PUBLIC NOTICE

U.S. Army Corps of Engineers New York District, CENAN-OP-RU Upstate Regulatory Field Office 1 Buffington Street, Bldg. 10, 3rd Fl. North Watervliet, New York 12189-4000

In replying refer to: Public Notice Number: NAN-2017-01372-USH Issue Date: December 19, 2018 Expiration Date: January 16, 2019

To Whom It May Concern:

The New York District, Corps of Engineers has received an application for a Department of the Army permit pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403) and Section 404 of the Clean Water Act (33 U.S. C. 1344).

- APPLICANT: Greenway Conservancy for the Hudson River Valley 625 Broadway, 4th Floor Albany, New York 12207
- ACTIVITY: Discharge of fill material into waters of the United States to facilitate the construction of a 36-mile pedestrian and bicycle trail
- WATERWAY: Wetlands and Tributaries (Hudson River Watershed)

LOCATION: City of Rensselaer, Village of Nassau, and Towns of East Greenbush, Schodack, and Nassau, Rensselaer County, New York Towns of Chatham, Kinderhook, Stuyvesant, Stockport, and Greenport, and Villages of Valatie and Kinderhook, Columbia County, New York

A detailed description and plans of the applicant's activity are enclosed to assist in your review.

The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and, in general, the needs and welfare of the people.

The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

ALL COMMENTS REGARDING THE PERMIT APPLICATION MUST BE PREPARED IN WRITING AND MAILED TO THE ATTENTION OF BRAD SHERWOOD AT THE ABOVE ADDRESS, OR SENT VIA ELECTRONIC MAIL TO <u>Brad.Sherwood@usace.army.mil</u>, TO REACH THIS OFFICE BY THE EXPIRATION DATE OF THIS NOTICE, otherwise, it will be presumed that there are no objections to the activity.

Comments submitted in response to this notice will be fully considered during the public interest review for this permit application. Comments provided will become part of the public record for this permit application. All written comments, including contact information, will be made a part of the administrative record, available to the public under the Freedom of Information Act. The Administrative Record, or portions thereof, may also be posted on a Corps of Engineers internet web site. Due to resource limitations, this office will normally not acknowledge the receipt of comments or respond to individual letters of comment.

Any person may request, in writing, before this public notice expires, that a public hearing be held to collect information necessary to consider this application. Requests for public hearings shall state, with particularity, the reasons why a public hearing should be held. It should be noted that information submitted by mail is considered just as carefully in the permit decision process and bears the same weight as that furnished at a public hearing.

Our preliminary determination is that the activity for which authorization is sought herein is not likely to adversely affect any Federally endangered or threatened species or their critical habitat. Pursuant to Section 7 of the Endangered Species Act (16 U.S.C. 1531), the District Engineer is consulting with the appropriate Federal agency to determine the presence of and potential impacts to listed species in the project area or their critical habitat.

Based upon a review of the GIS resources map on the N.Y.S. Office of Parks, Recreation and Historic Preservation (SHPO) website, the project site is located within areas identified by the SHPO as "Archeo Sensitive Areas". Further consultation with SHPO regarding these "Archeo Sensitive Areas" is being conducted and will be concluded prior to the final decision.

Reviews of activities pursuant to Section 404 of the Clean Water Act will include application of the guidelines promulgated by the Administrator, U.S. Environmental Protection Agency, under authority of Section 404 (b) of the Clean Water Act and the applicant will obtain a water quality certificate or waiver from the appropriate state agency in accordance with Section 401 of the Clean Water Act prior to a permit decision.

Pursuant to Section 307 (c) of the Coastal Zone Management Act of 1972 as amended [16 U.S.C. 1456 (c)], for activities under consideration that are located within the coastal zone of a state which has a federally approved coastal zone management program, the applicant has certified in the permit application that the activity complies with, and will be conducted in a manner that is consistent with, the approved state coastal zone management program. By this public notice, we are requesting the state's concurrence with, objection to, or waiver of the applicant's certification. No permit decision will be made until one of these actions occur. For activities within the coastal zone of New York State, the applicant's certification and accompanying information is available from the Consistency Coordinator, New York State Department of State, Division of Coastal Resources and Waterfront Revitalization, Coastal Zone Management Program, One Commerce Plaza, 99 Washington Avenue, Albany, New York 12231, Telephone (518) 474-6000. Comments regarding the applicant's certification, and copies of any letters to this office commenting upon this proposal, should be so addressed.

In addition to any required water quality certificate and coastal zone management program concurrence, the applicant has obtained or requested the following governmental authorization for the activity under consideration:

New York State Department of Environmental Conservation

In order for us to better serve you, please complete our Customer Service Survey located at:

http://www.nan.usace.army.mil/Missions/Regulatory/CustomerSurvey.aspx

It is requested that you communicate the foregoing information concerning the activity to any persons known by you to be interested and who did not receive a copy of this notice. If you have any questions concerning this application, you may contact Brad Sherwood of this office at (518) 266-6355.

For more information on New York District Corps of Engineers programs, visit our website at http://www.nan.usace.army.mil

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For and in behalf of Stephan A. Ryba Chief, Regulatory Branch

Enclosures

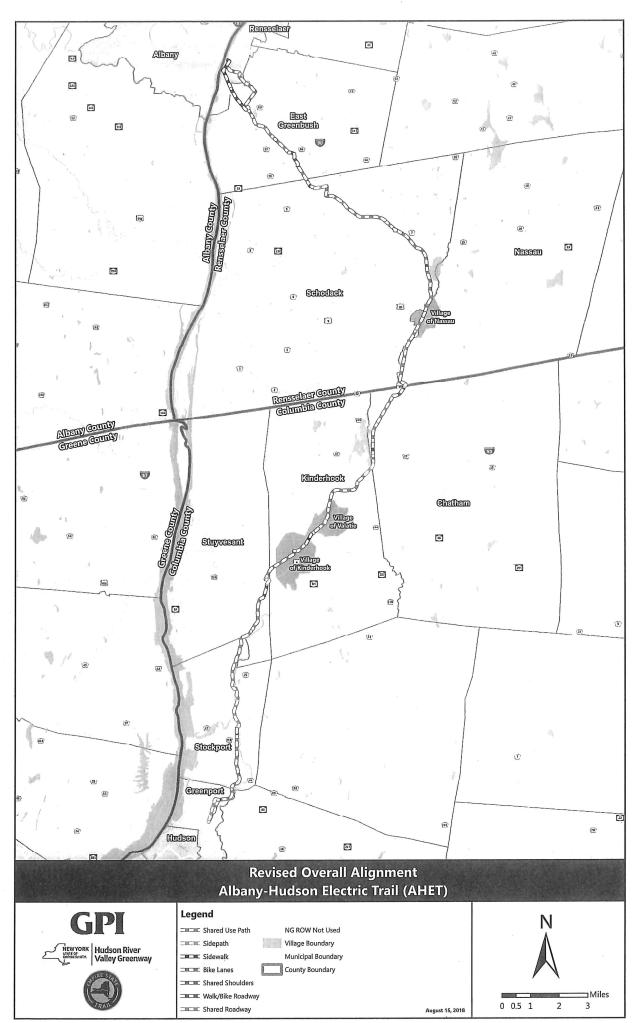
WORK DESCRIPTION

The applicant, Greenway Conservancy for the Hudson River Valley, Inc., has requested Department of the Army permit for the discharge of fill material into waters of the United States to facilitate the construction of a 36-mile pedestrian and bicycle trail, which begins at the northern end in the City of Rensselaer, Rensselaer County, New York and ends in the Town of Greenport, Columbia County, New York, while crossing though multiple municipalities within both Rensselaer and Columbia Counties.

The work would involve the discharge of fill material into a total of 2.04 acres of wetlands, including palustrine emergent (1.79), scrub-shrub (0.23), and forested (0.01) wetlands, and 968 linear feet of stream channel, for the construction of a 36-mile pedestrian and bicycle trail. The trail would be comprised of 27 miles of off-road, utilizing the alignment of a historic trolley route that is currently maintained as an electric utility corridor, and would include the construction of six bridge crossings. The bridge crossings would be comprised of over the Moordener Kill at one location and over the Valatie Kill at five locations along the proposed alignment. The remaining 9 miles would be comprised of on-road bike paths, sidewalks, and sidepaths, utilizing local, county, and state roadways where improvements would be made as needed to provide safe crossings and minimize conflicts with motor vehicles. In addition, the project would include the construction of up to ten trailhead locations, including parking areas and signage, along with benches, kiosks, and other bicycle-related facilities.

To mitigate for the proposed impacts to aquatic resources, the applicant proposes off-site mitigation at Schodack Island State Park, located along the Hudson River, in the Town of Stuyvesant, Columbia County. The proposed mitigation would include the excavation of a 575 linear foot side channel through historic dredge spoils, thereby re-establishing a direct connection between the Hudson River and Schodack Creek. In addition, approximately 1.70 acres of tidal and intertidal wetlands are proposed to be established alongside the channel cut.

The stated purpose of this project is to provide residents and visitors with a new pedestrian and bicycle recreational trail in Rensselaer and Columbia Counties.



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Project Impact Tables

Updated Federal Wetland Impacts Based Upon Cover Type					
Wetland ID	Pern	nanent Fill (Acre		Grand Total	Figure Sheet#
	PEM^1	PSS ¹	PF0 ¹	(Acreage)	I Iguie Sheet#
А	0.015	0	0	0.015	4.3.1
В	0.017	0	0	0.017	4.3.2
D	0	0.018	0	0.018	4.3.3
20	0	0.03	0	0.03	4.3.4
F	0.189	0	0	0.189	4.4.1
Н	0.025	0	0	0.025	4.4.2
Ι	0.126	0	0	0.126	4.4.3
J	0.001	0	0	0.001	4.5.1
О	0	0	0.013	0.013	4.6.1
Р	0.004	0	0	0.004	4.6.2
S	0.015	0	0	0.015	4.7.1
Т	0.01	0	0	0.01	4.7.2
U	0.022	0	0	0.022	4.7.2
V	0	0.032	0	0.032	4.7.3
Х	0.034	0.053	0	0.087	4.7.4
Y	0	0.02	0	0.02	4.7.5
Z	0	0.065	0	0.065	4.7.6
3B	0.027	0	0	0.027	4.9.1
3C	0.002	0	0	0.002	4.9.2
3D	0.374	0	0	0.374	4.9.3
3E	0.034	0	0	0.034	4.9.4
6A	0.09	0	0	0.09	4.10.1
6D	0.011	0	0	0.011	4.10.2
6B	0.01	0.008	0	0.018	4.10.3
6C	0.078	0	0	0.078	4.10.3
3G	0.041	0	0	0.041	4.10.4
3Н	0.001	0	0	0.001	4.10.5
3I	0.001	0	0	0.001	4.10.5
3J	0.065	0	0	0.065	4.10.6
3K	0.021	0	0	0.021	4.10.7
3L	0.009	0	0	0.009	4.10.8
3M	0.251	0	0	0.251	4.10.9
3N	0.041	0	0	0.041	4.10.10
30	0.181	0	0	0.181	4.10.11
2H	0.007	0	0	0.007	4.11.1
2E	0.001	0	0	0.001	4.11.2
2D	0.004	0	0	0.004	4.11.3
2C	0	0.006	0	0.006	4.11.4
2B	0	0.001	0	0.001	4.11.5
2A	0.01	0	0	0.01	4.12.1
4A	0.002	0	0	0.002	4.12.2
4B	0.001	0	0	0.001	4.12.2
4C	0.023	0	0	0.023	4.12.3
4E	0.003	0	0	0.003	4.12.4
4G	0.001	0	0	0.001	4.12.5
4H	0.004	0	0	0.004	4.12.6
AJ	0.04	0	0	0.04	4.12.7
Total	1.791	0.233	0.013	2.037	

Impacts Below OHW From Bridge Construction			
Location	Volume Below OHW (CY)	Area of Impact (sf)	Area of Impact (acres)
Bridge A	121.02	1025.17	0.024
Bridge B	0	0	0.000
Bridge C	106.15	827.9	0.019
Bridge D	175.8	388.4	0.009
Bridge E	184.75	1130.3	0.026
Bridge F	41.93	175.89	0.004
TOTAL	629.65	3547.66	0.081

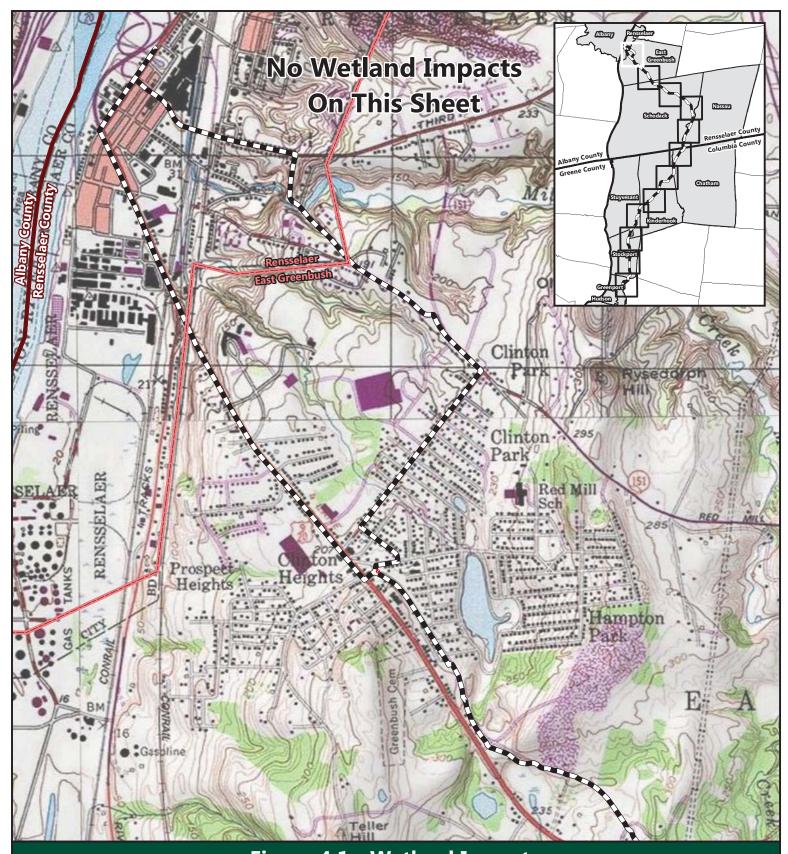


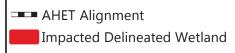
Figure 4.1 - Wetland Impacts City of Rensselaer & Town of East Greenbush - Rensselaer County

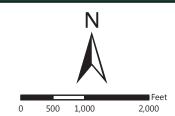


Data provided by NYS GIS Clearinghouse &

Other Third Parties.

Legend





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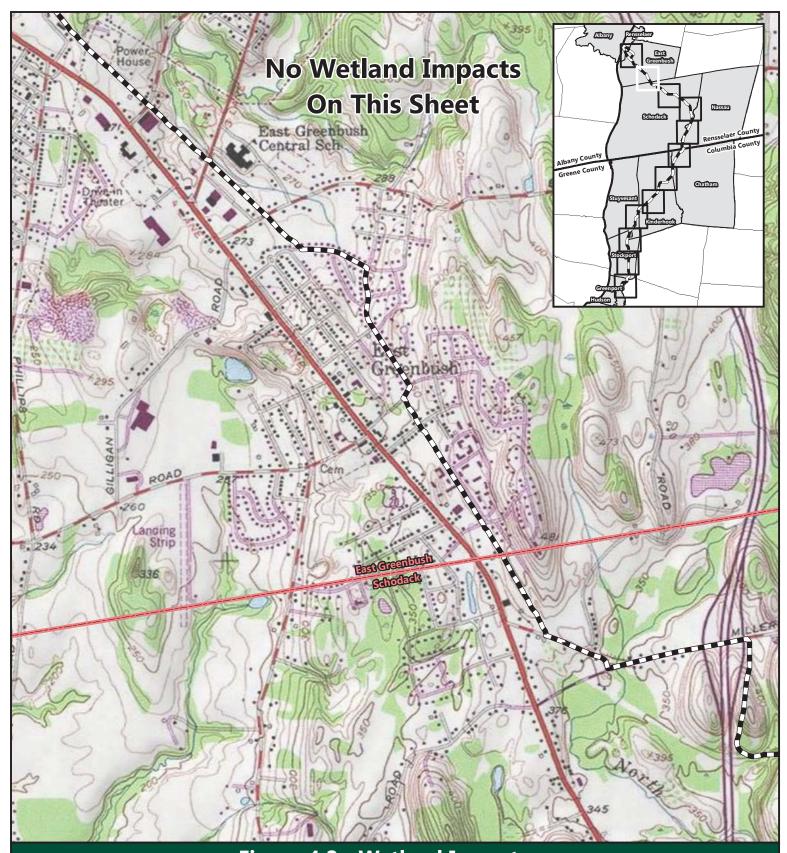
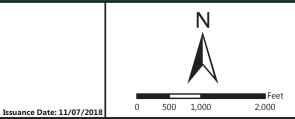


Figure 4.2 - Wetland Impacts Towns of East Greenbush & Schodack - Rensselaer County



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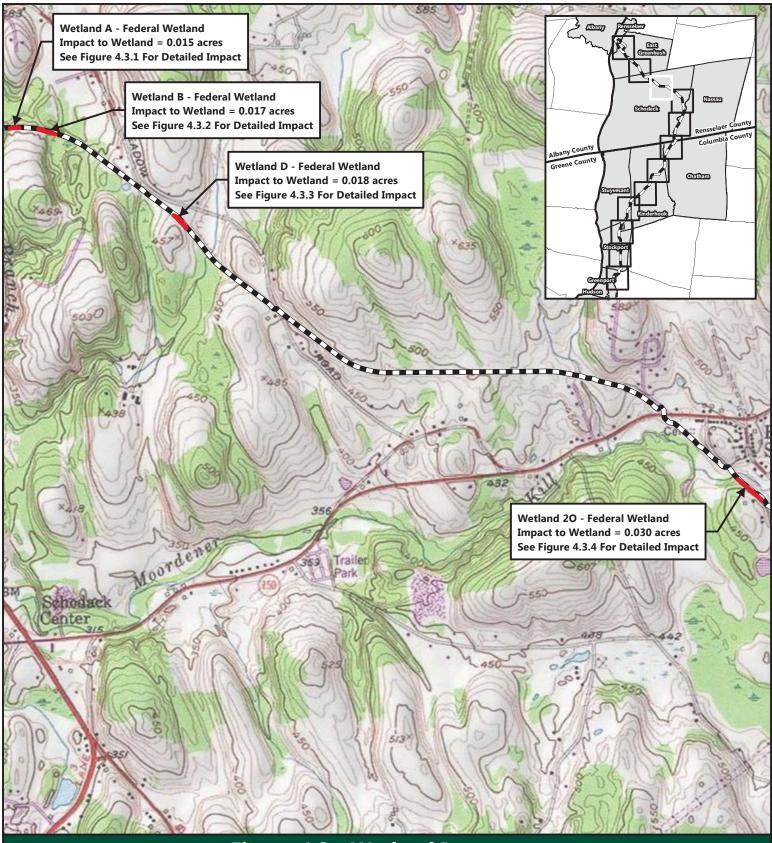


Figure 4.3 - Wetland Impacts Town of Schodack - Rensselaer County

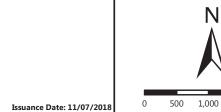


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Other Third Parties.

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AHET Alignment



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Impacted Delineated Wetland

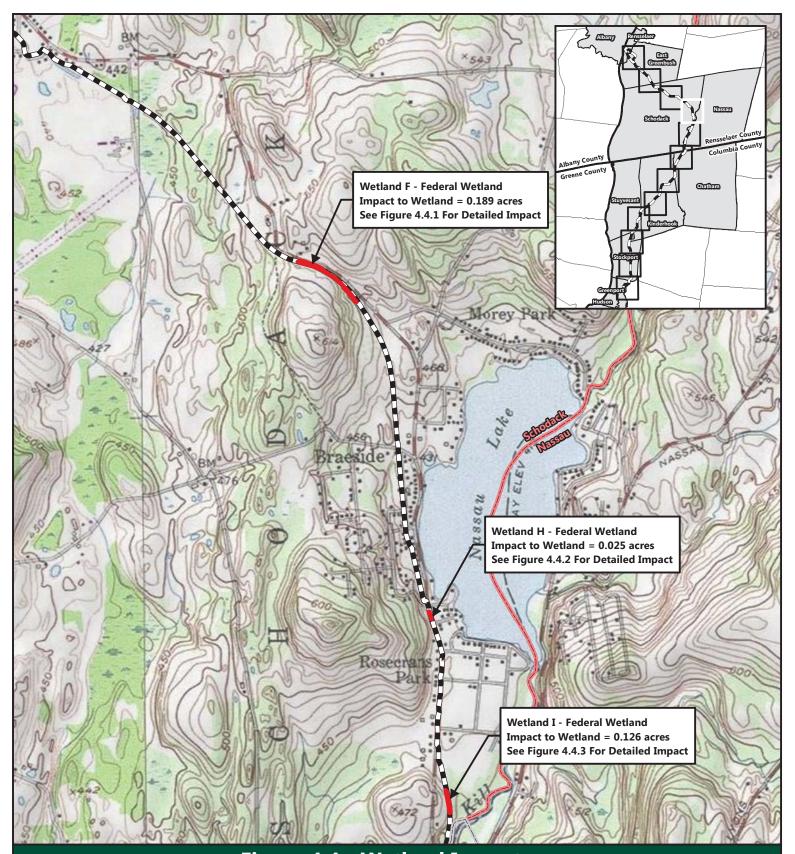
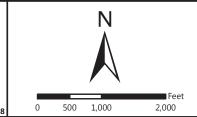


Figure 4.4 - Wetland Impacts Town of Schodack - Rensselaer County



Legend





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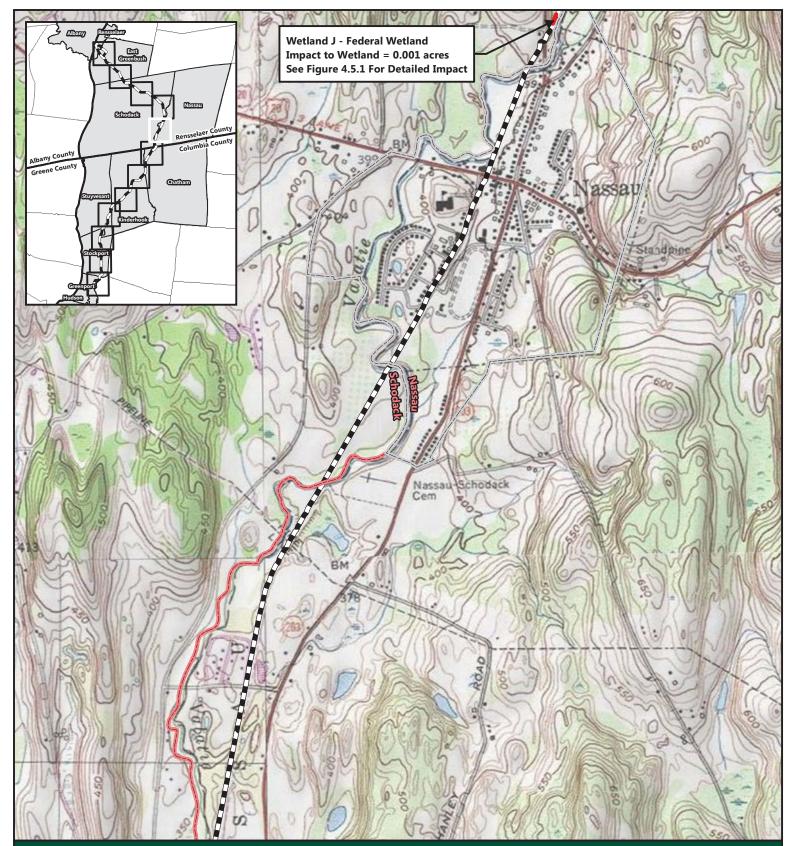
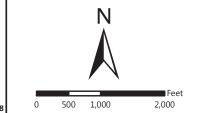


Figure 4.5 - Wetland Impacts Town & Village of Nassau - Rensselaer County



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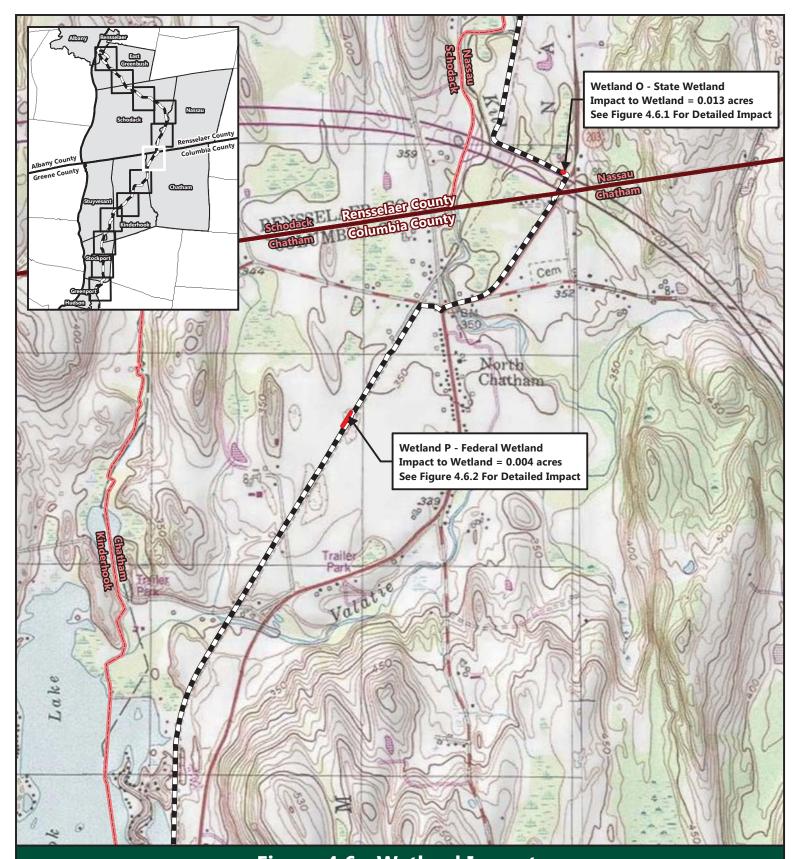


Figure 4.6 - Wetland Impacts Town of Nassau - Rensselaer County & Town of Chatham - Columbia County



Data provided by NYS GIS Clearinghouse &

Other Third Parties.

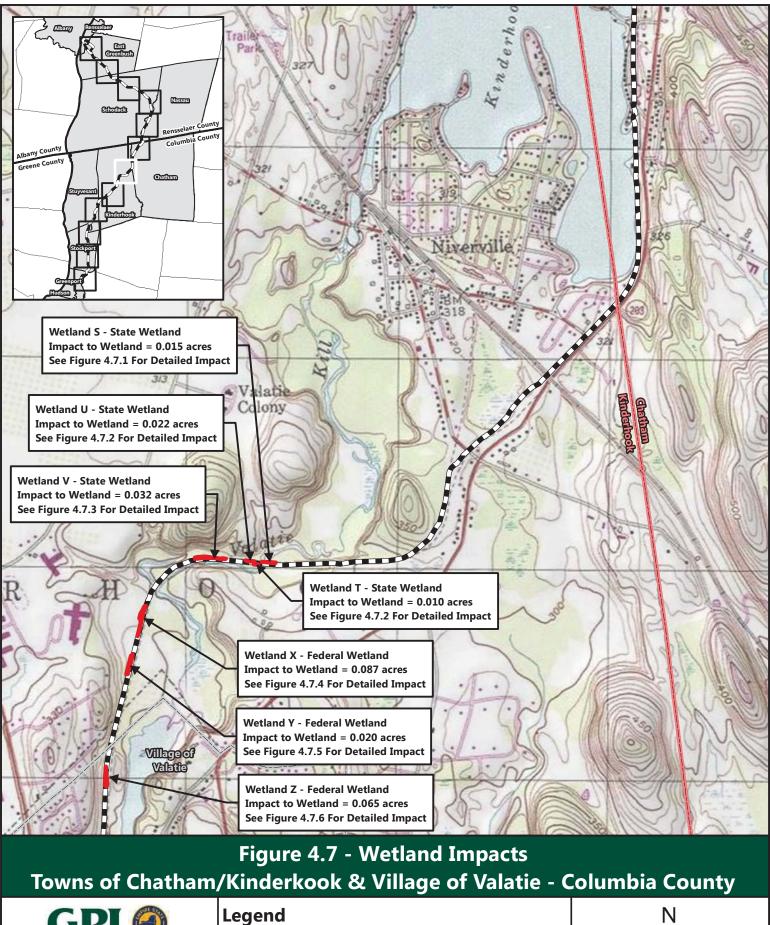
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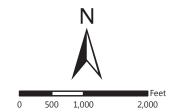
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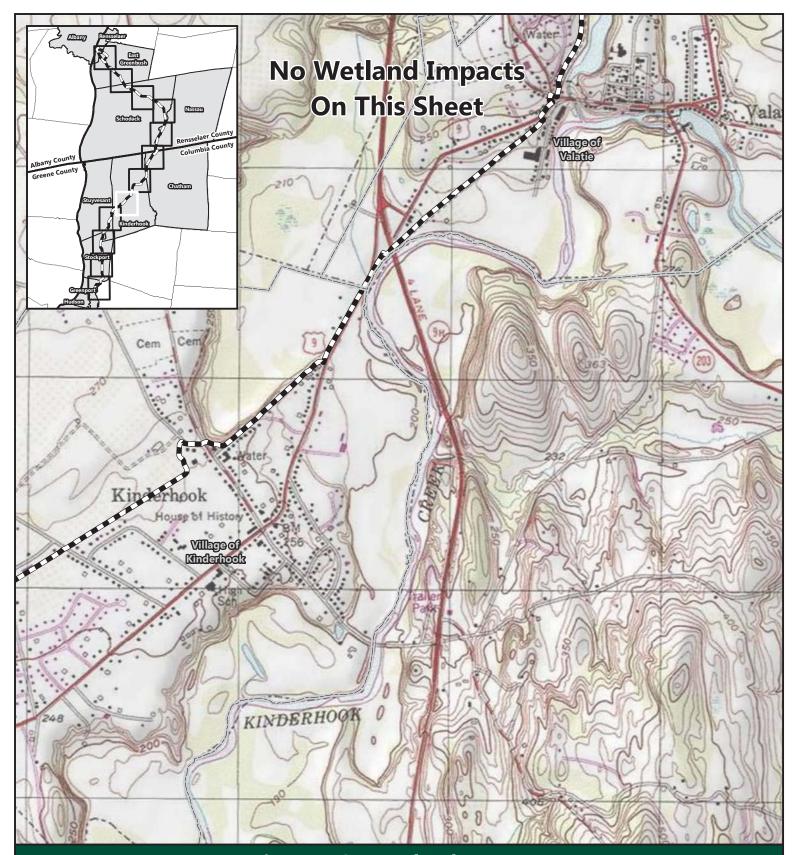


Figure 4.8 - Wetland Impacts Villages of Valatie & Kinderhook - Columbia County

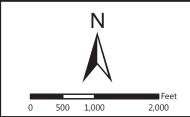


Other Third Parties.

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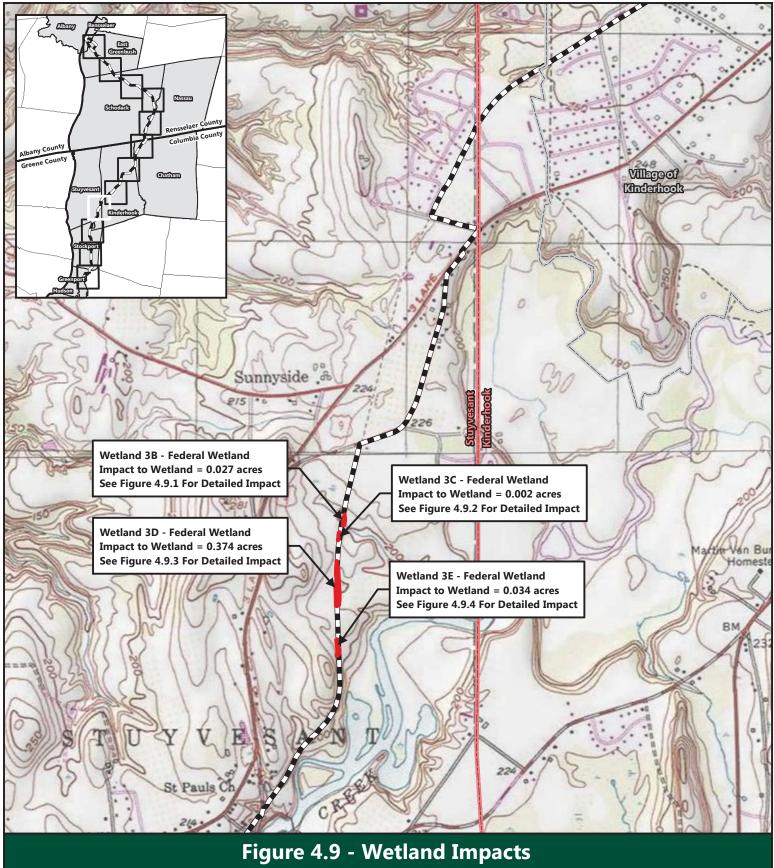


Impacted Delineated Wetland



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Town of Stuyvesant - Columbia County

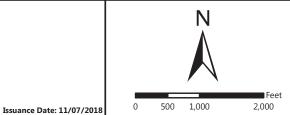


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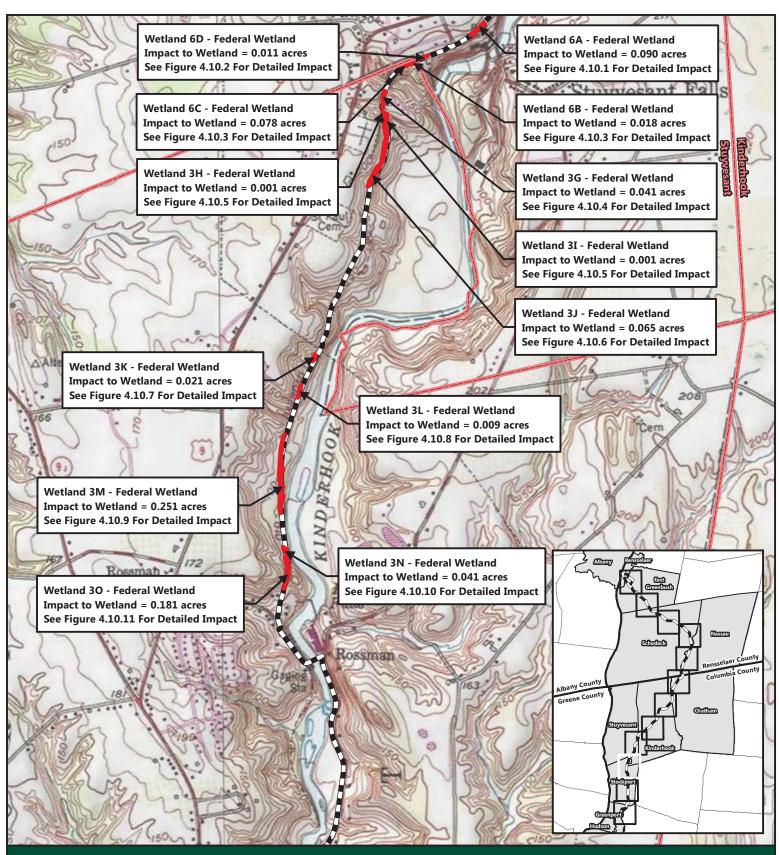


Figure 4.10 - Wetland Impacts Towns of Stuyvesant & Stockport - Columbia County

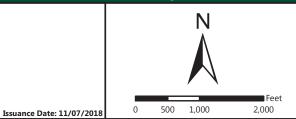


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Other Third Parties.

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Wetland 2H - Federal Wetland Impact to Wetland = 0.007 acres See Figure 4.11.1 For Detailed Impact

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Wetland 2E - Federal Wetland Impact to Wetland = 0.001 acres See Figure 4.11.2 For Detailed Impact

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Columbiaville .

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Wetland 2C - Federal Wetland Impact to Wetland = 0.006 acres See Figure 4.11.4 For Detailed Impact See Figure 4.11.3 For Detailed Impact

Wetland 2D - Federal Wetland Impact to Wetland = 0.004 acres

Issuance Date: 11/07/2018

Wetland 2B - Federal Wetland Impact to Wetland = 0.001 acres See Figure 4.11.5 For Detailed Impact

Figure 4.11 - Wetland Impacts Town of Stockport - Columbia County

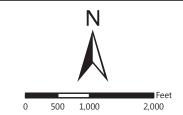


Data provided by NYS GIS Clearinghouse &

Other Third Parties.

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AHET Alignment



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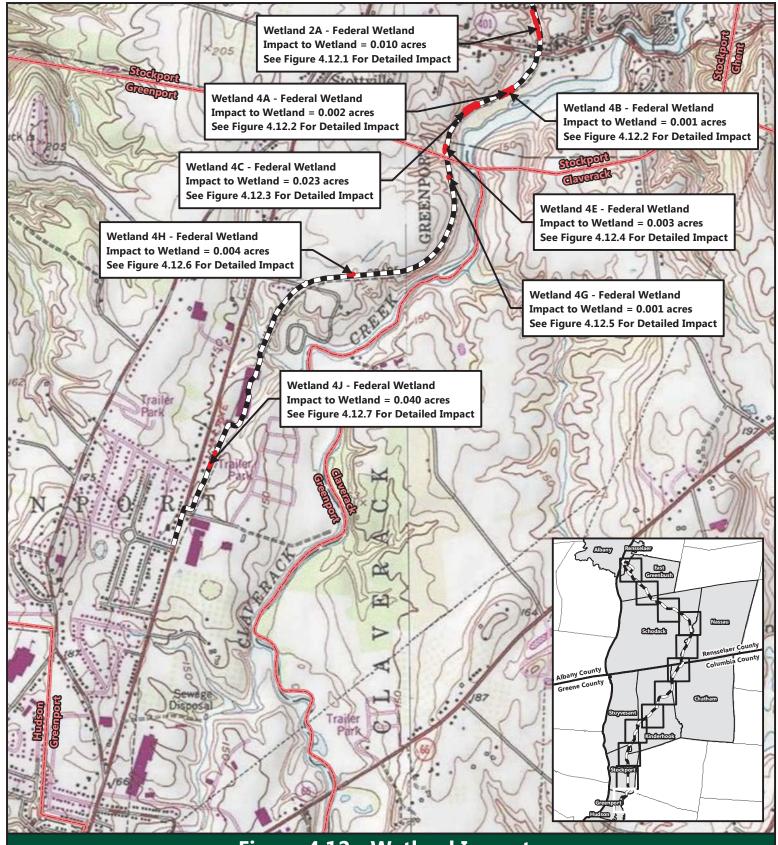


Figure 4.12 - Wetland Impacts Towns of Stockport & Greenport - Columbia County



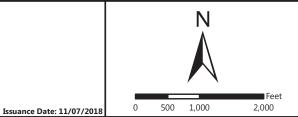
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Impacted Delineated Wetland



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ed Wetland Impact Cut Line Fill Line

Culvert & Stone Apron

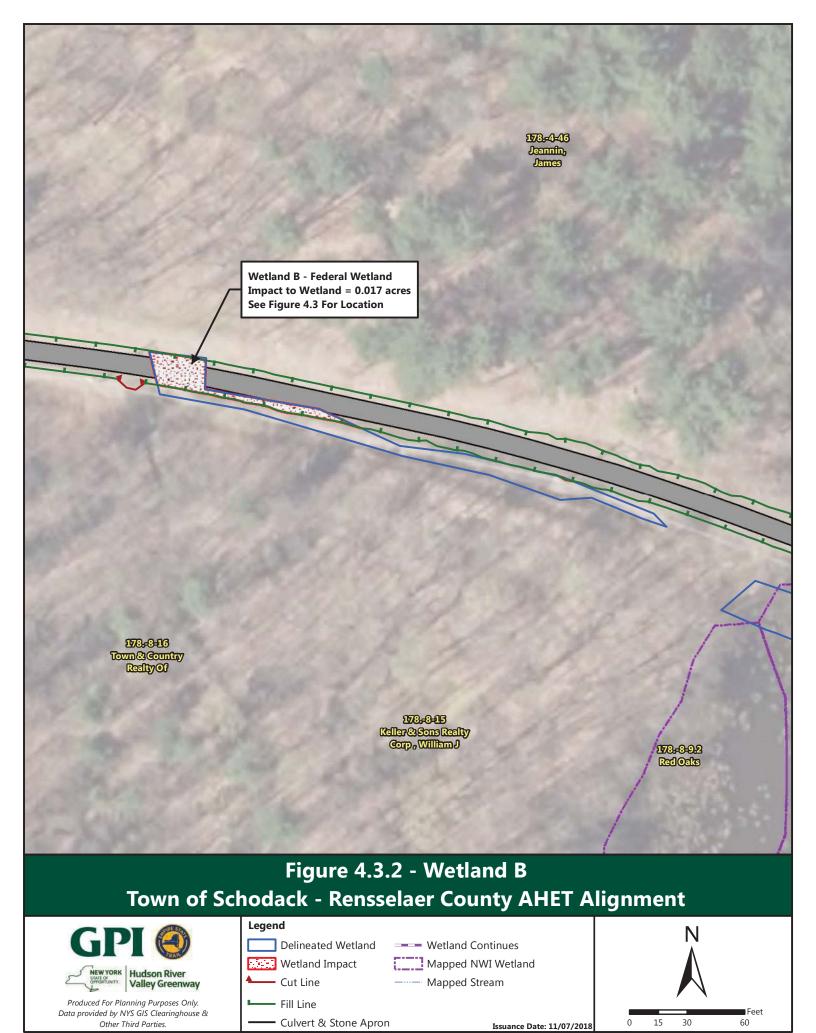
Wetland Continues Trail Alignment

Mapped NWI Wetland ---- Mapped Stream

Issuance Date: 11/07/2018

Ν Feet 0 15 30 60

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Wetland D - Federal Wetland Impact to Wetland = 0.018 acres See Figure 4.3 For Location

173-3-11.2 Hirt, ShirleyA

Figure 4.3.3 - Wetland D

Town of Schodack - Rensselaer County AHET Alignment



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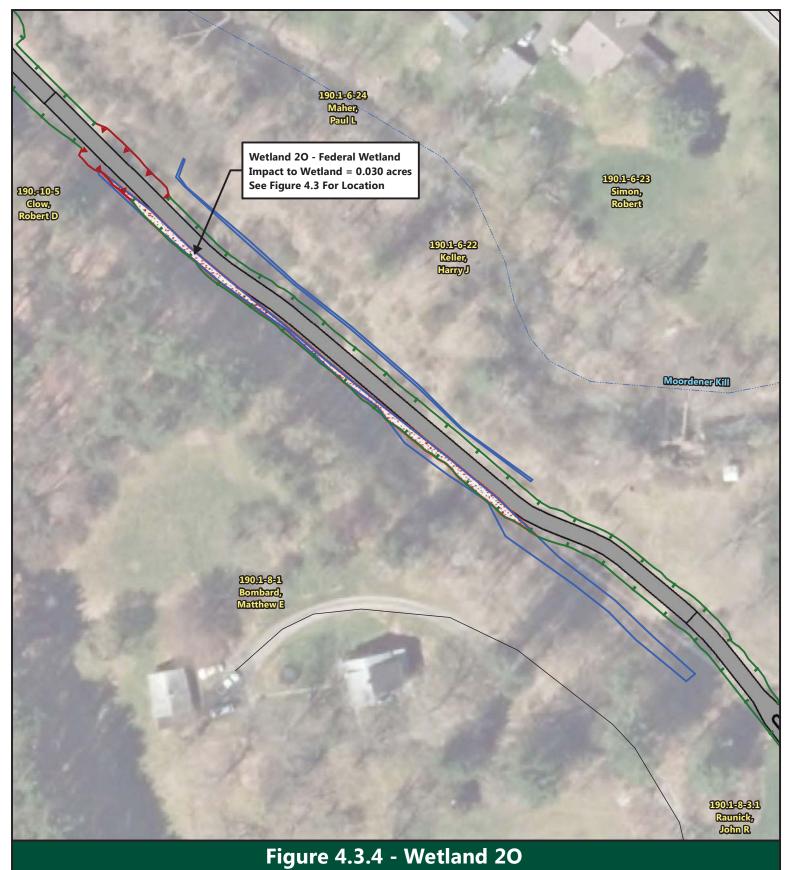
Mapped Stream

Culvert & Stone Apron



Ν Feet 0 15 30 60

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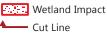
Town of Schodack - Rensselaer County AHET Alignment



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Legend

Delineated Wetland



Fill Line

Culvert & Stone Apron

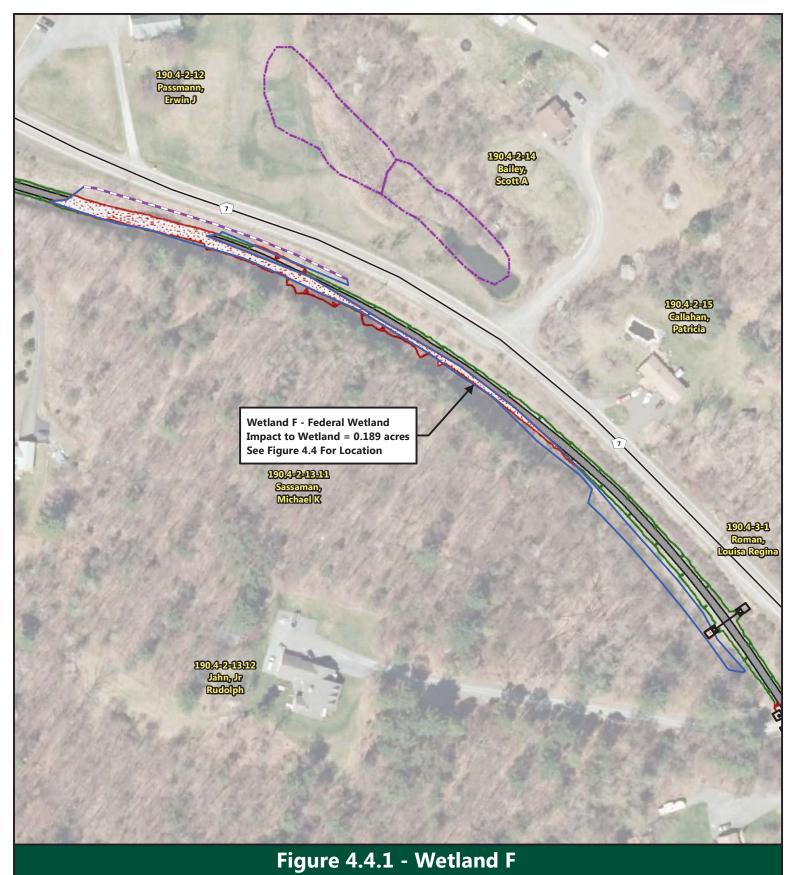
Wetland Continues

— Mapped Stream

Issuance Date: 11/07/2018

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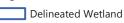


Town of Schodack - Rensselaer County AHET Alignment



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Cut Line



Culvert & Stone Apron

Wetland Continues

Mapped MWI Wetland Mapped Stream

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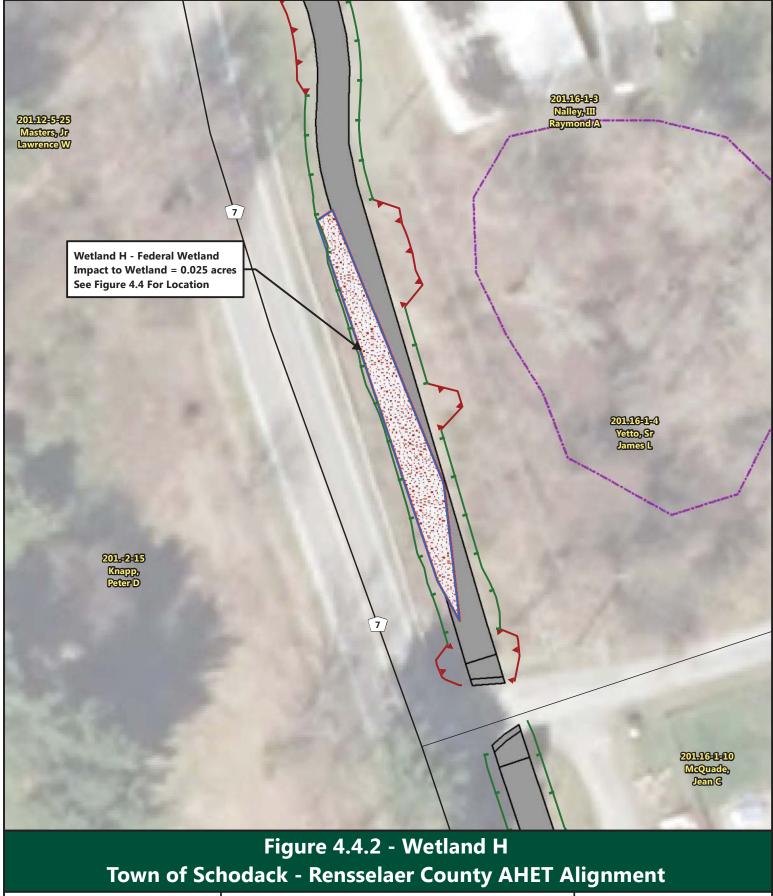
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Issuance Date: 11/07/2018



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. Delineated Wetland

Wetland Impact Cut Line Fill Line

Culvert & Stone Apron

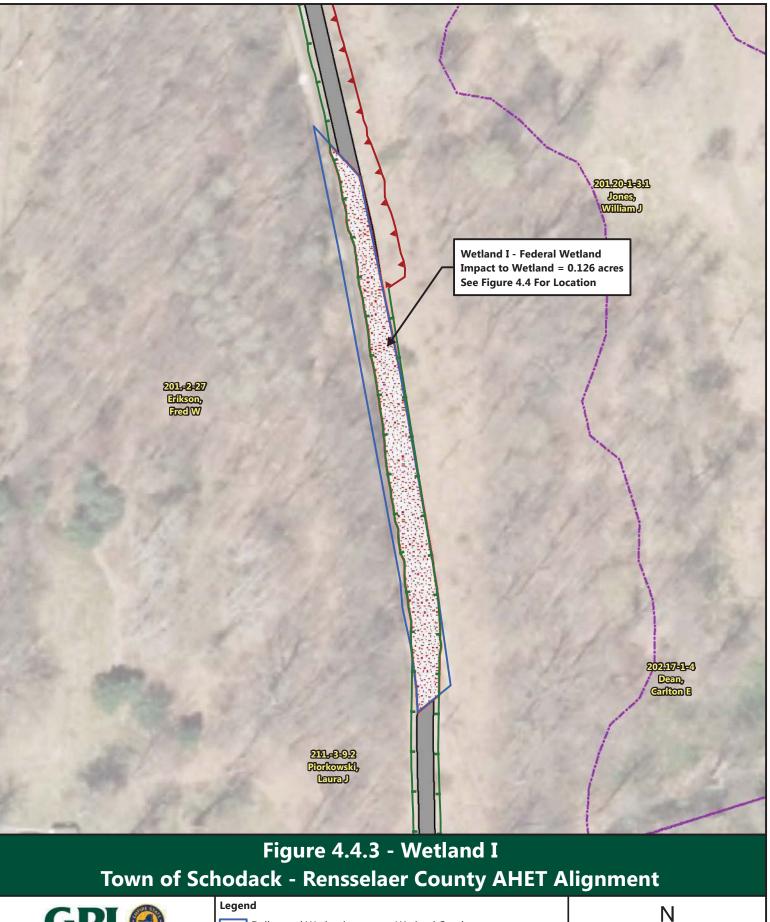
---- Wetland Continues
Trail Alignment

Mapped NWI Wetland

----- Mapped Stream

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P Hudson River Valley Greenway Produced For Planning Purposes Only.

Data provided by NYS GIS Clearinghouse & Other Third Parties.

Delineated Wetland

Wetland Impact

Cut Line

Fill Line

Culvert & Stone Apron

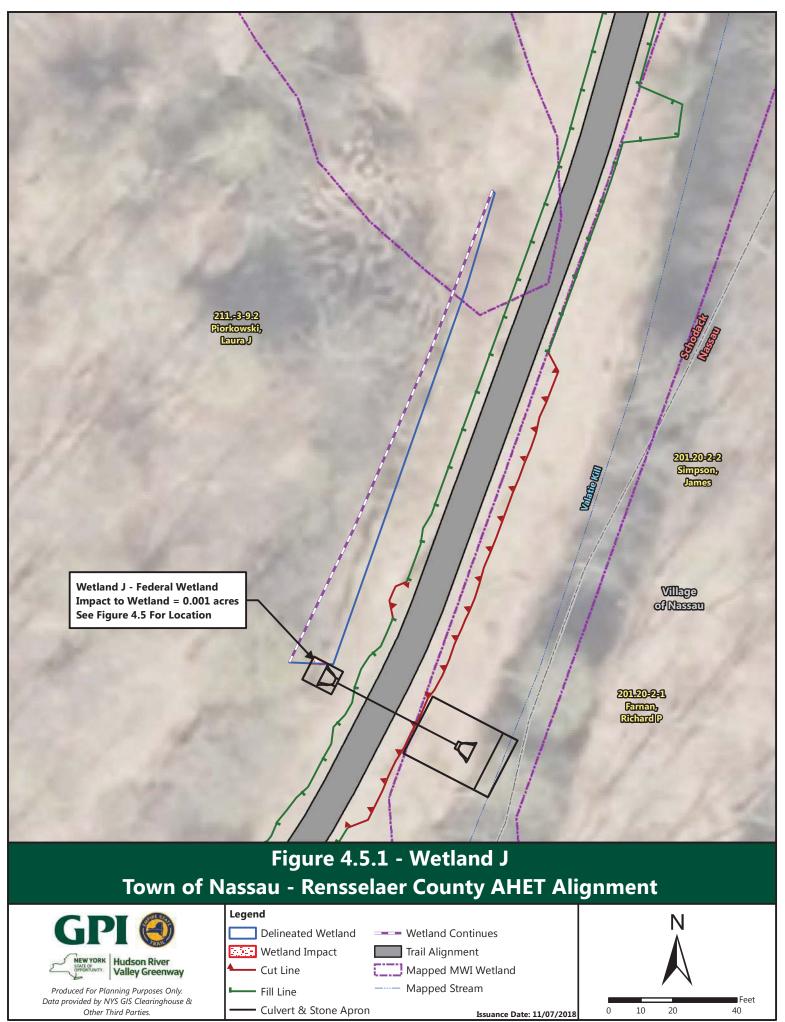
----- Wetland Continues Trail Alignment

Mapped NWI Wetland

——— Mapped Stream

Feet 50 100 Issuance Date: 11/07/2018 25

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Town of Nassau - Rensselaer County AHET Alignment



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Legend

Delineated Wetland

Fill Line

Wetland Impact
Cut Line

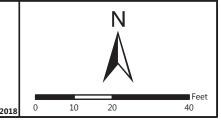
----- Wetland Continues
Trail Alignment

Mapped MWI Wetland

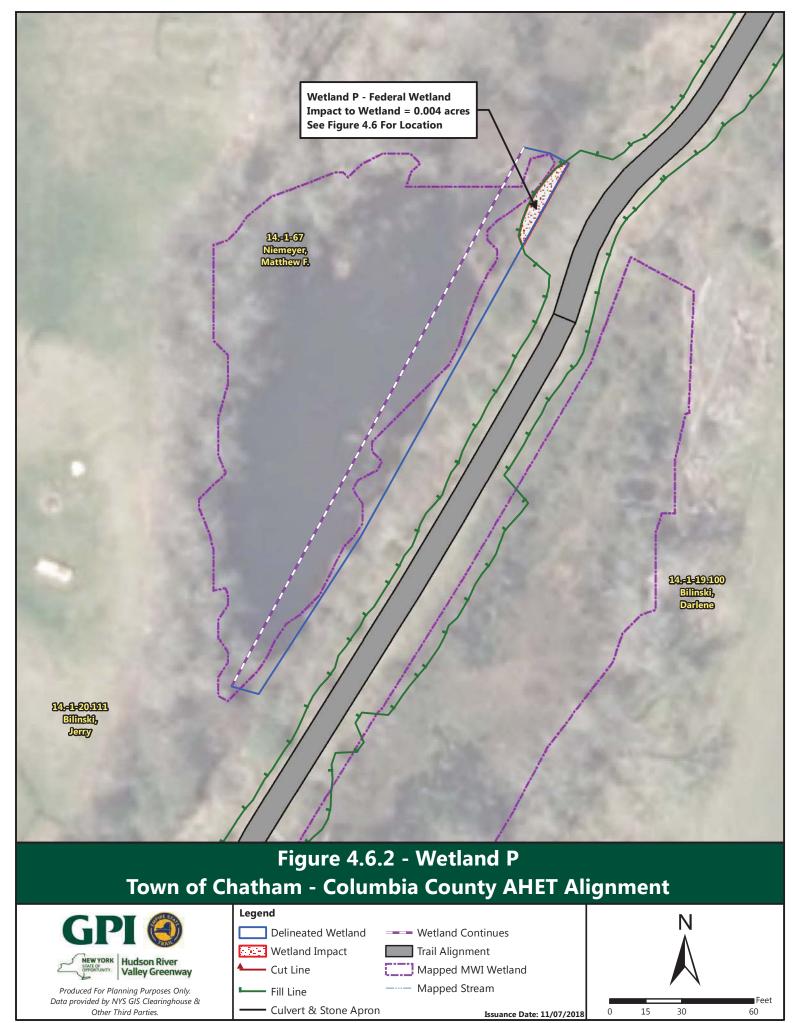
—— Mapped Stream

- Culvert & Stone Apron

Apron Issuance Date: 11/07/2018



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Leger	nd
	Delineated Wetland
	Wetland Impact

Cut Line

Fill Line

Culvert & Stone Apron

Wetland Continues
 Trail Alignment
 Mapped MWI Wetland

----- Mapped MWI Wetland

Issuance Date: 11/07/2018

Feet 0 15 30 60

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NEW YORK STATE OF OPPORTUNITY. Valley Greenway Cut Line

Culvert & Stone Apron

Wetland Continues
 Trail Alignment
 Mapped MWI Wetland

Mapped MWI Wetland
------ Mapped Stream

Issuance Date: 11/07/2018

N Feet 0 15 30 60

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Town of Kinderhook - Columbia County AHET Alignment



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Fill Line

----- Wetland Continues Trail Alignment

----- Mapped Stream

Culvert & Stone Apron

Mapped MWI Wetland

Issuance Date: 11/07/2018

Ν Feet 120 0 30 60

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Town of Kinderhook - Columbia County AHET Alignment



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egend	
cycna	

L

Delineated Wetland



Cut Line

Fill Line

----- Wetland Continues Trail Alignment

Mapped MWI Wetland

Culvert & Stone Apron

----- Mapped Stream

Ν Feet 25 100 Issuance Date: 11/07/2018 0 50

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NEW YORK STATE OF OPPORTUNITY. Hudson River Valley Greenway

Cut Line

Fill Line

Trail Alignment

Mapped MWI Wetland

----- Mapped Stream

Culvert & Stone Apron

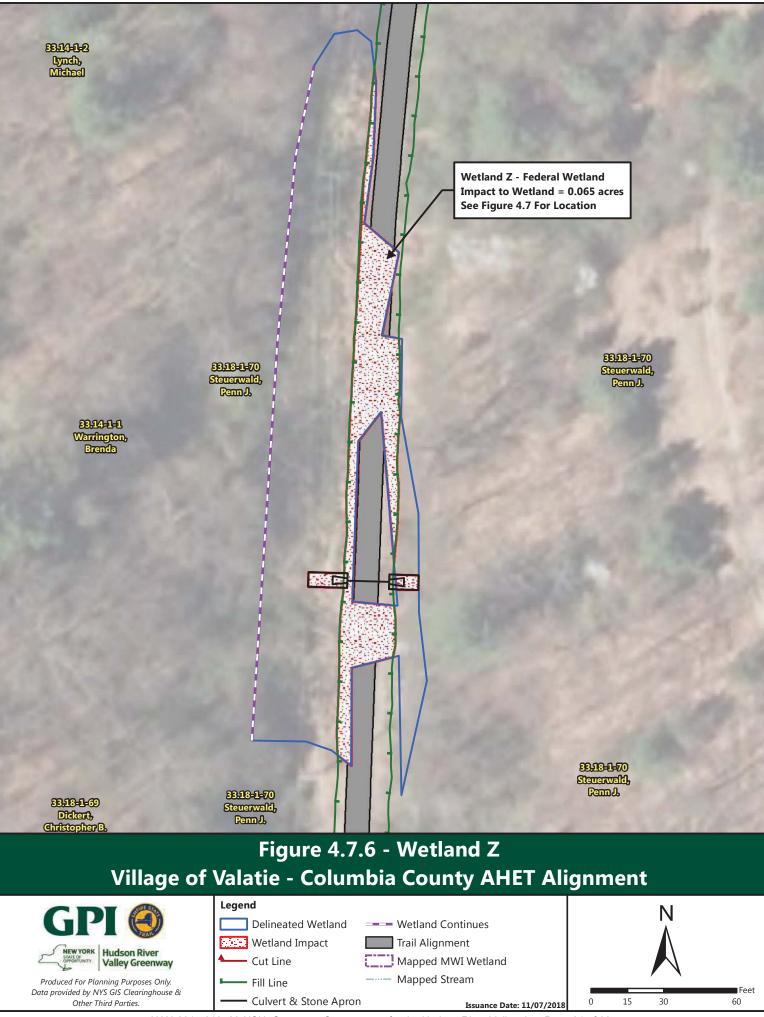
Issuance Date: 11/07/2018 NAN-2017-013720-USH, Greenway Conservancy for the Hudson River Valley, Inc, Page 30 of 93 Feet

80

20

0

40



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Town of Stuyvesant - Columbia County AHET Alignment



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Legend		
	Delineated	
E State	\	

Wetland ----- Wetland Continues Wetland Impact

Fill Line

Culvert & Stone Apron

Cut Line

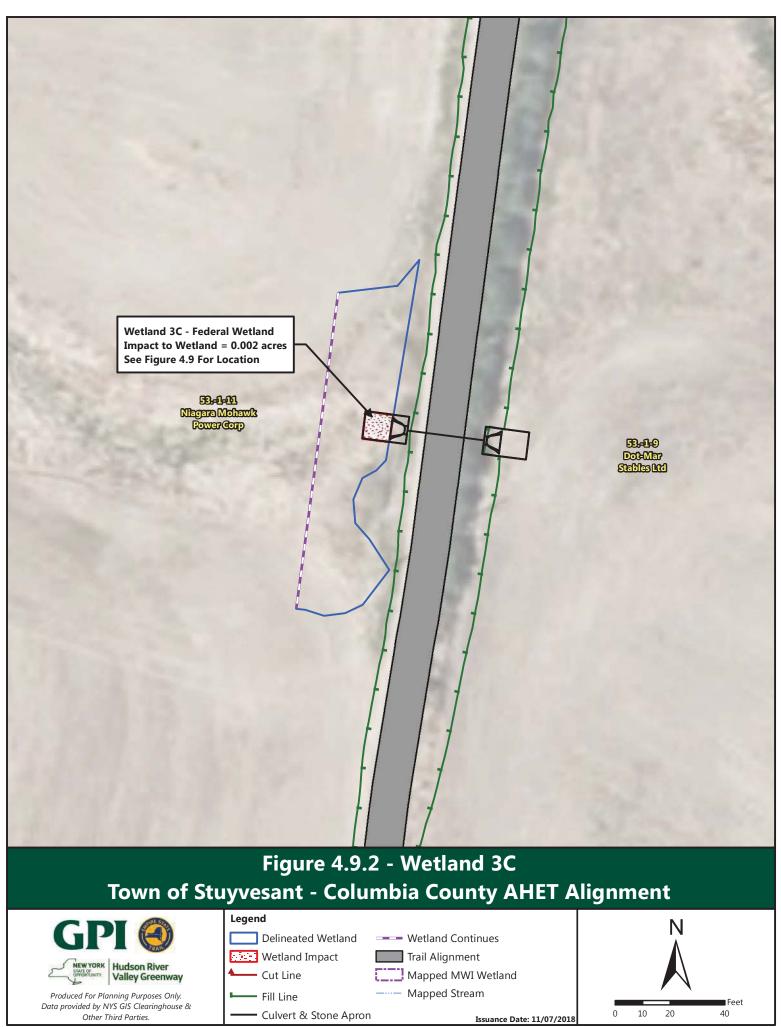
Trail Alignment Mapped MWI Wetland

----- Mapped Stream

Issuance Date: 11/07/2018

Ν Feet 15 30 60 0

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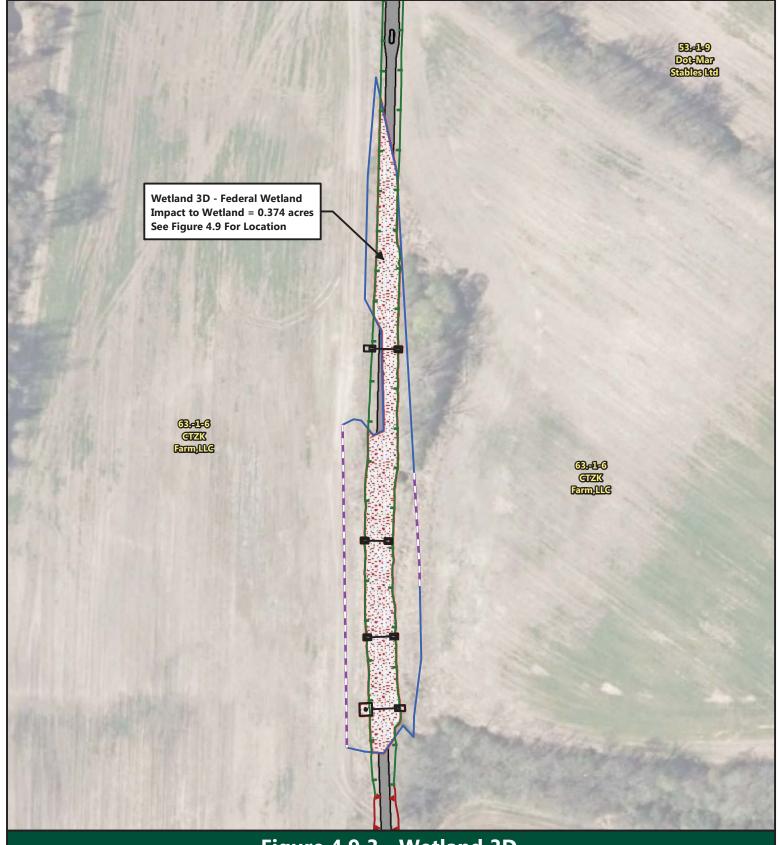


Figure 4.9.3 - Wetland 3D <u>Town of Stuyv</u>esant - Columbia County AHET Alignment



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Leger	nd
	Delineated Wetland
	Wetland Impact

Cut Line

Fill Line

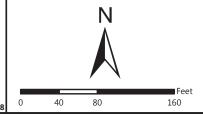
Wetland Continues

Mapped MWI Wetland

— Mapped Stream

- Culvert & Stone Apron

Mapped Stream
 Issuance Date: 11/07/2018



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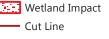
Town of Stuyvesant - Columbia County AHET Alignment



Produced For Planning Purposes Only. Data provided by NYS GIS Clearinghouse & Other Third Parties.

Legend

Delineated Wetland



----- Wetland Continues Trail Alignment

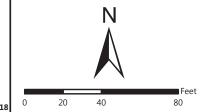
_____ Mapped MWI Wetland

Fill Line

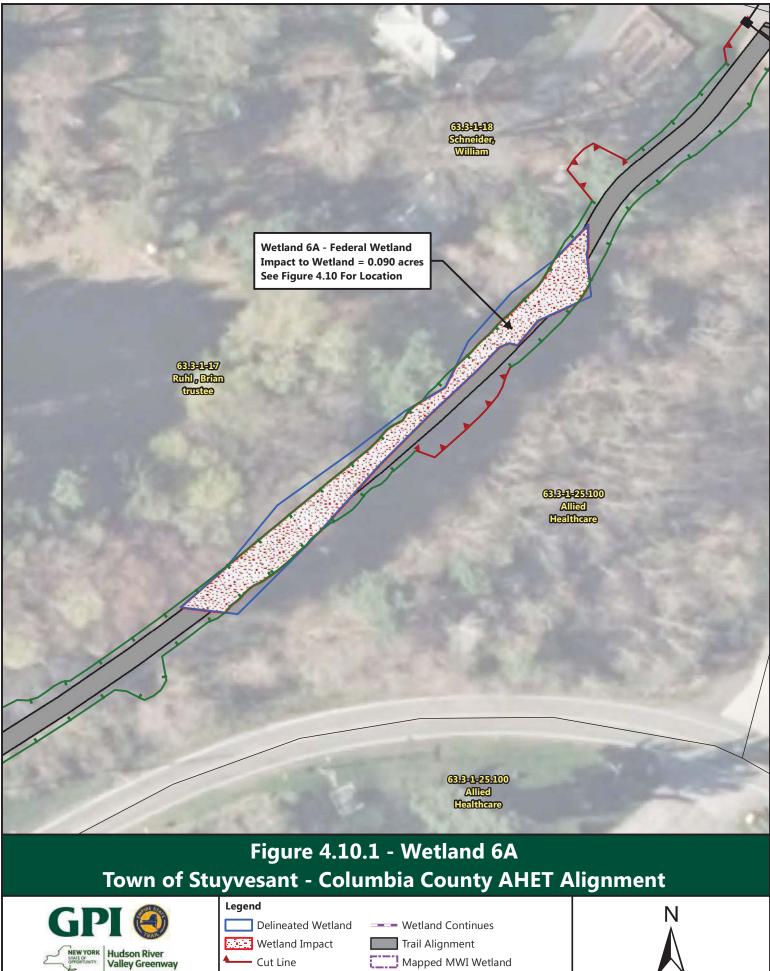
----- Mapped Stream

Culvert & Stone Apron

Issuance Date: 11/07/2018



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Cut Line

Fill Line

_____ Mapped MWI Wetland ----- Mapped Stream

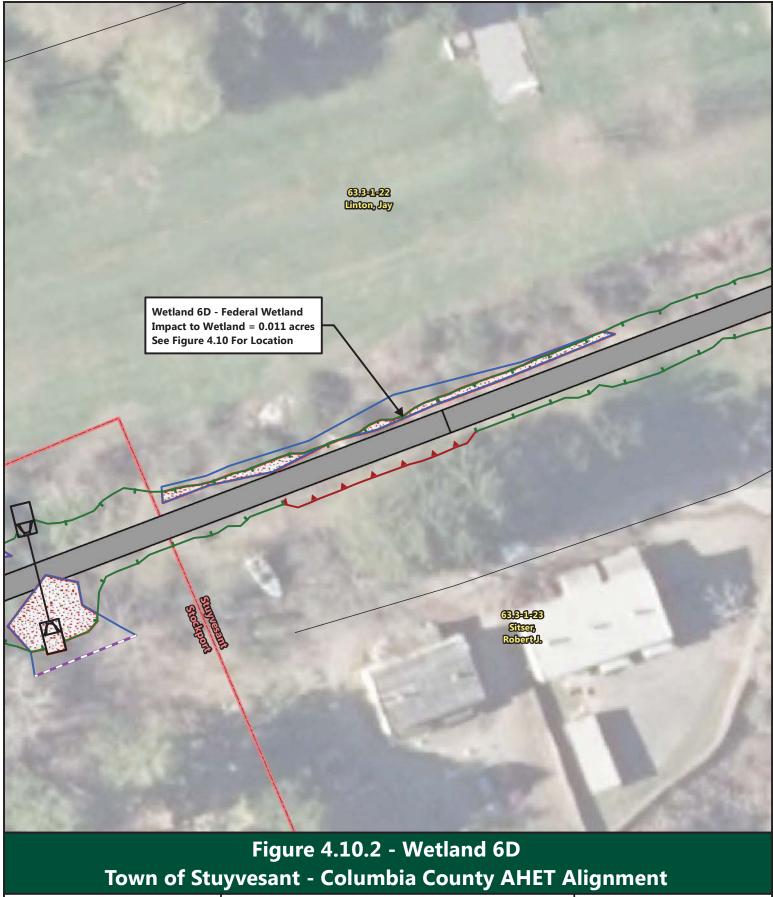
Culvert & Stone Apron

Issuance Date: 11/07/2018 NAN-2017-013720-USH, Greenway Conservancy for the Hudson River Valley, Inc, Page 36 of 93 Feet

80

20

40







Fill Line

Culvert & Stone Apron

etland ---- Wetland Continues Ict Trail Alignment

Mapped MWI Wetland ——— Mapped Stream

inues it Wetland Im Issuance Date: 11/07/2018 N Feet 0 15 30 60

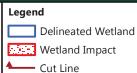
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Figure 4.10.3 - Wetland 6B & 6C Town of Stockport - Columbia County AHET Alignment



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Fill Line

Culvert & Stone Apron

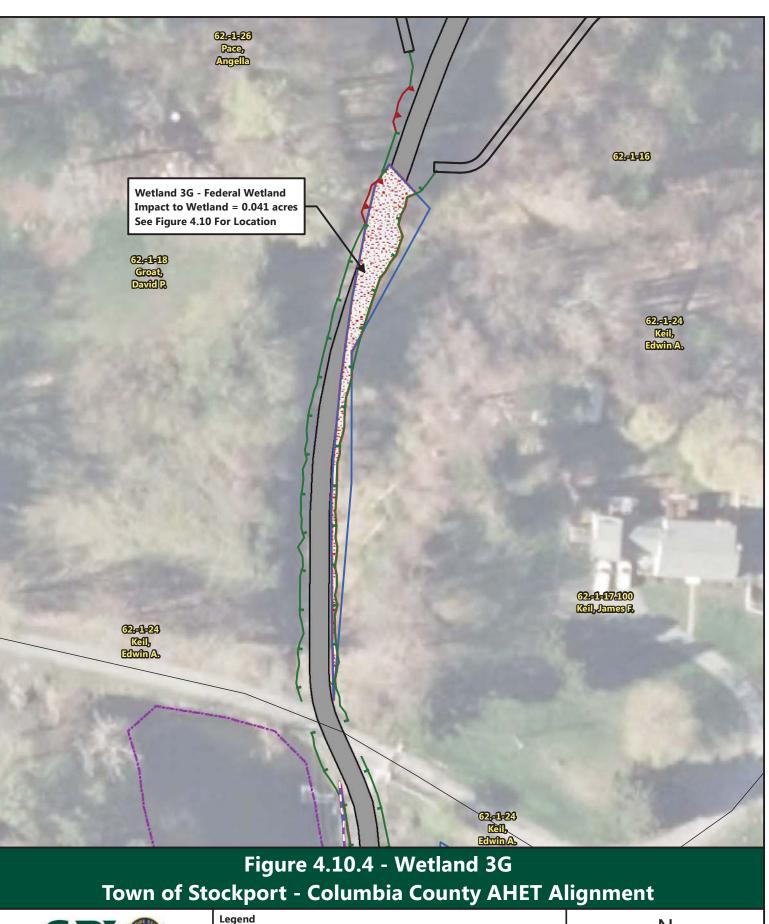
Wetland Continues
Trail Alignment
Mapped MWI Wetland

Mapped MWI Wetland
 Mapped Stream

Issuance Date: 11/07/2018

Feet 0 20 40 80

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Wetland Impact Cut Line

Fill Line

Culvert & Stone Apron

----- Wetland Continues Trail Alignment

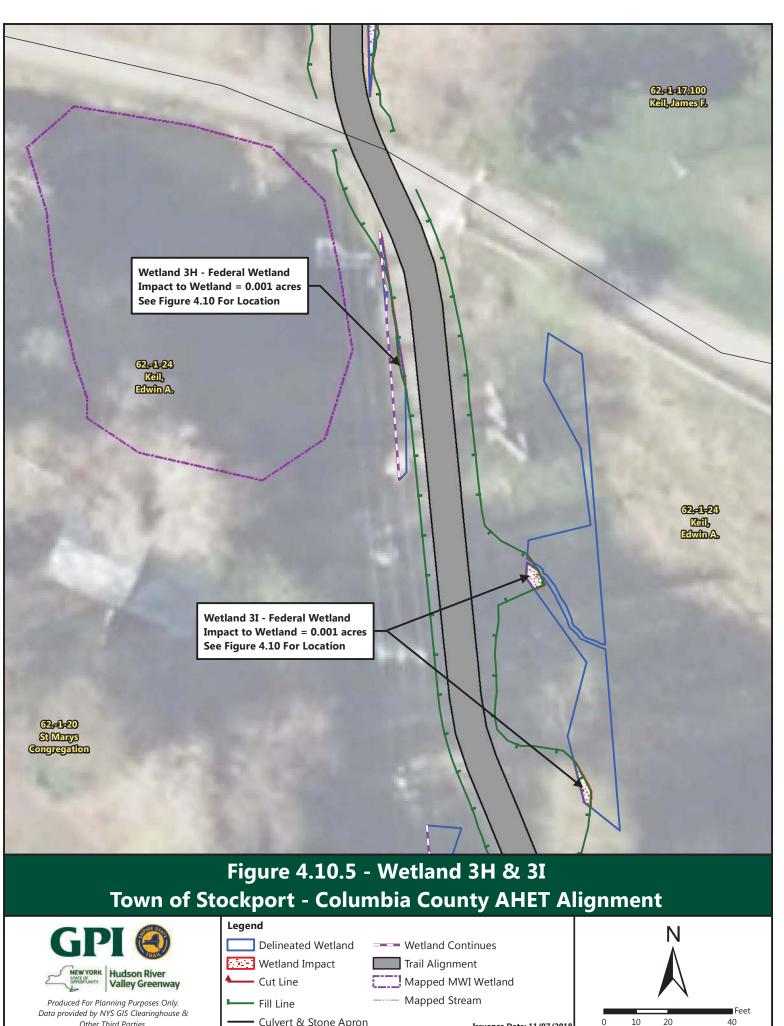
Mapped MWI Wetland

— Mapped Stream

Issuance Date: 11/07/2018

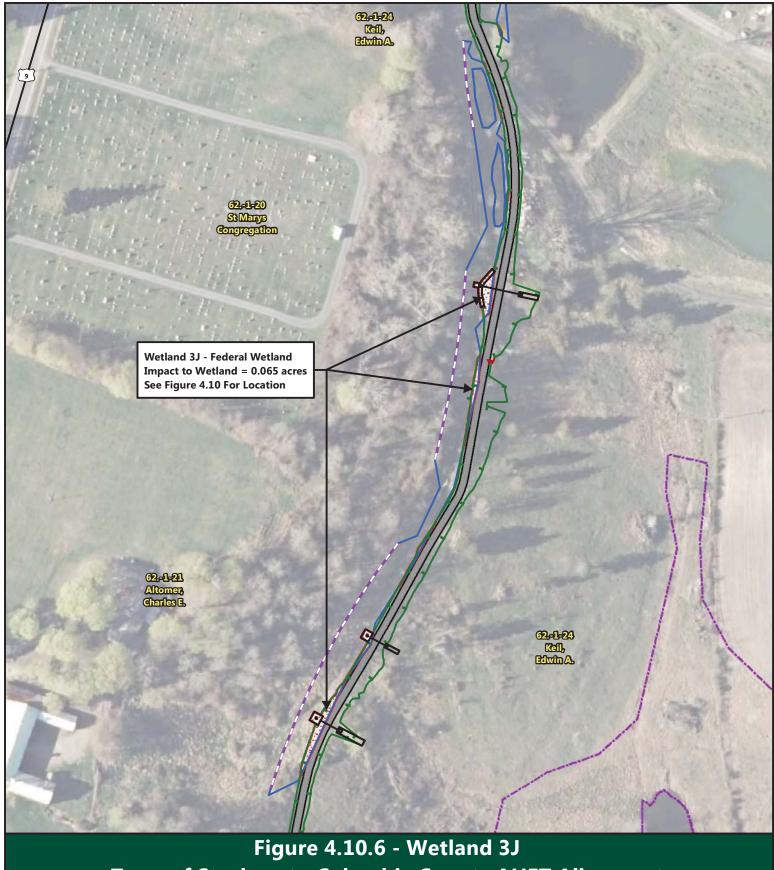
Ν Feet 40 80 20 0

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Other Third Parties. NAN-2017-013720-USH, Greenway Conservancy for the Hudson River Valley, Inc, Page 40 of 93

Culvert & Stone Apron Issuance Date: 11/07/2018 0





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Legend Delineated

Delineated Wetland

Wetland Impact Cut Line Fill Line

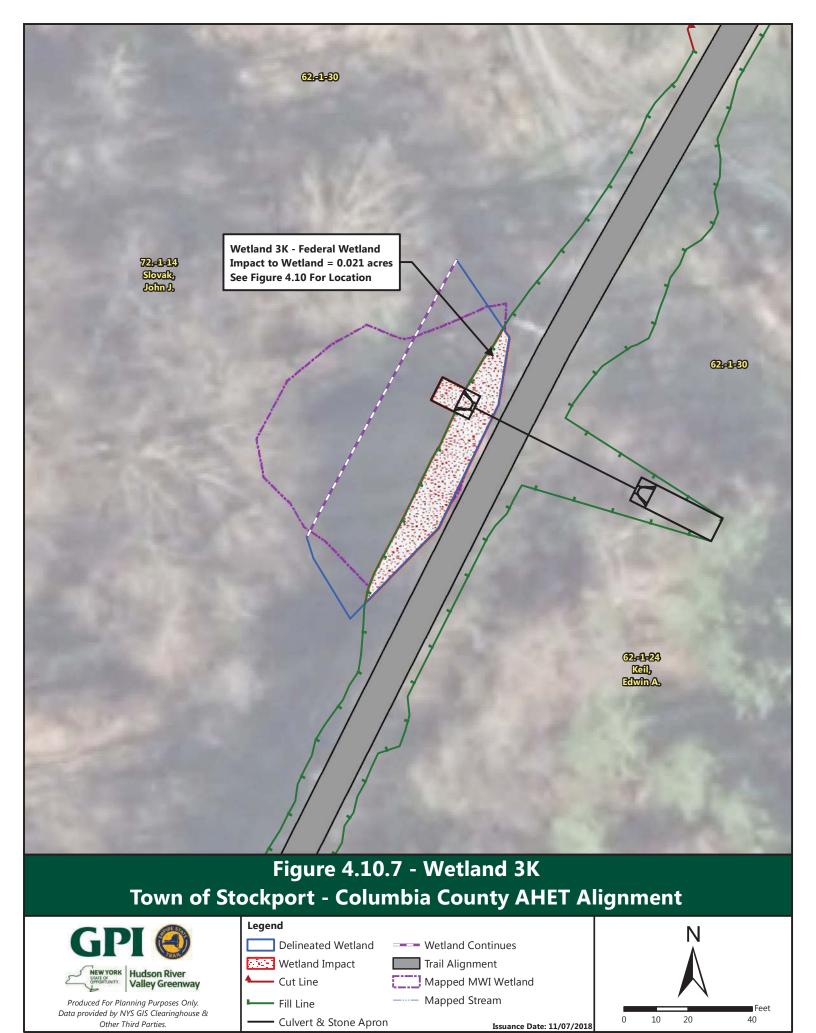
Culvert & Stone Apron

Wetland Continues

Mapped MWI Wetland ——— Mapped Stream

inues ht Wetland m Issuance Date: 11/07/2018

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Legend

Delineated Wetland



Culvert & Stone Apron

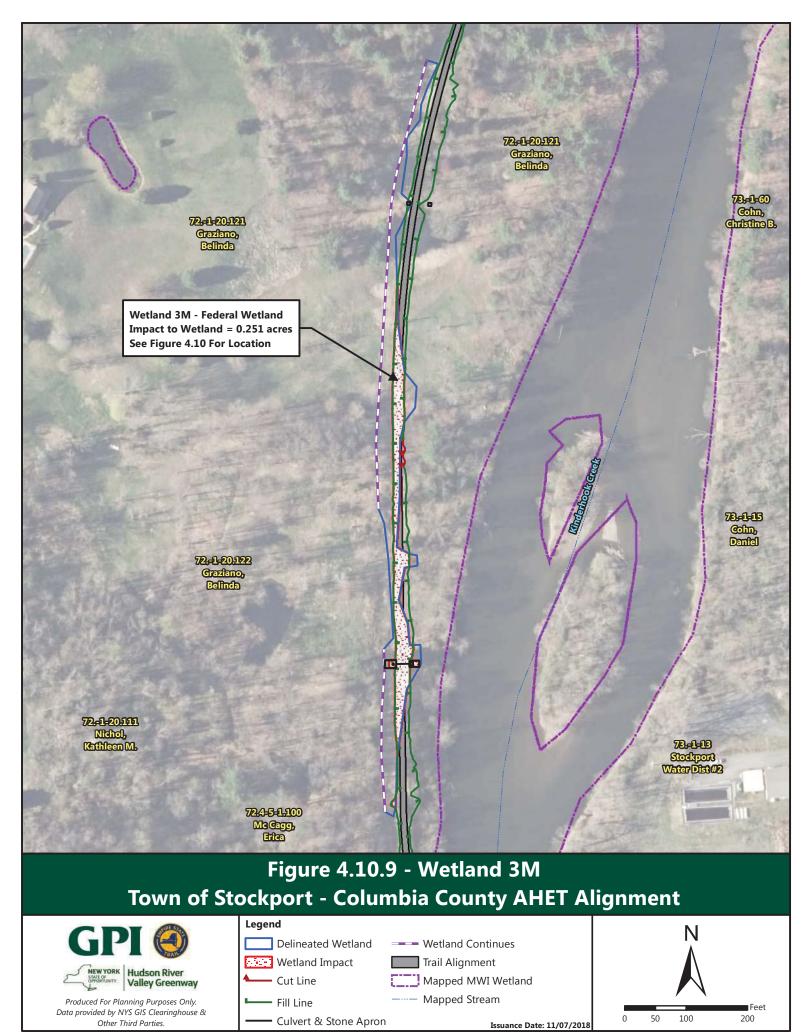
Wetland Continues

Mapped MWI Wetland ——— Mapped Stream

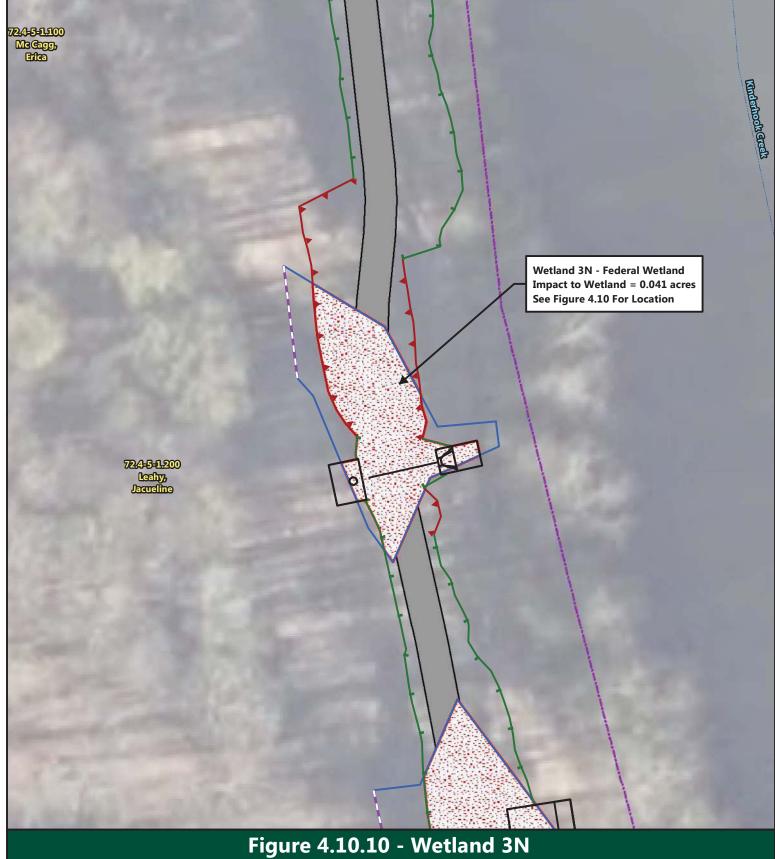
Issuance Date: 11/07/2018

N Feet 0 15 30 60

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Legend

Delineated Wetland

Fill Line

Culvert & Stone Apron

d ---- Wetland Continues

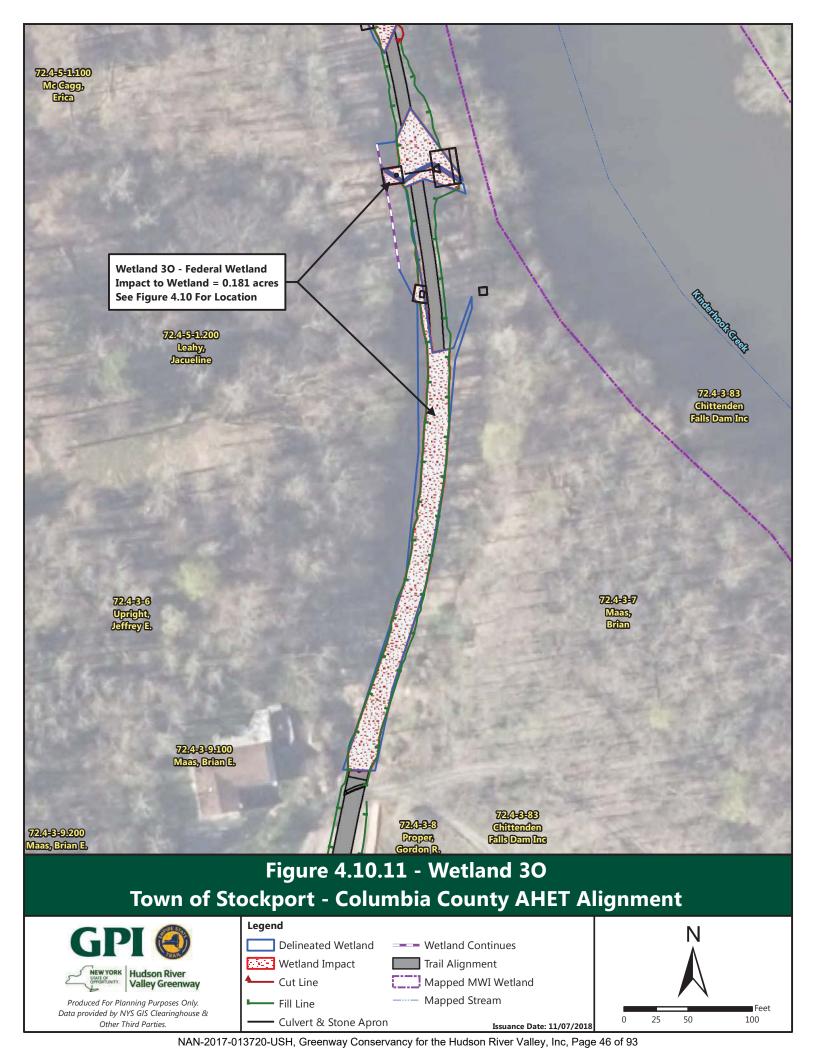
Mapped MWI Wetland

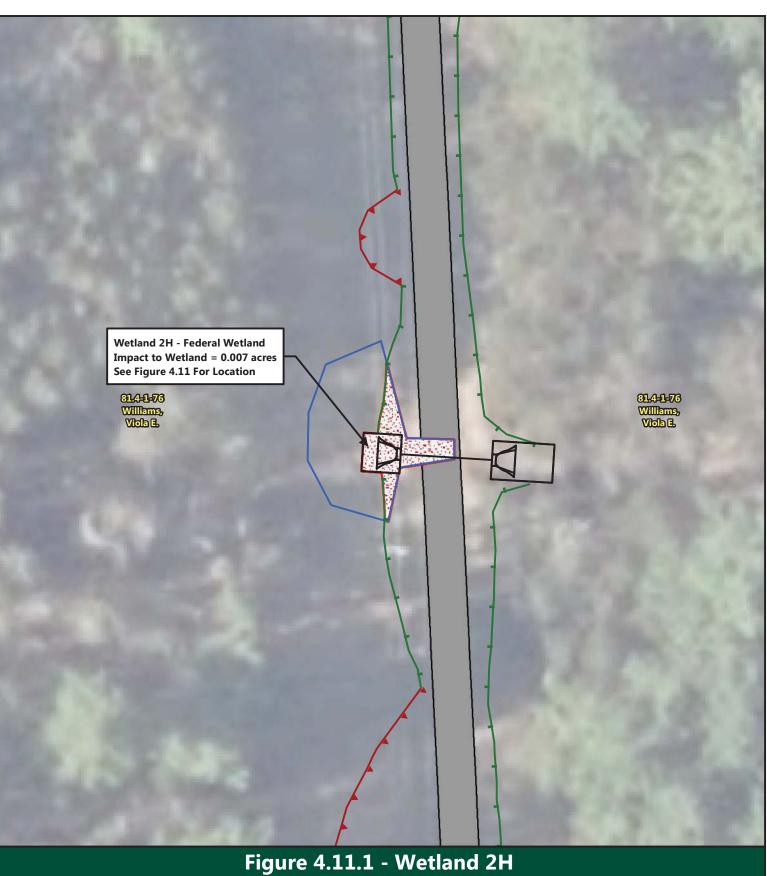
Issuance Date: 11/07/2018

----- Mapped Stream

N 6 10 20 40

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Legend

Delineated Wetland

Wetland Impact

Cut Line

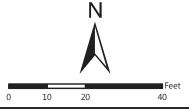
Fill Line

----- Wetland Continues Trail Alignment

Culvert & Stone Apron

Mapped MWI Wetland ----- Mapped Stream

Issuance Date: 11/07/2018



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Legend

Delineated Wetland

Wetland Impact Cut Line

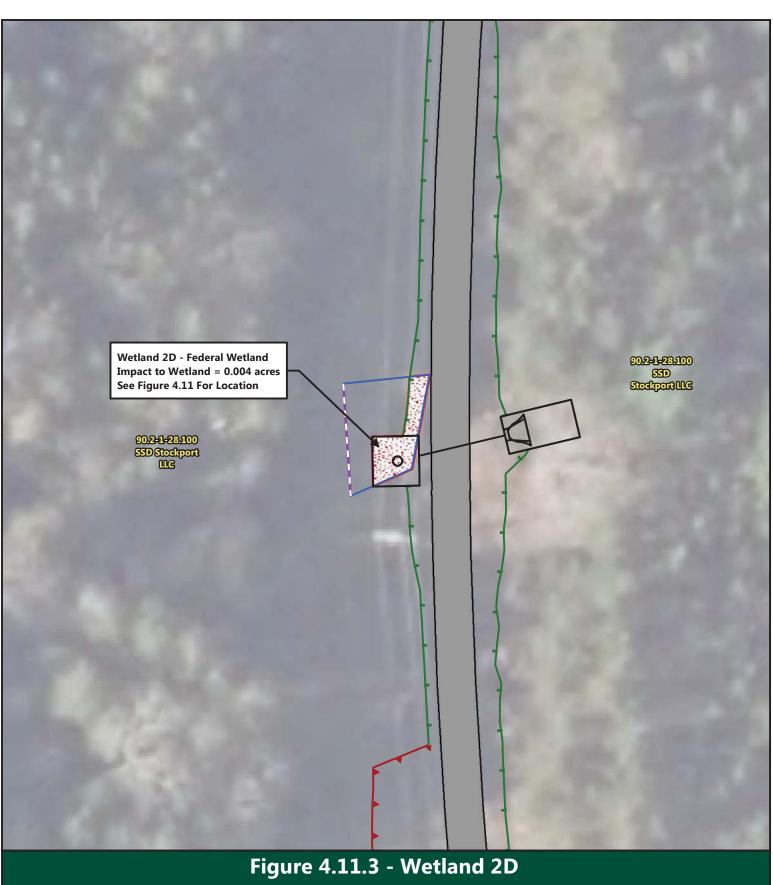
Fill Line Culvert & Stone Apron

----- Wetland Continues Trail Alignment Mapped MWI Wetland

----- Mapped Stream

Ν Feet 10 20 40 0 Issuance Date: 11/07/2018

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Legend

Delineated Wetland

Wetland Impact Cut Line

Trail Alignment

Fill Line

Culvert & Stone Apron

----- Wetland Continues

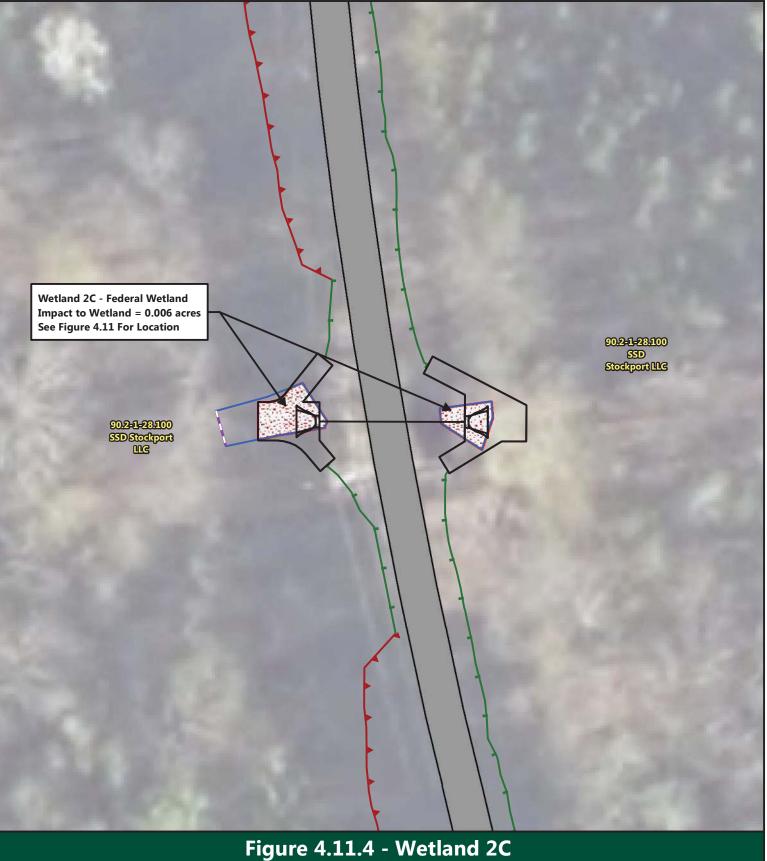
_____ Mapped MWI Wetland

----- Mapped Stream

Issuance Date: 11/07/2018

Ν Feet 10 20 40 0

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Legend Delineated Wetland

Wetland Impact

Cut Line

Fill Line

----- Wetland Continues Trail Alignment

----- Mapped Stream

Issuance Date: 11/07/2018

Culvert & Stone Apron

Mapped MWI Wetland

Ν Feet 10 20 40 0

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Cut Line Fill Line

Culvert & Stone Apron

Mapped MWI Wetland

----- Mapped Stream

Feet 10 20 40 0

Issuance Date: 11/07/2018 NAN-2017-013720-USH, Greenway Conservancy for the Hudson River Valley, Inc, Page 51 of 93

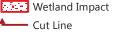




Legei	iu ii
	Delineated

Wetland

Fill Line



Culvert & Stone Apron

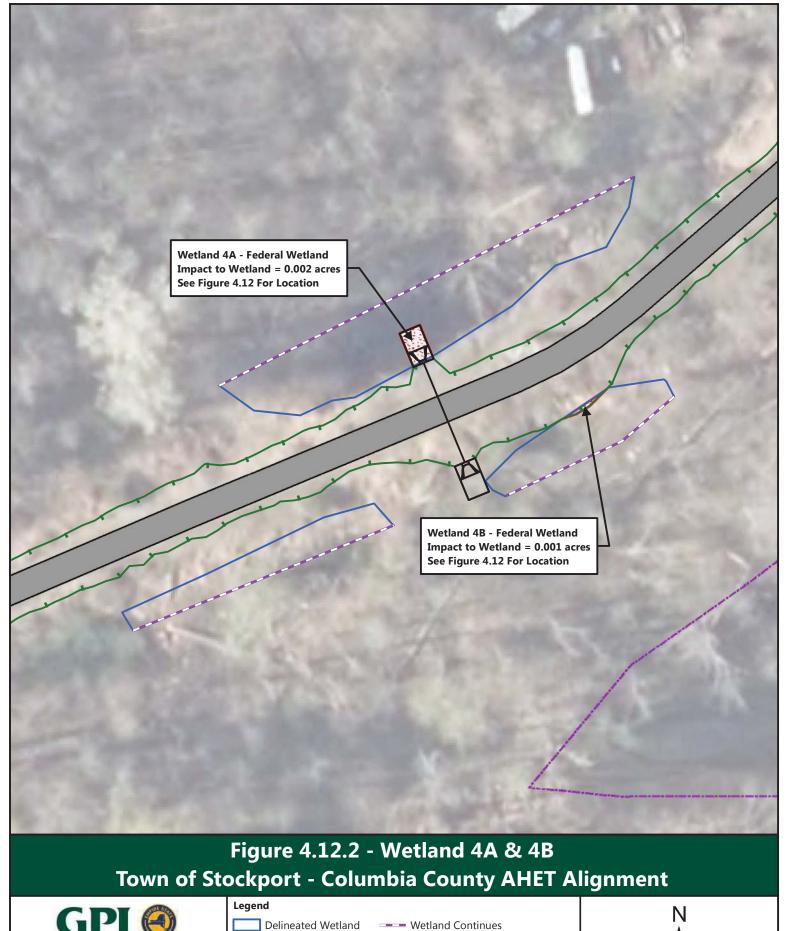
----- Wetland Continues Trail Alignment

_____ Mapped MWI Wetland ----- Mapped Stream

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Ν Feet 0 20 40 80

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Hudson River Valley Greenway Produced For Planning Purposes Only. Data provided by NYS GIS Clearinghouse & Other Third Parties.

Wetland Impact Cut Line Fill Line

Culvert & Stone Apron

----- Wetland Continues Trail Alignment

Mapped MWI Wetland ----- Mapped Stream

Feet 20 40 10 Issuance Date: 11/07/2018 0

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Fill Line

Culvert & Stone Apron

--- Mapped Stream

Issuance Date: 11/07/2018

0 15 30

Feet

60

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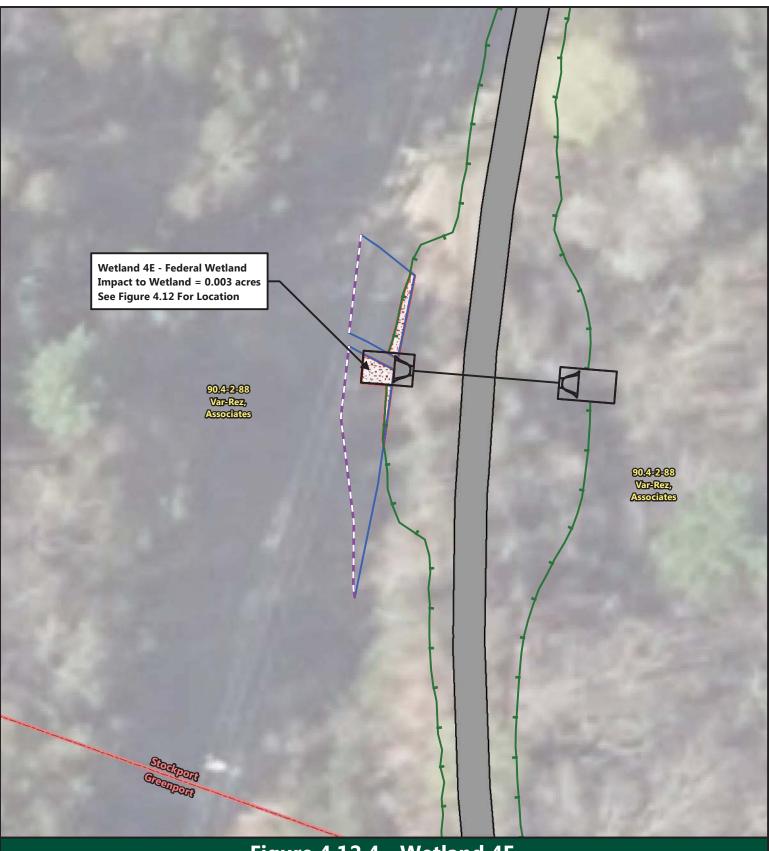


Figure 4.12.4 - Wetland 4E **Town of Stockport - Columbia County AHET Alignment**



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Legend

Delineated Wetland

Wetland Impact

Cut Line Fill Line

Culvert & Stone Apron

----- Wetland Continues Trail Alignment

Mapped MWI Wetland

----- Mapped Stream

Issuance Date: 11/07/2018

Ν Feet 0 10 20 40

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Legend

Delineated Wetland

Fill Line

Wetland Impact Cut Line

Culvert & Stone Apron

----- Wetland Continues Trail Alignment

_____ Mapped MWI Wetland ----- Mapped Stream

Ν Feet 20 40 10 Issuance Date: 11/07/2018 0

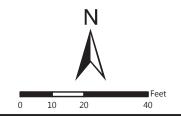
NAN-2017-013720-USH, Greenway Conservancy for the Hudson River Valley, Inc, Page 56 of 93



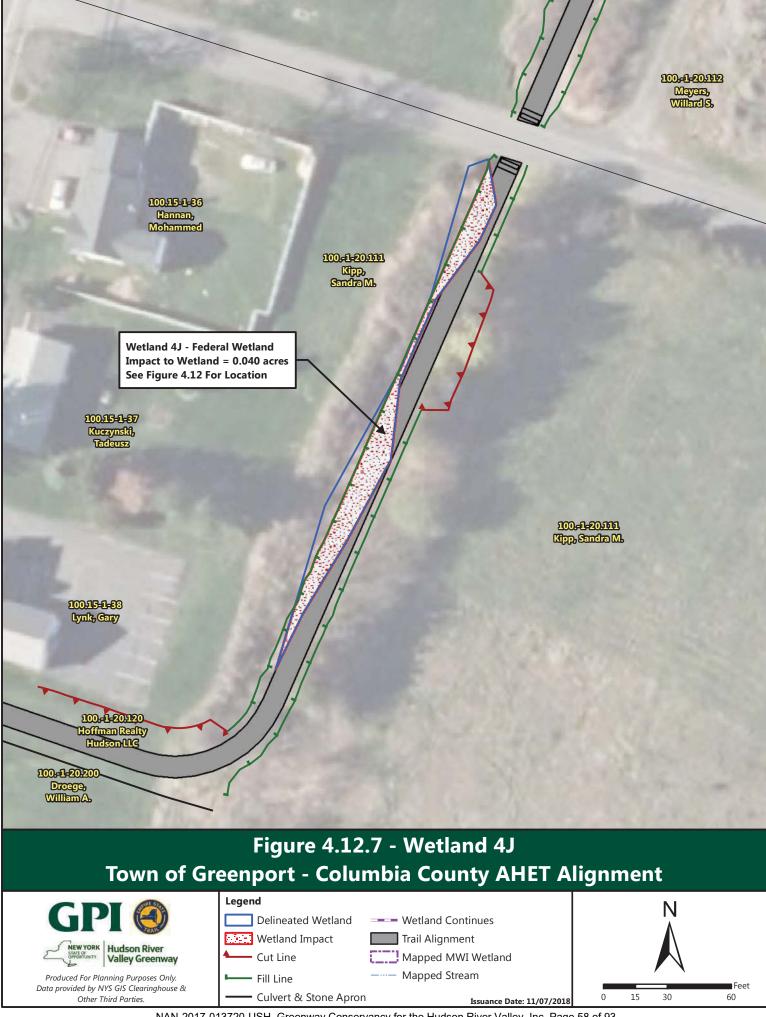
Delineated Wetland ----- Wetla Wetland Impact Impact Impact Mapp Fill Line ----- Mapp Culvert & Stone Apron

Wetland Continues
 Trail Alignment
 Mapped MWI Wetland
 Mapped Stream

Issuance Date: 11/5/2018

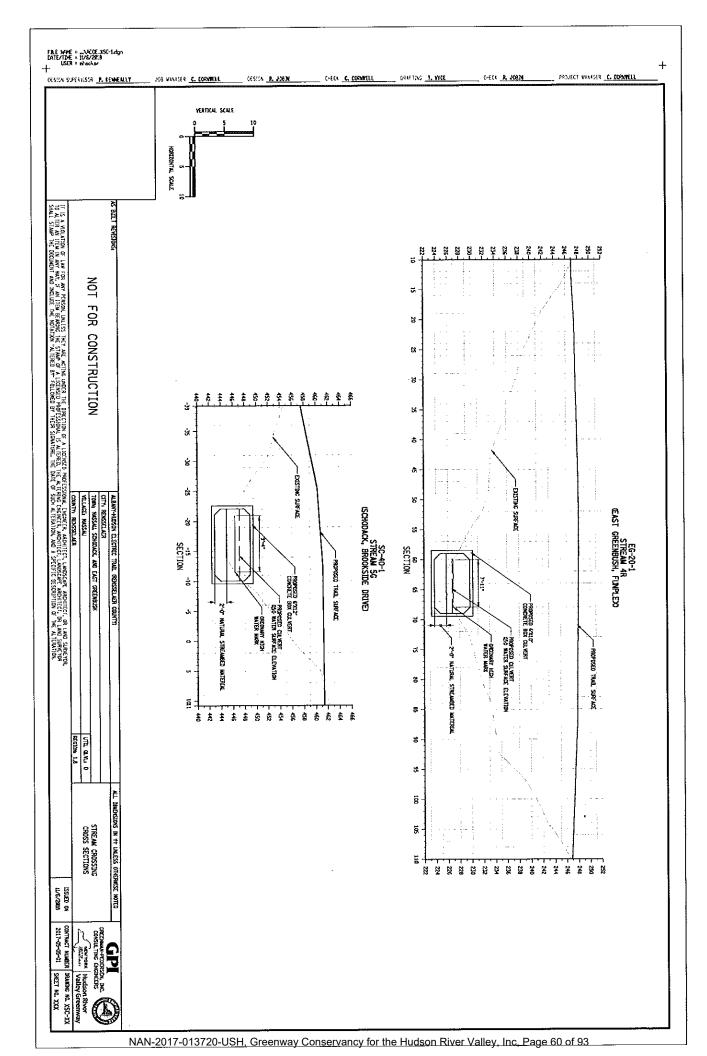


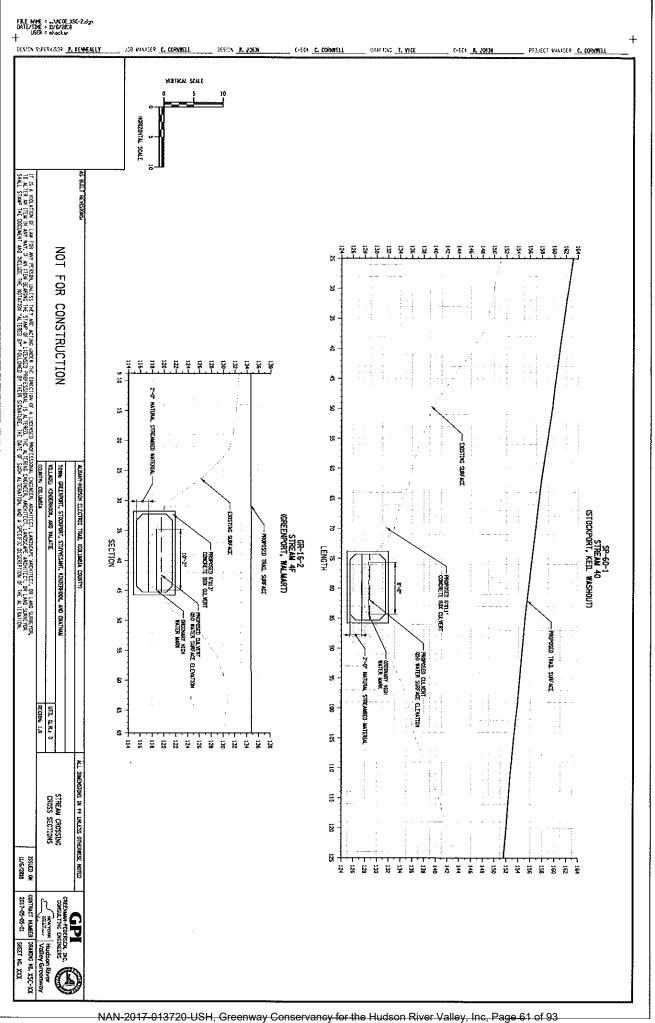
NAN-2017-013720-USH, Greenway Conservancy for the Hudson River Valley, Inc, Page 57 of 93



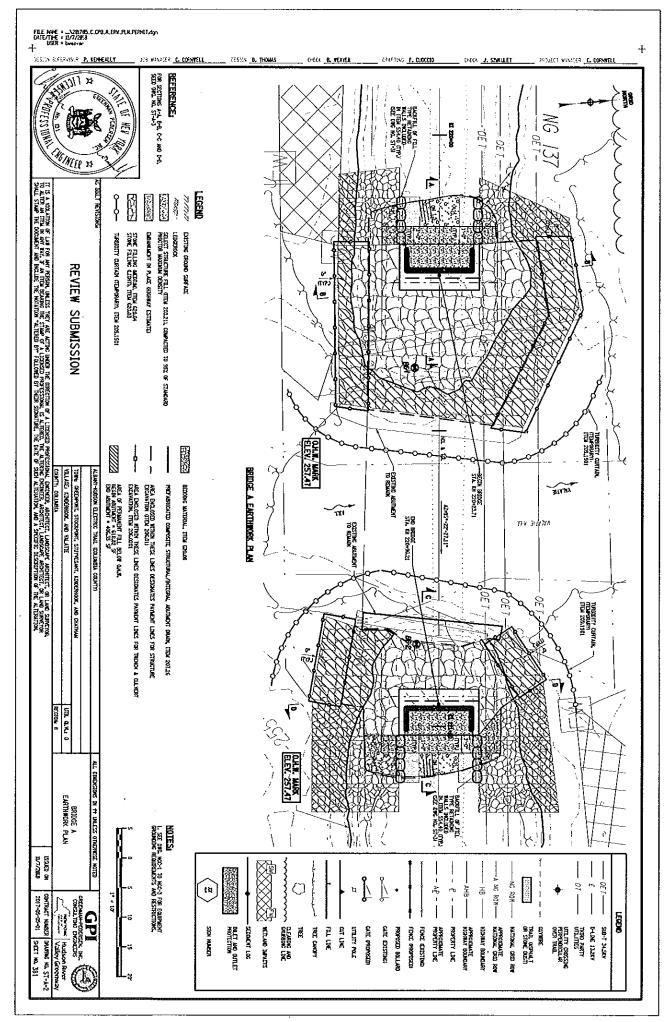
NAN-2017-013720-USH, Greenway Conservancy for the Hudson River Valley, Inc, Page 58 of 93

Material	100 LF		201 10		(4
2ft Embedded Natural Stream	110 CY, 790 SF, 0.02 Acres,	GR-16-7 6'v13' Concrete Rov	GR-16-2	Trih to Kinderhook Creek	٦	Derennial	ЛЕ
Material	190 LF		- 00 - L		~		ţ
210 CY, 1340 SF, 0.03 Acres, 2ft Embedded Natural Stream	210 CY, 1340 SF, 0.03 Acres,	SP-60-1 6'v11' Concrete Boy	<p-60-1< td=""><td>Trik to Kinderbook Creek</td><td>7</td><td>Derennial</td><td>20</td></p-60-1<>	Trik to Kinderbook Creek	7	Derennial	20
Material	90 LF		T-40-T		¢	r ei ei ii iidi	Ĺ
2ft Embedded Natural Stream	95 CY, 600 SF, 0.01 Acres		SC-70-1	Trih to Moordener Kill	ſ	Derennial	л
Material		42 NCI	LO-20-1		c		4
20% Embedded Natural Stream	121 15		EG- 30-1	Trik to Mill Creek	7	Intermittent	ΛĐ
Culvert Bottom Treatment	Total Stream Impacts	Culvert ID Culvert Size & Type	Culvert ID	Stream	Stream Classification	Stream Type	Stream ID
		ble 4.1	Stream Impact Response Table 4.1	Stream Impac			

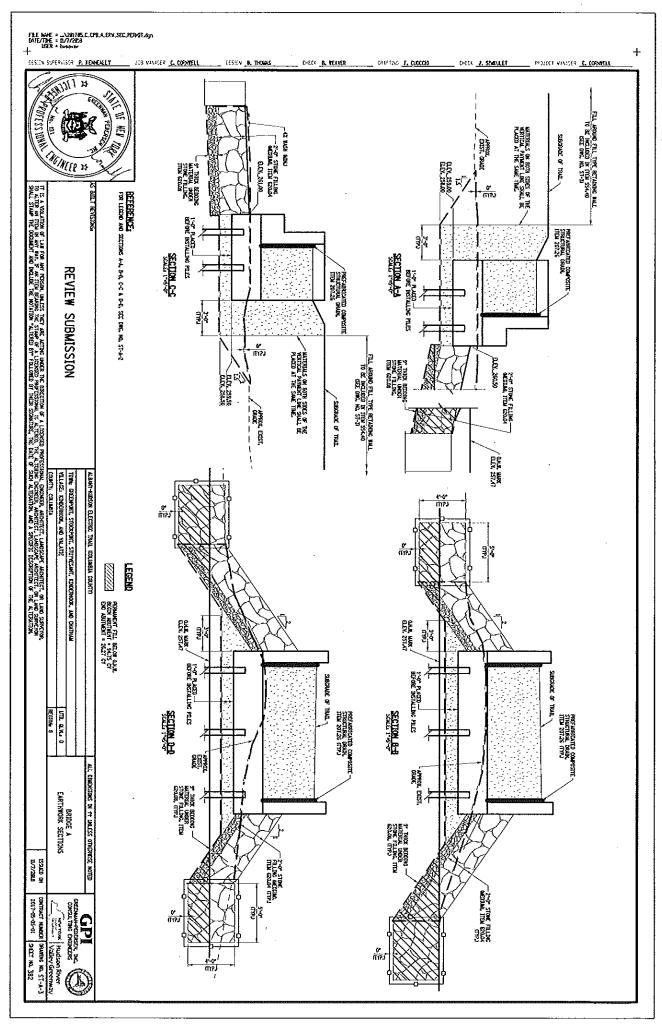




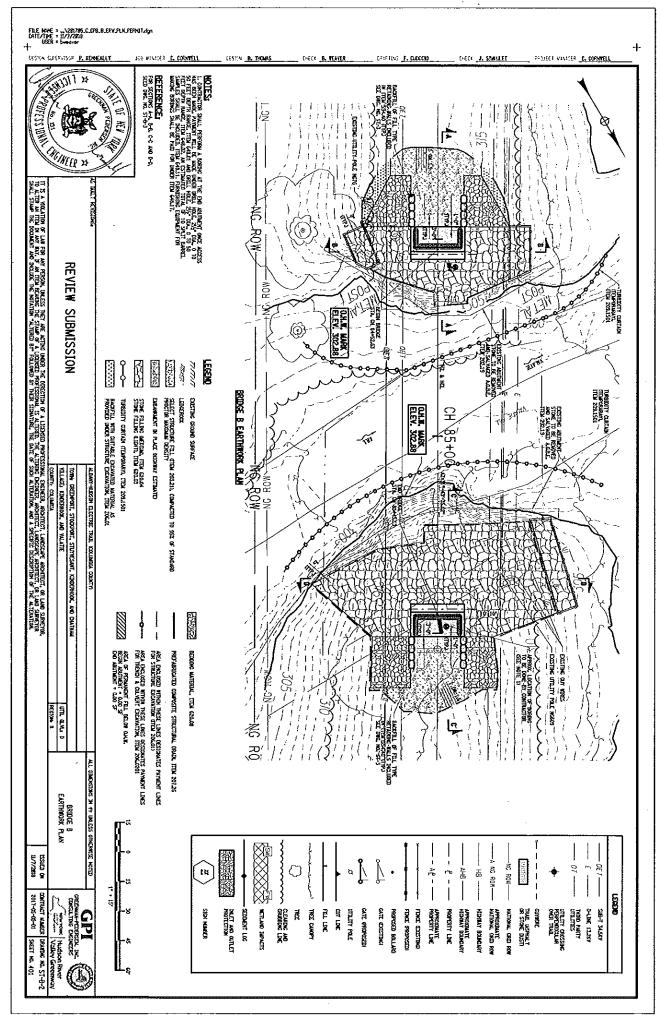
Linear Impacts	Linear Impacts To Waterways From Bridge Construction		
Location	Impact (Linear Feet)		
Bridge A	42		
Bridge B	62		
Bridge C	112		
Bridge D	69		
Bridge E	110		
Bridge F	62		
TOTAL	457		



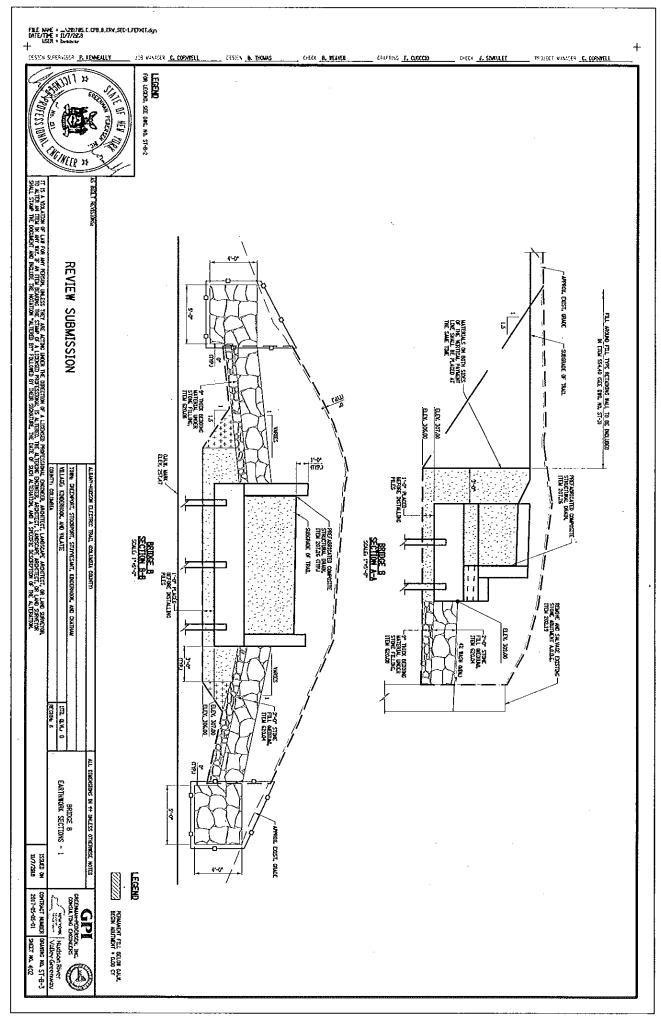
NAN-2017-013720-USH, Greenway Conservancy for the Hudson River Valley, Inc, Page 63 of 93



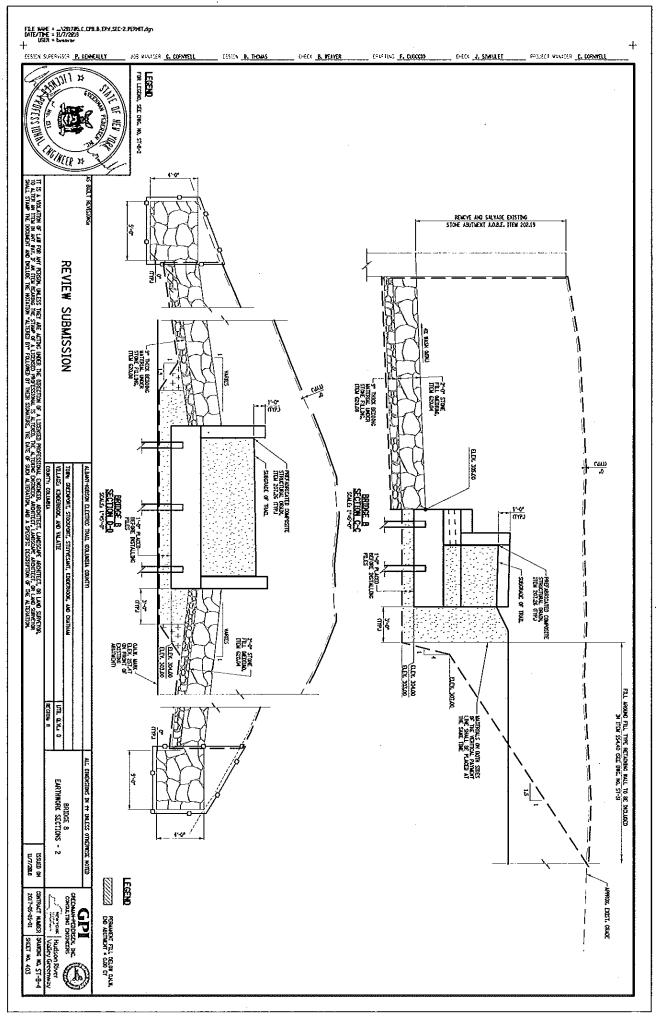
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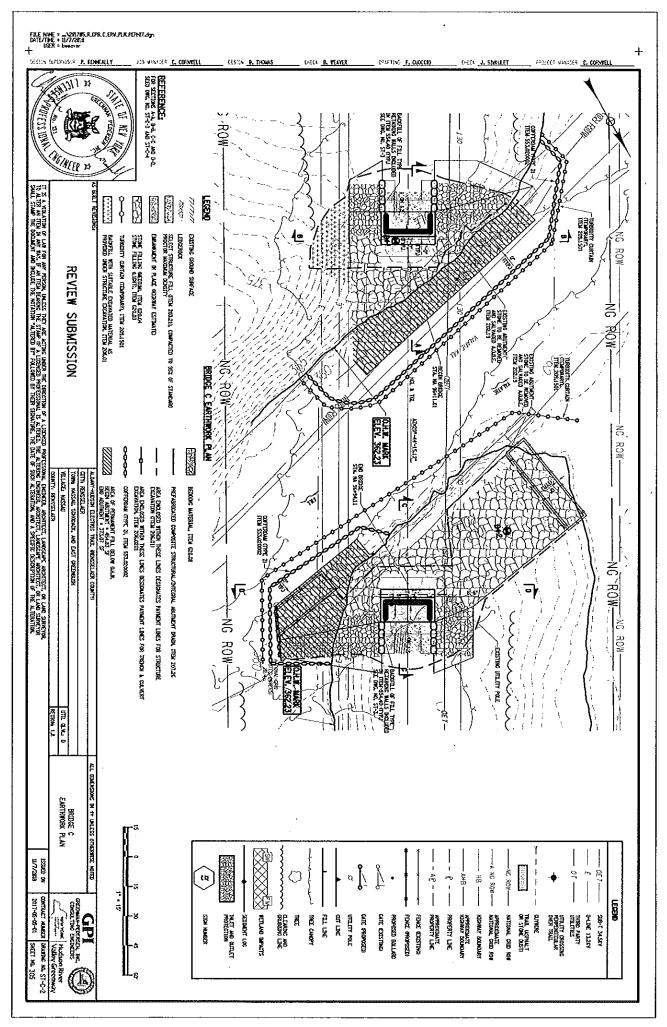
NAN-2017-013720-USH, Greenway Conservancy for the Hudson River Valley, Inc, Page 65 of 93



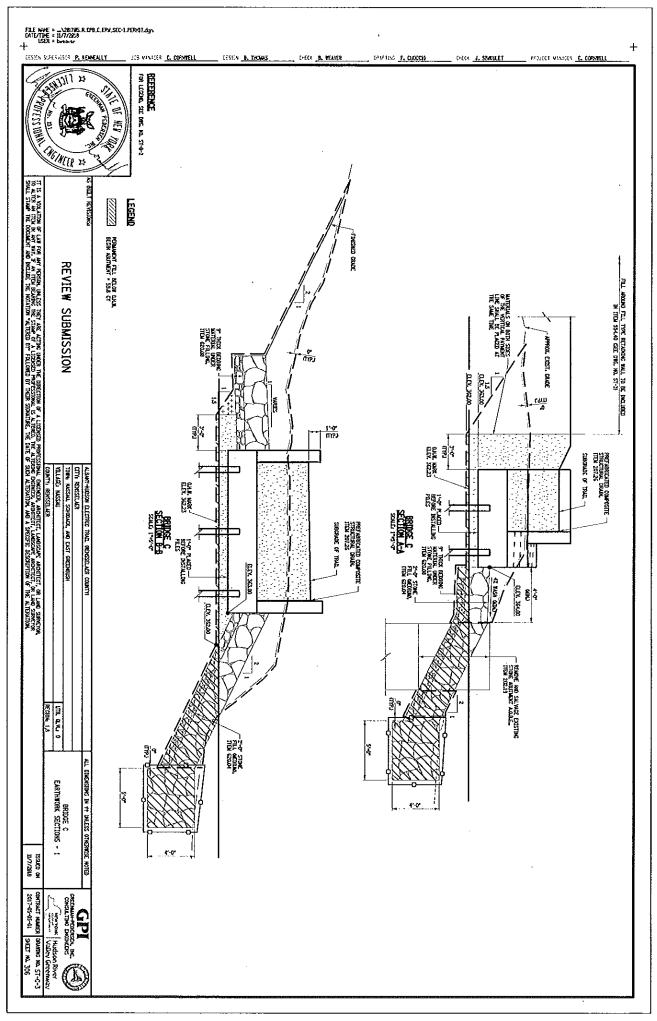
NAN-2017-013720-USH, Greenway Conservancy for the Hudson River Valley, Inc, Page 66 of 93



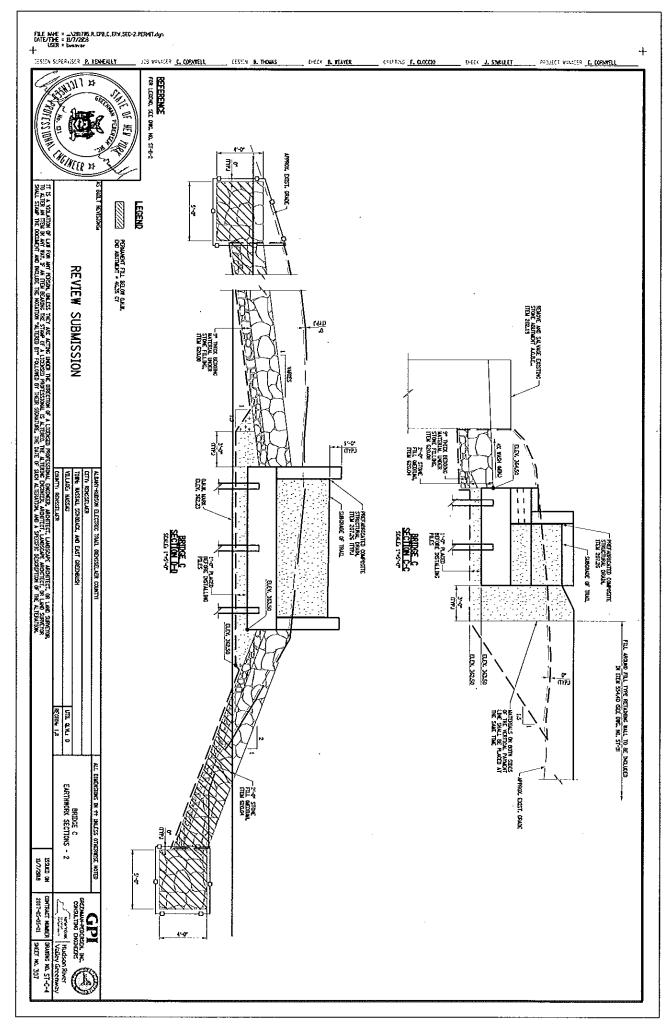
NAN-2017-013720-USH, Greenway Conservancy for the Hudson River Valley, Inc, Page 67 of 93



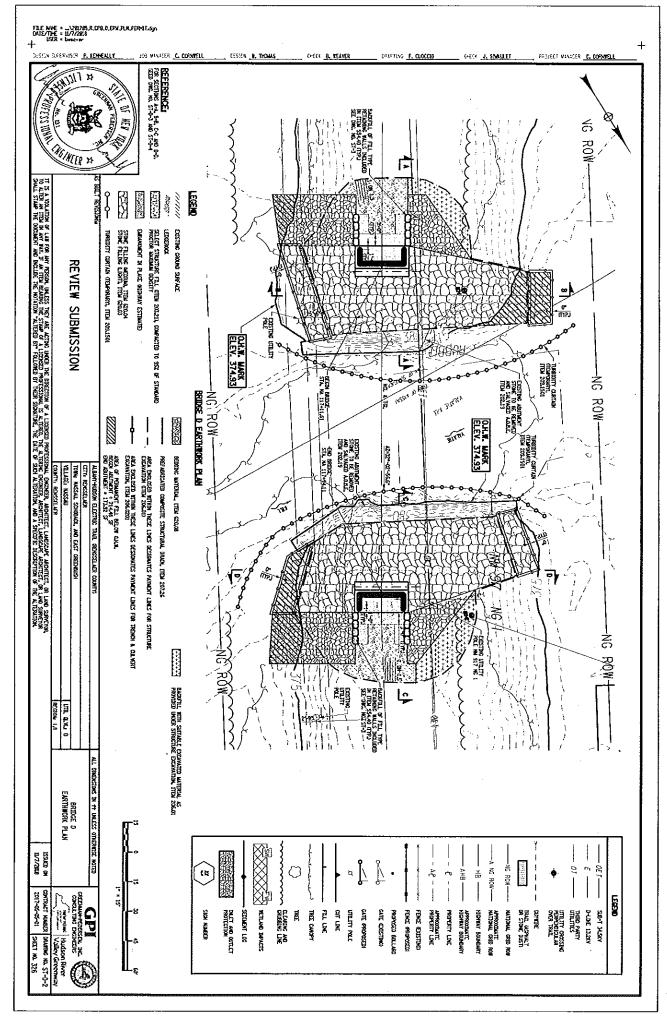
NAN-2017-013720-USH, Greenway Conservancy for the Hudson River Valley, Inc, Page 68 of 93

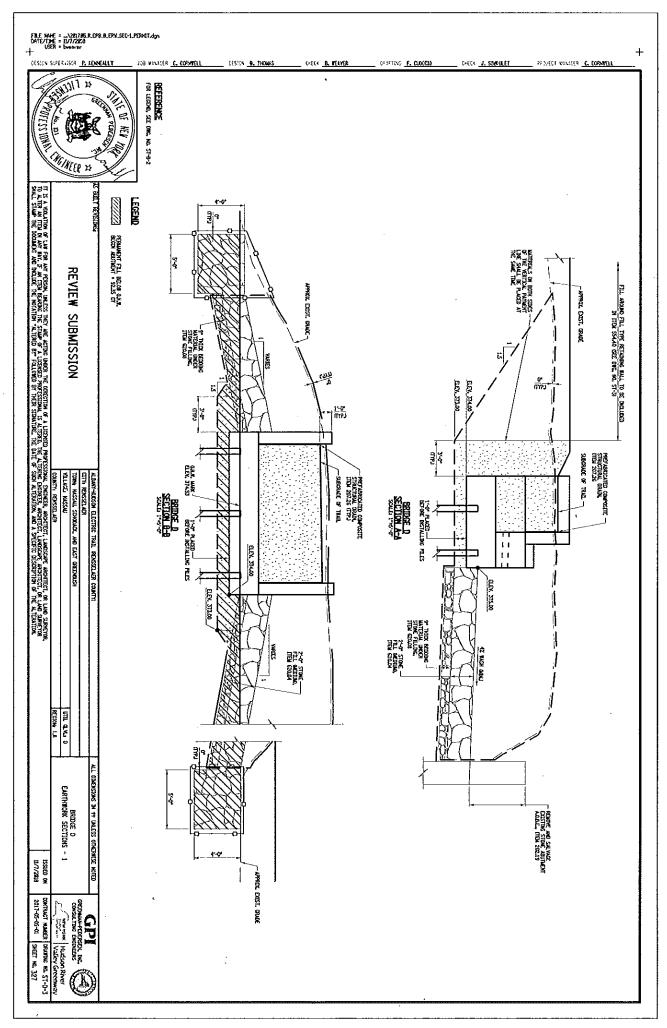


NAN-2017-013720-USH, Greenway Conservancy for the Hudson River Valley, Inc, Page 69 of 93

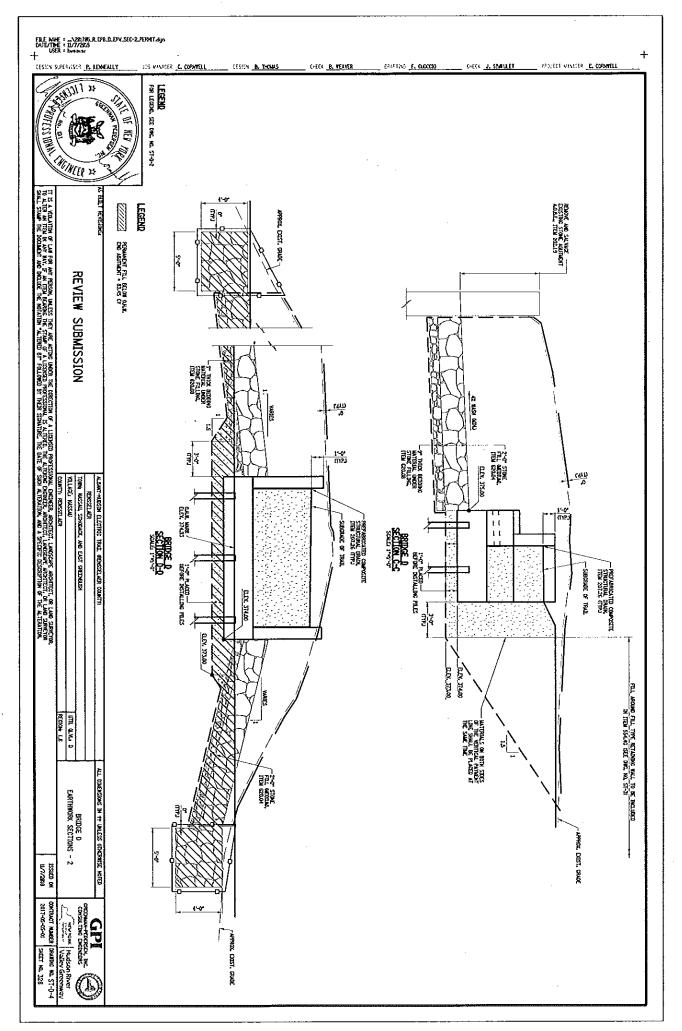


NAN-2017-013720-USH, Greenway Conservancy for the Hudson River Valley, Inc, Page 70 of 93

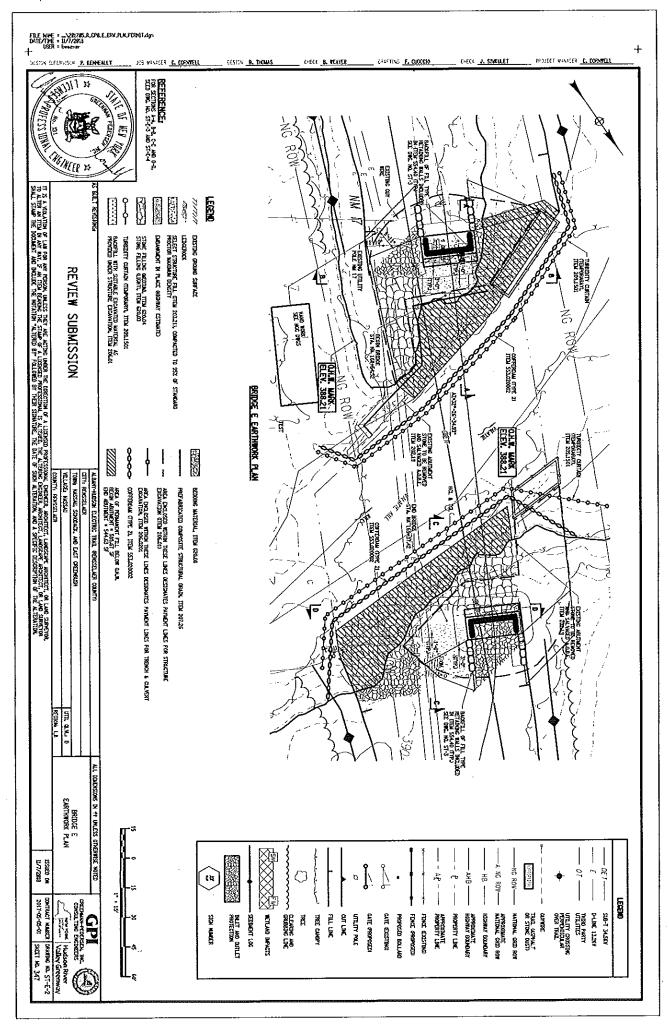




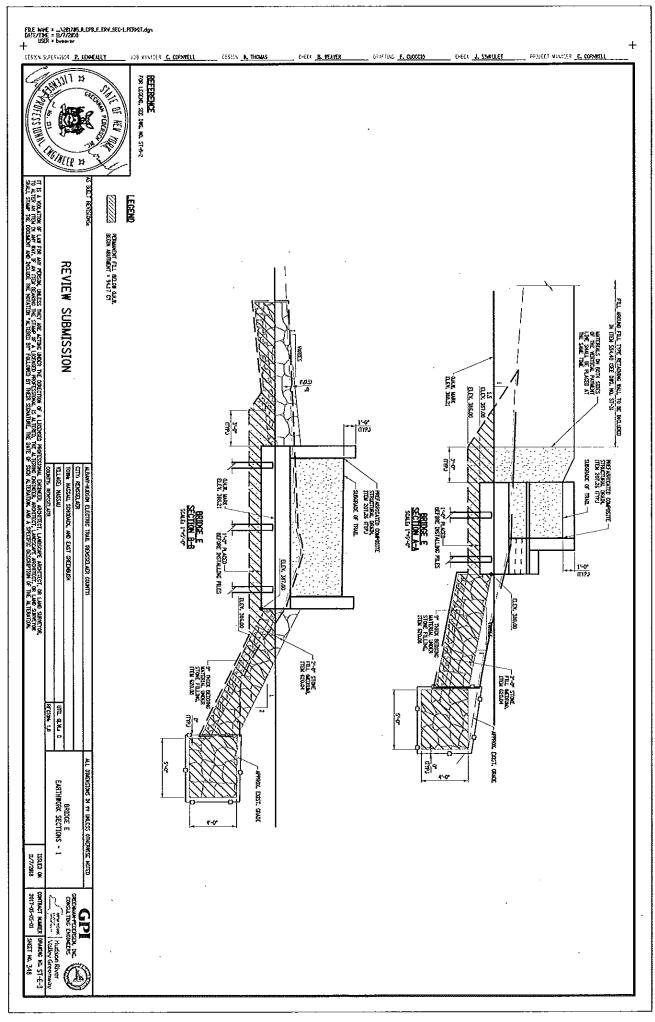
NAN-2017-013720-USH, Greenway Conservancy for the Hudson River Valley, Inc, Page 72 of 93



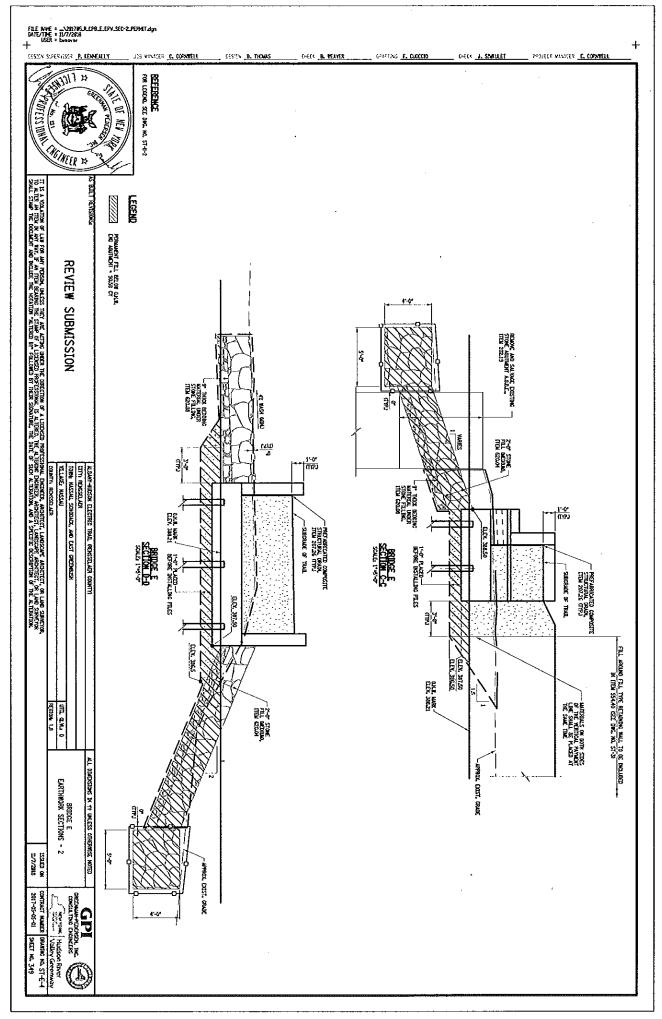
NAN-2017-013720-USH, Greenway Conservancy for the Hudson River Valley, Inc, Page 73 of 93



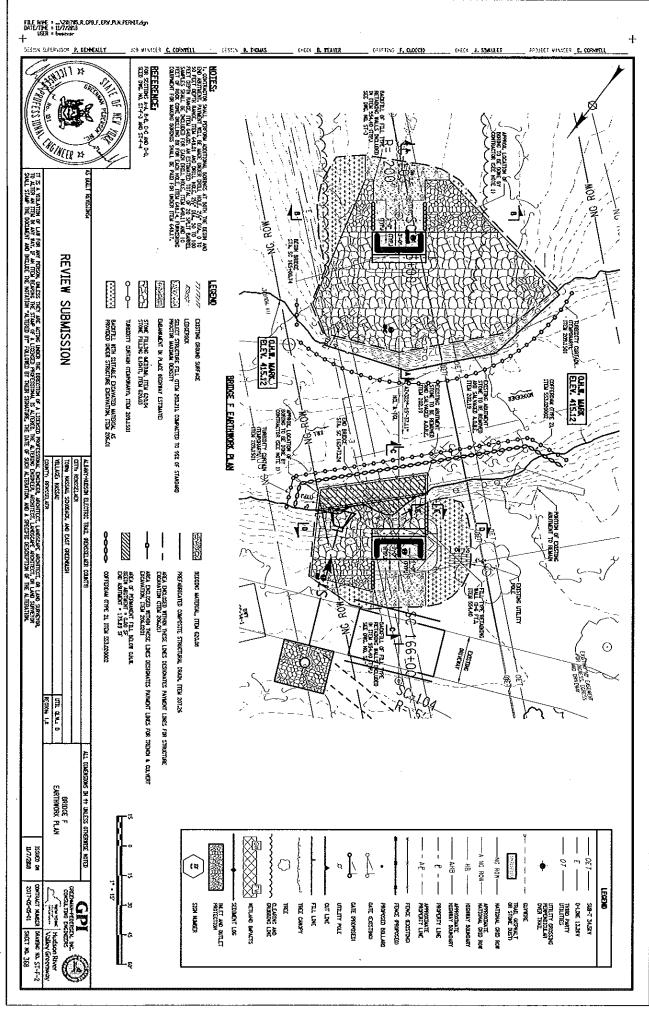
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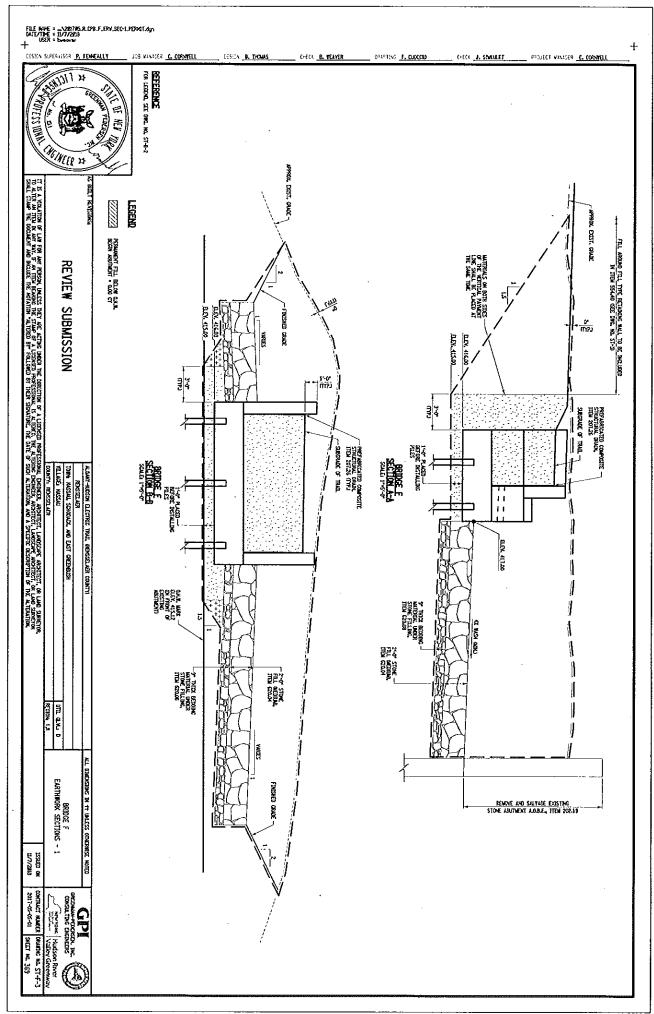
NAN-2017-013720-USH, Greenway Conservancy for the Hudson River Valley, Inc, Page 75 of 93



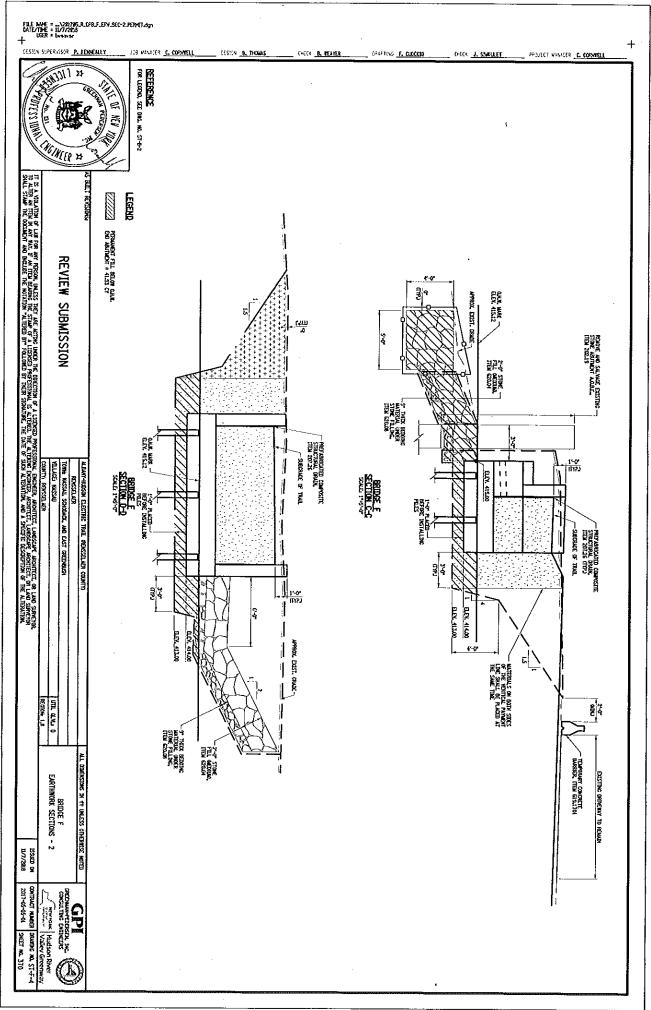
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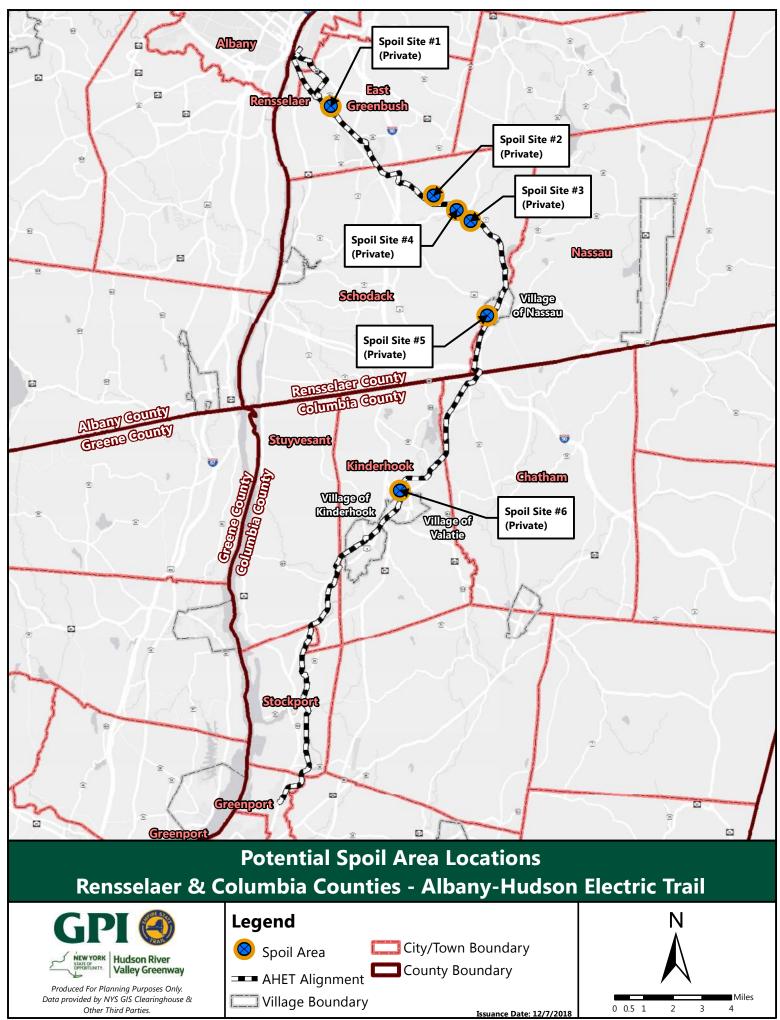
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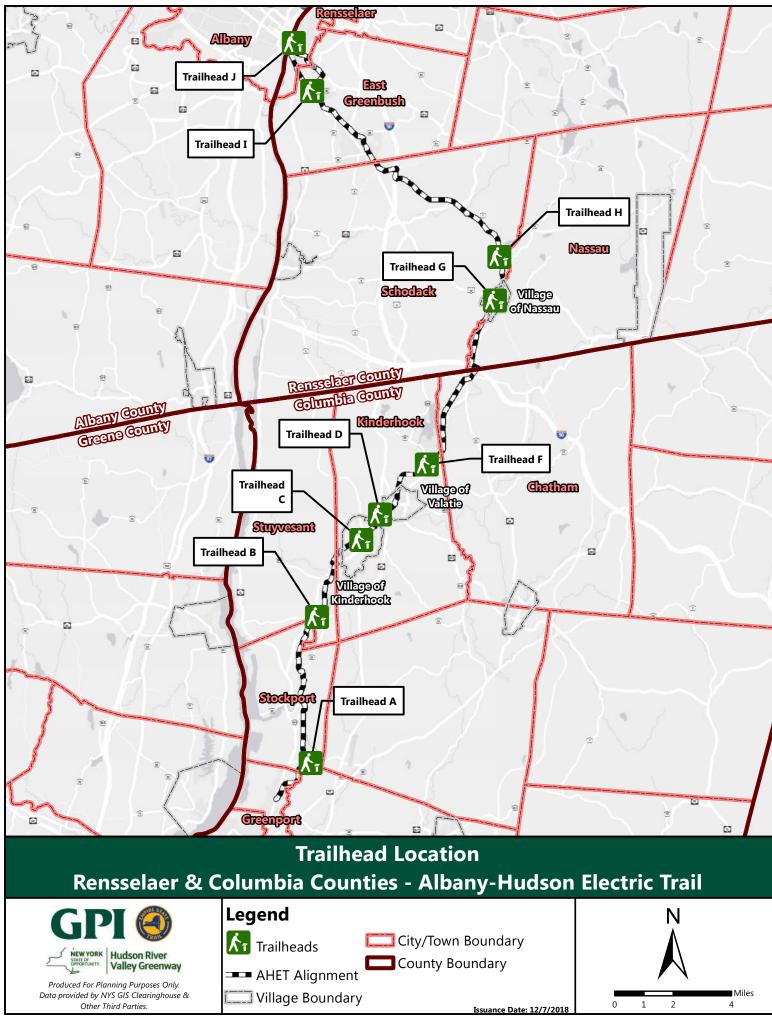
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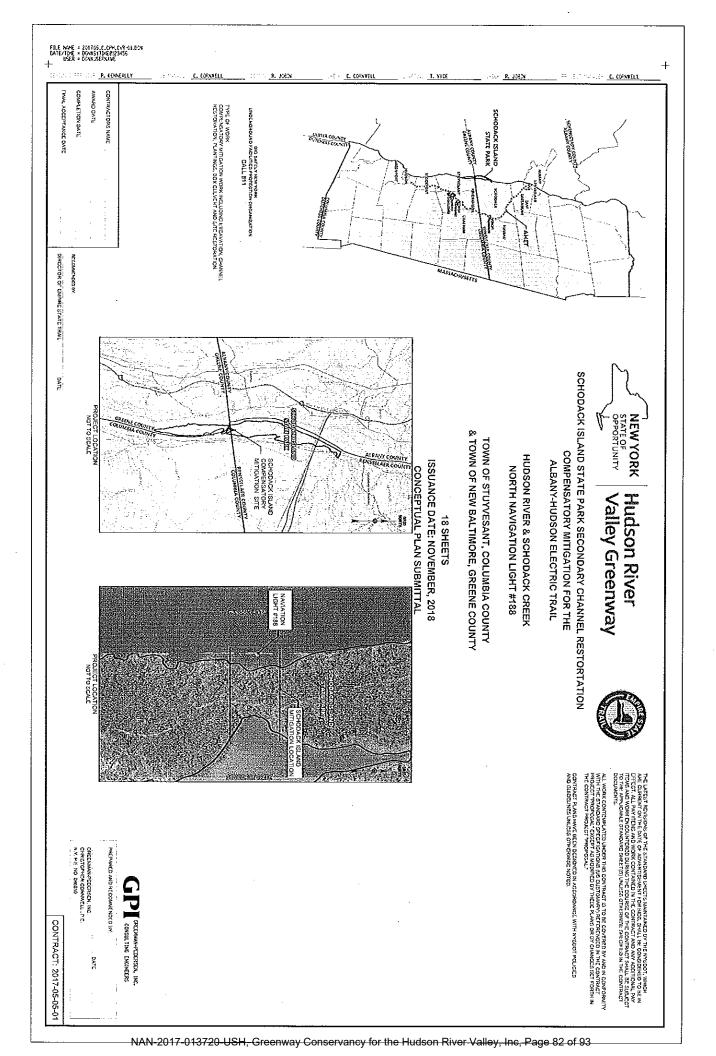
NAN-2017-013720-USH, Greenway Conservancy for the Hudson River Valley, Inc, Page 79 of 93

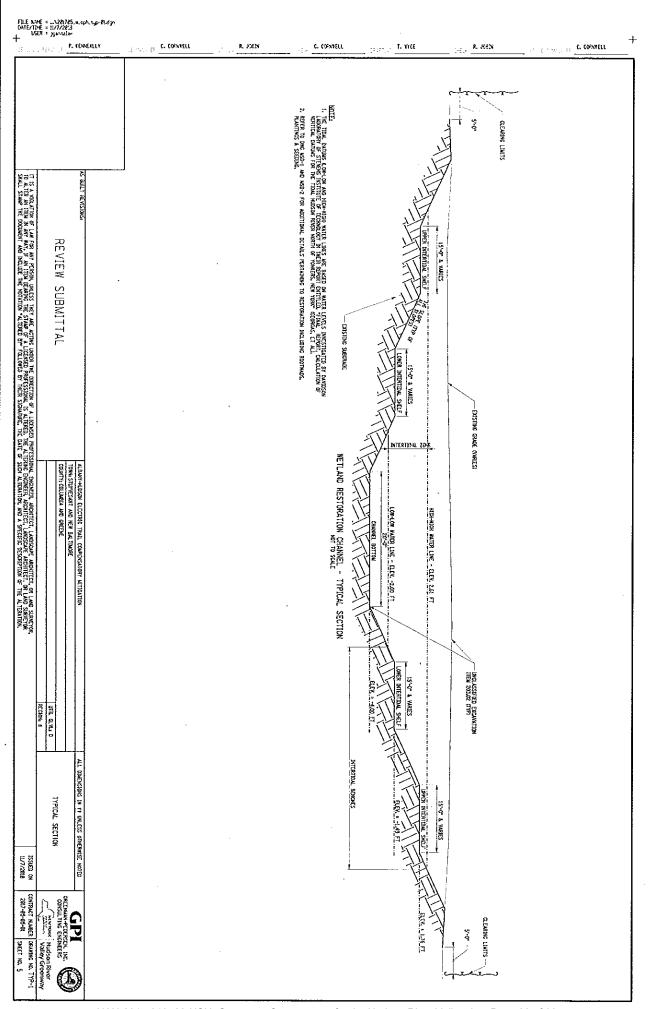


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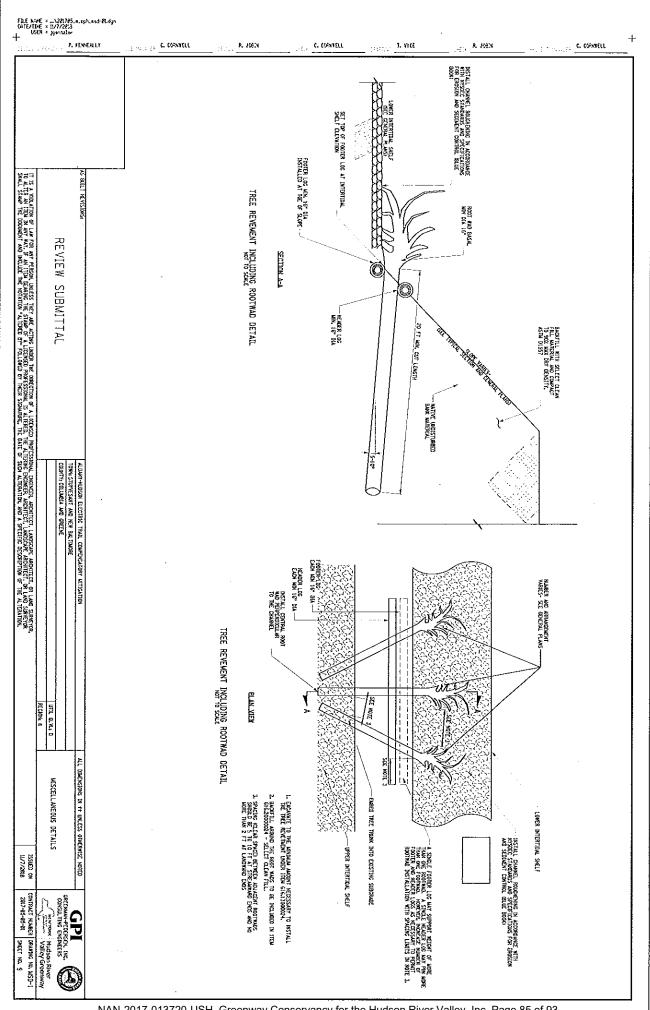
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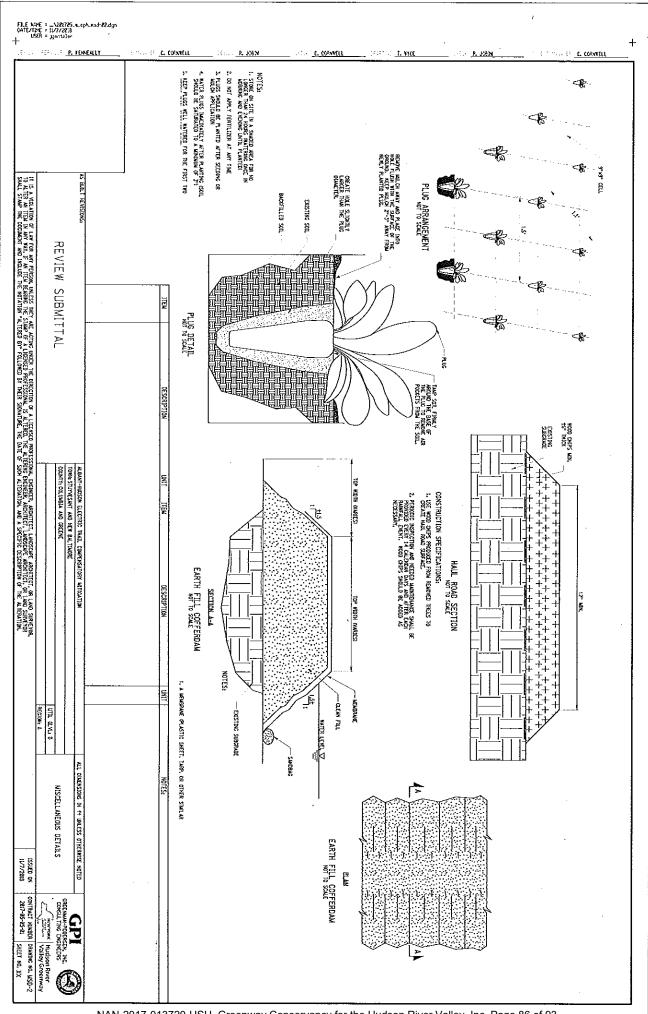


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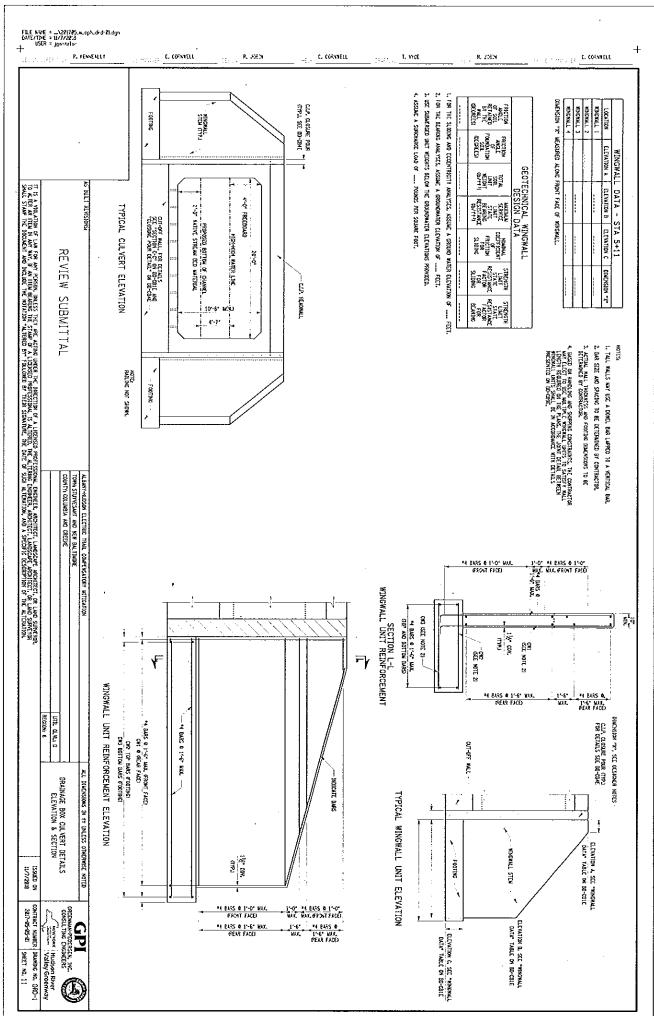
1.5			<u>.</u>	IENN	417		_	- "		:• <u>c</u>	. (0	- MEI	ι <u>.</u>				8.	<u>123</u>				<u>. c.</u>	LOFATELL.		_ 247			10E 	10.		.*	, <u>p</u>	<u>1963</u>	<u>۴</u>	<u>ب</u>			. : н	<u></u> •	LOFINITEL		
IT IS A VIRARION OF LAW FOR ANY MERCON, UNLESS THEY ARE ACTING UMBER THE DREASTING OF A LICENSED PROFESSIONAL To alter an item in any way, if an item derange the stame of a licensed professional is altered. The alteredie e		REVIEW SUBMITIAL		AC BUILT REVISIONS:																						A ONCE THE SITE IS COMPLCTELY STABILIZED, AND ONLY AS DIRECTED BY THE QUALIFIED INSPECTOR, THE TANDACTOR SILL REMAINS AND FRANCING AND STADIANT CONTROLS.		 PEREDRU ALL EXCAVATION AND MASS GRADING IN CONFIGMANCE WITH THE TYPICAL SECTION AND GENERAL PLANS INCLUDING BENORES AND SIDE CHANNELS/FLATS. 			disposed of small be chipped with the wood chips uitrized on access roads and stacing area subfaces and as millon. Stockple logs in stacing area for reuse in proposed root	STOCKPILE LOGS AND WOOD DAIPS IN DESIGNATED STARING AREA. TREES AND SHRUBS TO BE	. SELECTIVELY REMOVE TREES, STOLARS AND BRUSH WITHIN THE LIMITS OF DISTURBANCE WITH OWNER	INSTALL AND IMPLEMENT ALL EROSION AND SEDIRENT CONTROL PRACTICES INCLUDING, SILT FEMEL, INCLUDING SELT FEMEL, IN CONTROLING STATISTIC METAL AND	. INSTALL ANY TREE PROTECTION FOUCING IN CONCOMMANCE WITH THE REAGION AND SEDMENT CONTROL PLAY ON DRAMONE SSC-1. THEE PROTECTION HOTES AND STATE AND LOCAL STOMMATER REGULATIONS AND OR CODES.	. INSTALL TOUPORARY SITE CONSTRUCTOR FENCE AT LINITS OF DISTUBBLINGS FOR THE WORK AREA. ACCESS ROAD, ETC. PRIOR TO STARY OF CONSTRUCTION.	AND SUBCONTRACTOR TO FIELD -IDENTIFY TREES AND VICEFATION TO BE REMOVED AS WELL AS TREE PROTECTION MEASURES WITHIN THE LIMITS OF DISTURBANCE.	PRICE TO ANY EARTH DISTURBANCE, A MEETING SHALL BE CONDUCTED WITH THE DWNER, CONTRACTOR	A AUMADA 3 DAYS HADA TO SLAKING AAY LANH DISLUBANCE ACTAVITES, OF EXPANDIG INTO AN AGEA PREVIDENCY UNALARCE, 821-DIG SAFELY NY SAALL BE NOTFIED FOR THE LOCATION OF EXISTING UNDERGRAUND DUTLITIES.	CONDUCTED WITH THE EXEMPERA QUALIFED INSPECTOR, CONTRACTOR AND SUBCONTRACTOR TO REVIEW THE SYMPP AND SIGN REQUIRED SHAPP CERTIFICATION STATEMENTS.	. PRIOR TO ANY DEWOLITION OR SOLE DISTURBANCE. A PRE-CONSTRUCTION ACCTING SHALL BE	SEQUENCE OF CONSTRUCTION
R THE DIRECTION OF					ſ	5	5		tat	-	Т			1					1-		2	_	3 8	1.0	•	1	1		Grain	App	1	Panlet	 I	Agros		6	An	Elvm	Sch	5	 T	
A LICENSED PROFES						ormenty scripts pungens)	Schoenoplectus pungens	Scirpus validus }	tabernaemontani (formerly	Schoenoplectus	Leenia anusoides	Aconic amoricano	Pontegana coradta	Peltandra virginica	Nuphar lutea	LATIN NAME			ď.		schoenopiecus pungens (formerly Scirpus pungens)	validus)	tabernaemontani (formerly Scirpus	Schoenopiectus	LATIN NAME				Dats (Avena sat	ly Regreen [™] by		Ponicum virgatum S		Agrostis perennans	nutans	gcrardil	Andropogon	nus virginicus	Schizachyrium	LATIN NAME		
STONAL DAGINEER, ARCHITECT		COUNTY; COLUMBLA AND CR	TOWNESTUMESANT AND NEW BALTINORE	ALBANY HUDSON ELECTRIC TRAIL COMPENSATORY MIT		┝											LOWER		*Pure Live Seed (PLS) = (% germination x %	Total	Y Three-square Bulrush		Soft-stem Bulrush		COMMON NAME	UPPER IN		Dee respectively. Cover drop should be	Grain Oats (Avena sativa) or Grain rye (Secale cereale) may be used for time period 1 Jan to 31 July.	Apply Regreen" by Rainier Seeds, inc. as companion crop at rate of 20 lbs per acre. Alternately,	*Durn Thus Co	Switchgross		Autumn Bentgrass	Indian Grass	ulmeania 3.e		Virginia Wild Rve	Little Bluestem	COMMON NAME	_	
+ LANDSCAPE ARCHITE	-	tene	Y BALTINORE	TRAIL COMPENSATORY			Three-square Bulrush		Soft-stem Bulrush	ann Oann	Rice Cutorase	bigieaved Arrownead	Pickereiweed	Arrow Arum	Spatterdock	COMMON NAME	LOWER INTERTIDAL PLUGS		(% germination	,	125		h 3.75		E SEED PLS#/ACRE	UPPER INTERTIDAL SEED MIX		ver crop should	ale cereale) may	Seeds, Inc. as companion crop a		Ecotype	Long Island-NY	APB-NY Ecotype	Ecotype	Ecotype	Long Island-NY	PA Ecotype	Long Island-NY	SPECIFICATION	UPLAND SEED MIX	
DIGNEER, ARCHITECT, LANDSCARE, ARCHITECT, OR LAND SURVEYOR, ENGINEER, ARCHITECT, LANDSCARE, ARCHITECT, OR LAND SURVEYOR				MITTGATION	Total	2" plug	2" plug		2" plug		2" plue	Bnid. 7	2" plug	2" plug	Tubers	SPECIFICATION	SC	x % purity) / 100							TOTAL	XIX		be applied at a rate of 301bs/acre.	be used for time p	p at rate of 20 lbs per acre.			3.3	e 0.6	5.1	0,C		6	11.4	PLS*/ACRE (LBS)	EED MIX	
					2400		300		300		300	300	300	300	300	NUMBER				TRO	Car		TBD		(LBS) REQUIRED			of 301bs/acre.	riod 1 Jan to 31	er acre. Alterna										BS) ACREAGE		
	RECIONE D	ALL DINENCIONS IN AT UNLESS OTHERNISE NOTES		ALL DIMENSIONS IN IT UNLESS OT	nder 1. – Selar J. Oranno esc-1 for plus detar and Arandement											2. SOW LOWER INTERTIDAL AND UPPER INTERTIDAL SE	NUTSE SUPERVISED AND THE WAS CAREEN. THE SUPERVISED AND THE SUPERVISE AND THE SUPERV	a longer					July.	čely,						-			CHASIDERING TURING AND COST. ALL SCEDAPLIANT SPECIES SUBSTITUTIONS WUST HE APPROVED BY THE OWRER.									
ISSUED ON			HERMISE NOTED	45 20										seed mixes ungoing the mixes ungoing the mixes ungoing the mixes and the mixes with an order mixes with																			SCED/PLANT SPECIE	e to the hudson a extent they are o								
CONTRACT NUMBER DRAWING NO. ECN-1	Valley Greenway	CONSULTING ENGINEERS	ORCEMUAN-PEOPERSEN, INC.																			HOUT ENTERE INTERVIONE BENCH.	EY AND LOCAL GENOTYPES SHALL LY AVAILABLE WHILE ALSO ATMAK LAKET BY LOODANTH BY																ES SUBSTITUTIONS MUST BE APPROV	RIVER VALLEY AND LOCAL CONDITION COMMERCIALLY AVAILABLE WHILE A		



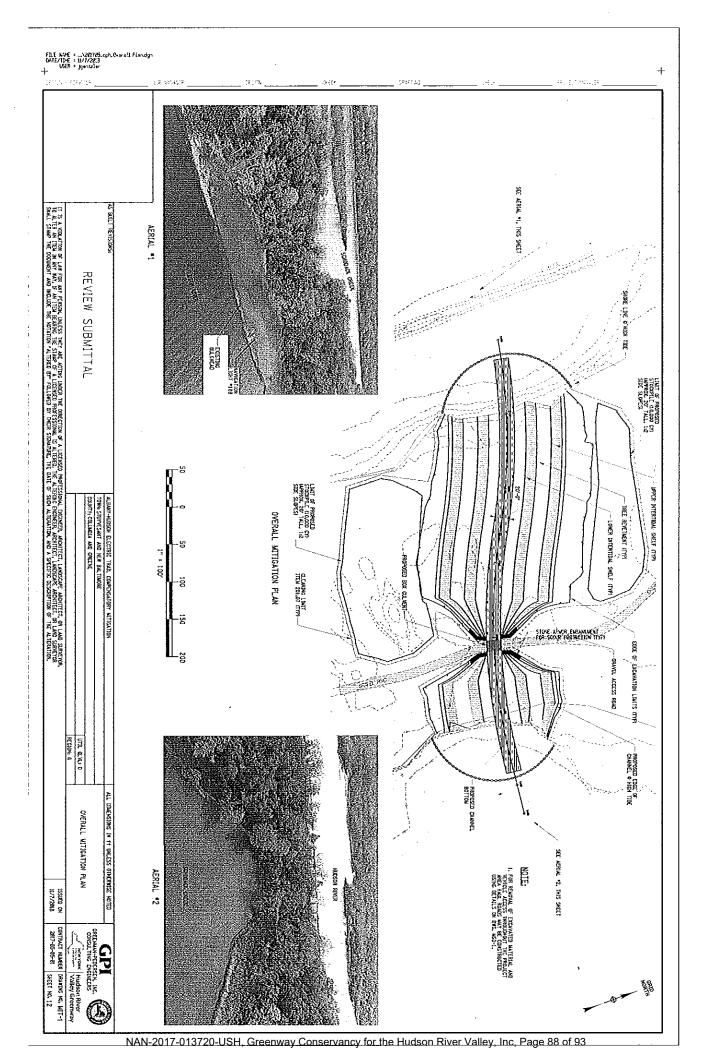
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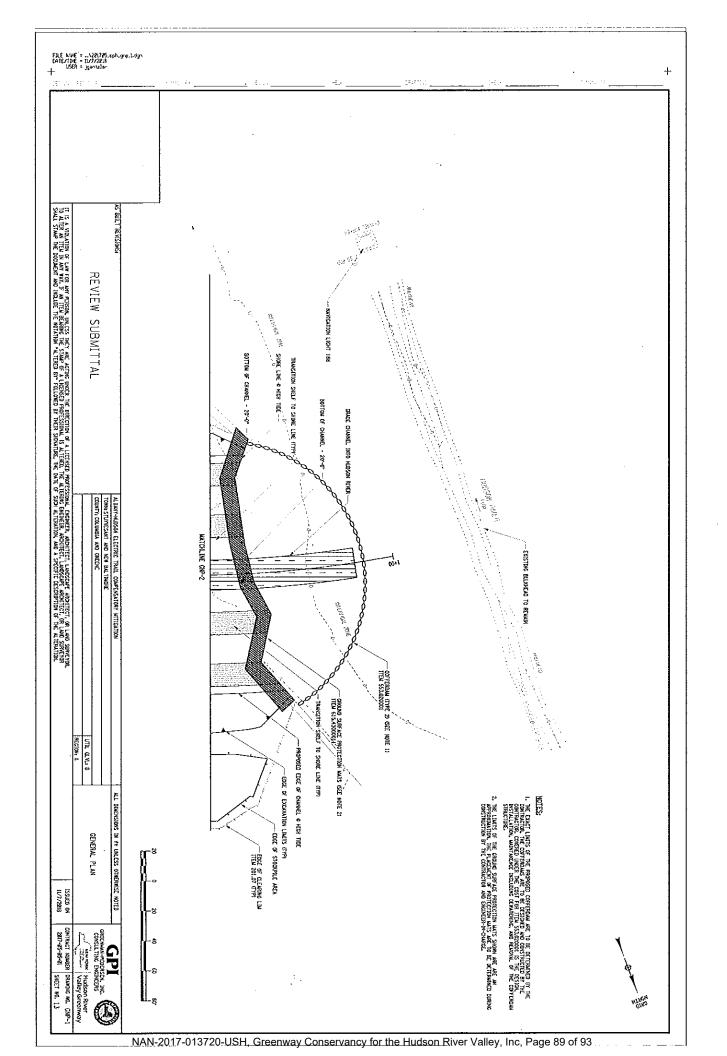


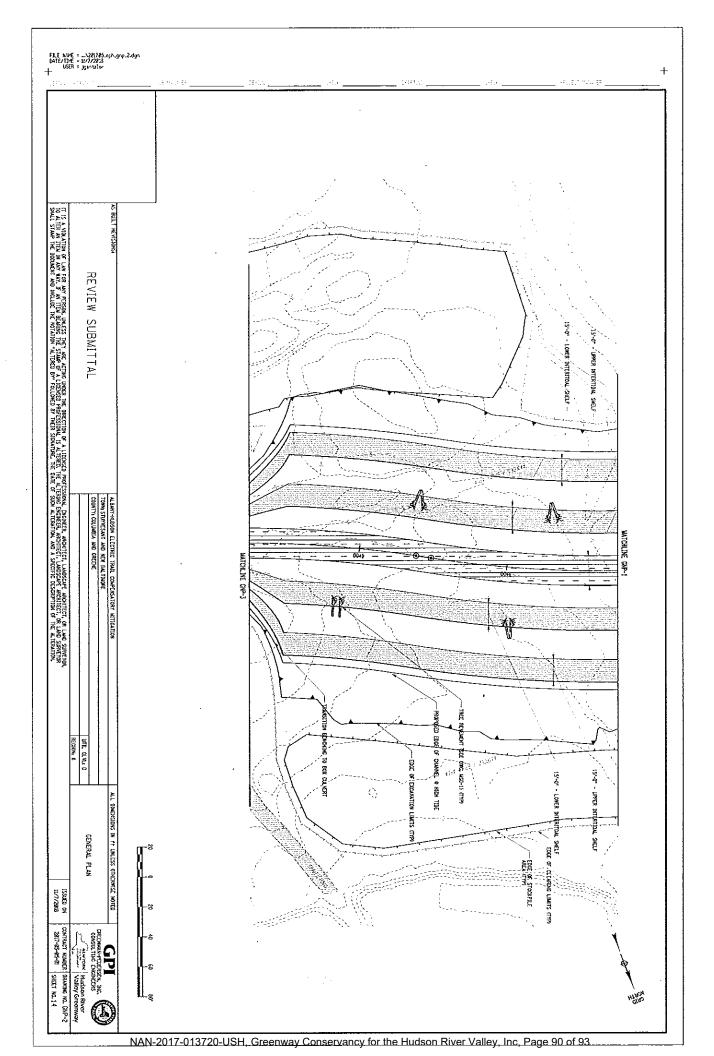
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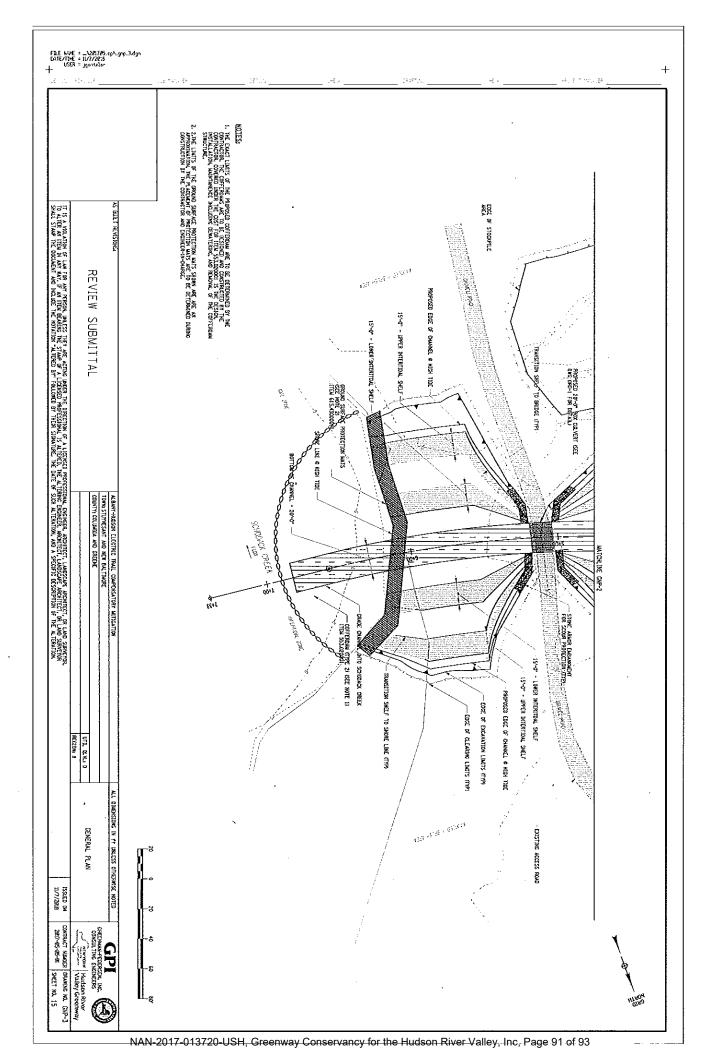


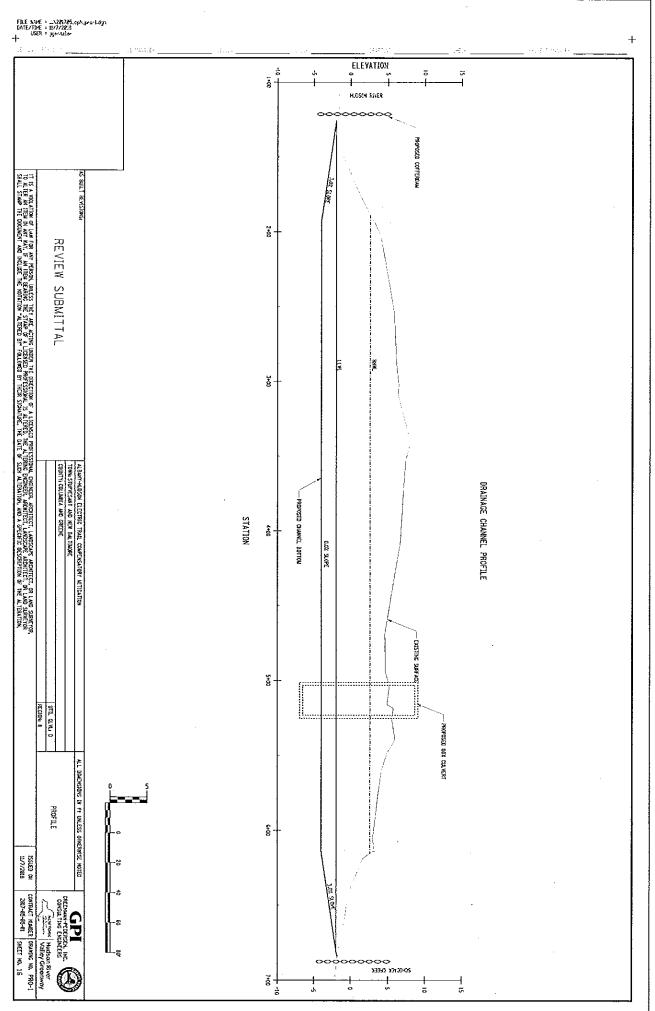
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