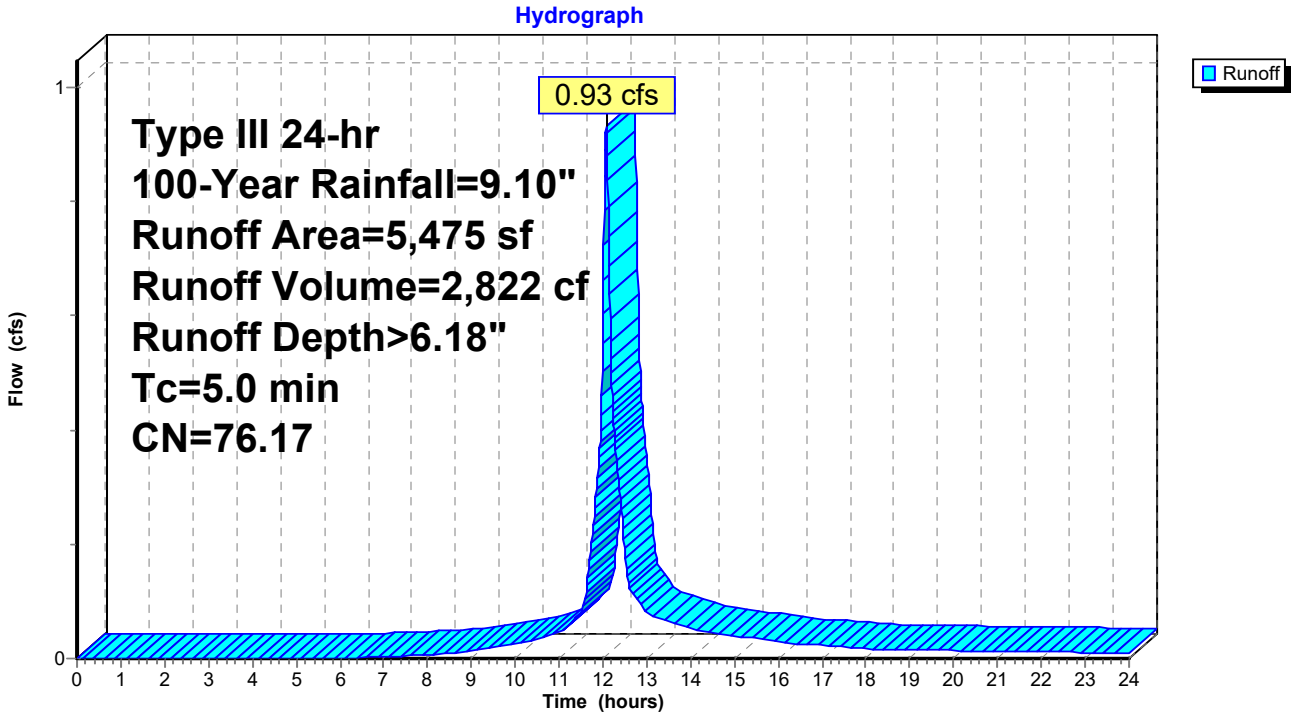
Runoff = 0.93 cfs @ 12.07 hrs, Volume= 2,822 cf, Depth> 6.18"
Routed to Pond 82 : 150 CULTEC GALS (2x2) BMP-E2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=9.10"

	Area (sf)	CN	Description
	0	98.00	Roofs, HSG B
	2,455	85.00	Gravel roads, HSG B
	0	98.00	Paved parking, HSG B
	0	49.00	50-75% Grass cover, Fair, HSG A
	3,020	69.00	50-75% Grass cover, Fair, HSG B
	0	84.00	50-75% Grass cover, Fair, HSG D
	0	49.00	Pasture/grassland/range, Fair, HSG A
	0	69.00	Pasture/grassland/range, Fair, HSG B
	0	84.00	Pasture/grassland/range, Fair, HSG D
	0	36.00	Woods, Fair, HSG A
	0	60.00	Woods, Fair, HSG B
	0	79.00	Woods, Fair, HSG D
*	0	61.00	Paddock, Good, HSG B
	5,475	76.17	Weighted Average
	5,475		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 42: Pr. EAST-2



Summary for Subcatchment 43: Pr. EAST-3

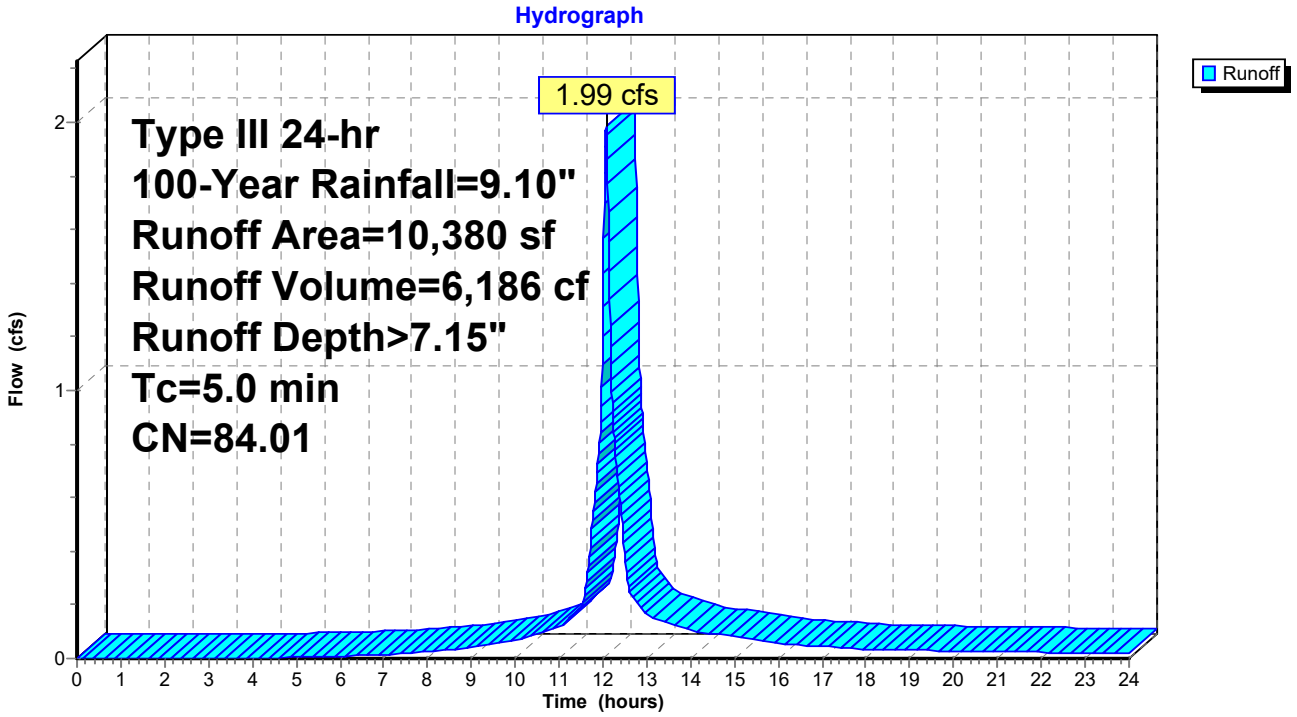
Runoff = 1.99 cfs @ 12.07 hrs, Volume= 6,186 cf, Depth> 7.15"
Routed to Pond 83 : 330 CULTEC GALS (3x3) BMP-E3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=9.10"

	Area (sf)	CN	Description
	0	98.00	Roofs, HSG B
	3,309	85.00	Gravel roads, HSG B
	3,546	98.00	Paved parking, HSG B
	0	49.00	50-75% Grass cover, Fair, HSG A
	3,525	69.00	50-75% Grass cover, Fair, HSG B
	0	84.00	50-75% Grass cover, Fair, HSG D
	0	49.00	Pasture/grassland/range, Fair, HSG A
	0	69.00	Pasture/grassland/range, Fair, HSG B
	0	84.00	Pasture/grassland/range, Fair, HSG D
	0	36.00	Woods, Fair, HSG A
	0	60.00	Woods, Fair, HSG B
	0	79.00	Woods, Fair, HSG D
*	0	61.00	Paddock, Good, HSG B
	10,380	84.01	Weighted Average
	6,834		65.84% Pervious Area
	3,546		34.16% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 43: Pr. EAST-3



Summary for Subcatchment 44: Pr. EAST-4

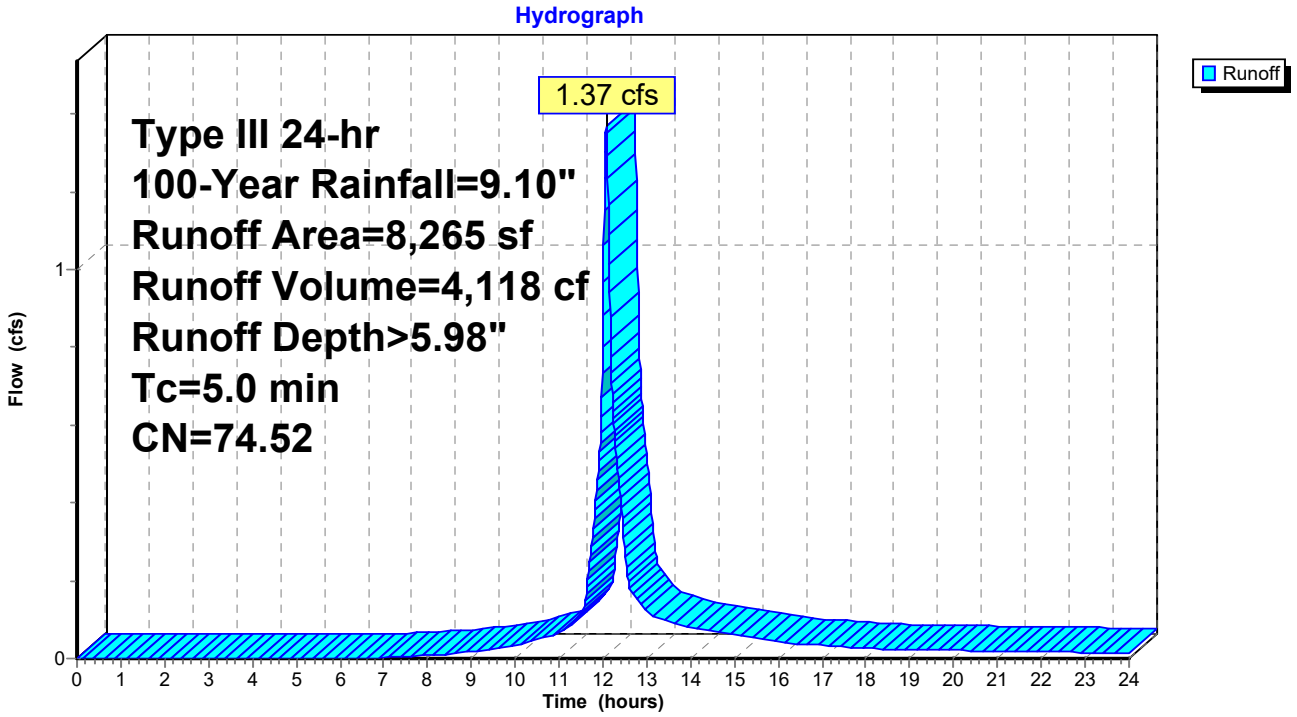
Runoff = 1.37 cfs @ 12.07 hrs, Volume= 4,118 cf, Depth> 5.98"
Routed to Pond 84 : 330 CULTEC GALS (2x3) BMP-E4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=9.10"

	Area (sf)	CN	Description
	0	98.00	Roofs, HSG B
	3,170	85.00	Gravel roads, HSG B
	0	98.00	Paved parking, HSG B
	0	49.00	50-75% Grass cover, Fair, HSG A
	4,455	69.00	50-75% Grass cover, Fair, HSG B
	0	84.00	50-75% Grass cover, Fair, HSG D
	0	49.00	Pasture/grassland/range, Fair, HSG A
	0	69.00	Pasture/grassland/range, Fair, HSG B
	0	84.00	Pasture/grassland/range, Fair, HSG D
	0	36.00	Woods, Fair, HSG A
	0	60.00	Woods, Fair, HSG B
	0	79.00	Woods, Fair, HSG D
*	640	61.00	Paddock, Good, HSG B
	8,265	74.52	Weighted Average
	8,265		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 44: Pr. EAST-4



Summary for Pond 71: 330 CULTEC GALS (2x5) BMP-W1

Inflow Area = 8,280 sf,100.00% Impervious, Inflow Depth > 8.85" for 100-Year event
Inflow = 1.76 cfs @ 12.07 hrs, Volume= 6,109 cf
Outflow = 1.76 cfs @ 12.07 hrs, Volume= 5,097 cf, Atten= 0%, Lag= 0.0 min
Discarded = 0.01 cfs @ 12.07 hrs, Volume= 906 cf
Primary = 1.75 cfs @ 12.07 hrs, Volume= 4,192 cf
Routed to Link 92 : Pr. WEST OUT

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 429.17' @ 12.07 hrs Surf.Area= 430 sf Storage= 1,009 cf

Plug-Flow detention time= 114.1 min calculated for 5,097 cf (83% of inflow)
Center-of-Mass det. time= 44.3 min (782.6 - 738.3)

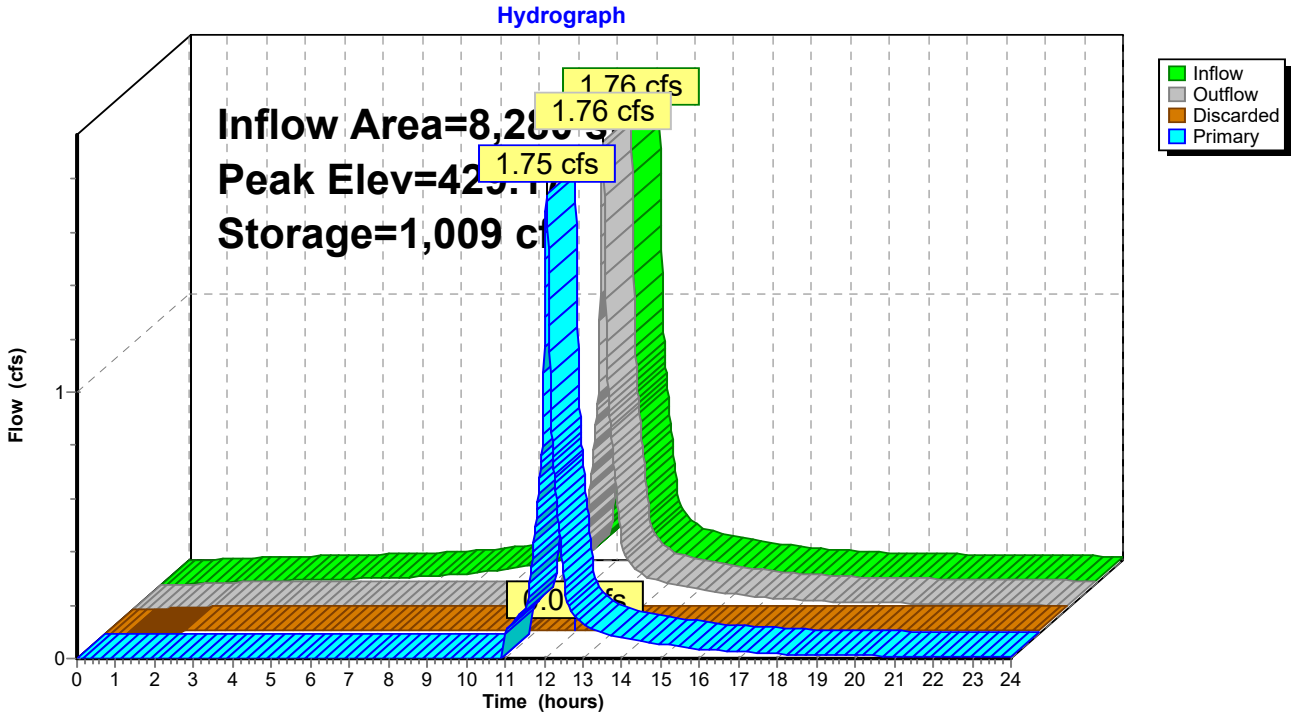
Volume	Invert	Avail.Storage	Storage Description
#1	424.50'	402 cf	**11.17'W x 38.50'L x 3.60'H Crushed Stone** 1,548 cf Overall - 544 cf Embedded = 1,004 cf x 40.0% Voids
#2	425.00'	544 cf	**Cultec R-330XLHD** x 10 Inside #1 Effective Size= 47.8"W x 30.0"H => 7.45 sf x 7.00'L = 52.2 cf Overall Size= 52.0"W x 30.5"H x 8.50'L with 1.50' Overlap Row Length Adjustment= +1.50' x 7.45 sf x 2 rows
#3	427.10'	65 cf	**2.00'W x 38.50'L x 2.10'H LVL SP VOLUME**-Impervious 162 cf Overall x 40.0% Voids
		1,010 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Primary	429.10'	**36.0' long x 1.0' breadth Broad-Crested Rectangular Weir LVL.SP** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 Coef. (English) 2.69 2.72 2.75 2.85 2.98 3.08 3.20 3.28 3.31 3.30 3.31 3.32
#2	Discarded	424.50'	**1.000 in/hr Exfiltration over Horizontal area** Conductivity to Groundwater Elevation = 396.50'

Discarded OutFlow Max=0.01 cfs @ 12.07 hrs HW=429.17' (Free Discharge)
↑**2=Exfiltration** (Controls 0.01 cfs)

Primary OutFlow Max=1.68 cfs @ 12.07 hrs HW=429.17' (Free Discharge)
↑**1=Broad-Crested Rectangular Weir LVL.SP** (Weir Controls 1.68 cfs @ 0.70 fps)

Pond 71: 330 CULTEC GALS (2x5) BMP-W1



Stage-Area-Storage for Pond 71: 330 CULTEC GALS (2x5) BMP-W1

Elevation (feet)	Horizontal (sq-ft)	Storage (cubic-feet)
424.50	**430**	0
424.55	430	9
424.60	430	17
424.65	430	26
424.70	430	34
424.75	430	43
424.80	430	52
424.85	430	60
424.90	430	69
424.95	430	77
425.00	430	86
425.05	430	103
425.10	430	121
425.15	430	138
425.20	430	155
425.25	430	172
425.30	430	189
425.35	430	206
425.40	430	223
425.45	430	240
425.50	430	258
425.55	430	275
425.60	430	292
425.65	430	308
425.70	430	325
425.75	430	342
425.80	430	358
425.85	430	375
425.90	430	391
425.95	430	408
426.00	430	424
426.05	430	441
426.10	430	457
426.15	430	474
426.20	430	490
426.25	430	506
426.30	430	522
426.35	430	538
426.40	430	554
426.45	430	570
426.50	430	585
426.55	430	601
426.60	430	616
426.65	430	631
426.70	430	646
426.75	430	660
426.80	430	675
426.85	430	689
426.90	430	703
426.95	430	717
427.00	430	730
427.05	430	743
427.10	430	756
427.15	430	770
427.20	430	784
427.25	430	797
427.30	430	810
427.35	430	822
427.40	430	833
427.45	430	844
427.50	430	855
427.55	430	865
427.60	430	875
427.65	430	885
427.70	430	895
427.75	430	905
427.80	430	916
427.85	430	926
427.90	430	936
427.95	430	946
428.00	430	956
428.05	430	966
428.10	430	976
428.15	430	978
428.20	430	979
428.25	430	981
428.30	430	983
428.35	430	984
428.40	430	986
428.45	430	987
428.50	430	989
428.55	430	990
428.60	430	992
428.65	430	993
428.70	430	995
428.75	430	996
428.80	430	998
428.85	430	1,000
428.90	430	1,001
428.95	430	1,003
429.00	430	1,004
429.05	430	1,006
429.10	430	1,007
429.15	430	1,009
429.20	430	**1,010**

Summary for Pond 72: 330 CULTEC GALS (2x1) BMP-W2

[42] Hint: Gap in defined storage above volume #1 at 399.10'

Inflow Area = 450 sf,100.00% Impervious, Inflow Depth > 8.85" for 100-Year event
Inflow = 0.10 cfs @ 12.07 hrs, Volume= 332 cf
Outflow = 0.00 cfs @ 14.02 hrs, Volume= 257 cf, Atten= 95%, Lag= 117.3 min
Discarded = 0.00 cfs @ 14.02 hrs, Volume= 257 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
Routed to Link 92 : Pr. WEST OUT

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 397.76' @ 14.02 hrs Surf.Area= 117 sf Storage= 164 cf

Plug-Flow detention time= 257.9 min calculated for 257 cf (77% of inflow)
Center-of-Mass det. time= 174.8 min (913.1 - 738.3)

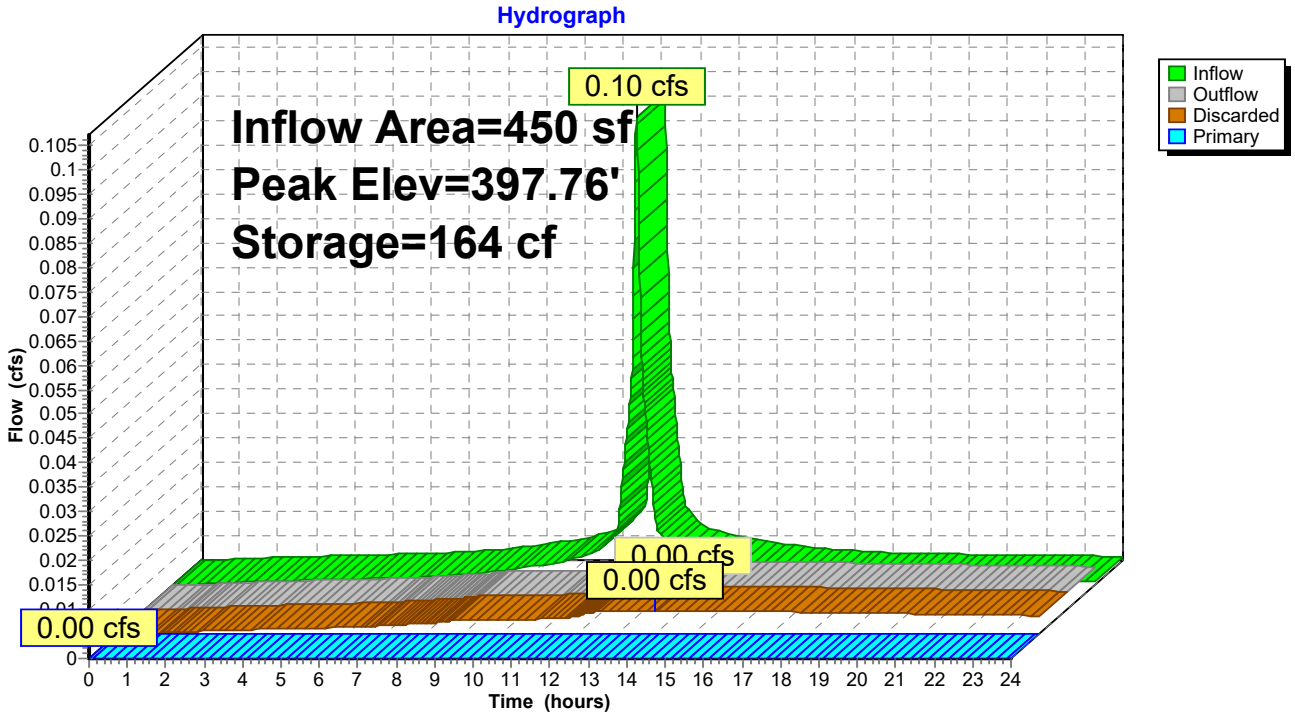
Volume	Invert	Avail.Storage	Storage Description
#1	395.50'	123 cf	**11.17'W x 10.50'L x 3.60'H Crushed Stone** 422 cf Overall - 115 cf Embedded = 307 cf x 40.0% Voids
#2	396.00'	115 cf	**Cultec R-330XLHD** x 2 Inside #1 Effective Size= 47.8"W x 30.0"H => 7.45 sf x 7.00'L = 52.2 cf Overall Size= 52.0"W x 30.5"H x 8.50'L with 1.50' Overlap Row Length Adjustment= +1.50' x 7.45 sf x 1 rows
#3	399.50'	16 cf	**2.00'W x 2.00'L x 4.10'H AD VOLUME**-Impervious
		255 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Primary	403.50'	**1.2" x 6.0" Horiz. Orifice/Grate 24x24 X 9.00 columns** X 3 rows C= 0.600 in 24.0" x 24.0" Grate (34% open area) Limited to weir flow at low heads
#2	Discarded	395.50'	**1.000 in/hr Exfiltration over Horizontal area** Conductivity to Groundwater Elevation = 392.50'

Discarded OutFlow Max=0.00 cfs @ 14.02 hrs HW=397.76' (Free Discharge)
↑—**2=Exfiltration** (Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=395.50' (Free Discharge)
↑—**1=Orifice/Grate 24x24** (Controls 0.00 cfs)

Pond 72: 330 CULTEC GALS (2x1) BMP-W2



Stage-Area-Storage for Pond 72: 330 CULTEC GALS (2x1) BMP-W2

Elevation (feet)	Horizontal (sq-ft)	Storage (cubic-feet)
395.50	**117**	0
395.60	117	5
395.70	117	9
395.80	117	14
395.90	117	19
396.00	117	23
396.10	117	32
396.20	117	40
396.30	117	48
396.40	117	57
396.50	117	65
396.60	117	73
396.70	117	81
396.80	117	90
396.90	117	98
397.00	117	106
397.10	117	114
397.20	117	122
397.30	117	130
397.40	117	137
397.50	117	145
397.60	117	153
397.70	117	160
397.80	117	167
397.90	117	174
398.00	117	181
398.10	117	188
398.20	117	194
398.30	117	200
398.40	117	205
398.50	117	210
398.60	117	215
398.70	117	219
398.80	117	224
398.90	117	229
399.00	117	233
399.10	117	238
399.20	117	238
399.30	117	238
399.40	117	238
399.50	117	238
399.60	117	239
399.70	117	239
399.80	117	239
399.90	117	240
400.00	117	240
400.10	117	241
400.20	117	241
400.30	117	241
400.40	117	242
400.50	117	242
400.60	117	243
400.70	117	243
400.80	117	243
400.90	117	244
401.00	117	244
401.10	117	245
401.20	117	245
401.30	117	245
401.40	117	246
401.50	117	246
401.60	117	247
401.70	117	247
401.80	117	247
401.90	117	248
402.00	117	248
402.10	117	249
402.20	117	249
402.30	117	249
402.40	117	250
402.50	117	250
402.60	117	251
402.70	117	251
402.80	117	251
402.90	117	252
403.00	117	252
403.10	117	253
403.20	117	253
403.30	117	253
403.40	117	254
403.50	117	254
403.60	117	**255**

Summary for Pond 73: 330 CULTEC GALS (4x3) BMP-W3

Inflow Area = 14,195 sf, 57.73% Impervious, Inflow Depth > 7.71" for 100-Year event
Inflow = 2.86 cfs @ 12.07 hrs, Volume= 9,118 cf
Outflow = 2.86 cfs @ 12.07 hrs, Volume= 7,916 cf, Atten= 0%, Lag= 0.0 min
Discarded = 0.03 cfs @ 12.07 hrs, Volume= 1,762 cf
Primary = 2.83 cfs @ 12.07 hrs, Volume= 6,154 cf
Routed to Link 92 : Pr. WEST OUT

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs / 6
Peak Elev= 404.23' @ 12.07 hrs Surf.Area= 510 sf Storage= 1,215 cf

Plug-Flow detention time= 89.1 min calculated for 7,913 cf (87% of inflow)
Center-of-Mass det. time= 30.7 min (805.9 - 775.2)

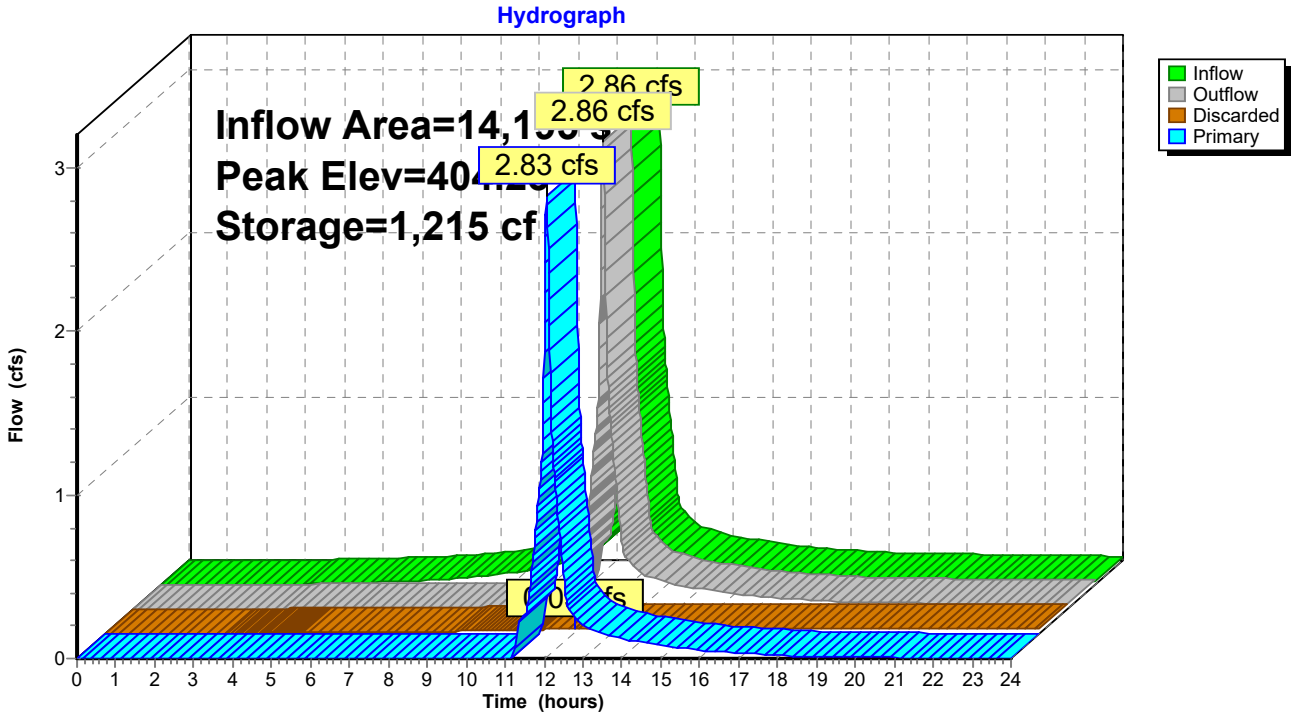
Volume	Invert	Avail.Storage	Storage Description
#1	399.50'	467 cf	**20.83'W x 24.50'L x 3.60'H STONE DATA VOLUME** 1,837 cf Overall - 671 cf Embedded = 1,167 cf x 40.0% Voids
#2	400.00'	671 cf	**Cultec R-330XLHD** x 12 Inside #1 Effective Size= 47.8"W x 30.0"H => 7.45 sf x 7.00'L = 52.2 cf Overall Size= 52.0"W x 30.5"H x 8.50'L with 1.50' Overlap Row Length Adjustment= +1.50' x 7.45 sf x 4 rows
#3	402.10'	43 cf	**2.00'W x 24.50'L x 2.20'H LVL SP VOLUME**-Impervious 108 cf Overall x 40.0% Voids
#4	401.20'	38 cf	**3.00'W x 4.00'L x 3.20'H CB**-Impervious
		1,219 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Primary	404.10'	**22.0' long x 1.0' breadth Broad-Crested Rectangular Weir - LVL.SP.** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 Coef. (English) 2.69 2.72 2.75 2.85 2.98 3.08 3.20 3.28 3.31 3.30 3.31 3.32
#2	Primary	404.20'	**1.7" x 6.5" Horiz. Orifice/Grate CB X 5.00 columns** X 4 rows C= 0.600 in 17.7" x 35.2" Grate (35% open area) Limited to weir flow at low heads
#3	Discarded	399.50'	**1.000 in/hr Exfiltration over Horizontal area** Conductivity to Groundwater Elevation = 396.50'

Discarded OutFlow Max=0.03 cfs @ 12.07 hrs HW=404.23' (Free Discharge)
└**3=Exfiltration** (Controls 0.03 cfs)

Primary OutFlow Max=2.75 cfs @ 12.07 hrs HW=404.23' (Free Discharge)
└**1=Broad-Crested Rectangular Weir - LVL.SP.**(Weir Controls 2.63 cfs @ 0.95 fps)
└**2=Orifice/Grate CB** (Weir Controls 0.12 cfs @ 0.52 fps)

Pond 73: 330 CULTEC GALS (4x3) BMP-W3



Stage-Area-Storage for Pond 73: 330 CULTEC GALS (4x3) BMP-W3

Elevation (feet)	Horizontal (sq-ft)	Storage (cubic-feet)
399.50	**510**	0
399.55	510	10
399.60	510	20
399.65	510	31
399.70	510	41
399.75	510	51
399.80	510	61
399.85	510	71
399.90	510	82
399.95	510	92
400.00	510	102
400.05	510	123
400.10	510	144
400.15	510	165
400.20	510	185
400.25	510	206
400.30	510	227
400.35	510	248
400.40	510	268
400.45	510	289
400.50	510	310
400.55	510	330
400.60	510	351
400.65	510	371
400.70	510	391
400.75	510	411
400.80	510	431
400.85	510	451
400.90	510	471
400.95	510	491
401.00	510	511
401.05	510	531
401.10	510	551
401.15	510	571
401.20	510	591
401.25	510	611
401.30	510	631
401.35	510	651
401.40	510	670
401.45	510	690
401.50	510	709
401.55	510	728
401.60	510	747
401.65	510	766
401.70	510	784
401.75	510	803
401.80	510	821
401.85	510	838
401.90	510	856
401.95	510	873
402.00	510	890
402.05	510	907
402.10	510	923
402.15	510	939
402.20	510	955
402.25	510	971
402.30	510	986
402.35	510	1,000
402.40	510	1,013
402.45	510	1,026
402.50	510	1,038
402.55	510	1,050
402.60	510	1,062
402.65	510	1,074
402.70	510	1,085
402.75	510	1,097
402.80	510	1,109
402.85	510	1,121
402.90	510	1,132
402.95	510	1,144
403.00	510	1,156
403.05	510	1,168
403.10	510	1,180
403.15	510	1,181
403.20	510	1,183
403.25	510	1,184
403.30	510	1,186
403.35	510	1,188
403.40	510	1,189
403.45	510	1,191
403.50	510	1,192
403.55	510	1,194
403.60	510	1,195
403.65	510	1,197
403.70	510	1,199
403.75	510	1,200
403.80	510	1,202
403.85	510	1,203
403.90	510	1,205
403.95	510	1,206
404.00	510	1,208
404.05	510	1,210
404.10	510	1,211
404.15	510	1,213
404.20	510	1,214
404.25	510	1,216
404.30	510	1,218
404.35	510	1,218
404.40	510	**1,219**

Summary for Pond 74: 330 CULTEC GALS (2x3) BMP-W4

Inflow Area = 4,752 sf,100.00% Impervious, Inflow Depth > 8.85" for 100-Year event
Inflow = 1.01 cfs @ 12.07 hrs, Volume= 3,506 cf
Outflow = 1.01 cfs @ 12.07 hrs, Volume= 2,925 cf, Atten= 0%, Lag= 0.0 min
Discarded = 0.02 cfs @ 12.07 hrs, Volume= 992 cf
Primary = 0.99 cfs @ 12.07 hrs, Volume= 1,933 cf
Routed to Link 92 : Pr. WEST OUT

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs / 4
Peak Elev= 404.66' @ 12.07 hrs Surf.Area= 273 sf Storage= 635 cf

Plug-Flow detention time= 121.0 min calculated for 2,924 cf (83% of inflow)
Center-of-Mass det. time= 51.5 min (789.8 - 738.3)

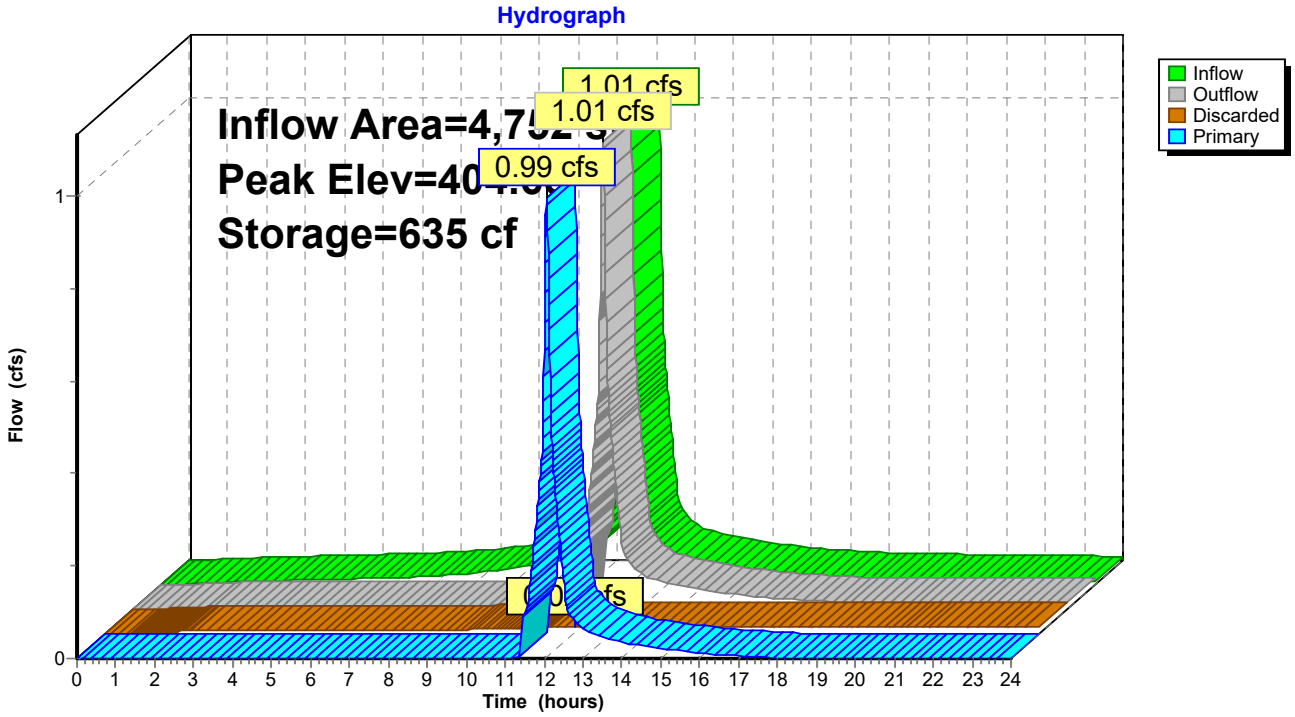
Volume	Invert	Avail.Storage	Storage Description
#1	400.00'	260 cf	**11.16'W x 24.50'L x 3.60'H STONE DATA VOLUME** 984 cf Overall - 335 cf Embedded = 649 cf x 40.0% Voids
#2	400.50'	335 cf	**Cultec R-330XLHD** x 6 Inside #1 Effective Size= 47.8"W x 30.0"H => 7.45 sf x 7.00'L = 52.2 cf Overall Size= 52.0"W x 30.5"H x 8.50'L with 1.50' Overlap Row Length Adjustment= +1.50' x 7.45 sf x 2 rows
#3	402.60'	41 cf	**2.00'W x 24.50'L x 2.10'H LVL SP VOLUME**-Impervious 103 cf Overall x 40.0% Voids
		636 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Primary	404.60'	**22.0' long x 1.0' breadth Broad-Crested Rectangular Weir LVL.SP** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 Coef. (English) 2.69 2.72 2.75 2.85 2.98 3.08 3.20 3.28 3.31 3.30 3.31 3.32
#2	Discarded	400.00'	**1.000 in/hr Exfiltration over Horizontal area** Conductivity to Groundwater Elevation = 397.00'

Discarded OutFlow Max=0.02 cfs @ 12.07 hrs HW=404.66' (Free Discharge)
↑—**2=Exfiltration** (Controls 0.02 cfs)

Primary OutFlow Max=0.96 cfs @ 12.07 hrs HW=404.66' (Free Discharge)
↑—**1=Broad-Crested Rectangular Weir LVL.SP** (Weir Controls 0.96 cfs @ 0.68 fps)

Pond 74: 330 CULTEC GALS (2x3) BMP-W4



Stage-Area-Storage for Pond 74: 330 CULTEC GALS (2x3) BMP-W4

Elevation (feet)	Horizontal (sq-ft)	Storage (cubic-feet)
400.00	**273**	0
400.05	273	5
400.10	273	11
400.15	273	16
400.20	273	22
400.25	273	27
400.30	273	33
400.35	273	38
400.40	273	44
400.45	273	49
400.50	273	55
400.55	273	66
400.60	273	76
400.65	273	87
400.70	273	98
400.75	273	109
400.80	273	119
400.85	273	130
400.90	273	141
400.95	273	151
401.00	273	162
401.05	273	173
401.10	273	183
401.15	273	194
401.20	273	204
401.25	273	215
401.30	273	225
401.35	273	236
401.40	273	246
401.45	273	256
401.50	273	267
401.55	273	277
401.60	273	287
401.65	273	298
401.70	273	308
401.75	273	318
401.80	273	328
401.85	273	338
401.90	273	348
401.95	273	358
402.00	273	367
402.05	273	377
402.10	273	387
402.15	273	396
402.20	273	405
402.25	273	414
402.30	273	424
402.35	273	432
402.40	273	441
402.45	273	450
402.50	273	458
402.55	273	467
402.60	273	475
402.65	273	484
402.70	273	492
402.75	273	501
402.80	273	509
402.85	273	516
402.90	273	524
402.95	273	530
403.00	273	537
403.05	273	544
403.10	273	550
403.15	273	556
403.20	273	563
403.25	273	569
403.30	273	576
403.35	273	582
403.40	273	589
403.45	273	595
403.50	273	602
403.55	273	608
403.60	273	615
403.65	273	615
403.70	273	616
403.75	273	617
403.80	273	618
403.85	273	619
403.90	273	620
403.95	273	621
404.00	273	622
404.05	273	623
404.10	273	624
404.15	273	625
404.20	273	626
404.25	273	627
404.30	273	628
404.35	273	629
404.40	273	630
404.45	273	631
404.50	273	632
404.55	273	633
404.60	273	634
404.65	273	635
404.70	273	**636**

Summary for Pond 81: 150 CULTEC GALS (2x2) BMP-E1

Inflow Area = 2,295 sf, 0.00% Impervious, Inflow Depth > 7.27" for 100-Year event
Inflow = 0.45 cfs @ 12.07 hrs, Volume= 1,391 cf
Outflow = 0.45 cfs @ 12.07 hrs, Volume= 1,122 cf, Atten= 0%, Lag= 0.0 min
Discarded = 0.01 cfs @ 12.07 hrs, Volume= 491 cf
Primary = 0.44 cfs @ 12.07 hrs, Volume= 631 cf
Routed to Link 94 : Pr. EAST OUT

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs / 4
Peak Elev= 389.14' @ 12.07 hrs Surf.Area= 186 sf Storage= 330 cf

Plug-Flow detention time= 133.6 min calculated for 1,122 cf (81% of inflow)
Center-of-Mass det. time= 60.2 min (844.9 - 784.8)

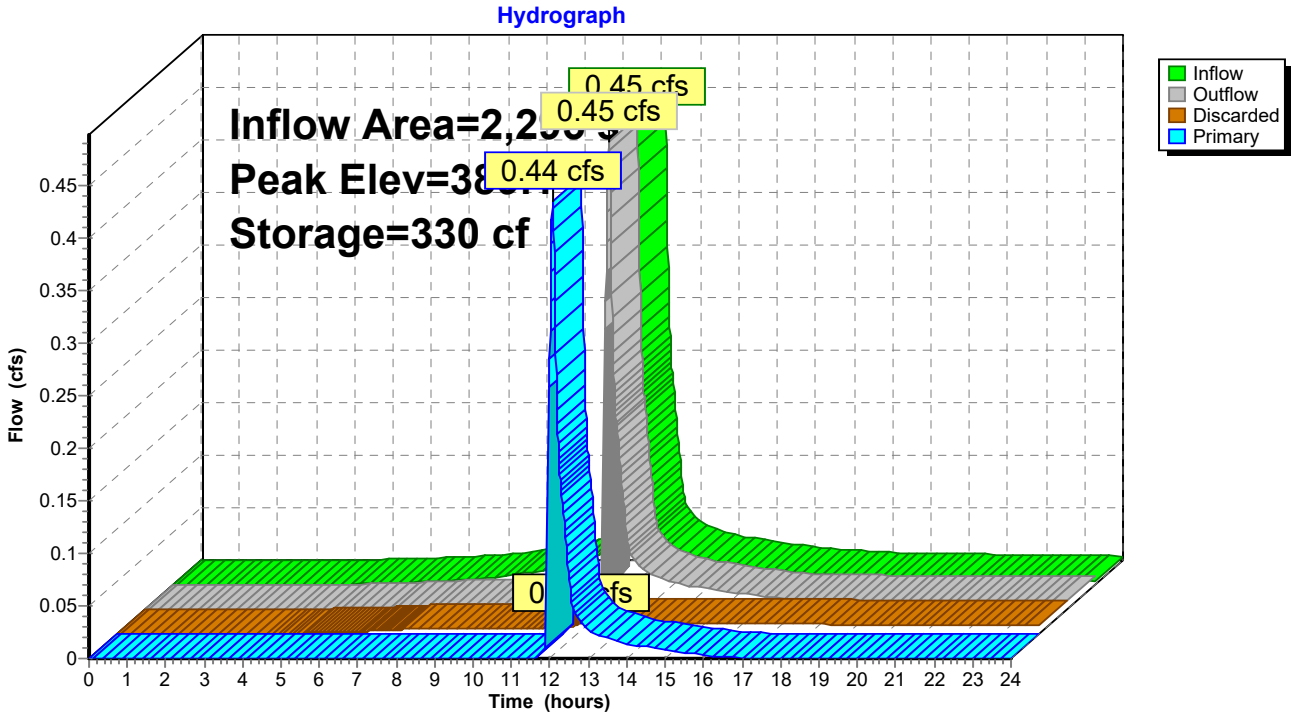
Volume	Invert	Avail.Storage	Storage Description
#1	385.50'	145 cf	**8.00'W x 23.25'L x 2.55'H STONE DATA VOLUME** 474 cf Overall - 113 cf Embedded = 362 cf x 40.0% Voids
#2	386.00'	113 cf	**Cultec R-150XLHD** x 4 Inside #1 Effective Size= 29.8"W x 18.0"H => 2.65 sf x 10.25'L = 27.2 cf Overall Size= 33.0"W x 18.5"H x 11.00'L with 0.75' Overlap Row Length Adjustment= +0.75' x 2.65 sf x 2 rows
#3	387.10'	39 cf	**2.00'W x 23.20'L x 2.10'H LVL SP VOLUME**-Impervious 97 cf Overall x 40.0% Voids
#4	386.20'	38 cf	**3.00'W x 4.00'L x 3.20'H CB**-Impervious
		335 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Primary	389.20'	**1.7" x 6.5" Horiz. Orifice/Grate - CB X 5.00 columns** X 4 rows C= 0.600 in 17.7" x 35.2" Grate (35% open area) Limited to weir flow at low heads
#2	Primary	389.10'	**22.0' long x 1.0' breadth Broad-Crested Rectangular Weir - LVL.SP.** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 Coef. (English) 2.69 2.72 2.75 2.85 2.98 3.08 3.20 3.28 3.31 3.30 3.31 3.32
#3	Discarded	385.50'	**1.000 in/hr Exfiltration over Horizontal area** Conductivity to Groundwater Elevation = 382.50'

Discarded OutFlow Max=0.01 cfs @ 12.07 hrs HW=389.14' (Free Discharge)
└**3=Exfiltration** (Controls 0.01 cfs)

Primary OutFlow Max=0.41 cfs @ 12.07 hrs HW=389.14' (Free Discharge)
├**1=Orifice/Grate - CB** (Controls 0.00 cfs)
└**2=Broad-Crested Rectangular Weir - LVL.SP.**(Weir Controls 0.41 cfs @ 0.51 fps)

Pond 81: 150 CULTEC GALS (2x2) BMP-E1



Stage-Area-Storage for Pond 81: 150 CULTEC GALS (2x2) BMP-E1

Elevation (feet)	Horizontal (sq-ft)	Storage (cubic-feet)
385.50	**186**	0
385.55	186	4
385.60	186	7
385.65	186	11
385.70	186	15
385.75	186	19
385.80	186	22
385.85	186	26
385.90	186	30
385.95	186	33
386.00	186	37
386.05	186	44
386.10	186	51
386.15	186	58
386.20	186	64
386.25	186	72
386.30	186	79
386.35	186	86
386.40	186	93
386.45	186	101
386.50	186	108
386.55	186	115
386.60	186	122
386.65	186	129
386.70	186	136
386.75	186	143
386.80	186	150
386.85	186	157
386.90	186	163
386.95	186	170
387.00	186	177
387.05	186	183
387.10	186	189
387.15	186	196
387.20	186	203
387.25	186	210
387.30	186	216
387.35	186	222
387.40	186	228
387.45	186	234
387.50	186	239
387.55	186	245
387.60	186	250
387.65	186	255
387.70	186	260
387.75	186	266
387.80	186	271
387.85	186	276
387.90	186	281
387.95	186	287
388.00	186	292
388.05	186	297
388.10	186	299
388.15	186	300
388.20	186	302
388.25	186	303
388.30	186	305
388.35	186	306
388.40	186	308
388.45	186	309
388.50	186	311
388.55	186	312
388.60	186	314
388.65	186	315
388.70	186	317
388.75	186	318
388.80	186	320
388.85	186	322
388.90	186	323
388.95	186	325
389.00	186	326
389.05	186	328
389.10	186	329
389.15	186	331
389.20	186	332
389.25	186	333
389.30	186	333
389.35	186	334
389.40	186	**335**

Summary for Pond 82: 150 CULTEC GALS (2x2) BMP-E2

Inflow Area = 5,475 sf, 0.00% Impervious, Inflow Depth > 6.18" for 100-Year event
Inflow = 0.93 cfs @ 12.07 hrs, Volume= 2,822 cf
Outflow = 0.93 cfs @ 12.07 hrs, Volume= 2,491 cf, Atten= 0%, Lag= 0.0 min
Discarded = 0.01 cfs @ 12.07 hrs, Volume= 510 cf
Primary = 0.92 cfs @ 12.07 hrs, Volume= 1,981 cf
Routed to Link 94 : Pr. EAST OUT

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs / 6
Peak Elev= 403.16' @ 12.07 hrs Surf.Area= 186 sf Storage= 331 cf

Plug-Flow detention time= 76.0 min calculated for 2,490 cf (88% of inflow)
Center-of-Mass det. time= 22.1 min (827.1 - 805.1)

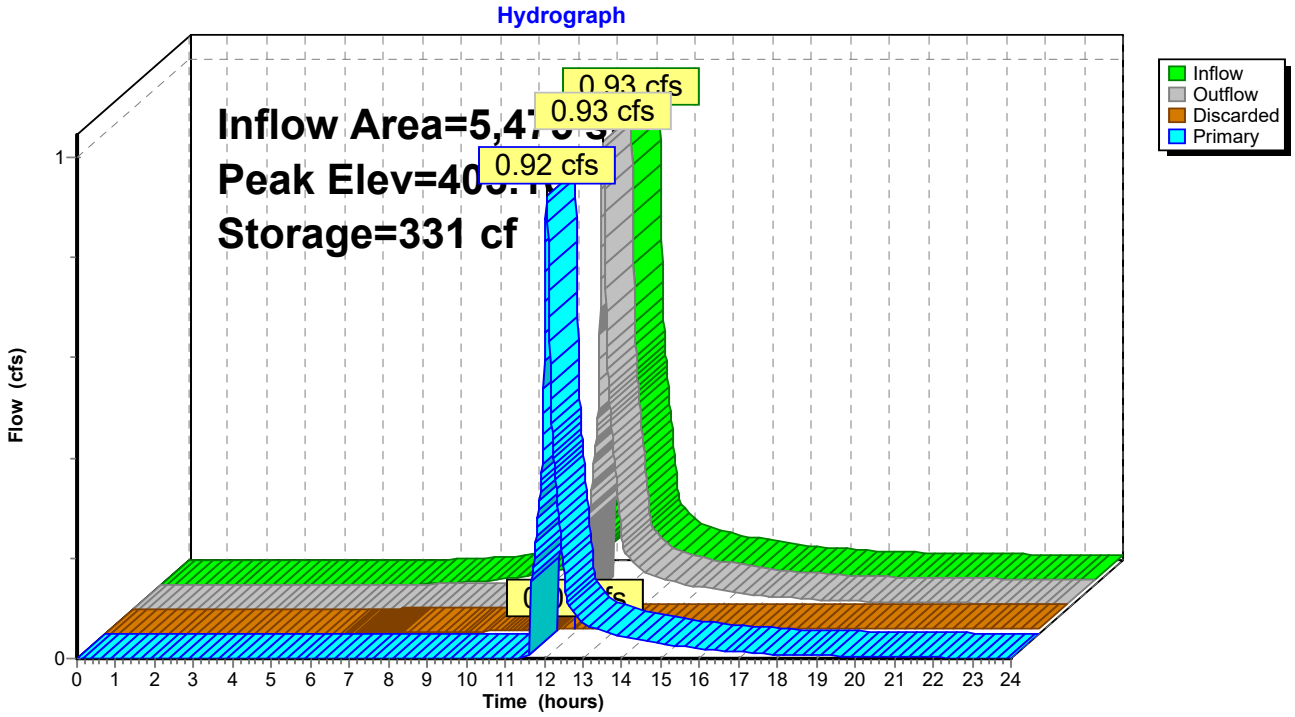
Volume	Invert	Avail.Storage	Storage Description
#1	399.50'	145 cf	**8.00'W x 23.25'L x 2.55'H STONE DATA VOLUME** 474 cf Overall - 113 cf Embedded = 362 cf x 40.0% Voids
#2	400.00'	113 cf	**Cultec R-150XLHD** x 4 Inside #1 Effective Size= 29.8"W x 18.0"H => 2.65 sf x 10.25'L = 27.2 cf Overall Size= 33.0"W x 18.5"H x 11.00'L with 0.75' Overlap Row Length Adjustment= +0.75' x 2.65 sf x 2 rows
#3	401.10'	41 cf	**2.00'W x 23.20'L x 2.20'H LVL SP VOLUME**-Impervious 102 cf Overall x 40.0% Voids
#4	400.20'	38 cf	**3.00'W x 4.00'L x 3.20'H CB**-Impervious
		337 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Primary	403.20'	**1.7" x 6.5" Horiz. Orifice/Grate - CB X 5.00 columns** X 4 rows C= 0.600 in 17.7" x 35.2" Grate (35% open area) Limited to weir flow at low heads
#2	Primary	403.10'	**22.0' long x 1.0' breadth Broad-Crested Rectangular Weir - LVL.SP.** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 Coef. (English) 2.69 2.72 2.75 2.85 2.98 3.08 3.20 3.28 3.31 3.30 3.31 3.32
#3	Discarded	399.50'	**1.000 in/hr Exfiltration over Horizontal area** Conductivity to Groundwater Elevation = 396.50'

Discarded OutFlow Max=0.01 cfs @ 12.07 hrs HW=403.16' (Free Discharge)
└**3=Exfiltration** (Controls 0.01 cfs)

Primary OutFlow Max=0.91 cfs @ 12.07 hrs HW=403.16' (Free Discharge)
├**1=Orifice/Grate - CB** (Controls 0.00 cfs)
└**2=Broad-Crested Rectangular Weir - LVL.SP.**(Weir Controls 0.91 cfs @ 0.67 fps)

Pond 82: 150 CULTEC GALS (2x2) BMP-E2



Stage-Area-Storage for Pond 82: 150 CULTEC GALS (2x2) BMP-E2

Elevation (feet)	Horizontal (sq-ft)	Storage (cubic-feet)
399.50	**186**	0
399.55	186	4
399.60	186	7
399.65	186	11
399.70	186	15
399.75	186	19
399.80	186	22
399.85	186	26
399.90	186	30
399.95	186	33
400.00	186	37
400.05	186	44
400.10	186	51
400.15	186	58
400.20	186	64
400.25	186	72
400.30	186	79
400.35	186	86
400.40	186	93
400.45	186	101
400.50	186	108
400.55	186	115
400.60	186	122
400.65	186	129
400.70	186	136
400.75	186	143
400.80	186	150
400.85	186	157
400.90	186	163
400.95	186	170
401.00	186	177
401.05	186	183
401.10	186	189
401.15	186	196
401.20	186	203
401.25	186	210
401.30	186	216
401.35	186	222
401.40	186	228
401.45	186	234
401.50	186	239
401.55	186	245
401.60	186	250
401.65	186	255
401.70	186	260
401.75	186	266
401.80	186	271
401.85	186	276
401.90	186	281
401.95	186	287
402.00	186	292
402.05	186	297
402.10	186	299
402.15	186	300
402.20	186	302
402.25	186	303
402.30	186	305
402.35	186	306
402.40	186	308
402.45	186	309
402.50	186	311
402.55	186	312
402.60	186	314
402.65	186	315
402.70	186	317
402.75	186	318
402.80	186	320
402.85	186	322
402.90	186	323
402.95	186	325
403.00	186	326
403.05	186	328
403.10	186	329
403.15	186	331
403.20	186	332
403.25	186	334
403.30	186	335
403.35	186	336
403.40	186	**337**

Summary for Pond 83: 330 CULTEC GALS (3x3) BMP-E3

Inflow Area = 10,380 sf, 34.16% Impervious, Inflow Depth > 7.15" for 100-Year event
Inflow = 1.99 cfs @ 12.07 hrs, Volume= 6,186 cf
Outflow = 1.99 cfs @ 12.07 hrs, Volume= 5,293 cf, Atten= 0%, Lag= 0.0 min
Discarded = 0.02 cfs @ 12.07 hrs, Volume= 1,278 cf
Primary = 1.97 cfs @ 12.07 hrs, Volume= 4,015 cf
Routed to Link 94 : Pr. EAST OUT

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs / 4
Peak Elev= 406.70' @ 12.07 hrs Surf.Area= 392 sf Storage= 907 cf

Plug-Flow detention time= 92.1 min calculated for 5,290 cf (86% of inflow)
Center-of-Mass det. time= 30.3 min (817.6 - 787.3)

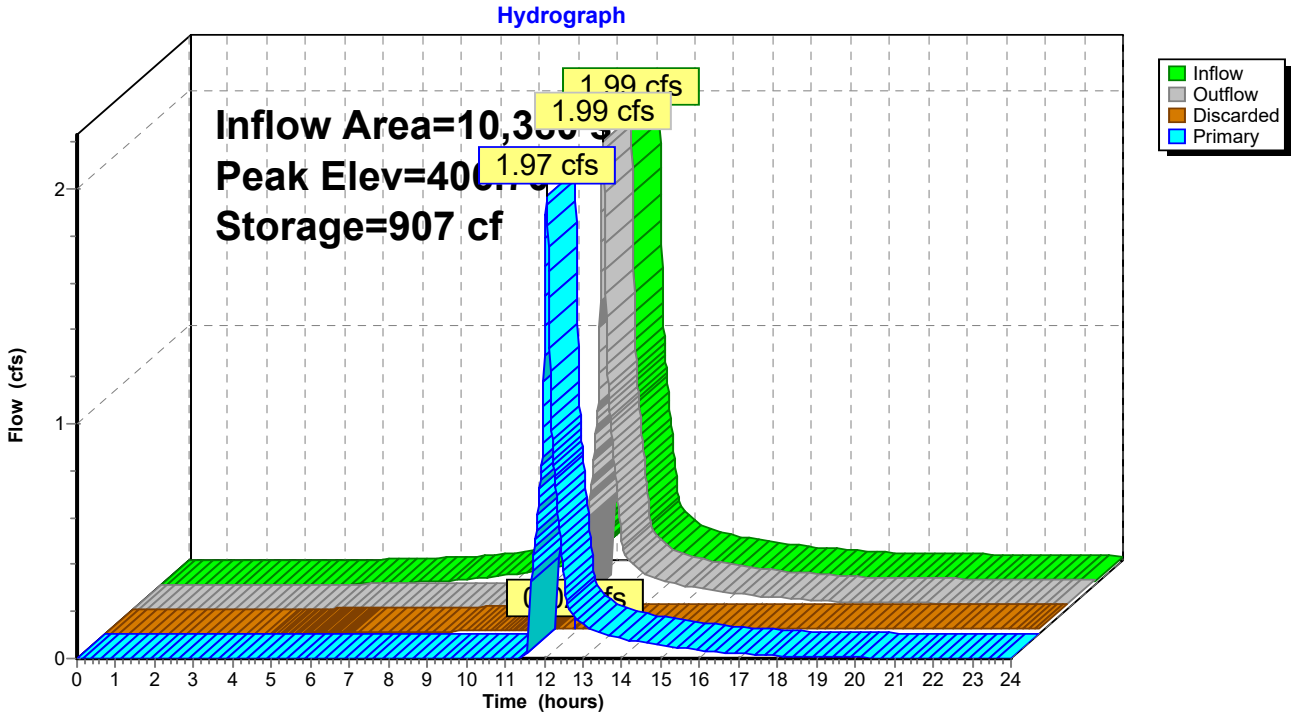
Volume	Invert	Avail.Storage	Storage Description
#1	402.00'	363 cf	**16.00'W x 24.50'L x 3.60'H STONE DATA VOLUME** 1,411 cf Overall - 503 cf Embedded = 908 cf x 40.0% Voids
#2	402.50'	503 cf	**Cultec R-330XLHD** x 9 Inside #1 Effective Size= 47.8"W x 30.0"H => 7.45 sf x 7.00'L = 52.2 cf Overall Size= 52.0"W x 30.5"H x 8.50'L with 1.50' Overlap Row Length Adjustment= +1.50' x 7.45 sf x 3 rows
#3	404.60'	41 cf	**2.00'W x 24.50'L x 2.10'H LVL SP VOLUME**-Impervious 103 cf Overall x 40.0% Voids
		907 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Primary	406.60'	**22.0' long x 1.0' breadth Broad-Crested Rectangular Weir - LVL.SP.** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 Coef. (English) 2.69 2.72 2.75 2.85 2.98 3.08 3.20 3.28 3.31 3.30 3.31 3.32
#2	Discarded	402.00'	**1.000 in/hr Exfiltration over Horizontal area** Conductivity to Groundwater Elevation = 399.00'

Discarded OutFlow Max=0.02 cfs @ 12.07 hrs HW=406.70' (Free Discharge)
↑—**2=Exfiltration** (Controls 0.02 cfs)

Primary OutFlow Max=1.96 cfs @ 12.07 hrs HW=406.70' (Free Discharge)
↑—**1=Broad-Crested Rectangular Weir - LVL.SP.**(Weir Controls 1.96 cfs @ 0.86 fps)

Pond 83: 330 CULTEC GALS (3x3) BMP-E3



Stage-Area-Storage for Pond 83: 330 CULTEC GALS (3x3) BMP-E3

Elevation (feet)	Horizontal (sq-ft)	Storage (cubic-feet)
402.00	**392**	0
402.05	392	8
402.10	392	16
402.15	392	24
402.20	392	31
402.25	392	39
402.30	392	47
402.35	392	55
402.40	392	63
402.45	392	71
402.50	392	78
402.55	392	94
402.60	392	110
402.65	392	126
402.70	392	142
402.75	392	157
402.80	392	173
402.85	392	189
402.90	392	205
402.95	392	220
403.00	392	236
403.05	392	252
403.10	392	267
403.15	392	283
403.20	392	298
403.25	392	313
403.30	392	328
403.35	392	344
403.40	392	359
403.45	392	374
403.50	392	389
403.55	392	404
403.60	392	419
403.65	392	434
403.70	392	449
403.75	392	464
403.80	392	479
403.85	392	494
403.90	392	508
403.95	392	522
404.00	392	537
404.05	392	551
404.10	392	565
404.15	392	578
404.20	392	592
404.25	392	605
404.30	392	619
404.35	392	632
404.40	392	645
404.45	392	657
404.50	392	670
404.55	392	682
404.60	392	693
404.65	392	706
404.70	392	718
404.75	392	730
404.80	392	741
404.85	392	751
404.90	392	761
404.95	392	771
405.00	392	780
405.05	392	789
405.10	392	798
405.15	392	806
405.20	392	815
405.25	392	824
405.30	392	833
405.35	392	842
405.40	392	851
405.45	392	859
405.50	392	868
405.55	392	877
405.60	392	886
405.65	392	887
405.70	392	888
405.75	392	889
405.80	392	890
405.85	392	891
405.90	392	892
405.95	392	893
406.00	392	894
406.05	392	895
406.10	392	896
406.15	392	897
406.20	392	898
406.25	392	899
406.30	392	900
406.35	392	901
406.40	392	902
406.45	392	903
406.50	392	903
406.55	392	904
406.60	392	905
406.65	392	906
406.70	392	**907**
406.75	392	**907**

Summary for Pond 84: 330 CULTEC GALS (2x3) BMP-E4

Inflow Area = 8,265 sf, 0.00% Impervious, Inflow Depth > 5.98" for 100-Year event
Inflow = 1.37 cfs @ 12.07 hrs, Volume= 4,118 cf
Outflow = 1.37 cfs @ 12.08 hrs, Volume= 3,514 cf, Atten= 0%, Lag= 0.1 min
Discarded = 0.01 cfs @ 12.08 hrs, Volume= 720 cf
Primary = 1.35 cfs @ 12.08 hrs, Volume= 2,794 cf
Routed to Link 94 : Pr. EAST OUT

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 403.53' @ 12.08 hrs Surf.Area= 273 sf Storage= 620 cf

Plug-Flow detention time= 89.0 min calculated for 3,513 cf (85% of inflow)
Center-of-Mass det. time= 26.2 min (834.7 - 808.5)

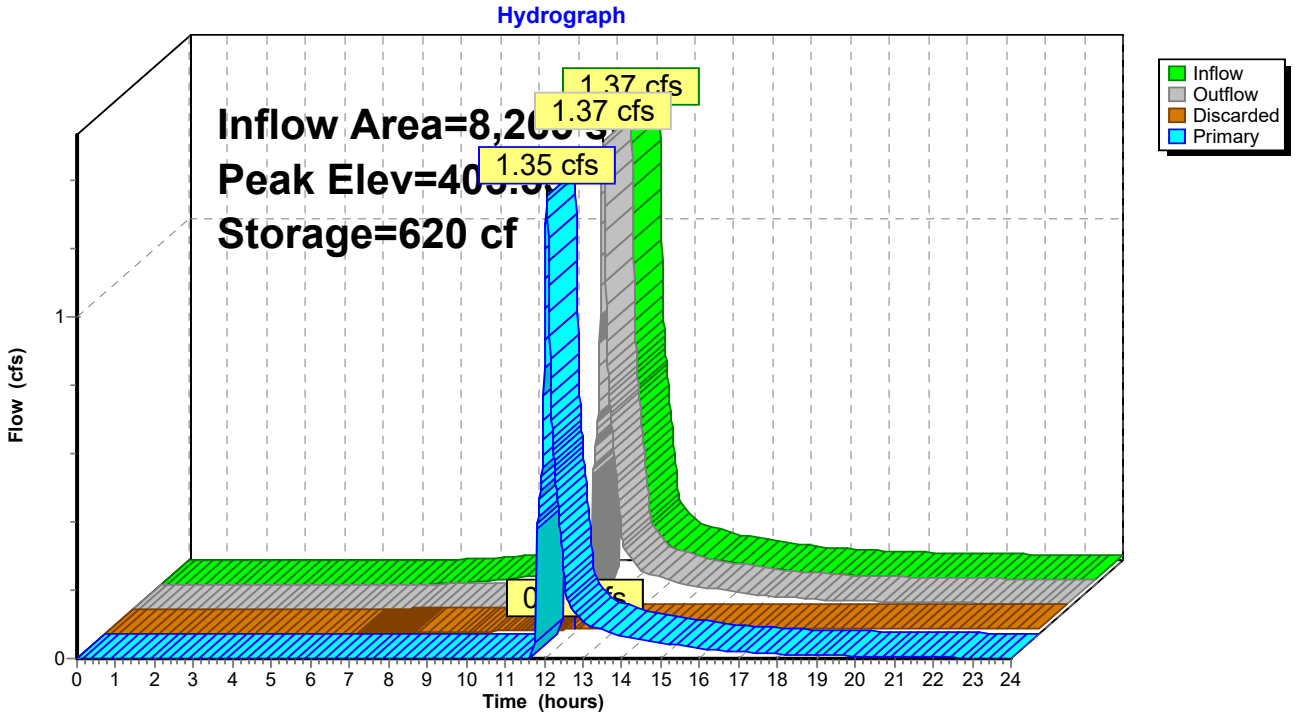
Volume	Invert	Avail.Storage	Storage Description
#1	400.00'	260 cf	**11.16'W x 24.50'L x 3.60'H STONE DATA VOLUME** 984 cf Overall - 335 cf Embedded = 649 cf x 40.0% Voids
#2	400.50'	335 cf	**Cultec R-330XLHD** x 6 Inside #1 Effective Size= 47.8"W x 30.0"H => 7.45 sf x 7.00'L = 52.2 cf Overall Size= 52.0"W x 30.5"H x 8.50'L with 1.50' Overlap Row Length Adjustment= +1.50' x 7.45 sf x 2 rows
#3	400.80'	34 cf	**3.00'W x 4.00'L x 2.80'H CB**-Impervious
		629 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Primary	403.40'	**1.7" x 6.5" Horiz. Orifice/Grate - CB X 5.00 columns** X 4 rows C= 0.600 in 17.7" x 35.2" Grate (35% open area) Limited to weir flow at low heads
#2	Discarded	400.00'	**1.000 in/hr Exfiltration over Horizontal area** Conductivity to Groundwater Elevation = 397.00'

Discarded OutFlow Max=0.01 cfs @ 12.08 hrs HW=403.53' (Free Discharge)
↑**2=Exfiltration** (Controls 0.01 cfs)

Primary OutFlow Max=1.35 cfs @ 12.08 hrs HW=403.53' (Free Discharge)
↑**1=Orifice/Grate - CB** (Weir Controls 1.35 cfs @ 1.18 fps)

Pond 84: 330 CULTEC GALS (2x3) BMP-E4



Stage-Area-Storage for Pond 84: 330 CULTEC GALS (2x3) BMP-E4

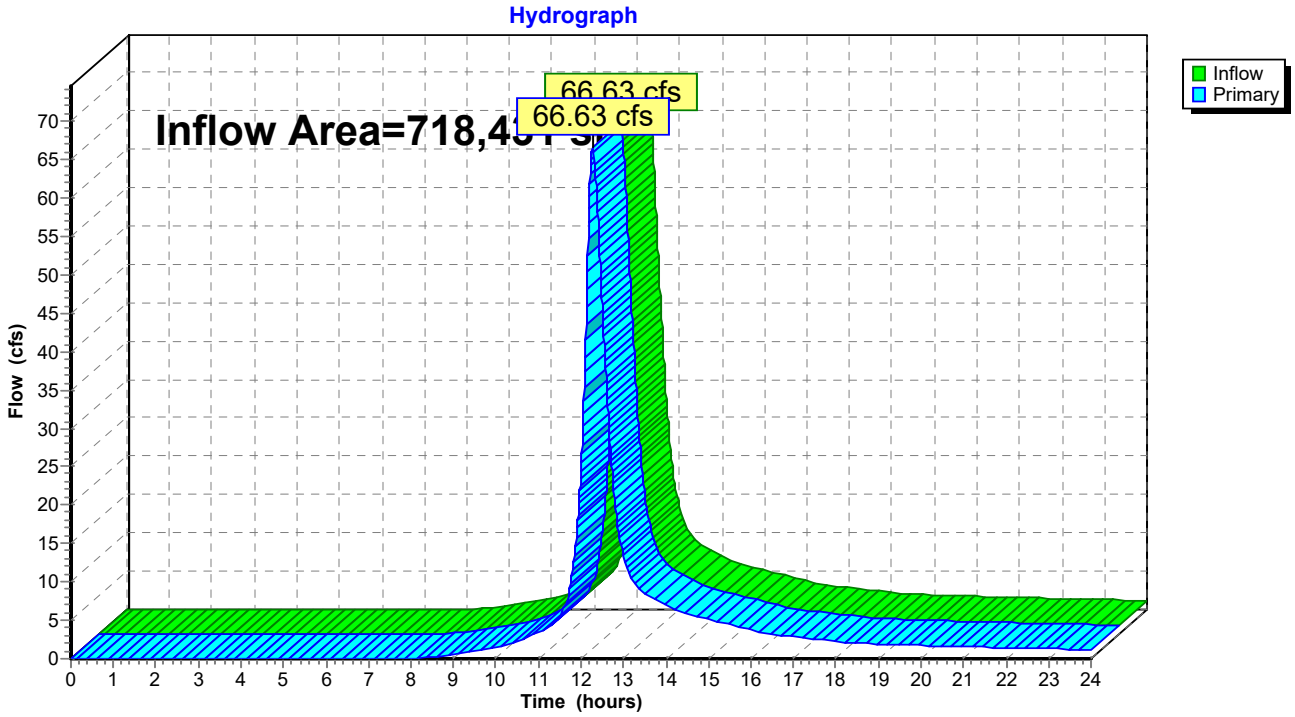
Elevation (feet)	Horizontal (sq-ft)	Storage (cubic-feet)
400.00	**273**	0
400.05	273	5
400.10	273	11
400.15	273	16
400.20	273	22
400.25	273	27
400.30	273	33
400.35	273	38
400.40	273	44
400.45	273	49
400.50	273	55
400.55	273	66
400.60	273	76
400.65	273	87
400.70	273	98
400.75	273	109
400.80	273	119
400.85	273	131
400.90	273	142
400.95	273	153
401.00	273	164
401.05	273	176
401.10	273	187
401.15	273	198
401.20	273	209
401.25	273	220
401.30	273	231
401.35	273	242
401.40	273	253
401.45	273	264
401.50	273	275
401.55	273	286
401.60	273	297
401.65	273	308
401.70	273	319
401.75	273	329
401.80	273	340
401.85	273	351
401.90	273	361
401.95	273	371
402.00	273	382
402.05	273	392
402.10	273	402
402.15	273	412
402.20	273	422
402.25	273	432
402.30	273	442
402.35	273	451
402.40	273	461
402.45	273	470
402.50	273	479
402.55	273	488
402.60	273	496
402.65	273	505
402.70	273	513
402.75	273	521
402.80	273	529
402.85	273	536
402.90	273	543
402.95	273	549
403.00	273	556
403.05	273	562
403.10	273	568
403.15	273	574
403.20	273	580
403.25	273	586
403.30	273	592
403.35	273	598
403.40	273	604
403.45	273	610
403.50	273	616
403.55	273	622
403.60	273	**629**

Summary for Link 91: Ex. WEST OUT

Inflow Area = 718,431 sf, 0.52% Impervious, Inflow Depth > 5.10" for 100-Year event
Inflow = 66.63 cfs @ 12.28 hrs, Volume= 305,546 cf
Primary = 66.63 cfs @ 12.28 hrs, Volume= 305,546 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs

Link 91: Ex. WEST OUT

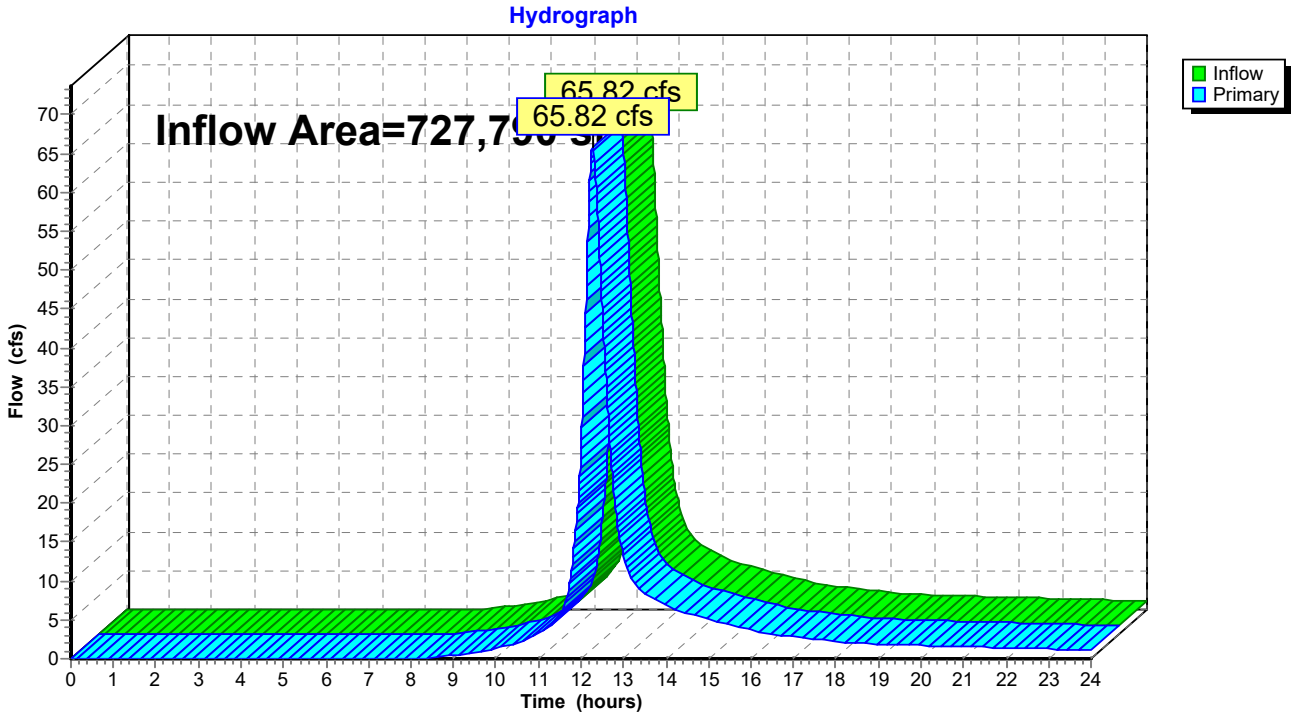


Summary for Link 92: Pr. WEST OUT

Inflow Area = 727,790 sf, 3.15% Impervious, Inflow Depth > 5.02" for 100-Year event
Inflow = 65.82 cfs @ 12.28 hrs, Volume= 304,452 cf
Primary = 65.82 cfs @ 12.28 hrs, Volume= 304,452 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs

Link 92: Pr. WEST OUT

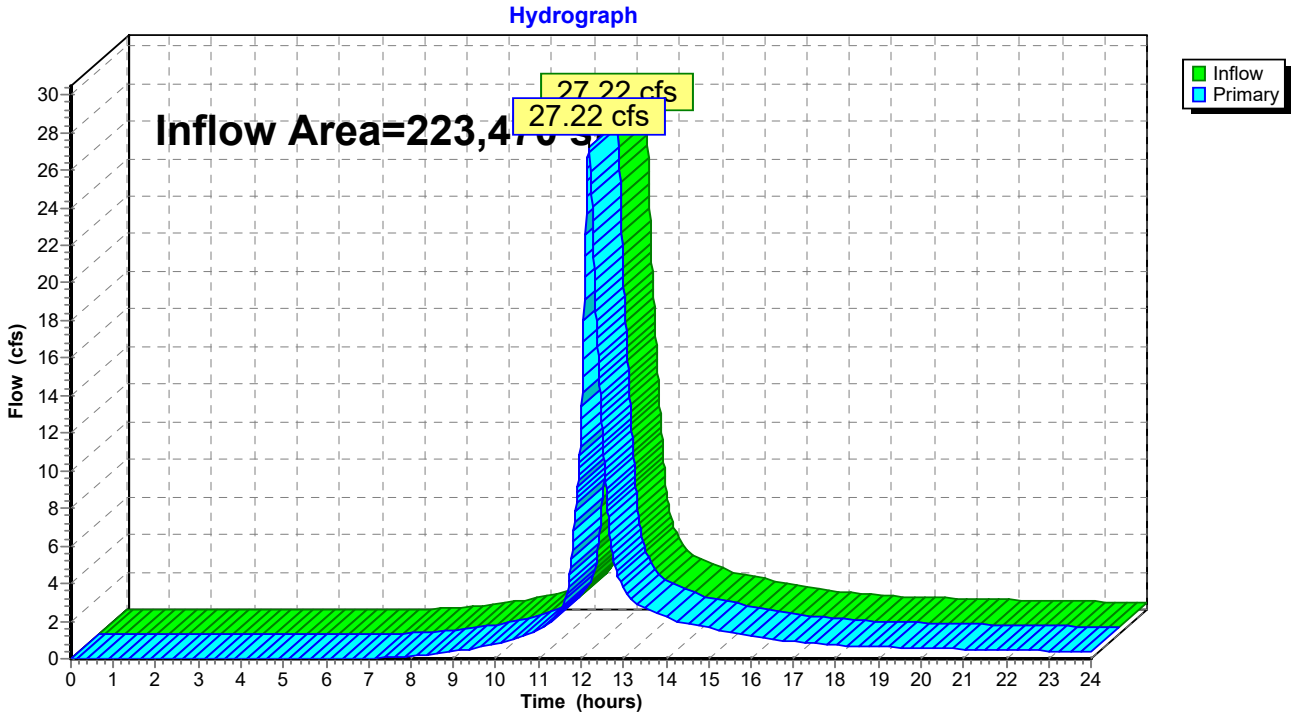


Summary for Link 93: Ex. EAST OUT

Inflow Area = 223,470 sf, 8.62% Impervious, Inflow Depth > 5.78" for 100-Year event
Inflow = 27.22 cfs @ 12.19 hrs, Volume= 107,547 cf
Primary = 27.22 cfs @ 12.19 hrs, Volume= 107,547 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs

Link 93: Ex. EAST OUT

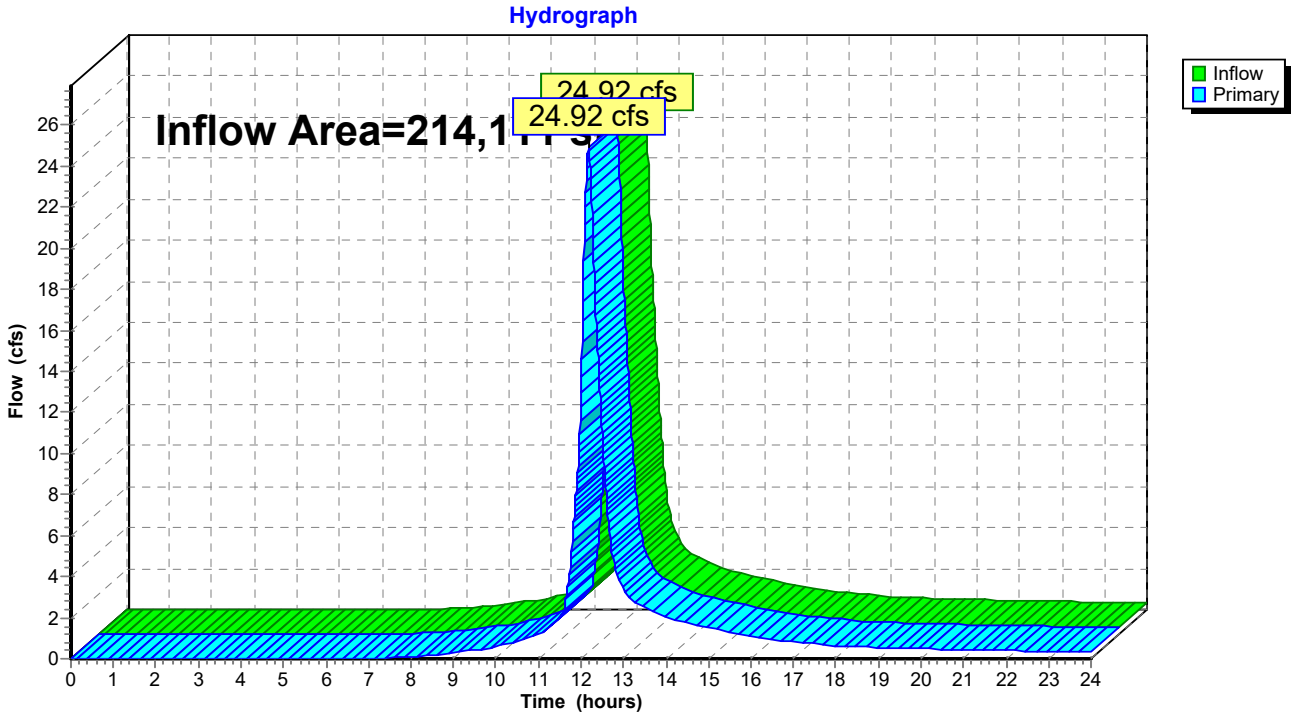


Summary for Link 94: Pr. EAST OUT

Inflow Area = 214,111 sf, 10.36% Impervious, Inflow Depth > 5.47" for 100-Year event
Inflow = 24.92 cfs @ 12.17 hrs, Volume= 97,655 cf
Primary = 24.92 cfs @ 12.17 hrs, Volume= 97,655 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs

Link 94: Pr. EAST OUT



APPENDIX – E

Appendix E – Corrective Action Log

Project Name:

SWPPP Contact:

Inspection Date	Inspector Name(s)	Description of BMP Deficiency	Corrective Action Needed (including planned date/responsible person)	Date Action Taken/Responsible person

APPENDIX – F

Appendix F – SWPPP Amendment Log

Project Name:
SWPPP Contact:

Amendment No.	Description of the Amendment	Date of Amendment	Amendment Prepared by [Name(s) and Title]

APPENDIX – G

Appendix G – Subcontractor Certifications/Agreements

SUBCONTRACTOR CERTIFICATION
STORMWATER POLLUTION PREVENTION PLAN

Project Number: _____

Project Title: _____

Operator(s): _____

As a subcontractor, you are required to comply with the Stormwater Pollution Prevention Plan (SWPPP) for any work that you perform on-site. Any person or group who violates any condition of the SWPPP may be subject to substantial penalties or loss of contract. You are encouraged to advise each of your employees working on this project of the requirements of the SWPPP. A copy of the SWPPP is available for your review at the office trailer.
Each subcontractor engaged in activities at the construction site that could impact stormwater must be identified and sign the following certification statement:

I certify under the penalty of law that I have read and understand the terms and conditions of the SWPPP for the above designated project and agree to follow the BMPs and practices described in the SWPPP.

This certification is hereby signed in reference to the above named project:

Company: _____

Address: _____

Telephone Number: _____

Type of construction service to be provided: _____

Signature: _____

Title: _____

Date: _____

APPENDIX – H

Appendix H – Grading and Stabilization Activities Log

Project Name:

SWPPP Contact:

Date Grading Activity Initiated	Description of Grading Activity	Date Grading Activity Ceased (Indicate Temporary or Permanent)	Date When Stabilization Measures are Initiated	Description of Stabilization Measure and Location

APPENDIX – I

Appendix I – SWPPP Training Log

STORMWATER POLLUTION PREVENTION TRAINING LOG

Project Name:

Project Location:

Instructor's Name(s):

Instructor's Title(s):

Course Location: _____ Date: _____

Course Length (hours): _____

Stormwater Training Topic: (*check as appropriate)*

- ❑ Erosion Control BMPs
- ❑ Emergency Procedures
- ❑ Sediment Control BMPs
- ❑ Good Housekeeping BMPs
- ❑ Non-Stormwater BMPs

Specific Training Objective:_____

_____

Attendee Roster: (*attach additional pages as necessary)*

No.	Name of Attendee	Company
1		
2		
3		
4		
5		
6		
7		

APPENDIX – J

Appendix J – Delegation of Authority Form

DELEGATION OF AUTHORITY

I, _____ (name), hereby designate the person or specifically described position below to be a duly authorized representative for the purpose of overseeing compliance with environmental requirements, including the Construction General Permit, at the _____ construction site. The designee is authorized to sign any reports, stormwater pollution prevention plans and all other documents required by the permit.

_____ (name of person or position)
_____ (company)
_____ (address)
_____ (city, state, zip)
_____ (phone)

By signing this authorization, I confirm that I meet the requirements to make such a designation as set forth in _____ (Reference State Permit), and that the designee above meets the definition of a "duly authorized representative" as set forth in _____ (Reference State Permit).

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name: _____

Company: _____

Title: _____

Signature: _____

Date: _____

APPENDIX – K