WAYNE COUNTY
SOIL & WATER
CONSERVATION DISTRICT

7312 Route 31, Lyons, New York 14489
Telephone (315) 946-7200
Fax (315) 946-7205
waynecountyNYsoilandwater.org

June 18, 2021

Dear Partnering Agencies:

On June 2, 2021, the District's Board of Directors reviewed the findings of the Coordinated Review process for the Blind Sodus Bay Western Bluff Process and Declared Negative Declaration on a Type 1 project noting considerations from NYSDEC and NYSOGS regarding regulations considerations for the current design. This information was immediate shared with the design team with MRB Group and is being looked and reviewed through the permitting process and 90% design.

In the attached information you will find a complete SEQR Review packet for this project. A notice of ENB has been filed and a 30 day comment period will commence with the posting of the publication.

If you have any specific questions, would you please reach out to me at Lindsey@WayneNYswcd.org.

Sincerely,

Lindsey M. Gerstenslager, District Manager

Wayne County Soil & Water Conservation District

C: Wayne SWCD, Board of Directors

MRB Group: Shawn Bray Project Manager

MRB Group: David Doyle, Vice President

The ENB SEQRA Notice Publication Form - *Please check all that apply*

Reset Form

Deadline: Notices must be received by **6 p.m. Wednesday** to appear in the following Wednesday's ENB

- [x] Negative Declaration - Type I
- [ ] Conditioned Negative Declaration
- [ ] Positive Declaration
- [ ] Draft Scope
- [ ] with Public Scoping Session (optional)
- [ ] Final Scope
- [ ] Draft EIS
- [ ] with Public Hearing
- [ ] Generic
- [ ] Supplemental
- [ ] Final EIS
- [ ] Generic
- [ ] Supplemental

DEC Region # 8 County: Wayne Lead Agency: Wayne County Soil & Water Conservation District

Project Title: Blind Sodus Bay REDI Project: West Bluff

Brief Project Description: The action involves . . .

920 lf feet of the western barrier bar of Blind Sodus Bay would be protected from continued erosion from precipitation, wind and high water level under cutting. This area has a 30lf bluff area along 12 properties and Town infrastructure (sewer main), 6 utility poles, a public and private roadway. The Bluff Area is located west of the barrier bar and extends for approximately 920 linear feet of shoreline. A private homeowner installed approximately 175 linear feet of shoreline protection at the northern terminus of the Bluff Area that is failing and will be repaired as part of the project. Shoreline protection consists of a concrete cap, drilled steel pipe piles filled with concrete extending up 8 to 10 feet above the concrete cap, timber cribbing behind the steel pipe piles, and gabion baskets
Wave and freeze action have continually eroded the toe of the bluff causing sloughing and encroachment onto properties and structures; several properties have structures that are undermined from erosion. The sloughed material is at the base of the bluff and is referred to herein as the slope

Project Location (include street address/municipality):

Contact Person: Lindsey M. Gerstenslager

Address: 7312 Route 31 City: Lyons State: NY Zip: 14489

Phone: 315-946-7200 Fax: 315-946-7205 E-mail: Lindsey@WayneNYswcd.org

For Conditioned Negative Declaration / Draft Scope / Draft EIS: Public Comment Period ends: 7 / 18 / 2021

For Public Hearing or Scoping Session: Date: ____ / ____ / _____ Time: _____:_____ am/pm

Location:

A hard copy of the Draft Scope/Final Scope/DEIS/FEIS is available at the following locations:
By request at the District office by calling for an appointment at 315.946.7200

The online version of the Draft Scope/Final Scope/DEIS/FEIS is available at the following publically accessible web site: https://waynecountynysoilandwater.org/lake-ontario-redi-projects/

For Conditioned Negative Declaration: In summary, conditions include:

WAYNE COUNTY
SOIL & WATER
CONSERVATION DISTRICT

Wayne County Board of Directors
June Special Board Meeting
Wednesday, June 2nd, 2021
10:00am via zoom/office
https://us02web.zoom.us/j/89974994140?pwd=cWJQcG05cUtvL3NyMGlwWitKajdkQT09

AUTHORIZATION TO DECLARE NEGATIVE DECLARATION FOR SEQR OF

THE BLIND SODUS BAY WESTERN BLUFF REDI PROJECT

WHEREAS, Wayne County Soil & Water Conservation District is proposing the Blind Sodus Bay Western Bluff REDI Project, located in the Towns of Wolcott, Wayne County, New York; and

WHEREAS, the Project has been classified as a "Type I Action" as defined by the State Environmental Quality Review Act (SEQRA) in 6 NYCRR Part 617.4; and

WHEREAS, Wayne County Soil & Water Conservation District Board of Directors and its agents assumed the role of "Lead Agency" for purposes of conducting a SEQRA assessment of the Project; and

WHEREAS, Wayne County Soil & Water Conservation District Board of Directors, and its agents notified all Interested and Involved Agencies for purposes of establishing the Wayne County Soil & Water Conservation District Board of Directors as "Lead Agency" in accordance with 6 NYCRR Part 617.6(b),

WHEREAS, All Interested and Involved Agencies acknowledged and responded with appropriate comments to contribute to the review, and;

WHEREAS, Part I, II and III of a Full Environmental Assessment Form (FEAF) has been completed, project assessment completed, comments reviewed and answered with final submittal to NYSDEC Regulatory Division for final review; now, therefore be it

RESOLVED, that the Chairman of the Wayne County Soil & Water Conservation Board of Directors is hereby authorized to Declare a Negative Impact on the Blind Sodus Bay Western Bluff REDI Project Sight; and be it further

RESOLVED, that the Chairman of the Wayne County Soil & Water Conservation District and the Board of Directors, together with the representative consultants of MRB Group, are hereby authorized to take all actions, serve all notices, and complete all documents required to give full force and effect to this determination.

Chairman of Soil & Water Conservation District — Date: 6/2/2021

Vice-Chairman of Soil & Water Conservation District — Date: 6/2/2021

Recording Officer — Date: 6/2/2021

Agency Use Only [IfApplicable]

Project :

Date :

Full Environmental Assessment Form
Part 3 - Evaluation of the Magnitude and Importance of Project Impacts
and
Determination of Significance

Part 3 provides the reasons in support of the determination of significance. The lead agency must complete Part 3 for every question in Part 2 where the impact has been identified as potentially moderate to large or where there is a need to explain why a particular element of the proposed action will not, or may, result in a significant adverse environmental impact.

Based on the analysis in Part 3, the lead agency must decide whether to require an environmental impact statement to further assess the proposed action or whether available information is sufficient for the lead agency to conclude that the proposed action will not have a significant adverse environmental impact. By completing the certification on the next page, the lead agency can complete its determination of significance.

Reasons Supporting This Determination:

To complete this section:

- Identify the impact based on the Part 2 responses and describe its magnitude. Magnitude considers factors such as severity, size or extent of an impact.
- Assess the importance of the impact. Importance relates to the geographic scope, duration, probability of the impact occurring, number of people affected by the impact and any additional environmental consequences if the impact were to occur.
- The assessment should take into consideration any design element or project changes.
- Repeat this process for each Part 2 question where the impact has been identified as potentially moderate to large or where there is a need to explain why a particular element of the proposed action will not, or may, result in a significant adverse environmental impact.
- Provide the reason(s) why the impact may, or will not, result in a significant adverse environmental impact
- For Conditional Negative Declarations identify the specific condition(s) imposed that will modify the proposed action so that no significant adverse environmental impacts will result.
- Attach additional sheets, as needed.

Please see the Document attached for answers to the Part III Evaluation. Summary listed below:
Identify the impact based on the Part 2 responses and describe its magnitude. Magnitude considers factors such as severity, size or extent of an impact. ?
1. Impact on Land - Yes, but through the assessment, No-or small impact may occur
a. The impact related to this exposed area is in regards to erosion management. The potential impact is in the amount of sediment budget material will be impacted in cu-yds in the future. Through modeling and assessment over historical photo measurements the actual contribution to the overall sediment budget for this area is minimal from the bluff face itself due to the fine composition of the soil substrate in comparison to the natural ecology of the near shore TSS and settling capabilities due to fluctuations, weather and seshe.
b. The project construction will be relatively efficient with less than a month of construction potential, with minimal grading and shaping to achieve safe anchoring while stabilizing the bank.
2. Impact on Geological Features - Yes, but through assessment, No - or small impact may occur
a. The area of management is a bluff face. However at the rate of erosion in the last 5 years, if left un disturbed the area would be reduced to a beach front in about 20 years, losing 10 properties and several structures completely, including two roadways, a sewer main and utilities etc. Not only would there be loss of structural materials, the bluffs would not exist.
b. Currently, the instability of the bluff face does not provide enough security to natural flora and fauna diminishing the ability for the natural ecosystem and environment to habituate there.
3. Impacts on Surface Water - Yes, but through assessment, No - or small impact may occur
a. Currently, surface water runoff is impacting other areas including the erosion on the bluff face. This project will have no negative impact based on the 90% design.
4. Impacts on Historic and Archeological Resources - Yes, but through assessment, No
a. NYS SHPO review identified No Effect this project will have to the Historical and Archeological Resources of this area.

Determination of Significance - Type 1 and Unlisted Actions

SEQR Status: ☑ Type 1 ☐ Unlisted

Identify portions of EAF completed for this Project: ☑ Part 1 ☑ Part 2 ☑ Part 3

Upon review of the information recorded on this EAF, as noted, plus this additional support information

and considering both the magnitude and importance of each identified potential impact, it is the conclusion of the Wayne County Soil & Water Conservation District as lead agency that:

☑ A. This project will result in no significant adverse impacts on the environment, and, therefore, an environmental impact statement need not be prepared. Accordingly, this negative declaration is issued.

☐ B. Although this project could have a significant adverse impact on the environment, that impact will be avoided or substantially mitigated because of the following conditions which will be required by the lead agency:

There will, therefore, be no significant adverse impacts from the project as conditioned, and, therefore, this conditioned negative declaration is issued. A conditioned negative declaration may be used only for UNLISTED actions (see 6 NYCRR 617.7(d)).

☐ C. This Project may result in one or more significant adverse impacts on the environment, and an environmental impact statement must be prepared to further assess the impact(s) and possible mitigation and to explore alternatives to avoid or reduce those impacts. Accordingly, this positive declaration is issued.

Name of Action: Blind Sodus Bay Barrier Bar Project: West Bar

Name of Lead Agency: Wayne County Soil & Water Conservation District

Name of Responsible Officer in Lead Agency: Lindsey M. Gerstenslager

Title of Responsible Officer: District Manager

Signature of Responsible Officer in Lead Agency: LMG Date: 6/18/2021

Signature of Preparer (if different from Responsible Officer) Lindsey Gerstenslager Date: 6/18/2021

For Further Information:

Contact Person: Lindsey M. Gerstenslager

Address: 7312 Route 31, Lyons NY 14489

Telephone Number: 315.946.7200

E-mail: Lindsey@wayneNYswcd.org

For Type 1 Actions and Conditioned Negative Declarations, a copy of this Notice is sent to:

Chief Executive Officer of the political subdivision in which the action will be principally located (e.g., Town / City / Village of)
Other involved agencies (if any)
Applicant (if any)
Environmental Notice Bulletin: http://www.dec.ny.gov/enb/enb.html

PRINT FULL FORM

SEQRA Process information:

1. The Blind Sodus Bay Western Bluff Slope Protection Project is at 90% design packet attached.

2. Alternatives analysis for a Gabion Retention Wall were assessed and included several factors of impact, geo-strength, management and mainly erosion management.

   a. Initially, three alternatives were being assessed:

      i. Do nothing – which is the current situation. Just since weekly monitoring began on March 31, 2021, several unprotected areas along this 800+/- shoreline bluff face have seen topline sluffing >8 lf in specific areas and 2-3 lf south receding as an average along the entire bluff. 6 more 20 + year old trees have been lost since then. This option does not correlate with regulatory protection for Infrastructure as part of the CEHA program.

      ii. Terracing Management – This proposed alternative was reviewed in 2018 prior to the 220lf of emergency protection for the Sewer Force Main at the end of West Blind Sodus Bay Road with the Town of Wolcott. In order to achieve the 1 to 3 or 1 to 6 slope spec to achieve stability, it worked out to be about 900 cu yards / 100 lf of shoreline. The project is over 1020+/- feet in total and would have to be protected out into the water to not compromise the sewer main on the eastern side of the project and if grading back was to occur it would take 6 taxable properties right off the map. This alternative was looked at during the previous project but was shortly discouraged because of the in ability to assess natural establishment time with the increase variability of NYS Seasons, water level instability and storm event potential x the amount of reclamation and fill to achieve the stability. It would also due away with the natural beach at the base of the bluff face and grade out below the LWD.

      iii. Gabion Wall (Preferred Alternative by the residents and local government for time, funding, infrastructure protected resources and the ability to commit to long term operations and maintenance on the project). There were three additional alternatives for this considered to drill the concept down for developing the 60% design and engineering management. This document is attached for review and consideration.

Identify the impact based on the Part 2 responses and describe its magnitude. Magnitude considers factors such as severity, size or extent of an impact. •

1. Impact on Land – Yes, but through the assessment, No-or small impact may occur
   a. The impact related to this exposed area is in regards to erosion management. The potential impact is in the amount of sediment budget material will be impacted in cu-yds in the future. Through modeling and assessment over historical photo measurements the actual contribution to the overall sediment budget for this area is minimal from the bluff face itself due to the fine composition of the soil substrate in comparison to the natural ecology of the near shore TSS and settling capabilities due to fluctuations, weather and seshe.
   b. The project construction will be relatively efficient with less than a month of construction potential, with minimal grading and shaping to achieve safe anchoring while stabilizing the bank.

2. Impact on Geological Features – Yes, but through assessment, No – or small impact may occur
    a. The area of management is a bluff face. However at the rate of erosion in the last 5 years, if left un disturbed the area would be reduced to a beach front in about 20 years, losing 10 properties and several structures completely, including two roadways, a sewer main and utilities etc. Not only would there be loss of structural materials, the bluffs would not exist.
    b. Currently, the instability of the bluff face does not provide enough security to natural flora and fauna diminishing the ability for the natural ecosystem and environment to habituate there.
3. Impacts on Surface Water – Yes, but through assessment, No – or small impact may occur
    a. Currently, surface water runoff is impacting other areas including the erosion on the bluff face. This project will have no negative impact based on the 90% design.
4. Impacts on Historic and Archeological Resources – Yes, but through assessment, No
    a. NYS SHPO review identified No Effect this project will have to the Historical and Archeological Resources of this area.

The assessment should take into consideration any design element or project changes. •

Overall assessment included review of various design elements and changes were made based on continued assessment review through the SEQR process due to soils, construction and increased cost of materials due to COVID. Through the Joint Application Permitting process, the design team is prepared to make design adjustments and justifications to address CEHA, DOS and WQ regulation processes affiliated with Federal and State Regulatory partners. At this time, the design of the project meets all local standards for construction and will fall into the Town's Codes appropriately without variance.

Provide the reason(s) why the impact may, or will not, result in a significant adverse environmental impact •

The Blind Sodus Bay Western Bluff Slope Protection Project addresses protection to 11 seasonal residences, 1 permanent residence, a sewer main, utilities for electric and phone service, two private roadways and the tie in for the success of a started project in 2019 completed by the Town of Wolcott to save the end of a roadway that provides public safety. This overall project will mitigate loss of tax revenue, increase public safety, stabilize tree stands at the top of the existing slope and manage erosion over the next 30 years. Because of the overall degradation of this area due to natural processes, the loss of materials is significant and will provide a more stable environment for nesting and/or additional plantings. The residents of these properties are interested in additional plantings and landscaping for natural habitats in partnership with this project. They are all science minded citizens.

After review of all the information in the attached packet, the District's Board of Directors declared a Negative Declaration for Type 1 action on this project with no-to minimal impacts. Additional review and adjustments will be made based on the 90% drawings attached as part of the Joint application review.

Agency Use Only [If applicable]

Project :

Date :

Full Environmental Assessment Form
Part 2 - Identification of Potential Project Impacts

Part 2 is to be completed by the lead agency. Part 2 is designed to help the lead agency inventory all potential resources that could be affected by a proposed project or action. We recognize that the lead agency's reviewer(s) will not necessarily be environmental professionals. So, the questions are designed to walk a reviewer through the assessment process by providing a series of questions that can be answered using the information found in Part 1. To further assist the lead agency in completing Part 2, the form identifies the most relevant questions in Part 1 that will provide the information needed to answer the Part 2 question. When Part 2 is completed, the lead agency will have identified the relevant environmental areas that may be impacted by the proposed activity.

If the lead agency is a state agency **and** the action is in any Coastal Area, complete the Coastal Assessment Form before proceeding with this assessment.

Tips for completing Part 2:

- Review all of the information provided in Part 1.
- Review any application, maps, supporting materials and the Full EAF Workbook.
- Answer each of the 18 questions in Part 2.
- If you answer "**Yes"** to a numbered question, please complete all the questions that follow in that section.
- If you answer "**No"** to a numbered question, move on to the next numbered question.
- Check appropriate column to indicate the anticipated size of the impact.
- Proposed projects that would exceed a numeric threshold contained in a question should result in the reviewing agency checking the box "Moderate to large impact may occur."
- The reviewer is not expected to be an expert in environmental analysis.
- If you are not sure or undecided about the size of an impact, it may help to review the sub-questions for the general question and consult the workbook.
- When answering a question consider all components of the proposed activity, that is, the "whole action".
- Consider the possibility for long-term and cumulative impacts as well as direct impacts.
- Answer the question in a reasonable manner considering the scale and context of the project.

1. Impact on Land
Proposed action may involve construction on, or physical alteration of, the land surface of the proposed site. (See Part 1. D.1)
If "Yes", answer questions a - j. If "No", move on to Section 2.

☐ NO ☑ YES

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may involve construction on land where depth to water table is less than 3 feet.	E2d	☑	☐
b. The proposed action may involve construction on slopes of 15% or greater.	E2f	☑	☐
c. The proposed action may involve construction on land where bedrock is exposed, or generally within 5 feet of existing ground surface.	E2a	☑	☐
d. The proposed action may involve the excavation and removal of more than 1,000 tons of natural material.	D2a	☑	☐
e. The proposed action may involve construction that continues for more than one year or in multiple phases.	D1e	☑	☐
f. The proposed action may result in increased erosion, whether from physical disturbance or vegetation removal (including from treatment by herbicides).	D2e, D2q	☑	☐
g. The proposed action is, or may be, located within a Coastal Erosion hazard area.	B1i	☐	☑
h. Other impacts: _____ _____		☐	☐

2. Impact on Geological Features

The proposed action may result in the modification or destruction of, or inhibit access to, any unique or unusual land forms on the site (e.g., cliffs, dunes, minerals, fossils, caves). (See Part 1. E.2.g) ☐ NO ☑ YES

If "Yes", answer questions a - c. If "No", move on to Section 3.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. Identify the specific land form(s) attached: Bluffs of Western Barrier Bar of Blind Sodus Bay	E2g	☑	☐
b. The proposed action may affect or is adjacent to a geological feature listed as a registered National Natural Landmark. Specific feature:	E3c	☑	☐
c. Other impacts:		☐	☐

3. Impacts on Surface Water

The proposed action may affect one or more wetlands or other surface water bodies (e.g., streams, rivers, ponds or lakes). (See Part 1. D.2, E.2.h) ☐ NO ☑ YES

If "Yes", answer questions a - l. If "No", move on to Section 4.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may create a new water body.	D2b, D1h	☑	☐
b. The proposed action may result in an increase or decrease of over 10% or more than a 10 acre increase or decrease in the surface area of any body of water.	D2b	☑	☐
c. The proposed action may involve dredging more than 100 cubic yards of material from a wetland or water body.	D2a	☑	☐
d. The proposed action may involve construction within or adjoining a freshwater or tidal wetland, or in the bed or banks of any other water body.	E2h	☐	☑
e. The proposed action may create turbidity in a waterbody, either from upland erosion, runoff or by disturbing bottom sediments.	D2a, D2h	☑	☐
f. The proposed action may include construction of one or more intake(s) for withdrawal of water from surface water.	D2c	☑	☐
g. The proposed action may include construction of one or more outfall(s) for discharge of wastewater to surface water(s).	D2d	☑	☐
h. The proposed action may cause soil erosion, or otherwise create a source of stormwater discharge that may lead to siltation or other degradation of receiving water bodies.	D2e	☑	☐
i. The proposed action may affect the water quality of any water bodies within or downstream of the site of the proposed action.	E2h	☑	☐
j. The proposed action may involve the application of pesticides or herbicides in or around any water body.	D2q, E2h	☑	☐
k. The proposed action may require the construction of new, or expansion of existing, wastewater treatment facilities.	D1a, D2d	☑	☐

l. Other impacts: _____ _____		☐	☐

4. Impact on groundwater

The proposed action may result in new or additional use of ground water, or may have the potential to introduce contaminants to ground water or an aquifer. (See Part 1. D.2.a, D.2.c, D.2.d, D.2.p, D.2.q, D.2.t)

☑ NO ☐ YES

If "Yes", answer questions a - h. If "No", move on to Section 5.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may require new water supply wells, or create additional demand on supplies from existing water supply wells.	D2c	☐	☐
b. Water supply demand from the proposed action may exceed safe and sustainable withdrawal capacity rate of the local supply or aquifer. Cite Source: _____	D2c	☐	☐
c. The proposed action may allow or result in residential uses in areas without water and sewer services.	D1a, D2c	☐	☐
d. The proposed action may include or require wastewater discharged to groundwater.	D2d, E2l	☐	☐
e. The proposed action may result in the construction of water supply wells in locations where groundwater is, or is suspected to be, contaminated.	D2c, E1f, E1g, E1h	☐	☐
f. The proposed action may require the bulk storage of petroleum or chemical products over ground water or an aquifer.	D2p, E2l	☐	☐
g. The proposed action may involve the commercial application of pesticides within 100 feet of potable drinking water or irrigation sources.	E2h, D2q, E2l, D2c	☐	☐
h. Other impacts: _____ _____		☐	☐

5. Impact on Flooding

The proposed action may result in development on lands subject to flooding. (See Part 1. E.2)

☑ NO ☐ YES

If "Yes", answer questions a - g. If "No", move on to Section 6.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may result in development in a designated floodway.	E2i	☐	☐
b. The proposed action may result in development within a 100 year floodplain.	E2j	☐	☐
c. The proposed action may result in development within a 500 year floodplain.	E2k	☐	☐
d. The proposed action may result in, or require, modification of existing drainage patterns.	D2b, D2e	☐	☐
e. The proposed action may change flood water flows that contribute to flooding.	D2b, E2i, E2j, E2k	☐	☐
f. If there is a dam located on the site of the proposed action, is the dam in need of repair, or upgrade?	E1e	☐	☐

g. Other impacts: _____ _____		☐	☐

6. Impacts on Air

The proposed action may include a state regulated air emission source. ☑ NO ☐ YES
(See Part 1. D.2.f., D.2.h, D.2.g)
If "Yes", answer questions a - f. If "No", move on to Section 7.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. If the proposed action requires federal or state air emission permits, the action may also emit one or more greenhouse gases at or above the following levels:			
i. More than 1000 tons/year of carbon dioxide (CO_2)	D2g	☐	☐
ii. More than 3.5 tons/year of nitrous oxide (N_2O)	D2g	☐	☐
iii. More than 1000 tons/year of carbon equivalent of perfluorocarbons (PFCs)	D2g	☐	☐
iv. More than .045 tons/year of sulfur hexafluoride (SF_6)	D2g	☐	☐
v. More than 1000 tons/year of carbon dioxide equivalent of hydrochloroflourocarbons (HFCs) emissions	D2g	☐	☐
vi. 43 tons/year or more of methane	D2h	☐	☐
b. The proposed action may generate 10 tons/year or more of any one designated hazardous air pollutant, or 25 tons/year or more of any combination of such hazardous air pollutants.	D2g	☐	☐
c. The proposed action may require a state air registration, or may produce an emissions rate of total contaminants that may exceed 5 lbs. per hour, or may include a heat source capable of producing more than 10 million BTU's per hour.	D2f, D2g	☐	☐
d. The proposed action may reach 50% of any of the thresholds in "a" through "c", above.	D2g	☐	☐
e. The proposed action may result in the combustion or thermal treatment of more than 1 ton of refuse per hour.	D2s	☐	☐
f. Other impacts: _____ _____		☐	☐

7. Impact on Plants and Animals

The proposed action may result in a loss of flora or fauna. (See Part 1. E.2. m.-q.) ☑ NO ☐ YES
If "Yes", answer questions a - j. If "No", move on to Section 8.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may cause reduction in population or loss of individuals of any threatened or endangered species, as listed by New York State or the Federal government, that use the site, or are found on, over, or near the site.	E2o	☐	☐
b. The proposed action may result in a reduction or degradation of any habitat used by any rare, threatened or endangered species, as listed by New York State or the federal government.	E2o	☐	☐
c. The proposed action may cause reduction in population, or loss of individuals, of any species of special concern or conservation need, as listed by New York State or the Federal government, that use the site, or are found on, over, or near the site.	E2p	☐	☐
d. The proposed action may result in a reduction or degradation of any habitat used by any species of special concern and conservation need, as listed by New York State or the Federal government.	E2p	☐	☐

e. The proposed action may diminish the capacity of a registered National Natural Landmark to support the biological community it was established to protect.	E3c	□	□
f. The proposed action may result in the removal of, or ground disturbance in, any portion of a designated significant natural community. Source: _____	E2n	□	□
g. The proposed action may substantially interfere with nesting/breeding, foraging, or over-wintering habitat for the predominant species that occupy or use the project site.	E2m	□	□
h. The proposed action requires the conversion of more than 10 acres of forest, grassland or any other regionally or locally important habitat. Habitat type & information source: _____ _____	E1b	□	□
i. Proposed action (commercial, industrial or recreational projects, only) involves use of herbicides or pesticides.	D2q	□	□
j. Other impacts: _____ _____		□	□

8. Impact on Agricultural Resources

The proposed action may impact agricultural resources. (See Part 1. E.3.a. and b.) ☑ NO ☐ YES

If "Yes", answer questions a - h. If "No", move on to Section 9.

	Relevant Part I Question(s)	**No, or small impact may occur**	**Moderate to large impact may occur**
a. The proposed action may impact soil classified within soil group 1 through 4 of the NYS Land Classification System.	E2c, E3b	□	□
b. The proposed action may sever, cross or otherwise limit access to agricultural land (includes cropland, hayfields, pasture, vineyard, orchard, etc).	E1a, Elb	□	□
c. The proposed action may result in the excavation or compaction of the soil profile of active agricultural land.	E3b	□	□
d. The proposed action may irreversibly convert agricultural land to non-agricultural uses, either more than 2.5 acres if located in an Agricultural District, or more than 10 acres if not within an Agricultural District.	E1b, E3a	□	□
e. The proposed action may disrupt or prevent installation of an agricultural land management system.	El a, E1b	□	□
f. The proposed action may result, directly or indirectly, in increased development potential or pressure on farmland.	C2c, C3, D2c, D2d	□	□
g. The proposed project is not consistent with the adopted municipal Farmland Protection Plan.	C2c	□	□
h. Other impacts: _____		□	□

9. Impact on Aesthetic Resources

The land use of the proposed action are obviously different from, or are in sharp contrast to, current land use patterns between the proposed project and a scenic or aesthetic resource. (Part 1. E.1.a, E.1.b, E.3.h.)

☑ NO ☐ YES

If "Yes", answer questions a - g. If "No", go to Section 10.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. Proposed action may be visible from any officially designated federal, state, or local scenic or aesthetic resource.	E3h	☐	☐
b. The proposed action may result in the obstruction, elimination or significant screening of one or more officially designated scenic views.	E3h, C2b	☐	☐
c. The proposed action may be visible from publicly accessible vantage points: i. Seasonally (e.g., screened by summer foliage, but visible during other seasons) ii. Year round	E3h	 ☐ ☐	 ☐ ☐
d. The situation or activity in which viewers are engaged while viewing the proposed action is: i. Routine travel by residents, including travel to and from work ii. Recreational or tourism based activities	E3h E2q, E1c	 ☐ ☐	 ☐ ☐
e. The proposed action may cause a diminishment of the public enjoyment and appreciation of the designated aesthetic resource.	E3h	☐	☐
f. There are similar projects visible within the following distance of the proposed project: 0-1/2 mile ½ -3 mile 3-5 mile 5+ mile	D1a, E1a, D1f, D1g	☐	☐
g. Other impacts: _____ _____		☐	☐

10. Impact on Historic and Archeological Resources

The proposed action may occur in or adjacent to a historic or archaeological resource. (Part 1. E.3.e, f. and g.)

☐ NO ☑ YES

If "Yes", answer questions a - e. If "No", go to Section 11.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may occur wholly or partially within, or substantially contiguous to, any buildings, archaeological site or district which is listed on the National or State Register of Historical Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places.	E3e	☑	☐
b. The proposed action may occur wholly or partially within, or substantially contiguous to, an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory.	E3f	☑	☐
c. The proposed action may occur wholly or partially within, or substantially contiguous to, an archaeological site not included on the NY SHPO inventory. Source: _____	E3g	☑	☐

d. Other impacts: _____ _____		☐	☐
e. If any of the above (a-d) are answered "Moderate to large impact may occur", continue with the following questions to help support conclusions in Part 3:			
i. The proposed action may result in the destruction or alteration of all or part of the site or property.	E3e, E3g, E3f	☐	☐
ii. The proposed action may result in the alteration of the property's setting or integrity.	E3e, E3f, E3g, E1a, E1b	☐	☐
iii. The proposed action may result in the introduction of visual elements which are out of character with the site or property, or may alter its setting.	E3e, E3f, E3g, E3h, C2, C3	☐	☐

11. Impact on Open Space and Recreation

The proposed action may result in a loss of recreational opportunities or a reduction of an open space resource as designated in any adopted municipal open space plan.
(See Part 1. C.2.c, E.1.c., E.2.q.)
If "Yes", answer questions a - e. If "No", go to Section 12.

☑ NO ☐ YES

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may result in an impairment of natural functions, or "ecosystem services", provided by an undeveloped area, including but not limited to stormwater storage, nutrient cycling, wildlife habitat.	D2e, E1b E2h, E2m, E2o, E2n, E2p	□	□
b. The proposed action may result in the loss of a current or future recreational resource.	C2a, E1c, C2c, E2q	□	□
c. The proposed action may eliminate open space or recreational resource in an area with few such resources.	C2a, C2c E1c, E2q	□	□
d. The proposed action may result in loss of an area now used informally by the community as an open space resource.	C2c, E1c	□	□
e. Other impacts: _____ _____		□	□

12. Impact on Critical Environmental Areas

The proposed action may be located within or adjacent to a critical environmental area (CEA). (See Part 1. E.3.d)
If "Yes", answer questions a - c. If "No", go to Section 13.

☑ NO ☐ YES

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may result in a reduction in the quantity of the resource or characteristic which was the basis for designation of the CEA.	E3d	□	□
b. The proposed action may result in a reduction in the quality of the resource or characteristic which was the basis for designation of the CEA.	E3d	□	□
c. Other impacts: _____ _____		□	□

13. Impact on Transportation

The proposed action may result in a change to existing transportation systems. ☑ NO ☐ YES
(See Part 1. D.2.j)
If "Yes", answer questions a - f. If "No", go to Section 14.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. Projected traffic increase may exceed capacity of existing road network.	D2j	☐	☐
b. The proposed action may result in the construction of paved parking area for 500 or more vehicles.	D2j	☐	☐
c. The proposed action will degrade existing transit access.	D2j	☐	☐
d. The proposed action will degrade existing pedestrian or bicycle accommodations.	D2j	☐	☐
e. The proposed action may alter the present pattern of movement of people or goods.	D2j	☐	☐
f. Other impacts: _____ _____		☐	☐

14. Impact on Energy

The proposed action may cause an increase in the use of any form of energy. ☑ NO ☐ YES
(See Part 1. D.2.k)
If "Yes", answer questions a - e. If "No", go to Section 15.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action will require a new, or an upgrade to an existing, substation.	D2k	☐	☐
b. The proposed action will require the creation or extension of an energy transmission or supply system to serve more than 50 single or two-family residences or to serve a commercial or industrial use.	D1f, D1q, D2k	☐	☐
c. The proposed action may utilize more than 2,500 MWhrs per year of electricity.	D2k	☐	☐
d. The proposed action may involve heating and/or cooling of more than 100,000 square feet of building area when completed.	D1g	☐	☐
e. Other Impacts: _____ _____			

15. Impact on Noise, Odor, and Light

The proposed action may result in an increase in noise, odors, or outdoor lighting. ☑ NO ☐ YES
(See Part 1. D.2.m., n., and o.)
If "Yes", answer questions a - f. If "No", go to Section 16.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may produce sound above noise levels established by local regulation.	D2m	☐	☐
b. The proposed action may result in blasting within 1,500 feet of any residence, hospital, school, licensed day care center, or nursing home.	D2m, E1d	☐	☐
c. The proposed action may result in routine odors for more than one hour per day.	D2o	☐	☐

d. The proposed action may result in light shining onto adjoining properties.	D2n	☐	☐
e. The proposed action may result in lighting creating sky-glow brighter than existing area conditions.	D2n, E1a	☐	☐
f. Other impacts: _____ _____		☐	☐

16. Impact on Human Health

The proposed action may have an impact on human health from exposure to new or existing sources of contaminants. (See Part 1.D.2.q., E.1. d. f. g. and h.) ☑ NO ☐ YES

If "Yes", answer questions a - m. If "No", go to Section 17.

	Relevant Part I Question(s)	No,or small impact may cccur	Moderate to large impact may occur
a. The proposed action is located within 1500 feet of a school, hospital, licensed day care center, group home, nursing home or retirement community.	E1d	☐	☐
b. The site of the proposed action is currently undergoing remediation.	E1g, E1h	☐	☐
c. There is a completed emergency spill remediation, or a completed environmental site remediation on, or adjacent to, the site of the proposed action.	E1g, E1h	☐	☐
d. The site of the action is subject to an institutional control limiting the use of the property (e.g., easement or deed restriction).	E1g, E1h	☐	☐
e. The proposed action may affect institutional control measures that were put in place to ensure that the site remains protective of the environment and human health.	E1g, E1h	☐	☐
f. The proposed action has adequate control measures in place to ensure that future generation, treatment and/or disposal of hazardous wastes will be protective of the environment and human health.	D2t	☐	☐
g. The proposed action involves construction or modification of a solid waste management facility.	D2q, E1f	☐	☐
h. The proposed action may result in the unearthing of solid or hazardous waste.	D2q, E1f	☐	☐
i. The proposed action may result in an increase in the rate of disposal, or processing, of solid waste.	D2r, D2s	☐	☐
j. The proposed action may result in excavation or other disturbance within 2000 feet of a site used for the disposal of solid or hazardous waste.	E1f, E1g E1h	☐	☐
k. The proposed action may result in the migration of explosive gases from a landfill site to adjacent off site structures.	E1f, E1g	☐	☐
l. The proposed action may result in the release of contaminated leachate from the project site.	D2s, E1f, D2r	☐	☐
m. Other impacts: _____ _____			

17. Consistency with Community Plans

The proposed action is not consistent with adopted land use plans. ☑ NO ☐ YES

(See Part 1. C.1, C.2. and C.3.)

If "Yes", answer questions a - h. If "No", go to Section 18.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action's land use components may be different from, or in sharp contrast to, current surrounding land use pattern(s).	C2, C3, D1a E1a, E1b	☐	☐
b. The proposed action will cause the permanent population of the city, town or village in which the project is located to grow by more than 5%.	C2	☐	☐
c. The proposed action is inconsistent with local land use plans or zoning regulations.	C2, C2, C3	☐	☐
d. The proposed action is inconsistent with any County plans, or other regional land use plans.	C2, C2	☐	☐
e. The proposed action may cause a change in the density of development that is not supported by existing infrastructure or is distant from existing infrastructure.	C3, D1c, D1d, D1f, D1d, Elb	☐	☐
f. The proposed action is located in an area characterized by low density development that will require new or expanded public infrastructure.	C4, D2c, D2d D2j	☐	☐
g. The proposed action may induce secondary development impacts (e.g., residential or commercial development not included in the proposed action)	C2a	☐	☐
h. Other: _____ _____		☐	☐

18. Consistency with Community Character

The proposed project is inconsistent with the existing community character. ☑ NO ☐ YES

(See Part 1. C.2, C.3, D.2, E.3)

If "Yes", answer questions a - g. If "No", proceed to Part 3.

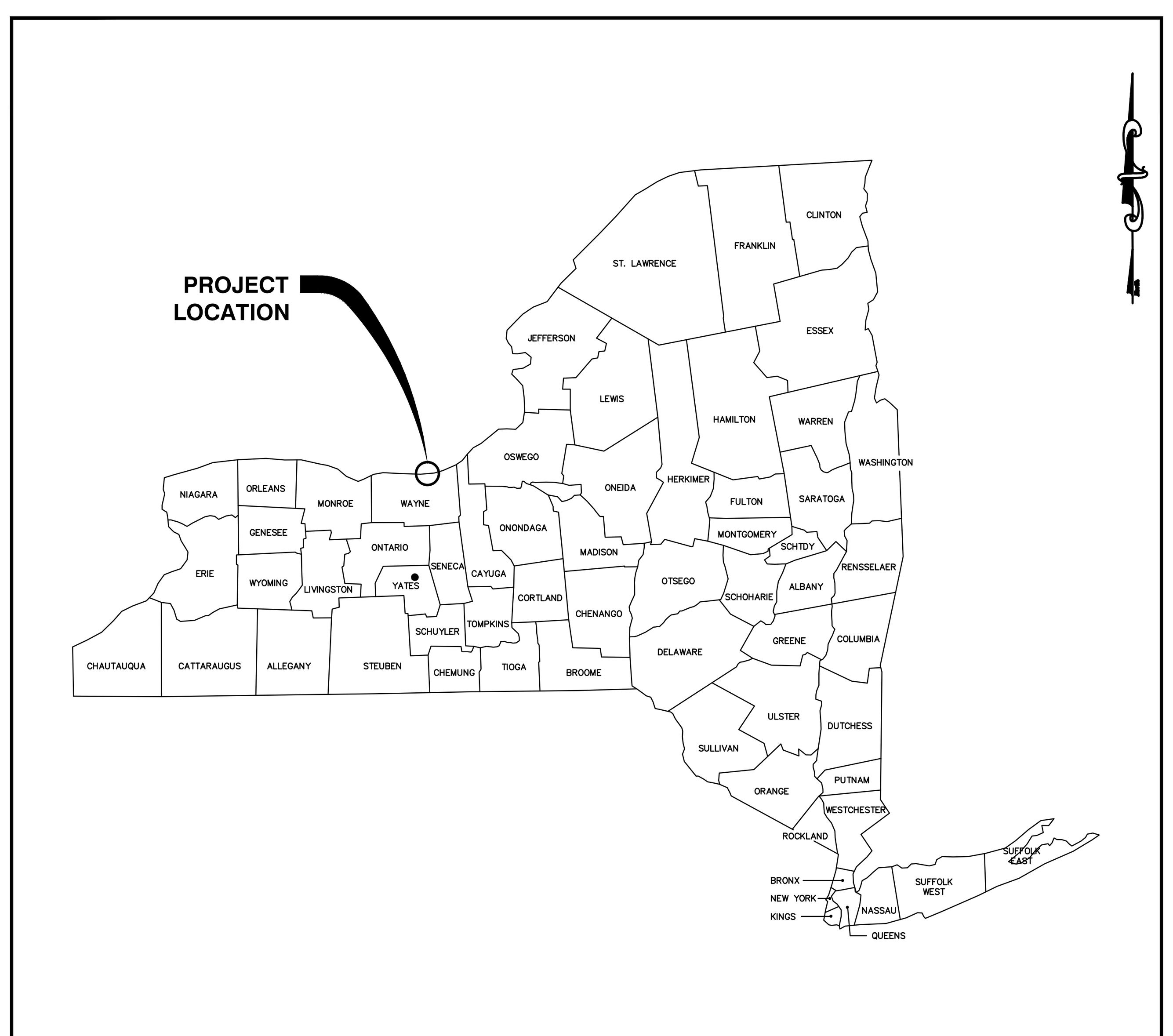
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may replace or eliminate existing facilities, structures, or areas of historic importance to the community.	E3e, E3f, E3g	☐	☐
b. The proposed action may create a demand for additional community services (e.g. schools, police and fire)	C4	☐	☐
c. The proposed action may displace affordable or low-income housing in an area where there is a shortage of such housing.	C2, C3, D1f D1g, E1a	☐	☐
d. The proposed action may interfere with the use or enjoyment of officially recognized or designated public resources.	C2, E3	☐	☐
e. The proposed action is inconsistent with the predominant architectural scale and character.	C2, C3	☐	☐
f. Proposed action is inconsistent with the character of the existing natural landscape.	C2, C3 E1a, E1b E2g, E2h	☐	☐
g. Other impacts: _____ _____		☐	☐

PRINT FULL FORM

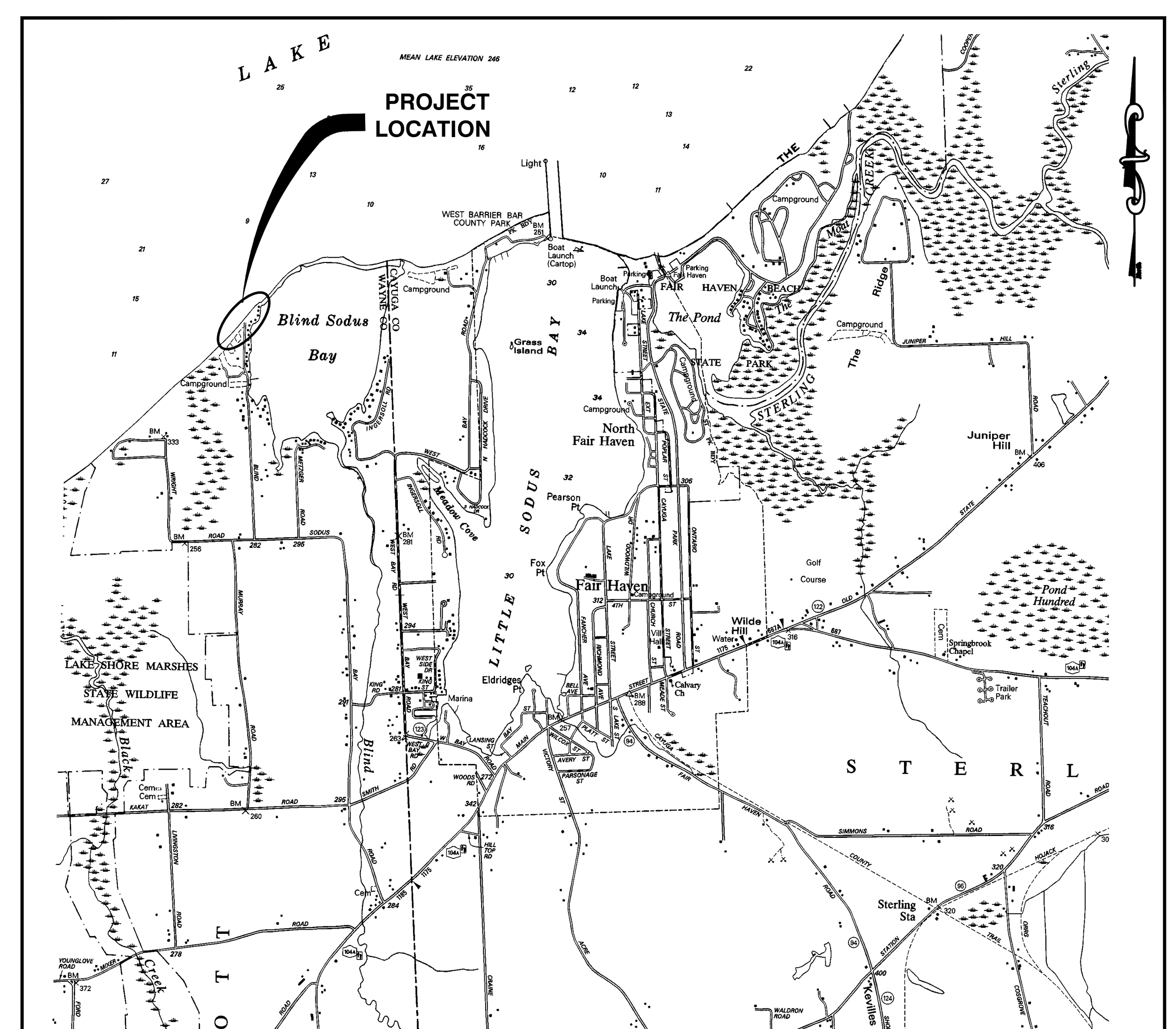
CONTRACT DRAWINGS
FOR THE

LAKE ONTARIO SHORE LINE REPAIR PROJECT
BLIND SODUS BAY WESTERN BLUFF

LAKE ONTARIO - RESILIENCY & ECONOMIC DEVELOPMENT INITIATIVE (REDI)
GRANT NO.



LOCATION MAP



LOCATION MAP

WAYNE COUNTY SOIL & WATER CONSERVATION DISTRICT
WAYNE COUNTY
NEW YORK

DRAWING INDEX:

MAY 2021

MRB | group

Engineering, Architecture & Surveying, D.P.C.

The Culver Road Armory, 145 Culver Road, Suite 160, Rochester, New York 14620
Phone: 585-381-9250

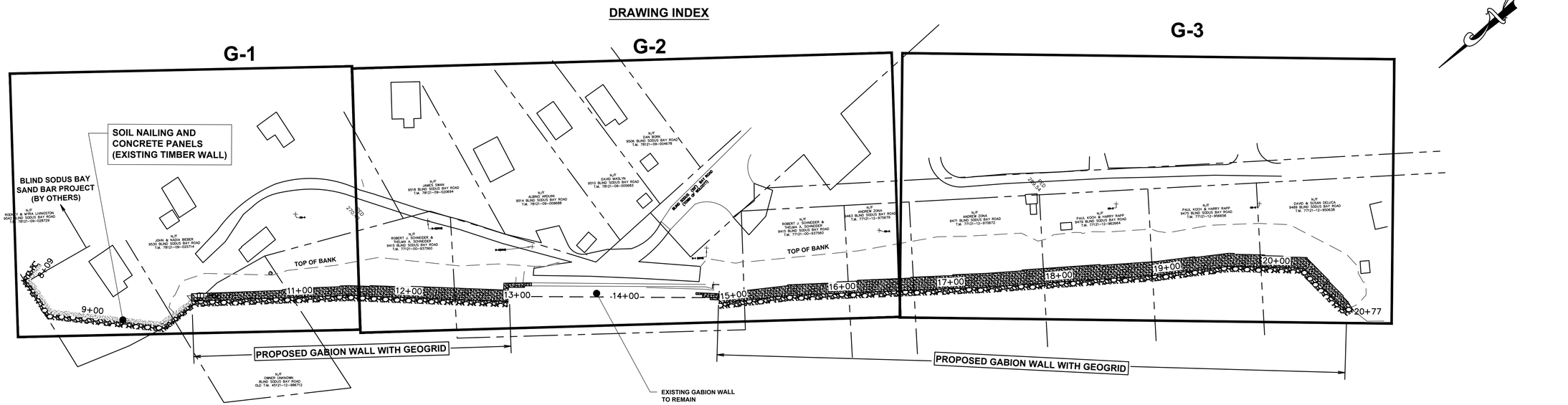
www.mrbgroup.com

PROJECT # 2317.20001.000

2317.20001.000 SHORE LINE REPAIR PROJECT– BLIND SODUS BAY RD – TOWN OF WOLCOTT

N:\2317.20001.000\dwg\000--T-0 (Blind Sodus Bay Cover).dwg, 5/25/2021 1:34:30 PM, wguida

DRAWING INDEX



GENERAL NOTES:

1. SURVEY AND BASE MAPPING INFORMATION, DATED SEPTEMBER 2020, PROVIDED BY :
   KOCHER SURVEYING, P.C.
   116 WEST MILLER STREET, NEWARK, NY 14513
   PHONE: 315.331.2800
   FAX: 315.331.2445
   WEBSITE: WWW.KOCHERSURVEYING.COM

   REFERENCE DATUM IS NEW YORK STATE PLANE COORDINATE, CENTRAL ZONE, NORTH AMERICAN VERTICAL DATUM 1988 (IGLD 1985)

2. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL DIMENSIONS, GRADES, QUANTITIES AND FIELD CONDITIONS PRIOR TO BIDDING THE WORK OR ORDERING MATERIALS.

3. WORK WILL BE PERFORMED IN ACCORDANCE WITH FEDERAL AND STATE ISSUED PERMITS

4. CONSTRUCTION BEST MANAGEMENT PRACTICES (BMP'S): UNLESS SPECIFICALLY APPROVED OTHERWISE THROUGH ISSUANCE OF A VARIANCE BY THE ARMY CORPS OF ENGINEERS DISTRICT ENGINEER, THE FOLLOWING BMP'S MUST BE IMPLEMENTED TO THE MAXIMUM DEGREE PRACTICABLE, TO MINIMIZE EROSION, MIGRATION OF SEDIMENTS, AND ADVERSE ENVIRONMENTAL IMPACTS. NOTE THAT AT A MINIMUM, ALL EROSION AND SEDIMENT CONTROL AND STORM WATER MANAGEMENT PRACTICES MUST BE DESIGNED, INSTALLED AND MAINTAINED THROUGHOUT THE ENTIRE CONSTRUCTION PROJECT IN ACCORDANCE WITH THE LATEST VERSION OF THE "NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL" AND THE "NEW YORK STATE STORM WATER MANAGEMENT DESIGN MANUAL". THESE DOCUMENTS ARE AVAILABLE AT: HTTP: //WWW.DEC.NY.GOV/CHEMICAL/29066.HTML AND HTTP: //WWW.DEC.NY.GOV/CHEMICAL/29072.HTML, RESPECTIVELY. PRIOR TO THE DISCHARGE OF ANY DREDGED OR FILL MATERIAL INTO WATERS OF THE UNITED STATES, INCLUDING WETLANDS, AUTHORIZED BY NWP, THE PERMITTEE MUST INSTALL AND MAINTAIN EROSION AND SEDIMENTATION CONTROLS IN AND/OR ADJACENT TO WETLANDS OR OTHER WATERS OF THE UNITED STATES.

   a). ALL SYNTHETIC EROSION CONTROL FEATURES (E.G., SILT FENCING, NETTING, MATS), WHICH ARE INTENDED FOR TEMPORARY USE DURING CONSTRUCTION, SHALL BE COMPLETELY REMOVED AND PROPERLY DISPOSED OF AFTER THEIR INITIAL PURPOSE HAS BEEN SERVED. ONLY NATURAL FIBER MATERIALS, WHICH WILL DEGRADE OVER TIME, MAY BE ABANDONED IN PLACE.

   b). MATERIALS RESULTING FROM TRENCH EXCAVATION FOR UTILITY LINE INSTALLATION OR DITCH RESHAPING ACTIVITIES WHICH ARE TEMPORARILY SIDECAST OR STOCKPILED INTO WATERS OF THE UNITED STATES MUST BE BACKFILLED OR REMOVED TO AN UPLAND AREA WITHIN 30 DAYS OF THE DATE OF DEPOSITION. NOTE: UPLAND OPTIONS SHALL BE UTILIZED PRIOR TO TEMPORARY PLACEMENT WITHIN WATERS OF THE U.S., UNLESS IT CAN BE DEMONSTRATED THAT IT WOULD NOT BE PRACTICABLE OR IF THE IMPACTS OF COMPLYING WITH THIS UPLAND OPTION REQUIREMENT WOULD RESULT IN MORE ADVERSE IMPACTS TO THE AQUATIC ENVIRONMENT.

   c). FOR TRENCHING ACTIVITIES IN WETLANDS THE APPLICANT SHALL INSTALL IMPERMEABLE TRENCH DAMS OR TRENCH BREAKERS AT THE WETLAND BOUNDARIES AND EVERY 100 FEET WITHIN WETLAND AREAS TO PREVENT INADVERTENT DRAINAGE OF WETLANDS OR OTHER WATERS OF THE UNITED STATES.

   d). DRY STREAM CROSSING METHODS (E.G., DIVERSION, DAM AND PUMP, FLUME, BORE) SHALL BE UTILIZED FOR CULVERT OR OTHER PIPE, OR UTILITY INSTALLATIONS TO REDUCE DOWNSTREAM IMPACTS FROM TURBIDITY AND SEDIMENTATION. THIS MAY REQUIRE PIPING OR PUMPING THE STREAM FLOW AROUND THE WORK AREA AND THE USE OF COFFERDAMS.

   e). NO IN-STREAM WORK SHALL OCCUR DURING PERIODS OF HIGH FLOW, EXCEPT FOR WORK THAT OCCURS IN DEWATERED AREAS BEHIND TEMPORARY DIVERSIONS, COFFERDAMS OR CAUSEWAYS.

   f). CONSTRUCTION ACCESS AND STAGING AREAS SHALL BE BY MEANS THAT AVOID OR MINIMIZE IMPACTS TO AQUATIC SITES (E.G. USE OF UPLAND AREAS FOR ACCESS & STAGING, FLOATING BARGES, MATS, ETC.). DISCHARGES OF FILL MATERIAL ASSOCIATED WITH THE CONSTRUCTION OF TEMPORARY ACCESS ROADS, STAGING AREAS AND WORK PADS IN WETLANDS SHALL BE PLACED ON FILTER FABRIC. ALL TEMPORARY FILLS SHALL BE REMOVED UPON COMPLETION OF THE WORK AND THE DISTURBED AREA RESTORED TO PRE-CONSTRUCTION CONTOURS, ELEVATIONS AND WETLAND CONDITIONS, INCLUDING COVER TYPE. ALL VEGETATION UTILIZED IN THE RESTORATION ACTIVITY SHALL CONSIST OF NATIVE SPECIES.

   g). ALL RETURN FLOW FROM DREDGED MATERIAL DISPOSAL AREAS SHALL NOT RESULT IN AN INCREASE IN TURBIDITY IN THE RECEIVING WATER BODY THAT WILL CAUSE A SUBSTANTIAL VISIBLE CONTRAST TO NATURAL CONDITIONS. (SEE NWP #16)

   h). FOR ACTIVITIES INVOLVING THE PLACEMENT OF CONCRETE INTO WATERS OF THE U.S., THE PERMITTEE MUST EMPLOY WATERTIGHT FORMS. THE FORMS SHALL BE DEWATERED PRIOR TO THE PLACEMENT OF THE CONCRETE. THE USE OF TREMIE CONCRETE IS ALLOWED, PROVIDED THAT IT COMPLIES WITH NEW YORK STATE WATER QUALITY STANDARDS.

   i). NEW STORMWATER MANAGEMENT FACILITIES SHALL BE LOCATED OUTSIDE OF WATERS OF THE U.S. A VARIANCE OF THIS REQUIREMENT MAY BE REQUESTED WITH THE SUBMISSION OF A PCN. THE PCN MUST INCLUDE JUSTIFICATION WHICH DEMONSTRATES THAT AVOIDANCE AND MINIMIZATION EFFORTS HAVE BEEN MET.

   j.) TO THE MAXIMUM EXTENT PRACTICABLE, THE PLACEMENT OF FILL IN WETLANDS MUST BE DESIGNED TO MAINTAIN PRE-CONSTRUCTION SURFACE WATER FLOWS/CONDITIONS BETWEEN REMAINING ON OR OFF-SITE WATERS AND TO PREVENT DRAINING OF THE WETLAND OR PERMANENT HYDROLOGIC ALTERATION. THIS MAY REQUIRE THE USE OF CULVERTS AND/OR OTHER MEASURES. FURTHERMORE, THE ACTIVITY MUST NOT RESTRICT OR IMPEDE THE PASSAGE OF NORMAL OR EXPECTED HIGH FLOWS (UNLESS THE PRIMARY PURPOSE OF THE FILL IS TO IMPOUND WATERS). THE ACTIVITY MAY ALTER THE PRE-CONSTRUCTION FLOWS/CONDITIONS IF IT CAN BE SHOWN THAT IT BENEFITS THE AQUATIC ENVIRONMENT (I.E. WETLAND RESTORATION AND/OR ENHANCEMENT).

5. NON-CONTAMINATION OF WATERS: ALL NECESSARY PRECAUTIONS SHALL BE TAKEN TO PRECLUDE CONTAMINATION OF ANY WETLAND WATERWAY OR GROUNDWATER BY SUSPENDED SOLIDS, RESINS, SEDIMENTS, FUELS, SOLVENTS, LUBRICANTS, EPOXY COATINGS, PAINTS, CONCRETE, LEACHATE, INADVERTENT RETURNS OF DRILLING MUDS (FRAC-OUTS) OR ANY OTHER ENVIRONMENTALLY DELETERIOUS MATERIALS ASSOCIATED WITH THE PROJECT.

6. ALL INCIDENTAL EXCAVATED SEDIMENTS AND REMOVED TREES/BRUSH SHALL BE DISPOSED UPLAND (NOT IN ANY WATERWAY, WETLAND, ETC.). THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER DISPOSAL.

7. WATER QUALITY CERTIFICATION TO PREVENT THE UNINTENTIONAL INTRODUCTION OR SPREAD OF INVASIVE SPECIES THE CONTRACTOR SHALL ENSURE THAT ALL CONSTRUCTION EQUIPMENT BE CLEANED OF MUD, SEEDS, VEGETATION AND OTHER DEBRIS BEFORE ENTERING ANY APPROVED CONSTRUCTION AREA WITHIN WATERS OF THE U.S. WHEN USING CONSTRUCTION EQUIPMENT FOR PROJECTS AUTHORIZED UNDER THIS CERTIFICATION THE CONTRACTOR SHALL TAKE REASONABLE PRECAUTIONS TO PREVENT THE SPREAD OF AQUATIC INVASIVE SPECIES REQUIRED UNDER NYS LAW

8. TREE REMOVALS (OVER 6" DBH) AND TRIMMING TO ACCOMMODATE CONSTRUCTION WILL ONLY BE PERMITTED WITH PRIOR WAYNE COUNTY SOIL AND WATER CONSERVATION DISTRICT AND PROPERTY OWNER APPROVAL. ALL TREES REMOVED SHALL BE CUT AT GROUND LEVEL AND DEBRIS SUITABLY DISPOSED IN UPLAND AREAS. THE STUMPS AND ROOT SYSTEMS SHALL REMAIN.

No.	Revisions and Descriptions	By	Date

Project Title:
BLIND SODUS BAY
WESTERN BLUFF REDI PROJECT
TOWN OF WOLCOTT, WAYNE COUNTY, NY

Drawing Title:
GENERAL PLAN AND NOTES

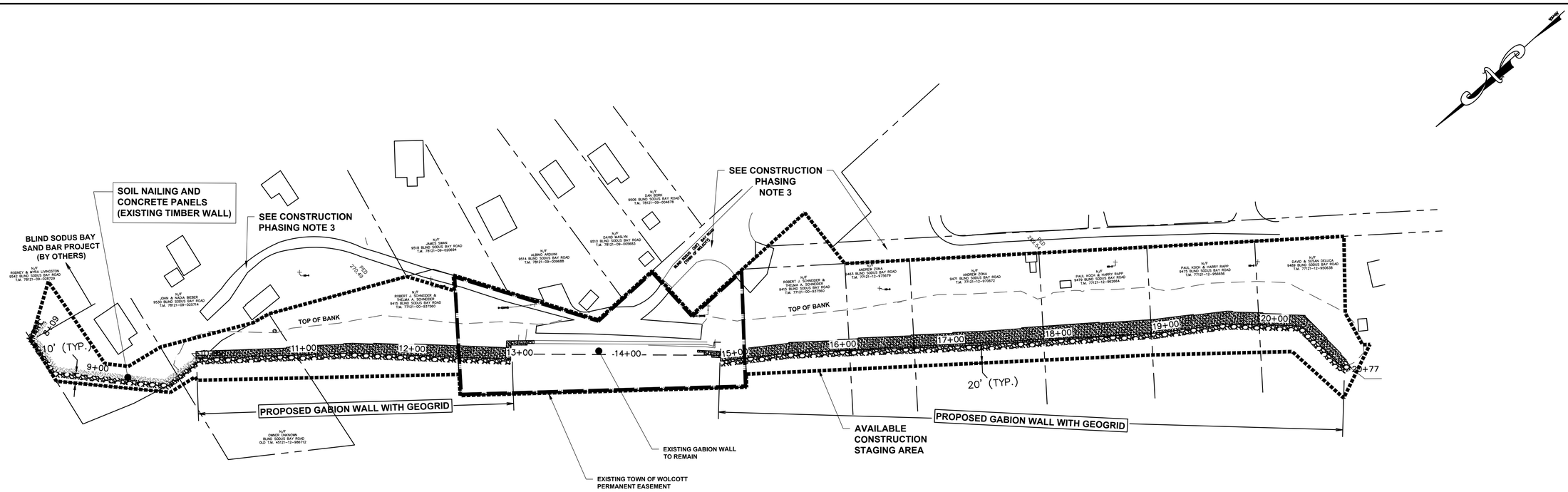
Drawn By: WFS
Checked By: SB
Scale: 1" = 50'
Date: 05/2021

MRB group
Engineering, Architecture & Surveying, D.P.C.
The Culver Road Armory, 145 Culver Road, Suite 160, Rochester, New York 14620
Phone: 585.381.9250
www.mrbgroup.com

Sheet No. N-1
2 of 24

Project No. 2317.20001

N:\2317.20001.000\dwg\601-Alt (Notes).dwg, 5/25/2021 1:34:40 PM, wguida



CONSTRUCTION PHASING NOTES:

1. ALL CONSTRUCTION EQUIPMENT SHALL BE OPERATED FROM DRY LAND OR ON A BARGE. ANY BLUFF EXCAVATION FOR TEMPORARY CONSTRUCTION ACCESS SHALL BE RESTORED TO THE EXISTING ELEVATION.
2. OTHER THEN THE PERMITTED AREAS SHOWN ON THE PLANS, ALL TEMPORARY GROUND DISTURBANCE AND EMBANKMENTS SHALL BE LOCATED IN UPLAND AREAS ONLY (ABOVE GROUND ELEV. 247.30).
3. THE CONTRACTOR SHALL PHASE OPERATIONS TO ALLOW CONTINUOUS VEHICLE ACCESS TO PRIVATE PROPERTIES IN VICINITY OF THE PROJECT AREA.
4. CONSTRUCTION MATERIALS AND EQUIPMENT SHALL REMAIN 16 FEET MINIMUM FROM TOP OF EMBANKMENT SLOPE DURING CONSTRUCTION OF THE FIRST FOUR ROWS OF GABIONS.
5. ALL PAVED ROADS SHALL BE KEPT CLEAN OF MUD AND DEBRIS AT ALL TIMES.
6. EXISTING POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.
7. MATERIALS, EQUIPMENT, AND VEHICLES SHALL NOT BE STORED OR PARKED OBSTRUCTING EXISTING ROADS AND DRIVEWAYS.
8. NO NIGHT WORK IS PERMITTED.
9. THE CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS IN KIND OR AS SPECIFIED ON THE PLANS.
10. LINEAR OPEN EXCAVATION PHASES FOR PROPOSED GABION BASKETS IS LIMITED TO A MAXIMUM 40 LF. THE NEXT OPEN EXCAVATION PHASE WILL NOT BE PERMITTED UNTIL THE TOP OF THE GABION WALL FOR THE PREVIOUS PHASE EXCEEDS EL. 256.0 (FIRST FOUR ROWS OF GABIONS).

No.	Revisions and Descriptions	By	Date

Project Title:
BLIND SODUS BAY
WESTERN BLUFF REDI PROJECT
TOWN OF WOLCOTT, WAYNE COUNTY , NY

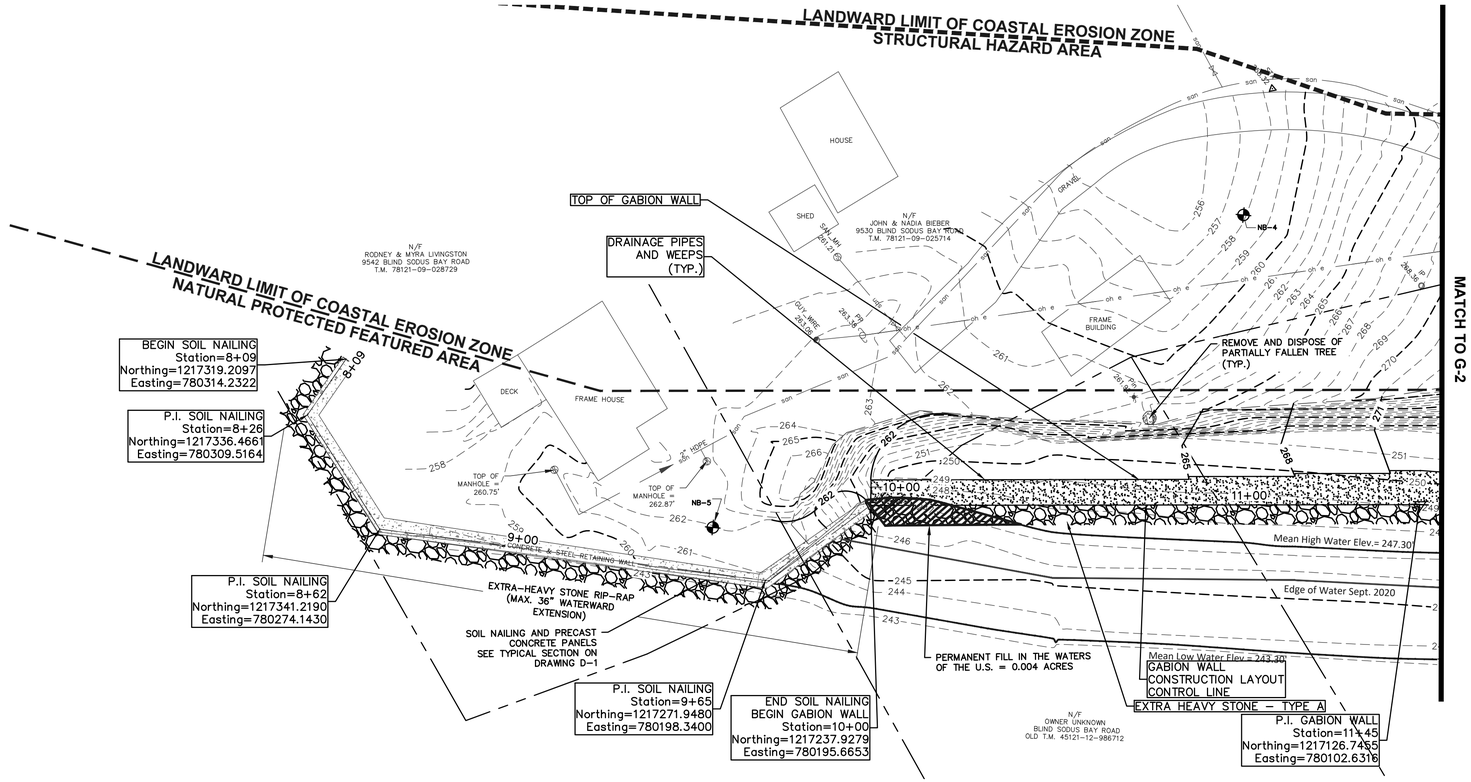
Drawing Title:
WORK ZONE TRAFFIC CONTROL AND CONSTRUCTION STAGING

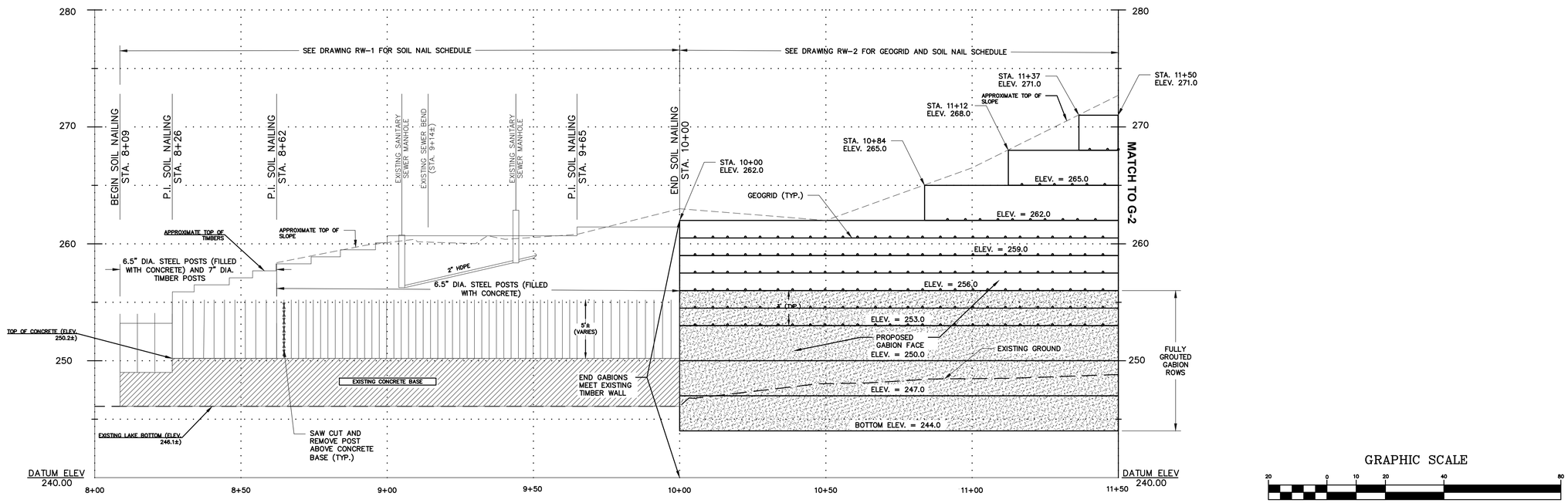
Drawn By: WFS
Checked By: SB
Scale: 1" = 50'
Date: 05/2021

MRB group
Engineering, Architecture & Surveying, D.P.C.
The Culver Road Armory, 145 Culver Road, Suite 160, Rochester, New York 14620
Phone: 585.381.9250
www.mrbgroup.com

Sheet No.
WZTC-1
3 of 24

Project No.
2317.20001





GABION FACE ELEVATION (LOOKING SOUTHEAST)
HORIZ SCALE: 1"=20'
VERT SCALE: 1"=5'

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

DRAWING ALTERATION
THE FOLLOWING IS AN EXCERPT FROM THE NEW YORK EDUCATION LAW ARTICLE 145 SECTION 7209 AND APPLIES TO THIS DRAWING.
"IT IS A VIOLATION OF THIS LAW FOR ANY PERSON UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION AND A SPECIFIC DESCRIPTION OF THE ALTERATION".

No.	Revisions and Descriptions	By	Date

Project Title:
BLIND SODUS BAY
WESTERN BLUFF REDI PROJECT
TOWN OF WOLCOTT, WAYNE COUNTY , NY

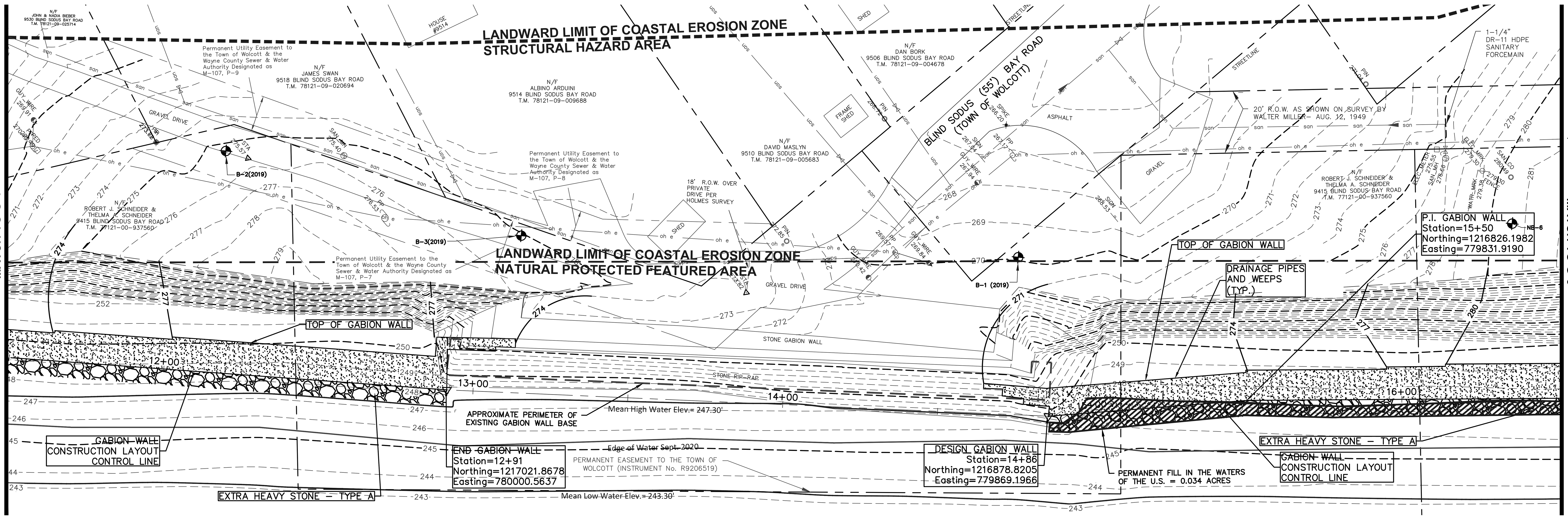
Drawing Title:
PLAN AND PROFILE

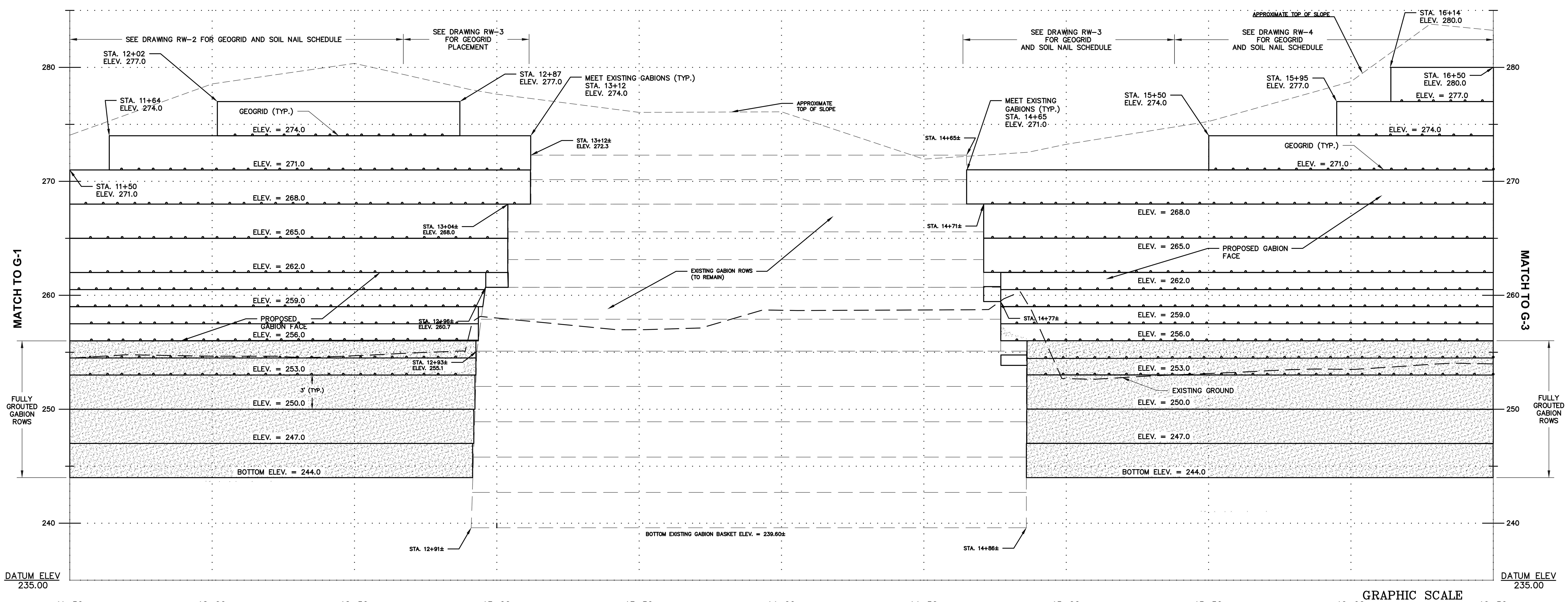
Drawn By: MRB
Checked By: SB
Scale: 1"=20'
Date: 05/2021

MRB group
Engineering, Architecture & Surveying, D.P.C.
The Culver Road Armory, 145 Culver Road, Suite 160, Rochester, New York 14620
Phone: 585-381-9250
www.mrbgroup.com

Sheet No. G-1
4 of 24

Project No. 2317.20001





GABION FACE ELEVATION (LOOKING SOUTHEAST)
HORIZ SCALE: 1"=20'
VERT SCALE: 1"=5'

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

DRAWING ALTERATION
THE FOLLOWING IS AN EXCERPT FROM THE NEW YORK EDUCATION LAW ARTICLE 145 SECTION 7209 AND APPLIES TO THIS DRAWING.
"IT IS A VIOLATION OF THIS LAW FOR ANY PERSON UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION AND A SPECIFIC DESCRIPTION OF THE ALTERATION".

No.	Revisions and Descriptions	By	Date

Project Title:
BLIND SODUS BAY
WESTERN BLUFF REDI PROJECT
TOWN OF WOLCOTT, WAYNE COUNTY , NY

Drawing Title:
PLAN AND PROFILE

Drawn By: MRB
Checked By: SB
Scale: 1"=20'
Date: 05/2021

MRB | group
Engineering, Architecture & Surveying, D.P.C.
The Culver Road Armory, 145 Culver Road,
Suite 160, Rochester, New York 14620
Phone: 585-381-9250
www.mrbgroup.com

Sheet No. **G-2**

Project No. **2317.20001**

MATCH TO G-2

GRAVEL DRIVEWAY

20' R.O.W. AS SHOWN ON SURVEY BY WALTER MILLER— AUG. 12, 1949

2" DR-11 HDPE SANITARY FORCEMAIN

N/F ANDREW ZONA 9471 BLIND SODUS BAY ROAD T.M. 77121-12-970672

N/F ANDREW ZONA 9441 BLIND SODUS BAY ROAD T.M. 77121-12-975879

N/F PAUL KOCH & HARRY RAPP 9475 BLIND SODUS BAY ROAD T.M. 77121-12-956656

N/F PAUL KOCH & HARRY RAPP 9479 BLIND SODUS BAY ROAD T.M. 77121-12-962664

N/F DAVID & SUSAN DELUCA 9489 BLIND SODUS BAY ROAD T.M. 77121-12-950638

SHED

CONC.

FRAME HOUSE

NB-1

NB-2

NB-3

TREES TO REMAIN AT TOP OF SLOPE (TYP.)

LANDWARD LIMIT OF COASTAL EROSION ZONE NATURAL PROTECTIVE FEATURE AREA

TOP OF GABION WALL

EXTRA HEAVY STONE – TYPE A

PERMANENT FILL IN THE WATERS OF THE U.S. = 0.042 ACRES

PERMANENT FILL IN THE WATERS OF THE U.S. = 0.015 ACRES

Mean High Water Elev.= 247.30'

Edge of Water Sept. 2020

Mean Low Water Elev.= 243.30'

17+00 18+00 19+00 20+00 20+77

P.I. GABION WALL
Station=17+33
Northing=1216685.2922
Easting=779715.2952

P.I. GABION WALL
Station=18+90
Northing=1216561.2984
Easting=779618.3764

GABION WALL CONSTRUCTION LAYOUT CONTROL LINE

P.I. GABION WALL
Station=19+57
Northing=1216506.8044
Easting=779580.3788

P.I. GABION WALL
Station=20+24
Northing=1216457.5103
Easting=779533.9466

DRAINAGE PIPES AND WEEPS (TYP.)

END GABION WALL
Station=20+77
Northing=1216454.8124
Easting=779481.9424

ROCK RIP-RAP

MATCH TO G-2

STA. 16+50 ELEV. 280.0
STA. 16+63 ELEV. 283.0
STA. 17+02 ELEV. 286.0
STA. 17+66 ELEV. 289.0
STA. 18+38 ELEV. 289.0
STA. 19+26 ELEV. 286.0
STA. 19+61 ELEV. 283.0
STA. 19+89 ELEV. 280.0
STA. 20+06 ELEV. 277.0
STA. 20+24 ELEV. 274.0
STA. 20+33 ELEV. 271.0
STA. 20+50 ELEV. 268.0
STA. 20+77 ELEV. 265.0

SEE DRAWING RW-4 FOR GEOGRID AND SOIL NAIL SCHEDULE

APPROXIMATE TOP OF SLOPE

SEE DRAWING RW-5 FOR GEOGRID AND SOIL NAIL SCHEDULE

APPROXIMATE TOP OF SLOPE

ELEV. = 286.0
ELEV. = 283.0
ELEV. = 280.0
ELEV. = 277.0
ELEV. = 274.0
ELEV. = 271.0
ELEV. = 268.0
ELEV. = 265.0
ELEV. = 262.0
ELEV. = 259.0
ELEV. = 256.0
ELEV. = 253.0
ELEV. = 250.0
ELEV. = 247.0
BOTTOM ELEV. = 244.0

3' (TYP.)

PROPOSED GABION FACE

EXISTING GROUND

FULLY GROUTED GABION ROWS

FULLY GROUTED GABION ROWS

END GABIONS MEET EXISTING STEEL SHEET PILING

ELEV. = 242.5
STA. 20+33
STA. 20+45
ELEV. = 241.0

STA. 20+77

DATUM ELEV 240.00

DATUM ELEV 240.00

290 280 270 260 250

16+50 17+00 17+50 18+00 18+50 19+00 19+50 20+00 20+50 20+77

GABION FACE ELEVATION (LOOKING SOUTHEAST)
HORIZ SCALE: 1"=20'
VERT SCALE: 1"=5'

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

No.	Revisions and Descriptions	By	Date

Project Title:
BLIND SODUS BAY
WESTERN BLUFF REDI PROJECT
TOWN OF WOLCOTT, WAYNE COUNTY , NY

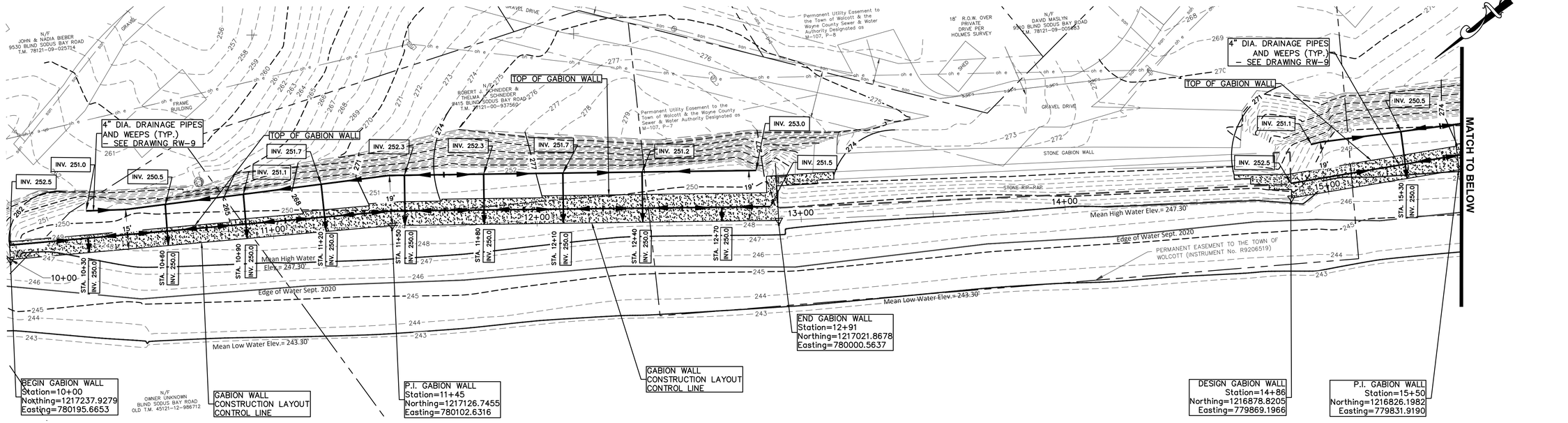
Drawing Title:
PLAN AND PROFILE

Drawn By: MRB
Checked By: SB
Scale: 1"=20'
Date: 05/2021

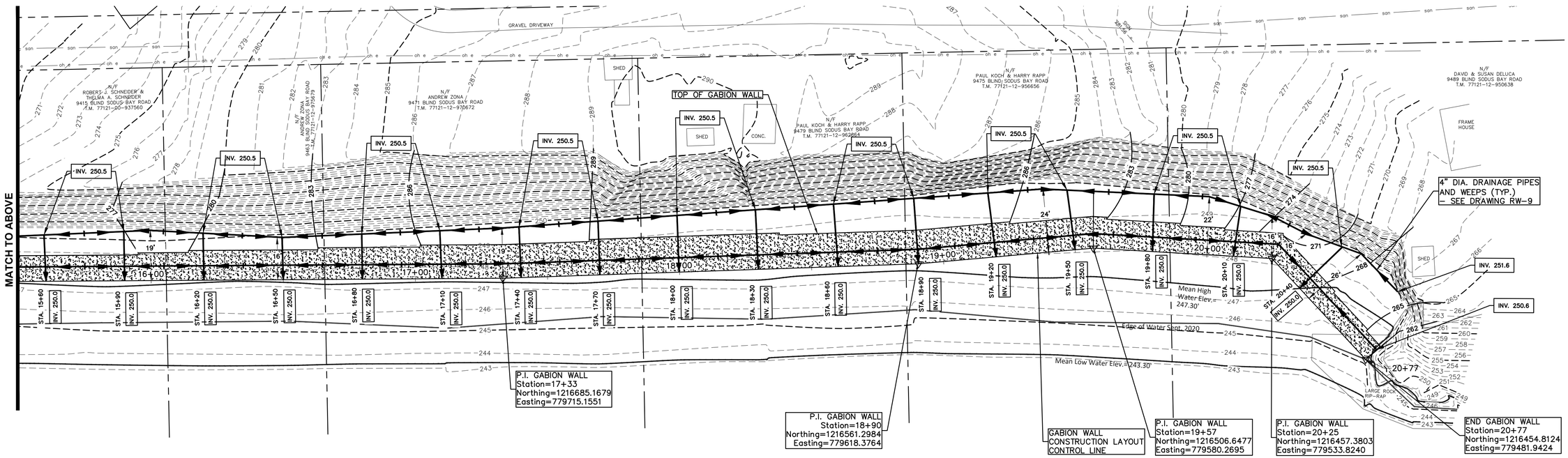
MRB group
Engineering, Architecture & Surveying, D.P.C.
The Culver Road Armory, 145 Culver Road, Suite 160, Rochester, New York 14620
Phone: 585-381-9250
www.mrbgroup.com

Sheet No. G-3
6 of 24

Project No. 2317.20001



DRAINAGE PLAN



DRAINAGE PLAN

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

No.	Revisions and Descriptions	By	Date

Project Title:
BLIND SODUS BAY
WESTERN BLUFF REDI PROJECT
TOWN OF WOLCOTT, WAYNE COUNTY , NY

Drawing Title:
DRAINAGE PLAN

Drawn By: MRB
Checked By: SB
Scale: 1" = 20'
Date: 05/2021

MRB group
Engineering, Architecture & Surveying, D.P.C.
The Culver Road Armory, 145 Culver Road, Suite 160, Rochester, New York 14620
Phone: 585-381-9250
www.mrbgroup.com

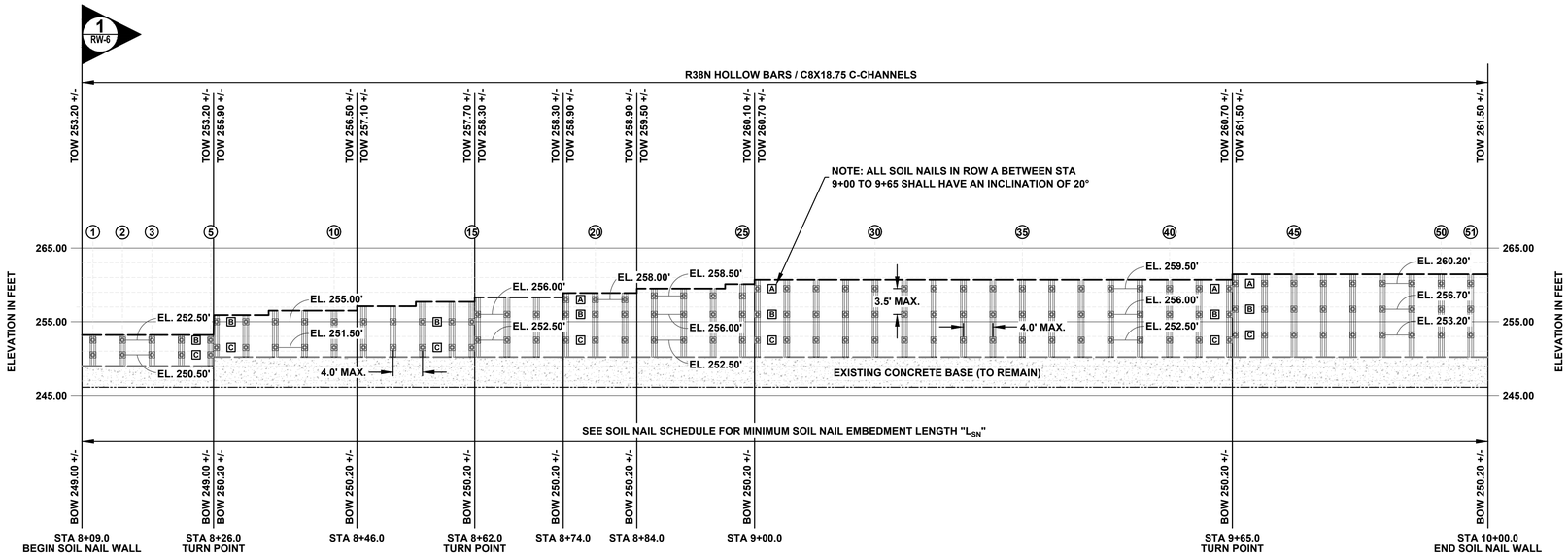
Sheet No. D-1
7 of 24

Project No. 2317.20001

LEGEND:

- SOIL NAIL LOCATION; R38N HOLLOW BAR
- FINISHED GRADE AT TOP OF WALL
- TOP OF EXISTING CONCRETE ENCASEMENT
- BOTTOM OF EXISTING CONCRETE ENCASEMENT
- A — SOIL NAIL ROW
- 1 — SOIL NAIL COLUMN
- EL. 256.2' — SOIL NAIL ELEVATIONS (TYP.)
- A_d — ALLOWABLE PULLOUT RESISTANCE (LB/FT)
- STA — STATION ALONG SOIL NAIL WALL ALIGNMENT
- "L_{SN}" — MINIMUM SOIL NAIL EMBEDMENT LENGTH
- TOW — ELEVATION AT TOP OF SOIL NAIL WALL
- BOW — ELEVATION AT BOTTOM OF WALL AND TOP OF EXISTING CONCRETE ENCASEMENT
- (2) C8x18.75 C-CHANNELS ON BOTH SIDES OF SOIL NAIL COLUMNS

PROFILE SCALE
1" = 10'
0 5 10 FEET



SOIL NAIL WALL STA 8+09.0 TO 10+00.0: SOIL NAIL PLACEMENT

SOIL NAIL SCHEDULE

STATION	ROW	COLUMN	MIN. LENGTH "L_{SN}" (FT)	INCLINATION ANGLE	MAX. HORIZONTAL SPACING (FT)	MIN. DRILL HOLE SIZE (IN)	HOLLOW BAR SIZE	Ad (LB/FT)
8+09.0 TO 8+26.0	B	1 - 5	8	15°	4	5	R38N	1414
	C		8					
8+26.0 TO 8+62.0	B	6 - 15	10	15°	4	5	R38N	1414
	C		10					
8+62.0 TO 8+74.0	B	16 - 18	12	15°	4	5	R38N	1414
	C		10					
8+74.0 TO 9+00.0	A	19 - 25	14	15°	4	5	R38N	1178
	B		12					1414
	C		11					
9+00.0 TO 9+65.0	A	26 - 42	15	20°	4	5	R38N	1178
	B		14	15°				1414
	C		14					
9+65.0 TO 10+00.0	A	43 - 51	17	15°	4	5	R38N	943
	B		16					1414
	C		16					

Terracon
Consulting Engineers and Scientists
4685 South Ash Avenue, Suite H-4 Tempe, AZ 85282
PH. (480) 897-8200 FAX: (480) 897-1133

No.	Revisions and Descriptions	By	Date

Project Title:
BLIND SODUS BAY
WESTERN BLUFF REDI PROJECT
TOWN OF WOLCOTT, WAYNE COUNTY , NY

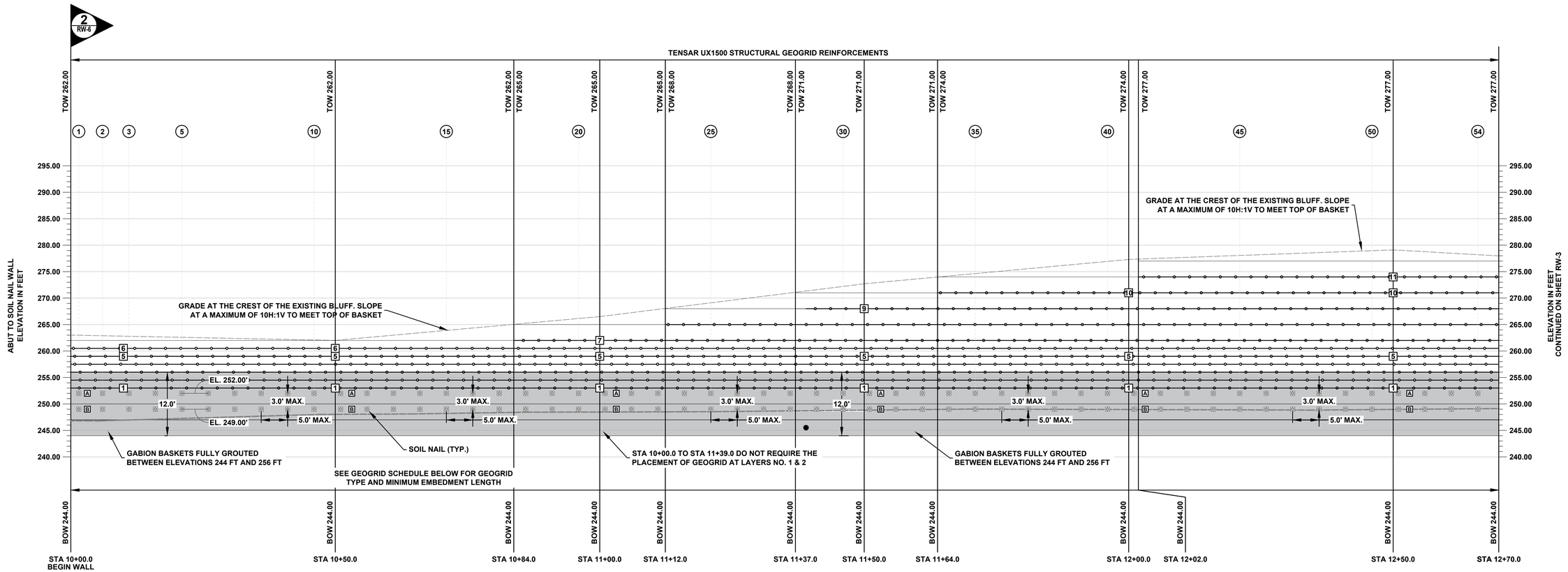
Drawing Title:
SOIL NAIL WALL PROFILE

Drawn By: RFR
Checked By: BJD
Scale: 1"=10'
Date: 04/25/2021

MRB group
Engineering, Architecture & Surveying, D.P.C.
The Culver Road Armory, 145 Culver Road,
Suite 160, Rochester, New York 14620
Phone: 585-381-9250
www.mrbgroup.com

Sheet No. RW-1
8 of 24

Project No.
65215077



MSE GABION WALL STA 10+00.0 TO 12+70.0: GABION BASKETS AND GEOGRID PLACEMENT

MSE WALL DESIGN - GEOGRID SCHEDULE

WALL STATION	TOTAL HEIGHT (FT)	LAYER NO.	GEOGRID TYPE	MINIMUM GEOGRID EMBEDMENT LENGTH "L" (FT)	LONG TERM DESIGN STRENGTH (LB/FT)[1]
10+00 TO 10+84.0	18.0	1 - 5	TENSAR UX1500	11.5	2403
		6		13.5	
10+84.0 TO 11+12.0	21.0	1 - 6	TENSAR UX1500	13.5	2403
		7		15.0	
11+12.0 TO 11+37.0	24.0	1 - 7	TENSAR UX1500	15.0	2403
		8		17.0	
11+37.0 TO 11+64.0	27.0	1 - 5	TENSAR UX1500	15.0	2403
		6 - 9		18.5	
11+64.0 TO 12+02.0	30.0	1 - 7	TENSAR UX1500	18.5	2403
		8 - 10		23.0	
12+02.0 TO 12+70.0	33.0	1 - 7	TENSAR UX1500	18.5	2403
		8 - 11		23.0	

NOTES:
1. THE LONG TERM DESIGN IS BASED ON INSTALLATION DAMAGE TESTING IN GRAVEL.

GEOGRID SCHEDULE

LAYER NO.	ELEVATION (FT)
1	253.0
2	254.5
3	256.0
4	257.5
5	259.0
6	260.5
7	262.0
8	265.0
9	268.0
10	271.0
11	274.0

SOIL NAIL SCHEDULE

STATION	ROW	COLUMN	MIN. BONDED LENGTH "L_B" (FT)[1]	INCLINATION ANGLE	MAX. HORIZONTAL SPACING (FT)	MIN. DRILL HOLE SIZE (IN)	HOLLOW BAR SIZE	Ad (LB/FT)
10+00.0 TO 11+12.0	A	1 - 23	8	15°	5	5	R38N	1414
	B		8					
11+12.0 TO 11+64.0	A	24 - 33	11	15°	5	5	R38N	1414
	B		11					
11+64.0 TO 12+02.0	A	34 - 41	12	15°	5	5	R38N	1414
	B		12					
12+02.0 TO 12+70.0	A	42 - 54	14	15°	5	5	R38N	1414
	B		14					

NOTES:
1. TOTAL LENGTH OF SOIL NAIL WILL VARY BASED ON DISTANCE FROM EXISTING GRADE TO FACE OF WALL.

LEGEND:

- GABION BASKETS
- GROUTED GABION BASKETS
- EXISTING GABION BASKETS
- TENSAR UX1500 STRUCTURAL GEOGRID
- FINISHED GRADE AT THE CREST OF EXISTING BLUFF AT TOP OF WALL
- FINISHED GRADE AT BOTTOM OF WALL
- STA — STATION ALONG RETAINING WALL ALIGNMENT
- EL. 249.0' — SOIL NAIL ELEVATIONS (TYP.)
- A — SOIL NAIL ROW
- 1 — GEOGRID LAYER
- SOIL NAIL LOCATION; R38N HOLLOW BAR
- (1) — SOIL NAIL COLUMN
- "L" — MINIMUM GEOGRID EMBEDMENT LENGTH
- TOW — ELEVATION AT TOP OF WALL
- BOW — ELEVATION AT BOTTOM OF WALL
- "L_B" — MINIMUM BONDED SOIL NAIL LENGTH

Terracon
Consulting Engineers and Scientists
4685 South Ash Avenue, Suite H-4 Tempe, AZ 85282
PH. (480) 897-8200 FAX: (480) 897-1133

No.	Revisions and Descriptions	By	Date

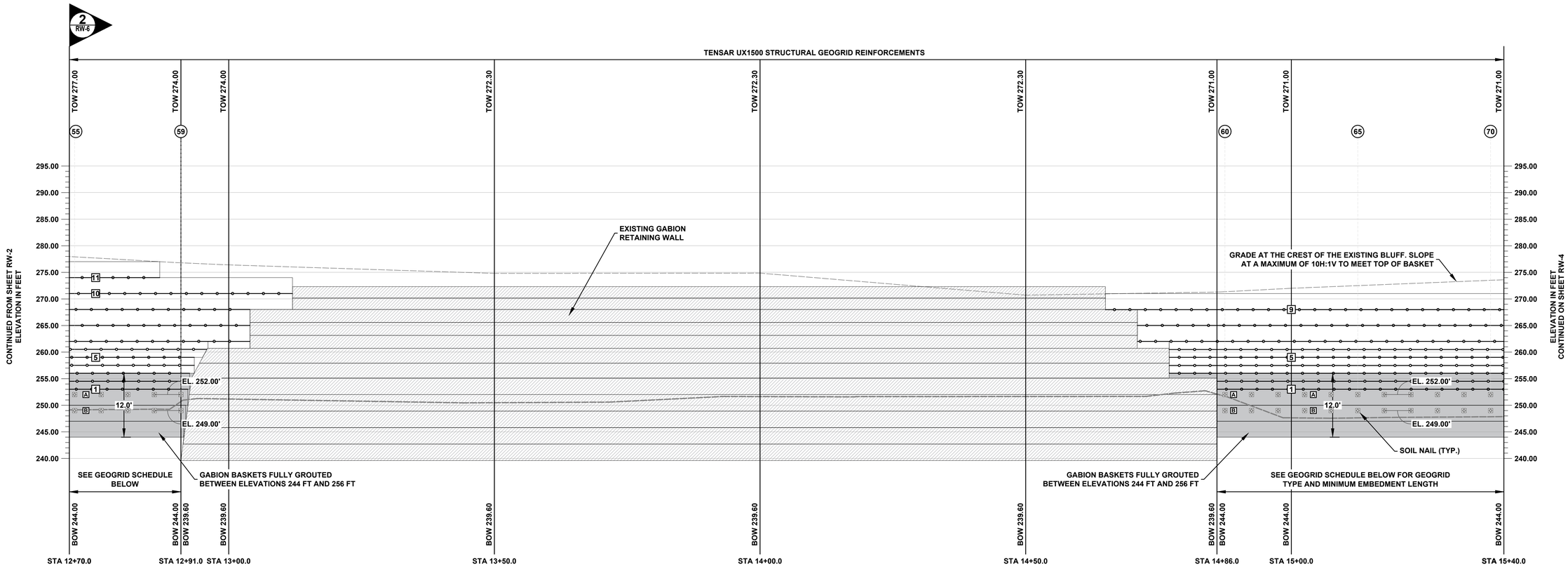
Project Title:
BLIND SODUS BAY
WESTERN BLUFF REDI PROJECT
TOWN OF WOLCOTT, WAYNE COUNTY , NY

Drawing Title:
MSE GABION WALL PROFILE

Drawn By: RFR
Checked By: BJD
Scale: 1"=10'
Date: 04/25/2021

MRB group
Engineering, Architecture & Surveying, D.P.C.
The Culver Road Armory, 145 Culver Road, Suite 160, Rochester, New York 14620
Phone: 585-381-9250
www.mrbgroup.com

Sheet No. RW-2
9 of 24
Project No. 65215077



MSE GABION WALL STA 12+70.0 TO 15+40.0: GABION BASKETS AND GEOGRID PLACEMENT

MSE WALL DESIGN - GEOGRID SCHEDULE

WALL STATION	TOTAL HEIGHT (FT)	LAYER NO.	GEOGRID TYPE	MINIMUM GEOGRID EMBEDMENT LENGTH "L" (FT)	LONG TERM DESIGN STRENGTH (LB/FT)[1]
12+70.0 TO 12+91.0	33.0	1 - 7	TENSAR UX1500	18.5	2403
		8 - 11		23.0	
14+86.0 TO 15+40.0	27.0	1 - 5	TENSAR UX1500	15.0	2403
		6 - 9		18.5	

NOTES:
1. THE LONG TERM DESIGN IS BASED ON INSTALLATION DAMAGE TESTING IN GRAVEL.

GEOGRID SCHEDULE

LAYER NO.	ELEVATION (FT)
1	253.0
2	254.5
3	256.0
4	257.5
5	259.0
6	260.5
7	262.0
8	265.0
9	268.0
10	271.0
11	274.0

SOIL NAIL SCHEDULE

STATION	ROW	COLUMN	MIN. BONDED LENGTH "L_B" (FT)[1]	INCLINATION ANGLE	MAX. HORIZONTAL SPACING (FT)	MIN. DRILL HOLE SIZE (IN)	HOLLOW BAR SIZE	Ad (LB/FT)
12+70.0 TO 12+91.0	A	55 - 59	14	15°	5	5	R38N	1414
	B		14					
14+86.0 TO 15+40.0	A	60 - 70	11	15°	5	5	R38N	1414
	B		11					

NOTES:
1. TOTAL LENGTH OF SOIL NAIL WILL VARY BASED ON DISTANCE FROM EXISTING GRADE TO FACE OF WALL.

LEGEND:

- GABION BASKETS
- GROUTED GABION BASKETS
- EXISTING GABION BASKETS
- TENSAR UX1500 STRUCTURAL GEOGRID
- FINISHED GRADE AT THE CREST OF EXISTING BLUFF AT TOP OF WALL
- FINISHED GRADE AT BOTTOM OF WALL
- STA — STATION ALONG RETAINING WALL ALIGNMENT
- EL. 249.0' — SOIL NAIL ELEVATIONS (TYP.)
- A — SOIL NAIL ROW
- 1 — GEOGRID LAYER
- SOIL NAIL LOCATION; R38N HOLLOW BAR
- (1) — SOIL NAIL COLUMN
- "L" — MINIMUM GEOGRID EMBEDMENT LENGTH
- TOW — ELEVATION AT TOP OF WALL
- BOW — ELEVATION AT BOTTOM OF WALL
- "L_B" — MINIMUM BONDED SOIL NAIL LENGTH

Terracon
Consulting Engineers and Scientists
4685 South Ash Avenue, Suite H-4 Tempe, AZ 85282
PH: (480) 897-8200 FAX: (480) 897-1130

No.	Revisions and Descriptions	By	Date

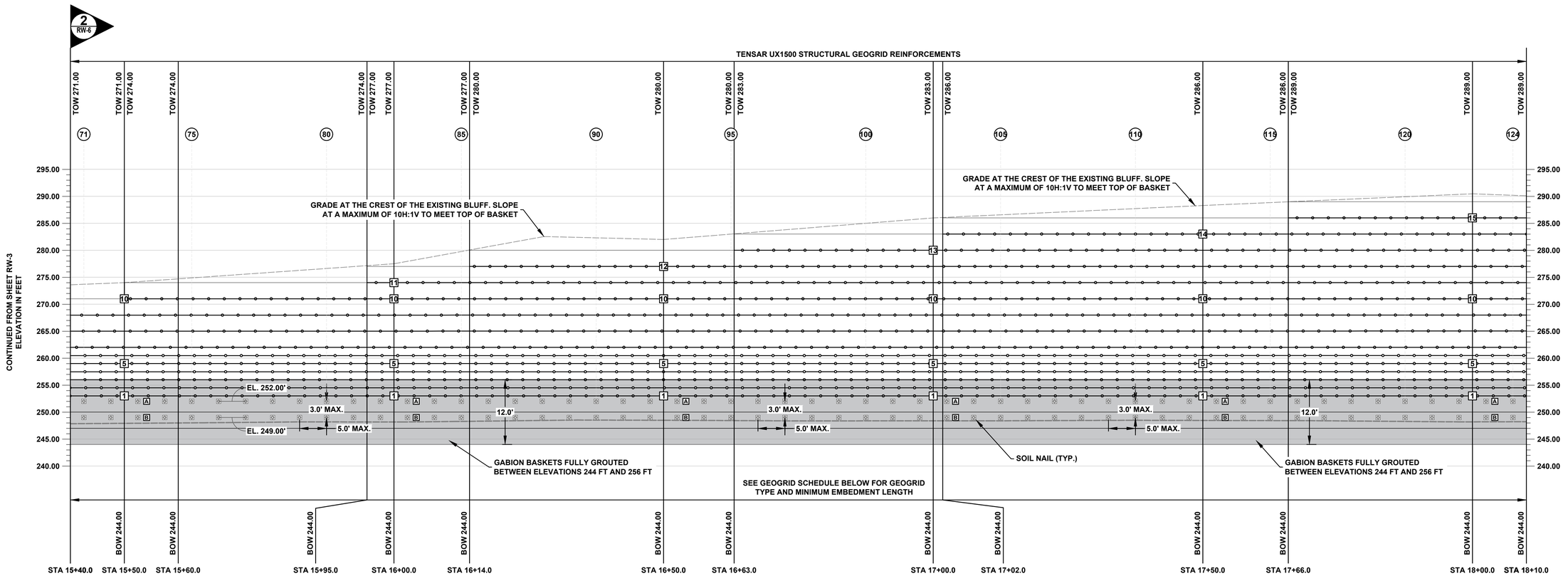
Project Title:
BLIND SODUS BAY
WESTERN BLUFF REDI PROJECT
TOWN OF WOLCOTT, WAYNE COUNTY, NY

Drawing Title:
MSE GABION WALL PROFILE

Drawn By: RFR
Checked By: BJD
Scale: 1"=10'
Date: 04/25/2021

MRB group
Engineering, Architecture & Surveying, D.P.C.
The Culver Road Armory, 145 Culver Road, Suite 160, Rochester, New York 14620
Phone: 585-381-9250
www.mrbgroup.com

Sheet No. RW-3
10 of 24
Project No. 65215077



MSE GABION WALL STA 15+40.0 TO 18+10.0: GABION BASKETS AND GEOGRID PLACEMENT

MSE WALL DESIGN - GEOGRID SCHEDULE					
WALL STATION	TOTAL HEIGHT (FT)	LAYER NO.	GEOGRID TYPE	MINIMUM GEOGRID EMBEDMENT LENGTH "L" (FT)	LONG TERM DESIGN STRENGTH (LB/FT)[1]
15+40.0 TO 15+50	27.0	1 - 5	TENSAR UX1500	15.0	2403
		6 - 9		18.5	
15+50.0 TO 15+95.0	30.0	1 - 7	TENSAR UX1500	18.5	2403
		8 - 10		23.0	
15+95.0 TO 16+14.0	33.0	1 - 7	TENSAR UX1500	18.5	2403
		8 - 11		23.0	
16+14.0 TO 16+63.0	36.0	1	TENSAR UX1500	17.0	2403
		2 - 3		18.5	
		4 - 7		20.0	
		8 - 9		23.0	
		10 - 12		26.0	
16+63.0 TO 17+02.0	39.0	1	TENSAR UX1500	20.0	2403
		2 - 7		21.5	
		8 - 9		25.0	
		10 - 13		27.0	
17+02.0 TO 17+66.0	42.0	1 - 7	TENSAR UX1500	21.5	2403
		8 - 9		25.0	
		10 - 14		27.0	
17+66.0 TO 18+10.0	45.0	1 - 7	TENSAR UX1500	21.5	2403
		8 - 10		25.0	
		11 - 14		27.0	
		15		30.0	

NOTES:
1. THE LONG TERM DESIGN IS BASED ON INSTALLATION DAMAGE TESTING IN GRAVEL.

GEOGRID SCHEDULE	
LAYER NO.	ELEVATION (FT)
1	253.0
2	254.5
3	256.0
4	257.5
5	259.0
6	260.5
7	262.0
8	265.0
9	268.0
10	271.0
11	274.0
12	277.0
13	280.0
14	283.0
15	286.0

SOIL NAIL SCHEDULE								
STATION	ROW	COLUMN	MIN. BONDED LENGTH "L_B" (FT)[1]	INCLINATION ANGLE	MAX. HORIZONTAL SPACING (FT)	MIN. DRILL HOLE SIZE (IN)	HOLLOW BAR SIZE	Ad (LB/FT)
15+40.0 TO 15+50.0	A	71 - 72	11	15°	5	5	R38N	1414
	B		11					
15+50.0 TO 15+95.0	A	73 - 81	12	15°	5	5	R38N	1414
	B		12					
15+95.0 TO 16+14.0	A	82 - 85	14	15°	5	5	R38N	1414
	B		14					
16+14.0 TO 16+63.0	A	86 - 95	18	15°	5	5	R38N	1414
	B		18					
16+63.0 TO 17+02.0	A	96 - 102	25	15°	5	5	R38N	1414
	B		25					
17+02.0 TO 17+66.0	A	103 - 115	27	15°	5	5	R38N	1414
	B		27					
17+66.0 TO 18+10.0	A	116 - 124	29	15°	5	5	R38N	1414
	B		29					

NOTES:
1. TOTAL LENGTH OF SOIL NAIL WILL VARY BASED ON DISTANCE FROM EXISTING GRADE TO FACE OF WALL.

LEGEND:

- GABION BASKETS
- GROUTED GABION BASKETS
- EXISTING GABION BASKETS
- TENSAR UX1500 STRUCTURAL GEOGRID
- FINISHED GRADE AT THE CREST OF EXISTING BLUFF AT TOP OF WALL
- FINISHED GRADE AT BOTTOM OF WALL
- STA STATION ALONG RETAINING WALL ALIGNMENT
- EL. 249.0' SOIL NAIL ELEVATIONS (TYP.)
- A SOIL NAIL ROW
- 1 GEOGRID LAYER
- SOIL NAIL LOCATION; R38N HOLLOW BAR
- (1) SOIL NAIL COLUMN
- "L" MINIMUM GEOGRID EMBEDMENT LENGTH
- TOW ELEVATION AT TOP OF WALL
- BOW ELEVATION AT BOTTOM OF WALL
- "L_B" MINIMUM BONDED SOIL NAIL LENGTH

Terracon
Consulting Engineers and Scientists
4685 South Ash Avenue, Suite H-4 Tempe, AZ 85282
PH. (480) 897-8200 FAX. (480) 897-1133

No.	Revisions and Descriptions	By	Date

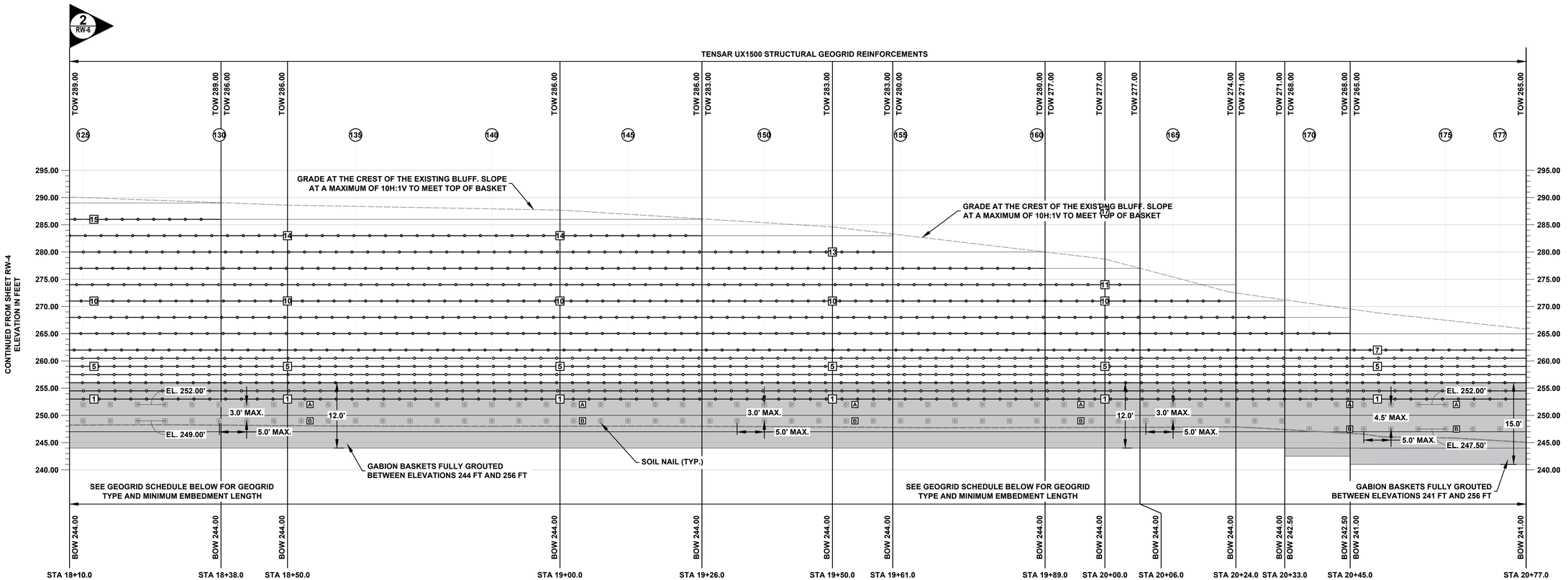
Project Title:
BLIND SODUS BAY
WESTERN BLUFF REDI PROJECT
TOWN OF WOLCOTT, WAYNE COUNTY , NY

Drawing Title:
MSE GABION WALL PROFILE

Drawn By: RFR
Checked By: BJD
Scale: 1"=10'
Date: 04/25/2021

MRB group
Engineering, Architecture & Surveying, D.P.C.
The Culver Road Armory, 145 Culver Road, Suite 160, Rochester, New York 14620
Phone: 585-381-9250
www.mrbgroup.com

Sheet No. RW-4
11 of 24
Project No. 65215077



MSE GABION WALL STA 18+10.0 TO 20+77.0: GABION BASKETS AND GEOGRID PLACEMENT

MSE WALL DESIGN - GEOGRID SCHEDULE					
STATION	TOTAL HEIGHT (FT)	LAYER NO.	GEOGRID TYPE	MINIMUM GEOGRID EMBEDMENT LENGTH "L" (FT)	LONG TERM DESIGN STRENGTH (LB/FT)[1]
18+10.0 TO 18+38.0	45.0	1 - 7	TENSAR UX1500	21.5	2403
		8 - 10		25.0	
		11 - 14		27.0	
		15		30.0	
18+38.0 TO 19+26.0	42.0	1 - 7	TENSAR UX1500	21.5	2403
		8 - 9		25.0	
		10 - 14		27.0	
19+26.0 TO 19+61.0	39.0	1	TENSAR UX1500	20.0	2403
		2 - 7		21.5	
		8 - 9		25.0	
		10 - 13		27.0	
19+61.0 TO 19+89.0	36.0	1	TENSAR UX1500	17.0	2403
		2 - 3		18.5	
		4 - 7		20.0	
		8 - 9		23.0	
		10 - 12		26.0	
19+89.0 TO 20+06.0	33.0	1 - 7	TENSAR UX1500	18.5	2403
		8 - 11		23.0	
20+06.0 TO 20+24.0	30.0	1 - 7	TENSAR UX1500	18.5	2403
		8 - 10		23.0	
20+24.0 TO 20+33.0	27.0	1 - 5	TENSAR UX1500	15.0	2403
		6 - 9		18.5	
20+33.0 TO 20+45.0	25.5	1 - 4	TENSAR UX1500	15.0	2403
		5 - 8		18.5	
20+45.0 TO 20+77.0	24.0	1 - 4	TENSAR UX1500	15.0	2403
		5 - 7		18.5	

NOTES:
1. THE LONG TERM DESIGN STRENGTH IS BASED ON INSTALLATION DAMAGE TESTING IN GRAVEL.

GEOGRID SCHEDULE	
LAYER NO.	ELEVATION (FT)
1	253.0
2	254.5
3	256.0
4	257.5
5	259.0
6	260.5
7	262.0
8	265.0
9	268.0
10	271.0
11	274.0
12	277.0
13	280.0
14	283.0
15	286.0

SOIL NAIL SCHEDULE								
STATION	ROW	COLUMN	MIN. BONDED LENGTH "L_B" (FT)[1]	INCLINATION ANGLE	MAX. HORIZONTAL SPACING (FT)	MIN. DRILL HOLE SIZE (IN)	HOLLOW BAR SIZE	Ad (LB/FT)
18+10.0 TO 18+38.0	A	125 - 130	29	15°	5	5	R38N	1414
	B		29					
18+38.0 TO 19+26.0	A	131 - 147	27	15°	5	5	R38N	1414
	B		27					
19+26.0 TO 19+61.0	A	148 - 154	25	15°	5	5	R38N	1414
	B		25					
19+61.0 TO 19+89.0	A	155 - 160	18	15°	5	5	R38N	1414
	B		18					
19+89.0 TO 20+17.0	A	161 - 165	14	15°	5	5	R38N	1414
	B		14					
20+17.0 TO 20+33.0	A	166 - 169	11	15°	5	5	R38N	1414
	B		11					
20+33.0 TO 20+73.0	A	170 - 177	13	15°	5	5	R38N	1414
	B		13					

NOTES:
1. TOTAL LENGTH OF SOIL NAIL WILL VARY BASED ON DISTANCE FROM EXISTING GRADE TO FACE OF WALL.

LEGEND:

- GABION BASKETS
- GROUTED GABION BASKETS
- EXISTING GABION BASKETS
- TENSAR UX1500 STRUCTURAL GEOGRID
- FINISHED GRADE AT THE CREST OF EXISTING BLUFF AT TOP OF WALL
- FINISHED GRADE AT BOTTOM OF WALL
- STA — STATION ALONG RETAINING WALL ALIGNMENT
- EL. 249.0' — SOIL NAIL ELEVATIONS (TYP.)
- A — SOIL NAIL ROW
- 1 — GEOGRID LAYER
- SOIL NAIL LOCATION; R38N HOLLOW BAR
- (1) — SOIL NAIL COLUMN
- "L" — MINIMUM GEOGRID EMBEDMENT LENGTH
- TOW — ELEVATION AT TOP OF WALL
- BOW — ELEVATION AT BOTTOM OF WALL
- "L_B" — MINIMUM BONDED SOIL NAIL LENGTH

Terracon
Consulting Engineers and Scientists
4685 South Ash Avenue, Suite H-4 Tempe, AZ 85282
PH. (480) 897-8200 FAX. (480) 897-1133

No.	Revisions and Descriptions	By	Date

Project Title:
BLIND SODUS BAY
WESTERN BLUFF REDI PROJECT
TOWN OF WOLCOTT, WAYNE COUNTY , NY

Drawing Title:
MSE GABION WALL PROFILE

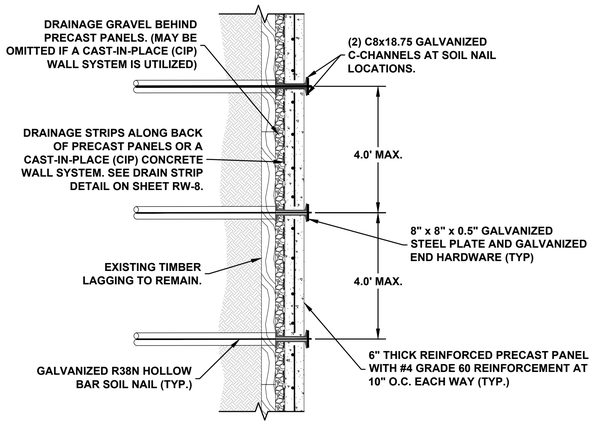
Drawn By: RFR
Checked By: BJD
Scale: 1"=10'
Date: 04/25/2021

MRB group
Engineering, Architecture & Surveying, D.P.C.
The Culver Road Armory, 145 Culver Road, Suite 160, Rochester, New York 14620
Phone: 585-381-9250
www.mrbgroup.com

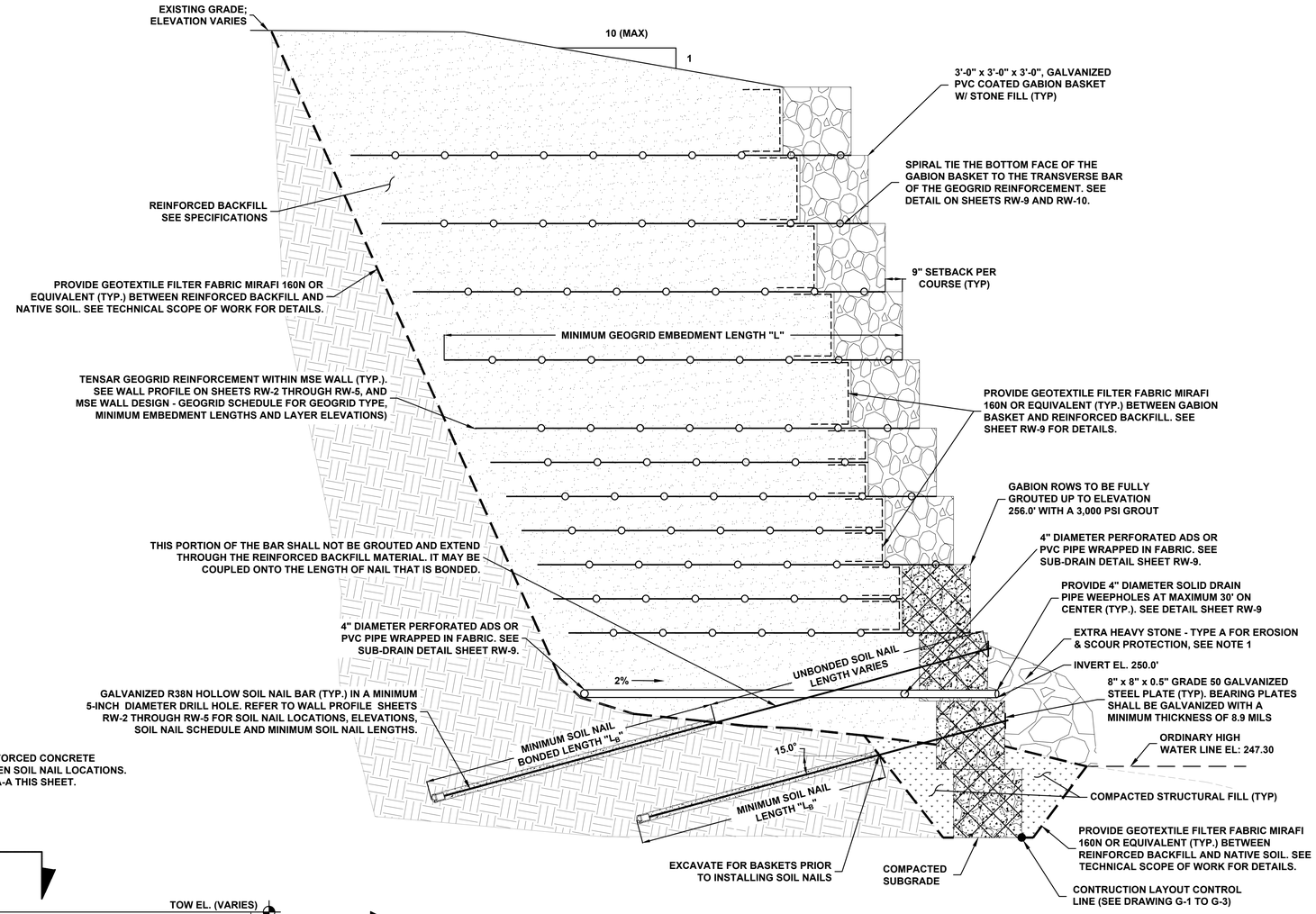
Sheet No. RW-5
12 of 24
Project No. 65215077

NOTES:

1. IF SOIL NAIL LOCATIONS ARE IN CONFLICT WITH EXISTING STEEL POSTS, SHIFT SOIL NAIL LOCATIONS AS LONG AS THE MAXIMUM HORIZONTAL SPACING INDICATED ON THE PROFILE SHEET IS FOLLOWED.
2. DRAINAGE GRAVEL GRAVEL SHALL BE PLACED IN A 1-FOOT MAXIMUM LOOSE LAYER THICKNESS AND SHALL BE CONSOLIDATED BY ROD BEFORE THE NEXT LOOSE LAYER OF DRAINAGE GRAVEL IS PLACED.
3. IF PRECAST PANELS ARE USED, CONTRACTOR SHALL SHIM THE EDGES OF THE PRECAST PANELS TIGHT TO THE C-CHANNEL FLANGES.



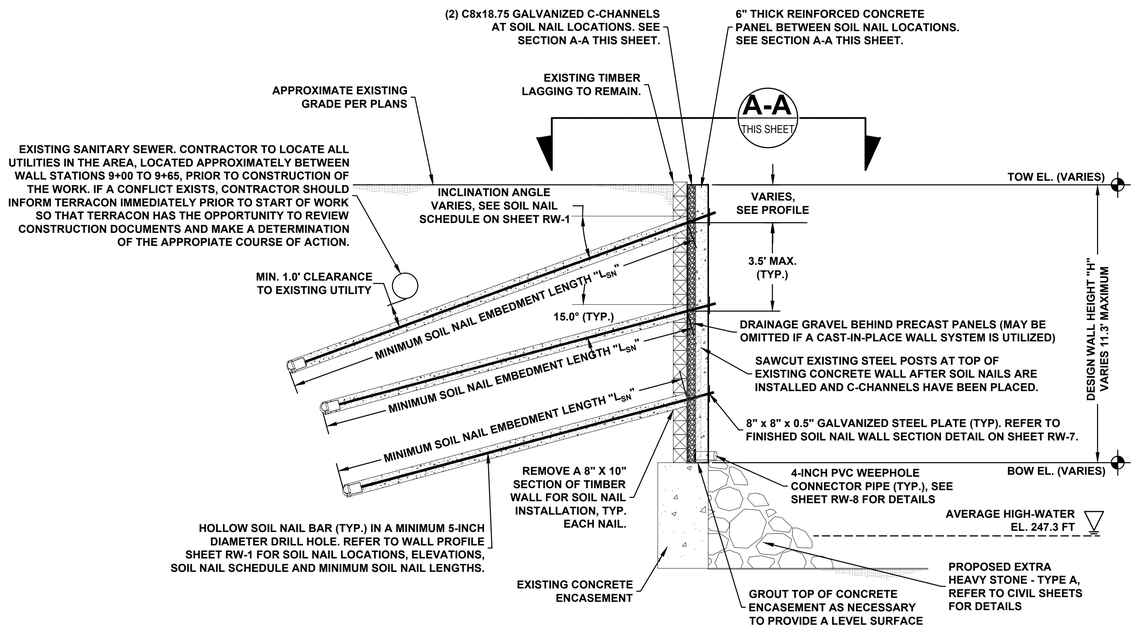
SECTION A-A



2 TYPICAL MSE (GABION BASKET) RETAINING WALL CROSS SECTION (NOT TO SCALE)

NOTES:

1. WHERE FEASIBLE, THE PLACEMENT OF HEAVY STONE WILL BE AT OR ABOVE THE ORDINARY HIGH WATER LINE ELEVATION.
2. ALL GABION BASKETS ARE TO BE FULLY GROUTED TO ELEVATION 256.0' WITH A 3,000 PSI GROUT.



1 TYPICAL SOIL NAIL RETAINING WALL CROSS SECTION (NOT TO SCALE)

No.	Revisions and Descriptions	By	Date

Project Title:
BLIND SODUS BAY
WESTERN BLUFF REDI PROJECT
TOWN OF WOLCOTT, WAYNE COUNTY , NY

Drawing Title:
RETAINING WALL CROSS SECTIONS

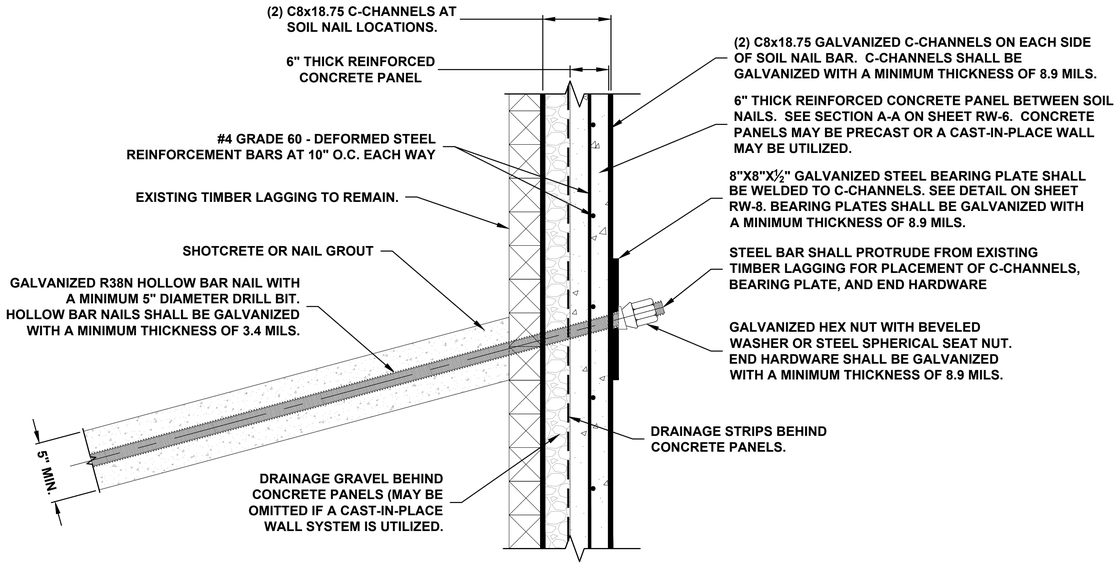
Drawn By: RFR
Checked By: BJD
Scale:
Date: 04/25/2021

MRB group
Engineering, Architecture & Surveying, D.P.C.
The Culver Road Armory, 145 Culver Road,
Suite 160, Rochester, New York 14620
Phone: 585-381-9250
www.mrbgroup.com

Sheet No. **RW-6**
13 of 24

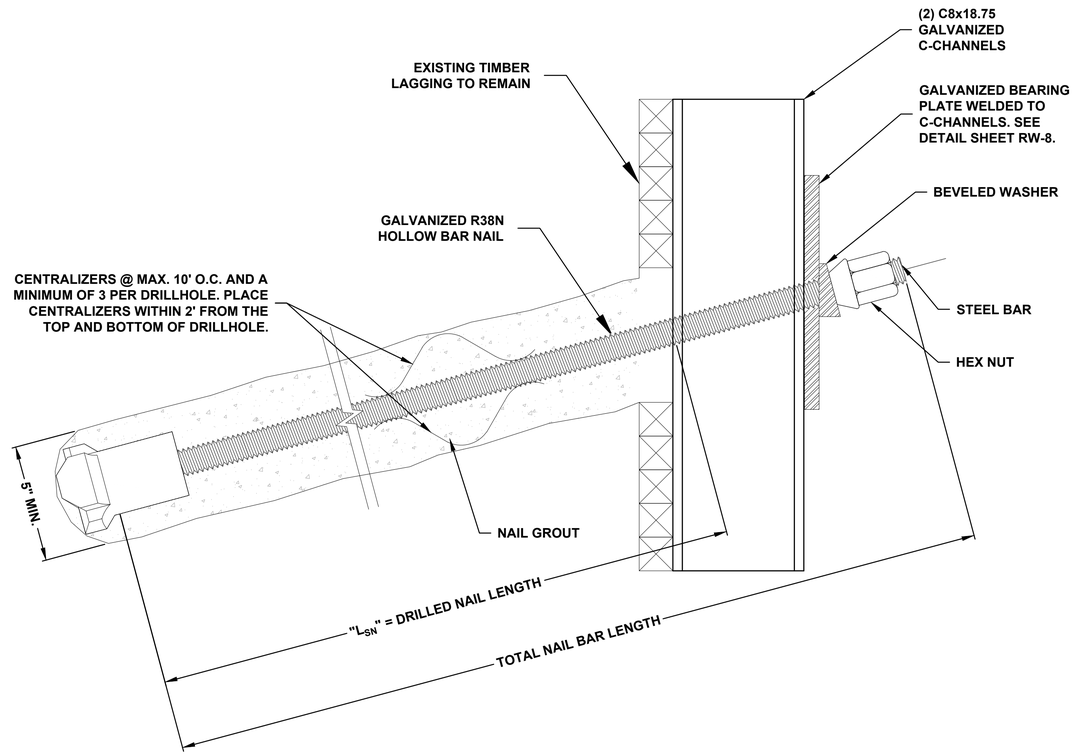
Project No. **65215077**

Terracon
Consulting Engineers and Scientists
4685 South Ash Avenue, Suite H-4 Tempe, AZ 85282
PH. (480) 897-8200 FAX. (480) 897-1133



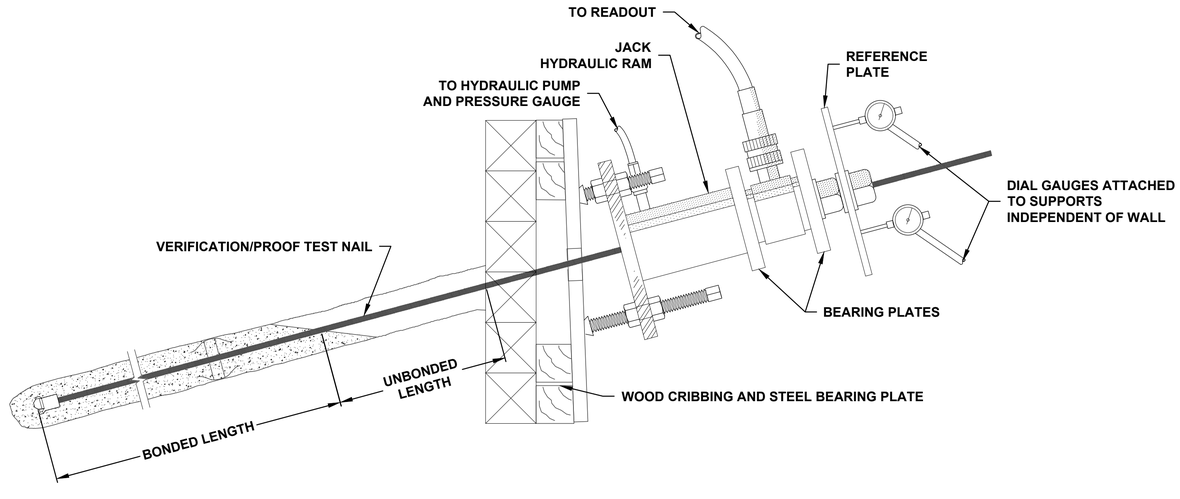
NOTE: ALL REINFORCING STEEL BARS ARE TO BE GALVANIZED.

FINISHED SOIL NAIL WALL SECTION (N.T.S.)



PRODUCTION SOIL NAIL DETAIL (N.T.S.)

NOTES:
1. DRAINAGE GRAVEL GRAVEL SHALL BE PLACED IN A 1-FOOT MAXIMUM LOOSE LAYER THICKNESS AND SHALL BE CONSOLIDATED BY ROD BEFORE THE NEXT LOOSE LAYER OF DRAINAGE GRAVEL IS PLACED.
2. IF PRECAST PANELS ARE USED, CONTRACTOR SHALL SHIM THE EDGES OF THE PRECAST PANELS TIGHT TO THE C-CHANNEL FLANGES.



VERIFICATION/PROOF TEST SOIL NAIL DETAIL (N.T.S.)

No.	Revisions and Descriptions	By	Date

Project Title:
BLIND SODUS BAY
WESTERN BLUFF REDI PROJECT
TOWN OF WOLCOTT, WAYNE COUNTY , NY

Drawing Title:
SOIL NAIL WALL CONSTRUCTION DETAILS

Drawn By: RFR
Checked By: BJD
Scale:
Date: 04/25/2021

MRB group
Engineering, Architecture & Surveying, D.P.C.
The Culver Road Armory, 145 Culver Road,
Suite 160, Rochester, New York 14620
Phone: 585-381-9250
www.mrbgroup.com

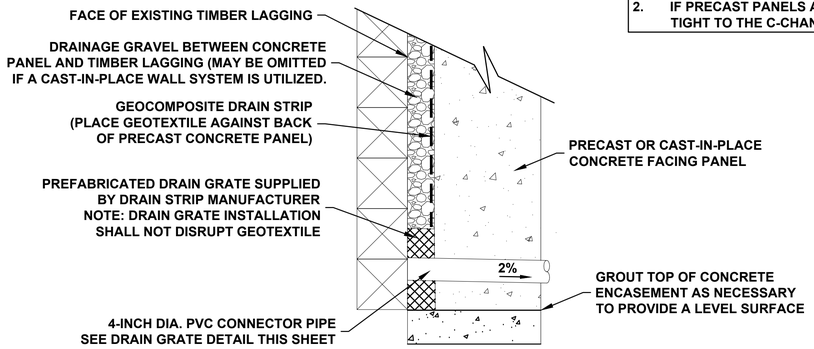
Sheet No. RW-7
14 of 24

Project No. 65215077

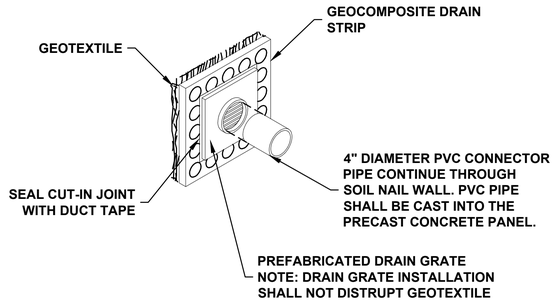
Terracon
Consulting Engineers and Scientists
4685 South Ash Avenue, Suite H-4 Tempe, AZ 85282
PH. (480) 897-8200 FAX. (480) 897-1133

NOTES:

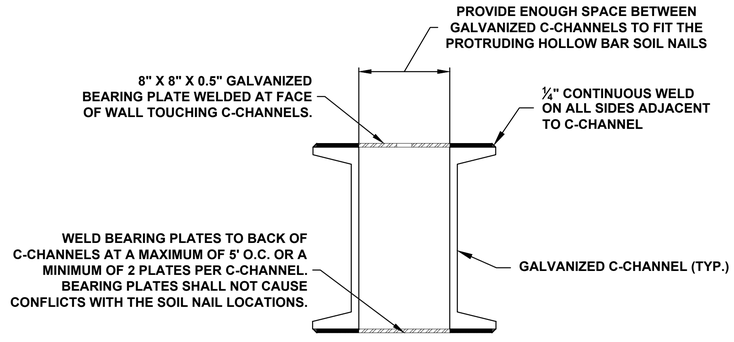
1. DRAINAGE GRAVEL GRAVEL SHALL BE PLACED IN A 1-FOOT MAXIMUM LOOSE LAYER THICKNESS AND SHALL BE CONSOLIDATED BY ROD BEFORE THE NEXT LOOSE LAYER OF DRAINAGE GRAVEL IS PLACED.
2. IF PRECAST PANELS ARE USED, CONTRACTOR SHALL SHIM THE EDGES OF THE PRECAST PANELS TIGHT TO THE C-CHANNEL FLANGES.



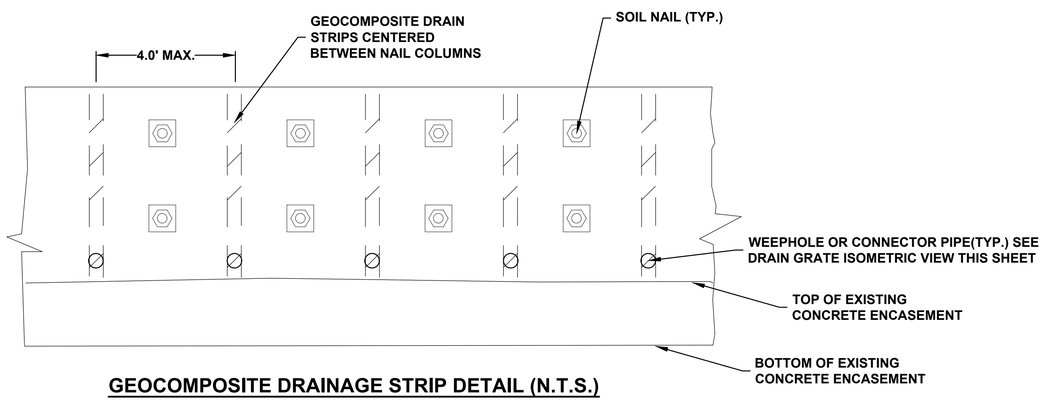
PVC CONNECTOR PIPE DETAIL (N.T.S.)



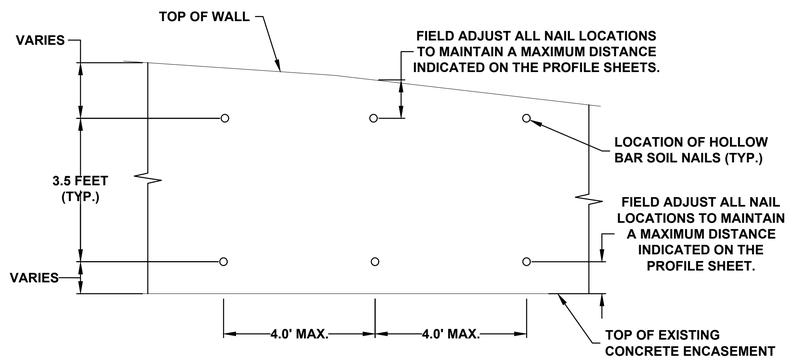
DRAIN GRATE ISOMETRIC VIEW (N.T.S.)



BEARING PLATE WELD DETAIL (N.T.S.)



GEOCOMPOSITE DRAINAGE STRIP DETAIL (N.T.S.)



FACE NAIL PATTERN DETAIL

No.	Revisions and Descriptions	By	Date

Project Title:
BLIND SODUS BAY
WESTERN BLUFF REDI PROJECT
TOWN OF WOLCOTT, WAYNE COUNTY , NY

Drawing Title:
SOIL NAIL WALL CONSTRUCTION DETAILS

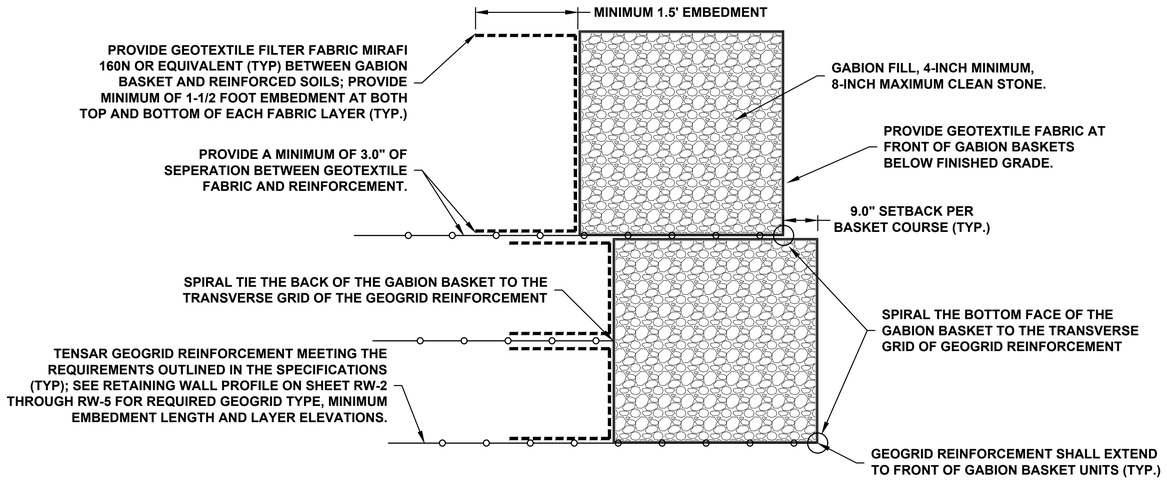
Drawn By: RFR
Checked By: BJD
Scale:
Date: 04/25/2021

MRB group
Engineering, Architecture & Surveying, D.P.C.
The Culver Road Armory, 145 Culver Road,
Suite 160, Rochester, New York 14620
Phone: 585-381-9250
www.mrbgroup.com

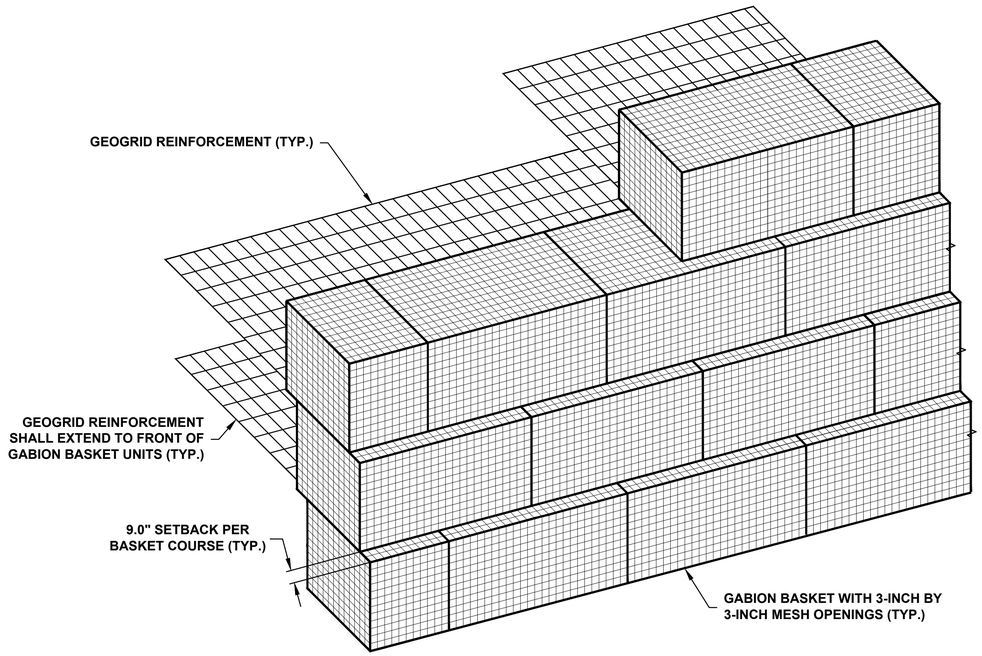
Sheet No. **RW-8**
15 of 24

Project No. **65215077**

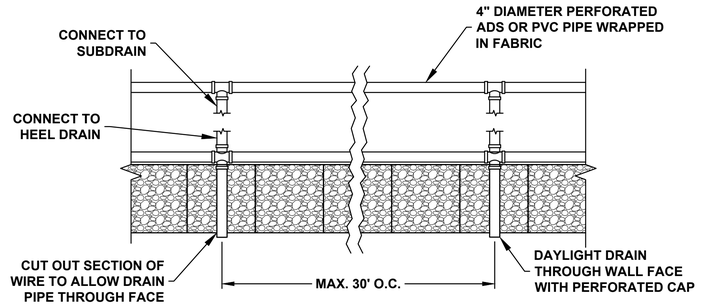
Terracon
Consulting Engineers and Scientists
4685 South Ash Avenue, Suite H-4 Tempe, AZ 85282
PH. (480) 897-8200 FAX. (480) 897-1133



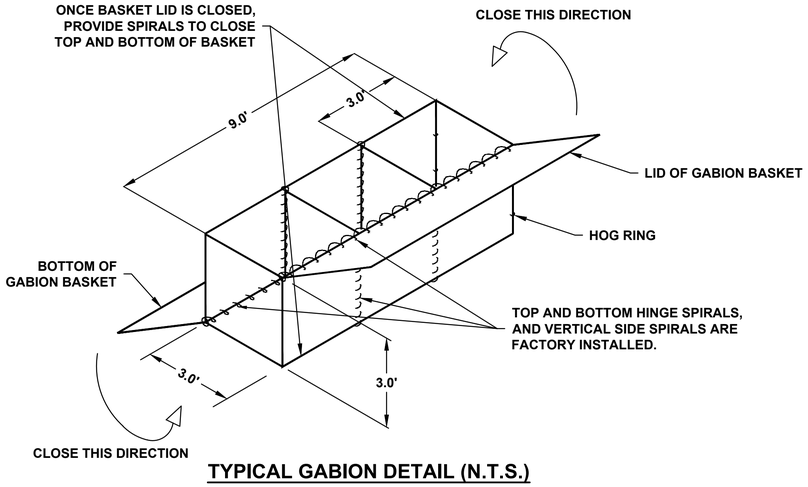
GABION BASKET AT FACE OF WALL DETAIL (N.T.S.)



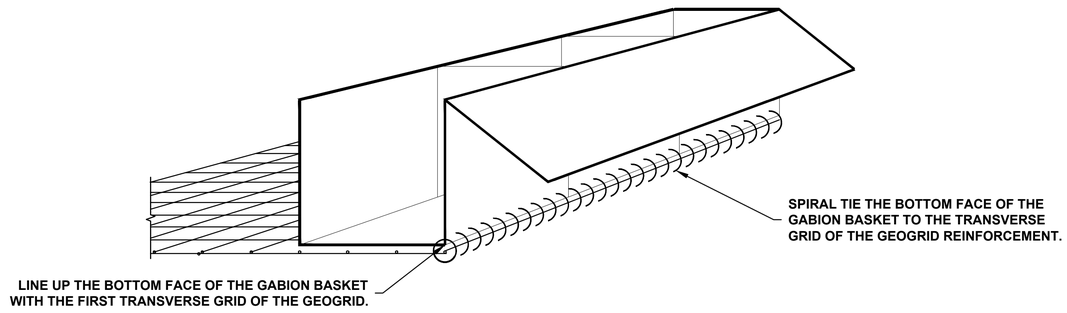
GABION BASKET ISOMETRIC VIEW (N.T.S.)



SUBDRAIN DETAIL (N.T.S.)



TYPICAL GABION DETAIL (N.T.S.)



GABION BASKET TO GEOGRID CONNECTION DETAIL (N.T.S.)

No.	Revisions and Descriptions	By	Date
Copyright © 2021 MRB Group All Rights Reserved			

Project Title:
BLIND SODUS BAY
WESTERN BLUFF REDI PROJECT
TOWN OF WOLCOTT, WAYNE COUNTY , NY

Drawing Title:
MSE GABION WALL CONSTRUCTION DETAILS

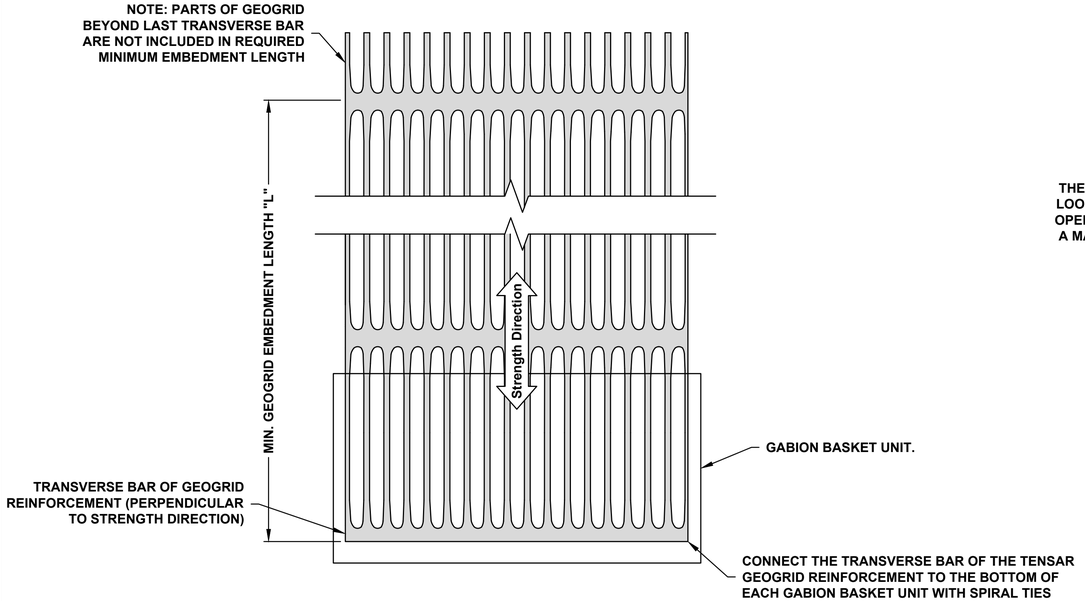
Drawn By: RFR
Checked By: BJD
Scale:
Date: 04/25/2021

MRB group
Engineering, Architecture & Surveying, D.P.C.
The Culver Road Armory, 145 Culver Road,
Suite 160, Rochester, New York 14620
Phone: 585-381-9250
www.mrbgroup.com

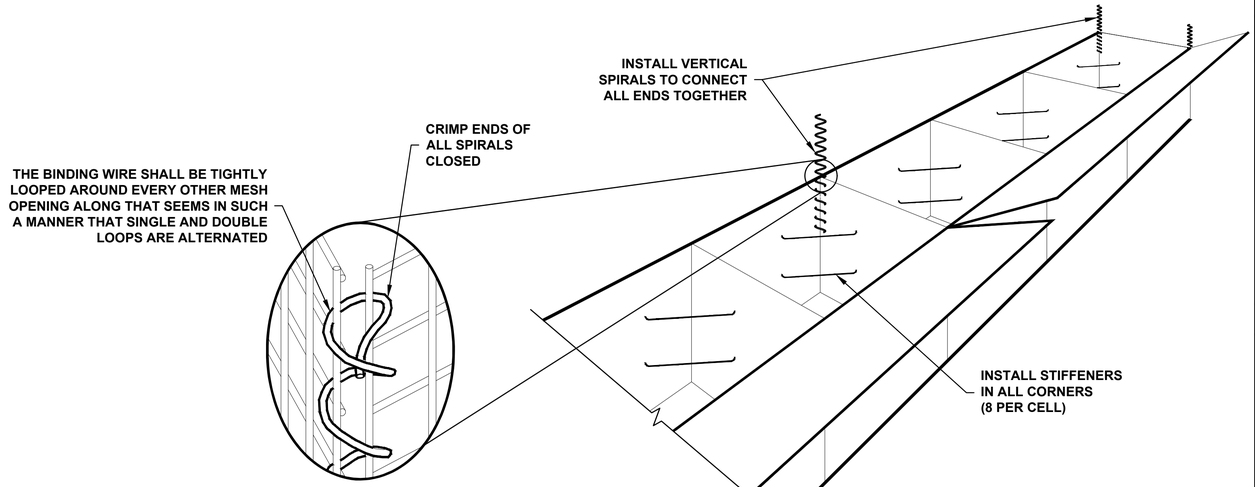
Sheet No. RW-9
16 of 24

Project No. 65215077

Terracon
Consulting Engineers and Scientists
4685 South Ash Avenue, Suite H-4 Tempe, AZ 85282
PH. (480) 897-8200 FAX. (480) 897-1153

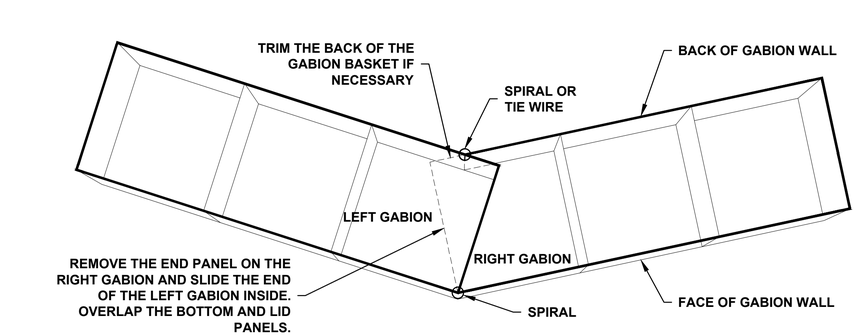


GEOGRID ORIENTATION DETAIL

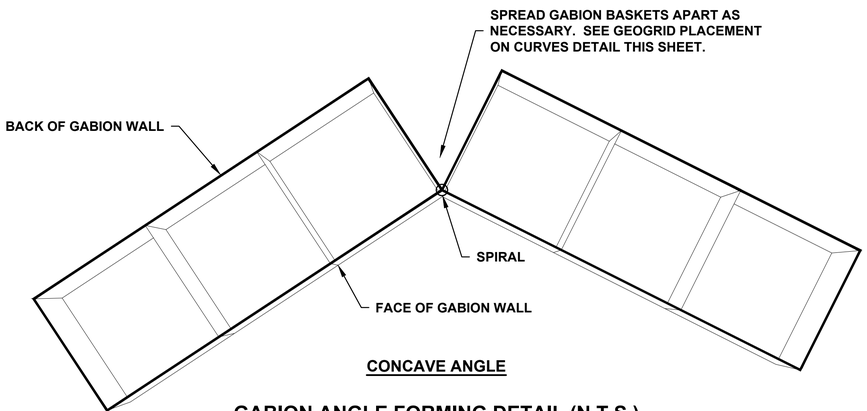


SPIRAL BINDING WIRE DETAIL

GABION BASKET CONNECTION DETAIL (N.T.S.)

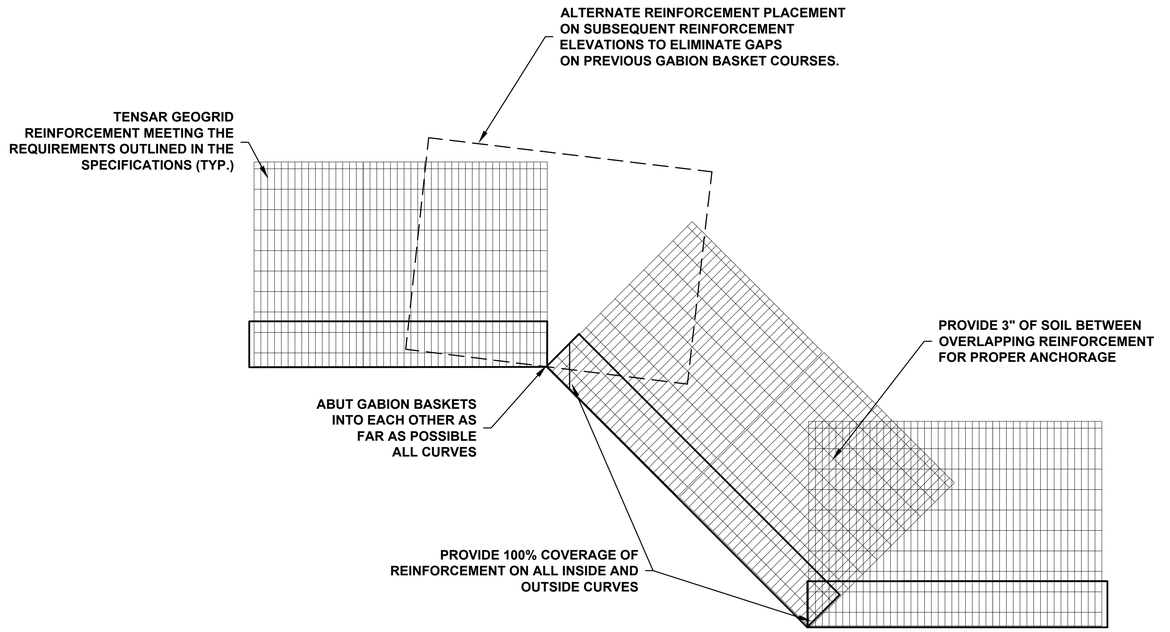


CONVEX ANGLE



CONCAVE ANGLE

GABION ANGLE FORMING DETAIL (N.T.S.)



REINFORCEMENT PLACEMENT ON GABION BASKETS, INSIDE AND OUTSIDE CURVES

No.	Revisions and Descriptions	By	Date
Copyright © 2021 MRB Group	All Rights Reserved		

Project Title:
BLIND SODUS BAY
WESTERN BLUFF REDI PROJECT
TOWN OF WOLCOTT, WAYNE COUNTY , NY

Drawing Title:
MSE GABION WALL CONSTRUCTION DETAILS

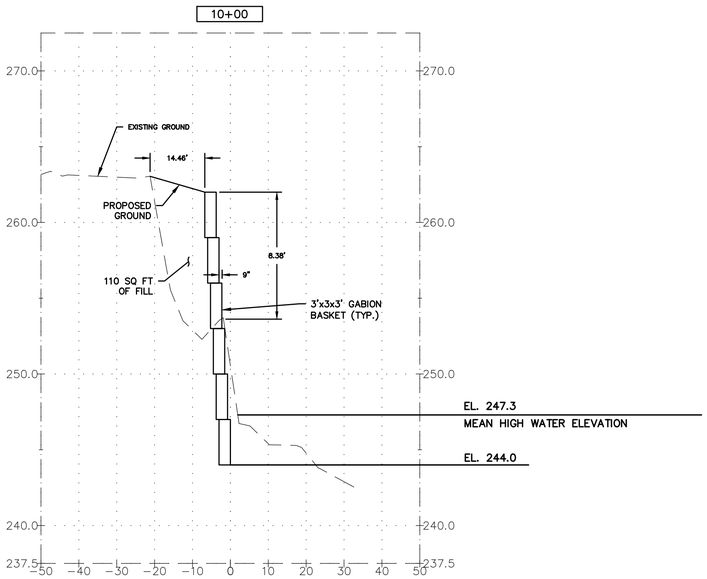
Drawn By: RFR
Checked By: BJD
Scale:
Date: 04/25/2021

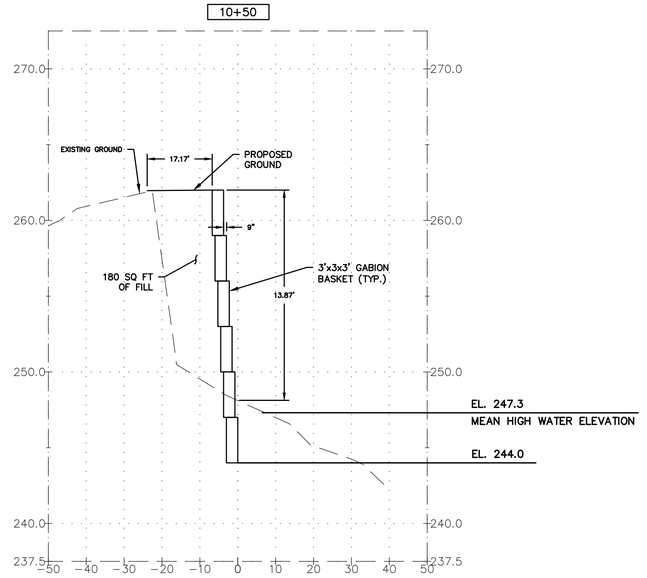
MRB group
Engineering, Architecture & Surveying, D.P.C.
The Culver Road Armory, 145 Culver Road,
Suite 160, Rochester, New York 14620
Phone: 585-381-9250
www.mrbgroup.com

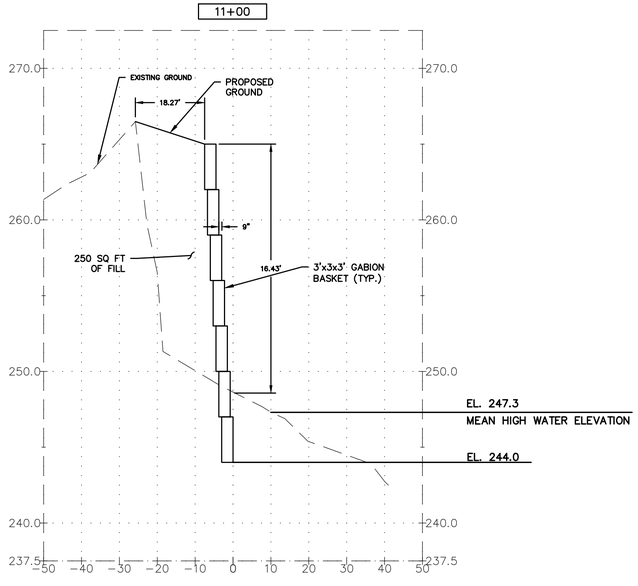
Sheet No. **RW-10**
17 of 24

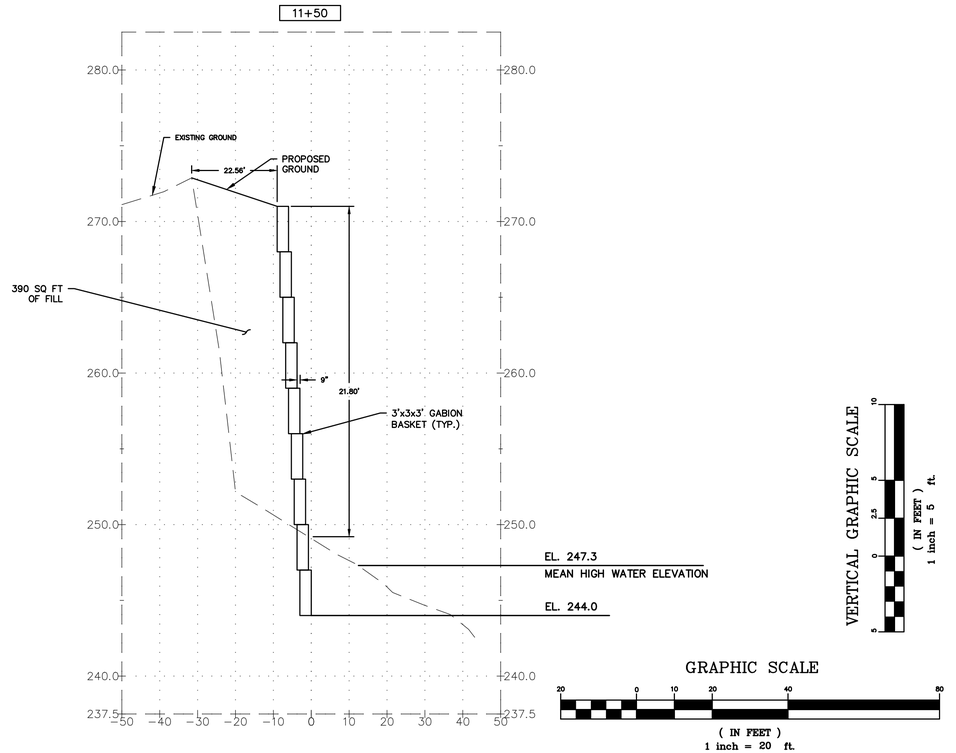
Project No. **65215077**

Terracon
Consulting Engineers and Scientists
4685 South Ash Avenue, Suite H-4 Tempe, AZ 85282
PH: (480) 897-8200 FAX: (480) 897-1133









VERTICAL GRAPHIC SCALE

10 5 2.5 0 0

(IN FEET)
1 inch = 5 ft.

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

DRAWING ALTERATION
THE FOLLOWING IS AN EXCERPT FROM THE NEW YORK EDUCATION LAW ARTICLE 145 SECTION 7209 AND APPLIES TO THIS DRAWING.
"IT IS A VIOLATION OF THIS LAW FOR ANY PERSON UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION AND A SPECIFIC DESCRIPTION OF THE ALTERATION".

No.	Revisions and Descriptions	By	Date

Project Title:
BLIND SODUS BAY
WESTERN BLUFF REDI PROJECT
TOWN OF WOLCOTT, WAYNE COUNTY , NY

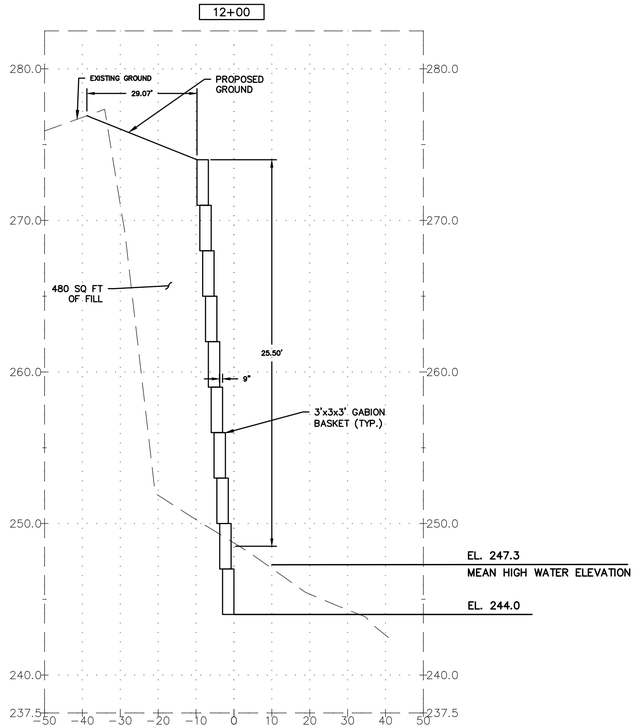
Drawing Title:
CROSS SECTIONS

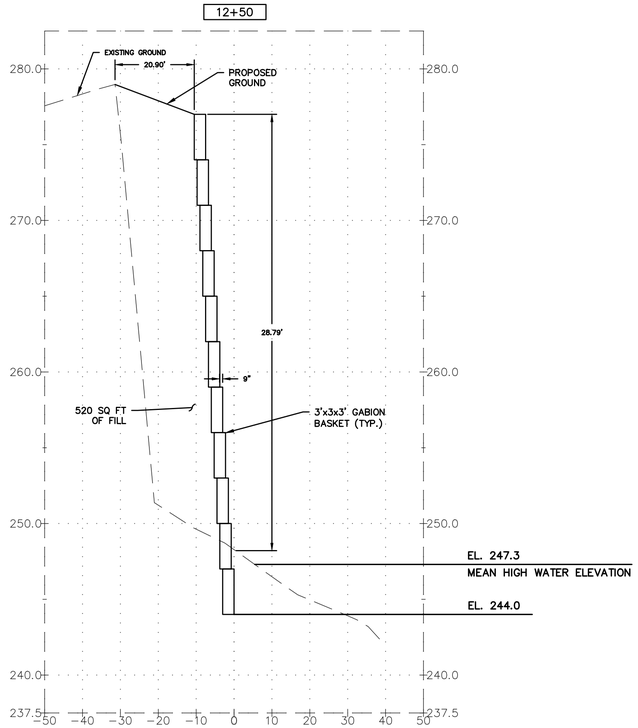
Drawn By: MRB
Checked By: SB
Scale: 1"=20'
Date: 05/2021

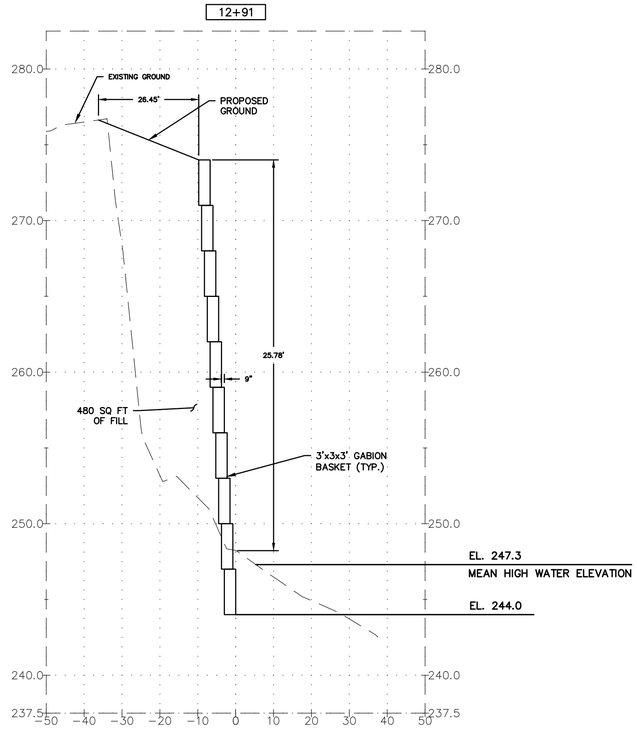
MRB group
Engineering, Architecture & Surveying, D.P.C.
The Culver Road Armory, 145 Culver Road, Suite 160, Rochester, New York 14620
Phone: 585-381-9250
www.mrbgroup.com

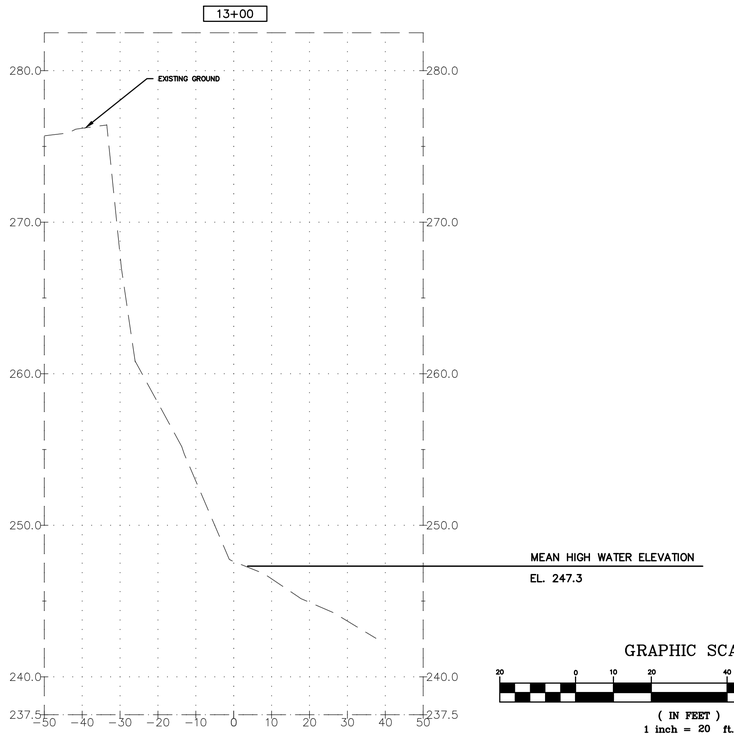
Sheet No. S-1
18 of 24

Project No. 2317.20001









VERTICAL GRAPHIC SCALE

10 5 2.5 0 0

(IN FEET)
1 inch = 5 ft.

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

No.	Revisions and Descriptions	By	Date

Project Title:
BLIND SODUS BAY
WESTERN BLUFF REDI PROJECT
TOWN OF WOLCOTT, WAYNE COUNTY , NY

Drawing Title:
CROSS SECTIONS

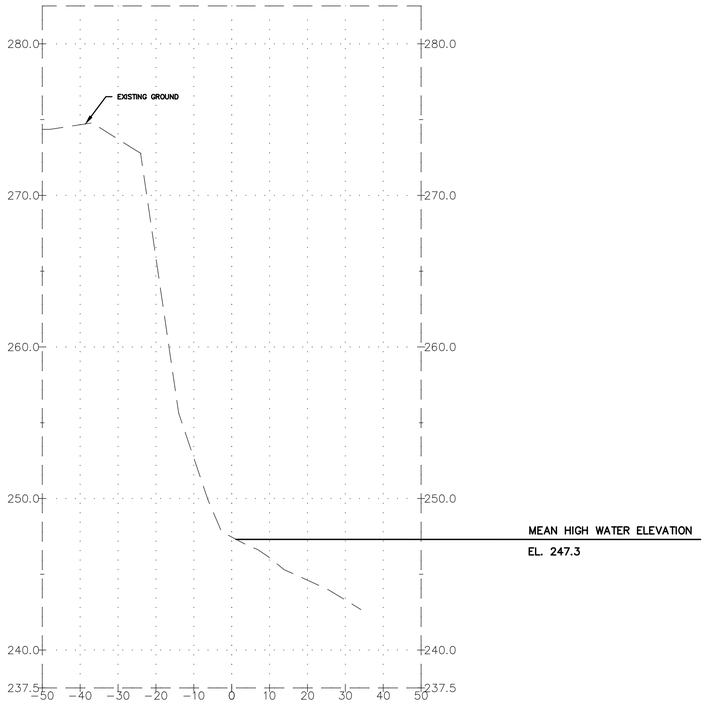
Drawn By: MRB
Checked By: SB
Scale: 1"=20'
Date: 05/2021

MRB group
Engineering, Architecture & Surveying, D.P.C.
The Culver Road Armory, 145 Culver Road,
Suite 160, Rochester, New York 14620
Phone: 585-381-9250
www.mrbgroup.com

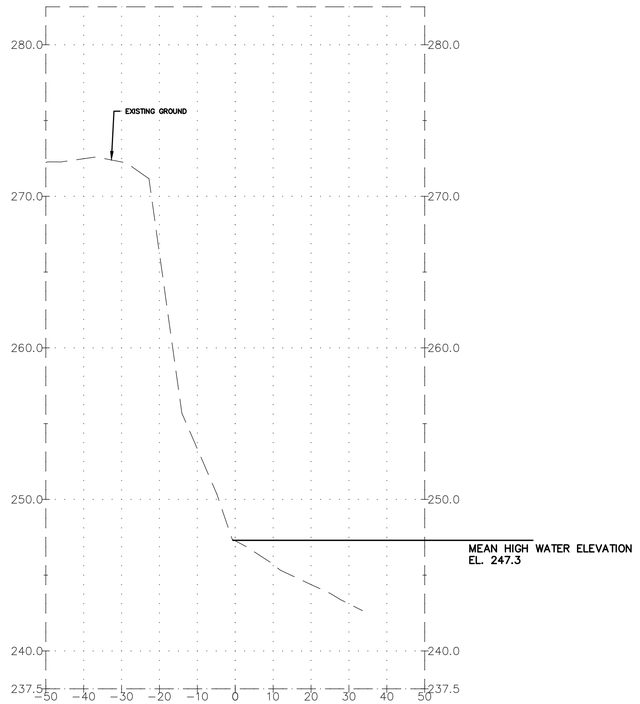
Sheet No. S-2
19 of 24

Project No. 2317.20001

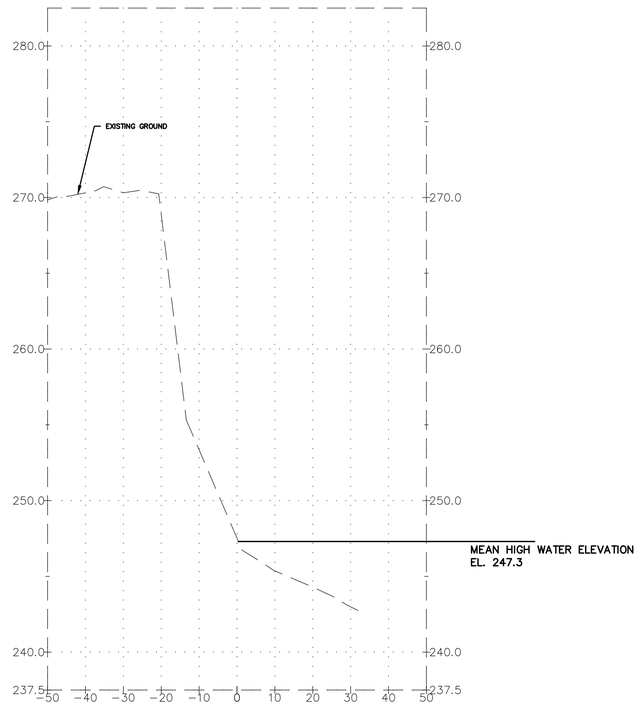
13+50



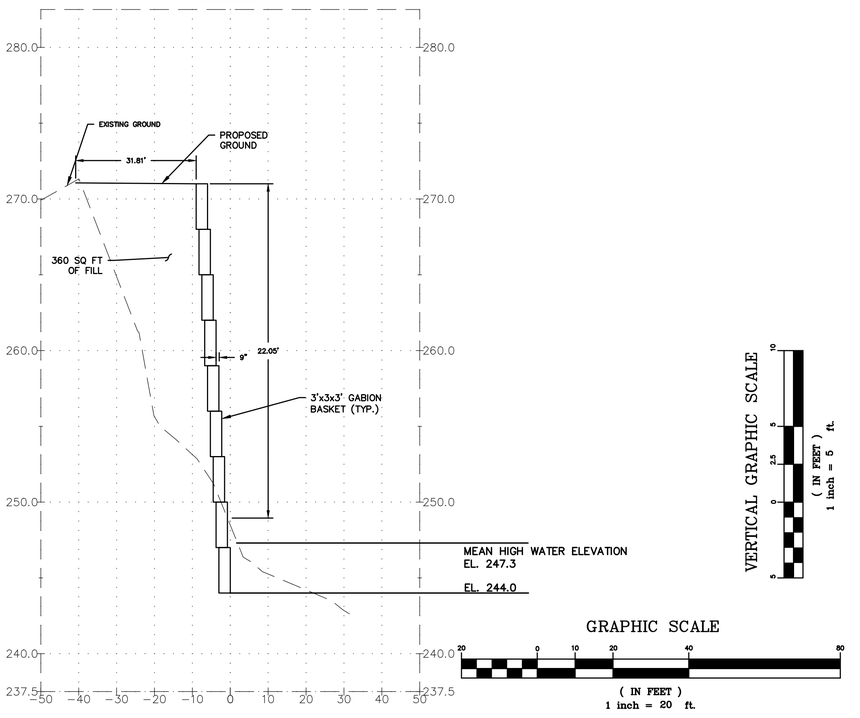
14+00



14+50



14+86



DRAWING ALTERATION
THE FOLLOWING IS AN EXCERPT FROM THE NEW YORK EDUCATION LAW ARTICLE 145 SECTION 7209 AND APPLIES TO THIS DRAWING.
"IT IS A VIOLATION OF THIS LAW FOR ANY PERSON UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION AND A SPECIFIC DESCRIPTION OF THE ALTERATION".

No.	Revisions and Descriptions	By	Date

Project Title:
BLIND SODUS BAY
WESTERN BLUFF REDI PROJECT
TOWN OF WOLCOTT, WAYNE COUNTY , NY

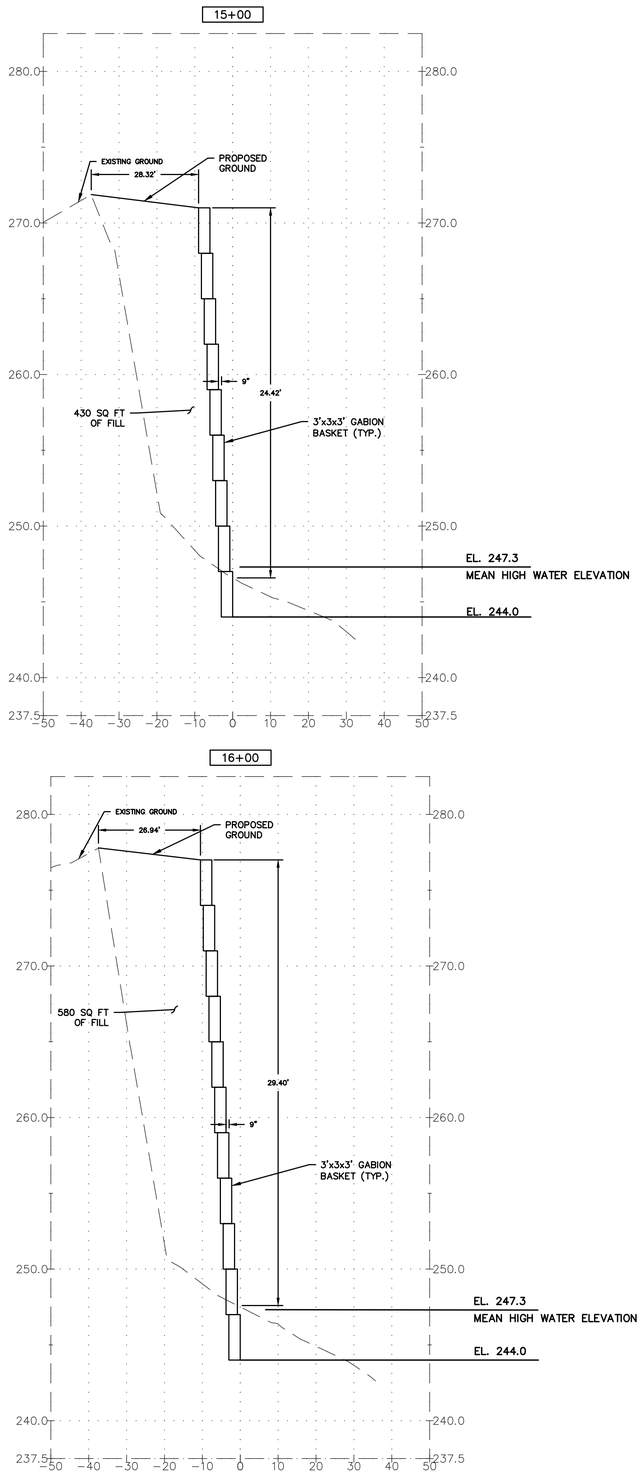
Drawing Title:
CROSS SECTIONS

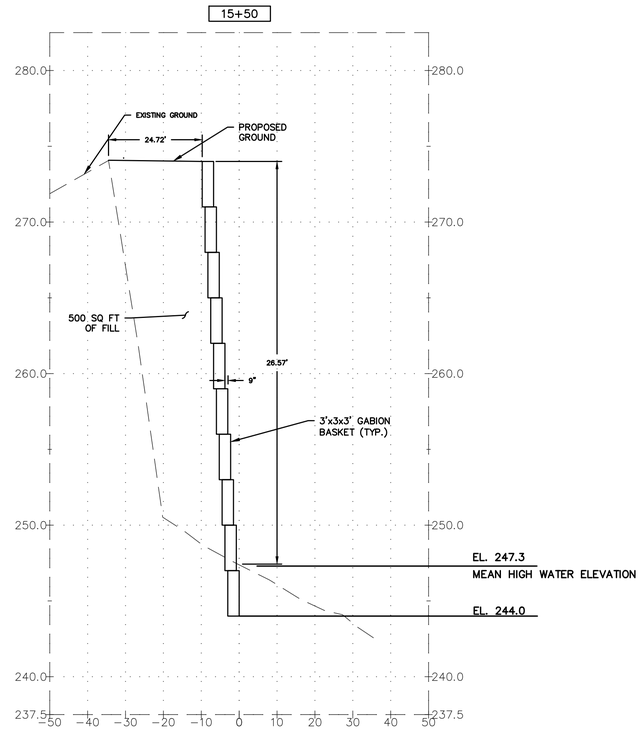
Drawn By: MRB
Checked By: SB
Scale: 1"=20'
Date: 05/2021

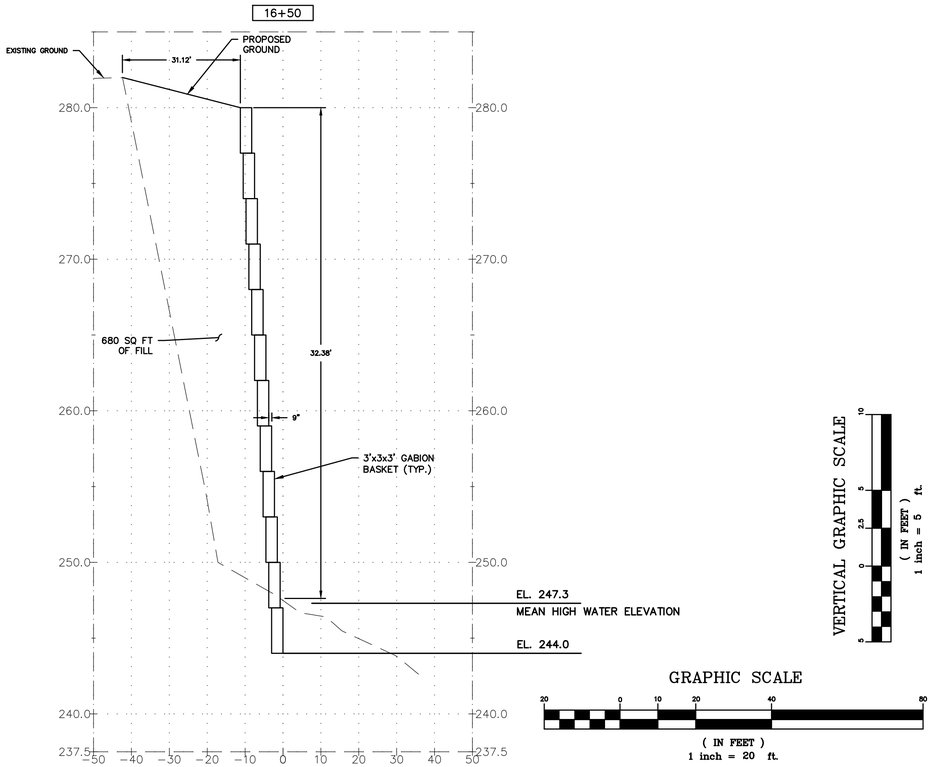
MRB group
Engineering, Architecture & Surveying, D.P.C.
The Culver Road Armory, 145 Culver Road, Suite 160, Rochester, New York 14620
Phone: 585-381-9250
www.mrbgroup.com

Sheet No.
S-3
20 of 24

Project No.
2317.20001







DRAWING ALTERATION
THE FOLLOWING IS AN EXCERPT FROM THE NEW YORK EDUCATION LAW ARTICLE 145 SECTION 7209 AND APPLIES TO THIS DRAWING.
"IT IS A VIOLATION OF THIS LAW FOR ANY PERSON UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION AND A SPECIFIC DESCRIPTION OF THE ALTERATION".

No.	Revisions and Descriptions	By	Date

Project Title:
BLIND SODUS BAY
WESTERN BLUFF REDI PROJECT
TOWN OF WOLCOTT, WAYNE COUNTY , NY

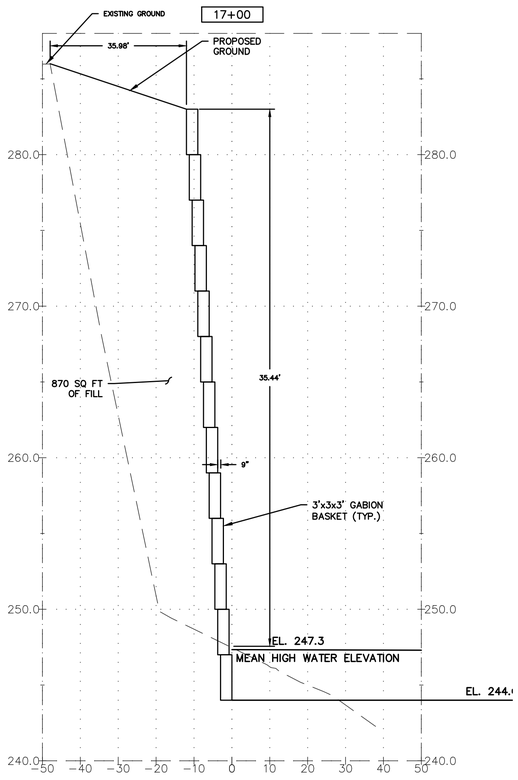
Drawing Title:
CROSS SECTIONS

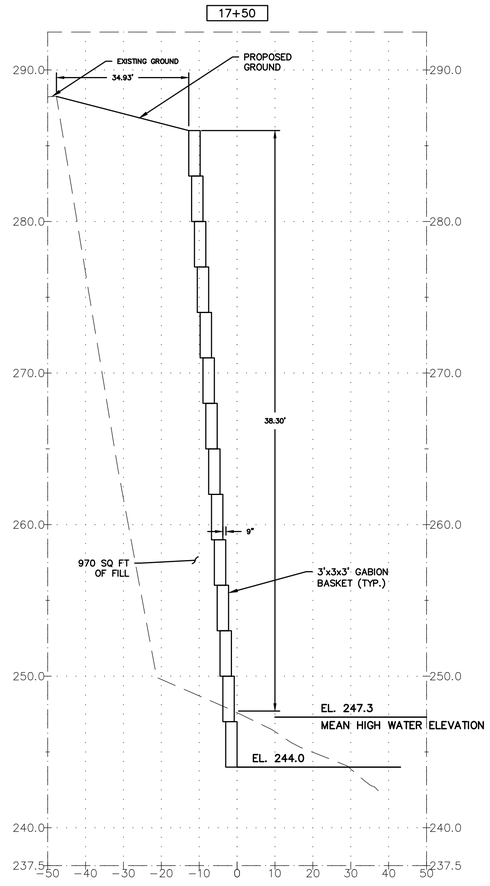
Drawn By: MRB
Checked By: SB
Scale: 1"=20'
Date: 05/2021

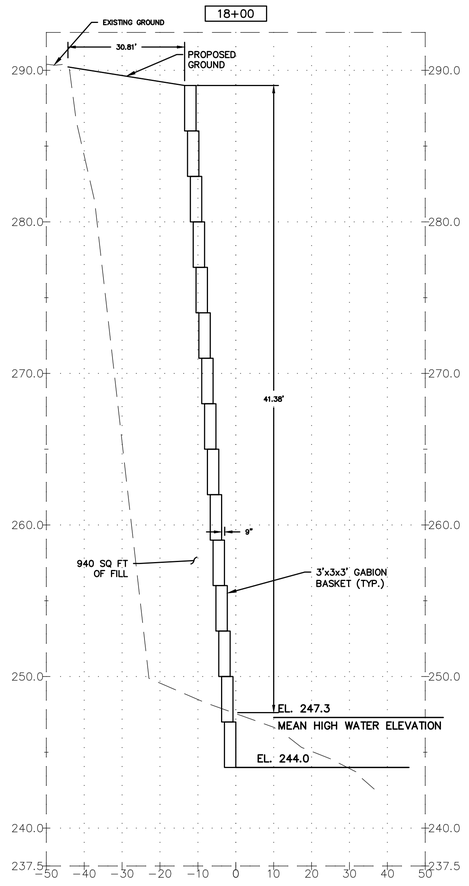
MRB group
Engineering, Architecture & Surveying, D.P.C.
The Culver Road Armory, 145 Culver Road, Suite 160, Rochester, New York 14620
Phone: 585-381-9250
www.mrbgroup.com

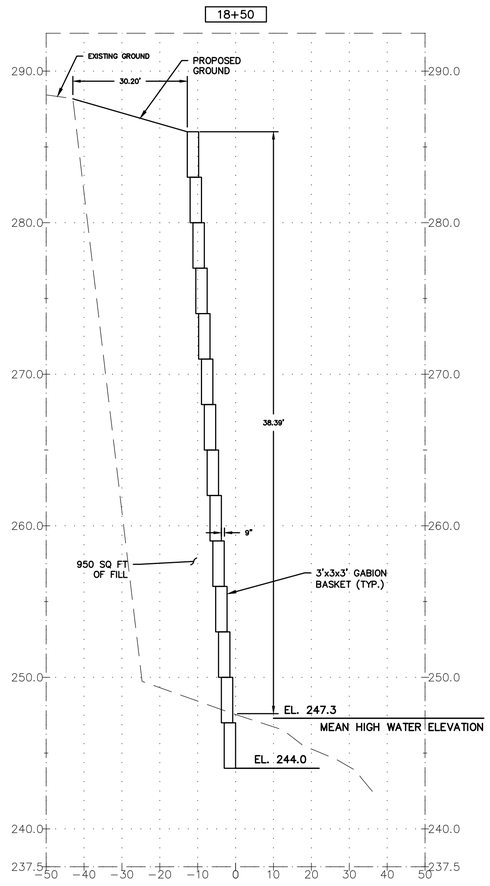
Sheet No. S-4
21 of 24

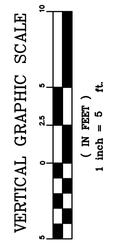
Project No. 2317.20001

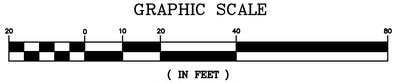












No.	Revisions and Descriptions	By	Date

Project Title:
BLIND SODUS BAY
WESTERN BLUFF REDI PROJECT
TOWN OF WOLCOTT, WAYNE COUNTY , NY

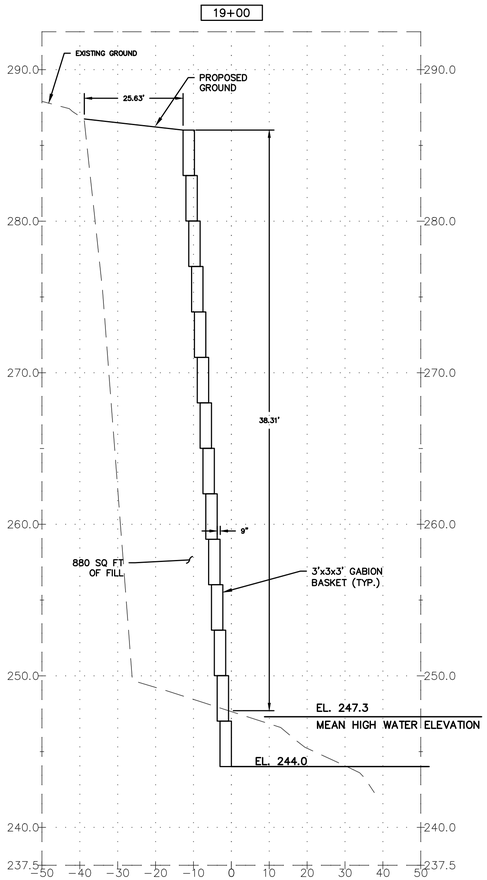
Drawing Title:
CROSS SECTIONS

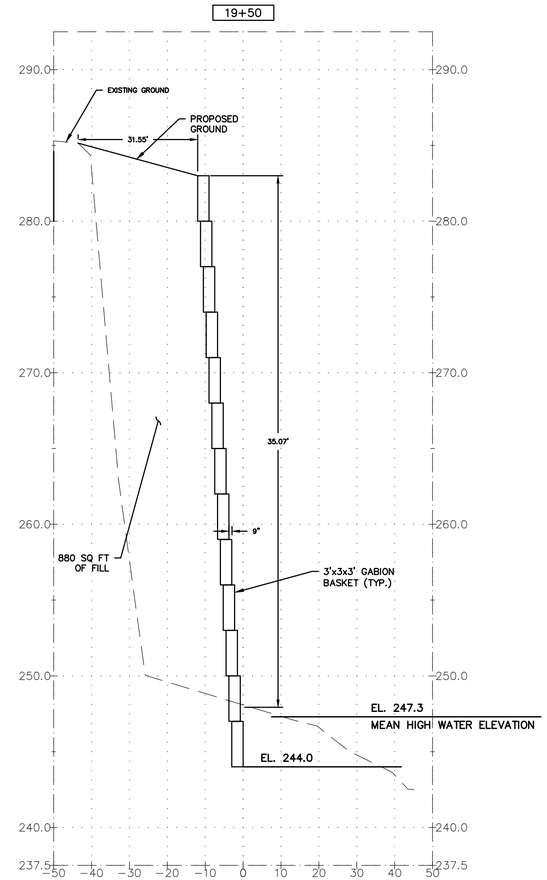
Drawn By: MRB
Checked By: SB
Scale: 1"=20'
Date: 05/2021

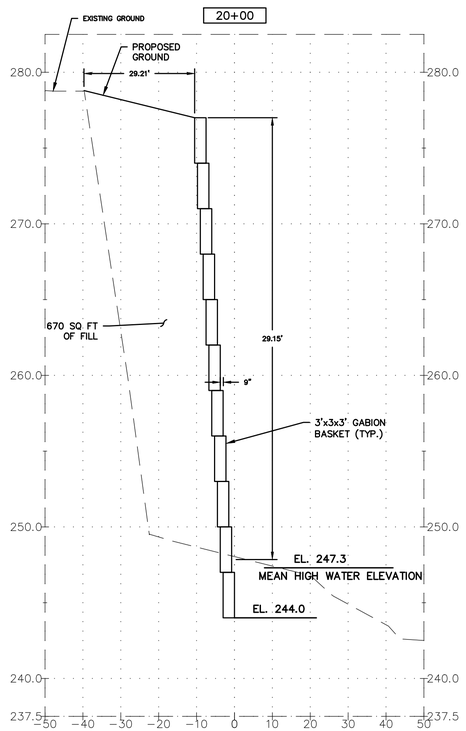
MRB group
Engineering, Architecture & Surveying, D.P.C.
The Culver Road Armory, 145 Culver Road, Suite 160, Rochester, New York 14620
Phone: 585-381-9250
www.mrbgroup.com

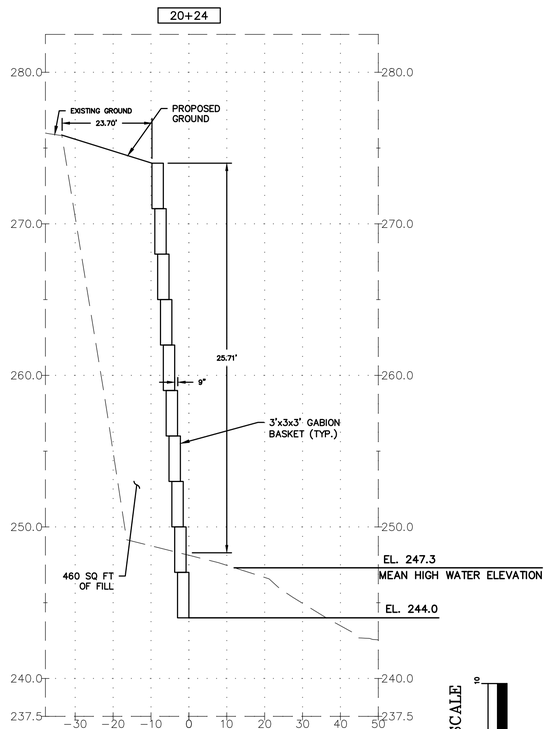
Sheet No. S-5
22 of 24

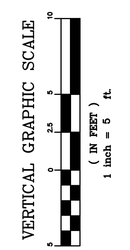
Project No. 2317.20001

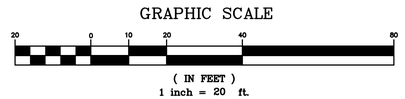












DRAWING ALTERATION
THE FOLLOWING IS AN EXCERPT FROM THE NEW YORK EDUCATION LAW ARTICLE 145 SECTION 7209 AND APPLIES TO THIS DRAWING.
"IT IS A VIOLATION OF THIS LAW FOR ANY PERSON UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION AND A SPECIFIC DESCRIPTION OF THE ALTERATION".

No.	Revisions and Descriptions	By	Date

Project Title:
BLIND SODUS BAY
WESTERN BLUFF REDI PROJECT
TOWN OF WOLCOTT, WAYNE COUNTY , NY

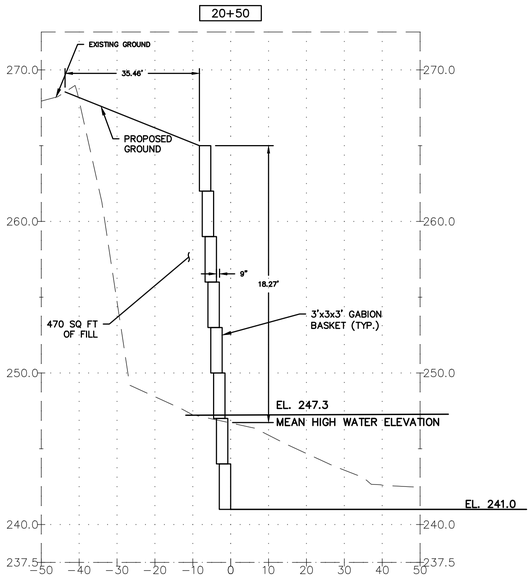
Drawing Title:
CROSS SECTIONS

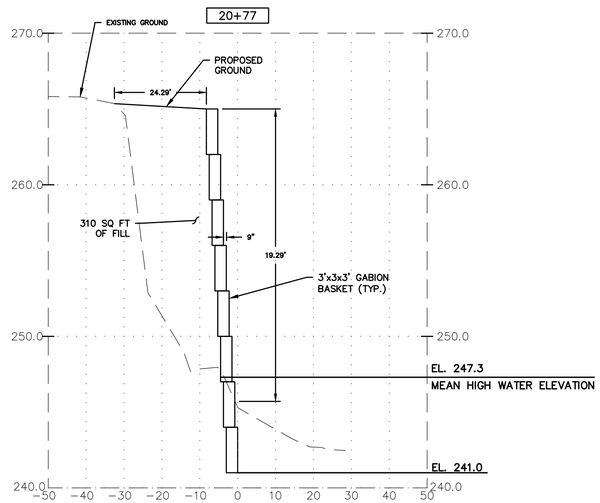
Drawn By: MRB
Checked By: SB
Scale: 1"=20'
Date: 05/2021

MRB group
Engineering, Architecture & Surveying, D.P.C.
The Culver Road Armory, 145 Culver Road,
Suite 160, Rochester, New York 14620
Phone: 585-381-9250
www.mrbgroup.com

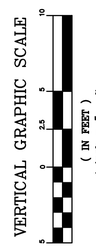
Sheet No. **S-6**
23 of **24**

Project No. **2317.20001**



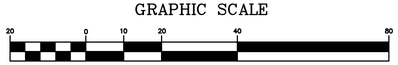


VERTICAL GRAPHIC SCALE



(IN FEET)
1 inch = 5 ft.

GRAPHIC SCALE



(IN FEET)
1 inch = 20 ft.

DRAWING ALTERATION
THE FOLLOWING IS AN EXCERPT FROM THE NEW YORK EDUCATION LAW ARTICLE 145 SECTION 7209 AND APPLIES TO THIS DRAWING.
"IT IS A VIOLATION OF THIS LAW FOR ANY PERSON UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION AND A SPECIFIC DESCRIPTION OF THE ALTERATION".

No.	Revisions and Descriptions	By	Date

Project Title:
BLIND SODUS BAY
WESTERN BLUFF REDI PROJECT
TOWN OF WOLCOTT, WAYNE COUNTY , NY

Drawing Title:
CROSS SECTIONS

Drawn By: MRB
Checked By: SB
Scale: 1"=20'
Date: 05/2021

MRB group
Engineering, Architecture & Surveying, D.P.C.
The Culver Road Armory, 145 Culver Road,
Suite 160, Rochester, New York 14620
Phone: 585-381-9250
www.mrbgroup.com

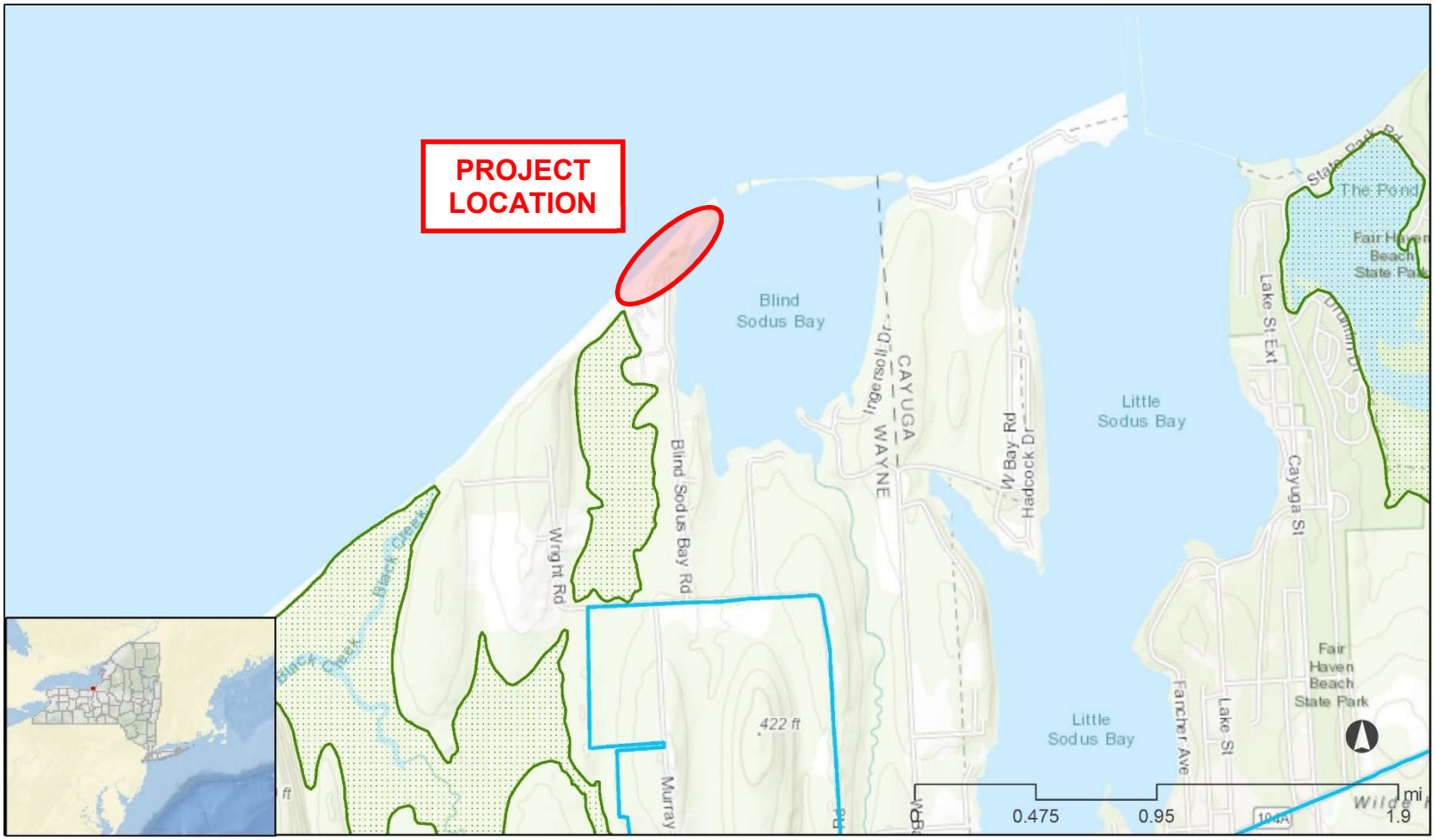
Sheet No. S-7
24 of 24

Project No. 2317.20001

LAKE ONTARIO SHORELINE REPAIR PROJECT
BLIND SODUS BAY WESTERN BLUFF
TOWN OF WOLCOTT, WAYNE COUNTY, NY

April 14, 2021

EXHIBIT 11



DOS_identified_artificial_canals
Coastal_Boundary_Polyline_update
Local Waterfront Revitalization Program [LWRP] Community Boundaries, Approved
Significant coastal fish & wildlife habitats - NYS Dept of State
SASS

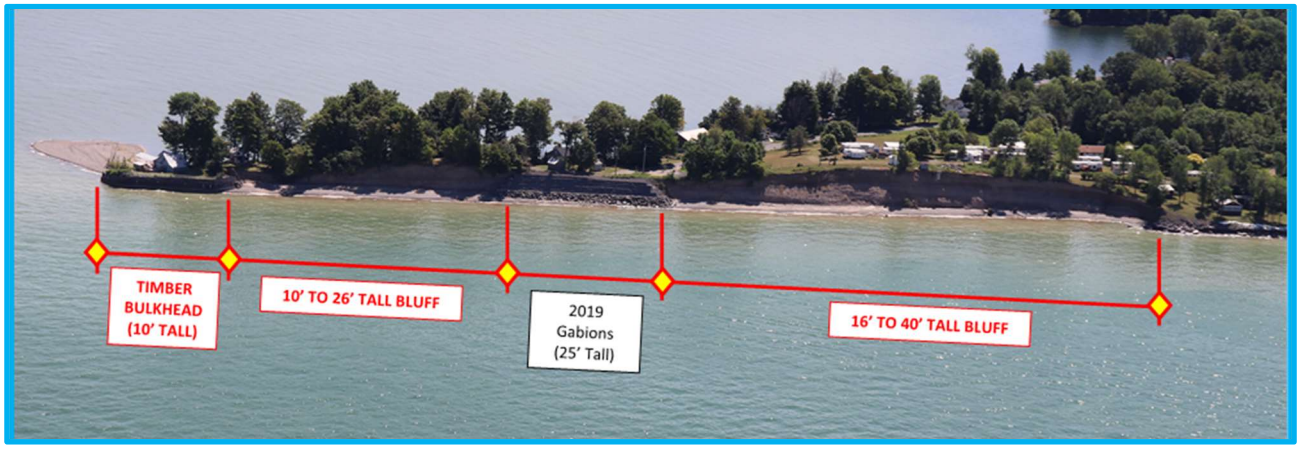
NEW YORK STATE OF OPPORTUNITY. Department of State

Purpose and Need

Implement a long-term improvement project to protect and stabilize approximately 920 LF of Lake Ontario eroded bluff shoreline, and stabilize 190 LF privately constructed timber and concrete bulkhead. The project area is located at the north end of Blind Sodus Bay Road.

In 2019, the Town of Wolcott contracted to construct a 25' tall gravity gabion revetment to stabilize a critical 190 LF section of the bluff at the terminus of Blind Sodus Bay Road (see below photographs). The project purpose was to address imminent risks to existing public utilities in close proximity of the top of slope. This project was deemed a high priority and awarded Lake Ontario – Resiliency & Economic Development Initiative (REDI) Grant funding. The project will extend the 2019 improvements both east and west to mitigate further infrastructure impacts, continued erosion, existing slope instability, and property loss along the remaining unprotected Blind Sodus Bay Western Bluff segments.

The western project limits will extend and terminate at an existing private bulkhead at 9489 Blind Sodus Bay Road. The eastern project scope includes stabilizing an existing 190 LF +/- long timber and concrete bulkhead at 9542 Blind Sodus Bay Road, and transition the bulkhead to the recommended taller bluff stabilization alternative.



Alternatives

Shore stabilization options were developed and evaluated to address the following factors:

- Long-Term Structural Stability to protect infrastructure and minimize further property loss.
- Constructability based on site and environmental constraints
- ACOE, NYSDEC, and NYSDOS Permit and Approval Policies
- Schedule – Construction can be substantially completed during a limited Fall construction window when Lake Ontario water levels are traditionally lower.
- Cost (Available Grant Construction Funds = $3,500,000)

2019 Alternative Analyses (Bluff Stabilization)

The 2019 Blind Sodus Bay Project evaluated four alternative typical sections to stabilize approximately 190 LF of the 25' high +/-bluff. A summary of this analyses and application to the current project site conditions are presented below. The alternatives were developed following a site geotechnical investigation and topographic survey. The attached 2019 geotechnical data report (Exhibit 12.1) was further supplemented with additional subsurface investigations in 2020 (Exhibit 12.2). Both reports noted the slope foundation subsoils consist of a dense glacial till material. The design goal continues to be minimization of lake encroachment and ground disturbance below the OHWL Elevation 247.3. The 2019 alternative analyses included a variety of materials and all were determined to be structurally feasible. The alternatives included:

Alternative 1: Generally consisted of a full height stepped and battered gravity gabion wall with the bottom baskets keyed into the very stiff glacial till subsoils to resist the soil loads. The gabion footing construction excavation would be upland of the Ordinary Mean High Water Elevation of 247.3. The exposed face of the bottom four rows of gabions would be grouted to provide added protection to wave action and erosion. The alternative cost met the 2019 grant budget, and stabilization materials addressed regulatory agency policy to avoid hardened options and incorporate more natural slope stabilization solutions.

Applicability: The gravity gabion concept was a cost-effective solution up to a 25-foot height and site constraints. Extending the gravity wall design to the typical bluff heights along the REDI project area exceeding 25 feet tall without soil backfill reinforcement was deemed cost prohibitive.

Alternative 2: This option was a further refinement of Alternatives #3. The alternative included a 15' high standard reinforced concrete retaining wall and footer design incorporating geofoam lightweight blocks behind the wall to reduce soil loads. The reduced soil pressure loads increase the constructability and minimizes the foundation disturbance. The finished ground surface would be constructed at a stable 1:2 slope to reduce the vertical structure height at water's edge and minimize the hardened concrete wall visual appearance, but extends the construction footprint "further into the lake". The preliminary construction cost also exceeded the available 2019 budget.

Applicability: This alternative would be even more cost prohibitive for the taller bluff segments in the current REDI project. The alternative was not considered further.

Alternative 3: A hybrid option consisting of a shorter 6' tall reinforced concrete retaining wall supporting upper rows of large precast modular block units (Redi-Rock). The modular units will likely require a means of tie-back into the existing slope. The alternative is cost effective and meets the ACOE NP-13 disturbance thresholds, but maintaining positive drainage behind the concrete wall, and constructability of both the tie-back system and lateral shear pile into the dense glacial till may be difficult. Although the precast modular units face provides a varied texture, the option is still considered as a more hardened solution.

Applicability: This alternative would be even more cost prohibitive for the taller bluff segments in the current REDI project. The alternative was not considered further.

Alternative 4: An earth retention cellular confinement system. The geocells consist of a honeycomb structure that confines and stabilizes cohesionless soils. The stabilization alternative consists of two-12' high +/- tiers of geocells and tie-back system to reduce and distribute soil pressures. The base at the shoreline would be protected with extra-large heavy rip-rap. The final treatment includes installing a vegetated facing covering the retention cells for a more natural finished appearance. The global stability factor of safety for this option is the lowest of the evaluated alternatives, and constructability of the tie-back system into the existing slope would be difficult.

Applicability: The cellular confinement system was deemed only cost effective with an acceptable global stability factor of safety for lower heights (< 10 feet). The REDI project existing bluff heights are significantly higher and make this option unfeasible.

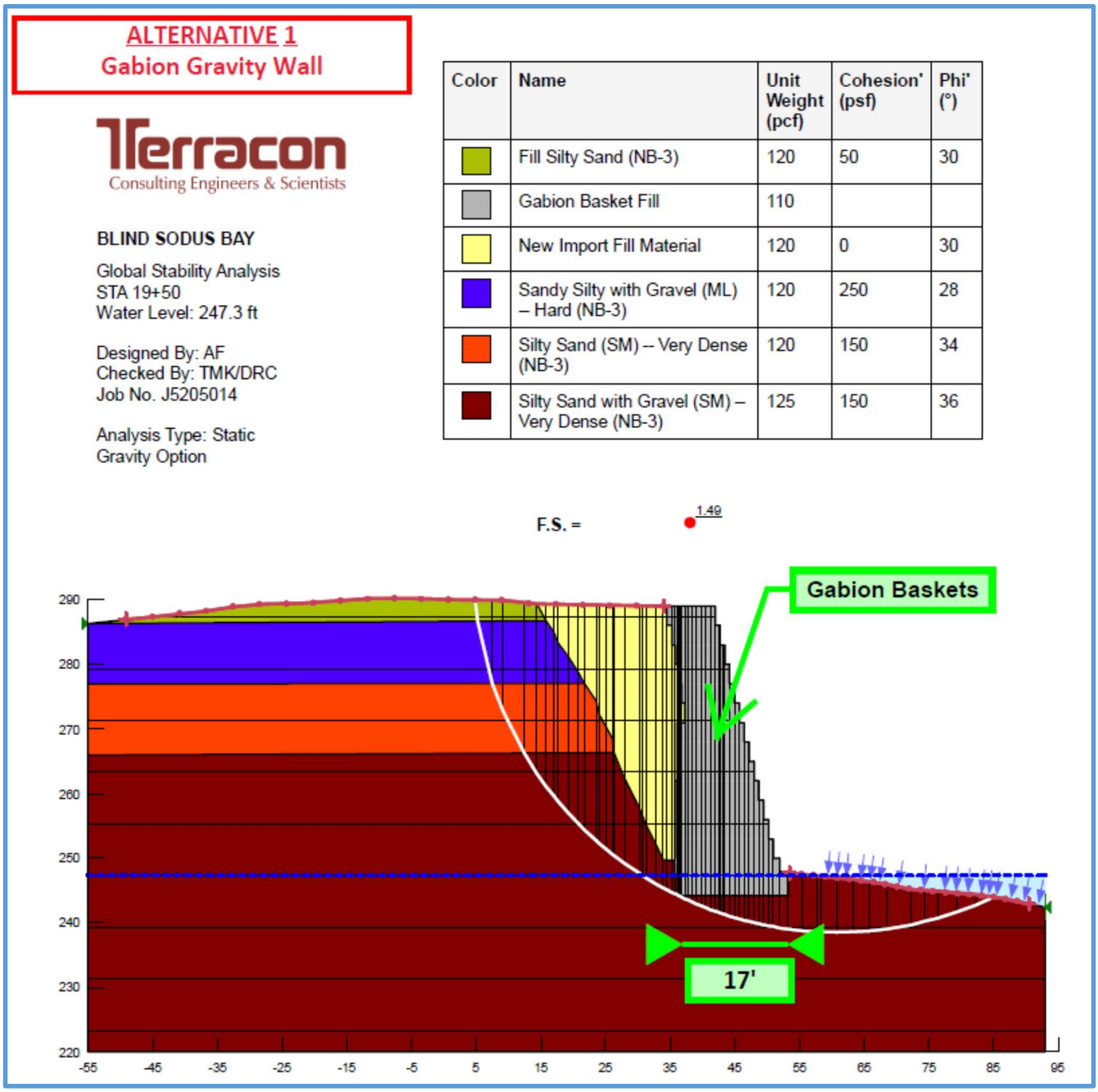
Alternative 5: A fifth alternative consisting of a standard full height soldier pile and sheeting retaining wall concept was also briefly reviewed. Although this option resulted in the smallest footprint impact, it was readily apparent the high cost and difficulty to drive piles into the stiff subsoils precluded further study.

Applicability: The identified negative impacts and constructability issues would be exacerbated with the REDI site conditions. The alternative was not considered further.

Alternative 1 (Gravity Gabion Wall) was the constructed 2019 alternative and deemed the best option to address long-term stability, existing site constraints, constructability, regulatory compliance, schedule, and cost.

Additional Alternative Analyses (Bluff Stabilization)

Alternative 1 was the only option from the 2019 analyses that warranted further structural review based on the REDI project area site conditions. Although the gravity gabion wall concept is structurally feasible, the cost effectiveness at vertical heights over 25 feet is significantly reduced due to the excessive wall footer dimensions (see below figure).



Two additional alternatives more applicable to the site conditions and taller bluff heights were also evaluated:

Alternative 6: A Mechanically Stabilized Earth (MSE) option with 3' x 3' gabion basket face. Lifts of imported select material and geogrid would be placed with each row of gabions. The gabion face would be offset from the existing bluff to permit geogrid placement behind the baskets without slope disturbance. The finished alternative would be similar in appearance to the adjacent 2019 project, and reclaim 15 to 30 feet of property at the top of slope. The design would require importing 15,000 to 20,000 CY of select material, and align the gabion face along the lake shore to minimize disturbance impacts below the Ordinary High-Water Elevation (247.3). The gabion baskets up to Elevation 253.0 would also be fully grouted.

ALTERNATIVE 6
Gabions with Geogrid

Terracon
Consulting Engineers & Scientists

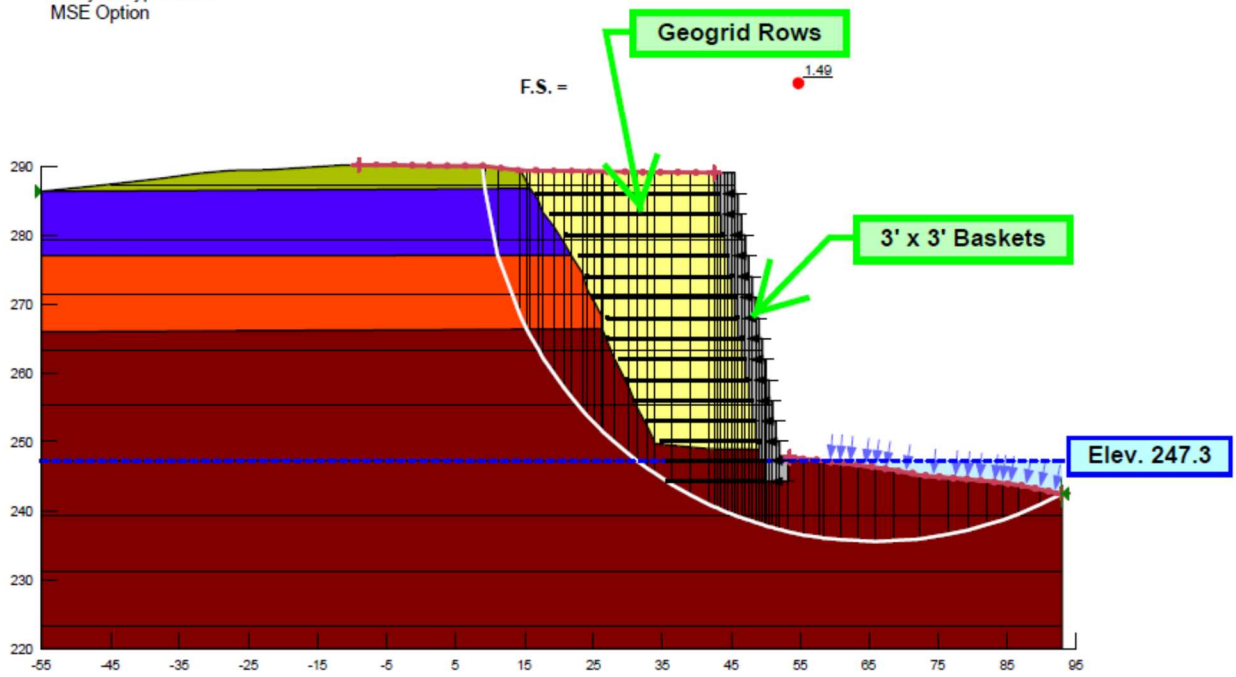
BLIND SODUS BAY

Global Stability Analysis
STA 19+50
Water Level: 247.3 ft

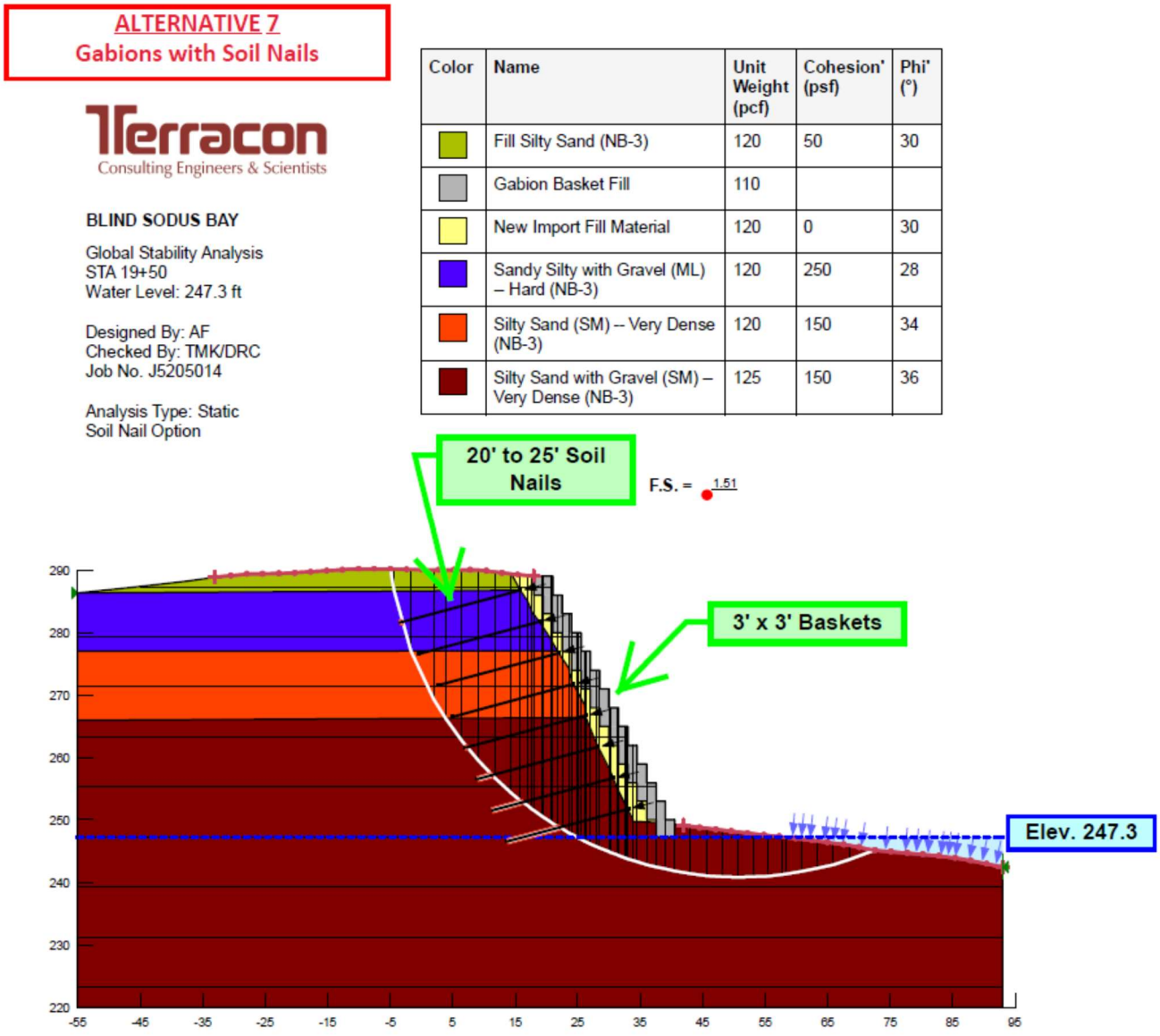
Designed By: AF
Checked By: TMK/DRC
Job No. J5205014

Analysis Type: Static
MSE Option

Color	Name	Unit Weight (pcf)	Cohesion' (psf)	Phi' (°)
	Fill Silty Sand (NB-3)	120	50	30
	Gabion Basket Fill	110		
	New Import Fill Material	120	0	30
	Sandy Silty with Gravel (ML) – Hard (NB-3)	120	250	28
	Silty Sand (SM) -- Very Dense (NB-3)	120	150	34
	Silty Sand with Gravel (SM) – Very Dense (NB-3)	125	150	36



Alternative 7: This option would have a finished 3' x 3' gabion basket face similar to Alternative 6. However, soil nailing into the existing bluff would be used to reinforce the stabilization alternative. The gabions would be constructed with a minimal offset to the existing bluff face, with 20 to 25-foot-long soil nails installed and securing the baskets. The finished alternative would be similar in appearance to the adjacent 2019 project, with very minimal reclaiming of property at the top of slope. All improvements would be constructed above the Ordinary High-Water Elevation (247.3). The gabion baskets up to Elevation 253.0 would also be fully grouted.



Alternative 8: This option would consist of sloping and/or terracing the eroded bluff further south to a maintainable and sustainable grade. The majority of the bluff ranges in height from 25 to 40 feet tall. Assuming a 1 on 3 slope, the top of bank would be relocated 75 to 120 feet further

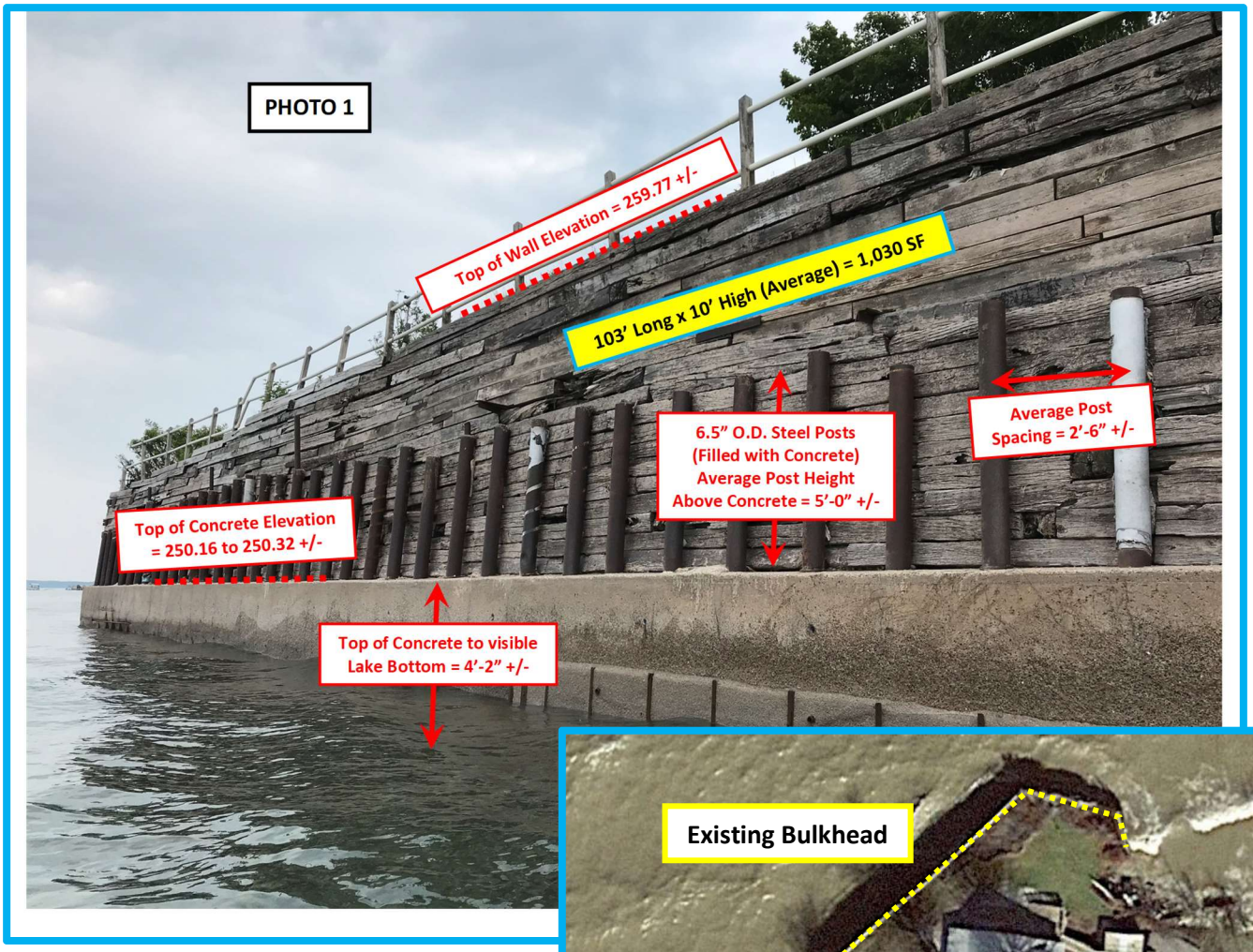
south. This would impact access roads, utilities and existing structures. In addition, many of the lake side building lots along the REDI project have only 40 feet +/- in remaining width from the existing top of slope. The site constraints preclude this alternative from further evaluation.

Recommendation (Bluff Stabilization)

Alternative 6 is the preferred option based on the site constraints, regulatory agency and permit requirements, cost, and meeting overall project objectives.

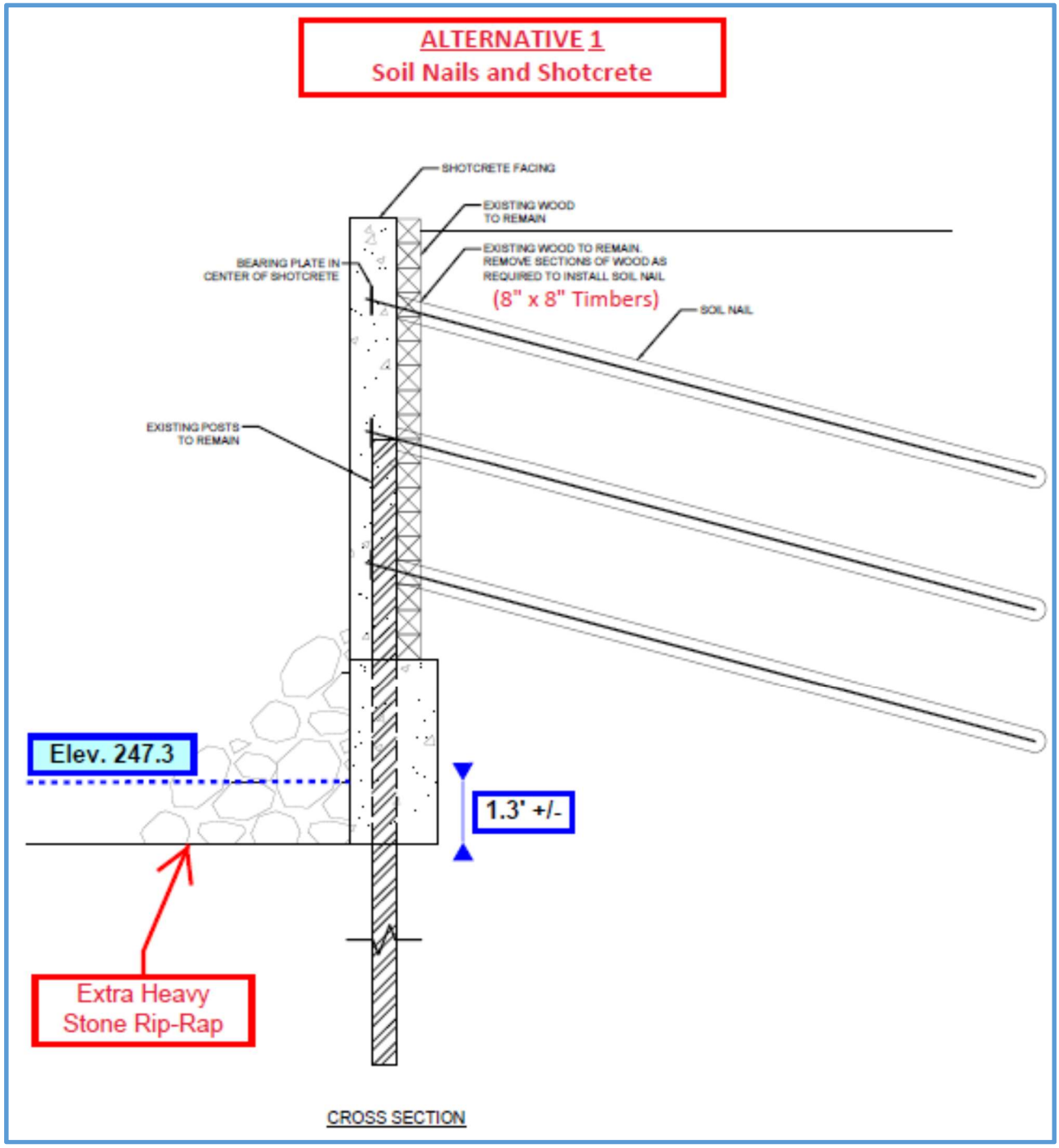
Alternative Analyses (Timber Bulkhead)

The current proposed project scope also includes evaluating feasible alternatives to stabilize approximately 190 LF long timber and concrete bulkhead located at 9542 Blind Sodus Bay Road. The privately constructed bulk head consists of 10' tall RR tie timber wall, steel vertical supports, and a concrete base. See Photo 1 for typical existing bulkhead dimensions.

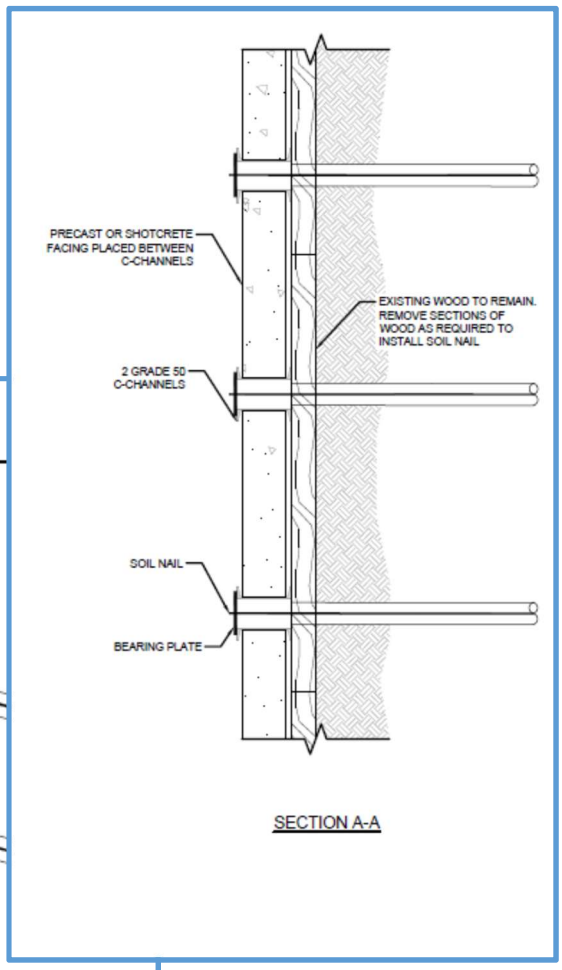


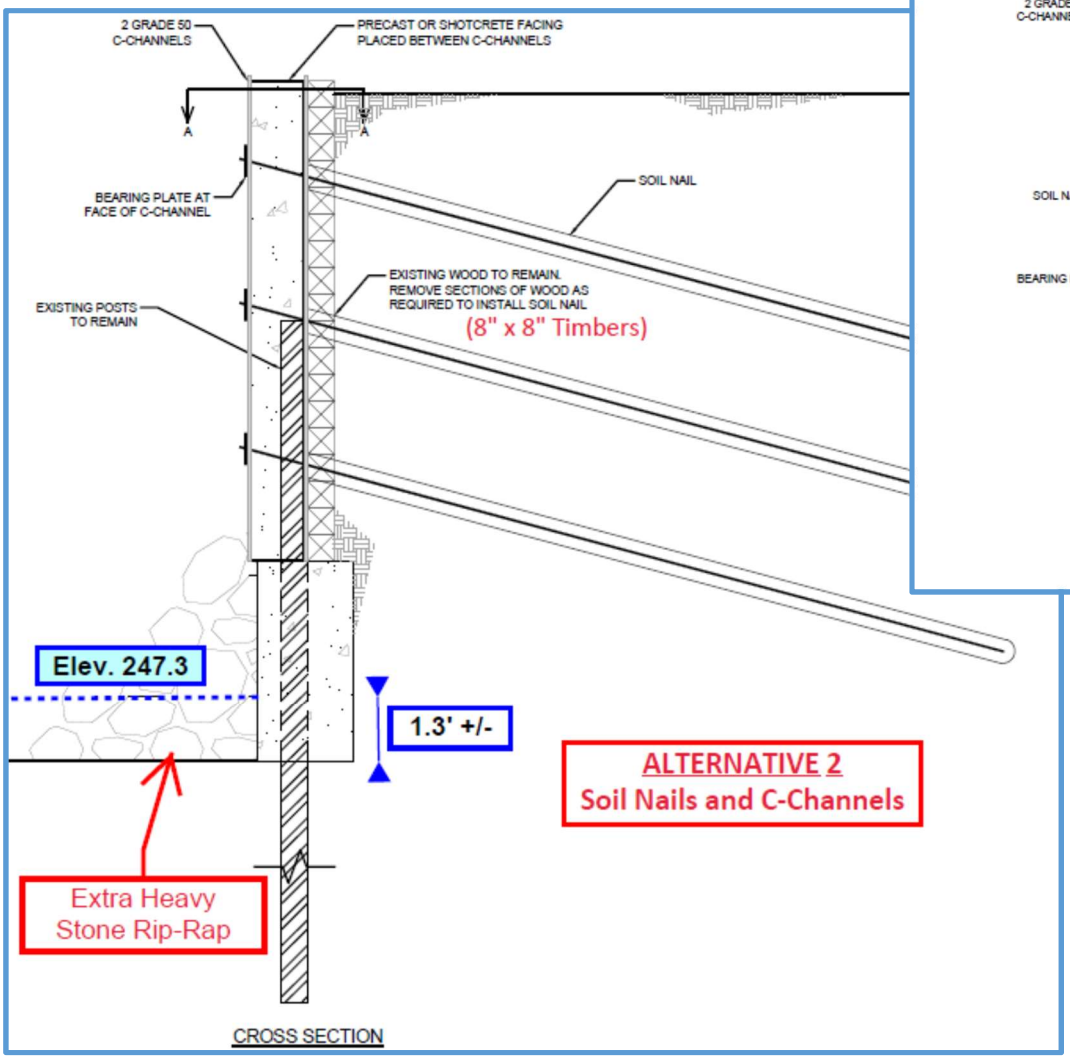
Construction site access and small ground footprint limit cost effective feasible alternatives. The existing site is occupied by a residential dwelling with support utilities that limits additional surface ground disturbance, and regulatory requirements restrict expanding the above-water lands.

Alternative 1: This option would consist of soil nailing (with a steel base plate) through the existing timbers and placing a shotcrete facing over the timbers. The soil nailing and shotcrete would be designed to self-support existing loads independent of the existing timber wall. Extra heavy stone rip-rap would be placed in front of the existing concrete footer for additional scour protection. Shotcrete rebound and overspray would have to be contained.



Alternative 2: This option would consist of soil nailing (with a steel base plate) through the existing timbers and placing precast concrete panels over the timbers. The panels would be placed between steel C-Channels attached to the existing concrete. The soil nailing and concrete panels would be designed to self-support existing loads independent of the existing timber wall. Extra heavy stone rip-rap would be placed in front of the existing concrete footer for additional scour protection.





Recommendation (Timber Bulkhead)

The options are similar and both are feasible. Alternative 2 is the preferred option based on the site constraints, construction access, and minimal environmental impacts.

NEW YORK STATE OF OPPORTUNITY. | Parks, Recreation, and Historic Preservation

ANDREW M. CUOMO
Governor

ERIK KULLESEID
Commissioner

March 26, 2021

Lindsey Gerstenslager
District Manager
Wayne County Soil & Water Conservation District
7312 Route 31
Lyons, NY 14489

Re: USACE
West Bluff REDI Project
37 West Blind Sodus Bay Road, Wolcott, Wayne County, NY
21PR01761

Dear Lindsey Gerstenslager:

Thank you for requesting the comments of the State Historic Preservation Office (SHPO). We have reviewed the project in accordance with Section 106 of the National Historic Preservation Act of 1966. These comments are those of the SHPO and relate only to Historic/Cultural resources. They do not include potential environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the National Environmental Policy Act and/or the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8).

Based upon this review, it is the opinion of the New York SHPO that no historic properties, including archaeological and/or historic resources, will be affected by this undertaking.

If further correspondence is required regarding this project, please be sure to refer to the OPRHP Project Review (PR) number noted above.

Sincerely,

R. Daniel Mackay

Deputy State Historic Preservation Officer
Division for Historic Preservation

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New York Ecological Services Field Office
3817 Luker Road
Cortland, NY 13045-9385
Phone: (607) 753-9334 Fax: (607) 753-9699
http://www.fws.gov/northeast/nyfo/es/section7.htm

In Reply Refer To: May 25, 2021
Consultation Code: 05E1NY00-2021-SLI-2775
Event Code: 05E1NY00-2021-E-08702
Project Name: Blind Sodus Bay Western Bluff Erosion Mitigation Project

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 *et seq.*). This list can also be used to determine whether listed species may be present for projects without federal agency involvement. New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list.

Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the ESA, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC site at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list. If listed, proposed, or candidate species were identified as potentially occurring in the project area, coordination with our office is encouraged. Information on the steps involved with assessing potential impacts from projects can be found at: http://www.fws.gov/northeast/nyfo/es/section7.htm

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the Services wind

energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the ESA. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

New York Ecological Services Field Office
3817 Luker Road
Cortland, NY 13045-9385
(607) 753-9334

Project Summary

Consultation Code: 05E1NY00-2021-SLI-2775
Event Code: 05E1NY00-2021-E-08702
Project Name: Blind Sodus Bay Western Bluff Erosion Mitigation Project
Project Type: LAND - PRESERVATION
Project Description: Along the shoreline of Lake Ontario, at the end of West Blind Sodus Bay Road, Wolcott, NY 14490, about 1020 lf of bluff face is eroding at 20-30 feet annually with 12 properties, 3 utilities and local access to these properties are at risk for complete loss. Since 2018, over 45 trees have been lost over the 28-35' embankment and an estimated 2 acres of land. The fall of 2019, 220 lf of the area was protected to immediately stop the erosion to a sewer line. This project is an extension of that project and will potentially be implemented in the fall of 2021. This is part of the NYS REDI program.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@43.3405358,-76.7348807328083,14z

Counties: Wayne County, New York

Endangered Species Act Species

There is a total of 0 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

---

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

NEW YORK STATE OF OPPORTUNITY. | Department of Environmental Conservation

STRUCTURAL ARCHAEOLOGICAL ASSESSMENT FORM (SAAF)
Supplement to the Joint Application Form

PART 1 – APPLICANT COMPLETES

APPLICANT INFORMATION

1. Applicant Name: Wayne County Soil and Water Conservation District

2. Applicant Address: 7312 Route 31, Lyons, NY 14489

PROJECT INFORMATION

3. Project/Facility Name: REDI - Blind Sodus Bay Western Bluff

4. Project/Facility Location: North terminus of West Blind Sodus Bay Road, Wolcott NY 14590 at the Lake Ontario shoreline.

5. Is the proposed project adjacent to, or does it contain a building or structure listed in the State or National Register of Historic Places? ☐ Yes ☒ No

6. Are there any buildings or structures 50 years old or older adjacent to or within the proposed project area? ☒ Yes ☐ No

If the answer to question 5 and /or 6 is yes, provide the following information for each building and structure (use attachments if necessary):

a. Name of structure: Livingston Parcel and DeLuca Parcel

b. Location: 9542 Blind Sodus Bay Road (Livingston Parcel)
9489 Blind Sodus Bay Road (DeLuca Parcel)

c. Type of structure (ex. house, outbuilding, barn, bridge, dam, ruins): Both are "Seasonal Residences"

d. Approximate age or date of construction: Livingston = 1940; DeLuca = 1965

7. Might the proposed project have any impact (physical/visual) upon any buildings or structures listed in the State or National Register of Historic Places or 50 years old or older? ☐ Yes ☒ No

If yes, describe briefly (use attachments if necessary):

APPLICANT SECTION CONTINUES ON REVERSE SIDE

8. Provide photographs of every building and structure that may be impacted by the project as described in number 7, on the opposite side of this page. The following standards are recommended:

- Minimum of 2 photographs
- Photographs must be 3.5" x 5" in size or larger
- Photos must be clear and focused
- Digital photographs must be printed on photo paper and be produced at a printer setting of a minimum of 600 dpi
- Clearly label photos so it is obvious what is being illustrated; key photos to map or plan, if possible
- Photo 1: show both the entire front and side of the structure in a single shot from as close to the building as possible. Be sure the structure is not partially or fully blocked by trees or other obstructions
- Photo 2: show relationship of building or structure to roadway or surroundings

9. Has the land within the proposed project area been previously disturbed or altered (excavated, landscaped, filled, utilities installed)? ■ Yes ☐ No

If yes, describe briefly, including depth of disturbance (use attachments if necessary):

The property owner previously constructed a 10 foot tall +/- timber and concrete bulkhead to protect their parcel from lake erosion along the eastern project limits. The existing bulkhead will remain and be upgraded.

10. Approximate percentage of proposed project area with slopes:

- 0-10% ____ %
- 10-15% ____%
- 15% or greater 100 ____%

11. Approximate percentage of proposed project site with the following drainage characteristics:

- Well drained ____%
- Moderately well drained 45 ____%
- Poorly drained 55 ____%

Prepared By (Print or type name): Lindsey M. Gerstenslager

Signature: LMG Date: 5/25/21

RESET PART 1

PART 2 – DEPARTMENT OF ENVIRONMENTAL CONSERVATION (DEC) COMPLETES

APPLICANT/PROJECT INFORMATION

1.Applicant Name:

2. Project/Facility Name:

3. DEC Number:

BUILDINGS AND STRUCTURES

4. Might the proposed project have any impact (physical/visual) upon any buildings or structures listed in the State or National Register of Historic Places or 50 years old or older? ☐ Yes ☐ No

If yes, DEC must consult with the Office of Parks, Recreation and Historic Preservation (OPRHP). DEC must request a determination of eligibility for the State Register of Historic Places and/or comments regarding project impact. Include information supplied by the applicant in response to questions 5, 6, 7 and 8 of **Part 1** of this form.

ARCHAEOLOGICAL SITES

5. Does the proposed project area coincide with a circle, square or stippled area on OPRHP's Statewide Archaeological Inventory Map? ☐ Yes ☐ No

6. Is the proposed project area outside of a circle or square, but one for which information has been provided (ex: documented reports of known sites) that suggests the area is archaeologically sensitive? ☐ Yes ☐ No

If yes, what is the nature and source of information?

7. Is the proposed project area apparently undisturbed? ☐ Yes ☐ No

8. Will the proposed action include a physical disturbance of the project area? ☐ Yes ☐ No

9. Is the slope in the area characteristically less than 15% (unless on limestone/flint escarpments)? ☐ Yes ☐ No

DEC SECTION CONTINUES ON REVERSE SIDE

10. Is the proposed project area characteristically moderately well or well drained? ☐ Yes ☐ No

If the answers to 5, 7-10 are yes, an archeological survey should be performed by the applicant. Provide the applicant with a copy of or the link to the *State Historic Preservation Office Phase 1 Archaeological Report Format Requirements (08/05)*.

If the answer to 5 is no, but answers to 6-10 are yes, DEC must consult with OPRHP before requiring that the applicant perform an archaeological survey.

RESULTS OF EVALUATION

☐ SHPA-1 No buildings, structures or archaeological sites identified at the project location.

☐ SHPA-2 Buildings, structures or archaeological sites identified, but no impacts will occur, no survey required. No further cultural resources review required.

☐ Consultation by DEC with OPRHP required. ☐ Structures ☐ Archaeology

☐ Archaeological survey required.

Prepared by: Date:

RESET PART 2

Blind Sodus Bay, Wayne County, NY

Boring Location Layout

PROPOSED GABION EXTENSION

2019 GABION WALL

PROPOSED GABION EXTENSION

BORING B-5

#9542 Livingston

#9530 Bieber

Robert Schneider

#9463 Zona

#9471 Zona

#9479 Koch

#9475 Koch

#9489 Deluca

Robert Schneider

BORINGS (2018)

BORING B-4

BORING B-1

BORING B-2

BORING B-3

#9514 Leonhort

#9518 Swan

Google Earth

©2019 Google

200 ft