

Stormwater Pollution Prevention Plan (SWPPP)

For Construction Activities At:

The Nemasket Street Lots
Map 69, blocks 86 through 93 and blocks 96 through 100
New Bedford, Massachusetts 02740

SWPPP Prepared For:

City of New Bedford
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SWPPP Prepared By:

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SWPPP Preparation Date:

09/12/2018

Estimated Project Dates:

Project Start Date: 09/24/2018

Project Completion Date: 05/31/2019

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SECTION 1: CONTACT INFORMATION/RESPONSIBLE PARTIES

1.1 Operator(s) / Subcontractor(s)

Instructions (see definition of “operator” at CGP Part 1.1.1):

- Identify the operator(s) who will be engaged in construction activities at the site. Indicate respective responsibilities, where appropriate. Also include the 24-hour emergency contact.
- List subcontractors expected to work on-site. Notify subcontractors of stormwater requirements applicable to their work.
- Consider using Subcontractor Agreements such as the type included as a sample in Appendix G of the Template.

Operator(s):

City of New Bedford
Department of Environmental Stewardship
Ms. Michele S. W. Paul
133 William Street
New Bedford, Massachusetts, 02740
(508) 991-6188
Michele.Paul@newbedford-ma.gov

Subcontractor(s):

City of New Bedford
Department of Public Infrastructure
Mr. Dan Perry
Supt. Of Water Construction
1105 Shawmut Ave. New Bedford, Massachusetts 02746
(508) 509-2219
dperry@newbedford-ma.gov
(Soil Excavation, Construction, SWPPP Implementation)

TRC Environmental Corporation
James Doherty, PE, LSP
(978) 970-5600 ext. 3680
JDoherty@trcsolutions.com
(Project Environmental Coordinator, Soil Management Oversight, SWPPP Inspections and Oversight)

Emergency 24-Hour Contact:

City of New Bedford
Michele Paul
(508) 816-5777

1.2 Stormwater Team

Instructions (see CGP Part 7.2.2):

- Identify the individuals (by name or position) that are part of the project's stormwater team, their individual responsibilities, and which members are responsible for inspections. At a minimum the stormwater team is comprised of individuals who are responsible for overseeing the development of the SWPPP, any later modifications to it, and for compliance with the permit requirements (i.e., installing and maintaining stormwater controls, conducting site inspections, and taking corrective actions where required).
- Each member of the stormwater team must have ready access to either an electronic or paper copy of applicable portions of the 2017 CGP and the SWPPP.

| Stormwater Team | | |
|---|---|---|
| Name and/or position, and contact | Responsibilities | I Have Read the CGP and Understand the Applicable Requirements |
| City of New Bedford Michele Paul 508-991-6188 Michele.Paul@newbedford-ma.gov | Responsible for overseeing the development of the SWPPP, any later modifications to it, and for compliance with the permit requirements. | <input checked="" type="checkbox"/> Yes Date: 8/30/2018 |
| James Doherty Senior Engineer 978-970-5600 JDoherty@trcsolutions.com | Responsible for on-site implementation of the SWPPP, identification of the need to modify the SWPPP, as necessary, and ensuring on-site compliance with permit requirements. Responsible for ensuring that required inspections are performed and documented. | <input checked="" type="checkbox"/> Yes Date: 8/30/2018 |
| To be determined at time of field work | Responsible for performing and documenting site inspections. Responsible for day-to-day review of site construction activities and reporting of issues to project manager. | <input type="checkbox"/> Yes Date: Click here to enter a date. |

SECTION 2: SITE EVALUATION, ASSESSMENT, AND PLANNING

2.1 Project/Site Information

Instructions (see “Project/Site Information” section of Appendix J – NOI form):

- In this section, you are asked to compile basic site information that will be helpful when you file your NOI.

Project Name and Address

Project/Site Name: [Nemasket Street Lots](#)

Project Street/Location: [Bounded by Hathaway Blvd. to the East, bounded by Ruggles St. to the South, bounded by Keith Middle School to the North and 139 Ruggles St. to the West](#)

City: [New Bedford](#)

State: [Massachusetts](#)

ZIP Code: [02740](#)

County or Similar Subdivision: [Bristol](#)

Business days and hours for the project: [Monday through Friday 7:00 am to 5:00 pm](#)

Project Latitude/Longitude

Latitude: 41°38' 38.35" N

Longitude: - 70 °56'57.1" W

Latitude/longitude data source:

☐ Map ☐ GPS ☒ Other (please specify): [ESRI ArcGIS Software](#)

Horizontal Reference Datum:

☐ NAD 27 ☒ NAD 83 ☐ WGS 84

Additional Project Information

Are you requesting permit coverage as a “federal operator” as defined in [Appendix A](#) of the 2017 CGP? ☐ Yes ☒ No

Is the project/site located on Indian country lands, or located on a property of religious or cultural significance to an Indian tribe? ☐ Yes ☒ No

If yes, provide the name of the Indian tribe associated with the area of Indian country (including the name of Indian reservation if applicable), or if not in Indian country, provide the name of the Indian tribe associated with the property: [Insert Text Here](#)

If you are conducting earth-disturbing activities in response to a public emergency, document the cause of the public emergency (e.g., *natural disaster, extreme flooding conditions*), information substantiating its occurrence (e.g., *state disaster declaration*), and a description of the construction necessary to reestablish effective public services: [Insert Text Here](#)

2.2 Discharge Information

Instructions (see “Discharge Information” section of Appendix J – NOI form):

- In this section, include information relating to your site's discharge. This information corresponds to the “Discharge Information” section of the NOI form.
- List all of the stormwater points of discharge from your site. Identify each point of discharge with a unique 3-digit ID (e.g., 001, 002).
- For each unique point of discharge you list, specify the name of the first water of the U.S. that receives stormwater directly from the point of discharge and/or from the MS4 that the point of discharge discharges to. You may have multiple points of discharge that discharge to the same receiving water.
- Next, specify whether any waters of the U.S. that you discharge to are listed as “impaired” as defined in [Appendix A](#), and the pollutants causing the impairment. Identify any Total Maximum Daily Loads (TMDL) that have been completed for any of the waters of the U.S. that you discharge to and the pollutants for which there is a TMDL. For more information on impaired waters and TMDLs, including a list of TMDL contacts and links by state, visit <https://www.epa.gov/tmdl>.
- Finally, indicate whether any water of the U.S. that you discharge to is designated as a Tier 2, Tier 2.5, or Tier 3 water and if so, what the designation is (2, 2.5, or 3). A list of Tier 2, 2.5, and 3 waters is provided in [Appendix F](#).

Does your project/site discharge stormwater into a Municipal Separate Storm Sewer System (MS4)? ☐ Yes ☒ No

Are there any waters of the U.S. within 50 feet of your project's earth disturbances? ☒ Yes ☐ No

For each point of discharge, provide a point of discharge ID (a unique 3-digit ID, e.g., 001, 002), the name of the first water of the U.S. that receives stormwater directly from the point of discharge and/or from the MS4 that the point of discharge discharges to, and the following receiving water information, if applicable:

| Point of Discharge ID | Name of receiving water: | Is the receiving water impaired (on the CWA 303(d) list)? | If yes, list the pollutants that are causing the impairment: | Has a TMDL been completed for this receiving water-body? | If yes, list TMDL Name and ID: | Pollutant(s) for which there is a TMDL: | Is this receiving water designated as a Tier 2, Tier 2.5, or Tier 3 water? | If yes, specify which Tier (2, 2.5, or 3)? |
|-----------------------|---|---|--|---|--------------------------------|---|--|--|
| [001] | Unnamed wetland ultimately discharging to the Apponagansett Swamp | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Tier 2 |

2.3 Nature of the Construction Activities

Instructions (see CGP Parts 1.2.1.c and 7.2.3):

- Provide a general description of the nature of the construction activities at your site.
- Describe the size of the property (in acres or in miles if a linear construction site), the total area expected to be disturbed by the construction activities (to the nearest quarter acre or quarter mile if a linear construction site), and the maximum area expected to be disturbed at any one time.
- Indicate the type of construction site, whether there will be certain demolition activities, and whether the predevelopment land use was for agriculture.
- Provide a list and description of all pollutant-generating activities (e.g., paving operations; concrete, paint, and stucco washout and waste disposal; solid waste storage and disposal; and dewatering operations) and indicate for each activity the type of pollutant that will be generated (e.g., sediment, fertilizers, pesticides, paints, caulks, sealants, fluorescent light ballasts, contaminated substrates, solvents, fuels) and could be discharged in stormwater from your site.
- Describe the construction support activities covered by this permit (see Part 1.2.1.c of the permit).

General Description of Project

Provide a general description of the nature of your construction activities, including the age dates of past renovations for structures that are undergoing demolition:

The work will be conducted in two phases. Phase I includes: installation of sedimentation and erosion control measures, surface soil removal, removal of peat from the bottom of the isolated wetland, filling, construction of a retaining wall, installation and rough grading of an exposure

barrier and installing temporary soil stabilization. Work will be suspended once rough grading and soil stabilization is complete to allow a peat deposit located approximately 10 feet below grade to compact in response to the weight of the additional soil added to the site. Phase II will include re-grading the surface soils and installation of a synthetic turf soccer field. Depending on the timing of the implementation (which is, in part, dependent on EPA approval of the remedial design), TRC anticipates that, the overall construction of the Project will occur over a period between 16 and 36 weeks (dependent on if the project extends over the winter). The Project will involve the following construction activities:

- Grubbing and removal of 6 inches of topsoil across the site, screening, and stockpiling on-site and/or direct loading into lined roll-offs;
- Excavation and if necessary, dewatering and re-infiltration of dewatering liquids to a location near the point of excavation of peat excavated from the bottom of the isolated wetland in the western portion of the site in accordance with applicable state and federal regulations;
- Excavation/grading of soils to support the construction of an exposure barrier;
- Temporary on-site storage of unsuitable PCB Remediation Waste in roll-offs prior to off-site disposal. On-site stockpiling of excavated material suitable for reuse. Drawings 5 and 6 provides details of the remediation waste stockpile configuration and locations;
- On-site reuse of non-PCB Remediation Waste excavated soils;
- Off-site disposal of geotechnically unusable excavated PCB non-PCB Remediation Waste Soil;
- Off-site disposal of remediation generated wastes (i.e., decontamination solvents, rags, etc.);
- Preparation of the subgrade for the future use of the Site as an athletic field containing a synthetic turf soccer field;
- Construction of a clean exposure barrier and installation of the synthetic turf soccer field.

Size of Construction Site

| | |
|--|------------|
| Size of Property | 2.15 acres |
| Total Area Expected to be Disturbed by Construction Activities | 1.89 acres |
| Maximum Area Expected to be Disturbed at Any One Time | 1.89 acres |

Type of Construction Site (check all that apply):

☐ Single-Family Residential
 ☐ Multi-Family Residential
 ☐ Commercial
 ☐ Industrial
☐ Institutional
☐ Highway or Road
☐ Utility
☒ Other Artificial Turf Soccer Field

Will there be demolition of any structure built or renovated before January 1, 1980?

☐ Yes ☒ No

If yes, do any of the structures being demolished have at least 10,000 square feet of floor space?

☐ Yes ☐ No ☒ N/A

Was the pre-development land use used for agriculture (see [Appendix A](#) for definition of "agricultural land")?

☐ Yes ☒ No

2.4 Sequence and Estimated Dates of Construction Activities

Instructions (see CGP Part 7.2.5):

- Describe the intended construction sequence and duration of major activities.
- For each portion or phase of the construction site, include the following:
 - ✓ Commencement and duration of construction activities, including clearing and grubbing, mass grading, demolition activities, site preparation (i.e., excavating, cutting and filling), final grading, and creation of soil and vegetation stockpiles requiring stabilization;
 - ✓ Temporary or permanent cessation of construction activities;
 - ✓ Temporary or final stabilization of areas of exposed soil. The dates for stabilization must reflect the applicable deadlines to which you are subject to in Part 2.2.14; and
 - ✓ Removal of temporary stormwater controls and construction equipment or vehicles, and cessation of any pollutant-generating activities.
- The construction sequence must reflect the following requirements:
 - ✓ Part 2.1.3 (installation of stormwater controls); and
 - ✓ Parts 2.2.14 (stabilization deadlines).

Phase I

| | |
|--|------------------------------------|
| Site Preparation, Filling and Rough Grading | |
| Estimated Start Date of Construction Activities for this Phase | 9/24/2018 |
| Estimated End Date of Construction Activities for this Phase | 10/22/2018 |
| Estimated Date(s) of Application of Stabilization Measures for Areas of the Site Required to be Stabilized | 10/15/2018 |
| Estimated Date(s) when Stormwater Controls will be Removed | At End of Phase II |

Phase II

| | |
|--|---------------------------|
| Final Grading and Installation of Artificial Turf Soccer Field | |
| Estimated Start Date of Construction Activities for this Phase | 4/8/2019 |
| Estimated End Date of Construction Activities for this Phase | 5/31/2019 |
| Estimated Date(s) of Application of Stabilization Measures for Areas of the Site Required to be Stabilized | 5/20/2019 |
| Estimated Date(s) when Stormwater Controls will be Removed | 6/7/2019 |

2.5 Authorized Non-Stormwater Discharges

Instructions (see CGP Parts 1.2.2 and 7.2.5):

- Identify all authorized sources of non-stormwater discharges. The authorized non-stormwater discharges identified in Part 1.2.2 of the 2017 CGP include:
 - ✓ Discharges from emergency fire-fighting activities;
 - ✓ Fire hydrant flushings;
 - ✓ Landscape irrigation;
 - ✓ Waters used to wash vehicles and equipment, provided that there is no discharge of soaps, solvents, or detergents used for such purposes;
 - ✓ Water used to control dust;
 - ✓ Potable water including uncontaminated water line flushings;
 - ✓ External building washdown, provided soaps, solvents and detergents are not used, and external surfaces do not contain hazardous substances (e.g., paint or caulk containing PCBs);
 - ✓ Pavement wash waters provided spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and detergents are not used. You are prohibited from directing pavement wash waters directly into any water of the U.S., storm drain inlet, or stormwater conveyance, unless the conveyance is connected to a sediment basin, sediment trap, or similarly effective control;
 - ✓ Uncontaminated air conditioning or compressor condensate;
 - ✓ Uncontaminated, non-turbid discharges of ground water or spring water;
 - ✓ Foundation or footing drains where flows are not contaminated with process materials such as solvents or contaminated ground water; and
 - ✓ Construction dewatering water discharged in accordance with Part 2.4.

List of Authorized Non-Stormwater Discharges Present at the Site

| Type of Authorized Non-Stormwater Discharge | Likely to be Present at Your Site? |
|--|---|
| Discharges from emergency fire-fighting activities | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Fire hydrant flushings | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Landscape irrigation | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Waters used to wash vehicles and equipment | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Water used to control dust | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| Potable water including uncontaminated water line flushings | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| External building washdown (soaps/solvents are not used and external surfaces do not contain hazardous substances) | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Pavement wash waters | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Uncontaminated air conditioning or compressor condensate | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |

| | |
|---|---|
| Uncontaminated, non-turbid discharges of ground water or spring water | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Foundation or footing drains | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Construction dewatering water | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |

(Note: You are required to identify the likely locations of these authorized non-stormwater discharges on your site map. See Section 2.6, below, of the SWPPP Template.)

2.6 Site Maps

Instructions (see CGP Part 7.2.4):

- Attach site maps in Appendix A of the Template. For most projects, a series of site maps is necessary and recommended. The first should show the undeveloped site and its current features. An additional map or maps should be created to show the developed site or, for more complicated sites, show the major phases of development.

These maps must include the following features:

- Boundaries of the property and of the locations where construction will occur, including:
 - ✓ Locations where earth-disturbing activities will occur, noting any phasing of construction activities and any demolition activities;
 - ✓ Approximate slopes before and after major grading activities. Note areas of steep slopes, as defined in CGP Appendix A;
 - ✓ Locations where sediment, soil, or other construction materials will be stockpiled;
 - ✓ Locations of any crossings of waters of the U.S.;
 - ✓ Designated points where vehicles will exit onto paved roads;
 - ✓ Locations of structures and other impervious surfaces upon completion of construction; and
 - ✓ Locations of on-site and off-site construction support activity areas covered by this permit (see Part 1.2.1.c).
- Locations of all waters of the U.S., including wetlands, on your site and within one mile downstream of the site's discharge point. Indicate which waterbodies are listed as impaired, and which are identified by your state, tribe, or EPA as Tier 2, Tier 2.5, or Tier 3 waters.
- Areas of federally-listed critical habitat for endangered or threatened species within the site and/or at discharge locations.
- Type and extent of pre-construction cover on the site (e.g., vegetative cover, forest, pasture, pavement, structures)
- Drainage pattern(s) of stormwater and authorized non-stormwater before and after major grading activities.
- Stormwater and authorized non-stormwater discharge locations, including:
 - ✓ Locations where stormwater and/or authorized non-stormwater will be discharged to storm drain inlets; and
 - ✓ Locations where stormwater or allowable non-stormwater will be discharged to waters of the U.S. (including wetlands).
- Locations of all potential pollutant-generating activities.
- Locations of stormwater controls, including natural buffer areas and any shared controls utilized to comply with the permit.
- Locations where polymers, flocculants, or other treatment chemicals will be used and stored.

Site maps are included as Drawings 1 through 6. Drawing 1 shows the Site's Existing Conditions. The final grading plan and completed site plan are shown in Drawing 2. Drawing 2a shows the rough grading and drainage plan. Drawing 3 provides grading sections and exposure barrier details. Drawing 4 provides site grading and drainage details. Drawing 5 provides the erosion control plan and Drawing 6 provides the Erosion Control Notes and details.

SECTION 3: DOCUMENTATION OF COMPLIANCE WITH OTHER FEDERAL REQUIREMENTS

3.1 Endangered Species Protection

Instructions (see CGP Parts 1.1.5, 7.2.9.a, Appendix D, and the “Endangered Species Protection” section of the Appendix J – NOI form):

Using the instructions in [Appendix D](#) of the permit, determine under which criterion listed below (A-F) you are eligible for coverage under this permit with respect to the protection of endangered species. To make this determination, you must use information from **BOTH** the National Marine Fisheries Service (NMFS) and U.S. Fish and Wildlife Service (USFWS). Both the NMFS and USFWS maintain lists of Endangered Species Act-listed (ESA-listed) species and designated critical habitat. Operators must consult both when determining their eligibility.

- Check only 1 box, include the required information and provide a sound basis for supporting the criterion selected. Select the most conservative criterion that applies
- Include documentation supporting your determination of eligibility.
- A step-by-step guide and flow-chart on ESA provisions for EPA's CGP is available at <https://www.epa.gov/npdes/stormwater-discharges-construction-activities#species>

Eligibility Criterion

Under which criterion listed in [Appendix D](#) are you eligible for coverage under this permit?

- ☒ **Criterion A: No ESA-listed species and/or designated critical habitat present in action area.**

Using the process outlined in Appendix D of this permit, you certify that ESA-listed species and designated critical habitat(s) under the jurisdiction of the USFWS or NMFS are not likely to occur in your site's "action area" as defined in Appendix A of this permit.

Basis statement content/Supporting documentation: A basis statement supporting the selection of Criterion A should identify the USFWS and NMFS information sources used. Attaching aerial image(s) of the site to your NOI is helpful to EPA, USFWS, and NMFS in confirming eligibility under this criterion. Please Note: NMFS' jurisdiction includes ESA-listed marine and estuarine species that spawn in inland rivers. Check the applicable source(s) of information you relied upon:

- ☐ Specific communication with staff of the USFWS and/or NMFS
- ☐ Species list from USFWS and/or NMFS. See the [CGP ESA webpage, Step 2](#) for available websites.

Massachusetts Division of Fish and Wildlife Natural Heritage and Endangered Species Program (NHESP) maintains a list and database of mapping of rare, threatened and endangered species in Massachusetts, including species protected under the state and federal Endangered Species Acts. TRC reviewed the NHESP polygon mapping on the MassGIS Data View (<http://www.mass.gov/mgis/mapping.htm>) effective August 1, 2017 in the vicinity of the Project area. There are no "Estimated" or "Priority" habitats for rare, threatened or endangered species near the Project. An image of the priority resource map is included in Appendix K.

TRC also reviewed occurrence information for federally threatened and endangered species, candidate species, and critical habitat on the US Fish and Wildlife Service (USFWS), New England Region, website at: <http://www.fws.gov/newengland/EndangeredSpec->

[Consultation_Project_Review.htm](#) and at <http://criticalhabitat.fws.gov/>. No known occurrences of critical habitat are documented in New Bedford. The Roseate Tern is a federally listed endangered species in New Bedford. Since the Roseate Tern generally nests on sandy, gravelly, or rocky islands and in small numbers at the ends of long barrier beaches, the proposed project action area does not have potential as habitat for the listed species. In accordance with the consultation guidelines developed by the USFWS, New England Region, for Section 7 review under the Endangered Species Act, no further consultation is necessary (see Appendix K).

In addition, TRC reviewed the National Oceanic and Atmospheric Administration National Marine Fisheries (NMFS) critical habitat maps at:

<http://www.nmfs.noaa.gov/pr/species/criticalhabitat.htm>. No NMFS-designated critical habitat is located in the vicinity of the Project.

-
- ☐ **Criterion B:** Eligibility requirements met by another operator under the 2017 CGP. The construction site's discharges and discharge-related activities were already addressed in another operator's valid certification of eligibility for your "action area" under eligibility Criterion A, C, D, E, or F of the 2017 CGP and you have confirmed that no additional ESA-listed species and/or designated critical habitat under the jurisdiction of USFWS and/or NMFS not considered in the that certification may be present or located in the "action area." To certify your eligibility under this criterion, there must be no lapse of NPDES permit coverage in the other CGP operator's certification. By certifying eligibility under this criterion, you agree to comply with any conditions upon which the other CGP operator's certification was based. You must include in your NOI the NPDES ID from the other 2017CGP operator's notification of authorization under this permit. If your certification is based on another 2017 CGP operator's certification under criterion C, you must provide EPA with the relevant supporting information required of existing dischargers in criterion C in your NOI form.

Basis statement content/Supporting documentation: A basis statement supporting the selection of Criterion B should identify the eligibility criterion of the other CGP NOI, the authorization date, and confirmation that the authorization is effective.

- ✓ Provide the 9-digit NPDES ID number from the other operator's NOI under the 2017 CGP: _____
- ✓ Authorization date of the other 2017 CGP operator: [INSERT AUTHORIZATION DATE OF OTHER OPERATOR](#)
- ✓ Eligibility criterion of the other 2017 CGP operator: ☐A ☐C ☐D ☐E ☐F
- ✓ Provide a brief summary of the basis the other operator used for selecting criterion A, C, D, E, or F: [INSERT TEXT HERE](#)

-
- ☐ **Criterion C:** Discharges not likely to adversely affect ESA-listed species and/or designated critical habitat. ESA-listed species and/or designated critical habitat(s) under the jurisdiction of the USFWS and/or NMFS are likely to occur in or near your site's "action area," and you certify to EPA that your site's discharges and discharge-related activities are not likely to adversely affect ESA-listed threatened or endangered species and/or designated critical habitat. This certification may include consideration of any stormwater controls and/or management practices you will adopt to ensure that your discharges and discharge-related activities are not likely to adversely affect ESA-listed species and/or designated critical habitat. To certify your eligibility under this criterion, indicate 1) the ESA-

listed species and/or designated habitat located in your “action area” using the process outlined in Appendix D of this permit; 2) the distance between the site and the listed species and/or designated critical habitat in the action area (in miles); and 3) a rationale describing specifically how adverse effects to ESA-listed species will be avoided from the discharges and discharge-related activities. You must also include a copy of your site map from your SWPPP showing the upland and in-water extent of your “action area” with this NOI.

Basis statement content/Supporting documentation: A basis statement supporting the selection of Criterion C should identify the information resources and expertise (e.g., state or federal biologists) used to arrive at this conclusion. Any supporting documentation should explicitly state that both ESA-listed species and designated critical habitat under the jurisdiction of the USFWS and/or NMFS were considered in the evaluation.

- ✓ Resources used to make determination: [INSERT RESOURCES YOU USED TO DETERMINE THAT DISCHARGES ARE NOT LIKELY TO ADVERSELY AFFECT ESA-LISTED SPECIES OR DESIGNATED CRITICAL HABITAT](#)
- ✓ ESA-listed Species/Critical Habitat in action area: [INSERT LIST OF ESA-LISTED SPECIES OR DESIGNATED CRITICAL HABITAT LOCATED IN YOUR ACTION AREA](#)
- ✓ Distance between site and ESA-listed Species/Critical Habitat: [INSERT DISTANCE BETWEEN YOUR SITE AND THE ESA-LISTED SPECIES OR CRITICAL HABITAT \(in miles\)](#)
- ✓ How adverse effects will be avoided: [DESCRIBE SPECIFICALLY HOW ADVERSE EFFECTS TO ESA-LISTED SPECIES WILL BE AVOIDED FROM THE DISCHARGES AND DISCHARGE-RELATED ACTIVITIES](#)

☐ **Criterion D:** Coordination with USFWS and/or NMFS has successfully concluded.

Coordination between you and the USFWS and/or NMFS has concluded. The coordination must have addressed the effects of your site’s discharges and discharge-related activities on ESA-listed species and/or designated critical habitat under the jurisdiction of USFWS and/or NMFS, and resulted in a written concurrence from USFWS and/or NMFS that your site’s discharges and discharge-related activities are not likely to adversely affect listed species and/or critical habitat. You must include copies of the correspondence with the participating agencies in your SWPPP and this NOI.

Basis statement content/Supporting documentation: A basis statement supporting the selection of Criterion D should identify whether USFWS or NMFS or both agencies participated in coordination, the field office/regional office(s) providing that coordination, and the date that coordination concluded.

- ✓ Agency coordinated with: ☐ USFWS ☐ NMFS
- ✓ Field/regional office(s) providing coordination: [INSERT FIELD/REGIONAL OFFICE\(S\) PROVIDING COORDINATION](#)
- ✓ Date coordination concluded: [INSERT DATE COORDINATION CONCLUDED](#)
- ✓ Attach copies of any letters or other communication between you and the U.S. Fish & Wildlife Service or National Marine Fisheries Service concluding coordination activities.

☐ **Criterion E:** ESA Section 7 consultation has successfully concluded. Consultation between a Federal Agency and the USFWS and/or NMFS under section 7 of the ESA has concluded. The consultation must have addressed the effects of the construction site’s discharges and discharge-related activities on ESA-listed species and/or designated critical habitat under

the jurisdiction of USFWS and/or NMFS. To certify eligibility under this criterion, Indicate the result of the consultation:

- ☐ Biological opinion from USFWS and/or NMFS that concludes that the action in question (taking into account the effects of your site's discharges and discharge-related activities) is not likely to jeopardize the continued existence of listed species, nor the destruction or adverse modification of critical habitat; or
- ☐ Written concurrence from USFWS and/or NMFS with a finding that the site's discharges and discharge-related activities are not likely to adversely affect ESA-listed species and/or designated critical habitat. You must include copies of the correspondence between yourself and the USFWS and/or NMFS in your SWPPP and this NOI.

Basis statement content/Supporting documentation: A basis statement supporting the selection of Criterion E should identify the federal action agency(ies) involved, the field office/regional office(s) providing that consultation, any tracking numbers of identifiers associated with that consultation (e.g., IPaC number, PCTS number), and the date the consultation was completed.

- ✓ Federal agency(ies) involved: **INSERT FEDERAL AGENCY(IES) INVOLVED**
 - ✓ Field/regional office(s) providing consultation: **INSERT FIELD/REGIONAL OFFICE(S) PROVIDING CONSULTATION**
 - ✓ Tracking numbers associated with consultation: **INSERT CONSULTATION TRACKING NUMBER(S)**
 - ✓ Date consultation completed: **INSERT DATE CONSULTATION COMPLETED**
 - ✓ Attach copies of any letters or other communication between you and the U.S. Fish & Wildlife Service or National Marine Fisheries Service concluding consultation.
-

- ☐ **Criterion F: Issuance of section 10 permit.** Potential take is authorized through the issuance of a permit under section 10 of the ESA by the USFWS and/or NMFS, and this authorization addresses the effects of the site's discharges and discharge-related activities on ESA-listed species and designated critical habitat. You must include copies of the correspondence between yourself and the participating agencies in your SWPPP and your NOI.

Basis statement content/Supporting documentation: A basis statement supporting the selection of Criterion F should identify whether USFWS or NMFS or both agencies provided a section 10 permit, the field office/regional office(s) providing permit(s), any tracking numbers of identifiers associated with that consultation (e.g., IPaC number, PCTS number), and the date the permit was granted.

- ✓ Agency providing section 10 permit: ☐USFWS ☐NMFS
- ✓ Field/regional office(s) providing permit: **INSERT FIELD/REGIONAL OFFICE(S) PROVIDING PERMIT**
- ✓ Tracking numbers associated with consultation: **INSERT CONSULTATION TRACKING NUMBER(S)**
- ✓ Date permit granted: **INSERT DATE PERMIT GRANTED**
- ✓ Attach copies of any letters or other communication between you and the U.S. Fish & Wildlife Service or National Marine Fisheries Service.

3.2 Historic Preservation

Instructions (see CGP Part 1.1.6, 7.2.9.b, Appendix E, and the “Historic Preservation” section of the Appendix J – NOI form):

Follow the screening process in Appendix E of the permit for determining whether your installation of subsurface earth-disturbing stormwater controls will have an effect on historic properties.

- Include documentation supporting your determination of eligibility.
- To contact your applicable state or tribal historic preservation office, information is available at www.achp.gov/programs/html.

Appendix E, Step 1

Do you plan on installing any of the following stormwater controls at your site? Check all that apply below, and proceed to Appendix E, Step 2.

- ☐ Dike
- ☐ Berm
- ☒ Catch Basin
- ☐ Pond
- ☒ Stormwater Conveyance Channel (e.g., ditch, trench, perimeter drain, swale, etc.)
- ☐ Culvert
- ☐ Other type of ground-disturbing stormwater control:

Appendix E, Step 2

If you answered yes in Step 1, have prior surveys or evaluations conducted on the site already determined that historic properties do not exist, or that prior disturbances at the site have precluded the existence of historic properties? ☐ YES ☒ NO

- If yes, no further documentation is required for Section 3.2 of the Template.
- If no, proceed to Appendix E, Step 3.

Appendix E, Step 3

If you answered no in Step 2, have you determined that your installation of subsurface earth-disturbing stormwater controls will have no effect on historic properties? ☒ YES ☐ NO

If yes, provide documentation of the basis for your determination. [A review of the National Register of Historic Places database \(www.nps.gov/nr/research\) was conducted. No historic properties exist near the Project.](#)

If no, proceed to Appendix E, Step 4.

Appendix E, Step 4

If you answered no in Step 3, did the State Historic Preservation Officer (SHPO), Tribal Historic Preservation Office (THPO), or other tribal representative (whichever applies) respond to you

within 15 calendar days to indicate whether the subsurface earth disturbances caused by the installation of stormwater controls affect historic properties? ☐ YES ☐ NO

If no, no further documentation is required for Section 3.2 of the Template.

If yes, describe the nature of their response:

- ☐ Written indication that no historic properties will be affected by the installation of stormwater controls. **INSERT COPIES OF LETTERS, EMAILS, OR OTHER COMMUNICATION BETWEEN YOU AND THE APPLICABLE SHPO, THPO, OR OTHER TRIBAL REPRESENTATIVE**
- ☐ Written indication that adverse effects to historic properties from the installation of stormwater controls can be mitigated by agreed upon actions. **INSERT COPIES OF LETTERS, EMAILS, OR OTHER COMMUNICATION BETWEEN YOU AND THE APPLICABLE SHPO, THPO, OR OTHER TRIBAL REPRESENTATIVE**
- ☐ No agreement has been reached regarding measures to mitigate effects to historic properties from the installation of stormwater controls. **INSERT COPIES OF LETTERS, EMAILS, OR OTHER COMMUNICATION BETWEEN YOU AND THE APPLICABLE SHPO, THPO, OR OTHER TRIBAL REPRESENTATIVE**
- ☐ Other: **INSERT COPIES OF LETTERS, EMAILS, OR OTHER COMMUNICATION BETWEEN YOU AND THE APPLICABLE SHPO, THPO, OR OTHER TRIBAL REPRESENTATIVE**

3.3 Safe Drinking Water Act Underground Injection Control Requirements

Instructions (see CGP Part 7.2.9.c):

- If you will use any of the identified controls in this section, include documentation of contact between you and the applicable state agency or EPA Regional Office responsible for implementing the requirements for underground injection wells in the Safe Drinking Water Act and EPA's implementing regulations at 40 CFR Parts 144-147. \
- For state UIC program contacts, refer to the following EPA website:
<https://www.epa.gov/uic>.

Do you plan to install any of the following controls? Check all that apply below.

- ☒ Infiltration trenches (if stormwater is directed to any bored, drilled, driven shaft or dug hole that is deeper than its widest surface dimension, or has a subsurface fluid distribution system)
- ☐ Commercially manufactured pre-cast or pre-built proprietary subsurface detention vaults, chambers, or other devices designed to capture and infiltrate stormwater flow
- ☐ Drywells, seepage pits, or improved sinkholes (if stormwater is directed to any bored, drilled, driven shaft or dug hole that is deeper than its widest surface dimension, or has a subsurface fluid distribution system)

It is possible that a limited volume of dewatering liquids may be generated during dewatering of a small amount of peat (215 cubic yards) that will be excavated as part of the work. None of the constituents in groundwater at the site exceed applicable state or federal regulations. The dewatering liquids will be recharged to the subsurface near the point of extraction in accordance with applicable state and federal regulations.

SECTION 4: EROSION AND SEDIMENT CONTROLS

General Instructions (See CGP Parts 2.2 and 7.2.6):

- Describe the erosion and sediment controls that will be installed and maintained at your site.
- Describe any applicable stormwater control design specifications (including references to any manufacturer specifications and/or erosion and sediment control manuals/ordinances relied upon).
- Describe any routine stormwater control maintenance specifications.
- Describe the projected schedule for stormwater control installation/implementation.

4.1 Natural Buffers or Equivalent Sediment Controls

Instructions (see CGP Parts 2.2.1 and 7.2.6.b.i, and Appendix G):

This section only applies to you if a water of the U.S. is located within 50 feet of your site's earth disturbances. If this is the case, consult CGP Part 2.2.1 and Appendix G for information on how to comply with the buffer requirements.

- Describe the compliance alternative (CGP Part 2.2.1.a.i, ii, or iii) that was chosen to meet the buffer requirements, and include any required documentation supporting the alternative selected. The compliance alternative selected must be maintained throughout the duration of permit coverage. However, if you select a different compliance alternative during your period of permit coverage, you must modify your SWPPP to reflect this change.
- If you qualify for one of the exceptions in CGP Part 2.2.1.b, include documentation related to your qualification for such exceptions.

Buffer Compliance Alternatives

Are there any waters of the U.S. within 50 feet of your project's earth disturbances? ☒ YES ☐ NO

(Note: If no, no further documentation is required for Part 4.1 in the SWPPP Template. Continue on to Part 4.2.)

Check the compliance alternative that you have chosen:

- ☐ (i) I will provide and maintain a 50-foot undisturbed natural buffer.

(Note (1): You must show the 50-foot boundary line of the natural buffer on your site map.)

(Note (2): You must show on your site map how all discharges from your construction disturbances through the natural buffer area will first be treated by the site's erosion and sediment controls. Also, show on the site map any velocity dissipation devices used to prevent erosion within the natural buffer area.)

- ☒ (ii) I will provide and maintain an undisturbed natural buffer that is less than 50 feet and is supplemented by additional erosion and sediment controls, which in combination achieves the sediment load reduction equivalent to a 50-foot undisturbed natural buffer.

(Note (1): You must show the boundary line of the natural buffer on your site map.)

(Note (2): You must show on your site map how all discharges from your construction disturbances through the natural buffer area will first be treated by the site's erosion and sediment controls. Also, show on the site map any velocity dissipation devices used to prevent erosion within the natural buffer area.)

- The soil at the site is a fine sandy loam. Appendix G, Attachment 1 indicates that the estimated 50-foot buffer performance for a medium density weed cover in Massachusetts for this soil is 66% sediment removal.
- The minimum width of natural buffer to be retained is two feet.
- A double row of silt fencing will be installed along the boundary between the site and the wetland
- Based on the results of testing by Bugg, Donald, Zech and Perez presented in Water, 2017 V9 p. 502, Table 2, average sediment load reduction for a trenched silt fence ranged between 82.7% and 90.5%.
- Thus, a single row of sediment fence should be adequate to achieve the sediment removal equivalent to the natural buffer performance. A second row of silt fence will be installed along the wetland boundary to provide an additional factor of safety.

☐ (iii) It is infeasible to provide and maintain an undisturbed natural buffer of any size, therefore I will implement erosion and sediment controls that achieve the sediment load reduction equivalent to a 50-foot undisturbed natural buffer.

- INSERT RATIONALE FOR CONCLUDING THAT IT IS INFEASIBLE TO PROVIDE AND MAINTAIN A NATURAL BUFFER OF ANY SIZE
- INSERT EITHER ONE OF THE FOLLOWING:
(1) THE ESTIMATED SEDIMENT REMOVAL FROM A 50-FOOT BUFFER USING APPLICABLE TABLES IN APP. G, ATTACHMENT 1. INCLUDE INFORMATION ABOUT THE BUFFER VEGETATION AND SOIL TYPE THAT PREDOMINATE AT YOUR SITE

OR

- (2) IF YOU CONDUCTED A SITE-SPECIFIC CALCULATION FOR THE ESTIMATED SEDIMENT REMOVAL OF A 50-FOOT BUFFER, PROVIDE THE SPECIFIC REMOVAL EFFICIENCY, AND INFORMATION YOU RELIED UPON TO MAKE YOUR SITE-SPECIFIC CALCULATION.
- INSERT DESCRIPTION OF ADDITIONAL EROSION AND SEDIMENT CONTROLS TO BE USED IN COMBINATION WITH NATURAL BUFFER AREA
- INSERT THE FOLLOWING INFORMATION:
 - (1) SPECIFY THE MODEL OR OTHER TOOL USED TO ESTIMATE SEDIMENT LOAD REDUCTIONS FROM THE EROSION AND SEDIMENT CONTROLS INSTALLED AT YOUR SITE, AND
 - (2) INCLUDE THE RESULTS OF CALCULATIONS SHOWING THAT THE ADDITIONAL EROSION AND SEDIMENT CONTROLS INSTALLED AT YOUR SITE WILL MEET OR EXCEED THE SEDIMENT REMOVAL EFFICIENCY OF A 50-FOOT BUFFER

☐ I qualify for one of the exceptions in Part 2.2.1.b. (If you have checked this box, provide information on the applicable buffer exception that applies, below.)

Buffer Exceptions

Which of the following exceptions to the buffer requirements applies to your site?

- ☐ There is no discharge of stormwater to the water of the U.S. that is located 50 feet from my construction disturbances.

(Note: If this exception applies, no further documentation is required for Section 4.1 of the Template.)

- ☐ No natural buffer exists due to preexisting development disturbances that occurred prior to the initiation of planning for this project.
- (Note (1): If this exception applies, no further documentation is required for Section 4.1 of the Template.)
- (Note (2): Where some natural buffer exists but portions of the area within 50 feet of the surface water are occupied by preexisting development disturbances, you must still comply with the one of the CGP Part 2.2.1.a compliance alternatives.)
- ☐ For a "linear construction sites" (defined in Appendix A), site constraints (e.g., limited right-of-way) make it infeasible to meet any of the CGP Part 2.2.1.a compliance alternatives. **INCLUDE DOCUMENTATION HERE OF THE FOLLOWING: (1) WHY IT IS INFEASIBLE FOR YOU TO MEET ONE OF THE BUFFER COMPLIANCE ALTERNATIVES, AND (2) BUFFER WIDTH RETAINED AND/OR SUPPLEMENTAL EROSION AND SEDIMENT CONTROLS TO TREAT DISCHARGES TO THE SURFACE WATER**
- ☐ The project qualifies as "small residential lot" construction (defined in Appendix A) (see Appendix G, Part G.3.2).
- ☐ For Alternative 1:
- **INSERT WIDTH OF NATURAL BUFFER TO BE RETAINED**
 - **INSERT APPLICABLE REQUIREMENTS BASED ON TABLE G-1**
 - **INSERT DESCRIPTION OF HOW YOU WILL COMPLY WITH THESE REQUIREMENTS**
- ☐ For Alternative 2:
- **INSERT (1) THE ASSIGNED RISK LEVEL BASED ON APP. G APPLICABLE TABLE G-2 THROUGH G-6 AND (2) THE PREDOMINANT SOIL TYPE AND AVERAGE SLOPE AT YOUR SITE**
 - **INSERT APPLICABLE REQUIREMENTS BASED ON APP. G, TABLE G-7**
 - **INSERT DESCRIPTION OF HOW YOU WILL COMPLY WITH THESE REQUIREMENTS**
- ☐ Buffer disturbances are authorized under a CWA Section 404 permit. **INSERT DESCRIPTION OF ANY EARTH DISTURBANCES THAT WILL OCCUR WITHIN THE BUFFER AREA**
- (Note (1): If this exception applies, no further documentation is required for Section 4.1 of the Template.)
- (Note (2): This exception only applies to the limits of disturbance authorized under the Section 404 permit, and does not apply to any upland portion of the construction project.)
- ☐ Buffer disturbances will occur for the construction of a water-dependent structure or water access area (e.g., pier, boat ramp, and trail). **INSERT DESCRIPTION OF ANY EARTH DISTURBANCES THAT WILL OCCUR WITHIN THE BUFFER AREA**
- (Note (1): If this exception applies, no further documentation is required for Section 4.1 of the Template.)

4.2 Perimeter Controls

Instructions (see CGP Parts 2.2.3 and 7.2.6.b.ii):

- Describe sediment controls that will be used (e.g., silt fences, filter berms, temporary diversion dikes, or fiber rolls) to meet the Part 2.2.3 requirement to “install sediment controls along any perimeter areas of the site that will receive pollutant discharges.”
- For linear projects, where you have determined that the use of perimeter controls in portions of the site is infeasible, document other practices that you will implement.

General

- Erosion and sediment controls that minimize the discharge of pollutants from earth-disturbing activities have been included in this SWPPP and will be installed and maintained to comply with the provisions of Part 2 of the CGP. Control measures will be installed and maintained in good working order in accordance with good engineering practices. Perimeter controls will be installed and made operational around the entire perimeter of the Site prior to earth-disturbing activities.

Specific Perimeter Controls

| Sediment Barriers | |
|---|--|
| Description: Preventative erosion and sedimentation control measures (Silt Fence and Wattles or Engineer-approved alternate) will be implemented to limit and retard runoff within the construction area limits. Sediment barriers will remain in place until construction activities are complete, the Project area has been cleaned, and the exposed soil surfaces have been stabilized. | |
| Installation | Sediment barriers will be installed prior to earth-disturbing activities. |
| Maintenance Requirements | Inspection of sediment barriers will be performed weekly or after a 0.25" (minimum) rain storm event to ensure that any sediment accumulation to one-half the aboveground barrier height is removed, and the good working order of the sediment barrier is maintained. |
| Design Specifications | Design specifications are provided on Drawings 5 and 6. |

4.3 Sediment Track-Out

Instructions (see CGP Parts 2.2.4 and 7.2.6.b.iii):

- Describe stormwater controls that will be used to minimize sediment track-out.
- Describe location(s) of vehicle exit(s), procedures to remove accumulated sediment off-site (e.g., vehicle tracking), and stabilization practices (e.g., stone pads or wash racks or both) to minimize off-site vehicle tracking of sediment. Also include the design, installation, and maintenance specifications for each control.

General

- Sediment track-out will be minimized using Stabilized Construction Entrance Pads. Materials that are inadvertently tracked out of the Site will be removed by sweeping, shoveling, or vacuuming. Track-out minimization will not occur due to water applications (e.g., steam cleaning) and track-out will not be swept into stormwater conveyances, storm drain inlets or surface waters. Mud and sediment tracked or washed onto public roads will be removed promptly.

Specific Track-Out Controls

| Stabilized Construction Entrance Pads | |
|---|---|
| Description: Stabilized Construction Entrance Pads will be set up at the entrance and exits of the construction area. The pads will help dislodge soil from equipment tires and equipment tracks and provide a durable surface at access points. | |
| Installation | Construction entrance pads will be installed prior to conducting earth-disturbing work. |
| Maintenance Requirements | The entrance will be maintained in a condition that will prevent tracking sediment onto public roads. This may require periodic top dressing with additional stone. If Site conditions are such that the majority of mud is not removed from the vehicle tires by the gravel pad, then the tires will be brushed clean. |
| Design Specifications | Gravel will be angular crushed stone 1 inch to 3 inches in diameter, laid down at a thickness of 6 inches and a length of at least 50 feet. Design specifications are shown on Drawings 5 and 6. |

4.4 Stockpiled Sediment or Soil

Instructions (see CGP Parts 2.2.5 and 7.2.6):

- Describe stormwater controls and other measures you will take to minimize the discharge of sediment or soil particles from stockpiled sediment or soil. Include a description of structural practices (e.g., diversions, berms, ditches, storage basins), including design, installation, and maintenance specifications, used to divert flows from stockpiled sediment or soil, retain or detain flows, or otherwise limit exposure and the discharge of pollutants from stockpiled sediment or soil.
- For piles that will be unused for 14 or more days, describe what cover or other appropriate temporary stabilization will be used.
- Also, describe any controls or procedures used to minimize exposure resulting from adding to or removing materials from the pile.

General

Soil stockpiles will be protected against erosion from precipitation, run-on/off, and wind using proper siting techniques, covers, liners, and silt fencing. If necessary peat excavated from the bottom of the isolated wetland will be dewatered in a dewatering box.

Specific Stockpile Controls

| Designated Soil Stockpile Areas |
|---|
| Description: Soil stockpile areas is designated at the Site in Drawing 5. The area is located at a higher elevation point than surrounding areas, where possible, to prevent run-on from |

| | |
|--|--|
| surrounding areas. Stockpiles will be constructed in accordance with 40 CFR §761.65(c)(9). PCB Remediation waste soils will be segregated from other materials and shall not be used or mixed for reuse on-Site. | |
| Installation | This control will be implemented prior to excavating soils and bringing soil on the sites that will be stockpiled |
| Maintenance Requirements | <p>Polyethylene sheeting will be replaced if it is destroyed or damaged during execution of the work. Should this happen, the contractor will be responsible for further sampling or remediation that may be required as a result.</p> <p>Sediment will be removed from silt fencing when it has reached 1/2 of the aboveground height of the fence. The removal of the soils will be left to the discretion of the LSP.</p> |
| Design Specifications | <p>The PCB and non-PCB remediation waste stockpile cover material will be at least 10 mil thick polyethylene. Stockpile liner will be 10 mil polyethylene. Design details and specifications are shown on Drawings 5 and 6. Covers will be secured against wind and rain with bales, sandbags or similar.</p> <p>Clean Fill Stockpile construction details are included in Drawing 6.</p> |

Specific Stockpile Controls

| Dewatering Box/Roll-Off | |
|--|---|
| Description: To limit discharge of sediment or soils from storage of Remediation Waste removed from the isolated wetland, this material will be stored in a dewatering box/roll-off. A storage area has been designated for storage of this material. The area is located at a higher elevation point than surrounding areas, where possible, to prevent run-on from surrounding areas. | |
| Installation | This control will be installed prior to removal of Remediation Waste that will be stockpiled |
| Maintenance Requirements | Sediment will be removed from silt fencing surrounding the dewatering box when it has reached 1/2 of the aboveground height of the fence. This material will be disposed of off-site. |
| Design Specifications | The storage area for the dewatering box/Roll-off will be surrounded by silt fence. Design details and specifications are shown on Drawings 5 and 6. |

Specific Stockpile Controls

| Roll-Off | |
|--|---|
| Description: To limit discharge of sediment or soils from storage of PCB Remediation Waste to be disposed of off-site, this material will be stored in a roll-off. A storage area has been designated for storage of this material. The area is located at a higher elevation point than surrounding areas, where possible, to prevent run-on from surrounding areas. | |
| Installation | This control will be installed prior to removal of Remediation Waste that will be stockpiled |
| Maintenance Requirements | Sediment will be removed from silt fencing surrounding the container storage area when it has reached 1/2 of the aboveground height of the fence. The removal of the soils will be left to the discretion of the LSP. |
| Design Specifications | The storage area for the Roll-off will be surrounded by silt fence. Design details and specifications are shown on Drawings 5 and 6. |

4.5 Minimize Dust

Instructions (see CGP Parts 2.2.6 and 7.2.6):

Describe controls and procedures you will use at your site to minimize the generation of dust.

General

Dust suppression will be employed as necessary throughout excavation and grading prior to final surface stabilization. Dust monitoring will take place during dust generating activities. An action level of 100 ug/m³ has been established to initiate dust suppression.

Specific Dust Controls

| Soil Stockpile Covers. | |
|---------------------------------|---|
| Description: | Polyethylene sheeting will be used to cover soil stockpiles when not in use. The covers will be weighted down with straw bales or similar objects |
| Installation | Covers will be installed as soon as soil stockpiles are created. |
| Maintenance Requirements | Polyethylene sheeting will be replaced when it has become torn. |
| Design Specifications | Polyethylene sheeting will have a minimum thickness of 6 mil. Design details are shown on Drawing 6. |

| Soil Wetting | |
|---------------------------------|---|
| Description: | During activities that involve the movement or disturbance of soils, dust suppression consisting of water or calcium chloride sprays will be applied on an as-needed basis, depending on observed conditions, to prevent the release of potential fugitive dust emissions. Wetting of soil will not be performed so excessively as to produce surface runoff and will be conducted up-gradient of erosion control measures. |
| Installation | This control will be implemented on an as-needed basis, based on observed conditions and the location and type of activity being performed. |
| Maintenance Requirements | Not Applicable |
| Design Specifications | Application of soil wetting will be in the form of heavy mist, rather than a water stream. |

| Vehicle Restrictions | |
|---------------------------------|---|
| Description: | Vehicular traffic will be restricted to what is determined to be necessary during work periods. Vehicle speeds will be limited to minimize dust generation. Vehicles transporting soil will be covered with tarps or similar prior to exiting the Site. |
| Installation | Not Applicable |
| Maintenance Requirements | Not Applicable |
| Design Specifications | Not Applicable. |

[Repeat as needed for individual dust controls.]`

4.6 Minimize Steep Slope Disturbances

Instructions (see CGP Parts 2.2.7 and 7.2.6):

- Describe how you will minimize the disturbance to steep slopes (as defined by CGP Appendix A).
- Describe controls (e.g., erosion control blankets, tackifiers), including design, installation and maintenance specifications, that will be implemented to minimize sediment discharges from slope disturbances.

General

A small area with steep slopes are present at the site in the area surrounding the isolated wetland. After clearing and grubbing the site, bare soils in this area will be exposed for a short time prior to filling.

Specific Steep Slope Controls

| Straw Wattles | |
|--|---|
| Description: Straw wattles will be installed at the midpoint and 2-feet above the bottom of the west slope. Because the east slope is shallower, wattles will be installed 2-feet above the bottom of the east slope only. The wattles will not be installed at the bottom of the slope because approximately 2-feet of peat present at the bottom of the slopes will be removed. | |
| Installation | Straw wattles will be installed after clearing and grubbing and prior filling. |
| Maintenance Requirements | Inspection of wattles will be performed weekly or after a 0.25" (minimum) rain storm event to ensure that any sediment accumulation to one-half the aboveground barrier height is removed and the good working order of the sediment barrier is maintained. |
| Design Specifications | Design specifications are included in Drawings 5 and 6. |

4.7 Topsoil

Instructions (see CGP Parts 2.2.8 and 7.2.6):

- Describe how topsoil will be preserved and identify these areas and associated control measures on your site map(s).
- If it is infeasible for you to preserve topsoil on your site, provide an explanation for why this is the case.

General

- As part of clearing and grubbing, the top 6-inches of soil will be screened to remove geotechnically unsuitable material. This material will be reused as part of filling at the site. Existing soil beneath 6-inches will be regraded and covered with a minimum of three feet of clean material as a remediation exposure barrier.

Specific Topsoil Controls

| Reuse of perimeter soils | |
|--|--|
| Description: Geotechnically suitable topsoil excavated from the properties is intended for reuse on-Site to prepare the subgrade. | |
| Installation | Reuse of topsoil will take place during backfilling operations |
| Maintenance Requirements | Backfilled soil will be compacted and covered with permeable fill as part of construction of the turf field. |
| Design Specifications | The location where perimeter soils shall be stockpiled is shown on Drawing 5. Erosion control details are included in Drawing 6. |

[Repeat as needed for individual topsoil controls.]

4.8 Soil Compaction

Instructions (see CGP Parts 2.2.9 and 7.2.6):

- In areas where final vegetative stabilization will occur or where infiltration practices will be installed, describe the controls, including design, installation, and maintenance specifications that will be used to restrict vehicle or equipment access or condition the soil for seeding or planting.

General

- No vegetative stabilization is included as part of the site construction.

4.9 Storm Drain Inlets

Instructions (see CGP Parts 2.2.10 and 7.2.6):

- Describe controls (e.g., inserts, rock-filled bags, or block and gravel) including design, installation, and maintenance specifications that will be implemented to protect all inlets that carry stormwater flow from your site to a water of the U.S., provided you have the authority to access the storm drain inlet.

General

- Inlet protection measures that remove sediment from water prior to entry into the storm drain inlet will be installed and maintained to comply with the provisions of Part 2 of the 2012 CGP.

Specific Storm Drain Inlet Controls

| Filter Fabric in Catch Basin | |
|--|---|
| Description: Filter fabric will be used to filter waterborne sediment. Filter fabric will be placed under the grates of the catch basin down-gradient of any active excavation/disturbance area or active temporary stockpile area. | |
| Installation | Installation of filters will occur prior to earth-disturbing activities |
| Maintenance Requirements | The protection measures will be cleaned, or removed and replaced, as sediment accumulates, the filter becomes clogged, and/or performance is compromised. Where there is evidence of sediment accumulation adjacent to the inlet protection measure, the sediment will be removed by the end of the same work day in which it is found or by the end of the following work day if removal by the same work day is not feasible. |

| | |
|------------------------------|---|
| Design Specifications | Design details are shown on Drawings 4 and 6. |
|------------------------------|---|

[Repeat as needed for individual storm drain inlet controls.]

4.10 Stormwater Conveyance Channels

Instructions (see CGP Parts 2.2.11 and 7.2.6):

If you will be installing a stormwater conveyance channel, describe control practices (e.g., velocity dissipation devices), including design specifications and details (volume, dimensions, outlet structure), that will be implemented at the construction site.

General

- Installation of stormwater conveyance channels is anticipated as part of Phase I of construction at the Site. At the end of Phase I of the construction, as part of the rough grading plan (Drawing 2A), temporary v-ditches will be located on the north, south and west end of the graded area to transmit any excess runoff into an outlet control structure prior to discharge to the wetlands.

Specific Conveyance Channel Controls

| | |
|---------------------------------|--|
| Grading and Lining | |
| Description: | As part of Phase I - Rough grading, a temporary v-ditch will be installed around the perimeter of the graded area. The rough graded permeable fill will be covered with geotextile to limit erosion from the surface of the rough graded material. The channel will be graded to minimize surface water flow velocity and lined with permeable cover to maximize infiltration in the channel. The channel will discharge to an outlet control that includes a stormdrain inlet control and a water tight block weir wall to further limit sediment migration off-site. |
| Installation | After rough grading is complete |
| Maintenance Requirements | Inspection of the ditches, lining and outlet control structure will be performed weekly or after a 0.25" (minimum) rain storm event to ensure that any sediment accumulation to one-quarter of the weir height is removed and the good working order of the outlet control is maintained |
| Design Specifications | Specifications are provided in Drawings 2a, 4 and 6. |

[Repeat as needed for individual stormwater conveyance channel controls.]

4.11 Sediment Basins

Instructions (see CGP Parts 2.2.12 and 7.2.6.b.iv):

If you will install a sediment basin, include design specifications and other details (volume, dimensions, outlet structure) that will be implemented in conformance with CGP Part 2.2.12.

- Sediment basins must be situated outside waters of the U.S. and any natural buffers established under CGP Part 2.2.1; and designed to avoid collecting water from wetlands.
- At a minimum, sediment basins provide storage for either (1) the calculated volume of runoff from the 2-year, 24-hour storm (see CGP App. H), or (2) 3,600 cubic feet per acre drained
- Sediment basins must also utilize outlet structures that withdraw water from the surface, unless infeasible

General

- Installation of sediment basins is not anticipated as part of construction stormwater controls at this Site.

4.12 Chemical Treatment

Instructions (see CGP Parts 2.2.13 and 7.2.6.v):

If you are using treatment chemicals at your site, provide details for each of the items below. This information is required as part of the SWPPP requirements in CGP Part 7.2.6.v.

- No treatment chemicals are anticipated to be used at the site during construction.

Soil Types

List all the soil types (including soil types expected to be found in fill material) that are expected to be exposed during construction in areas of the project that will drain to chemical treatment systems: No chemical treatment will be used.

4.13 Dewatering Practices

Instructions (see CGP Parts 2.4 and 7.2.6):

If you will be discharging ground water or accumulated stormwater that is removed from excavations, trenches, foundations, vaults, or other similar points of accumulation, include design specifications and details of all dewatering practices that are installed and maintained to comply with CGP Part 2.4.

General

- Dewatering liquids may be generated while dewatering peat excavated from the isolated wetlands. These would be stored within the dewatering roll-off until discharged in a manner consistent with the regulations and policies of the Massachusetts Contingency Plan. Dewatering

liquids being recharged will be controlled to prevent flooding of the ground surface and subsurface utilities or adversely impacting the geotechnical quality of completed work areas. It is anticipated that this will include discharge to the ground in the approximate area indicated on Drawing 5. Groundwater from MCP regulated areas will not be discharged to non-MCP regulated areas.

Specific Dewatering Practices

| Dewatering of Excavated Sediments in a Dewatering Roll-Off (if necessary) | |
|--|---------------------------------|
| Description: Sediments requiring dewatering will be placed inside a dewatering roll-off and allowed to gravity drain. | |
| Installation | At start of sediment Excavation |
| Maintenance Requirements | N/A |
| Design Specifications | N/A |

4.14 Other Stormwater Controls

| |
|---|
| Instructions: |
| – Describe any other stormwater controls that do not fit into the above categories. |

General

- Good housekeeping will be practiced minimizing the potential for loose soils and debris to be taken up in stormwater runoff.

Specific Stormwater Control Practices

| Good Housekeeping | |
|---|----------------|
| Description: Loose soil will be swept from paved surfaces at the end of each work day and returned to soil stockpile areas | |
| Installation | Daily |
| Maintenance Requirements | None |
| Design Specifications | Not applicable |

4.15 Site Stabilization

Instructions (see CGP Parts 2.2.14 and 7.2.6.vi):

The CGP requires you to immediately initiate stabilization when work in an area of your site has permanently or temporarily stopped, and to complete certain stabilization activities within prescribed deadlines. Construction projects disturbing more than 5 acres at any one time have a different deadline than projects disturbing 5 acres or less at any one time. See CGP Part 2.2.14.a. The CGP also requires that stabilization measures meet certain minimum criteria. See CGP Part 2.2.14.b. For your SWPPP, you must include the following:

- Describe the specific vegetative and/or non-vegetative practices that will be used to stabilize exposed soils where construction activities have temporarily or permanently ceased. Avoid using impervious surfaces for stabilization whenever possible.
- The stabilization deadline(s) that will be met in accordance with Part 2.2.14.a
- Once you begin construction, consider using the Grading/Stabilization Activities log in Appendix H of the Template to document your compliance with the stabilization requirements in CGP Part 2.2.14.

Total Amount of Land Disturbance Occurring at Any One Time

- ☒ Five Acres or less
☐ More than Five Acres

Use this template box if you are not located in an arid, semi-arid, or drought-stricken area

| Temporary Stabilization by Covering with Geotextile | |
|---|--|
| <input type="checkbox"/> Vegetative <input checked="" type="checkbox"/> Non-Vegetative <input checked="" type="checkbox"/> Temporary <input type="checkbox"/> Permanent | |
| Description: <ul style="list-style-type: none"> ▪ Temporary stabilization using geotextile cover over the location of the soccer field will be initiated as soon as practicable after rough grading is done at the end of Phase 1 in the areas indicated in Drawing 2a. | |
| Installation | As soon as practicable exposed soil will be covered where construction activities have permanently ceased or will be temporarily inactive for 14 or more calendar days in and around the area to be used as a soccer field. |
| Completion | As soon as practicable, but no later than 7 days after initiation of stabilization. |
| Maintenance Requirements | Covered areas will be inspected weekly and after storm events to check for erosion or movement of the cover. If washout, breakage, or erosion occurs, the surface will be repaired. |
| Design Specifications | The geotextile will be a Mirafi 140N Non-Woven Geotextile or approved equivalent. The temporary cover will be installed in accordance with manufacturers recommendations. Additional design specifications are provided in Drawing 2a. |

| Temporary Stabilization by Seeding and/or Straw Mulching | |
|---|---|
| <input checked="" type="checkbox"/> Vegetative <input checked="" type="checkbox"/> Non-Vegetative <input checked="" type="checkbox"/> Temporary <input type="checkbox"/> Permanent | |
| Description: <ul style="list-style-type: none"> Temporary stabilization in areas not covered by the geotextile or a gravel top coat will be initiated as soon as practicable in any areas of exposed soil where construction activities have permanently ceased or will be temporarily inactive for 14 or more calendar days. Temporary stabilization will be achieved by seeding and/or straw mulching in areas not covered by geotextile. | |
| Installation | As soon as practicable in any areas of exposed soil not covered by geotextile where construction activities have permanently ceased or will be temporarily inactive for 14 or more calendar days |
| Completion | As soon as practicable, but no later than 7 days after initiation of stabilization. |
| Maintenance Requirements | Seeded and mulched areas will be inspected weekly and after storm events to check for erosion or movement of mulch. If washout, breakage, or erosion occurs, the surface will be repaired, and new seed and/or mulch will be applied to the damaged area |
| Design Specifications | Hydromulching will provide immediate protection to exposed soils where construction will cease for more than 14 days and over the winter months (unless it is too cold to establish growth). Straw mulch and wood fiber will be mixed with a tackifier (amount specified per manufacturer's instructions) and applied uniformly by machine with an application rate of 90–100 pounds (2–3 bales) per 1,000 square feet or 2 tons (100–200 bales) per acre. If the tackifier does not appear effective in anchoring the mulch to the disturbed soil, crimping equipment will be used to provide additional binding to the soil. The mulch will cover 75 to 90 percent of the ground surface. In areas, where hydromulching is inaccessible, straw mulch will be applied by hand with an application rate of 90–100 pounds (2–3 bales) per 1,000 square feet. Temporary seeding will be achieved using a quick-growing erosion control/restoration mix that contains a mix of at least some of the following – Creeping Red Fescue, Little Bluestem, Indian Grass, Upland Bentgrass, Rough Bentgrass, Blue Grama, Canadian Wild Rye, and Perennial Ryegrass. The mix should be applied at a rate of 35 pounds per acre either by hydroseeding or by hand. Where seed is applied, fertilization with 10-10-10 is recommended. Watering must be maintained until the seed has germinated. |

| Final Stabilization by Covering with Geotextile and Stone | |
|--|--|
| <input type="checkbox"/> Vegetative <input checked="" type="checkbox"/> Non-Vegetative <input type="checkbox"/> Temporary <input checked="" type="checkbox"/> Permanent | |
| Description: <ul style="list-style-type: none"> As permanent stabilization, all disturbed areas not covered by the field turf within the project limit of work will be covered with a geotextile overlain by a minimum of 2-inches of crushed stone. | |
| Installation | As soon as practicable in any areas of exposed soil where construction activities have permanently ceased or will be temporarily inactive for 14 or more calendar days |
| Completion | As part of completion of the site work |
| Maintenance Requirements | Stabilized areas will be inspected weekly and after storm events to check for erosion or movement of stone for a minimum of one month after project completion. If washout, breakage, or erosion occurs, the surface will be repaired, and new stone mulch will be applied to the damaged area |
| Design Specifications | The geotextile will be a Mirafi 140N Non-Woven Geotextile or approved equivalent. The geotextile will be installed in accordance with manufacturers recommendations. The crushed stone cover will be installed to a minimum depth of 2-inches on top of the geotextile. Additional design specifications are provided in Drawings 3 and 4. |

SECTION 5: POLLUTION PREVENTION STANDARDS

5.1 Potential Sources of Pollution

Instructions (see CGP Part 7.2.3.g):

- Identify and describe all pollutant-generating activities at your site (e.g., paving operations; concrete, paint, and stucco washout and waste disposal; solid waste storage and disposal).
- For each pollutant-generating activity, include an inventory of pollutants or pollutant constituents associated with that activity (e.g., sediment, fertilizers, and/or pesticides, paints, solvents, fuels), which could be exposed to rainfall or snowmelt, and could be discharged from your construction site. You must take into account where potential spills and leaks could occur that contribute pollutants to stormwater discharges, and any known hazardous or toxic substances, such as PCBs and asbestos, that will be disturbed or removed during construction.

Construction Site Pollutants

| Pollutant-Generating Activity | Pollutants or Pollutant Constituents (that could be discharged if exposed to stormwater) | Location on Site (or reference SWPPP site map where this is shown) |
|-------------------------------|---|---|
| Grading Work | PCBs, TSS | Drawing 2 |
| Solid Waste Storage | Solid Waste | Drawing 5 |
| Soil Stockpile | TSS | Drawing 5 |
| Construction Equipment | Fuels, Oils, Hydraulic Fluids, Lubricants | Within the Limit of Work |
| Sanitary toilets | Bacteria, parasites and viruses. | Locations to be determined by contractor. To be located outside of wetland resource area and 100 foot buffer. |

5.2 Spill Prevention and Response

Instructions (see CGP Parts 2.3.6 and 7.2.6.vii):

- Describe procedures you will use to prevent and respond to leaks, spills, and other releases. You must implement the following at a minimum:
 - ✓ Procedures for expeditiously stopping, containing, and cleaning up spills, leaks, and other releases. Identify the name or title of the employee(s) responsible for detection and response of spills or leaks; and
 - ✓ Procedures for notification of appropriate facility personnel, emergency response agencies, and regulatory agencies where a leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity consistent with Part 2.3.6 and established under either 40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part 302, occurs during a 24-hour period. Contact information must be in locations that are readily accessible and available.
- Some projects/site may be required to develop a Spill Prevention Control and Countermeasure (SPCC) plan under a separate regulatory program (40 CFR 112). If you are required to develop an SPCC plan, or you already have one, you should include references to the relevant requirements from your plan.

In the unlikely event of a spill or release, the following practices will be followed for spill cleanup:

- Manufacturers' recommended methods for spill cleanup will be maintained on-site and site personnel will be made aware of the procedures and the location of the information and cleanup supplies.
- Materials and equipment necessary for spill cleanup will be kept in the construction staging areas on-site. Equipment and materials will include, but not be limited to, brooms, dust pans, mops, rags, gloves, goggles, sand, sawdust, and plastic and metal trash containers specifically for this purpose.
- All spills will be cleaned up immediately after discovery.
- Personnel will wear appropriate protective clothing to prevent injury from contact with a hazardous substance.

The Contractor's site superintendent responsible for day-to-day operations will be the spill prevention and cleanup coordinator. He/she will designate at least three other site personnel who will receive spill prevention and cleanup training. The individuals will each become responsible for a particular phase of prevention and cleanup. The names of responsible spill personnel will be posted in the material storage/construction staging area.

5.3 Fueling and Maintenance of Equipment or Vehicles

Instructions (see CGP Parts 2.3.1 and 7.2.6):

- Describe equipment/vehicle fueling and maintenance practices that will be implemented to eliminate the discharge of spilled or leaked chemicals (e.g., providing secondary containment (examples: *spill berms, decks, spill containment pallets*) and cover where appropriate, and/or having spill kits readily available.)

General

- It is anticipated that fueling on maintenance of equipment or vehicles will not take place at the work site. However, the following procedures will be utilized to prevent releases from heavy equipment and during possible equipment failure.

Specific Pollution Prevention Practices

| Equipment/Vehicle Fueling and Maintenance | |
|--|---|
| <p>Description: Proper material handling methods minimize the possibility of introducing pollutants into stormwater runoff. The following practices will be followed:</p> <ul style="list-style-type: none"> The Contractor will inspect trucks and heavy equipment daily for leaks. These inspections will be designed to uncover conditions such as cracks or slow leaks, which could cause breakdowns or failures that could potentially result in releases to the environment. Any defective equipment found during inspections will be promptly repaired or replaced. The Contractor will take all precautions to ensure that repair operations do not result in spills or leaks that could contaminate stormwater runoff (i.e., use drip pans to minimize the potential for spills and releases to occur and have dry cleanup equipment available in the unlikely event that a spill or release does occur). Wastes from any maintenance activities are to be disposed of properly to ensure they do not come in contact with stormwater runoff. Fueling activities will be conducted outside of the wetlands resource area and 100-foot buffer zone. The Contractor will provide and maintain suitable over-the-road equipment for transporting construction waste materials or debris to disposal locations. Each piece of equipment will be equipped with covers to contain loose materials during transportation. | |
| Installation | Pollution prevention practices will be implemented throughout project construction. |
| Maintenance Requirements | Construction vehicles will be inspected for evidence of leaks on a daily basis. Maintenance will be performed daily as necessary. |
| Design Specifications | Not Applicable. |

5.4 Washing of Equipment and Vehicles

Instructions (see CGP Parts 2.3.2 and 7.2.6):

- Describe equipment/vehicle washing practices that will be used to minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other types of wash waters (e.g., locating activities away from waters of the U.S. and stormwater inlets or conveyances and directing wash waters to a sediment basin or sediment trap, using filtration devices, such as filter bags or sand filters, or using other similarly effective controls).
- Describe how you will prevent the discharge of soaps, detergents, or solvents by providing either (1) cover (examples: plastic sheeting or temporary roofs) to prevent these detergents from coming into contact with rainwater, or (2) a similarly effective means designed to prevent the discharge of pollutants from these areas.

General

- All Equipment and vehicle washing will be performed offsite.

Specific Pollution Prevention Practices

| All Equipment and Vehicle Washing will be Performed Offsite | |
|---|-----|
| Description: N/A | |
| Installation | N/A |
| Maintenance Requirements | N/A |
| Design Specifications | N/A |

[Repeat as needed.]

5.5 Storage, Handling, and Disposal of Building Products, Materials, and Wastes

| | |
|---|--|
| Instructions (see CGP Parts 2.3.3 and 7.2.6): <ul style="list-style-type: none"> For any of the types of building products, materials, and wastes below in Sections 5.5.1-5.5.6 below that you expect to use or store at your site, provide the information on how you will comply with the corresponding CGP provision and the specific practices that you will be employ. | |
|---|--|

5.5.1 Building Products

Specific Pollution Prevention Practices

| Storage of Building Products | |
|--|---|
| Description: Building products will be brought on-site as needed to minimize an extended period of on-site storage. When stored on-site, building products with pollution potential will be stored under cover or covered by plastic sheeting and within protected areas to minimize potential exposure to precipitation and to stormwater as indicated in Drawing 5. | |
| Installation | Protective cover will be provided as needed. |
| Maintenance Requirements | Condition of stored materials and protective cover will be inspected during regular weekly inspections. Repair and/or replacement of cover materials will be implemented as needed. |
| Design Specifications | Not applicable |

[Repeat as needed.]

5.5.2 Pesticides, Herbicides, Insecticides, Fertilizers, and Landscape Materials

Specific Pollution Prevention Practices

| Storage of Pesticides, Herbicides, Insecticides, Fertilizer and Landscape Materials | |
|---|--|
| Description: It is not anticipated that pesticides, herbicides or insecticides will be used or stored on-site. Fertilizers and landscape materials will be brought on-site for site stabilization as needed to minimize an extended period of on-site storage. When fertilizers and landscape materials are stored on-site, they will be stored under cover or covered by plastic sheeting to minimize potential exposure to precipitation and to stormwater. Application and disposal of fertilizers will comply with requirements included on the registered fertilizer label. | |
| Installation | Protective cover will be provided as needed. |

| | |
|---------------------------------|---|
| Maintenance Requirements | Condition of stored materials and protective cover will be inspected during regular weekly inspections. Repair and/or replacement of cover materials will be implemented as needed. |
| Design Specifications | Not applicable. |

5.5.3 Diesel Fuel, Oil, Hydraulic Fluids, Other Petroleum Products, and Other Chemicals

| | |
|--|--|
| Storage of diesel fuel, oil, hydraulic fluids, other petroleum products, and other chemicals. | |
| Description: | Bulk storage of diesel fuel, oil, hydraulic fluids, other petroleum products, and other chemicals will not occur on-site. Small quantities that may be stored on-site will be stored in water-tight containers and under cover or covered by plastic sheeting to minimize potential exposure to precipitation and to stormwater. Secondary containment will be provided where practicable and spill kit materials will be available in construction staging areas. |
| Installation | Protective cover will be provided as needed. |
| Maintenance Requirements | Condition of stored materials and protective cover will be inspected during regular weekly inspections. Repair and/or replacement of cover materials will be implemented as needed. Secondary containment, where provided, will also be checked during inspections and spills (if any) will be immediately cleaned up using available spill kit materials and waste products appropriately disposed. |
| Design Specifications | Not applicable |

5.5.4 Hazardous or Toxic Waste

(Note: Examples include paints, solvents, petroleum-based products, wood preservatives, additives, curing compounds, acids.)

| | |
|--|---|
| Storage of hazardous or toxic wastes. | |
| Description: | Bulk storage of hazardous or toxic wastes will not occur on-site. Small quantities that may be stored on-site will be stored separately from domestic wastes. Wastes will be stored in sealed containers, which are constructed of suitable materials to prevent leakage and corrosion, and which are labeled in accordance with applicable Resource Conservation and Recovery Act (RCRA) requirements and all other applicable federal, state, or local requirements. Materials will either be stored outdoors (within appropriately sized secondary containment) or stored in a covered area. Spill kit materials will be available in the storage area. Hazardous or toxic waste will be disposed in accordance with the manufacturer's recommended method of disposal and in compliance with federal, state, and local requirements. Spills will be cleaned up immediately, using dry clean-up methods, and used materials will be disposed of properly. Hosing spill areas down to clean surfaces or spills is prohibited. The source of the spill will be eliminated to prevent a discharge or a furtherance of an ongoing discharge. |
| Installation | Storage methods and procedures described above will be implemented immediately upon the presence of waste materials. |
| Maintenance Requirements | Condition of stored materials and protective cover will be inspected during regular weekly inspections. Repair and/or replacement of cover materials will be implemented as needed. Secondary containment, where provided, will also be checked during inspections and spills (if any) will be immediately cleaned up using available spill kit materials and waste products appropriately disposed. |

| | |
|------------------------------|----------------|
| Design Specifications | Not applicable |
|------------------------------|----------------|

5.5.5 Construction and Domestic Waste

(Note: Examples include packaging materials, scrap construction materials, masonry products, timber, pipe and electrical cuttings, plastics, styrofoam, concrete, and other trash or building materials.)

| Management of Construction and Domestic Waste | |
|--|---|
| Description: | Waste containers (dumpsters and local trash receptacles) will be available on-site for storage of construction and domestic wastes. Waste container lids will be closed when not in use. Waste containers that do not have lids, will be provided with either cover (e.g., a tarp, plastic sheeting, temporary roof) to minimize exposure of wastes to precipitation. |
| Installation | Waste container will be installed at commencement of project construction. |
| Maintenance Requirements | Condition of waste containers will be inspected daily and containers will be emptied of waste when full. Any overflow of a container will be cleaned up immediately. |
| Design Specifications | Not applicable |

5.5.6 Sanitary Waste

| Management of sanitary waste | |
|-------------------------------------|---|
| Description: | Sanitary waste portable toilets will be placed so that they are secure and will not be tipped or knocked over and located away from waters of the U.S. (including away from wetlands resource area and 100 foot buffer zone) and stormwater inlets or conveyances. All construction related sanitary wastes will be collected from portable units, as required, by a licensed sanitary waste management contractor. |
| Installation | Portable toilets will be installed at commencement of project construction. |
| Maintenance Requirements | All construction related sanitary wastes will be collected from portable units, as required, by a licensed sanitary waste management contractor. |
| Design Specifications | Not applicable. |

5.6 Washing of Applicators and Containers used for Paint, Concrete or Other Materials

| | |
|--|--|
| Instructions (see CGP Parts 2.3.4 and 7.2.6): <ul style="list-style-type: none"> Describe how you will comply with the CGP Part 2.3.4 requirement for washing applications and containers. | |
|--|--|

General

- No washing of applicators and containers used for paint, concrete or other materials will be conducted on-site.

5.7 Fertilizers

Instructions (CGP Parts 2.3.5 and 7.2.6.ix):

Describe how you will comply with the CGP Part 2.3.5 requirement for the application of fertilizers.

Application or fertilizer

Description: Fertilizer will be applied consistent with manufacturer's specifications. To the extent practicable, fertilizer will be applied at a time of year that coincides as closely as possible to the period of maximum vegetative uptake and growth. The contractor will avoid applying fertilizer before heavy rain events and will never apply fertilizer to frozen ground or along stormwater conveyance channels. All other federal, state, tribal, and local requirements regarding fertilizer application will be followed.

| | |
|---------------------|---|
| Installation | INSERT APPROXIMATE DATE OF INSTALLATION |
|---------------------|---|

| | |
|---------------------------------|-----|
| Maintenance Requirements | N/A |
|---------------------------------|-----|

| | |
|------------------------------|-----|
| Design Specifications | N/A |
|------------------------------|-----|

SECTION 6: INSPECTION, MAINTENANCE, AND CORRECTIVE ACTION

6.1 Inspection Personnel and Procedures

Instructions (see CGP Parts 3.2, 4, 5, and 7.2.7):

Describe the procedures you will follow for conducting inspections in accordance with CGP Parts 3.2, 4, 5, and 7.2.7.

Personnel Responsible for Inspections

Inspections will be conducted by TRC field staff who will be performing oversight and environmental monitoring implementation of the work. These individuals will meet the requirements of a "qualified person."

Note: All personnel conducting inspections must be considered a "qualified person." CGP Part 4.1 clarifies that a "qualified person" is a person knowledgeable in the principles and practices of erosion and sediment controls and pollution prevention, who possesses the appropriate skills and training to assess conditions at the construction site that could impact stormwater quality, and the appropriate skills and training to assess the effectiveness of any stormwater controls selected and installed to meet the requirements of this permit.

Inspection Schedule

Select the inspection frequency(ies) that applies, based on CGP Parts 4.2, 4.3, or 4.4

(Note: you may be subject to different inspection frequencies in different areas of the site. Check all that apply)

| |
|---|
| Standard Frequency: |
| <input type="checkbox"/> Every 7 days <input checked="" type="checkbox"/> Every 14 days and within 24 hours of a 0.25" rain or the occurrence of runoff from snowmelt sufficient to cause a discharge |
| Increased Frequency (if applicable): |
| For areas of sites discharging to sediment or nutrient-impaired waters or to waters designated as Tier 2, Tier 2.5, or Tier 3 <input type="checkbox"/> Every 7 days and within 24 hours of a 0.25" rain |
| Reduced Frequency (if applicable) |
| For stabilized areas <input type="checkbox"/> Twice during first month, no more than 14 calendar days apart; then once per month after first month; ▪ SPECIFY LOCATIONS WHERE STABILIZATION STEPS HAVE BEEN COMPLETED ▪ INSERT DATE THAT THEY WERE COMPLETED (Note: It is likely that you will not be able to include this in your initial SWPPP. If you qualify for this reduction (see CGP Part 4.4.1), you will need to modify your SWPPP to include this information.) |
| For stabilized areas on "linear construction sites" <input type="checkbox"/> Twice during first month, no more than 14 calendar days apart; then once more within 24 hours of a 0.25" rain |

- SPECIFY LOCATIONS WHERE STABILIZATION STEPS HAVE BEEN COMPLETED
- INSERT DATE THAT THEY WERE COMPLETED

(Note: It is likely that you will not be able to include this in your initial SWPPP. If you qualify for this reduction (see CGP Part 4.4.1), you will need to modify your SWPPP to include this information.)

For arid, semi-arid, or drought-stricken areas during seasonally dry periods or during drought

- ☐ Once per month and within 24 hours of a 0.25" rain

Insert beginning and ending dates of the seasonally-defined dry period for your area or the valid period of drought:

- Beginning date of seasonally dry period: INSERT APPROXIMATE DATE
- Ending date of seasonally dry period: INSERT APPROXIMATE DATE

For frozen conditions where earth-disturbing activities are being conducted

- ☐ Once per month

Insert beginning and ending dates of frozen conditions on your site:

- Beginning date of frozen conditions: INSERT APPROXIMATE DATE
- Ending date of frozen conditions: INSERT APPROXIMATE DATE

Rain Gauge Location (if applicable)

The NOAA Weather observatory at the New Bedford Regional Airport will be used to determine the magnitude of rainfall events.

Inspection Report Forms

A copy of the inspection report form is included in Appendix D of this SWPPP

6.2 Corrective Action

Instructions (CGP Parts 5 and 7.2.7):

- Describe the procedures for taking corrective action in compliance with CGP Part 5.

Personnel Responsible for Corrective Actions

The Project Manager (David Sullivan of TRC) will be responsible for implementing corrective actions.

Corrective Action Forms

A copy of the corrective action form is included in Appendix E.

6.3 Delegation of Authority

Instructions:

- Identify the individual(s) or positions within the company who have been delegated authority to sign inspection reports.
- Attach a copy of the signed delegation of authority (see example in Appendix J of the Template.)
- For more on this topic, see Appendix I, Subsection 11 of EPA's CGP.

Duly Authorized Representative(s) or Position(s):

To be completed at initiation of work.

SECTION 7: TRAINING

Instructions (see CGP Part 6 and 7.2.8):

- Complete the table below to provide documentation that the personnel required to be trained in CGP Part 6 completed the appropriate training
- If personnel will be taking course training (which is not required as part of the CGP), consider using Appendix I of this SWPPP template to track completion of this training
- The following personnel, at a minimum, must receive training, and therefore should be listed out individually in the table below:
 - ✓ Personnel who are responsible for the design, installation, maintenance, and/or repair of stormwater controls (including pollution prevention measures);
 - ✓ Personnel responsible for the application and storage of treatment chemicals (if applicable);
 - ✓ Personnel who are responsible for conducting inspections as required in Part 4.1; and
 - ✓ Personnel who are responsible for taking corrective actions as required in Part 5.
- CGP Part 6 requires that the required personnel must be trained to understand the following if related to the scope of their job duties:
 - ✓ The permit deadlines associated with installation, maintenance, and removal of stormwater controls and with stabilization;
 - ✓ The location of all stormwater controls on the site required by this permit, and how they are to be maintained;
 - ✓ The proper procedures to follow with respect to the permit's pollution prevention requirements; and
 - ✓ When and how to conduct inspections, record applicable findings, and take corrective actions.

Table 7-1: Documentation for Completion of Training

[illegible]

SECTION 8: CERTIFICATION AND NOTIFICATION

Instructions (CGP Appendix I, Part I.11.b):

- The following certification statement must be signed and dated by a person who meets the requirements of Appendix I, Part I.11.b.
- This certification must be re-signed in the event of a SWPPP Modification.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name: _____ Title: _____

Signature: _____ Date: _____

[Repeat as needed for multiple construction operators at the site.]

SWPPP APPENDICES

Attach the following documentation to the SWPPP:

Appendix A – Site Maps

Appendix B – Copy of 2017 CGP

(Note: The 2017 CGP is available at <https://www.epa.gov/npdes/epas-2017-construction-general-permit-cgp-and-related-documents>)

Appendix C – NOI and EPA Authorization Email

Appendix D – Inspection Form

(Note: EPA has developed a sample inspection form that CGP operators can use. The form is available at <https://www.epa.gov/npdes/stormwater-discharges-construction-activities#resources>)

Appendix E – Corrective Action Form

(Note: EPA has developed a sample corrective action form that CGP operators can use. The form is available at <https://www.epa.gov/npdes/stormwater-discharges-construction-activities#resources>)

Appendix F – SWPPP Amendment Log

Appendix G – Subcontractor Certifications/Agreements

Appendix H – Grading and Stabilization Activities Log

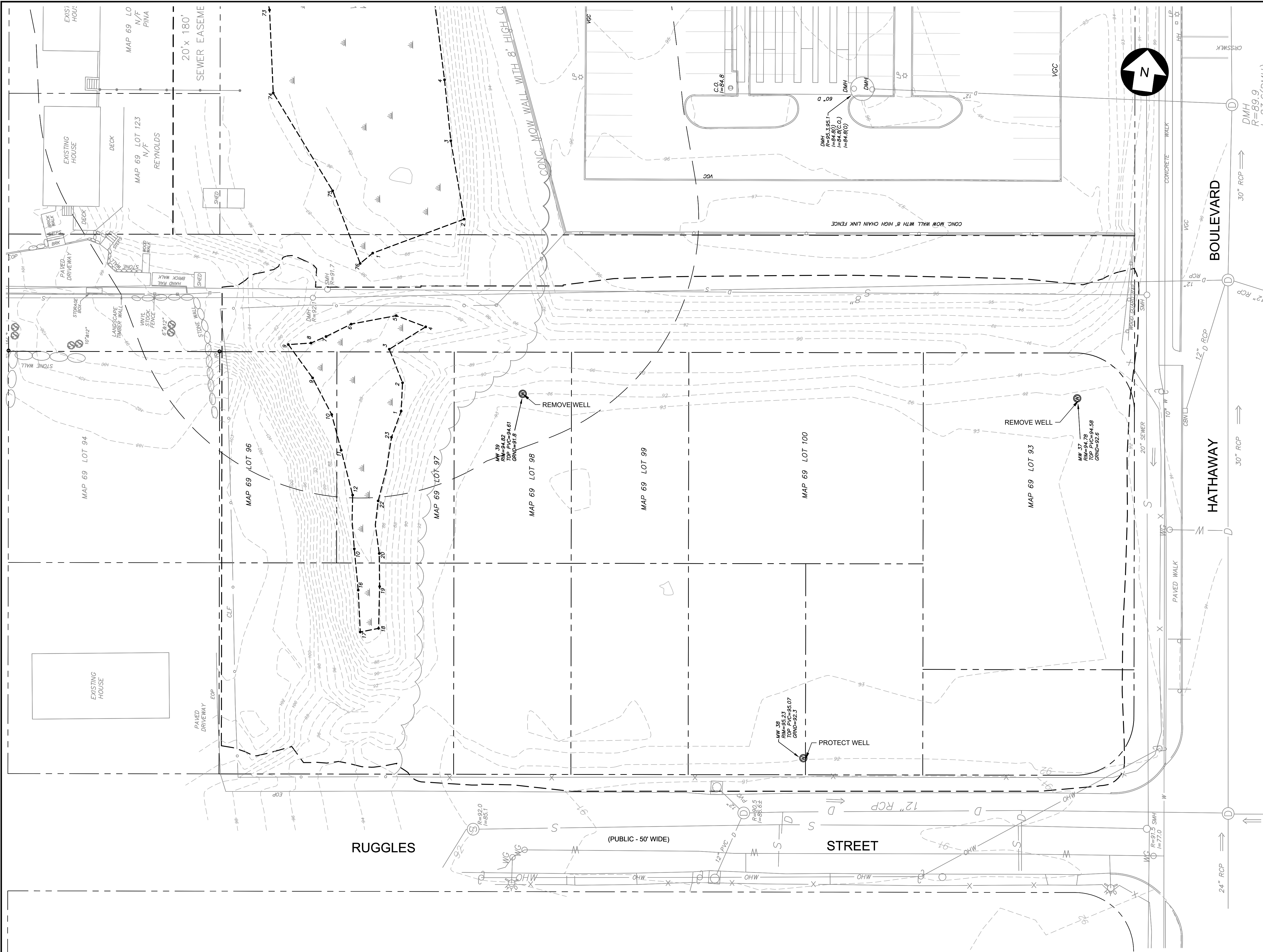
Appendix I – Training Log

Appendix J – Delegation of Authority

Appendix K – Endangered Species Documentation

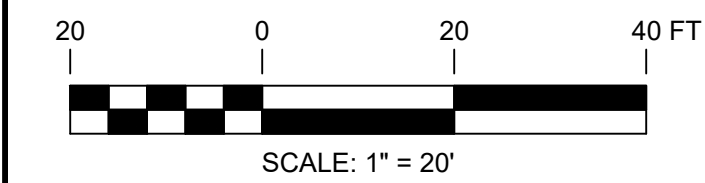
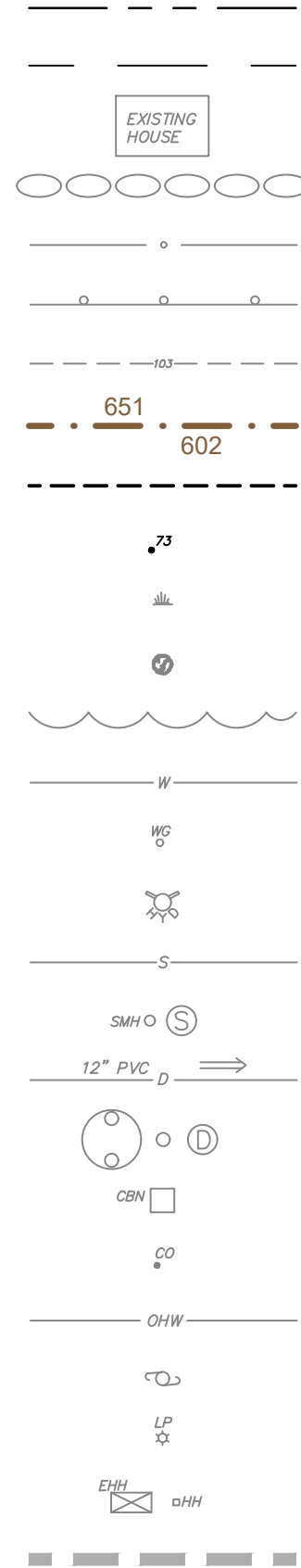
Appendix L – Historic Preservation Documentation

Appendix A – Site Maps



NOTES

1. BASE MAP TAKEN FROM "EXISTING CONDITIONS PLAN NEMASKET STREET NEW BEDFORD, MA BY LAND PLANNING INC. DATED 3/10/2016.
2. HORIZONTAL DATUM: MASSACHUSETTS STATE PLANE, MAINLAND ZONE, NAD83, US SURVEY FEET. VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM, 1988 (NAVD88), US FEET
3. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND COMPILED FROM PROPOSED PLAN INFORMATION. TRC MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA EITHER IN SERVICE OR ABANDONED. THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING THE LOCATIONS OF ALL UTILITIES. PRIOR TO WORK, THE CONTRACTOR SHALL, AT A MINIMUM, CONTACT "DIG SAFE" 1-888-344-7233 TO IDENTIFY OR VERIFY SIZE, DEPTH AND LOCATIONS OF ALL UNDERGROUND UTILITIES WITHIN THE VICINITY OF THE WORK AREA.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SECURITY AND JOB SAFETY. CONSTRUCTION ACTIVITIES SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), AND STANDARDS SET FORTH BY THE CITY OF NEW BEDFORD.
5. IF NECESSARY, CONTRACTOR SHALL COORDINATE WITH THE CITY TO SECURE SITE ACCESS AGREEMENTS FROM ABUTTING PROPERTY OWNERS PRIOR TO ENTERING ABUTTING PROPERTIES.
6. CONTRACTOR SHALL INSPECT AND MAINTAIN EROSION CONTROL MEASURES AND REMOVE ACCUMULATED SEDIMENT IN ACCORDANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) FOR THIS PROJECT.
7. TEMPORARY 6-FOOT CHAIN-LINK FENCE WILL ALREADY BE INSTALLED AS INDICATED ON THIS PLAN. FENCE SECTIONS WILL HAVE SUPPORT FEET AND WILL NOT PENETRATE THE GROUND.
8. TRUCKS SHALL USE EXISTING CURB CUTS FOR PROPERTY ACCESS, OR STEEL PLATING SHALL BE UTILIZED IF NECESSARY TO AVOID DAMAGE TO EXISTING CURBING.
9. PRIOR TO COMMENCING SITE WORK, THE CONTRACTOR SHALL INSTALL TYPICAL CONSTRUCTION ENTRANCE/EXIT PAD(S) AT ONE OR MORE OF THE ACCESS GATES ON HATHAWAY BOULEVARD, RUGGLES STREET, AND THE KEITH MIDDLE SCHOOL PARKING LOT.
10. CONTRACTOR SHALL ENSURE THAT NO SOILS ARE TRACKED OFF-SITE ON TRUCKS OR HEAVY MACHINERY BY BRUSHING OFF TIRES AND VEHICLE BODIES PRIOR TO LEAVING THE SITE.
11. CONTRACTOR SHALL ENSURE THAT NO SITE SOILS ARE OTHERWISE SPREAD ONTO THE STREET OR ABUTTING PROPERTIES AT ANY POINT DURING INSTALLATION OF THE FIELD.
9. TRAFFIC FLOW PATTERN TO BE APPROVED BY CITY OF NEW BEDFORD POLICE DEPARTMENT, AND INCORPORATED INTO A CONTRACTOR'S HAUL ROUTES AND STAGING AREAS PLAN.
10. NECESSARY EXCAVATION, BACKFILLING, GRADING AND COMPACTION FOR PREPARATION OF SUBBASE WILL BE PERFORMED BY THE CITY PRIOR TO FIELD INSTALLATION. CONTRACTOR SHALL MINIMIZE AND REPAIR ANY DISTURBANCE OF EXISTING SITE SOILS.
11. IF NECESSARY, A STORMWATER DRAINAGE SYSTEM WILL BE INSTALLED IN THE SUBBASE BY THE CITY PRIOR TO FIELD INSTALLATION. CONTRACTOR SHALL ENSURE THAT STORMWATER STRUCTURES ARE NOT DAMAGED DURING INSTALLATION OF THE SYNTHETIC TURF SYSTEM.
12. SUBBASE ELEVATIONS IDENTIFIED ON THIS PLAN SHALL BE CONFIRMED AND PROPERTY CORNERS AND POINTS OF AGENCY IDENTIFIED ON THIS PLAN SHALL BE LOCATED AND MARKED BY A LICENSED PROFESSIONAL LAND SURVEYOR PRIOR TO THE START OF WORK.



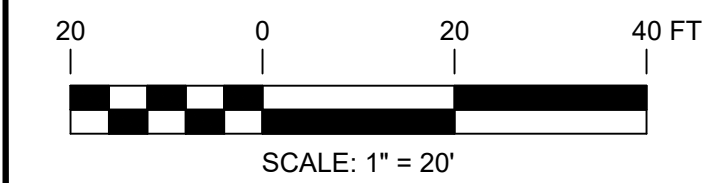
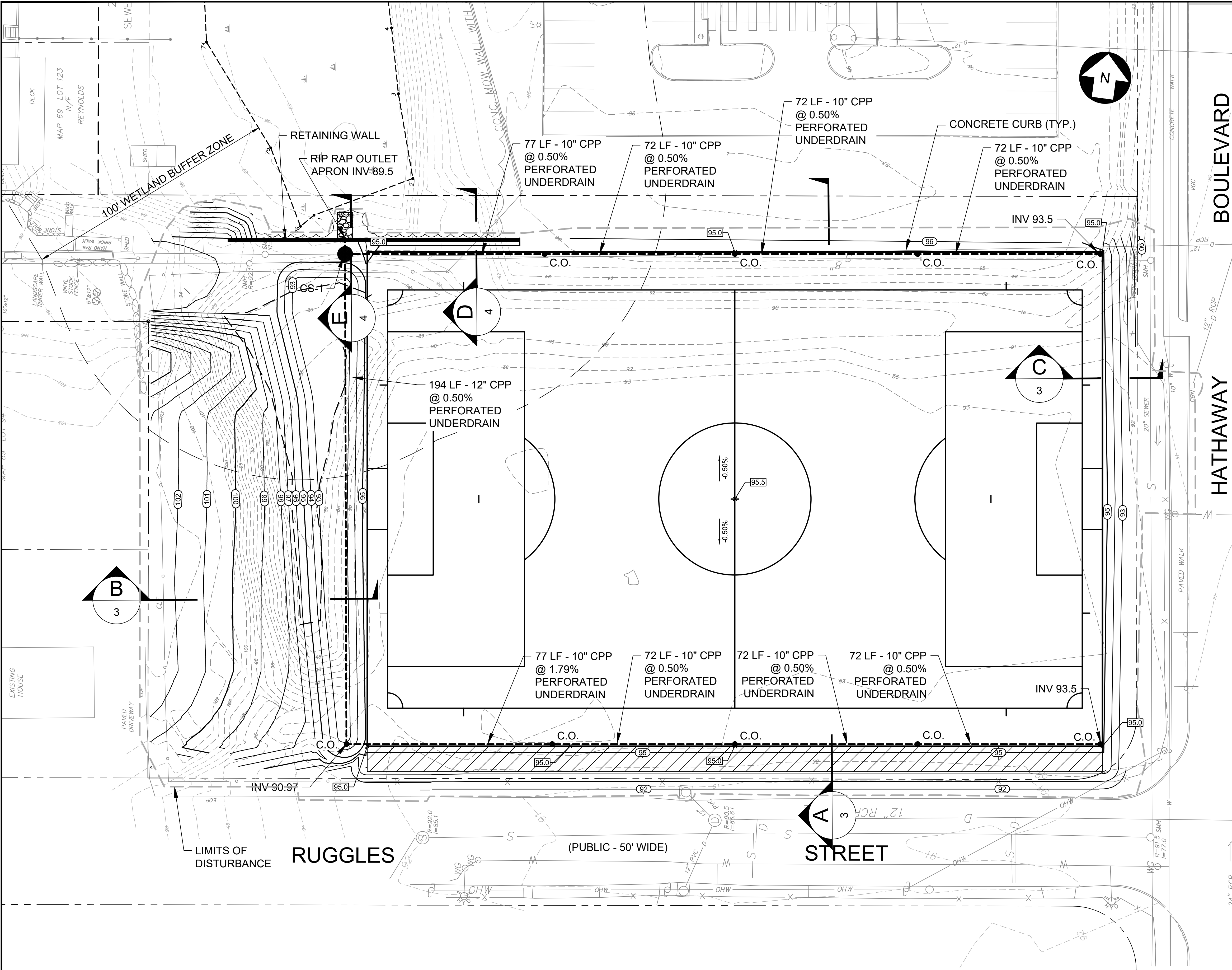
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|-----------------|--|-----|-------------------------------|----------|-----|-----|-----|
| | | D | REVISED LIMIT OF CLEARING | 06/15/18 | TRC | TRC | |
| | | C | ISSUED FOR PHASE IV SUBMITTAL | 04/10/18 | TRC | TRC | |
| | | B | REVISED SOCCER FIELD LAYOUT | 11/11/17 | TRC | TRC | |
| | | A | ISSUED FOR CLIENT REVIEW | 05/17/16 | TRC | TRC | |



249 WESTERN AVENUE
AUGUSTA, ME 04330

PROJECT NO: 115058

| | | | | |
|-----------------|---|--|-------------|-----------|
| PGT DESIGNED | EXISTING CONDITIONS & REMOVALS PLAN NEMASKET STREET RECREATION AREA | | NEW BEDFORD | MA |
| CMW DRAWN | | | | |
| PGT CHECKED | | | | |
| APPROVED | | | | |
| REVIEW 1 | 03/28/16 DATE | | DRAWING 1 | REV. D |
| REVIEW 2 | 1" = 20' SCALE | | | |



ISSUED FOR PERMITTING
NOT FOR CONSTRUCTION



249 WESTERN AVENUE
AUGUSTA, ME 04330

PROJECT NO: 115058

| REV | DESCRIPTION | DATE | DES | CHK | APP |
|-----|--|----------|-----|-----|-----|
| E | REVISED PER 07/03/18 REVIEW MEETING COMMENTS | 07/10/18 | TRC | TRC | |
| D | REVISED LIMITS OF DISTURBANCE | 06/15/18 | TRC | TRC | |
| C | ISSUED FOR PHASE IV SUBMITTAL | 04/10/18 | TRC | TRC | |
| B | REVISED SOCCER FIELD LAYOUT | 11/17/17 | TRC | TRC | |

PGT
DESIGNED
CMW
DRAWN
PGT
CHECKED
APPROVED

SITE GRADING PLAN
NEMASKET STREET
RECREATION AREA

NEW BEDFORD

MA

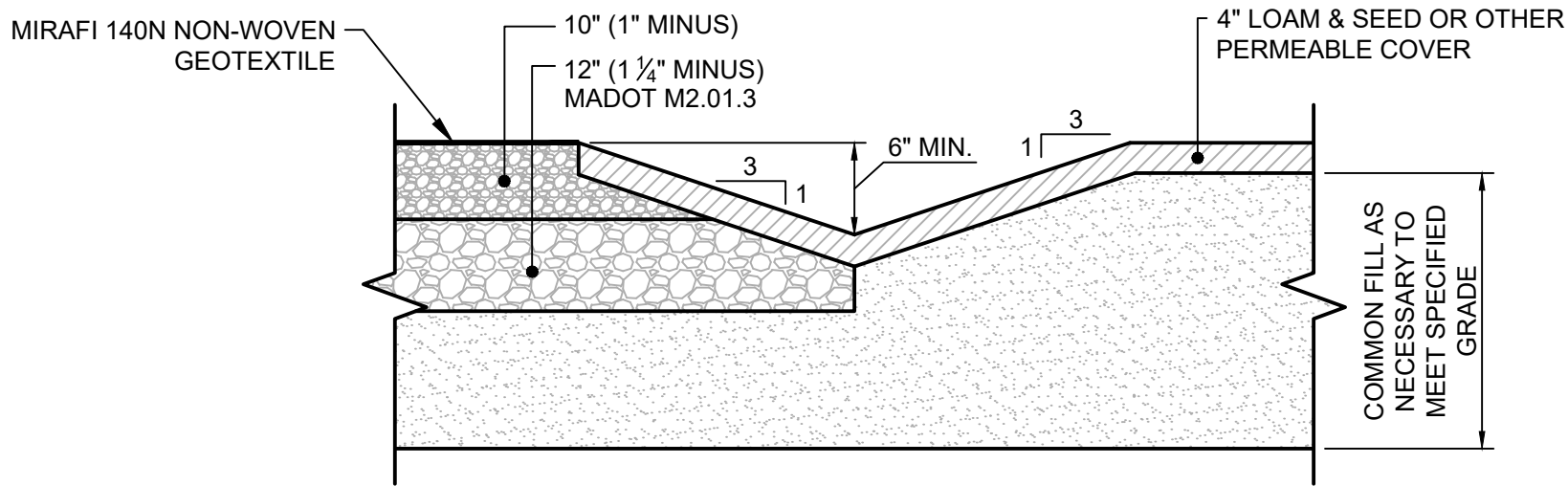
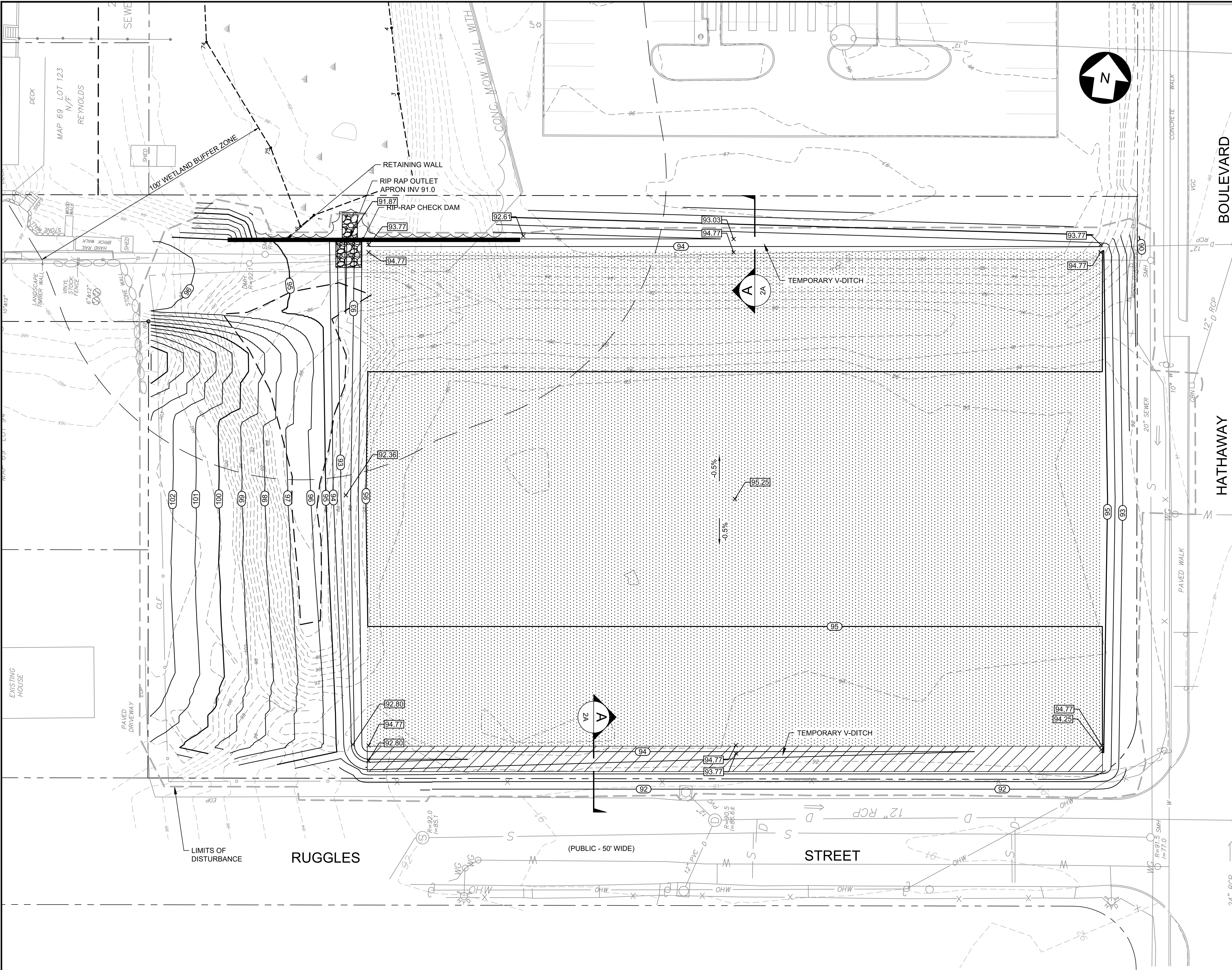
REVIEW 1
REVIEW 2

03/28/16
DATE
1" = 20'
SCALE



DRAWING 2

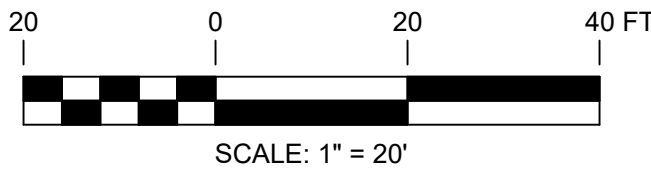
REV.
E



A
2A
TEMPORARY V-DITCH SECTION
SCALE: N.T.S.

LEGEND

- LIMITS OF SOCCER FIELD
ROUGH GRADING
- CLEAN UTILITY CORRIDOR
- LIMITS OF DISTURBANCE



249 WESTERN AVENUE
AUGUSTA, ME 04330

PROJECT NO: 115058

| REV | DESCRIPTION | DATE | DES | CHK | APP |
|-----|-------------------------------|----------|-----|-----|-----|
| | | | | | |
| | | | | | |
| | | | | | |
| A | ISSUED FOR PHASE IV SUBMITTAL | 04/10/18 | TRC | TRC | |

PGT
DESIGNED
CMW
DRAWN
PGT
CHECKED
APPROVED

ROUGH GRADING PLAN
NEMASKET STREET
RECREATION AREA

NEW BEDFORD

MA

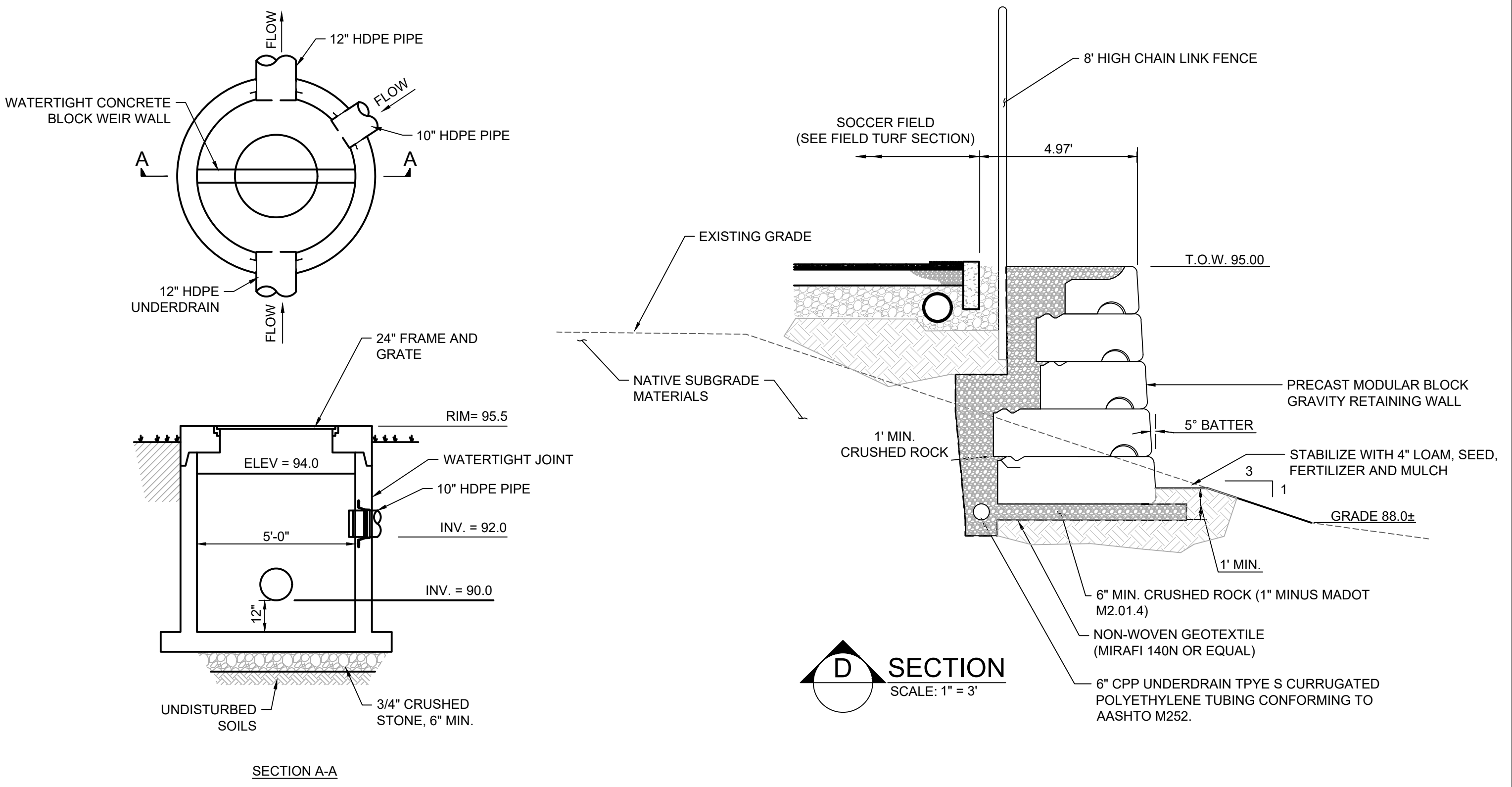
REVIEW 1
REVIEW 2

03/28/16
DATE
1" = 20'
SCALE



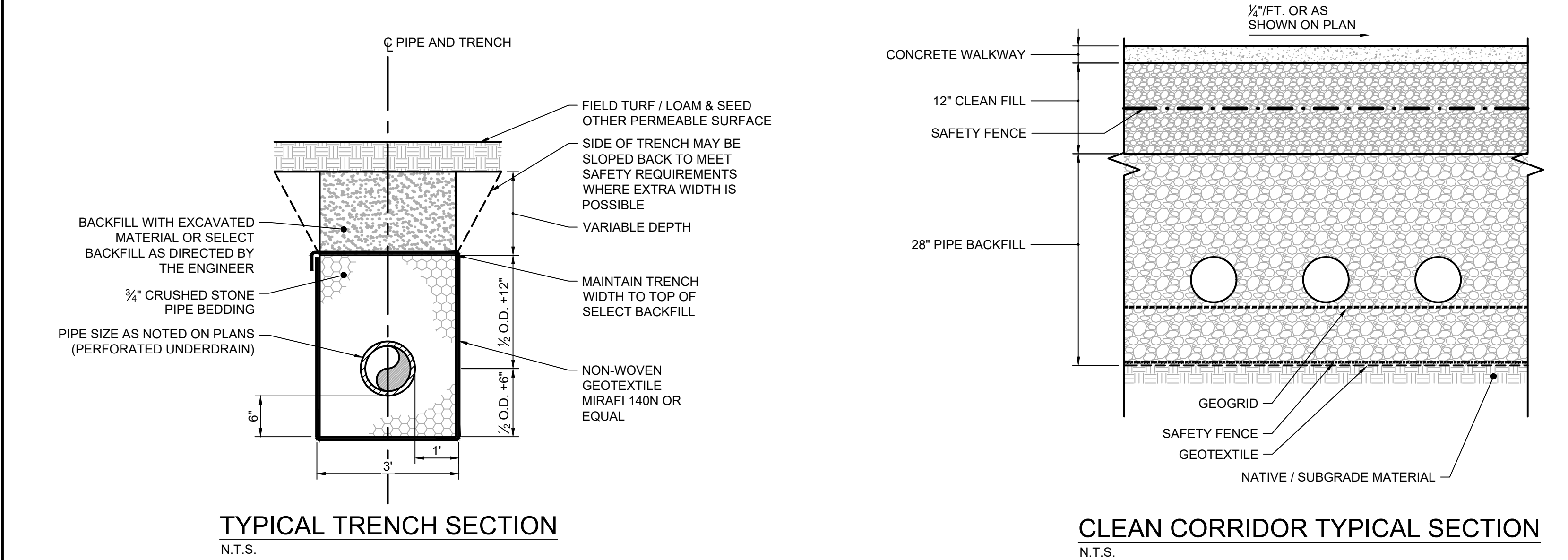
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REV.
A

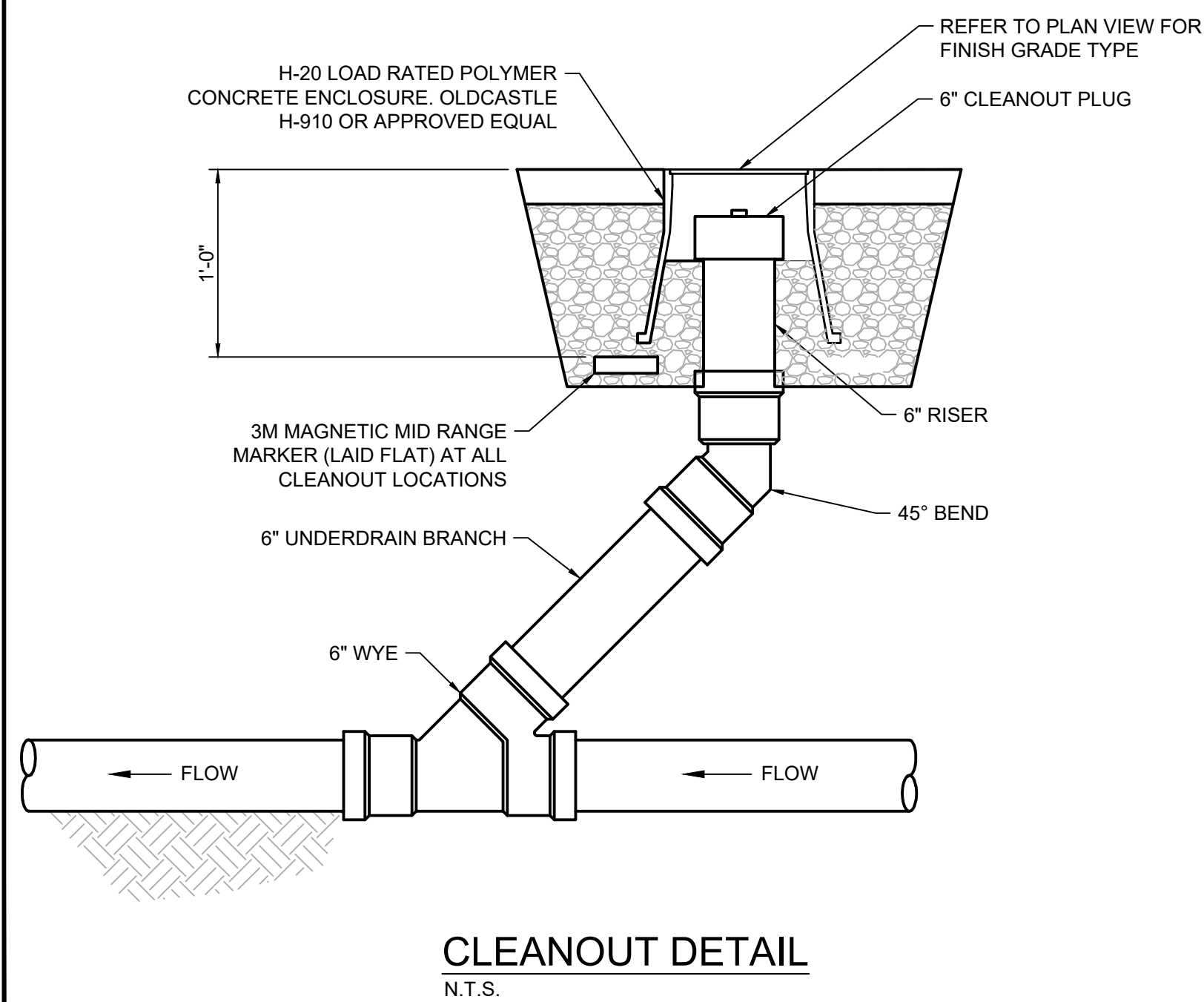


OUTLET CONTROL STRUCTURE CS-1

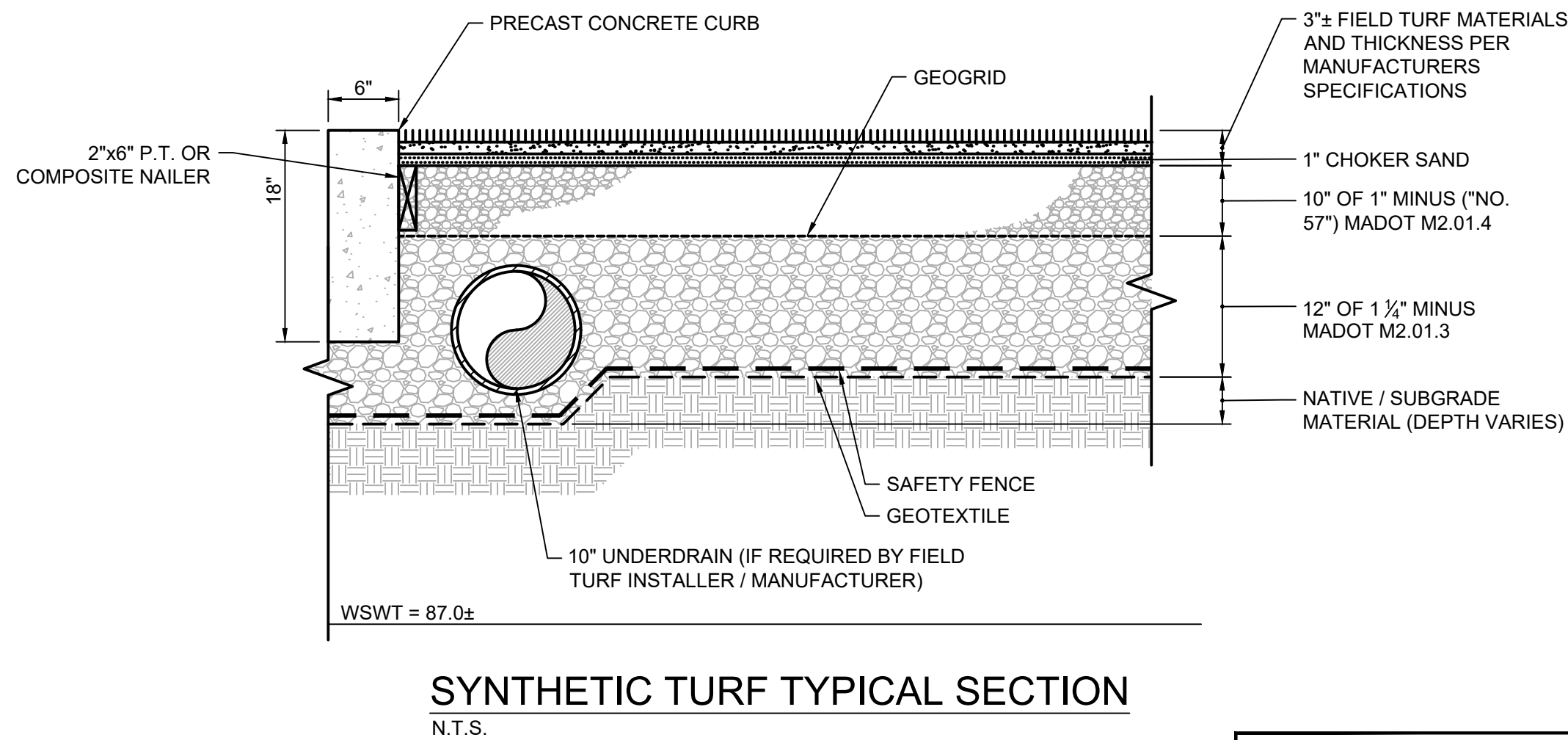
SCALE: 1" = 3'




CLEAN CORRIDOR TYPICAL SECTION
N.T.S.




CLEANOUT DETAIL
N.T.S.



SYNTHETIC TURF TYPICAL SECTION
N.T.S.

| | | |
|---|---|---------------------------|
|  | 249 WESTERN AVENUE AUGUSTA, ME 04330 | PROJECT NO: 115058 |
|---|---|---------------------------|

| REV | DESCRIPTION | DATE | DES | CHK | APP |
|-----|--|----------|-----|-----|-----|
| D | REVISED PER 07/03/18 REVIEW MEETING COMMENTS | 07/10/18 | TRC | TRC | |
| C | REVISED PER NITSCH ENGINEERING COMMENTS | 06/27/18 | TRC | TRC | |
| B | REVISED SOCCER FIELD LAYOUT | 11/17/17 | TRC | TRC | |
| A | ISSUED FOR CLIENT REVIEW | 05/17/16 | TRC | TRC | |

| | | | | |
|---|---|---|-----------|-----------|
| PGT DESIGNED CMW DRAWN PGT CHECKED APPROVED | SITE GRADING & DRAINAGE DETAILS NEMASKET STREET RECREATION AREA | | | MA |
| | NEW BEDFORD | | | |
| REVIEW 1 REVIEW 2 | 03/28/16 DATE AS NOTED SCALE |  | DRAWING 4 | REV. D |

MULCH AND SEED SPECIFICATIONS

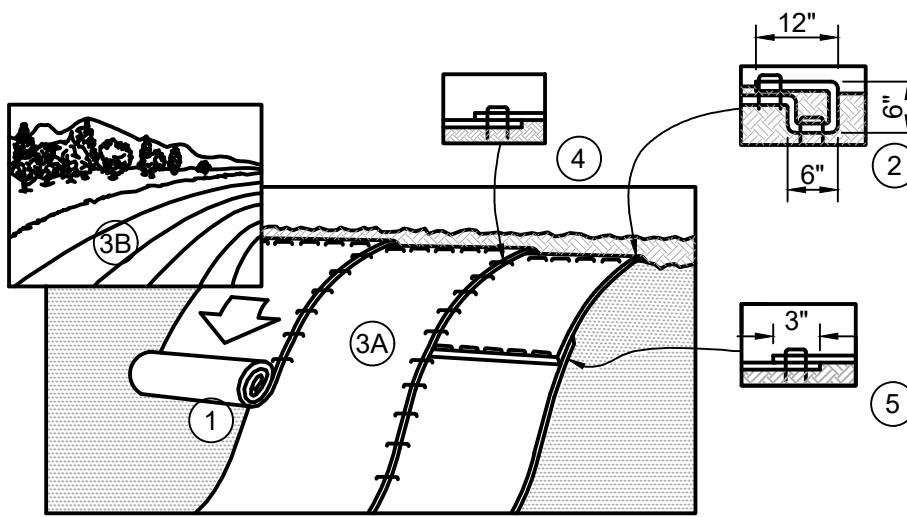
| SUMMARY OF TEMPORARY AND PERMANENT MULCH APPLICATION REQUIREMENTS | |
|---|---|
| TEMPORARY | |
| WITHIN 100 FEET OF WETLANDS AND WATERBODIES | APPLY "STRAW MULCH AT A MINIMUM OF 70 LBS/1000 S.F. OF EXPOSED SOIL." MUST BE DONE WITHIN 48 HOURS OF INITIAL SOIL DISTURBANCE AND BEFORE FORECASTED STORM EVENTS, UNLESS OTHERWISE SPECIFIED. IF FINAL RESTORATION IS NOT SCHEDULED WITHIN 30 DAYS, APPLY ANNUAL RYEGRASS AT 1LB/1000 S.F. |
| OTHER AREAS OF EXPOSED SOIL WITH SLOPES LESS THAN 8% AND SOILS STOCKPILES | IF NO ACTIVITY IS SCHEDULED WITHIN 30 DAYS, APPLY "STRAW MULCH AT A MINIMUM OF 70 LBS/1000 S.F. OF EXPOSED SOIL," UNLESS SPECIFIED OTHERWISE. ECM** MAY BE USED. "STRAW MULCH MAY ALSO BE SUPPLEMENTED BY TEMPORARY SEEDING WITH ANNUAL RYEGRASS AT 1 LB/1000 S.F. FOR AREAS WHERE ADDITIONAL ACTIVITY IS NOT EXPECTED FOR SEVERAL MORE WEEKS. AN EROSION CONTROL BARRIER MUST BE INSTALLED AROUND SOIL STOCKPILES THAT ARE EXPECTED TO REMAIN UNDISTURBED FOR MORE THAN 48 HOURS, OR PRIOR TO A STORM EVENT. |
| OTHER AREAS OF EXPOSED SOIL WITH SLOPES GREATER THAN 8% | IF FINAL RESTORATION IS NOT SCHEDULED WITHIN 30 DAYS OR PRIOR TO A STORM EVENT, APPLY "STRAW MULCH AT THE ABOVE RATES." HAY OR STRAW MUST BE ANCHORED, UNLESS SPECIFIC SITE CONDITIONS DO NOT REQUIRE USE OF ANCHORING. ECM** OR MATTING MAY ALSO BE USED. TEMPORARY SEEDING WITH ANNUAL RYEGRASS AT 1LB/1000 S.F. IS ALSO RECOMMENDED FOR AREAS WHERE FINAL STABILIZATION IS NOT EXPECTED FOR SEVERAL MORE WEEKS. |
| TEMPORARY SEEDBED PREPARATION | APPLY LIMESTONE AND FERTILIZER (UPLANDS ONLY) ACCORDING TO SOIL TEST DATA. IF SOIL TEST IS NOT POSSIBLE, 10-0-10 FERTILIZER MAY BE APPLIED AT A RATE OF 600 LBS/ACRE AND LIMESTONE AT 3 TONS/ACRE. LOOSEN COMPACTED SOILS. |
| TEMPORARY SEEDING IN WETLANDS | IF REQUIRED, APPLY ANNUAL RYEGRASS AT A RATE OF 1 LB/1000 S.F. AND COVER WITH STRAW MULCH. DO NOT ADD LIME OR FERTILIZER TO WETLANDS. |
| FINAL RESTORATION | |
| PERMANENT MULCHING | EROSION CONTROL MIX (ECM) CAN BE USED AS A TEMPORARY OR PERMANENT SLOPE REINFORCEMENT AND LEFT TO RE-VEGETATE TO NEAR NATURAL CONDITIONS. IT IS NOT USED WHERE GRASS VEGETATION IS REQUIRED. RE-VEGETATION CAN BE ENHANCED BY SEEDING, WHICH IS ENCOURAGED IF USED AS A PERMANENT STABILIZATION MEASURE. PERMANENT MULCH MUST NOT BE USED IN AREAS OF CONCENTRATED WATER FLOWS AND EVIDENCE OF GROUNDWATER SEEPAGE ON SLOPES MAY REQUIRE THE ECM TO BE REPLACED WITH RIPRAP. ON SLOPES THAT ARE 3H:1V OR LESS, ECM SHALL BE APPLIED AT A MINIMUM OF 2 INCHES THICK PLUS AN ADDITIONAL 1/2 INCH PER 20 FEET OF SLOPE UP TO 100 FEET (E.G. 3 INCHES THICK FOR 60 FEET OF SLOPE; 4 INCHES THICK FOR 100 FEET OF SLOPE). FOR SLOPES BETWEEN 3H:1V AND 2H:1V, ECM WILL BE APPLIED 4 INCHES THICK PLUS AN ADDITIONAL 1/2 INCH PER 20 FEET OF SLOPE UP TO 100 FEET (E.G. 5 INCHES THICK FOR 60 FEET OF SLOPE; 6 INCHES THICK FOR 100 FEET OF SLOPE) ECM MUST BE SPREAD EVENLY AND MUST PROVIDE 100 PERCENT SOIL COVERAGE. |
| PERMANENT RE-VEGETATION | PERMANENT SEEDING SHALL BE USED ON ALL EXPOSED SOIL THAT IS NOT PERMANENTLY STABILIZED BY ROCK, GRAVEL OR ECM. THE FOLLOWING PERMANENT SEEDING MIX SPECIFICATIONS ARE BETWEEN APRIL 16 AND OCTOBER 31, HOWEVER WINTER RYE WILL BE ADDED TO THE PERMANENT SEED MIX AFTER OCTOBER 1. PERMANENT SEEDING IS NOT REQUIRED DURING THE WINTER CONSTRUCTION SEASON, ALTHOUGH DORMANT SEEDING MAY BE PERFORMED |
| THE CONTRACTOR WILL BE RESPONSIBLE FOR THE PROPER MAINTENANCE OF ALL RE-VEGETATED AREAS UNTIL THE PROJECT HAS BEEN COMPLETED AND ACCEPTED. FOLLOWING FINAL SEEDING THE CONTRACTOR WILL INSPECT RESTORED AREAS EVERY 30 DAYS UNTIL 75 PERCENT VEGETATIVE COVER HAS BEEN ESTABLISHED UNLESS ADJACENT, UNDISTURBED AREAS INDICATE THAT ACHIEVING THAT LEVEL OF VEGETATION IN THE AREA IS UNLIKELY. WHERE SEEDING AREAS HAVE BECOME ERODED OR DAMAGED BY CONSTRUCTION OPERATIONS, OR WHERE POOR GERMINATION OBSERVED, THE AFFECTED AREAS WILL BE PROMPTLY RE-GRADED, LIMED, FERTILIZED, AND RE-SEEDING AS NEEDED UNTIL THE ABOVE CRITERIA ARE MET. THE CONTRACTOR MAY BE REQUIRED TO RE-SEED DURING THE FOLLOWING SPRING IN ORDER TO ACHIEVE THE REQUIRED VEGETATIVE COVER. | |
| * MULCH APPLICATION RATES SHALL BE DOUBLED FOR WINTER CONSTRUCTION **MINIMUM ECM THICKNESS IS 4 INCHES FOR WINTER CONSTRUCTION | |

| PERMANENT SEED MIX SPECIFICATIONS | | | | |
|--|--|---|--------------------|----------------------|
| | SOIL AMENDMENTS | SEED MIX VARIETIES | SEED RATE, LB/ACRE | MULCH, TONS/ACRE |
| UPLAND | APPLY GROUND LIMESTONE @ 3 TONS/ACRE | CREeping RED FESCUE / (PENNLAWN, ENSYLA, WINTERGREEN) | 20 | 1.5-2 (90-100 BALES) |
| | APPLY 10-20-20 FERTILIZER @ 800 LBS/ACRE | REDTOP / (ANY NATIVE SPECIES) | 2 | |
| WETLAND | NONE | TALL FESCUE / (KENTUCKY 31) | 20 | |
| | | ANNUAL RYEGRASS, IF REQUIRED FOR TEMPORARY STABILIZATION / (WETLAND SEED MIX) | 40 | 1.5-2 (90-100 BALES) |
| • INCREASE SEEDING RATES BY 10% WHEN HYDROSEEDING. | | | | |
| • ADD WINTER RYE TO THE UPLAND MIX AT A RATE OF 120 LB/ACRE AFTER OCTOBER 1 | | | | |
| • SEED OR MULCH WETLANDS ONLY WHERE REQUIRED BY THE E1 OR 3P1, OR WHEN RESTORATION OCCURS AFTER OCTOBER 1. TYPICALLY, REPLACING THE ORIGINAL WETLAND SOIL ON THE RESTORED SURFACE WILL PROVIDE AN ADEQUATE SEED BED. | | | | |
| • DO NOT LIME OR FERTILIZE ANY AREAS WITHIN THE WATER BODY BUFFERS OR WETLANDS. | | | | |
| • MULCH WETLANDS WITH WEED-FREE STRAW ONLY. | | | | |

GENERAL EROSION CONTROL NOTES

INSTALL EROSION CONTROL MEASURES IN ACCORDANCE WITH THE SPECIFICATIONS HEREIN AND IN ACCORDANCE WITH ALL MASSACHUSETTS REGULATIONS.

1. INSTALL ALL PERIMETER CONTROLS PRIOR TO COMMENCEMENT OF EARTH MOVING ACTIVITIES.
2. PRIOR TO THE INITIATION OF GRADING OPERATIONS, CONSTRUCT AND STABILIZE TEMPORARY DRAINAGE SWALES, CHECK DAMS, AND PLUNGE POOLS AS NEEDED TO EFFECTIVELY CONTROL EROSION AND PREVENT TRANSPORT OF SEDIMENT INTO REGULATED RESOURCES OR OFF-SITE.
3. DRAINAGE CHANNELS SHALL BE STABILIZED PRIOR TO RECEIVING RUNOFF. STABILIZE ROAD DITCHES WITH LOAM, SEED, EROSION CONTROL, BLANKETS OR RIPRAP (DEPENDING ON SLOPE) WITHIN 24 HOURS OF FINAL GRADING.
4. INSTALL STONE CHECK DAMS WITHIN 24 HOURS OF ROUGH OR FINISH GRADING ANY SECTION OF DITCH, AS SHOWN ON THE PROJECT PLANS AND AT OTHER LOCATIONS AS NEEDED.
5. ALL ROADWAYS AND CUT/FILL SLOPES SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
6. ONCE A WEEK, OR AFTER RAINSTORMS PRODUCING AT LEAST 1/4 INCH OF RAINFALL, WHICHEVER IS MORE FREQUENT, INSPECT ALL AREAS WHERE TEMPORARY NON-STRUCTURAL MEASURES ARE USED. THE INSPECTION SCHEDULE WILL BE INCREASED TO DAILY DURING THE WINTER CONSTRUCTION PERIOD.
7. AFTER GRADING AND PRIOR TO FINAL STABILIZATION PROVIDE PERIODIC APPLICATION OF WATER OR CALCIUM CHLORIDE AS NEEDED TO CONTROL EXCESSIVE DUST.
8. REMOVE TEMPORARY EROSION CONTROL MEASURES ONCE AN AREA OF THE SITE IS PERMANENTLY STABILIZED.
9. MONITOR PUBLIC ROADS FOR SIGNS OF MUD TRACKING OR SPILLAGE OF SPOIL MATERIAL. CLEAN ROADWAYS AS NEEDED.

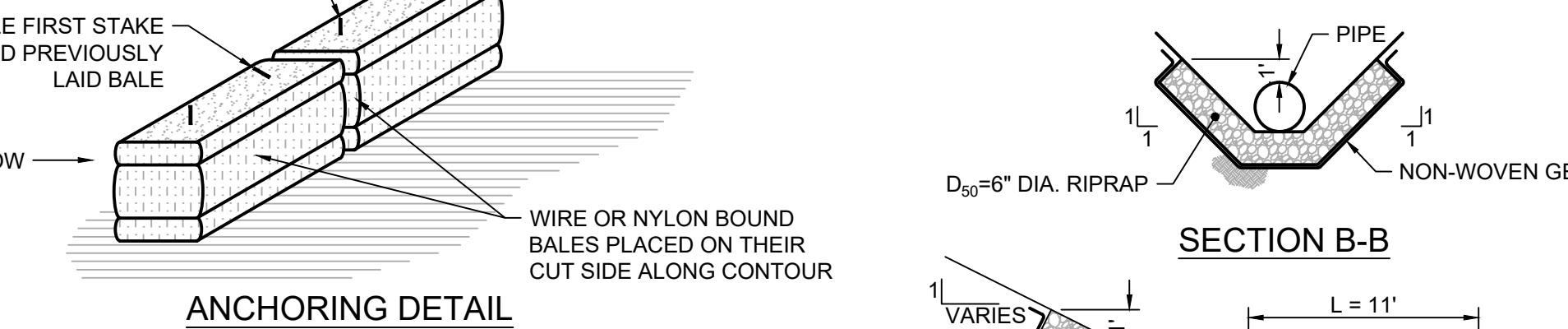
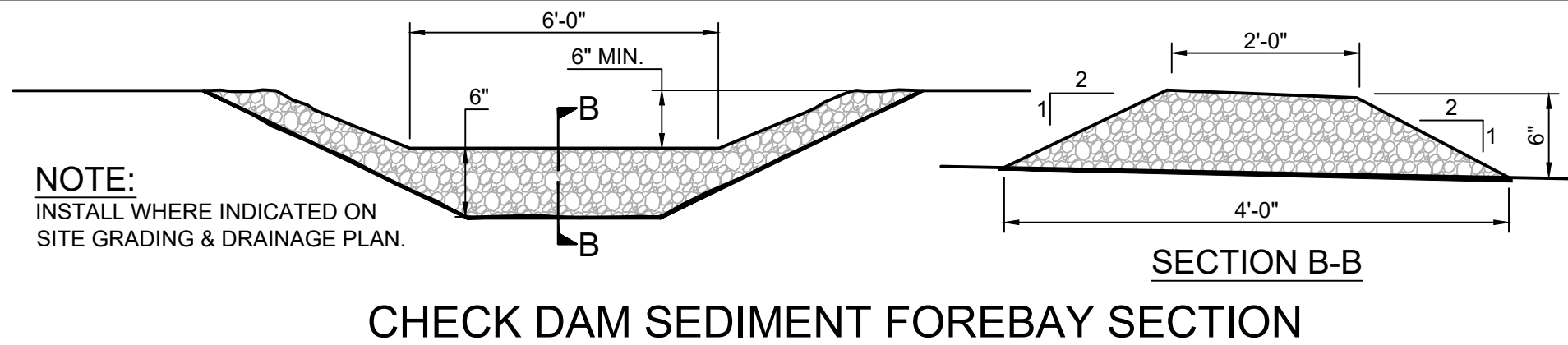


1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O- SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP SLOPE PORTION. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET.
3. ROLL THE BLANKETS (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING OPTIONAL DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2"-5" OVERLAP DEPENDING ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET.
5. CONSECUTIVE BLANKETS SPICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE BLANKET WIDTH.

NOTE: *IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.

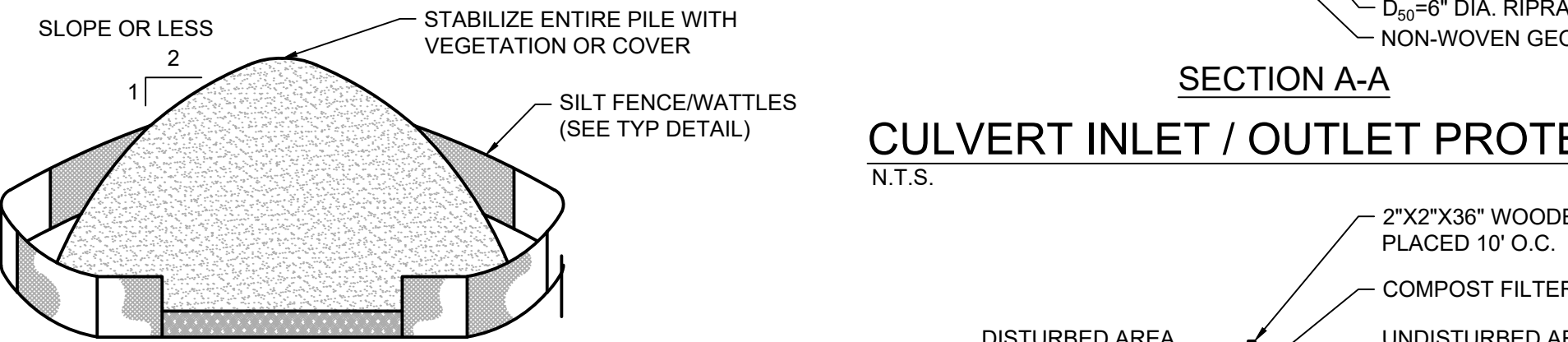
EROSION CONTROL BLANKET INSTALLATION

N.T.S.



STRAW BALE BARRIER DETAIL

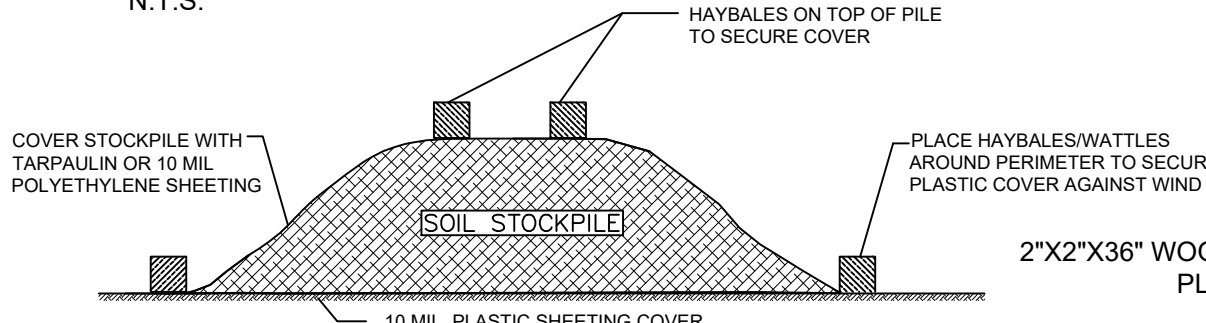
N.T.S.



- INSTALLATION NOTES:
1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
 2. MAXIMUM SLOPE OF STOCKPILE SHALL BE 2H:1V.
 3. UPON COMPLETION OF SOIL STOCKPILING, EACH PILE SHALL BE SURROUNDED WITH EITHER SILT FENCING OR STRAW BALES, THEN STABILIZED WITH VEGETATION OR COVERED.

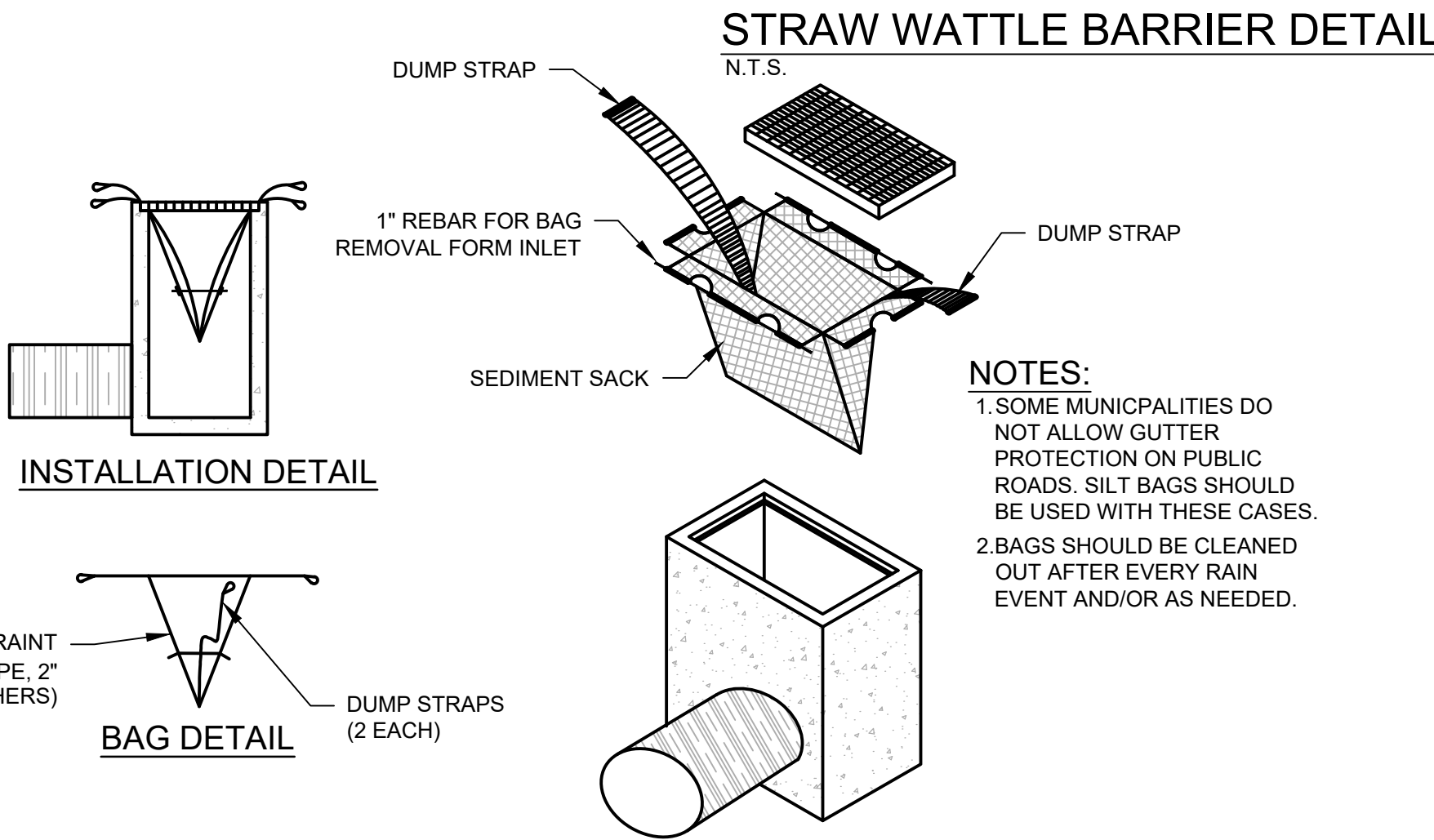
TYPICAL CLEAN FILL STOCKPILE

N.T.S.



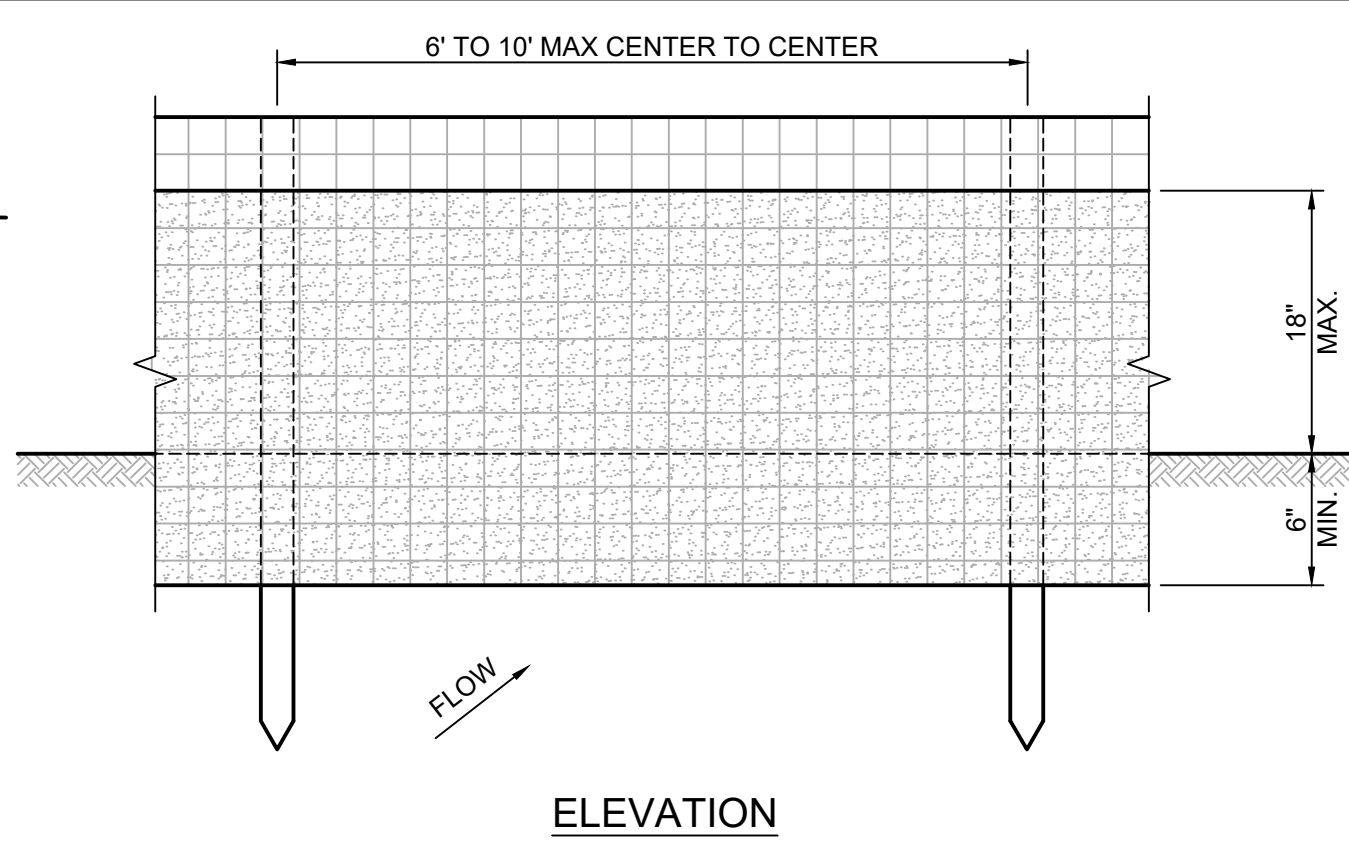
PCB, NON-PCB REMEDIATION WASTE STOCKPILE DETAIL

N.T.S.



SILT BAG - CATCH BASIN INLET PROTECTION DETAIL

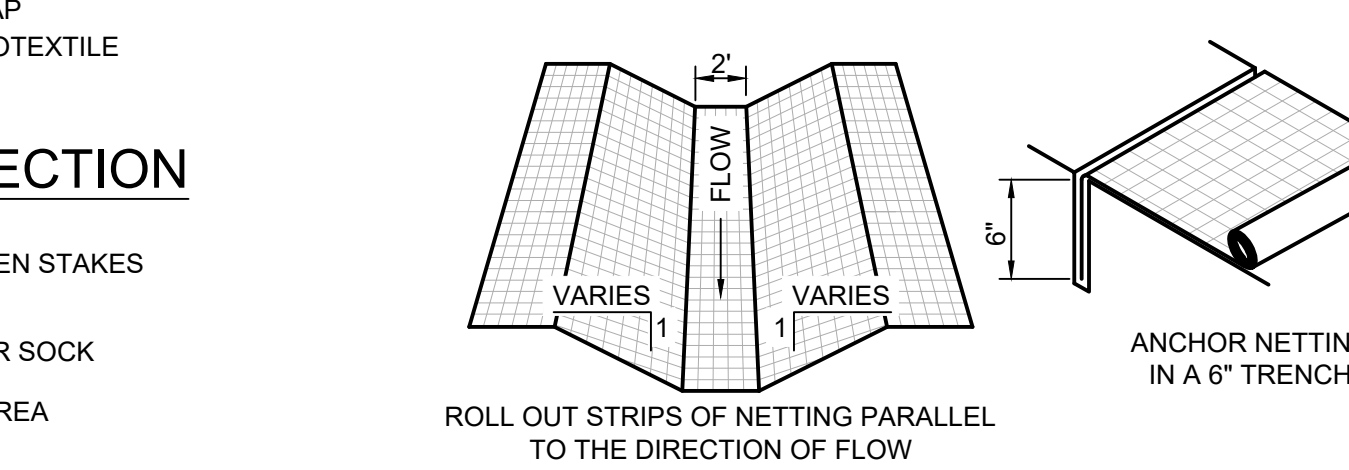
N.T.S.



- ELEVATION
1. WOVEN WIRE FENCE TO BE FASTENED TO FENCE POSTS WITH WIRE TIES OR STAPLES.
 2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MIDSECTION.
 3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY 6" AND FOLDED.
 4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN BUILD-UP REACHES 1/2 THE HEIGHT OF THE FENCE.

SILT FENCE DETAILS

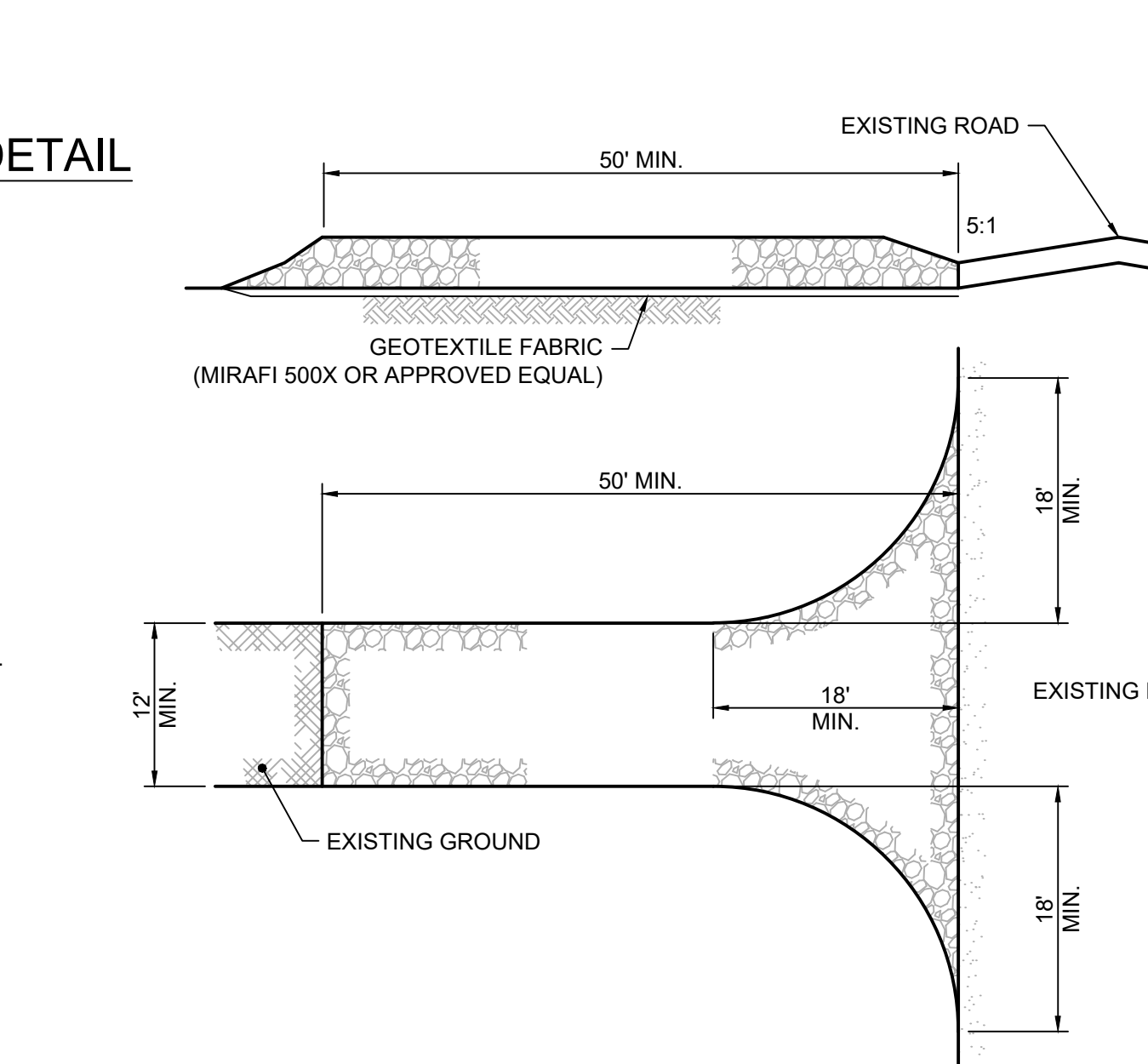
N.T.S.



- NOTES
1. EXCAVATE THE CHANNEL AND SHAPE IT TO AN EVEN CROSS-SECTION AS SHOWN. WHEN STAKING INDICATE A 0.2' OVERCUT AROUND THE CHANNEL PERIMETER FOR SILTING AND BULKING.
 2. GRADE SOIL AWAY FROM CHANNEL SO THAT SURFACE WATER MAY ENTER FREELY.
 3. APPLY LIME, FERTILIZER AND SEED TO THE CHANNEL AND ADJOINING AREAS IN ACCORDANCE WITH THE EROSION CONTROL PLAN.
 4. SPREAD STRAW MULCH AT THE RATE OF 100LB/1000 SF.
 5. HOLD MULCH IN PLACE IMMEDIATELY AFTER SPREADING WITH A PLASTIC NETTING INSTALLED AS SHOWN.
 6. START LAYING THE NET FROM THE TOP OF THE UPSTREAM END OF THE CHANNEL AND UNROLL IT DOWN GRADE. DO NOT STRETCH THE NETTING.
 7. BURY THE UP SLOPE END AND STAPLE THE NET EVERY 12" ACROSS THE TOP END, EVERY 3" AROUND THE EDGES AND ACROSS THE NET SO THAT THE STRAW IS HELD CLOSELY AGAINST THE SOIL. HOWEVER, DO NOT STRETCH THE NETTING WHEN STAPLING.
 8. NETTING STRIPS SHOULD BE JOINED TOGETHER ALONG THE SIDES WITH A 3" OVERLAP AND STAPLED TOGETHER.
 9. TO JOIN ENDS OF STRIPS, INSERT A NEW ROLL OF NET IN A TRENCH AS WITH THE UP SLOPE END AND OVERLAP IT 18" WITH THE PREVIOUSLY LAID UPPER ROLL. TURN UNDER 6" OF THE 18" OVERLAP AND STAPLE EVERY 12" ACROSS THE END.

LINED SWALE

N.T.S.



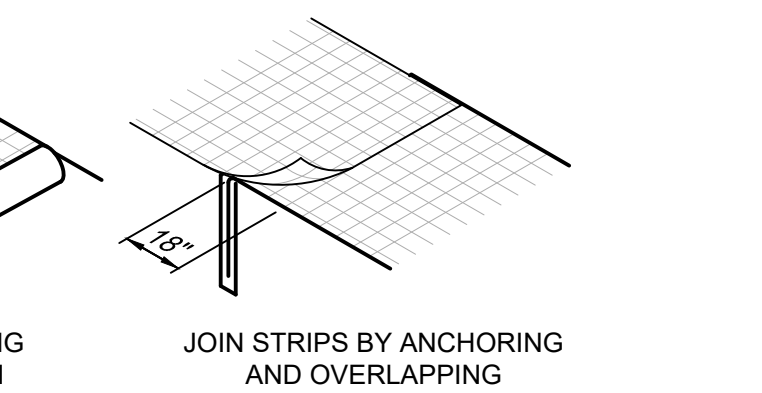
STABILIZED CONSTRUCTION ENTRANCE

N.T.S.



| POSTS | STEEL "T" OR "U" TYPE OR 2" HARDWOOD. |
|--------------------|--|
| FENCE | WOVEN WIRE. 141/2 GA 6" MAX MESH OPENING. |
| FILTER CLOTH | FILTER X, MIRAFI 100X, STABILINKA T140N OR APPROVED EQUAL. |
| PREFABRICATED UNIT | ENVIROFENCE OR APPROVED EQUAL |

SILT FENCE DETAILS

N.T.S.



- NOTES
1. EXCAVATE THE CHANNEL AND SHAPE IT TO AN EVEN CROSS-SECTION AS SHOWN. WHEN STAKING INDICATE A 0.2' OVERCUT AROUND THE CHANNEL PERIMETER FOR SILTING AND BULKING.
 2. GRADE SOIL AWAY FROM CHANNEL SO THAT SURFACE WATER MAY ENTER FREELY.
 3. APPLY LIME, FERTILIZER AND SEED TO THE CHANNEL AND ADJOINING AREAS IN ACCORDANCE WITH THE EROSION CONTROL PLAN.
 4. SPREAD STRAW MULCH AT THE RATE OF 100LB/1000 SF.
 5. HOLD MULCH IN PLACE IMMEDIATELY AFTER SPREADING WITH A PLASTIC NETTING INSTALLED AS SHOWN.
 6. START LAYING THE NET FROM THE TOP OF THE UPSTREAM END OF THE CHANNEL AND UNROLL IT DOWN GRADE. DO NOT STRETCH THE NETTING.
 7. BURY THE UP SLOPE END AND STAPLE THE NET EVERY 12" ACROSS THE TOP END, EVERY 3" AROUND THE EDGES AND ACROSS THE NET SO THAT THE STRAW IS HELD CLOSELY AGAINST THE SOIL. HOWEVER, DO NOT STRETCH THE NETTING WHEN STAPLING.
 8. NETTING STRIPS SHOULD BE JOINED TOGETHER ALONG THE SIDES WITH A 3" OVERLAP AND STAPLED TOGETHER.
 9. TO JOIN ENDS OF STRIPS, INSERT A NEW ROLL OF NET IN A TRENCH AS WITH THE UP SLOPE END AND OVERLAP IT 18" WITH THE PREVIOUSLY LAID UPPER ROLL. TURN UNDER 6" OF THE 18" OVERLAP AND STAPLE EVERY 12" ACROSS THE END.

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|--|--|--|--|--------------------|-----|-----|-----|--|--|---|--|--|---|---|--|--|-----------|--|--|-----------|--|--|
|  249 WESTERN AVENUE AUGUSTA, ME 04330 | | | | | | PROJECT NO: 115058 | | | | | | <div>PGT DESIGNED</div> <div>CMW DRAWN</div> <div>PGT CHECKED</div> <div>APPROVED</div> | | | EROSION CONTROL NOTES & DETAILS NEMASKET STREET RECREATION AREA | | | | | | | | | |
| REV | DESCRIPTION | | | | | DATE | DES | CHK | APP | | | | | | | | | | | | | | | |
| D | INCLUDED PCB, NON-PCB WASTE STOCKPILE DETAIL | | | | | 09/11/18 | TRC | TRC | | | | | | | | | | | | | | | | |
| C | ISSUED FOR PHASE IV SUBMITTAL | | | | | 04/10/18 | TRC | TRC | | | | | | | | | | | | | | | | |
| B | REVISED SOCCER FIELD LAYOUT | | | | | 11/17/17 | TRC | TRC | | | | | | | | | | | | | | | | |
| A | ISSUED FOR CLIENT REVIEW | | | | | 05/17/16 | TRC | TRC | | <div>REVIEW 1</div> <div>DATE</div> <div>1" = 30'</div> <div>SCALE</div> <div>REVIEW 2</div> | | | <div>03/28/16</div> <div>DATE</div> <div>1" = 30'</div> <div>SCALE</div> | | |  | | | DRAWING 6 | | | REV. D | | |