

**FLOODPLAIN MANAGEMENT EO 11988 AND WETLANDS PROTECTION EO 11990
DETERMINATION
COMMUNITY RECONSTRUCTION PROGRAM WITHIN NY STATE COMMUNITY
DEVELOPMENT BLOCK GRANT DISASTER RECOVERY PROGRAM
ELLENVILLE STREAM BANK RESTORATION PROJECT
ULSTER COUNTY, NEW YORK**

Governor's Office of Storm Recovery
U.S. Department of Housing and Urban Development Community Development Block Grant –
Disaster Recovery

Introduction & Overview

The purpose of Executive Order (EO) 11988 Floodplain Management is “to avoid to the extent possible the long- and short-term adverse impacts associated with occupancy and modification of floodplains and to avoid direct or indirect support of floodplain development wherever there is a practicable alternative.” The purpose of EO 11990 Protection of Wetlands is “to avoid to the extent possible the long- and short-term adverse impacts associated with the destruction or modification of wetlands and to avoid direct or indirect support of new construction in wetlands wherever there is a practicable alternative.” This report contains the analysis prescribed by 24 CFR Part 55 and documents the eight-step decision making process for the Proposed Action and pertains to activities within the Special Flood Hazard Area (SFHA) as defined by the Federal Emergency Management Agency (FEMA), or its successors, pursuant to the National Flood Insurance Program (NFIP), or a successor program, whether advisory, preliminary, or final and wetland as defined by 24 CFR 55.2(b)(11).

In addition, federal agencies are required to demonstrate that consideration of all practicable alternatives has resulted in the reduction or elimination of long- and short-term adverse impacts associated with occupancy and modifications of the floodplain or wetlands. This 8-step process includes assessing all practicable alternatives and incorporating public review.

Projects located within a Special Flood Hazard Area (SFHA) are subject to Executive Order 11988. Information on where SFHAs are located is available on Flood Insurance Rate Maps (FIRMs) published by FEMA. FEMA uses engineering studies to determine the delineation of these areas or zones subject to flooding. The relevant data source for the SFHA is the latest issued FEMA data or guidance, which includes advisory data, such as Advisory Base Flood Elevations (ABFEs) or preliminary and final FIRMs.

The Governor's Office of Storm Recovery (GOSR), an office of the New York State Housing Trust Fund Corporation (HTFC), proposes to provide Community Development Block Grant – Disaster Recovery (CDBG-DR) funding from the NY Rising Community Reconstruction Program to the Village of Ellenville for the Ellenville Stream Bank Restoration Project (Proposed Action) involves the restoration of damaged streams and stream corridors for several sites within the village of Ellenville, in Ulster County, New York.

The analysis that follows focuses on floodplain and wetland impacts, as there are direct wetland impacts associated with this project. Based on the type of land use and facility and other case characteristics described herein, it is concluded that there is a reasonable basis to proceed with funding for this project/ activity within floodplain and wetland. The CDBG-DR funding is administered through the New York State Rising Community Reconstruction Program which is using bottom-up community participation and State-provided technical expertise to develop resilient and sustainable communities. Thus, alternatives preventing or impeding the development of resilient and sustainable communities are not considered reasonable alternatives.

Description of Proposed Action & Land Use

The Village of Ellenville (Village) applied for U.S. Department of Housing and Urban Development (HUD) Community Development Block Grant (CDBG-DR) funding for design and construction of stream bank restoration improvements and resiliency measures within and along the West Branch of Beer Kill and Sandburg Creek. The Ellenville Stream Bank Restoration Project involves the restoration of damaged streams and stream corridors for several sites within the village of Ellenville, in Ulster County, New York (the Proposed Action). Stream restoration measures include channel realignments to original channel paths, removal of existing structures necessary to return stream banks to previous ground level grades, and placement of materials (soils and riprap armoring) to retain existing and future bank elevations and slopes. The flood mitigation measures include the construction of floodplain benches with rock and/or wood revetment (to reduce cutting at the toe of bank), the lowering of the height, angle and overall erosion hazard of the eroding streambanks; installation of in-stream rock structures to provide grade control and reduce the erosive force of water upon streambanks (by directing flood flows to the center of the stream channel); and the reconnection of floodplains in select areas (to reduce channel confinement and the corresponding increases in flood velocity that contribute to flood severity).

Originally, thirteen project sites were included in the proposed project. Five sites (6, 7, 9, 11 and 12) have been removed from the project scope. A total of eight (8) sites in the project area are proposed for improvements and summarized in the table below and shown in the attached figures (See Attached Figures.).

Site Designation Number	Site Name	Proposed Improvements
1	West Branch Beer Kill at Old Greenfield Road	Enhance bank protection along left bank toe
2	West Branch Beer Kill at Barbara Road Bridge	Replacement of gabion basket revetments, construction of cross vanes downstream of bridge
3	West Branch Beer Kill at Old Greenfield Road	Installation of rock cross vanes at upper and lower limits of project reach and transition project reach with adjacent and upstream and downstream reaches
4	West Branch Beer Kill at Old Greenfield Road	Installation of multiple cross vane structures
5	West Branch Beer Kill at Old Greenfield Road	Installation of rock cross vanes at upper and lower limits of the project reach and transition project reach with adjacent and upstream and downstream reaches

8	Sandburg Creek at Roslyn Street Pump Station	Installation of rip rap stone armoring on the east side of the creek, downstream of the sewer crossing in order to achieve streambank stabilization
10	Sandburg Creek at Hang Glider Road	Installation of floodplain benches, rock cross vanes, and rock and root wad/toe wood revetment along portions of the stream bank to prevent lateral bank erosion. Placement of a floodplain culvert through the western roadway bridge approach.
13	Sandburg Creek at Fallsview Pump Houses	Reconstruction and vegetation of floodplains along left and right banks, installation of rock cross vanes.

Hurricane Irene and Tropical Storm Lee caused widespread flooding, resulting in stream bank and streambed erosion and some areas of sediment deposition along major streams in the Village of Ellenville, and surrounding Town of Wawarsing, including the West Branches of the Beer Kill, and Sandburg Creek.

This Project is expected to provide risk reduction as well as social, health, environmental, and economic benefits to the Village and Town. Amongst other benefits, the Project will:

- Increase the channels' ability to handle water flow, therefore reducing hazard exposure to nearby assets including wastewater treatment plants, school emergency services, and the Ellenville Regional Hospital;
- Provide long-term flood protection of homes and businesses thereby encouraging economic health by ensuring retention of residents and commercial tax base;
- Restore the health, resiliency, and capacity of the subject waterways to better support biological diversity and resulting increases to water quality; and
- Reduce roadway inundation that can limit local and regional access to/from emergency, health, and social service providers and facilities.

New York State has experienced a number of storms (e.g., Hurricane Irene, Tropical Storm Lee, Hurricane Sandy) that have caused substantial damage over the last decade. As a result, this trend has increased the need for streambank restoration for Beer Kill and Sandburg Creek, in the Village of Ellenville to support the storm-stricken communities.

The lands surrounding the Proposed Action include residential areas or open forested land. Ellenville is largely a built-out community, with few large natural areas left in the Village. Some of the sites are located in the Shawangunk Mountains Scenic Byway, an 88-mile byway encircling the northern Shawangunk Mountains. The byway is a state awarded designation based on the significance of the scenic, natural, historic and recreational resources in the region.

Applicable Regulatory Procedure Per EO 11988 and EO 11990

The Proposed Action corresponds with a noncritical action not excluded under 24 CFR §55.12(b) or (c), and the use is a functionally dependent use. Funding is permissible for the use in the floodplain and wetland if the proposed action is processed under §55.20 and the findings of the determination are affirmative to suggest that the project may proceed. The Proposed Action would have both temporary and permanent effects on floodplains and wetlands.

Step 1. Determine Whether the Proposed Action is Located in the 100-year Floodplain (500-year for Critical Actions) or results in New Construction in Wetlands.

Approximately 2.8 acres of West Branch of Beer Kill river channel will be modified and approximately 1.4 acres of Sandburg Creek river channel will be modified. According to the Flood Insurance Rate Map (FIRM) panel 3611C0685F effective November 18, 2016 and panel 36111C0700F effective November 18, 2016, Sites 1, 2, 3, 4, 8, and 10 are located in Special Flood Hazard Area. Sites 8 and 13 are located in a Regulatory Floodway.

The Proposed Activity will result in temporary impacts to an estimated 7.5 acres of 100-Year Floodplain (temporary roads and staging area) and will result in permanent impacts to 1.9 acres of 100-Year Floodplain. Permanent impacts will consist of vegetated floodplain bench, rip-rap, revetment wall, rock flood toe revetment, rock flood grade control and permanent gravel access roads. The appropriate permits will be obtained in accordance with 6NYCRR Part 608, Protection of Waters Program; 6NYCRR Part 661, NYSDEC stormwater discharge from construction activities regulations, and Section 401 of the Clean Water Act. A Stormwater Pollution Prevention Plan (SWPPP) will be prepared for the Project.

No wetland under NYSDEC jurisdiction are located within the project areas. Sites 1, 2, 3, 4, and 5 which include the river channel of West Branch Beer Kill, are identified as a National Wetland Inventory (NWI) Riverine wetland (West Branch Beer Kill). Sites 8, 10 and 13, including the river channel of Sandburg Creek, are identified as a NWI Riverine wetland (Sandburg Creek). A NWI Freshwater Forested/Shrub wetland is located on the north bank of Sandburg Creek in the area of site 13.

Step 2. Initiate Public Notice for Early Review of Proposal.

Because the proposed action is located within wetlands, GOSR published an early notice, that allowed for the public and public agencies to provide input on the decision to provide funding for the proposed action. The early public notice and 15-day comment period is complete.

"Early Notice of a Proposed Activity in Floodplain" was published in the *Shawangunk Journal* newspaper on January 16, 2020, with the 15-day period expiring on January 31, 2020. The notice targeted local residents, including those within the floodplain. (See the attached **Early Notice and Affidavit of Publication**). The notice was also sent to the following state and Federal agencies on January 16, 2020: HUD; Federal Emergency Management Agency (FEMA); U.S Fish and Wildlife Service (USFWS); U.S. Environmental Protection Agency (EPA); NYSDEC; NY State Historic

Preservation Office (SHPO); NYS Office of Parks, Recreation and Historic Preservation; NYS Department of Transportation (DOT); and the NYS Division of Homeland Security & Emergency Services. The notice was also sent to agencies within the Village of Ellenville and Town of Wawarsing. GOSR has not received comments in response to the Early Notice.

Step 3. Identify and Evaluate Practicable Alternatives to Locating the Proposed Action in a 100-year Floodplain (or 500-year Floodplain if a Critical Action) or Wetland.

The New York State Rising Community Reconstruction Program is structured to provide eligible communities' resources and expertise to build projects resilient to future flooding events.

The primary alternative for the current proposed action is the "No Action" alternative. Not undertaking the Proposed Action would not be consistent with the goals and objectives of the Ulster County Communities New York Rising Community Reconstruction Plan, in which it is a featured project that will provide risk reduction as well as social, health, environmental, and economic benefits to the Village and Town. The project will increase the river channels' ability to handle water flow, therefore reducing hazard exposure to nearby assets including wastewater treatment plants, school emergency services, and the Ellenville Regional Hospital; Provide long-term flood protection of homes and businesses thereby encouraging economic health by ensuring retention of residents and commercial tax base; Restore the health, resiliency, and capacity of the subject waterways to better support biological diversity and resulting increases to water quality; and Reduce roadway inundation that can limit local and regional access to/from emergency, health, and social service providers and facilities.

The No Action Alternative would result in future severe flooding of the area and will cost the Village of Ellenville and Town of Wawarsing, Ulster County, New York, significantly more money in damages over time. Without an improved drainage, the area would continue to be impacted by flooding and water damage.

The above identified alternatives will be re-evaluated in response to public comments received.

Step 4. Step 4: Identify and describe the proposed action's direct and indirect effects associated with occupying or modifying the floodplain and wetlands.

The purpose of floodplain and wetland evaluation is to consider factors relevant to a Proposed Action's effect on the survival, quality, and beneficial function and values of floodplains and wetlands. These factors include public health (including water supply and water quality), maintenance of natural systems, cost increases attributed to construction in wetland, and other uses of wetland in the public interest.

According to the FEMA Report - A Unified National Program for Floodplain Management, two definitions commonly used in evaluating actions in a floodplain are "structural" and "nonstructural" activities. Per the report, structural activity is usually intended to mean adjustments that modify the behavior of floodwaters through the use of measures such as public works dams, levees and channel work. Non-structural is usually intended to include all other adjustments (e.g., regulations, insurance, etc.) in the way society acts when occupying or modifying a floodplain. These definitions are used in describing impacts that may arise in association with potential advancement of the Project.

There would be a negligible change in the existing impermeable surface, which would be the only long-term effect on the floodplain. The Project would not disturb the NWI wetlands.

The floodplain area in the Project sites are previously disturbed by the existing roads and residential development along these roads. No existing impermeable surfaces are associated with the Project locations and none will be created. The project actions will occur the along the banks of creeks and include bank stabilization with permeable materials such as rip rap, gravel (temporary access road), and rock revetments. Restoration/stabilization of Sandburg Creek will require some channel relocation to soften bend angles, grading the areas adjacent to the channel to create an interactive floodplain, installing cross vanes to anchor the bed elevation and to direct flow into the center of the channel away from currently eroding banks, and installing structures at critical locations along the bank to stabilize actively eroding banks and improve fish habitat. Stream barbs will be constructed in West Branch Beer Hill to establish grade control and encourage the stream to maintain single thread channel.

The project would directly contribute to the resiliency of the Village of Ellenville and the Town of Wasarsing.

The area of disturbance would not adversely affect the natural and beneficial values of the wetlands, floodplains or properties. The resilience of these areas and the communities as a whole will be improved by these projects.

Public health, safety, and welfare, including water supply, quality, recharge, and discharge; pollution; flood and storm hazards and hazard protection; and sediment and erosion.

The Proposed Action will reduce risks of flooding provide social, health, environmental, and economic benefits to the Village and Town by reducing flooding to road and properties, eliminating damages to roads and property and providing safe access to emergency responders. The action includes measures to reduce sedimentation within the West Branch Beer Kill and Sandburg Creek. Construction activities will be conducted in accordance with Best Management Practices which include erosion control .

Maintenance of natural systems, including conservation and long-term productivity of existing flora and fauna; species and habitat diversity and stability; natural hydrologic function; wetland type; fish; wildlife; timber; and food and fiber resources.

Implementation of the Proposed Action will comply with all best management practices and permit requirements and conditions set forth in the applicable Federal, State, and local permits. Prior to construction, the appropriate permits would be obtained in accordance with 6NYCRR Part 608, Protection of Waters Program; 6NYCRR Part 661, NYSDEC stormwater discharge from construction activities regulations, and Section 401 of the Clean Water Act. An SWPPP would be prepared for the Project. The Proposed Action would adhere to the requirements of these permits, which include preventing backfill from entering the wetland or protected buffer area, using clean fill, confining equipment and materials storage to upland areas, and stabilizing disturbed soil.

A Clean Water Act Section 404 Permit will be obtained for the Proposed Activity. The proposed Activity would adhere to the conditions of this permit, which requires that steps be taken to avoid impacts to wetlands, streams and other aquatic resources; that potential impacts have been

minimized; and that compensation will be provided for all remaining unavoidable impacts.

Water quality will be protected from temporary disturbance from construction of the Proposed Action by preventing erosion, sedimentation, and the introduction of contaminants associated with construction equipment within the floodplain. Temporary erosion and sediment controls would be installed over the length of the Project. These measures would be installed prior to disturbance and would remain in place until all slopes are stabilized and revegetated as necessary.

Cost increases attributed to wetland-required new construction and mitigation measures to minimize harm to wetlands that may result from such use.

The proposed project activities will be completed in accordance with construction BMP and all applicable federal, state, and local permits and their requirements and conditions, which will be obtained prior to commencing work. Consequently, there would be no additional anticipated cost increases for mitigation measures to minimize harm to wetlands.

Other uses of wetlands in the public interest, including recreational, scientific, and cultural uses.

The Proposed Action would not change current land use or require the acquisition of additional property and would, therefore, not affect any current uses of the project area.

Step 5. Identify methods to minimize the potential adverse impacts within a floodplain and wetland and to restore and preserve the natural and beneficial values.

Implementation of the Proposed Action will comply with all best management practices and permit requirements and conditions set forth in the applicable Federal, State, and local permits. Best management practices following permit requirements and conditions will be implemented during the construction period and disturbed areas revegetated as appropriate once construction is completed. Water quality will be protected from temporary disturbance from construction of the Proposed Action by preventing erosion, sedimentation, and the introduction of contaminants associated with construction equipment within the floodplain. Temporary erosion and sediment controls would be installed over the length of the Project. These measures would be installed prior to disturbance and would remain in place until all slopes are stabilized and revegetated as necessary. All stockpiled soils would be protected with sediment and erosion control measures in compliance with Section 207-02 of the NYS Department of Transportation Standard Specifications. All necessary precautions would be undertaken to prevent contamination of any streams, channels or waterways by silt, sediment, fuel, solvents, lubricants, epoxy coatings, debris, concrete leachate, or any other pollutant associated with Project construction would be avoided through proper equipment maintenance and washout basins, platforms, nets, and screens for equipment cleaning. Debris or excess construction material would be immediately removed off-site.

Prior to construction, the appropriate permits would be obtained in accordance with 6NYCRR Part 608, Protection of Waters Program; 6NYCRR Part 661, NYSDEC stormwater discharge from construction activities regulations, and Section 401 of the Clean Water Act. An SWPPP would be prepared for the Project. Construction activities related to the Proposed Action would adhere to the requirements of these permits, which include preventing backfill from entering the wetland or protected buffer area, using clean fill, confining equipment and materials storage to upland areas, and stabilizing disturbed soil. A Clean Water Act Section 404 Permit will be obtained for the Proposed Activity. The proposed Activity would adhere to the conditions of this permit, which

requires that steps be taken to avoid impacts to wetlands, streams and other aquatic resources; that potential impacts have been minimized; and that compensation will be provided for all remaining unavoidable impacts.

Step 6. Reevaluate the Alternatives and Proposed Action.

The “no action” alternative would not address the purpose and need of the Proposed Action. Not undertaking the Project would not be consistent with the goals and objectives of the Ulster County Communities New York Rising Community Reconstruction Plan to improve drainage without negatively without resulting in worse flooding downstream. Under the No Action Alternative, the project area would continue to be subject to future severe flooding, which will cost the Village of Ellenville and Town of Wawarsing, Ulster County, New York significantly more money in damages over time. The Village and Town would continue to experience main arterial road closures, damage to public infrastructure, and flooding of commercial establishments during storm events. Construction activities will adhere to the conditions of all applicable permits, which will be obtained prior to construction. This will minimize potential temporary adverse impacts on the wetlands during construction.

The impacts of these alternatives will be re-evaluated in response to any public comments received.

Step 7. If the only practicable alternative is locating in a floodplain, publish a final public notice.

It is the finding of this report that there is no practicable alternative to locating the project in the floodplain and wetlands. The location within floodplain and wetlands cannot be avoided.

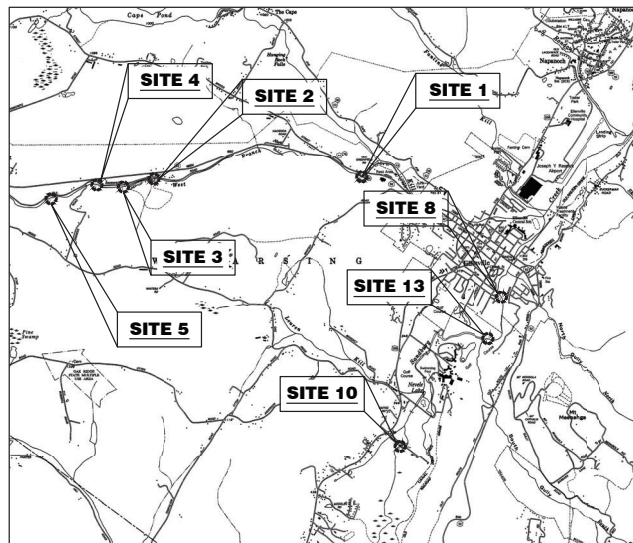
A combined Notice of Intent to Release Funds (NOIRROF)/final public notice was published in the Shawangunk Journal newspaper by the Governor’s Office of Storm Recovery on February 6, 2020, in compliance with Executive Orders 11988 and 11990 and 24 CFR Part 55. The final notice details the reasons why the project must be located in wetlands, a list of alternatives considered, and all mitigation measures taken to minimize adverse impacts and preserve natural and beneficial values of the wetlands. All comments received during the comment period will be addressed prior to funds being committed to the proposed project. The comment period started with the Notice of Intent to Release Funds (NOIRROF)/final public notice on February 6, 2020. The comment period for the Final Notice is 7 days, which expires at 5pm on February 13, 2020. The Final Notice was also sent to the following state and Federal agencies on February 6, 2020: the US Army Corps of Engineers, HUD, FEMA, USFWS, EPA, NYSDEC, NY SHPO, NYS Office of Parks, Recreation and Historic Preservation, NYS DOT, and the NYS Division of Homeland Security and Emergency Services. The notice was also sent to the agencies within the Town of Wallkill.

Step 8. Implement the Proposed Action

GOSR, operating under the auspices of the New York State Homes and Community Renewal’s (NYSHCR) Housing Trust Fund Corporation, is the responsible entity. GOSR will ensure that the Proposed Action, as described above, is executed and necessary language will be included in all agreements with participating parties. Implementation of the proposed action may require additional local and state permits, which could place additional design modifications or mitigation requirements on the Project. It is acknowledged there is a continuing responsibility by the responsible entity to ensure, to the extent feasible and necessary, compliance with Steps 5 through 7.

Attachments
Site Plans
Early Notice
Affidavit of Publication

DRAFT



PROJECT LOCATION PLAN

NOT TO SCALE

INDEX OF DRAWINGS

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C-501	EROSION AND SEDIMENT CONTROL DETAILS

95% DESIGN DRAWINGS

ELLENVILLE STREAM RESTORATION

VILLAGE OF ELLENVILLE AND TOWN OF WAWARSING STREAM RESTORATION PROJECT

CONTRACT 1 - GENERAL CONSTRUCTION

VILLAGE OFFICIALS

JEFF KAPLAN MAYOR
RAYMOND YOUNGER DEPUTY MAYOR
JOHN GAVARIS VILLAGE TRUSTEE
FRANCISCO OLIVERAS VILLAGE TRUSTEE
PATRICIA STEINHOFF VILLAGE TRUSTEE

TOWN OFFICIALS

TERRY HOUCK SUPERVISOR
DAN JOHNSON DEPUTY SUPERVISOR
STEPHEN BRADLEY COUNCILMAN
ROGER BUCHWALTER COUNCILMAN
THOMAS J. BRIGGS COUNCILMAN

DECEMBER 2019

**Barton
&Loguidice**

NEW YORK STATE PROFESSIONAL ENGINEERS LICENSE NO. 075248

924.068.002

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION, SURVEY, AND STAKE OUT OF PROPOSED IMPROVEMENTS. EXCESS EXCAVATED MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF AT SITE IN A LAWFUL MANNER.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING HIMSELF WITH EXISTING CONDITIONS OF ALL AREAS OF PROPOSED WORK SHALL INCLUDE PROVISIONS TO AVOID CONFLICTS WITH ANY/OR RESTORE SITE FEATURES IN KIND, NO SEPARATE OR ADDITIONAL PAYMENT WILL BE MADE FOR WORK REQUIRED TO AVOID CONFLICTS WITH EXISTING SURFACE FEATURES OR RESTORE THOSE WHICH ARE NOT KNOWN.
3. CONTRACTOR IS RESPONSIBLE FOR ALL SURVEY AND STAKEOUT FOR THIS PROJECT. THE CONTRACTOR IS ALSO RESPONSIBLE FOR FINAL AS-BUILT PLANS FOR THIS PROJECT IN DIGITAL FORMAT WITH TIES TO ALL UTILITY CONNECTIONS, BENDS, VALVES, LOCATIONS, LENGTHS, OR LINES. CORRECTIONS ON THE INSTRUMENTS, AND/OR AS-BUILT PLANS SHALL BE REVIEWED BY THE OWNER AND ENGINEER, AND THE CONTRACTOR SHALL PROVIDE ANY CORRECTION OR ADMISSIONS TO THE SATISFACTION OF THE OWNER AND ENGINEER BEFORE UTILITIES WILL BE ACCEPTED.
4. UNLESS OTHERWISE NOTED ON THE DRAWINGS, ALL DIMENSIONS SHOWN ON THE SITE DRAWINGS FOLLOW THESE CONVENTIONS:
 - a. DIMENSIONS TO BUILDINGS AND RETAINING WALLS ARE TO THE EXTERIOR OF EXPOSED FACE OF THE WALL
 - b. DIMENSIONS TO A CURB ARE TO THE FACE OF THE CURB
 - c. DIMENSIONS TO A FENCE OR RAILING ARE TO THE CENTERLINE OF THE FENCE OR RAILING
 - d. DIMENSIONS TO A MANHOLE, INLET, CLEAN OUT, PIPE BEND, VALVE, FIRE HYDRANT OR OTHER STRUCTURES OFT LOCAL IMPORTANCE ARE TO THE CENTER OF THE STRUCTURE
5. THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE OF ANY DISCREPANCY UPON DISCOVERY AND SHALL RECEIVE CLARIFICATION BEFORE PROCEEDING WITH CONSTRUCTION.
6. CONTRACTOR SHALL DEVELOP AND MAINTAIN A DETAILED CONSTRUCTION SCHEDULE THAT IDENTIFIES DATES AND DURATION OF ALL PORTIONS OF THE WORK. FULL TIME ACCESS ALONG ROADWAYS AND TO ALL UTILITIES SHALL BE MAINTAINED THROUGHOUT THE PROJECT.
7. THE CONTRACTOR SHALL SUBMIT A CONSTRUCTION SEQUENCE FOR REVIEW PRIOR TO THE PRE-CONSTRUCTION MEETING. THE FOLLOWING IS A SUGGESTED SEQUENCE OF CONSTRUCTION:
 - a. OBTAIN PLAN APPROVAL AND OTHER APPLICABLE STATE AND LOCAL PERMITS. THE OWNER SHALL SUBMIT THE NOTICE OF INTENT (NOI) TO OBTAIN COVERAGE UNDER GP-0-15-002 IN ACCORDANCE WITH PART 8 OF THE PERMIT.
 - b. SCHEDULE AND HOLD A PRECONSTRUCTION MEETING WITH OWNER, ENGINEER, CONTRACTOR(S), COVEYERS OFT LOCAL IMPORTANCE, AND/OR (GOSR) GRANT MANAGER, AND VILLAGE/TOWN AT LEAST ONE (1) WEEK PRIOR TO STARTING CONSTRUCTION.
 - c. ALL CONTRACTORS AND SUBCONTRACTORS MUST COMPLETE AND EXECUTE A CONSTRUCTION CERTIFICATION FORM AS LAYOUT IN THE SWPPP.
 - d. MOBILIZE TO SITE AND INSTALL ESTABLISHED LIMITS OF WORK AND BUFFER AREAS PRIOR TO STARTING CONSTRUCTION. CONSTRUCTION BARRIERS BY INSTALLING BARRIERS BETWEEN WORK AREA AND ENVIRONMENTALLY SENSITIVE AREAS. IDENTIFY TREES TO BE PROTECTED NEAR WORK LIMITS AND INSTALL TREE PROTECTION MEASURES. OBTAIN APPROVAL FROM PROTECTED NEAR TO ANY TREE REMOVAL.
 - e. OBTAIN CONSTRUCTION ACCESS, STAGING, LAYOUT, TEMPORARY STOCKPILE, AND CONCRETE WASHOUT AREAS.
 - f. INSTALL EROSION AND SEDIMENT CONTROL MEASURES IN PREPARATION OF THE CONSTRUCTION. ALL EROSION AND SEDIMENT CONTROL STRUCTURES (INCLUDING STABILIZED CONSTRUCTION ENTRANCES) SHALL BE IN PLACE PRIOR TO UPGRADE LAND DISTURBANCE.
 - g. COMPLETE TREE REMOVAL, AS REQUIRED WITHIN THE LIMITS OF DISTURBANCE.
 - h. COMPLETE ROUGH GRADING AND CONSTRUCTION OF ALL UTILITIES AND STRUCTURES.
 - i. COMPLETE RESTORATION OF ALL DISTURBED AREAS INCLUDING PAVING, LANDSCAPE PLANTING, AND SEEDING.
 - j. ONCE FINAL STABILIZATION IS ACHIEVED, REMOVE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SUBJECT TO THE APPROVAL OF THE ENGINEER.
 - k. MAKE REPAIRS AS REQUIRED BY THE OWNER TO OBTAIN CERTIFICATE OF COMPLIANCE AND FILE NOTICE OF TERMINATION (NOT) IN ACCORDANCE WITH GP-0-15-002 PART V.
8. THE CONTRACTOR SHALL PREPARE A MAINTENANCE AND PROTECTION OF TRAFFIC PLAN THAT IDENTIFIES THOSE FIELDS THAT ARE IN ADJACENT VILLAGES/TOWNS, AND UPLAND COUNTY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN AND INCUR THE COST OF ALL REQUIRED PERMITS, INSPECTIONS, CERTIFICATES, ETC.
9. CONTRACTOR SHALL PROVIDE A WRITTEN PLAN TO INDICATE HOW ACTIVITIES WILL BE CONDUCTED TO AVOID OR MINIMIZE UNNECESSARY NOISE, DUST, AND VISUAL IMPACTS OF CONSTRUCTION ACTIVITIES ON ADJACENT LANDS. MANAGEMENT OF TRAFFIC, STAGING PROCEDURES, AND HOW CONSTRUCTION TRAFFIC EXITING AND ENTERING THE SITE WILL BE MANAGED TO AVOID UNNECESSARY IMPACT ON TRAFFIC USING LOCAL ROADS.
10. CONTRACTOR TO PROVIDE FULL TIME ACCESS ALONG ROADWAYS AND DRIVEWAYS TO OWNER.
11. THE OWNER MAY AUTHORIZED APPROPRIATE PROFESSIONALS TO OBSERVE AND MONITOR THE SITE ACTIVITIES WHEN DEEMED NECESSARY TO COMPLY WITH THE CONDITIONS OF APPROVAL OR THE PROTECTION OF ENVIRONMENTALLY SENSITIVE AREAS.
12. CONTRACTOR SHALL BE RESPONSIBLE FOR TRAFFIC CONTROL FOR DELIVERY OF MATERIALS AND RELATED WORK.
13. THE CONTRACTOR IS RESPONSIBLE FOR ALL EXCAVATION, INCLUDING ANY ROCK OR CONCRETE EXCAVATION, STRUCTURES AND CONCRETE EXCAVATION AT THE PROJECT SITE.
14. CONTRACTOR SHALL TAKE CARE NOT TO UNDERMINE ROADWAY/DRIVEWAY PAVEMENT, ANY DISTURBED OR UNDERMINED PAVEMENT SHALL BE REPLACED AT NO ADDITIONAL COST TO THE OWNER.
15. CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING AND THE MAINTENANCE OF SURFACE DRAINAGE DURING THE COURSE OF WORK.
16. CONTRACTOR SHALL REMOVE, STORE AND REPLACE SIGNS AND MAILBOXES AS NECESSARY. SIGNS AND MAILBOXES MUST REMAIN FUNCTIONAL AND ACCESSIBLE AT ALL TIMES. ALL DAMAGED SIGNS SHALL BE REPLACED IN KIND AT CONTRACTORS EXPENSE.
17. RESTORE ALL SURFACES TO AS GOOD OR BETTER CONDITION BEFORE CONSTRUCTION AS SOON AS POSSIBLE. FOLLOWING COMPLETION OF THE PROJECT, PROGRESS RESTORATION PROMPTLY TO MINIMIZE IMPACTS TO VEHICULAR AND PEDESTRIAN ACCESS.
18. ALL COSTS ASSOCIATED WITH PREPARING ANY STORAGE AND STAGING AREA(S) SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THIS INCLUDES, BUT IS NOT LIMITED TO, CLEARING AND GRADING, STABILIZATION OF EXPOSED SOILS, EROSION CONTROL, AND TEMPORARY LIMITED ACCESS ROADS, ALL SECURITY FENCING, AND RESTORATION OF STAGING OR DISTURBED AREAS.

ENVIRONMENTAL RESOURCES NOTES:

1. CONTRACTOR SHALL IDENTIFY AND PROVIDE FENCING TO PROTECT SENSITIVE AREAS IDENTIFIED ON THE PLANS IN COORDINATION WITH THE ENGINEER AND OWNER BEFORE COMMENCING ANY WORK.
2. WORK IN WETLANDS, WATERCOURSES, AND OTHER ECOLOGICALLY SENSITIVE AREAS SHALL USE THE SPECIFIC CONSTRUCTION TECHNIQUES DESCRIBED IN THE SWPPP AND CONTRACT DOCUMENTS. PRIOR TO WORK, THE CONTRACTOR SHALL LIMITS OF CONSTRUCTION FENCE TO BE PLACED AT SITE WITH OWNER, ENGINEER, AND TOWN.
3. ALL TREE CLEARING ACTIVITIES ON THE SITE SHALL BE RESTRICTED TO THE PERIOD BETWEEN NOVEMBER 1 AND MARCH 31. INDIVIDUAL TREE REMOVAL FOR THE PLACEMENT OF STREAM BARBS OR OTHER FENCES SHALL BE LIMITED TO FALLING. THE CONTRACTOR SHALL ADVISE THE TOWN OF ANY TREE REMOVAL PRIOR TO THE START OF THE FENCING SURVEY THE NIGHT PRIOR TO REMOVAL. CONTACT XXX FOR NOTIFICATION OF EMERGENT BARB SURVEY.
4. TREE REMOVAL SHALL BE CONFINED TO THE DESIGNATED WORK LIMITS OR OTHER PROPERTY AS INDICATED ON THE PLANS. THE CONTRACTOR SHALL MAKE EVERY ATTEMPT TO PRESERVE ALL TREES. NO CLEARING SHALL BE COMMENCED UNLESS FIRST APPROVED BY THE ENGINEER AND OWNER. ANY REMOVAL OF TREES FOR CLEARING IN THE FIELD WITH THE ENGINEER AND OWNER, ANY UNAUTHORIZED DAMAGE TO LANDSCAPING OR TREES SHALL REQUIRE THEM TO BE REPLACED IN KIND AT NO ADDITIONAL COST TO THE OWNER.
5. CLEARING OF TREES SOLELY FOR STAGING OF EQUIPMENT IS NOT ACCEPTABLE. DISTURBANCE SHOULD BE LIMITED TO ONLY WHAT IS NECESSARY FOR EQUIPMENT PASSAGE AND THE EXPOSURE OF NON-VEGETATED AREAS (E.G. MATERIALS STAGING) OF PERMANENT STRUCTURES. EXCESSIVE STAGING AREAS SHOULD BE AVOIDED.

1. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER'S REPRESENTATIVE FOR FIELD ADJUSTMENTS OF NEW WORK TO BLEND WITH EXISTING WORK THAT IS TO REMAIN.
2. THE CONTRACTOR SHALL STAKE OUT ALL GRADES IN THE FIELD PRIOR TO CONSTRUCTION AND NOTIFY THE OWNER'S REPRESENTATIVE IMMEDIATELY OF ANY DISCREPANCIES WITH THE CONSTRUCTION DOCUMENTS.
3. THE CONTRACTOR SHALL CONTINUALLY MONITOR EXISTING STORM WATER AND EROSION CONTROL SYSTEMS AND PERIODICALLY CLEAN, REPAIR, AND UPGRADE AS REQUIRED.
4. GRADES WITH DRIP-LINE OF VEGETATION TO REMAIN SHALL NOT BE COMPACTED OR ALTERED UNLESS DIRECTED IN EITHER THE CONSTRUCTION DOCUMENTS OR IN THE EVENT THIS IS UNAVOIDABLE, CONSULT THE OWNER'S REPRESENTATIVE BEFORE PROCEEDING.

1. PLANS ILLUSTRATE KNOWN SUBSURFACE STRUCTURES, ABOVE GROUND STRUCTURES, AND/OR UTILITIES BELIEVED TO EXIST IN THE WORKING AREA. THE EXACT OR EVEN APPROXIMATE LOCATION OF SUCH MAY BE DIFFERENT FROM THAT SHOWN OR MAY NOT BE SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ALL NECESSARY INFORMATION AND TO LOCATE AND TO PROTECT ALL UTILITIES. CONTRACTOR SHALL COMPLY WITH THE STATE OF NEW YORK DEPARTMENT OF PUBLIC SERVICE, 16 NYCRR PART 753, OBTAIN A GID SAFELY NEW YORK STATE OUT PRIOR TO ANY CONSTRUCTION.
2. DAMAGE TO UTILITIES RESULTING FROM NEGLIGENCE OR FAILURE ON THE PART OF THE CONTRACTOR TO MAKE ACCURATE LOCATION IS THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING OR REPAIRING ANY DAMAGED UTILITY TO THE SATISFACTION OF THE OWNER AND ANY AGENCY WITHIN THE CITY OF NEW YORK.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXISTING UTILITY POLES AS REQUIRED, INCLUDING TEMPORARILY SUPPORTING POLES DURING IMPROVEMENTS AT NO ADDITIONAL COST TO THE OWNER. COORDINATE UTILITY POLE WORK WITH LOCAL UTILITY COMPANY.
4. NO WORK SHALL BE PROGRESSED ON PRIVATE PROPERTY, OR OUTSIDE OF EASEMENTS SHOWN ON THE PLANS.

1. EROSION AND SEDIMENT CONTROL FEATURES SHOWN ARE CONSIDERED A MINIMUM AMOUNT OF CONTROL NECESSARY TO ENSURE WATER QUALITY IN WORK AREAS. THE INTENT IS TO CONTAIN THE EROSION AND SEDIMENTATION FROM THE PROJECT AREA. CURB AND GUTTER FILLS DURING VOLUME PUMPED WITH SEDIMENT BAGS OR BARRELS AND NATURAL FILTRATION OF DRILLAGE CUTtings INTO THE DIVERTING STREAM FLOW ALONG THE WORK ZONE. ANY CURATION OF SEDIMENTS IN THE OLD GREENFIELD ROAD DITCH WILL REQUIRE REMOVAL UNLESS MINUTE AS DETERMINED BY THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOT ALLOWING EXCESSIVE TURBIDITY WHILE LARGE ROCK STRUCTURES BUT WILL VARY. THE CONTRACTOR IS REQUIRED TO SUBMIT FOR OWNER'S AND ENGINEER REVIEW; THEIR OWN EROSION AND SEDIMENT CONTROL PLAN AND NARRATIVE TO THE SPECIFICATIONS REGARDING EROSION AND SEDIMENT CONTROL MEASURES. THE CONTRACTOR USE/RE-USE, RESTORATION AND CONSTRUCTION STAGING TO ADDRESS ALL AREAS PROPOSED TO BE DISTURBED NEEDED TO CONSTRUCT THE PROJECT.
2. THE CONTRACTOR WILL BE REQUIRED TO SUBMIT A CONSTRUCTION SEQUENCING PLAN AND NARRATIVE (PARTICULARLY REGARDING THE KEY-IN-OUT OF STREAM BARRS THROUGH THE REVENTON DAM) THAT SHOWS THE ORDER OF CONSTRUCTION AND THE DURATION OF ALL PORTIONS AND PHASES OF THE WORK FOR EACH SITE THAT INCLUDES WHERE CONSTRUCTION STAGING, MATERIAL STORAGE, EQUIPMENT ACCESS, SANITARY FACILITIES FOR THE CREW, ANY SPECIALIZED EQUIPMENT, AND OTHER LOGISTICS ARE LOCATED. THE CONTRACTOR SHALL PROVIDE MEANS OF NOTIFICATION TO PROPERTY OWNERS OF THE WORK, SCHEDULE AND IMPACTS ON TRAVEL PRIOR TO COMMENCING. RESTORE ALL PROPERTY DISTURBED TO ORIGINAL CONDITION.
3. FOR OLD GREENFIELD ROAD AND WORK AT SITES 2, 3, 4, AND 5 THE TOWN WILL ALLOW PORTIONS OF THE ROADWAY TO BE CLOSED TO TRAFFIC. THE CONTRACTOR SHALL PROVIDE A WARNING ROAD WILL BE ALLOWED TO CLOSE FROM 10' WEST OF BRIDGE TO 300' WEST OF WESTERLY EXTENT OF SITE 5 WORK SITE. INCLUDE MEANS OF PROTECTION IN NARRATIVES.
4. THE ROAD SURFACE MAY BE USED AS A MATERIAL STORAGE AREA IF SUFFICIENTLY PROTECTED BY STEEL PLATES, WOODEN MATTRESSES OR APPROPRIATE MEANS TO AVOID DAMAGING ROAD

1. SURVEY FOR ALL SITES 1, 10, AND 13 PREPARED BY BROOKS AND BROOKS SURVEYORS, P.C.
2. SUBJECT TO ALL RIGHTS OF WAYS, COVENANTS, EASEMENTS, RESTRICTIONS, CONDITIONS AND AGREEMENTS OF RECORD.
3. SUBJECT TO WHATEVER STATE OF FACTS A COMPLETE SEARCH OF TITLE MAY REVEAL.
4. SUBSURFACE STRUCTURE NOT VISIBLE OR READILY APPARENT ARE NOT SHOWN AND THEIR LOCATION AND EXTENT ARE NOT CERTIFIED.
5. AREA SHOWN CONTAINS FEDERAL WETLAND NOT DELINEATED OR SHOWN HEREON. AREA LIES WITHIN A FEMA FLOOD ZONE AS DEPICTED ON FEMA FORM NO. 36111C06855 EFFECTIVE DATE 18 NOVEMBER 2007.
6. APPROXIMATE BOUNDARIES SHOWN HEREON AS PER ULSER COUNTY GIS TAX MAPPING, AND ARE SUBJECT TO COMPLETE SURVEYS.
7. CONTOURS BASED ON FIELD SURVEY. ELEVATIONS ARE APPROXIMATE NAVD83 AS DERIVED BY RTK GPS OBSERVATIONS.

1. PLANS FOR ALL SITES WITH THE EXCEPTION OF SITES 1, 10, AND 13 WERE PREPARED USING LIDAR TOPOGRAPHY AND ORTHOIMAGERY SOURCED FROM THE NYS GIS CLEARINGHOUSE.
2. THE NYS HIGH RESOLUTION DIGITAL ORTHOIMAGERY IS ACCURATE TO ± 8 -FT HORIZONTALLY AT THE 95% CONFIDENCE LEVEL FOR 2-FT RESOLUTION.

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REVISIONS

SE OF ELLENVILLE & TOWN OF WAWARSING

STREAM RESTORATION PROJECT

GENERAL NOTES

TOWN OF WAWARSING

**Barton
&Loguidice**

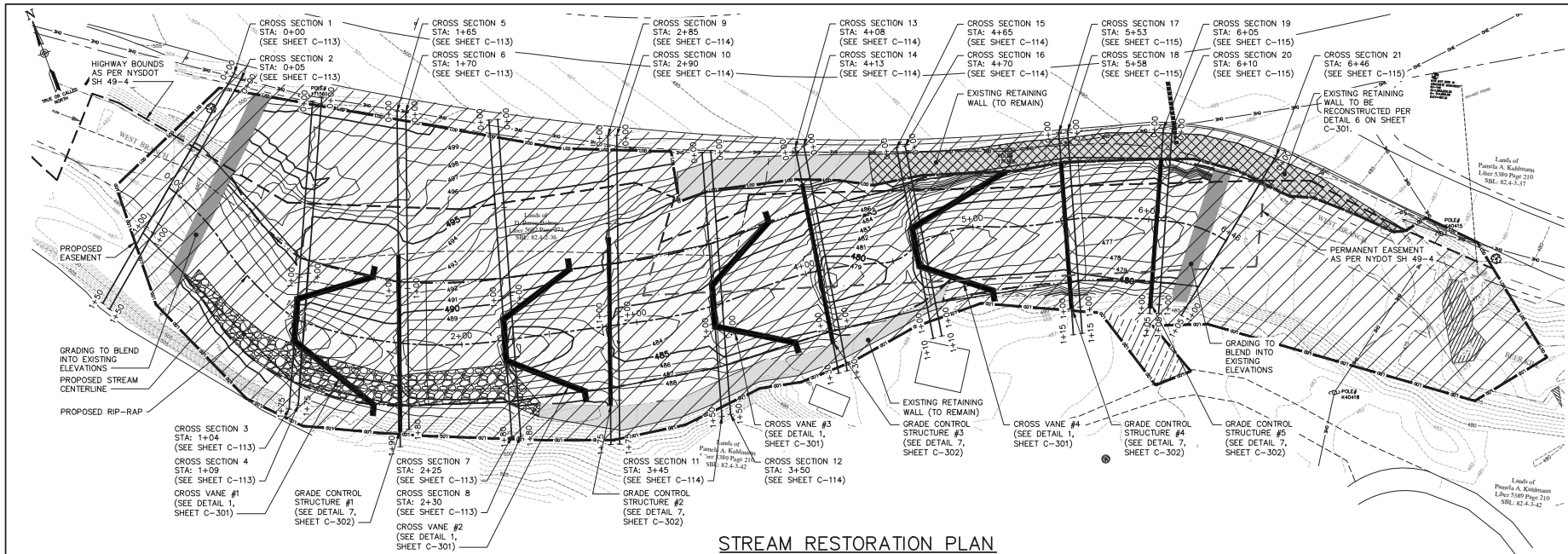
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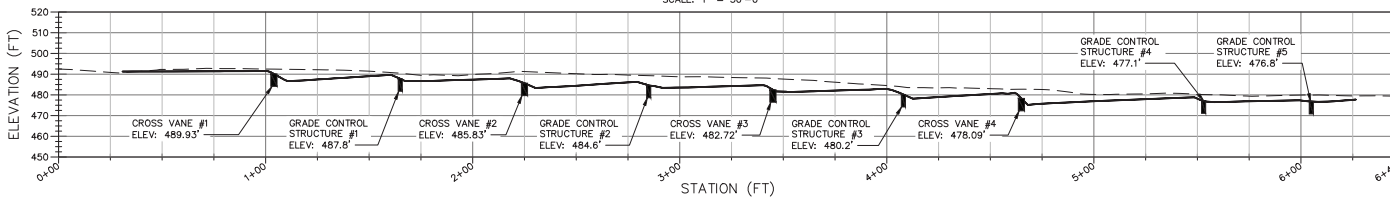
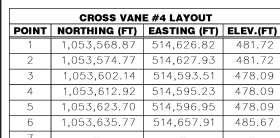
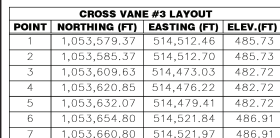
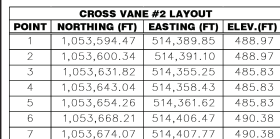
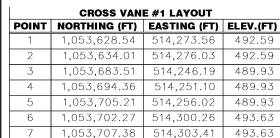
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Project Number
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STREAM RESTORATION PLAN



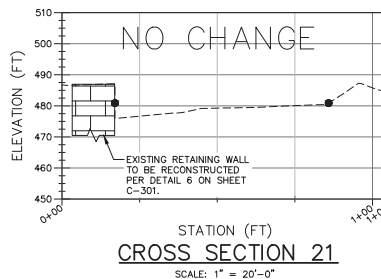
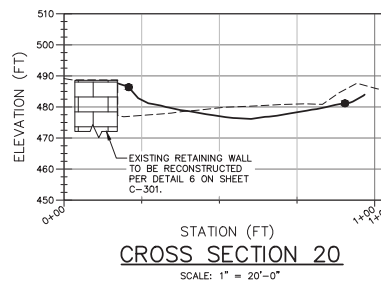
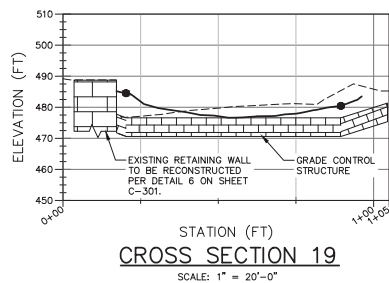
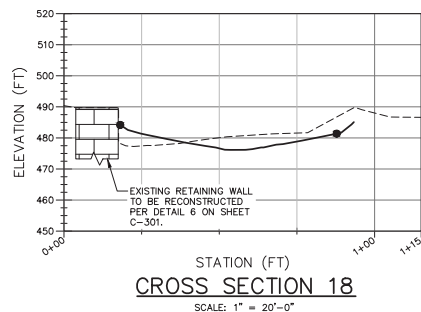
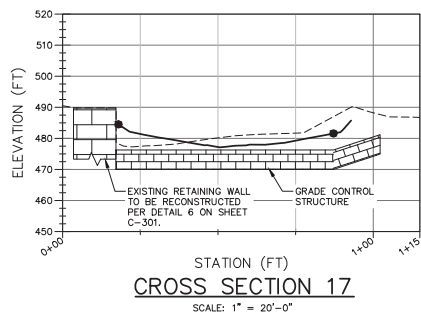
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CROSS SECTION COORDINATES					CROSS SECTION COORDINATES					CROSS SECTION COORDINATES				
CROSS SECTION	POINT	NORTHING (FT)	EASTING (FT)	ELEV.(FT)	CROSS SECTION	POINT	NORTHING (FT)	EASTING (FT)	ELEV.(FT)	CROSS SECTION	POINT	NORTHING (FT)	EASTING (FT)	ELEV.(FT)
1	STA: 0+00	1,053,837.49	514,265.95	502.41	8	STA: 0+00	1,053,761.92	514,397.40	499.30	15	STA: 0+00	1,053,669.48	514,604.26	491.73
	CENTERLINE	1,053,789.33	514,293.48	492.48		CENTERLINE	1,053,641.97	514,363.33	483.66		CENTERLINE	1,053,612.92	514,595.23	478.09
	END STA.	1,053,740.60	514,151.44	509.11		END STA.	1,053,588.77	514,348.22	495.61		END STA.	1,053,560.86	514,586.92	487.52
	STA: 0+01	1,053,832.99	514,268.37	501.50		STA: 0+01	1,053,731.98	514,452.97	497.24		STA: 0+01	1,053,668.87	514,609.23	491.80
	CENTERLINE	1,053,785.09	514,211.76	492.28		CENTERLINE	1,053,650.28	514,417.06	484.74		CENTERLINE	1,053,614.04	514,600.48	475.41
3	END STA.	1,053,736.10	514,163.86	509.24	9	END STA.	1,053,566.96	514,394.70	494.69	16	END STA.	1,053,560.49	514,591.92	487.55
	STA: 0+00	1,053,807.57	514,302.41	501.11		STA: 0+00	1,053,730.40	514,457.72	497.05		STA: 0+00	1,053,646.30	514,693.74	490.52
	CENTERLINE	1,053,694.58	514,251.20	489.97		CENTERLINE	1,053,629.21	514,421.98	483.89		CENTERLINE	1,053,598.21	514,680.05	477.21
	END STA.	1,053,641.18	514,230.17	496.10		END STA.	1,053,566.96	514,394.70	494.69		END STA.	1,053,535.10	514,685.25	486.73
	STA: 0+00	1,053,807.90	514,308.05	500.77		STA: 0+00	1,053,744.68	514,439.77	494.64		STA: 0+00	1,053,634.33	514,698.86	490.60
4	CENTERLINE	1,053,691.29	514,255.20	487.12	11	CENTERLINE	1,053,620.85	514,476.22	482.72	18	CENTERLINE	1,053,597.24	514,684.97	476.43
	END STA.	1,053,648.51	514,235.81	495.27		END STA.	1,053,560.27	514,459.20	496.84		END STA.	1,053,534.72	514,667.17	486.62
	STA: 0+00	1,053,785.70	514,345.35	500.39		STA: 0+00	1,053,704.15	514,504.82	494.75		STA: 0+00	1,053,627.91	514,750.15	489.16
	CENTERLINE	1,053,661.97	514,301.66	487.97		CENTERLINE	1,053,620.67	514,481.36	481.59		CENTERLINE	1,053,580.66	514,728.84	476.85
	END STA.	1,053,606.54	514,282.09	503.36		END STA.	1,053,559.74	514,464.25	497.84		END STA.	1,053,532.20	514,706.98	485.25
6	STA: 0+00	1,053,783.74	514,349.97	500.38	13	STA: 0+00	1,053,689.09	514,550.32	493.57	20	STA: 0+00	1,053,626.25	514,754.89	489.13
	CENTERLINE	1,053,659.84	514,306.21	486.71		CENTERLINE	1,053,613.11	514,539.14	480.37		CENTERLINE	1,053,578.48	514,734.39	479.94
	END STA.	1,053,614.01	514,290.03	499.28		END STA.	1,053,560.72	514,529.82	489.37		END STA.	1,053,530.54	514,711.72	485.09
	STA: 0+00	1,053,763.28	514,392.59	499.34		STA: 0+00	1,053,688.52	514,555.29	493.51		STA: 0+00	1,053,591.49	514,804.78	486.77
	CENTERLINE	1,053,643.04	514,358.43	485.83		CENTERLINE	1,053,618.34	514,544.08	478.16		CENTERLINE	1,053,556.30	514,761.73	479.37
7	END STA.	1,053,590.13	514,343.41	496.05	14	END STA.	1,053,560.38	514,534.83	489.17	21	END STA.	1,053,525.04	514,723.48	484.64

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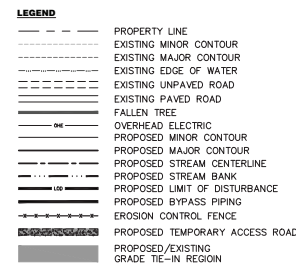
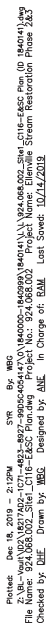
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<p>REVISIONS</p>

VILLAGE OF ELLENVILLE & TOWN OF WAWARISING
STREAM RESTORATION PROJECT

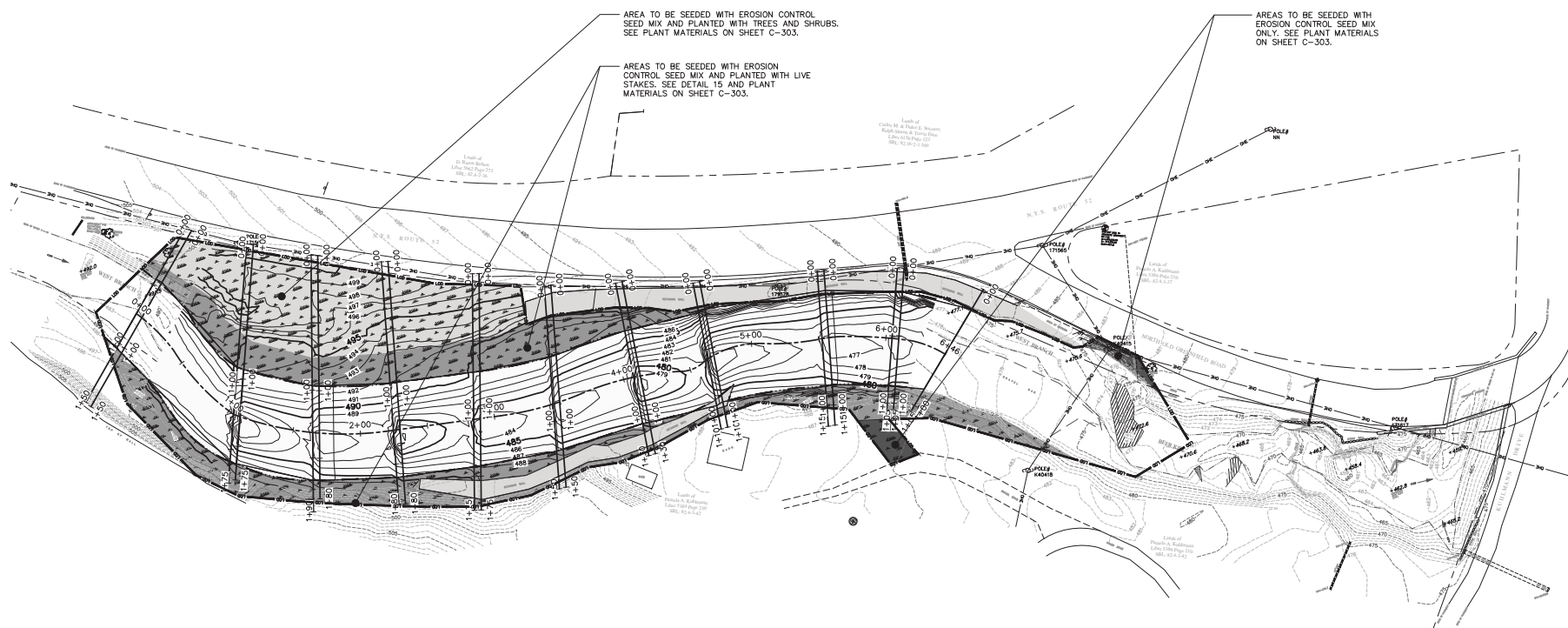
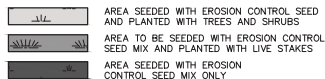
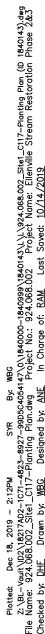
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PROPOSED CONDITIONS (3 OF 3)

TOWN OF WAWARISING
ULSTER COUNTY, NEW YORK

		Date	DECEMBER 2019
		Scale	AS SHOWN
Sheet Number		C-115	
Project Number		924.068.002	



<p>Barton & Loguidice</p> <p>DRAFT</p>	<p>VILLAGE OF ELLENVILLE & TOWN OF WAWARSSING STREAM RESTORATION PROJECT</p>		<p>EROSION AND SEDIMENT CONTROL PLAN SITE 1 TOWN OF WAWARSSING ULSTER COUNTY, NEW YORK</p>	
	<p>Date DECEMBER 2019</p> <p>Scale AS SHOWN</p> <p>Sheet Number C-116</p> <p>Project Number 924.068.002</p>	<p>IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR SURVEYOR, TO ALTER AN ITEM IN ANY WAY IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ATTACHED. THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION."</p>		
<p>REVISIONS</p>				



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REVISIONS	

VILLAGE OF ELLENVILLE & TOWN OF WAWARISING
STREAM RESTORATION PROJECT

SITE 1
PLANTING PLAN

**Barton
& Loguidice**

DRAFT

Date
DECEMBER 2019

Scale
AS SHOWN

Sheet Number

C-117

Project Number	924.068.002
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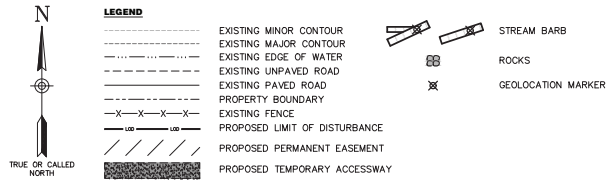
REVISIONS

VILLAGE OF ELENVILLE & TOWN OF WAWARSON
STREAM RESTORATION PROJECT
SITE 2
STREAM RESTORATION PLAN
TOWN OF WAWARSON
ULSTER COUNTY, NEW YORK

Barton & Loguidice

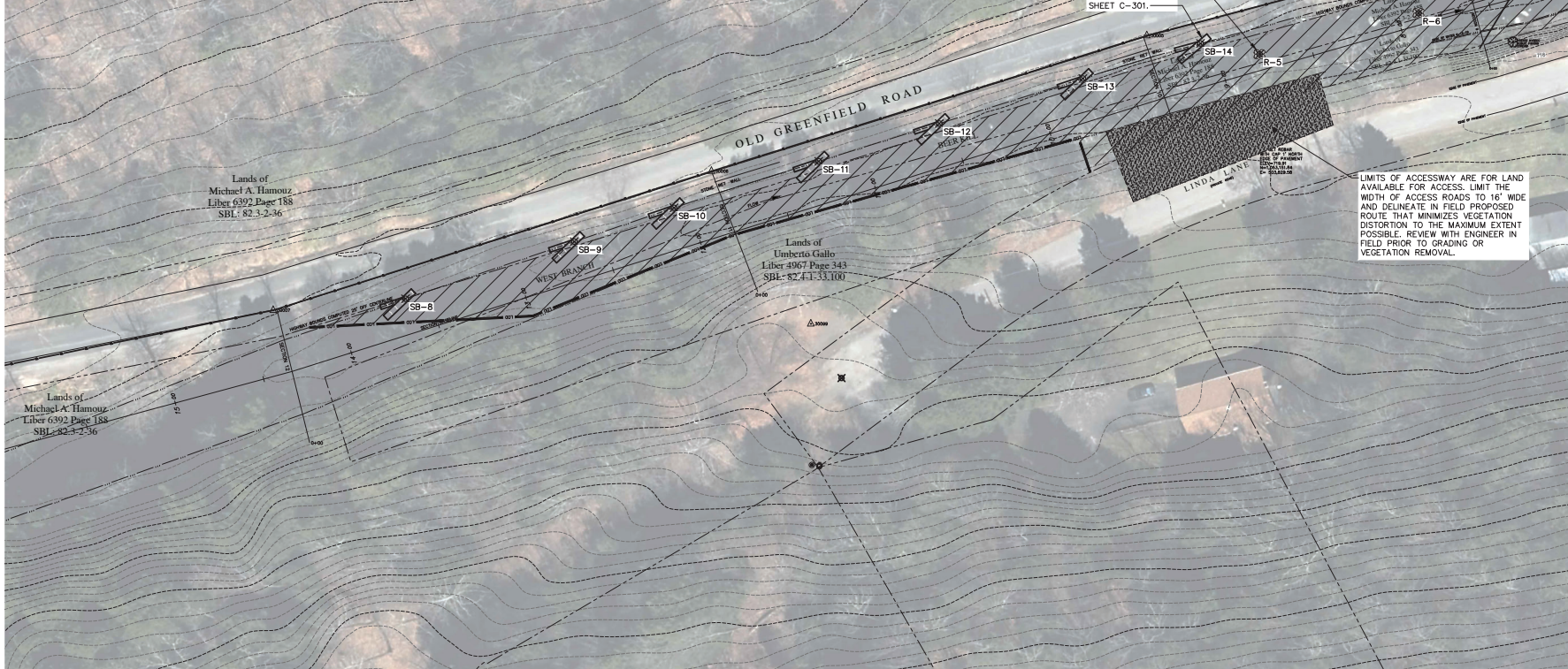
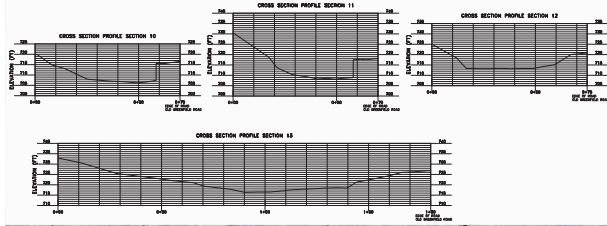
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Date: DECEMBER 2019
Scale: AS SHOWN
Sheet Number: C-121
Project Number: 924.068.002



APPROXIMATE STREAM PRACTICE LAYOUT		
POINT	NORTHING	EASTING
SB-8	1,053,070.96	503,366.61
SB-9	1,053,102.21	503,458.76
SB-10	1,053,120.68	503,513.22
SB-11	1,053,146.08	503,592.24
SB-12	1,053,166.73	503,658.07
SB-13	1,053,191.33	503,736.51
SB-14	1,053,210.49	503,800.75
R-5	1,053,204.61	503,832.96
R-6	1,053,227.07	503,919.82

PERMANENT AND TEMPORARY IMPACTS TO WATER RESOURCES	
TOTAL AREA OF DISTURBANCE (SF)	18,872
TOTAL LENGTH OF DISTURBANCE (LF)	701
TOTAL FILL BELOW OHWM (CY)	135
TOTAL CUT BELOW OHWM (CY)	100



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REVISIONS

VILLAGE OF ELENVILLE & TOWN OF WAWARISING
STREAM RESTORATION PROJECT

SITE 3
STREAM RESTORATION PLAN

TOWN OF WAWARISING
ULSTER COUNTY, NEW YORK

Barton & Loguidice

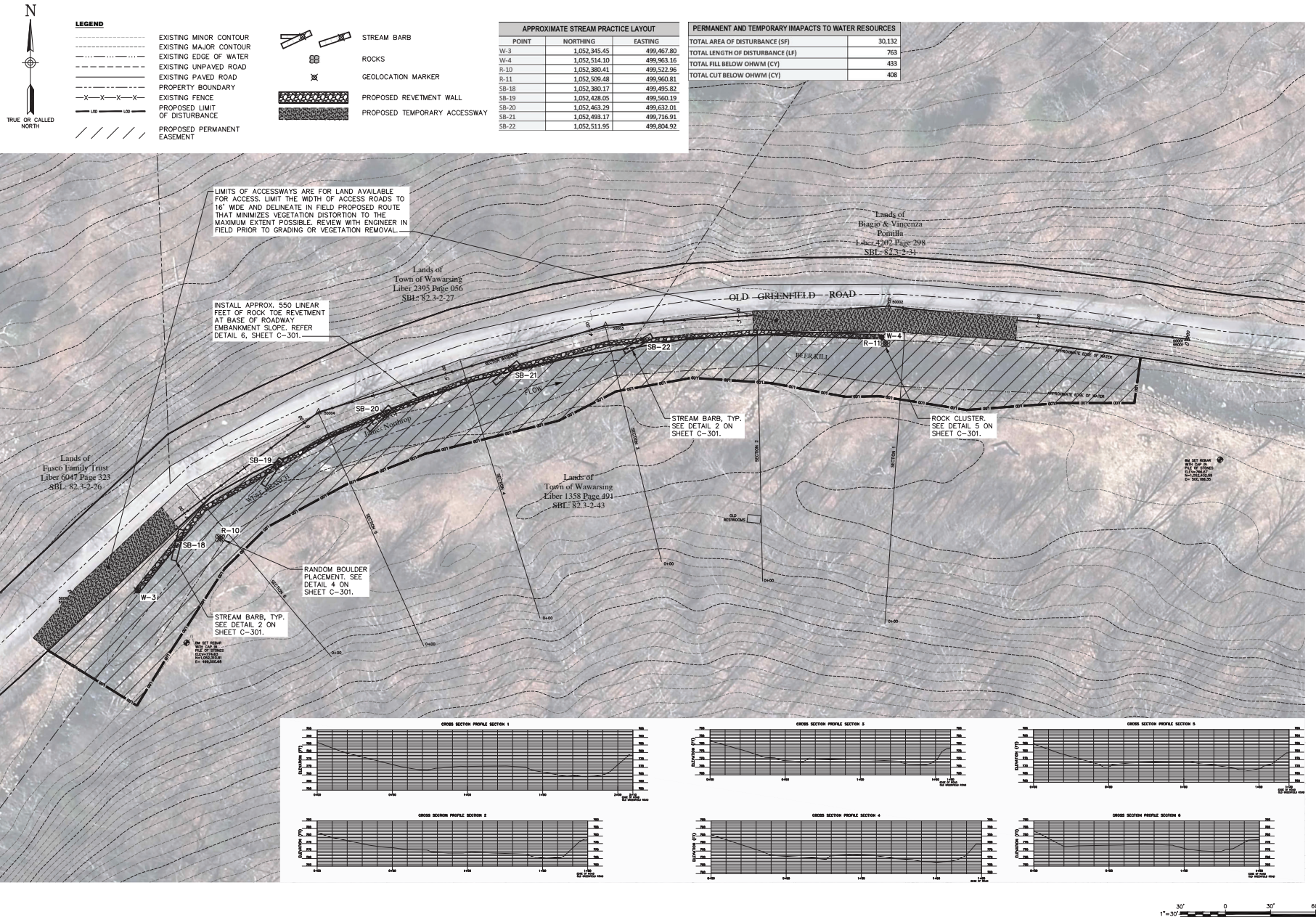
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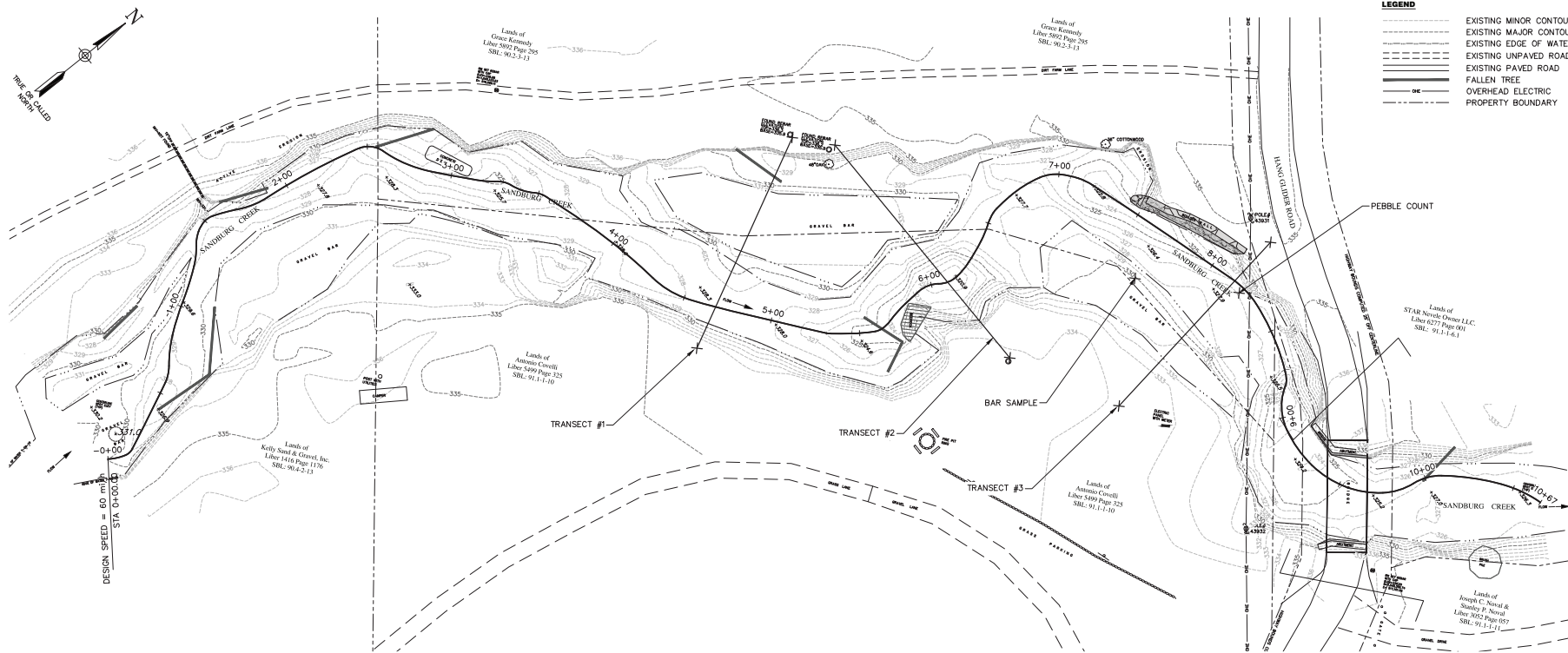
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Project Number
924.068.002

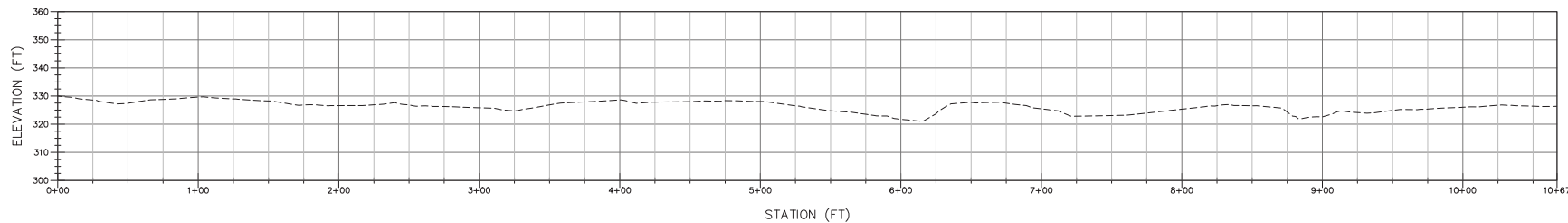


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 In Charge of: EAM
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 By: MBS
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 Date: 12/18/2019
 Project Number: 924.068.002



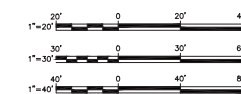
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SCALE: 1" = 30'-0"



EXISTING CONDITIONS PROFILE

HORIZONTAL SCALE: 1" = 40'-0"
 VERTICAL SCALE: 1" = 20'-0"



- LEGEND**
- EXISTING MINOR CONTOUR
 - EXISTING MAJOR CONTOUR
 - EXISTING EDGE OF WATER
 - EXISTING UNPAVED ROAD
 - EXISTING PAVED ROAD
 - FALLEN TREE
 - OVERHEAD ELECTRIC
 - PROPERTY BOUNDARY

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL, TO ALTER AN ITEM BEARING THE SEAL OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

REVISIONS

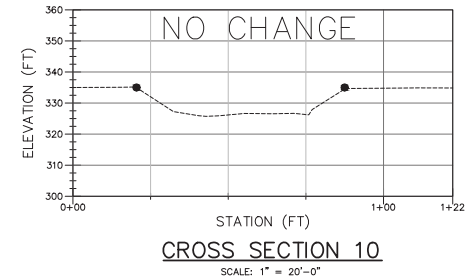
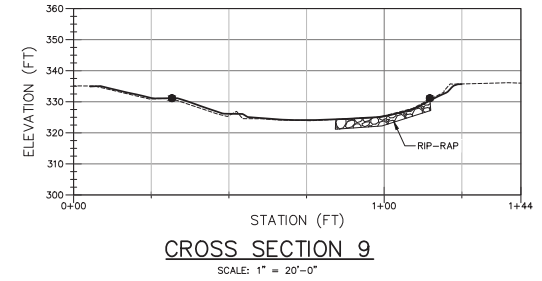
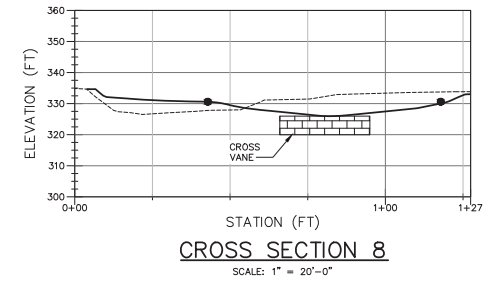
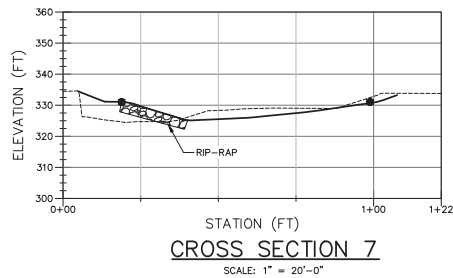
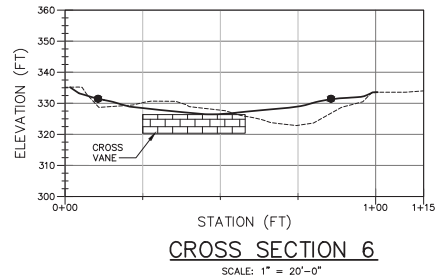
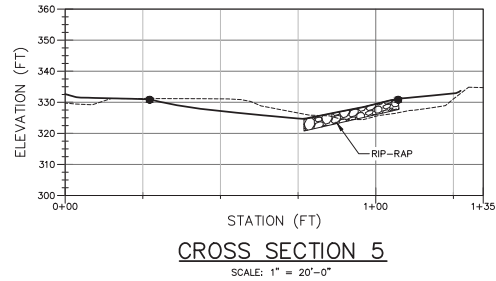
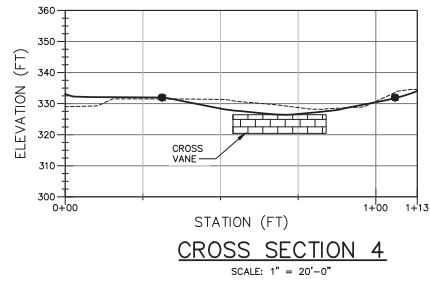
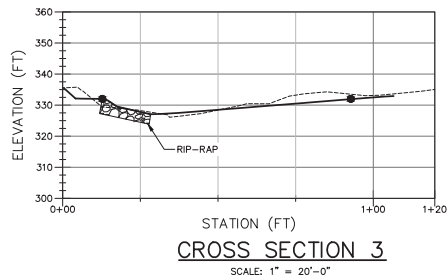
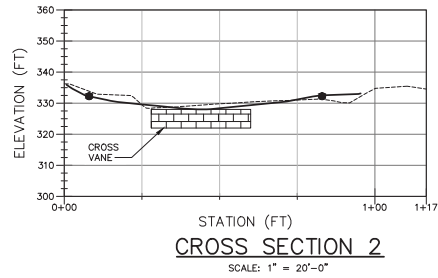
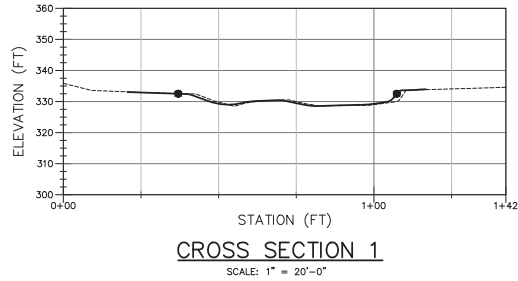
VILLAGE OF ELENVILLE & TOWN OF WAWARISING
 STREAM RESTORATION PROJECT
SITE 10
 EXISTING CONDITIONS
 TOWN OF WAWARISING
 ULSTER COUNTY, NEW YORK

Barton & Loguidice
DRAFT

Date: DECEMBER 2019
 Scale: AS SHOWN
 Sheet Number: C-171
 Project Number: 924.068.002

SYR By: WBC

----- EXISTING GRADE
 _____ PROPOSED GRADE
 ● TOP OF BANK



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REVISIONS

TOWN OF WAUWATONG
ULSTER COUNTY, NEW YORK

SITE 10 CROSS SECTIONS
PROPOSED CONDITIONS

**Barton
& Loguidice**

DRAFT

Date
DECEMBER 2019

DECEMBER 2015
Scale

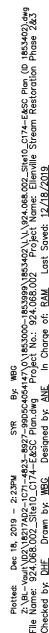
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Sheet Number
C-173

Project Number

924.068.002





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REVISONS

VILLAGE OF ELLENVILLE & TOWN OF WAWARISING
STREAM RESTORATION PROJECT

SITE 10

EROSION AND SEDIMENT CONTROL PLAN

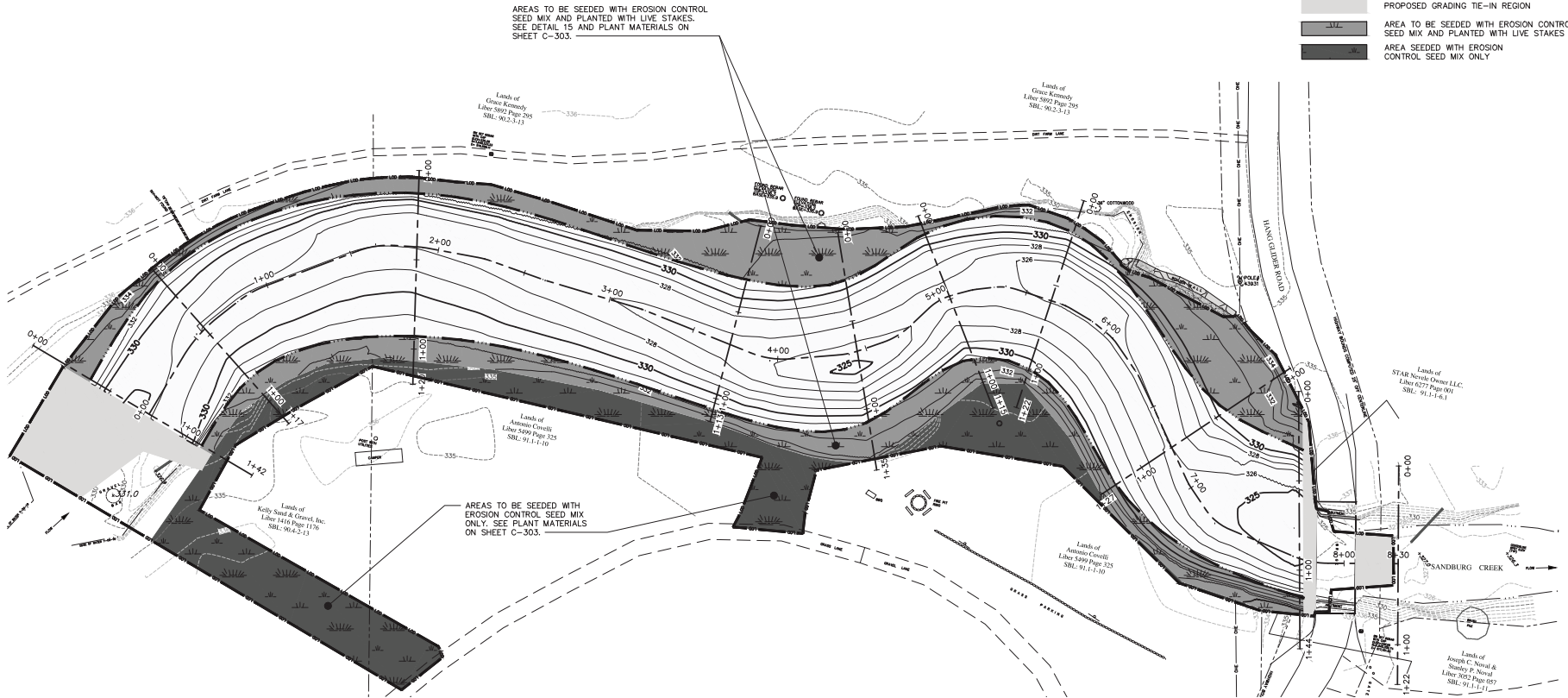
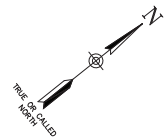
TOWN OF WAWARISING
ULSTER COUNTY, NEW YORK

**Barton
& Loguidice**

DRAFT

Date	DECEMBER 2019
Scale	AS SHOWN
Sheet Number	C-174
Project Number	924.068.002

Printed: Dec 18, 2019 - 2:19PM
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Checked by: DLF. Drawn by: MSG. Designed by: ANL. In Charge of: RAM. Last Saved: 12/18/2019



LEGEND	
	EXISTING MINOR CONTOUR
	EXISTING MAJOR CONTOUR
	EXISTING EDGE OF WATER
	EXISTING UNPAVED ROAD
	EXISTING PAVED ROAD
	FALLEN TREE
	OVERHEAD ELECTRIC
	PROPERTY BOUNDARY
	PROPOSED MINOR CONTOUR
	PROPOSED MAJOR CONTOUR
	PROPOSED STREAM CENTERLINE
	PROPOSED STREAM BANK
	PROPOSED LIMIT OF DISTURBANCE
	PROPOSED GRADING TIE-IN REGION
	AREA TO BE SEEDDED WITH EROSION CONTROL SEED MIX AND PLANTED WITH LIVE STAKES
	AREA SEEDDED WITH EROSION CONTROL SEED MIX ONLY

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY, IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

REVISIONS

VILLAGE OF ELENVILLE & TOWN OF WAWARSSING
STREAM RESTORATION PROJECT

SITE 10
PLANTING PLAN

TOWN OF WAWARSSING
ULSTER COUNTY, NEW YORK

Barton & Loguidice

DRAFT

Date
DECEMBER 2019

Scale
AS SHOWN

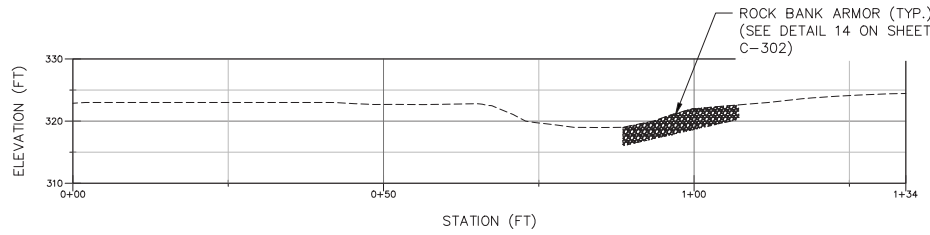
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Project Number
924.068.002

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Project: Stream Restoration Phase 2A

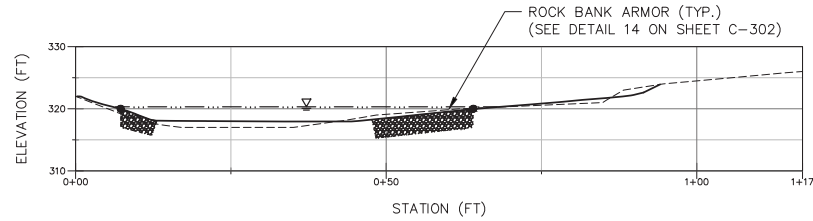
LEGEND

- EXISTING GRADE
- PROPOSED GRADE
- TOP OF BANK
- ▽--- BANKFULL WATER ELEVATION



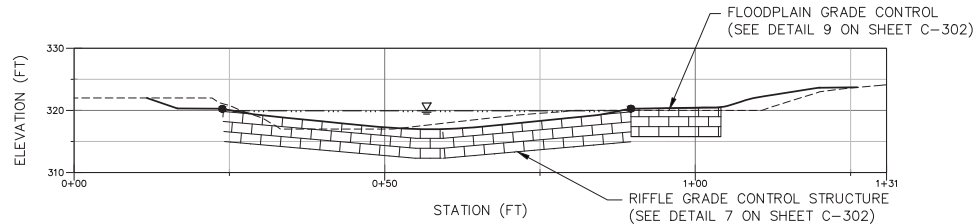
CROSS SECTION 1

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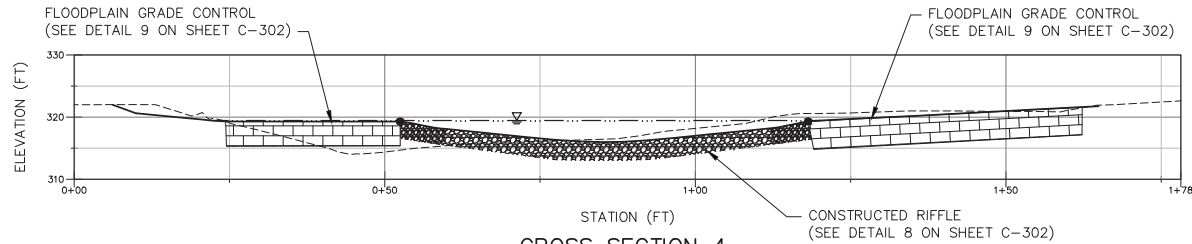
CROSS SECTION 2

SCALE: 1" = 10'-0"



CROSS SECTION 3

SCALE: 1" = 10'-0"



CROSS SECTION 4

SCALE: 1" = 10'-0"



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REVISIONS

NO.	DESCRIPTION	DATE

VILLAGE OF ELENVILLE & TOWN OF WAWARSON
STREAM RESTORATION PROJECT

SITE 13 CROSS SECTIONS
PROPOSED CONDITIONS (1 of 2)
TOWN OF WAWARSON
ULSTER COUNTY, NEW YORK

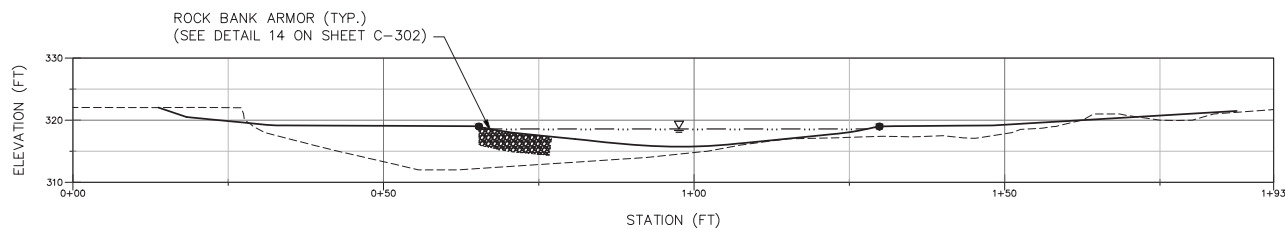
Barton & Loguidice

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Date: DECEMBER 2019
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Sheet Number: C-184
Project Number: 924.068.002

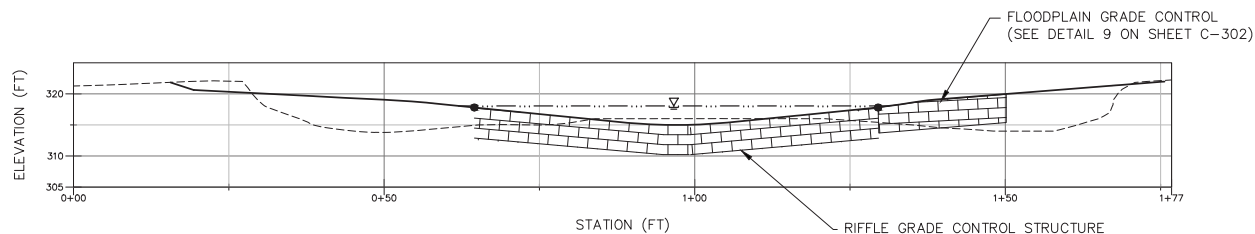
LEGEND

---	EXISTING GRADE
—	PROPOSED GRADE
●	TOP OF BANK
—▽—	BANKFULL WATER ELEVATION



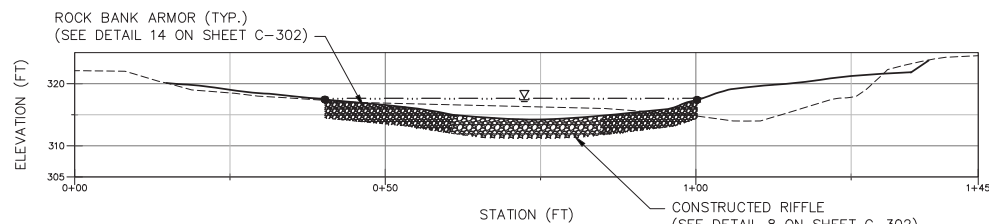
CROSS SECTION 5

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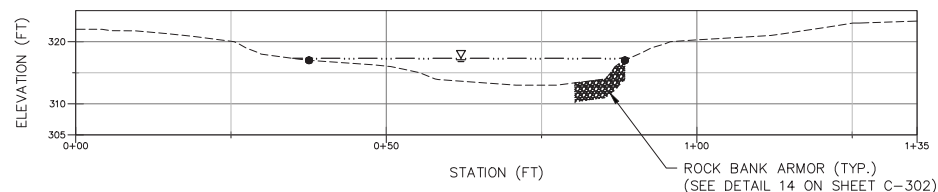
CROSS SECTION 6

SCALE: 1" = 10'-0"



CROSS SECTION 7

SCALE: 1" = 10'-0"



CROSS SECTION 8

SCALE: 1" = 10'-0"



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REVISIONS	

VILLAGE OF ELLENVILLE & TOWN OF WAWARSING
STREAM RESTORATION PROJECT

SITE 13 CROSS SECTIONS
PROPOSED CONDITIONS (2 OF 2)
WAWARISING
ULSTER COUNTY, NEW YORK

**Barton
&Loguidice**

DRAFT

Date _____

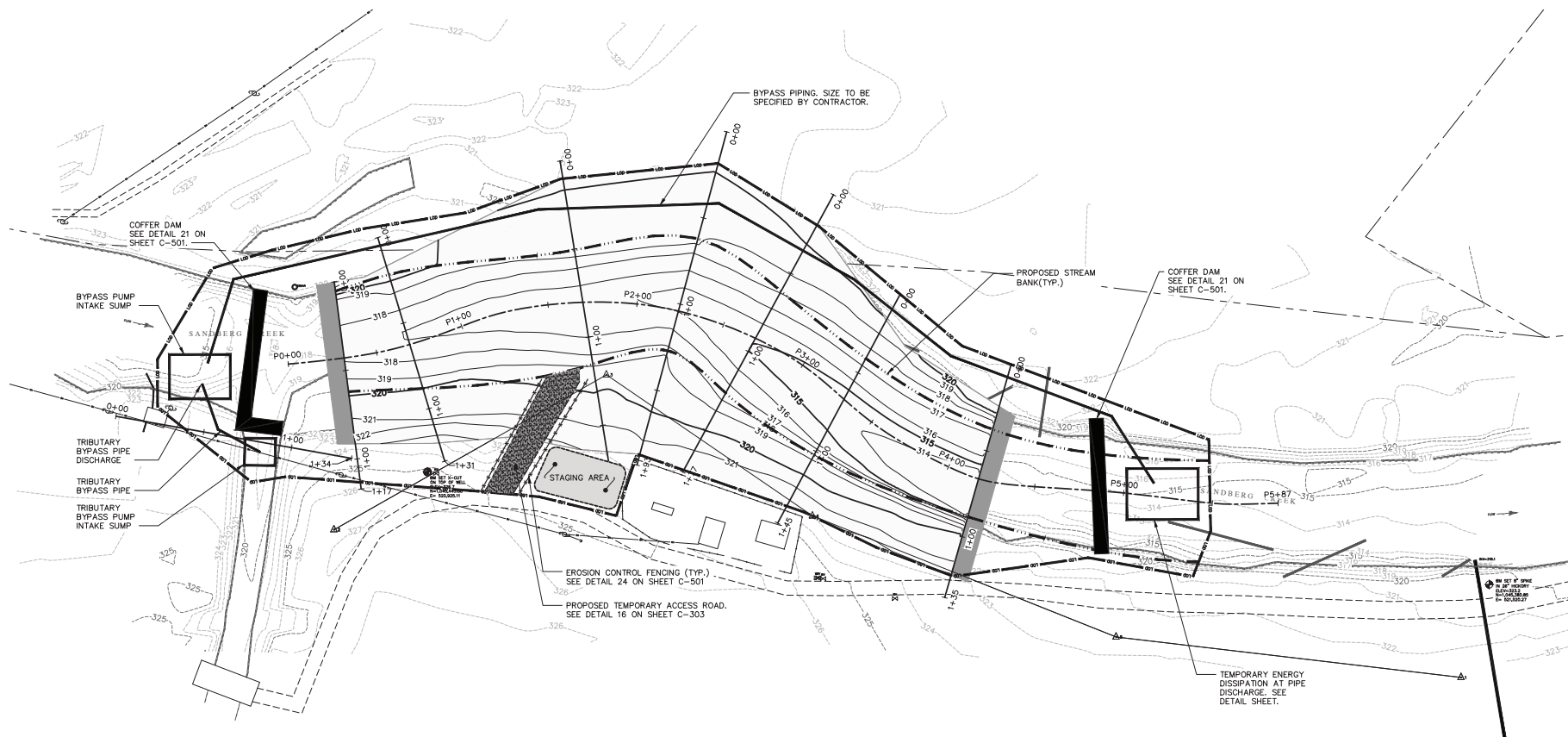
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C-185

Project Number	
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924.068.002



LEGEND

	EXISTING MINOR CONTOUR
	EXISTING MAJOR CONTOUR
	EXISTING EDGE OF WATER
	EXISTING UNPAVED ROAD
	FALLEN TREE
	OVERHEAD UTILITIES
	PROPERTY BOUNDARY
	PROPOSED MINOR CONTOUR
	PROPOSED MAJOR CONTOUR
	PROPOSED STREAM BANK
	PROPOSED LIMIT OF DISTURBANCE
	PROPOSED BYPASS PIPING
	EROSION CONTROL FENCE
	PROPOSED STAGING AREA
	PROPOSED TEMPORARY ACCESS ROAD
	COFFER DAM
	PROPOSED EXISTING GRADE TIE-IN REGION

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY, IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION".

REVISIONS	

VILLAGE OF ELLENVILLE & TOWN OF WAWARSGING
STREAM RESTORATION PROJECT

SITE 13 BYPASS PUMPING AND
EROSION AND SEDIMENT CONTROL PLAN

TOWN OF WAWARSGING
ULSTER COUNTY, NEW YORK

**Barton
& Toguidice**

DRAFT

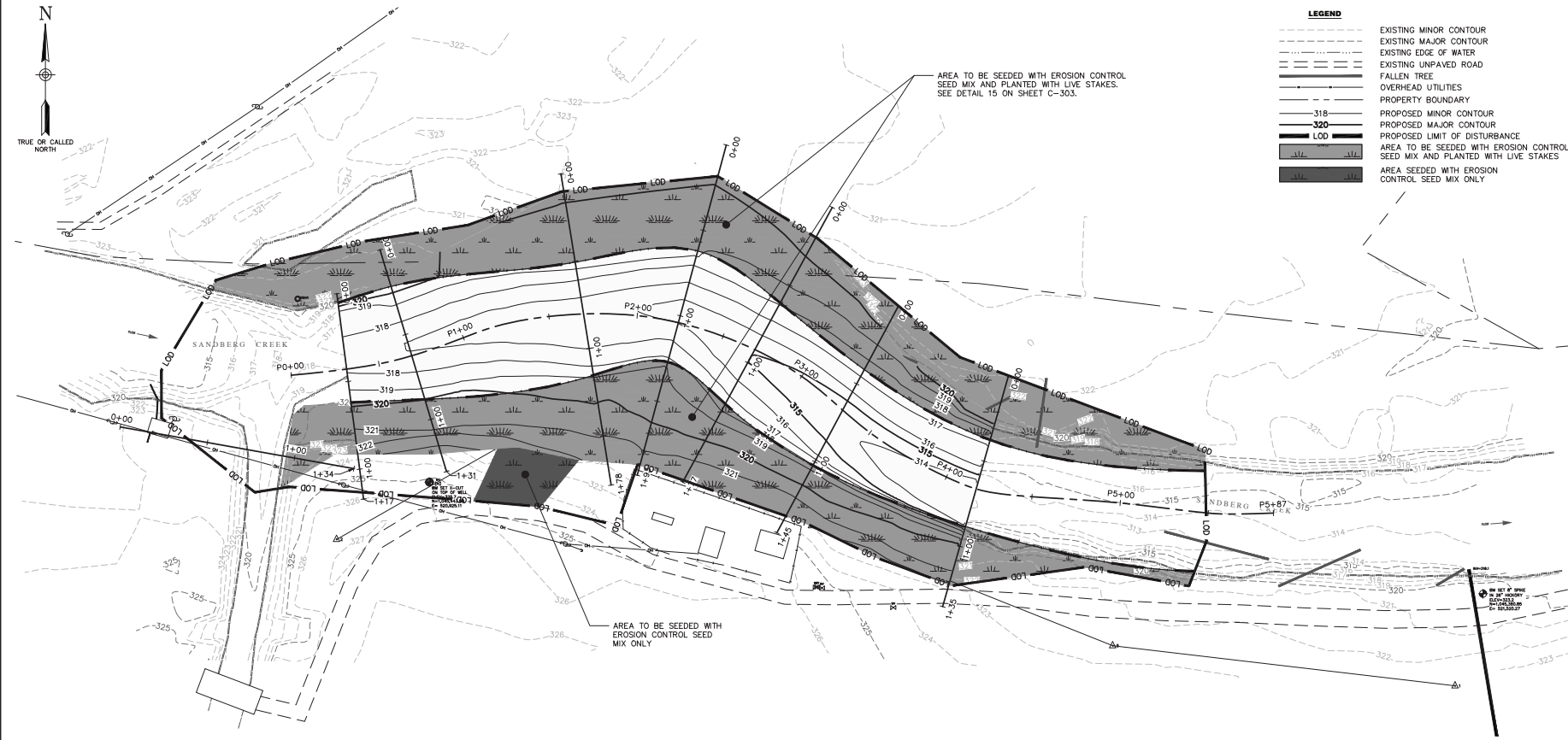
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Scale	AS SHOWN
Sheet Number	C-187

Project Number	924.068.002
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Checked by: DHE Drawn by: ANE In Charge of: RAM Last saved: 9/27/2019

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Project: Dec 18, 2019 - 2:15PM
File: P:\ML-1924\19240000\19240000.dwg
Checked by: DLE
Drawn by: MEG
In Charge of: RAM
Last Saved: 10/1/2019



LEGEND

- EXISTING MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- EXISTING EDGE OF WATER
- EXISTING UNPAVED ROAD
- FALLEN TREE
- OVERHEAD UTILITIES
- PROPERTY BOUNDARY
- PROPOSED MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED LIMIT OF DISTURBANCE
- AREA TO BE SEEDED WITH EROSION CONTROL SEED MIX AND PLANTED WITH LIVE STAKES
- AREA SEEDED WITH EROSION CONTROL SEED MIX ONLY

SPECIFIED RIPARIAN RESTORATION SEED MIX

15% VIRGINIA WILD RYE, PA ECOTYPE (ELYMUS VIRGINICUS, PA ECOTYPE)	2% NEW YORK IRONWEED, PA ECOTYPE (VERNONIA NOVEBORACENSIS, PA ECOTYPE)
15% RIVERBANK WILD RYE, PA ECOTYPE (ELYMUS RIPARIUS, PA ECOTYPE)	2% COMMON MILKWEED, PA ECOTYPE (ASCLEPIAS SYRIACA, PA ECOTYPE)
15% LITTLE BLUESTEM, 'CAMPER' (SCHIZACHYRIUM SCOPARIUM)	2% SOFT RUSH (JUNCUS EFFUSUS)
15% FOX SEDGE, PA ECOTYPE (CAREX VULPINOIDEA, PA ECOTYPE)	1% CANADA GOLDENROD, PA ECOTYPE (SOLIDAGO CANADENSIS), PA ECOTYPE
10% DEER TONGUE, 'TIOGA' (PANICUM CLANDESTINUM (DICHANTHELIUM C.), 'TIOGA')	1% WRINKLELEAF GOLDENROD, PA ECOTYPE (SOLIDAGO RUGOSA), PA ECOTYPE
10% BIG BLUESTEM, 'NIAGARA' (ANDROPOGON GERARDII, 'NIAGARA')	1% SPOTTED JOE PYE WEED, PA ECOTYPE (EUPATORIUM MACULATUM, PA ECOTYPE)
3% BLUE VERVAIN (VERBENA HASTATA)	1% BONESET, PA ECOTYPE (EUPATORIUM PERFOLIATUM, PA ECOTYPE)
3% BLACK-EYED SUSAN, PA ECOTYPE (RUDBECKIA HIRTA)	1% WHITE SNAKEROOT, PA ECOTYPE (AGERATINA ALTISSIMA, PA ECOTYPE)
2% NEW ENGLAND ASTER, PA ECOTYPE (SYMPHYOTRICHUM NOVAE-ANGLIAE)	1% INDIANHEMP, PA ECOTYPE (APOCYNUM CANNABINUM, PA ECOTYPE)

SPECIFIED COVER CROP/TEMPORARY SEED MIX

50% CEREAL RYE (SECALE CEREAL)
50% OATS (AVENA SATIVA)

SPECIFIED LIVE STAKES

60% SILKY WILLOW (SALIX SERICA)
10% PUSSY WILLOW (SALIX DISCOLOR)
10% SILKY DOGWOOD (CORNUS AMOMUM)
10% RED ELDERBERRY (SAMBUCUS RACEMOSA)
10% BLACK ELDERBERRY (SAMBUCUS CANADENSIS)



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REVISIONS

VILLAGE OF ELENVILLE & TOWN OF WAWARISING
STREAM RESTORATION PROJECT
SITE 13
PLANTING PLAN
ULSTER COUNTY, NEW YORK
TOWN OF WAWARISING

Barton & Loguidice

DRAFT

Date
DECEMBER 2019
Scale
AS SHOWN
Sheet Number
C-188
Project Number
924.068.002



**Governor's Office of
Storm Recovery**

ANDREW M. CUOMO
Governor

**EARLY NOTICE OF A PROPOSED ACTIVITY
IN A 100-YEAR FLOODPLAIN
ELLENVILLE STREAM BANK RESTORATION PROJECT
ELLENVILLE, ULSTER COUNTY, NEW YORK
January 16, 2020**

To: All interested Agencies, Groups, and Individuals:

This is to give notice that the Governor's Office of Storm Recovery (GOSR), an office of the New York State Housing Trust Fund Corporation (HTFC), has received an application from The Village of Ellenville to fund Ellenville Stream Bank Restoration Project (hereinafter, the "Proposed Activity") and is conducting an evaluation as required by Executive Order 11988 and Executive Order 11990 in accordance with U.S. Department of Housing and Urban Renewal (HUD) regulations (24 CFR Part 55). There are three primary purposes for this notice. First, to provide the public an opportunity to express their concerns and share information about the Proposed Activity. Second, adequate public notice is an important public education tool. The dissemination of information about floodplains and wetlands facilitates and enhances governmental efforts to reduce the risks associated with the occupancy and modification of these special areas. Third, as a matter of fairness, when the government determines it will participate in actions taking place in floodplains or wetlands, it must inform those who may be put at greater or continued risk. Funding for the Proposed Activity will be provided by the HUD Community Development Block Grant – Disaster Recovery (CDBG-DR) program for storm recovery activities in New York State.

The Ellenville Stream Bank Restoration ("Proposed Activity") is needed to address widespread flooding, resulting in stream bank and streambed erosion and some areas of sediment deposition along major streams in the Village of Ellenville, and surrounding Town of Wawarsing caused by Hurricane Irene and Tropical Storm Lee. This Project is expected to provide risk reduction as well as social, health, environmental, and economic benefits to the Village and Town.

The Proposed Activity entails design and construction of stream bank restoration improvements within and along the West Branch of Beer Kill and Sandburg Creek at eight sites within the town of Wawarsing and village of Ellenville, in Ulster County, New York. The flood mitigation measures include the construction of floodplain benches with rock and/or wood revetment (to reduce cutting at the toe of bank), the lowering of the height, angle and overall erosion hazard of the eroding streambanks; installation of in-stream rock structures to provide grade control and reduce the erosive force of water upon streambanks (by directing flood flows to the center of the stream channel); and the reconnection of floodplains in select areas (to reduce channel confinement and the corresponding increases in flood velocity that contribute to flood severity). The stream bank restoration measures may be implemented in phases.

Some sites will require sedimentation removal to restore the natural channel and improve quality and flows. The Proposed Activity will restore severely eroded/damaged sites to be capable of withstanding large flood events. All of the eight locations are located in Riverine wetlands, river channels (Sites 1, 2, 3, 4, 5, 8, 10

and 13). Approximately 2.8 acres of West Branch of Beer Kill river channel will be modified and approximately 1.4 acres of Sandburg Creek river channel will be modified.

The Proposed Activity will result in temporary impacts to an estimated 7.5 acres of 100-Year Floodplain (temporary roads and staging area) and will result in permanent impacts to 1.9 acres of 100-Year Floodplain. Permanent impacts will consist of vegetated floodplain bench, rip-rap, revetment wall, rock flood toe revetment, rock flood grade control and permanent gravel access roads. These features are described in the design plans available at <https://stormrecovery.ny.gov/environmental-docs>. The function of the floodplain will not change. The flow of water will be slowed and there will be no increase to impermeable surfaces, although the surfaces will change to include rip-rap, etc. Additionally, the constructed features will prevent erosion and restore the health, resiliency, and capacity of the subject waterways to better support biological diversity and resulting increases to water quality as well as reconnection of floodplains.

For the duration of the Proposed Activity site controls will be in place to minimize water quality impacts. At each site requiring in-stream entry, temporary cofferdams will be utilized to work in the dry with a turbidity curtain. For the duration of the Project Activity pollution control measures will be utilized to minimize the potential pollution releases. Pollutants such as fuels, lubricants, and wash water will not be discharged into or near streams or into natural or man-made channels. Re-fueling will be completed away from regulated resources. These measures will protect surface water and wetlands. Additionally, all work will be completed in accordance with permit conditions that include surface water and wetland protection measures.

Prior to construction, the Village of Ellenville/Town of Wawarsing must apply for and receive a Floodplain Development Permit from the appropriate local floodplain administrator.

Floodplain maps based on the FEMA Base Flood Elevation Maps and wetlands maps based on the National Wetland Inventory and New York State Department of Environmental Conservation (NYSDEC) data have been prepared and are available for review with additional information at <http://www.stormrecovery.ny.gov/environmental-docs>.

Any individual, group, or agency may submit written comments on the Proposed Activity or request further information by contacting Lori A. Shirley, Certifying Officer, Governor's Office of Storm Recovery, 99 Washington Avenue, Suite 1224, Albany, NY 12260; email: NYSCDBG_DR_ER@nyshcr.org. Standard office hours are 9:00 AM to 5:00 PM Monday through Friday. For more information call 518-474-0755. All comments received by January 31, 2020 will be considered.

Distribution List for Ellenville Stream Bank Project

FEDERAL AGENCIES

By Overnight Express

Tennille Smith Parker, Director
U.S. Department of Housing and Urban Development
Disaster Recovery and Special Issues Division
451 7th Street SW, Room 7272
Washington, DC 20410

By E-mail only

Ms. Rhoda M. Nicholson
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disaster_recovery@hud.gov

Mr. Mike Poetzsch
U.S. Environmental Protection Agency
poetzsch.michael@epa.gov

By U.S. Mail

Ms. Therese J. Fretwell, Enviro. Officer, R 1 & 2
U.S. Dep. of Housing and Urban Development
26 Federal Plaza, Room 3541
New York, NY 10278-0068

Andrew Dangler
ATTN: CENAN-OP-RU
Biologist/Senior Project Manager, Upstate New York Section
Department of the Army, US Army Corps of Engineers,
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Thomas Von Essen, Regional Administrator
U.S. Dep. of Homeland Security
Federal Emergency Management Agency, R II
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Ms. Robyn Niver
U.S. Fish and Wildlife Service
New York Field Office
3817 Luker Rd
Cortland, NY 13045

Distribution List for Ellenville Stream Bank Project

NYS & LOCAL AGENCIES

John Petronella, Regional Permit Administrator
New York State Department of Environmental Conservation, Region 3
21 South Putt Corners Road
New Paltz, NY 12561-1696

Mr. Ron Rausch, Director
Environmental Management Bureau
Office of Parks, Recreation and Historic Preservation
625 Broadway, 2nd Floor
Albany, New York 12238

Marlene White
Supervisor, Mitigation Projects
NYS Division of Homeland Security & Emergency Services
1220 Washington Avenue, Building 7A - 4th Floor
Albany, NY 12242

Jeffrey Kaplan, Mayor
Village of Ellenville
2 Elting Lane
Ellenville, NY 12428

Ms. Noreen Dechon
Interim Village Manager
Village of Ellenville
2 Elting Lane
Ellenville, NY 12428

Brian A. Schug
Local Floodplain Manager
Village of Ellenville
2 Elting Lane
Ellenville, NY 12428

Traci Jeter, Village Clerk
Village of Ellenville
2 Elting Lane
Ellenville, NY 12428

Nina Postupack
Ulster County Clerk
Ulster County Office Building
244 Fair Street
Kingston, NY 12401

Distribution List for Ellenville Stream Bank Project

Terry Houck, Town Supervisor
Town of Wawarsing
108 Canal Street
PO Box 671
Ellenville, NY 12428

Andrea Noval, Town Clerk
Town of Wawarsing
108 Canal Street
PO Box 671
Ellenville, NY 12428

**EARLY NOTICE OF A PROPOSED ACTIVITY
IN A 100-YEAR FLOODPLAIN
ELLENVILLE STREAM BANK RESTORATION PROJECT
ELLENVILLE, ULSTER COUNTY, NEW YORK
January 16, 2020**

To: All interested Agencies, Groups, and Individuals:

This is to give notice that the Governor's Office of Storm Recovery (GOSR), an office of the New York State Housing Trust Fund Corporation (HTFC), has received an application from The Village of Ellenville to fund Ellenville Stream Bank Restoration Project (hereinafter, the "Proposed Activity") and is conducting an evaluation as required by Executive Order 11988 and Executive Order 11990 in accordance with U.S. Department of Housing and Urban Renewal (HUD) regulations (24 CFR Part 55). There are three primary purposes for this notice. First, to provide the public an opportunity to express their concerns and share information about the Proposed Activity. Second, adequate public notice is an important public education tool. The dissemination of information about floodplains and wetlands facilitates and enhances governmental efforts to reduce the risks associated with the occupancy and modification of these special areas. Third, as a matter of fairness, when the government determines it will participate in actions taking place in floodplains or wetlands, it must inform those who may be put at greater or continued risk. Funding for the Proposed Activity will be provided by the HUD Community Development Block Grant – Disaster Recovery (CDBG-DR) program for storm recovery activities in New York State.

The Ellenville Stream Bank Restoration ("Proposed Activity") is needed to address widespread flooding, resulting in stream bank and streambed erosion and some areas of sediment deposition along major streams in the Village of Ellenville, and surrounding Town of Wawarsing caused by Hurricane Irene and Tropical Storm Lee. This Project is expected to provide risk reduction as well as social, health, environmental, and economic benefits to the Village and Town.

The Proposed Activity entails design and construction of stream bank restoration improvements within and along the West Branch of Beer Kill and Sandburg Creek at eight sites within the town of Wawarsing and village of Ellenville, in Ulster County, New York. The flood mitigation measures include the construction of floodplain benches with rock and/or wood revetment (to reduce cutting at the toe of bank), the lowering of the height, angle and overall erosion hazard of the eroding streambanks; installation of in-stream rock structures to provide grade control and reduce the erosive force of water upon streambanks (by directing flood flows to the center of the stream channel); and the reconnection of floodplains in select areas (to reduce channel confinement and the corresponding increases in flood velocity that contribute to flood severity). The stream bank restoration measures may be implemented in phases.

Some sites will require sedimentation removal to restore the natural channel and improve quality and flows. The Proposed Activity will restore severely eroded/damaged sites to be capable of withstanding large flood events. All of the eight locations are located in Riverine wetlands, river channels (Sites 1, 2, 3, 4, 5, 8, 10 and 13). Approximately 2.8 acres of West Branch of Beer Kill river channel will be modified and approximately 1.4 acres of Sandburg Creek river channel will be modified.

The Proposed Activity will result in temporary impacts to an estimated 7.5 acres of 100-Year Floodplain (temporary roads and staging area) and will result in permanent impacts to 1.9 acres of 100-Year Floodplain. Permanent impacts will consist of vegetated floodplain bench, rip-rap, revetment wall, rock flood toe revetment, rock flood grade control and permanent gravel access roads. These features are described in the design plans available at <https://stormrecovery.ny.gov/environmental-docs>. The function of the floodplain will not change. The flow of water will be slowed and there will be no increase to impermeable surfaces, although the surfaces will change to include rip-rap, etc. Additionally, the constructed features will prevent erosion and restore the health, resiliency, and capacity of the subject waterways to better support biological diversity and resulting increases to water quality as well as reconnection of floodplains.

For the duration of the Proposed Activity site controls will be in place to minimize water quality impacts. At each site requiring in-stream entry, temporary cofferdams will be utilized to work in the dry with a turbidity curtain. For the duration of the Project Activity pollution control measures will be utilized to minimize the potential pollution releases. Pollutants such as fuels, lubricants, and wash water will not be discharged into or near streams or into natural or man-made channels. Re-fueling will be completed away from regulated resources. These measures will protect surface water and wetlands. Additionally, all work will be completed in accordance with permit conditions that include surface water and wetland protection measures.

Prior to construction, the Village of Ellenville/Town of Wawarsing must apply for and receive a Floodplain Development Permit from the appropriate local floodplain administrator.

Floodplain maps based on the FEMA Base Flood Elevation Maps and wetlands maps based on the National Wetland Inventory and New York State Department of Environmental Conservation (NYSDEC) data have been prepared and are available for review with additional information at <http://www.stormrecovery.ny.gov/environmental-docs>.

Any individual, group, or agency may submit written comments on the Proposed Activity or request further information by contacting Lori A. Shirley, Certifying Officer, Governor's Office of Storm Recovery, 99 Washington Avenue, Suite 1224, Albany, NY 12260; email: NYSCDBG_DR_ER@nyshcr.org. Standard office hours are 9:00 AM to 5:00 PM Monday through Friday. For more information call 518-474-0755. All comments received by January 31, 2020 will be considered.



Governor's Office of
Storm Recovery