Draft Supplemental Environmental Assessment

York County Maine Emergency Operations Center Project

Alfred, York County, Maine

2022-EO-00004

February 28, 2024

FEMA

U.S. Department of Homeland Security
Federal Emergency Management Agency, Region I
220 Binney Street
Cambridge, MA 02142

TABLE OF CONTENTS

LIST OF TABLES

APPENDICES

ACRONYMS

APE	Area of Potential Effect
BMP	Best Management Practice
CWA	Clean Water Act
DOT	Department of Transportation
EA	Environmental Assessment
EO	Executive Order
EOC	Emergency Operations Center
EPA	United States Environmental Protection Agency
FEMA	Federal Emergency Management Agency
FONSI	Finding of No Significant Impact
GPD	Grant Programs Directorate
IPaC	Information for Planning and Consultation
ME DEP	Maine Department of Environmental Protection
MDIFW	Maine Department of Inland Fish and Wildlife
NEPA	National Environmental Policy Act
NPDES	National Pollutant Discharge Elimination System
PEA	Programmatic Environmental Assessment
PFAS	Per- and Polyfluoroalkyl Substances
SCF	Stormwater Compensation Fee
SEA	Supplemental Environmental Assessment
SHPO	State Historic Preservation Officer
SLODA	Site Location of Development Act
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service

1.0 INTRODUCTION

The Maine Emergency Management Agency submitted to the Federal Emergency Management Agency (FEMA) a Grant Programs Directorate (GPD) grant application on the behalf of York County, Maine (County). FEMA coordinates the federal government's role in preparing for, preventing, mitigating the effects of, responding to, and recovering from all domestic disasters, whether natural or man-made, including acts of terror. The mission of GPD is to manage federal assistance to measurably improve capability and reduce the risks the Nation faces in times of man-made and natural disasters. As such, GPD-funded grants involve a wide variety of projects designed to improve the preparedness and readiness of public safety and first response agencies, as well as improve homeland security through increased protection of the Nation's critical infrastructure.

The Proposed Action would construct York County's All-Hazards Training Facilities, consisting of 41,963 square feet of floor area and a 58-bed, 54,530 square foot, Regional Drug Treatment and Recovery Center on a County-owned parcel in the Town of Alfred, ME (Town). In addition to providing a training facility for first responders, a portion of the facility would house an Emergency Operations Center (EOC) for the monitoring, preparation for, and management of emergency and disaster events and a regional drug recovery center. These buildings are being built at the same time on the same site.

The National Environmental Policy Act (NEPA) requires FEMA to consider potential environmental effects before funding or approving actions and projects and to ensure that the public is fully informed about the potential consequences of a proposed federal action. Additionally, the CEQ regulations at 40 C.F.R. §§ 1500.4(k) and 1501.11 encourage the development of program-level NEPA environmental documents and tiering from those programmatic documents to eliminate repetitive discussions, allowing for site-specific reviews that are focused on a narrower scope specific to the subsequent action. A Programmatic Environmental Assessment (PEA) is used to address a group of projects that are similar in scope, scale, magnitude, and the nature of the impact. In addition, CEQ regulations at 40 C.F.R. § 1501.5 allow agencies to prepare an environmental assessment (EA) on any action at any time to assist agency planning and decision-making. As such, FEMA developed a PEA to assess the impacts of GPD funded actions under these CEQ authorities in July of 2010.

FEMA is proposing to utilize the GPD PEA in its assessment of the York County All Hazards Training Facility/EOC project since the scope of the action substantially falls within the impact thresholds analyzed within that document; however; because the proposed project exceeds the thresholds established within the PEA for some resource areas, FEMA has prepared this Supplemental Environmental Assessment (SEA) to evaluate the potential effects of the Proposed Action and alternatives that were not analyzed within the PEA. FEMA will use the findings in this SEA to determine whether to prepare an Environmental Impact Statement or to issue a FONSI.

2.0 PURPOSE AND NEED

The purpose of the proposed GPD project is to provide an EOC that would be utilized in the preparation and planning for emergency response activities and to execute emergency operations as part of the Incident Command System. This facility would be scalable in design to accommodate needs as an incident expands or contracts. Operational planning, logistics, communications, and other functions of an EOC would be conducted from this facility including the daily monitoring of events around the country and region to maintain situational awareness.

In addition to the EOC, the project would provide facilities to train first responders, as the County currently has no adequate site to train responders or to practice and prepare tactics for joint operations. There are currently no law enforcement, technical rescue, or hazardous material training sites in the County, and the two existing fire training sites are over 30-years old and in need of repair. The expanded facilities would provide a facility to manage emergencies and maintain continuity of operations of essential public services for the County.

3.0 PROJECT LOCATION AND BACKGROUND

The proposed project location is located off Maine Route-4 (Jordan Springs Road) in the Town of Alfred, ME (**Appendix A, Figure 1**). The project area consists of approximately 16.8-acres of undeveloped, wooded land on a County-owned parcel adjacent to the York County Jail. The project area commences at the current County Jail access road (Layman Way) at the north end of the site and extends approximately 2,650 feet to the southwest. The project area is located behind several residential and commercial properties which separate the proposed project from Jordan Springs Road to the west. Land directly to the east of the project area is predominantly undeveloped, and Hay Brook is located approximately 900 feet east of the site. Libby Pit Road is situated approximately 450 feet south of the project area limits and is separated from the site by wooded land.

The County selected the site as the preferred alternative, as it is the only County-owned parcel large enough to accommodate the proposed facilities.

4.0 ALTERNATIVES

NEPA regulations state that an agency must explore and objectively evaluate all reasonable alternatives, and for alternatives that were eliminated from detailed study, briefly discuss the reasons for their elimination (40 C.F.R. 1502.14). Additionally, a No Action alternative must be included. This section describes the No Action Alternative, the Proposed Action (that would provide for the purpose and need), and other alternatives that were considered but eliminated from the full analysis. Since no alternatives were presented that would provide the purpose and need of the proposed action, no other alternatives have been considered in this analysis.

As described in **Section 1**, FEMA completed a PEA and a FONSI in July of 2010 which analyzed the impacts of GPD funded projects such as the proposed action. As part of that EA, two alternatives were considered, the proposed action and the No Action Alternative. These two alternatives have been carried through in this SEA (see **Section 4.1** and **Section 4.2**).

4.1 No Action Alternative

Under the No Action alternative, there would be no federal financial assistance provided to construct the County facilities. Unless alternative funding were secured, the County would remain without an adequate facility to train first responders or to practice and prepare tactics for joint operations. York County would remain without an EOC.

4.2 Proposed Action

Under the Proposed Action alternative, approximately 16.8-acres of predominantly undeveloped, wooded land owned by the County would be cleared to construct York County's All Hazards Training Facility, a portion of which would house the County's EOC. The new facilities would include a first responder training center, substance abuse treatment facility, burn tower, fire training pond, a 300-ft by 500-ft concrete training pad, vehicle storage, and a K-9 training area (**Appendix B, Document 1**). Details include the following:

- First responder training that would be conducted on-site would include emergency vehicle driver training, vehicle extrication; physical fitness training; hose training such as hose line advancement, loading and packing, and flow testing; ground ladder carries; emergency diver drills; and simulated prop burns.
- The project would include updated stormwater management consisting of a grassed under-drained soil filter and wet ponds.
- A9,824 gallon per day septic system would be installed between the responder training center and the treatment center to manage wastewater from both facilities. By utilizing an advanced treatment system, the project proponent anticipates a reduction in wastewater contaminants and a reduction of the disposal fields by approximately 50 percent compared to a traditional system.
- Utilities including water, electric and telecommunications would be installed underground and tie into existing public utilities currently servicing the adjacent jail. The treatment center and first responder training center would include backup generator installation which would be used intermittently to maintain operations during emergencies.
- Equipment and materials staging would occur within the limit of the newly cleared portions of the site. Erosion, sedimentation, and spill protection measures will be implemented on-site prior to equipment and materials staging.
- Following construction, unhardened surfaces within the site would be mulched and seeded, planted with deciduous or decorative trees, or planted with perennial/shrub beds. Portions of the cleared areas between the facilities and the remaining wooded areas would be seeded with a native meadow/wildflower mix.

5.0 AFFECTED ENVIRONMENT AND POTENTIAL EFFECTS

This section describes the environment potentially affected by the alternatives, evaluates potential environmental effects, and recommends measures to avoid or reduce those effects. Effects are changes to the existing environment including ecological, aesthetic, historic, cultural, economic, social, or health conditions. Effects may also include consequences resulting from actions that may have both beneficial and detrimental effects, even if on balance the agency believes that the effect would be beneficial (40 C.F.R. 1508.1(g)(1)).

When possible, quantitative information is provided to establish the magnitude of potential effects; otherwise, the potential effects are evaluated qualitatively based on the criteria listed in Table 5-1.

Table 5-1: Classification of Potential Effects

Effect Scale	Criteria
None/Negligible	Resource area would not be affected and there would be no effect, OR changes or benefits would either be nondetectable or, if detected, would have effects that would be slight and local. Effects would be well below regulatory standards, as applicable.
Minor	Changes to the resource would be measurable, but the changes would be small and localized. Adverse or beneficial effects would be within or below regulatory standards, as applicable. Mitigation measures would reduce any potential adverse effects.
Moderate	Changes to the resource would be measurable and have either localized or regional scale effects/benefits. Effects would be within or below regulatory standards, but historic conditions would be altered on a short-term basis. Mitigation measures would be necessary, and the measures would reduce any potential adverse effects.
Major	Changes to the resource would be readily measurable and would have substantial consequences/benefits on a local or regional level. Effects would exceed regulatory standards. Mitigation measures to offset the adverse effects would be required to reduce effects, though long-term changes to the resource would be expected.

Table 5-2 identifies the resources that would not be affected by either the No Action alternative or the Proposed Action because they do not exist in or adjacent to the project area or the alternatives would have no effect on the resource. These resources were removed from further consideration in this SEA. In addition, a number of resources are adequately evaluated in the GPD PEA, and those evaluations are incorporated by reference. Additional evaluation of resources sufficiently analyzed in the PEA is not required.

Table 5-2: Resources Not Present or Fully Covered Under PEA

Resource	Reason for Elimination from SEA
Designated Farmland Soils (Farmland Policy Protection Act)	The proposed project area contains soil types that could be classified as prime farmland (Madawaska fine sandy, 0 to 8 percent slopes – MaB) and farmland of statewide importance (Adams loamy sand, 0 to 8 percent slopes – AdB; Allagash very fine sandy loam, 8 to 15 percent slopes – AlC; and Croghan loamy fine sand, 0 to 8 percent slopes, wooded – CrB). However, based on land evaluation and site assessment criteria, scoring of the site resulted in less than 160 points; therefore, the Farmland Policy Protection Act would not apply (FEMA 2023a).
Seismic Hazards (Executive Order 12699 Seismic Safety)	The town of Alfred is in an area with minimal earthquake hazards (moderate shaking and slight damage could occur), and the project would not affect seismic activity.
Climate Change	Release of greenhouse gases would be negligible and would not result in a significant effect on climate.
Sole Source Aquifers (Safe Drinking Water Act)	There are no designated sole source aquifers within the influence of the project area. The closest designated sole source aquifer is located over 70-miles from the project area.
Federally Designated Wild and Scenic Rivers (Wild and Scenic Rivers Act)	There are no designated Wild and Scenic Rivers within the influence of the project area. The closest designated Wild and Scenic River, the York River, is located approximately 17-miles south of the project area.
Coastal Zone (Coastal Zone Management Act)	Alfred Maine is not a designated coastal community, and the project is not expected to affect the coastal zone.
Coastal Barrier Resources System (Coastal Barrier Resources Act)	There are no designated Coastal Barrier Resource Units or Otherwise Protected Areas within the influence of the project area.
Endangered and Threatened Species (Endangered Species Act)	Using the US Fish and Wildlife Service's (USFWS) Northern Long-Eared Bat (NLEB) Rangewide Determination Key, a determination of not likely to adversely affect (NLAA) was made, and USFWS concurrence was assumed after 15 calendar days with no response. No other ESA-listed species were identified as potentially present within the project area. Based upon the NLAA determination, the potential effects to the ESA-listed NLEB are in conformity with the PEA. In June 2023, A Rare, Threatened, and Endangered Plant Species Survey was conducted by Basswood Environmental, and no state or federally listed species were identified within the project area (Basswood Environmental 2023).
Bald and Golden Eagles (Bald and Golden Eagle Protection Act)	Per the USFWS's online mapper for Bald Eagle Nest Locations and Buffer Zones, the closest known bald eagle nest is located approximately 2.75-miles south of the project site (USFWS 2023a). There are currently no known golden eagle nesting locations within the State of Maine (MDIFW 2023a).

Resource	Reason for Elimination from SEA
Cultural Resources (National Historic Preservation Act) - Structures	FEMA determined there are no structures eligible for listing on the National Register of Historic Places within the Area of Potential Effect (APE) of the proposed project. The Maine State Historic Preservation Officer's (SHPO) office concurred with this determination on June 28, 2023 (FEMA 2023b). The determination of No Historic Properties Affected is in conformity with the PEA for this resource area.
Cultural Resources (National Historic Preservation Act) - Archeology	Based on a review of the archaeological sensitivity of the APE, FEMA recommended a Phase I Archaeological Survey be conducted at the proposed project site (FEMA 2023c). Based on results of the Phase I survey completed in May of 2023, FEMA made a determination of No Historic Properties Affected for the APE of the proposed project. The Maine SHPO's office concurred with this determination on June 28, 2023 (FEMA 2023b). No response was received from the Passamaquoddy Tribe within 30 days of submission of consultation. The determination of No Historic Properties Affected is in conformity with the PEA for this resource area.
Essential Fish Habitat (Magnuson-Stevens Act)	There is no designated Essential Fish Habitat within the influence of the project area.
Transportation (Infrastructure)	The proposed project would require the ingress and egress of construction vehicles and equipment during construction which could lead to a minor increase in traffic in the area. Operation of the facilities would include 85 students and 15 staff daily (Monday through Friday) at the training center and a peak number of 28 staff and an undetermined number of outpatients at the treatment center. These numbers are not expected to result in any impacts to traffic or transportation beyond minimal. The project would require a traffic movement permit be submitted to the Maine Department of Transportation and changes in traffic patterns would be expected to be addressed as part of the permitting process. These effects are in conformity with the PEA.
Public Services and Utilities (Infrastructure)	The current public utilities in the area are adequate to service the new facility and no interruption in public services would be expected from the proposed project.
Hazardous Waste (Resource Conservation and Recovery Act)	Although the York County Jail is listed as a RCRA Very Small Quantity Generator, there are no known hazardous materials within the proposed project area (EPA 2023a). Construction and possible storage of fuel at the proposed facilities could result in minor releases. No aqueous film forming foams containing per- and polyfluoroalkyl substances (PFAS) would be used during training activities at the proposed facilities. Effects resulting from hazardous materials associated with the proposed action would be expected to be negligible. These impacts are in conformity with the PEA.
Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)	There are no hazardous waste sites in the Town of Alfred listed on EPA's National Priorities List (EPA 2023a). There are also no other hazardous sites within the proposed project parcel.
Cumulative Impacts	The project is not expected to result in further long-term development in the area The proposed project would have cumulative beneficial impacts on human health and safety. These impacts are in conformity with the PEA.

5.1 Physical Resources

5.1.1 Land Use and Planning

5.1.1.1 Existing Conditions

The project area is located on a County-owned parcel within a commercial district based upon the Town of Alfred's Zoning Ordinances and Official Zoning Map (Southern Maine Planning Commission 2010). Land use within zoning districts is managed pursuant to the Zoning Ordinances enumerated within Chapter 160 of Alfred's General Legislation. A portion of the project site is located within a Forested Wetlands Resource Protection District (Southern Maine Planning Commission 2010). Pursuant to Article XV §160-82 of the Town of Alfred's Legislation, the Resource Protection District is created as one of the Shoreland Zones, pursuant to the Department of Environmental Protection Shoreland Zoning Guidelines. This district contains those areas mandated in the DEP rules as well as locally designated areas. The purpose of this district is to protect these critical natural resource areas and the surface water quality from the adverse impacts of development, and to protect productive habitat, biological ecosystems, and scenic and natural values (Town of Alfred 1996). Dependent upon the type of development, land use permits may be required from the local Code Enforcer or Planning Board.

The Maine Department of Environmental Protection (ME DEP), Bureau of Land Resources administers Maine's Site Location of Development Act (SLODA) and reviews developments that may have a substantial effect upon the environment. This includes developments occupying more than 20-acres, involving large structures and subdivisions, and oil terminal facilities.

5.1.1.2 Potential Effects and Proposed Mitigation

No Action Alternative

Under the No Action alternative, the site would remain undeveloped. No Resource Protection Districts would be affected, and no land use permits would be required.

Proposed Action

Under the Proposed Action, approximately 16.8-acres of wooded land would be cleared and developed. Construction of the facilities would require a local Land Use permit from the Town of Alfred. The proposed project would require a Site Location of Development Permit, and a SLODA permit application was submitted by the county in July of 2023, which is currently under review by the State. The County would be required to abide by any conditions of local and state permits regulating land use and development. Though compliance with land development permit conditions, effects to local land use would be expected to be **negligible**.

5.1.2 Air Quality (Clean Air Act)

The Clean Air Act regulates air emissions from area, stationary, and mobile sources. Air quality standards have been set for lead, nitrogen dioxide, ozone, carbon monoxide, sulfur dioxide, and particulate matter to protect public health and the environment. Areas where the monitored concentration of a pollutant exceeds air quality standards are designated as nonattainment areas. Areas where all pollutants are below the standards are classified as in attainment areas. Air quality standards are maintained and implemented at a state level through regulations set forth by a State Implementation Plan (SIP).

The Town of Alfred's zoning ordinances prohibit the emission of dust, dirt, fly ash, fumes, vapors, or gases which could damage human health, animals, vegetation, or property, or which could soil or stain persons or property, at any point beyond the lot line of the commercial or industrial establishment creating that emission (Town of Alfred 1996).

5.1.2.1 Existing Conditions

There are currently no non-attainment areas for critical pollutants in the State of Maine; however, the Town of Alfred is within the EPA designated Ozone Transport Region (EPA 2023b). As such, additional levels of control are required by the State of Maine's SIP to control pollutants that form ozone in this area.

5.1.2.2 Potential Effects and Proposed Mitigation

No Action Alternative

Under the No Action Alternative, there would be no emissions related to construction or facilities operations. Effects to air quality would be **none**.

Proposed Action

The Proposed Action would result in short-term emissions related to the use of construction equipment. Emissions would be reduced by minimizing equipment idling times to the extent possible and using equipment in good working order. Additionally, all construction equipment would be required to meet current EPA emissions standards (EPA 2016a). Construction related emissions would be expected to be below *de minimis* levels. Excavation and grading activities during construction could result in a temporary increase in airborne particulate matter; however, best management practices including watering down construction areas, enclosing soil storage piles, and phasing construction to minimize disturbed areas and preserve vegetation to the extent possible would be expected to reduce airborne particulate matter. Short-term effects to air quality as a result of construction would be **minimal**.

Operation of the facilities including use of the burn tower and emergency generators could result in a long-term, intermittent increase in pollutant emissions. Effects to air quality from operation of the burn tower would be managed through compliance with the Maine Department of Environmental Protection's open burning regulations and the Maine Forest Service's requirements. Burns conducted during exercises would also need to be compliant with National Fire Protection Association (NFPA) standards (i.e., NFPA 1403), and Maine Bureau of Air Quality regulations which restrict what can be burned during exercises to straw and clean wood pallets and propane or natural gas fueled props. Additionally, burns would be subject to Town ordinances prohibiting the emissions of gas and vapor beyond the property line of the facility.

Backup generator use would be limited to emergency situations to maintain the facility's continuity of operations and routine maintenance cycles, so effects on air quality are expected to be minimal. Additionally, generator installation and usage would be subject to the regulations of the Maine SIP. Long-term air quality effects resulting from facility operation is expected to be **minimal**.

5.2 Water Resources

5.2.1 Water Quality

The Clean Water Act (CWA) regulates discharge of pollutants into water with sections falling under the jurisdiction of the U.S Army Corps of Engineers (USACE) and the EPA. Section 404 of the CWA establishes the USACE permit requirements for discharge of dredged or fill materials into Waters of the United States and traditional navigable waterways. USACE regulation of activities within navigable waters is also authorized under the 1899 Rivers and Harbors Act. Section 402 of the CWA establishes the National Pollutant Discharge Elimination System (NPDES) authorizing the EPA to regulate both point and non-point pollutant sources, including stormwater and stormwater runoff. Activities that disturb one acre of ground or more are required to apply for an NPDES permit, through the ME DEP as authorized by the EPA. A CWA Section 401 Water Quality Certification from the ME DEP is required when obtaining a CWA Section 402 or 404 permit.

The Maine Stormwater Management Law (38 M.R.S.A. §420-D) requires that projects which would disturb more than one acre obtain prior approval from ME DEP. These projects are subject to the Basic Standards set forth in Maine's Stormwater Management Rules (Chapter 500). These standards include requirements pertaining to the reduction of pollution, the installation and maintenance of sediment barriers, construction entrance stabilization, temporary and permanent stabilization of disturbed soils, and the design and construction of stormwater channels, sediment basins, roads, culverts, and parking areas. Additional requirements may be applied on a site-specific basis.

The Maine Stormwater Management Law also requires ME DEP to maintain a list of Watersheds of Bodies of Water Most at Risk (38 M.R.S.A. §420-D.3) as well as Degraded, Sensitive or Threatened Regions or Watersheds (38 M.R.S.A. §420-D.4). Chapter 500 sets forth Phosphorus Standards for projects that create more than 20,000 feet^2 of impervious area or 5 acres or more of development within the direct watershed of a Lake Most at Risk. Degraded, Sensitive or Threatened Regions or Watersheds are included in the ME DEP's list of the State's Nonpoint Source Priority Watersheds. Lakes in these watersheds are either impaired or threatened based on threats to water quality and value of the resource. Unimpaired lakes listed as threatened include lakes on the DEP Watch List, lakes having a recent or long-term significant negative trend in water clarity, lakes determined as being sensitive to additional phosphorus inputs, and lakes having a recent increased threat to the watershed by development or agriculture (ME DEP 2020). The Maine Stormwater Management Law (38 M.R.S.A. Section 420-D.11) allows for the collection of Stormwater Compensation Fees (SCFs) from developers who cannot achieve full on-site reduction of phosphorus in certain watersheds. These SCFs are paid to the Stormwater Administrator for phosphorus mitigation projects within that watershed. To be eligible to use the compensation fee option, the project must incorporate on-site measures to reduce the project's phosphorus export by at least 60% (ME DEP 2012).

5.2.1.1 Existing Conditions

Although the proposed project would not take place within any surface waters, project site is located approximately 900-feet northwest of the Hay Brook and approximately 500-feet west of an unnamed tributary to Hay Brook. The Hay Brook flows into Estes Lake approximately 1,600-ft east of the proposed project site. The Estes Lake watershed which is listed as Threatened on the Nonpoint Source Priority List under both the DEP's Watchlist and Sensitive criteria. Lakes listed on the DEP's Watchlist are still sensitive due to being recently impaired or data suggests their water quality is close to the impairment threshold.

Lakes listed as Sensitive are sensitive to additional phosphorus inputs due to the lake's hydrology and threats in the watershed (ME DEP 2020). The Estes Lake is also listed by the ME DEP as a Lake Most at Risk (Chapter 502).

Based on test borings completed during a geotechnical survey conducted at the site in January of 2023, ground water at the site is present at depths of approximately 34 feet below grade at the proposed treatment center location and 12 to 14 feet below grade at the proposed training center location. These depths are not believed to be representative of stabilized groundwater levels and fluctuations in groundwater levels at the site would be expected due to precipitation and snow melt (Miller Engineering & Testing Inc. 2023). Per the Official Zoning Map for the Town of Alfred, the proposed site is not located within a wellhead protection district (Southern Maine Planning Commission 2010).

5.2.1.2 Potential Effects and Proposed Mitigation

No Action Alternative

Under the No Action alternative, there would be no construction related runoff or sedimentation at the site that could affect surface waters. Since the project site is predominantly forested, erosion would be expected to be controlled by current site conditions. The No Action alternative would have no effect on water quality.

Proposed Action

Under the Proposed Action, construction activities could result in erosion of disturbed areas which could impact surface waters, including wetlands, within and downgradient of the site. The implementation of best management practices (BMPs), including those required by permitting, would be expected to minimize adverse impacts. The Maine Stormwater Management Rules (Chapter 500) require adherence to the Stormwater Management Basic Standards which would be implemented through the use of sediment barriers placed down gradient of exposed soils; the installation of inlet protection on downstream structures; the use of mulch or temporary seeding for temporary stabilization; the use of erosion control blankets, netting, or rip rap in erosion-prone areas (e.g. steep slopes and vegetated ditches); pipe protection (rip rap) at storm drain outfalls; and excavation dewatering (silt bags or sediment ponds) when excavating below groundwater (Oak Point 2023). As such, an Erosion and Sedimentation Control Plan has been developed in accordance with the Maine Erosion and Sediment Control Best Management Practices to minimize impacts due to construction related runoff. The project would be conditioned for compliance with all applicable stormwater permitting including National Pollutant Discharge Elimination System Permits required by Section 402 of the Clean Water Act. This would require the County to obtain authorization from the ME DEP under the Maine Construction General Permit. Using stormwater management BMPs and compliance with all other stormwater permitting requirements, short-term impacts to water quality related to construction activities would be expected to be minor.

In the long term, the proposed project would result in the creation of8.8acres of impervious surface. Runoff from impervious surfaces would be managed through a combination of overland flow, drainage swales, culverts, and closed drainage systems. Stormwater quality would be addressed using three wet ponds (Wet Ponds A, B, and C) and a grassed under-drained soil filter. The three wet ponds will be lined and capture stormwater from the training pad and the training center building (Wet Pond A); training center parking lots, plaza, and a portion of the access road (Wet Pond B); and the treatment center building and parking lot, fire lane, and the remainder of the access road (Wet Pond C) (Oak Point 2023). The training pad would be designed so that water pumped from Wet Pond A during training exercises, e.g., hose flow testing, would

drain back into the wet pond. Stormwater from the grass training area and adjacent gravel roadway would be collected in a grassed under-drained soil filter located at the southern portion of the site.

Long-term site operations could result in the release of contaminants from unexpected leaks or spills of fuel or lubricants from vehicles and equipment or from on-site fuel storage, and the County would develop a Spill Prevention, Control, and Countermeasure Plan to address any releases resulting from site operations. Although training activities could involve the use of chemical fire suppressants such as encapsulating agents, if permitted by ME DEP, no PFAS containing Aqueous Film Forming Foams would be utilized on site. Additionally, the ash produced during simulated burn trainings would be contained within a burn box and disposed of off-site along with solid waste. Runoff from hard surfaces such as the training pad would drain to the wet ponds which would maintain a permanent water storage level for the treatment of stormwater. Retention of stormwater would be expected to minimize the amount of nutrients and contaminants entering surface water or infiltrating into groundwater.

The reduction of nutrients and suspended solid loads in stormwater would be accomplished by on-site filtration through the grassed under-drained soil filter, the retention of runoff in the wet ponds, and the capture of stormwater carried sediment in forebays prior to entering the wet ponds and grassed under-drained soil filter. Additionally, phosphorus containing fertilizers would be prohibited by deed restriction. On-site treatment would be expected to reduce phosphorus export by more than 60 percent; however, the total export resulting from the project would exceed the site's phosphorus budget when combined with the existing yearly export from the jail. As such, an SCF would be required which would be paid to the York County Soil and Water Conservation District and be applied to phosphorus reduction projects at compensation sites within the Estes Lake Watershed.

The proposed project would also result in the installation of a 9,824 gallon per day engineered septic system between the responder training center and the treatment center. The proposed septic design would incorporate an advance secondary treatment system which would be expected to reduce wastewater contaminant loads by approximately 50 percent when compared to a traditional system. The septic system would require approval by the Local Plumbing Inspector in accordance with Maine's Wastewater Disposal Rules (Code of Maine Rules Chapter 241 §10-144).

Through implementation of stormwater BMPs as required by regulatory permits, the treatment of runoff through infiltration and retention in stormwater management systems, and the use of engineered wastewater disposal treatment systems the short- and long-term impacts of the proposed action on both surface water and groundwater quality would be expected to be **minor**.

5.2.2 Wetlands

Executive Order (EO) 11990 Protection of Wetlands requires federal agencies to avoid to the extent possible the long- and short-term adverse impacts associated with the destruction or modification of wetlands and to avoid direct or indirect support of new construction in wetlands wherever there is a practicable alternative. Each federal agency shall provide leadership and shall take action to minimize the destruction, loss, or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands in carrying out the agency's responsibilities. FEMA uses the 8-step analysis to evaluate potential effects on, and mitigate effects to, wetlands in compliance with EO 11990 and 44 C.F.R. Part 9. The Maine Department of Environmental Protection, administers and regulates wetlands in Maine.

Initial public notice for the project was published on June 23, 2023, in the *Portland Press Herald*. FEMA will issue a final notice as part of the SEA public notification process in accordance with 44 C.F.R. 9.8 and 9.12. The purpose of the notices is to inform and solicit feedback from the public regarding potential effects on wetlands and notify the public of FEMA's final decision.

5.2.2.1 Existing Conditions

Per U.S. Fish and Wildlife Service's National Wetlands Inventory, a portion of an approximately 33-acre palustrine, freshwater forested/shrub wetland is located within the proposed project site (**Appendix A: Figure 3**). Wetland delineation was conducted by Marc J. Hampton, Soil Scientist in October 2021, which identified wetlands, designated as a Significant Vernal Pool habitat by the State, on the southern portion of the property. On June 15th and 16th, 2023 a rare, threatened, and endangered plant species survey was conducted by Basswood Environmental at the site to determine the presence of state-listed plant species known by the Maine Natural Areas Program to be located within the vicinity of the project area. The wetland areas surveyed were found to be forested and dominated by red maple with a dense understory predominantly of common winterberry (*Ilex verticillata*), highbush blueberry (*Vaccinium corymbosum*), cinnamon fern (*Osmundastrum cinnamomeum*), and New York fern (*Parathelypteris noveboracensis*). The survey did not identify any of the four state-listed wetland plant species known by Maine Natural Areas Program to be present in the vicinity of the area which include Atlantic white cedar (*Chamaecyparis thyoides*), smooth winterberry (*Ilex laevigata*), hollow Joe-Pye weed (*Eutrochium fistulosum*), and northern spicebush (*Lindera benzoin*) (Basswood Environmental 2023).

5.2.2.2 Potential Effects and Proposed Mitigation

No Action Alternative

Under the No Action alternative, there would be no construction at the project site that could affect wetlands. The site would remain undeveloped barring any future development of the project area; therefore, the No Action alternative would have no effect on wetlands. The 8-step analysis determined that the No Action alternative is not a practicable alternative because it would not meet the purpose and need for the project (**Appendix B, Document 2**).

Proposed Action

Under the Proposed Action, work would occur adjacent to wetlands. See **Appendix B, Document 2**. There would be no direct wetland impacts (a previous design included an emergency vehicles operation course that would have converted 4,120-ft^2 of wetlands). Construction activities adjacent to wetlands could result in an accidental release of fuels or lubricants which could have short-term impacts on the wetlands. Additionally, potential runoff from construction activities could result in sedimentation within adjacent wetlands. Adverse effects caused by pollutant release and sedimentation would be mitigated through best management practices (BMPs) required by Clean Water Act permitting such as a National Pollution Discharge Elimination System General Construction Permit, Maine Natural Resources Protection Act (Permit By Rule requirements) and Maine Stormwater Permit. Effects to wetlands would be **none to negligible**.

5.3 Biological Resources

5.3.1 Vegetation/Invasive Species

The proposed project site is within the Gulf of Maine Coastal Plain ecoregion which is currently mostly forested despite historic agricultural use. Wooded areas predominantly consist of Appalachian oak-pine forest and some hemlock-hardwood-pine forest (bplant.org 2023).

EO 13112, Invasive Species, 64 FR 25 (February 8, 1999) requires federal agencies, to the extent practicable, to prevent the introduction of invasive species and provide for their control and to minimize the economic, ecological, and human health impacts that invasive species cause. Invasive species prefer disturbed habitats and generally possess high dispersal abilities, enabling them to out-compete native species. There are four State forestry related quarantines in effect within the State of Maine (emerald ash borer, European larch canker, hemlock woolly adelgid, and white pine blister rust) and one federal quarantine for the spongy moth (ME DACF 2024).

5.3.1.1 Existing Conditions

The June 2023 Rare, Threatened, and Endangered Plant Species Survey completed by Basswood Environmental identified the site as almost entirely upland habitat with the exception of one wetland crossing. The site was found to be uniformly covered with mixed oak-pine forest with pockets dominated by hemlock (*Tsuga canadensis*). The overstory is dominated by red oak (*Quercus rubra*), black oak (*Quercus velutina*), white oak (*Quercus alba*), and white pine (*Pinus strobus*). American beech (*Fagus grandifolia*) and red maple (*Acer rubrum*) are present in lower densities. The site exhibits sparse understory dominated by lowbush blueberry (*Vaccinium angustifolium*) and other typical dry-site understory species such as eastern spicy-wintergreen (*Gaultheria procumbens*), starflower (*Lysimachia borealis*), and bracken fern (*Pteridium aquilinum* ssp. *latiusculum*). The site shows evidence of past selective timber harvest (Basswood Environmental 2023).

One state-listed plant species, upright false bindweed (*Calystegia spithamaea*), has been identified immediately outside of the project area along Maine Route-4 but was not identified within the project area during the survey. None of the four other state-listed rare, threatened, or endangered plant species, Atlantic white cedar (*Chamaecyparis thyoides*), smooth winterberry (*Ilex laevigata*), hollow Joe-Pye weed (*Eutrochium fistulosum*), or northern spicebush (*Lindera benzoin*) were identified the within the project site, as these species are generally associated with wetland or mesic habits outside of the proposed project area. Since the federally listed small whorled pogonia (*Isotria medeoloides*) has been known to be present in the area, it was also included in the survey; however, its presence was not observed at the site (Basswood Environmental 2023).

The proposed project site is within the State forestry quarantine zones for emerald ash borer and hemlock woolly adelgid and the federal quarantine zone for spongy moth.

5.3.1.2 Potential Effects and Proposed Mitigation

No Action Alternative

Under the No Action alternative, existing vegetation would not be disturbed by construction activities and the site would remain in its current forested condition. Effects of the No Action Alternative on vegetation would be **none**.

Proposed Action

Under the Proposed Action, development of the site would permanently remove approximately 16.8-acres of vegetation within the project area to construct the County facilities. Areas where vegetation is removed are often subject to additional erosion from wind and rain and the possible introduction of invasive species. The proposed project would involve planting a mix of deciduous shade trees and decorative flowering trees in unhardened areas throughout the site following construction. Additionally, a native meadow/wildflower mix would be seeded in portions of the buffer between the facility and remaining wooded parcel. These design features would preclude the establishment of invasive species populations in disturbed areas. In the long-term, drainage features including grassed under-drained soil filters and wet ponds would minimize erosion that could result from devegatation and site development.

The disposal of woody debris created by site clearing could become a vector for the spread of invasives if not properly handled or moved outside if designated quarantine zones. Merchantable trees requiring removal would be sold as firewood, pulpwood, or saw logs; and stumps would be ground on-site for use as stabilization and erosion control. Any other woody debris generated during construction would be removed and disposed of at ME DEP permitted sites. The currently proposed disposal sites include those in Topsham, Waterboro, Buxton, Auburn, and/or Sanford, ME, none which would require the transport of woody debris outside of regulated quarantine areas for emerald ash borer, hemlock woolly adelgid, or spongy moth. If woody debris would be disposed of or sold outside of the state or federally regulated quarantine areas applicable to those materials, the County would be required to abide by any state and/or federal regulations pertaining to the handling and transportation of those materials.

Based on the June 2023 Rare, Threatened, and Endangered Plant Species Survey, the primary cover of the proposed project site is a uniform mixed oak-pine forest with pockets of hemlock. This cover is typical of the Gulf of Maine Coastal Plain ecoregion, and very low species diversity was observed at the site. Although some potential habitat for rare plant species exists at the site, the presence of these species was not observed (Basswood Environmental 2023). Additionally, the 16.8 acres that would be developed represents a small portion of the vegetated/forested area in the project vicinity. Therefore, impacts to vegetation from the proposed project would be **moderate**.

5.3.2 Wildlife and Fish

The Maine Department of Inland Fisheries and Wildlife (MDIFW) is responsible for the preservation, protection, and enhancement of Maine's wildlife resources including both game and nongame species as well as threatened and endangered species. Currently, there are 26 inland fish and wildlife species listed as endangered and 25 listed as threatened under the Maine Endangered Species Act which MDIFW are responsible for, some of which are also federally protected under ESA (MDIFW 2023b).

The Migratory Bird Treaty Act provides a program for the conservation of migratory birds that fly through lands of the United States. A migratory bird is any species or family of birds that live, reproduce, or migrate within or across international borders at some point during their annual life cycle. The lead federal agency for implementing the Migratory Bird Treaty Act is USFWS. The law makes it unlawful at any time, by any means, or in any manner to take any part, nest, or egg of migratory birds. “Take” is defined in regulation (50 C.F.R. 10.12) as “to pursue, hunt, shoot, wound, kill, trap, capture, or collect, or any attempt to carry out these activities.”

5.3.2.1 Existing Conditions

Oak-pine forest habitat in Maine is predominantly comprised of land that was previously pastured or subject to timber harvest. These areas are often subject to fragmentation due to agriculture and development. These habitats are host to a variety of passerine birds such as wood thrush, scarlet tanager, ovenbird, pine warbler, and rare whip-poor-will. They are also host to a variety of butterflies such as the persius duskywing and the frosted elfin as well as the state-listed rare species red-winged sallow moth which uses the red oak as one of its host plants (MDACF 2023).

Based on the *Beginning with Habitat – High Value Plant & Animal Habitat Map* for Alfred, ME prepared by MDIFW, there are no known occurrences of endangered or threatened inland fish or wildlife species within or in the immediate vicinity of the proposed project site. The nearest known occurrences of rare, threatened, or endangered animal species are over 1-mile to the east of the site. Here, there are multiple known occurrences in and around the Massabesic Experimental Forest (MDIFW 2019a).

Additionally, MDIFW tracks Undeveloped Habitat Blocks, which are areas remaining outside of Development Buffers. These Development Buffers are 250 to 500-foot buffers around improved roads and developed areas based on development intensity. Based on the *Beginning with Habitat – Undeveloped Habitat Blocks & Connectors and Conserved Lands Map* for Alfred, ME, most of the project site is located within a Development Buffer with a small portion of the project area extending into a 529-acre Undeveloped Habitat Block directly to the east (MDIFW 2019b).

As part of the initial scoping process, the County coordinated with MDIFW regarding the presence of endangered, threatened, and special concern species; designated Essential or Significant Wildlife Habitats; and inland fisheries habitat concerns in the project area. In a letter dated June 15, 2023, MDIFW responded that there were no mapped Essential Habitats that would be directly affected by the project (MDIFW 2023c).

MDIFW also concluded that based on historical evidence, it is likely that several of the eight bat species present in the State of Maine are likely to be present at the proposed site. These could include the state endangered little brown bat and northern long-eared bat; the state threatened eastern small foot bat; and state species of special concern big brown bat, red bat, hoary bat, silver-haired bat, and tri-colored bat (MDIFW 2023c).

In their response to the County, MDIFW also noted that there are known occurrences of the state threatened spotted turtle, state endangered Blanding's turtle, and state species of special concern wood turtle in the vicinity of the proposed project. These turtles are known to utilize small streams and wetland types that are present within or near the project site including shrub swamps, forested swamps, and bogs (MDIFW 2023c).

The proposed project is located within the Atlantic Flyway, and USFWS documents eight species of migratory birds potentially present in the project area: Bald Eagle, Black-billed Cuckoo, Bobolink, Canada Warbler, Chimney Swift, Eastern Whip-poor-will, Prairie Warbler and Wood Thrush (USFWS 2023).

5.3.2.2 Potential Effects and Proposed Mitigation

No Action Alternative

Under the No Action alternative, the site would not be disturbed by construction activities and current habitat would remain unchanged. No wildlife would be displaced and effects to this resource would be none.

Proposed Action

Under the Proposed Action, construction would result in the loss of vegetation that could serve as habitat for wildlife. Additionally, construction activities would increase noise levels that could result in the temporary displacement of wildlife from areas around the site during construction as wildlife moves away from noise sources. Although deciduous and decorative trees and native wildflower mix would be planted in and around the site following construction, which could attract wildlife species which prefer open and edge habitat, the majority of forested habitat within the 16.8acre project site would be lost. However, the project site represents a relatively small percentage of the available habitat in the area. Based upon the *Beginning with Habitat – Undeveloped Habitat Blocks & Connectors and Conserved Lands Map* for Alfred, ME, there is a 529-acre Undeveloped Habitat Block directly to the east of the project area and a 1,303-acre Undeveloped Habitat Block to the west of the site across Route 4. Since the project is located almost entirely within a Development Buffer and the project area represents approximately 1% of the available habitat in the immediate vicinity, the effects of the Proposed Action on habitat would be expected to be **moderate**.

Since there are no known occurrences of rare, threatened, or endangered species nor any state-designated Significant Wildlife Habitats within the project area, no effect to High-Value Habitat is expected from the project (MDIFW 2019a). Based on correspondence with MDIFW, despite the likely presence of several bat species in the project area, no significant impacts to any of these bats is anticipated because of the proposed project (MDIFW 2023c). Effects to state-listed turtles would be expected to be minimized through state permitting conditions resulting from the Site Location and Development review process. FEMA will condition the project for obtaining and complying with any issued Site Location and Development permit. Therefore, the effects of the Proposed Action on state-listed species would be expected to be **minor**.

The proposed project would result in the removal of vegetation potentially used by migratory birds for nesting and foraging. If vegetation removal were to occur during the breeding season, the loss of nest, eggs, and young could occur resulting in a moderate short-term adverse effect to migratory birds due to construction activities. Following construction, the planting of trees and native wildflower mix in unhardened areas throughout the site would be expected to minimize the long-term adverse effects on migratory birds by replacing some foraging habitat. Of the migratory bird species identified as possibly present in the project area by USFWS's IPaC, the Black Billed Cuckoo, Bobolink, Whip-poor-will, Prairie Warbler, and Wood Thrush are known to be found in open or edge habitat including old pastures, meadows, well planted parks and gardens, sparse woodland, or woodlands near fields (Bull and Farrand 1977). Adverse effects to migratory birds would be expected to be **moderate**.

5.4 Socioeconomic Resources

5.4.1 Noise

EPA developed federal noise-emission standards in accordance with the Noise Control Act of 1972 identifying major sources of noise and determining appropriate noise levels for activities that would infringe on public health and welfare in accordance with the law. The EPA identifies a 24-hour exposure level of 70 decibels as the level of environmental noise which would prevent any measurable hearing loss over a lifetime. Likewise, levels of 55 decibels outdoors and 45 decibels indoors are identified as preventing activity interference and annoyance. The levels are not single event, or "peak" levels. Instead, they represent averages of acoustic energy over periods of time such as 8 hours or 24 hours, and over long periods of time such as years (EPA 1974). Additionally, the Federal Highway Administration established acceptable noise levels and ranges for construction equipment (FHWA 2006) and the Occupational Safety and Health Administration established thresholds for occupational noise exposure to protect the health and safety of workers (29 C.F.R. 1926.52). Land uses that are considered sensitive to noise effects are referred to as “sensitive receptors.” Noise sensitive receptors consist of, but are not limited to, schools, residences, libraries, hospitals, and other care facilities.

5.4.1.1 Existing Conditions

Existing noises in and near the project area include traffic from Maine Route 4 (a minor arterial roadway), neighborhood traffic, the York County Jail, an auto salvage yard, and a Maine Department of Transportation (DOT) yard. The closest sensitive receptors to the project area are single-family homes, some of which are within 75 feet of the project area. Alfred, Maine's zoning ordinances restrict noise from construction and maintenance activities that occur outside of the hours of 6:30 a.m. to 8:00 p.m.

5.4.1.2 Potential Effects and Proposed Mitigation

No Action Alternative

Under the No Action alternative, no construction related noise would occur. Noise from facility operations including use of the burn tower, emergency vehicle operations course, and emergency backup generators would also not occur. Noise from existing sources such as roadways, the DOT yard, jail, and salvage yard would remain. Effects on noise levels would be **none**.

Proposed Action

Under the Proposed Action, construction activities would temporarily increase noise levels in and around the project area. Short-term adverse effects to noise levels would be minimized by leaving a natural wooded buffer between residences where possible. Additionally, construction equipment would be required to use the manufacturers standard noise control devices such as mufflers, baffling, and/or engine enclosures.

Facility operations including use of the burn tower, and backup generators would result in a long-term, reoccurring increase in noise levels in and around the project area resulting from the use of vehicles and equipment. Noise levels at nearby sensitive receptors would be minimized by maintaining a wooded buffer between the proposed facilities and adjacent residences to the maximum extent possible. Where possible, additional plantings would be added as a noise buffer. In addition to firefighter training, the burn tower would be used for police exercises; however, no live-fire firearms training would be part of operations. The management of reoccurring noise sources would be addressed in an operating guidelines and procedures

plan to be prepared by the County. Impacts from noise resulting from the proposed project would be **moderate**.

5.4.2 Environmental Justice

EO 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, requires each Federal agency to identify and address, as appropriate, "disproportionately high and adverse human health or environmental effects" its activities may have on minority or low-income populations. Guidance released by the Council on Environmental Quality following publication of the EO makes clear that environmental effects include economic and social effects when considering Environmental Justice during the NEPA process (CEQ 1997).

The CEQ guidance also provides criteria for identifying minority and low-income populations. Specifically, low-income populations are identified based on the annual statistical poverty income thresholds of the U.S. Census Bureau, and minority populations are defined as persons in the following population groups: American Indian or Alaskan Native; Asian or Pacific Islander; Black, not of Hispanic origin; or Hispanic. Any area where the minority population exceeds 50 percent is considered to have an environmental justice population, based on the CEQ guidance.

5.4.2.1 Existing Conditions

According to EJ Screen, there are 193 people in the immediate project area. Of the surrounding population, 41% are low income (77th percentile in the state), 12% are unemployed (93rd percentile in state), 4% live in limited English-speaking households (91st percentile in the state), 19% have less than a high school education (96th percentile in the state), 5% are under the age of 5 (63rd percentile in the state), and 26% are over the age of 64 (70th percentile in the state)(EPA, 2023c). Based on the population with demographic indicators above the 50th percentile in the state, there are several environmental justice populations in the immediate area of the project. Additionally, the surrounding population is in the 99th state percentile for Air Toxics Cancer Risk.

5.4.2.2 Potential Effects and Proposed Mitigation

No Action Alternative

Under the No Action Alternative, the site would remain undeveloped, and there would be no impacts on environmental justice communities in the area related to changes in noise levels or potential air quality around the site. However, under the No Action alternative, the County would remain without an adequate facility to train first responders and to monitor and manage emergencies. All communities would be adversely affected by the reduced ability to maintain continuity of operations of essential public services within the County during a disaster; however, it is likely that lower income communities with fewer resources would be less equipped to respond to emergency events on their own and could suffer greater impacts without the support of County services provided by the EOC. Adverse impacts to environmental justice communities would be expected to be **minor**.

Proposed Action

Under the Proposed Action, construction noise would be expected to affect environmental justice populations in the immediate project area. It is also possible that emissions and airborne dust caused by construction could affect these populations. Noise and air quality effects would be temporary and would be

expected to be minor. These effects would be minimized by previously mentioned BMPs including watering down construction areas, enclosing soil storage piles, and phasing construction to minimize disturbed areas, maintaining equipment in proper working order and with factory noise control, and limiting hours of construction to normal business hours. Since the project is located along a minor arterial road, Maine Route 4, which would be expected to be able to accommodate any additional volume resulting from construction vehicles, no adverse traffic related impacts are expected within the vicinity of the project.

Facility operations including operation of the burn tower, and backup generators could have intermittent adverse effects to noise levels and air quality in the area. As discussed in Section 5.4.1, noise from operations would be minimized by maintaining a wooded buffer or reestablishing vegetated buffers were possible along the boundaries of the site and through the establishment of operating procedures to manage site noise. Air quality impacts would be minimized through compliance with local zoning ordinances and state Forest Service, Bureau of Air Quality, and SIP regulations. A notice of FEMA's intent to fund the proposed project, which would include a summary of anticipated effects and a notice of availability of the draft SEA, would be sent to abutters, and comments received by FEMA would be addressed prior to issuing a FONSI. Both short-term and long-term effects on environmental justice communities would be **moderate**.

6.0 PERMITS AND PROJECT CONDITIONS

The County is responsible for obtaining all required federal, state, and local permits. While a good faith effort was made to identify all necessary permits for this SEA, the following list may not include every approval or permit required for this project.

1. Before construction begins, the County must obtain a Land Use Permit from the Town of Alfred and comply with all terms and conditions of the issued permit.

2. Before construction begins, the County must obtain a Site Location of Development ("Site Law") Permit from the Maine Department of Environmental Protection and comply with all terms and conditions of the issued permit.

3. Before construction begins, the County must obtain any state permits required for the installation of emergency backup generators or siting of emissions producing features from the Maine Department of Environmental Protection and comply with all terms and conditions of the issued permit(s). The County must provide a copy of the approval(s)/permit(s), or documentation from the permitting agency that approval(s)/permit(s) are not required, to the State and FEMA for inclusion in the administrative record at or before closeout.

4. Before conducting any facility operations that produce emissions or airborne particulate matter, i.e., operation of the burn tower or open burning the County must obtain any required state (i.e., Maine Bureau of Air Quality and Maine Forest Service) or local (i.e., Town of Alfred) permits regulating air quality and comply with all terms and conditions of the issued permit(s). The County must provide a copy of the approval(s)/permit(s), or documentation from the permitting agencies that approval(s)/permit(s) are not required, to the State and FEMA for inclusion in the administrative record at or before closeout.

5. Before construction begins, the County must obtain any required stormwater permits including National Pollutant Discharge Elimination System Permits required by Sections 401 and 402 of the Clean Water Act and State Stormwater Law, i.e., a Construction Stormwater Discharge Permit, and/or Chapter 500 Permit from the Maine Department of Environmental Protection and comply with all terms and conditions of the issued permit(s). The County must provide a copy of the approval(s)/permit(s), or documentation from the permitting agency that approval(s)/permit(s) are not required, to the State and FEMA for inclusion in the administrative record at or before closeout.

Additionally, FEMA would require the County and/or their subcontractor(s) to adhere to the following conditions during project implementation. Failure to comply with grant conditions may jeopardize federal funds.

1. During construction activities, the County and/or their contractor(s) must utilize best management practices to minimize the transport of fugitive airborne dust particles from the project site. These include but are not limited to minimizing disturbed areas by phasing construction activities, maintaining topsoil, and preserving vegetation to the extent possible; enclosing piles of fill and overburden; and watering down the construction site and fill and overburden piles two to three times per day if necessary.

2. During construction activities, the County and/or their contractor(s) must ensure adequate maintenance of equipment, including proper engine maintenance, adequate tire inflation, and proper maintenance of pollution control devices. Additionally, the County and/or their contractor(s) must reduce construction equipment idling to the maximum extent practicable.

3. During construction activities, the County and/or their contractor(s) must utilize best management practices to minimize the transport of sediment off site and/or into surface waters and wetlands. These include but are not limited to controlling stormwater flowing to and through the project site; protecting slopes by using erosion control blankets, bonded fiber matrices, turf reinforcement mats, silt fences (for moderate slopes), etc.; protecting storm drain inlets until stabilized; retaining sediment on-site and controlling dewatering practices by using sediment traps or basins for large areas (> 1 acre) when appropriate; establishing stabilized construction entrances/exits (e.g. large crushed rocks, stone pads, steel wash racks, hose-down systems, pads); and minimizing the impacts of equipment staging areas.

4. The County and/or their contractor(s) are responsible for complying with all federal, state, and local regulations, including obtaining any required permit(s), for the transportation and disposal of potentially contaminated debris as identified by USDA APHIS and the Maine Department of Agriculture, Conservation, and Forestry. All regulated articles having originated or previously been held in a regulated area or under quarantine are prohibited entry into non-quarantined areas without permit. Materials are not prohibited from moving within the regulated/quarantined area. A copy of the approval/permit, or documentation from the permitting official that an approval/permit is not required, must be forwarded to the State and FEMA for inclusion in the administrative record. Contact the Maine Department of Agriculture, Conservation, and Forestry (foresthealth@maine.gov, (207) 287-2431) for specifics regarding regulations and permit requirements.

5. Stop Work if archaeological deposits (for example Indian pottery, stone tools, shell, old house foundations, old bottles) are found/uncovered during construction. The County and/or their contractor(s) must immediately stop all work in the vicinity of the find, take reasonable measures to avoid or minimize harm to the finds, secure all archaeological finds (without removing them), and restrict access to the area of the find. The County must immediately report the archaeological discovery to the State Emergency Management Agency and the FEMA Deputy Regional Environmental Officer Mary Shanks, 617-901-2204. FEMA will determine the next steps.

6. Stop Work if human remains are discovered. The County and/or their contractor(s) must immediately stop all work in the vicinity of the discovery and take reasonable measures to avoid or minimize harm to the remains, project all human remains discoveries, and restrict access to discovery sites. The project proponents and their contractor must follow all state laws associated with the discovery of human remains, including immediately notifying the proper authorities. Violation of state law will jeopardize FEMA funding for this project. County must inform the Office of the Chief Medical Examiner, the State Archaeologist, the State Emergency Management Agency, and the FEMA Deputy Regional Environmental Officer Mary Shanks, 617-901-2204. FEMA will consult with the SHPO and Tribes, if remains are of tribal origin. Work in the vicinity of the discovery(s) may not resume until consultation is completed and appropriate measures have been taken to ensure that the project is compliant with the National Historic Preservation Act and the Native American Graves Protection and Repatriation Act.

7. All borrow or fill material must come from pre-existing stockpiles, material reclaimed from maintained roadside ditches (provided the designed width or depth of the ditch is not increased), or commercially procured material from a source existing prior to the event. For any FEMA-funded project requiring the use of a non-commercial source or a commercial source that was not permitted to operate prior to the event (e.g., a new pit, agricultural fields, road ROWs, etc.) in whole or in part, regardless of cost, the County must notify FEMA and the Recipient (State EMA) prior to extracting material. FEMA must review the source for compliance with all applicable federal environmental planning and historic preservation laws and executive orders prior to a Subrecipient or their contractor commencing borrow extraction. Consultation and regulatory permitting may be required. Non-compliance with this requirement may jeopardize receipt of federal funding. Documentation of borrow sources utilized is required at closeout.

8. During construction activities, the County and/or their contractor(s) must ensure equipment at the project site uses the manufacturer's standard noise control devices (i.e., mufflers, baffling, and/or engine enclosures).

9. The County and/or their contractor(s) must abide by local noise ordinances and limit construction and maintenance activities, including operation of heavy machinery, to the hours of 6:30 AM to 8:00 PM.

10. The County and/or their contractor(s) must implement plans to eliminate and minimize oil or fuel spills from construction equipment.

11. The County and/or their contractor(s) must adopt measures to minimize traffic impacts during construction such as providing warning signage, limit the use of public rights-of-way for staging of equipment or materials, use of flag-persons when needed, and coordinate detours if traffic access points will be obstructed.

12. During construction, the County and/or their contractor(s) must establish an inspection and maintenance approach to ensure the above listed measures are working adequately.

7.0 AGENCY COORDINATION AND PUBLIC INVOLVEMENT

NEPA and FEMA procedures stress the importance of engagement with partner agencies, applicants, and the public, to the extent practicable, while preparing an SEA. To solicit input on the project and its potential effects, FEMA distributed a SEA scoping document to the following agencies on June 23, 2023:

- U.S. EPA, Region 1
- U.S. Department of Housing and Urban Development, Bangor Field Office
- USFWS, Maine Field Office
- USACE, Maine Project Office
- ME DEP, Portland Field Office
- MDIFW, Office of Environmental Review
- Maine Floodplain Management Program
- U.S. Natural Resource Conservation Service
- ME SHPO
- Maine Emergency Management Agency

The scoping document was subsequently sent to ME DEP, Division of Environmental Assessment on July 06, 2023.

Following distribution of the scoping document, FEMA received correspondence from the agencies. The correspondence is summarized in **Table 7.1.**

Table 7-1: Correspondence Summary

From	Date	Subject
EPA-R1	July 21, 2023	Comments provided suggested consideration of air and water quality impacts associated with use of the burn tower and fire training pond. Specific mention was made of fire suppressants using PFAS. Suggested consideration of effects on drinking water. Suggested consideration of the facility in light of climate change and climate resiliency. Suggested consideration of effects on air quality due to open burning, construction, and stationary engines. Suggested consideration of environmental justice communities.
Maine Department of Environmental Protection	July 21, 2023	Initial reply did not provide comments; however, continued coordination with ME DEP resulted a project scoping meeting held on August 24, 2023. During this meeting County representatives addressed questions from ME DEP stormwater management, phosphorous allocation/compensation. Concern was expressed by ME DEP regarding a Wetlands of Special Significance at the north end of the parcel outside of the project area and possible work within the buffer.

Additionally, the following agencies were consulted during the preparation of this SEA:

- U.S. Natural Resource Conservation Service – Consultation under the Farmland Protection Policy Act regarding effects to prime farmland and farmland of state-wide importance from May 01 to May 10, 2023.

- Maine State Historic Preservation Officer – Consultation under Section 106 of the National Historic Preservation Act from March 27, 2023 to June 28, 2023.
    - Phase I Archaeological Survey recommendation submitted to Maine SHPO's office on March 27, 2023.
    - Response received from SHPO on April 10, 2023, concurring with Phase I survey recommendation and stating no further information was necessary for architectural resources determination.
    - Based on results of a May 2023 Phase I Survey, a determination of No Historic Properties Affected was submitted to the SHPO's office on June 26, 2023.
    - Concurrence with No Historic Properties Affected determination received from SHPO's office on June 28, 2023.
- Passamaquoddy Tribe – Consultation under Section 106 of the National Historic Preservation Act from March 27, 2023 to June 28, 2023.
    - Phase I Archaeological Survey recommendation submitted to Passamaquoddy Tribal Historic Preservation Officer on March 27, 2023. No response received within 30 days.
    - Based on results of a May 2023 Phase I Survey, a determination of No Historic Properties Affected was submitted to the THPO's office on June 26, 2023. No response received within 30 days, and consultation was concluded.
- U.S. Fish and Wildlife Service – Submittal of Northern Long-Eared Bat Rangewide Determination Key as streamlined consultation under Section 7 of the Endangered Species Act on July 07, 2023. Determination verification letter received upon submittal. No response received from USFWS within 15 calendar days, and consultation was concluded on July 22, 2023.

Two meetings were held with the Town of Alfred's Planning Board on February 06, 2023 and May 01, 2023, for the Town's Planning Board to review the application for completeness. During the February meeting, project information was provided to the Planning Board by representatives of the County, their engineering consultant, and project architectural firm. The following concerns were raised at the meeting:

- The representative from the Alfred Water District expressed concern regarding the age of the district's water supply piping in that area;
- The Town's Code Enforcement Officer expressed that the project plans were out of compliance with the Route-4 frontage requirement; and
- The addition of the treatment center could tax the ability of the Town's one ambulance to serve the rest of the community.

Additional information was requested so the Planning Board could vote on completeness of the application.

During the May Planning Board Meeting, additional documentation provided by the County was reviewed by the board and the following comments and concerns were expressed:

- A legal opinion would be sought from the Town's attorney regarding an interpretation of Alfred's Zoning Code as it related to the project. This was resolved and the planning board approved the 58-bed limit for the treatment center during the 1/8/24 meeting.
- The Town Code Enforcement Officer requested the Land Use Permit be resubmitted in two applications: one for the training center and one for the treatment center.
- Concern was once again raised over the potential burden the treatment center could place on the Town's ambulance service. Factors of concern included Alfred's aging population demographic, including the Keywood Manor 55+ age community, and the Town's geographic layout. This issue was resolved. A study was conducted for the Fire Department and the Planning Board accepted the results of the study and would not pursue the issue further.
- There would be the need for additional discussion regarding peak traffic flows in the area of the project.

Additional meetings were held on September 18, 2023, October 23, 2023, and January 8, 2024. There was also a site walk on November 05, 2023, and a public hearing on November 27, 2023, as part of the Town's Land Use permitting review process.

A Notice of Intent to File and Public Meeting was posted on the County's website at https://www.yorkcountymaine.gov/post/public-notice-notice-of-intent-to-file-and-public-meeting on June 09, 2023. The notice informed the public of the County's intent to file a SLODA permit application and to hold an informational meeting to discuss the anticipated environmental impacts of the proposed project. The meeting was held on June 29, 2023. During the June 2023 public hearing, County representatives summarized the project scope of work, permitting requirements, and environmental issues associated with the project. Comments received from attendees included questions regarding effects on abutting properties, traffic and egress, an existing nitrate plume beneath the prison, archeological study of an historic cemetery in the vicinity of the site, project contracting, and the use of public water.

Early Public Notice notifying the pubic of FEMA’s decision to prepare a Supplemental Environmental Assessment was published in the Portland Press Harald on June 23, 2023. FEMA received one response requesting maps and more information on environmental impacts on June 06, 2023. FEMA replied with the requested information on August 08, 2023. No other comments were received.

The comment period will end 15 days from the date of the legal notice publication, or distribution of print copies, whichever is later. Written comments can be emailed to eric.kuns@fema.dhs.gov or christian.paske@fema.dhs.gov. If no substantive comments are received, the EA will become final and a Finding of No Significant Impact will be signed. Substantive comments will be addressed as appropriate in Section 9 of the final EA and in the FONSI.

8.0 LIST OF PREPARERS

- Christian Paske (Environmental Protection Specialist)
- David Robbins (Regional Environmental Officer)
- Eric Kuns (Senior Environmental Protection Specialist)
- Mary Shanks (Deputy Regional Environmental Officer)
- Kathleen Philp (Environmental Protection Specialist)

9.0 REFERENCES

Basswood Environmental. 2023. Rare, Threatened and Endangered Plant Species Surveys, York County Jail, Alfred, Maine. June 20, 2023.

Bplant.org. 2023. Gulf of Maine Coastal Plain. Accessed June 22, 2023. Located at https://bplant.org/region/807

Bull, John and Ferrand, John, Jr. 1977. The Audubon Society Field Guide to North American Birds – Eastern Range. July 26, 1977.

CEQ (Council on Environmental Quality). 1997. Environmental Justice: Guidance Under the National Environmental Policy Act. Executive Office of the President dated December 10, 1997. Located at https://www.epa.gov/sites/production/files/2015-02/documents/ej_guidance_nepa_ceq1297.pdf

Federal Emergency Management Agency (FEMA). 2023a. Consultation with US Natural Resource Conservation Service on Prime Farmland. May 10, 2023.

_____. 2021b. Consultation concurrence letter from Kirk Mohney, Maine State Historic Preservation Officer to FEMA. Recommendation for Project Conditions and Determination of "No Historic Properties Affected," York County Emergency Management Campus; Lyman Way Expand Alfred Campus. Dated June 28, 2023.

_____. 2021c. Consultation letter from FEMA to Kirk Mohney, Maine State Historic Preservation Officer. Recommendation of Phase 1 Archaeological Survey York County Emergency Management Campus Expansion (Alfred, ME). Dated March 27, 2023.

Federal Highway Administration. 2006. FHWA Roadway Construction Noise Model User's Guide. Accessed April 18, 2021. Located at https://oysterzone.files.wordpress.com/2012/03/fhwa-2006.pdf

Maine Department of Agriculture, Conservation & Forestry (MDACF). 2023. Accessed August 15, 2023. https://www.maine.gov/dacf/mnap/features/communities/oakpineforest.htm.

_____. 2024. Accessed January 23, 2024. https://www.maine.gov/dacf/mfs/forest_health/quarantine_information.html#spongy_moth

Maine Department of Environmental Protection (ME DEP). 2020. MDEP Nonpoint Source Priority Watersheds List. Dated December 2020.

_____. 2012. Stormwater Compensation Fund Program Guidance. Dated October 2012.

Maine Division of Inland Fish and Wildlife (MDIFW). 2023a. Accessed November 20, 2023. https://www.maine.gov/ifw/fish-wildlife/wildlife/species-information/birds/golden-eagles.html.

_____. 2023b. Accessed November 27, 2023. https://www.maine.gov/ifw/fish-wildlife/wildlife/endangered-threatened-species/listed-species.html.

_____. 2023c. RE: Information Request – York County Jail site 1 Layman Way, Alfred Project. June 15, 2023.

_____. 2019a. Beginning with Habitat High Value Plant & Animal Habitats – Alfred, ME. Dated August 2019.

_____. 2019b. Beginning with Habitat Undeveloped Habitat Blocks & Connectors ad Conserved Lands – Alfred, ME. Dated August 2019.

Miller Engineering & Testing Inc. 2023. Geotechnical Engineering Report York County Facility Expansion. February 22, 2023.

Oak Point Associates. 2023. Site Location of Development – Major Amendment. Dated July 27, 2023.

Southern Maine Regional Planning Commission. 2010. Official Zoning Map Town of Alfred, Maine Annual Town Meeting, March 2010. Printed January 08, 2010.

Town of Alfred, Maine. 1996. General Legislation. Accessed August 14, 2023. https://ecode360.com/11767542.

U.S. Environmental Protection Agency (EPA). 2023a. NEPA Assist. Accessed April 03, 2023. https://www.epa.gov/nepa/nepassist.

_____. 2023b. EPA Greenbook. Accessed November 21, 2023. https://www3.epa.gov/airquality/greenbook/astate.html.

_____. 2023c. EJ Screen. Accessed March 16, 2023, https://ejscreen.epa.gov/mapper/.

_____. 1974. *EPA Identifies Noise Levels Affecting Health and Welfare.* Accessed April 4, 2021, https://archive.epa.gov/epa/aboutepa/epa-identifies-noise-levels-affecting-health-and-welfare.html.

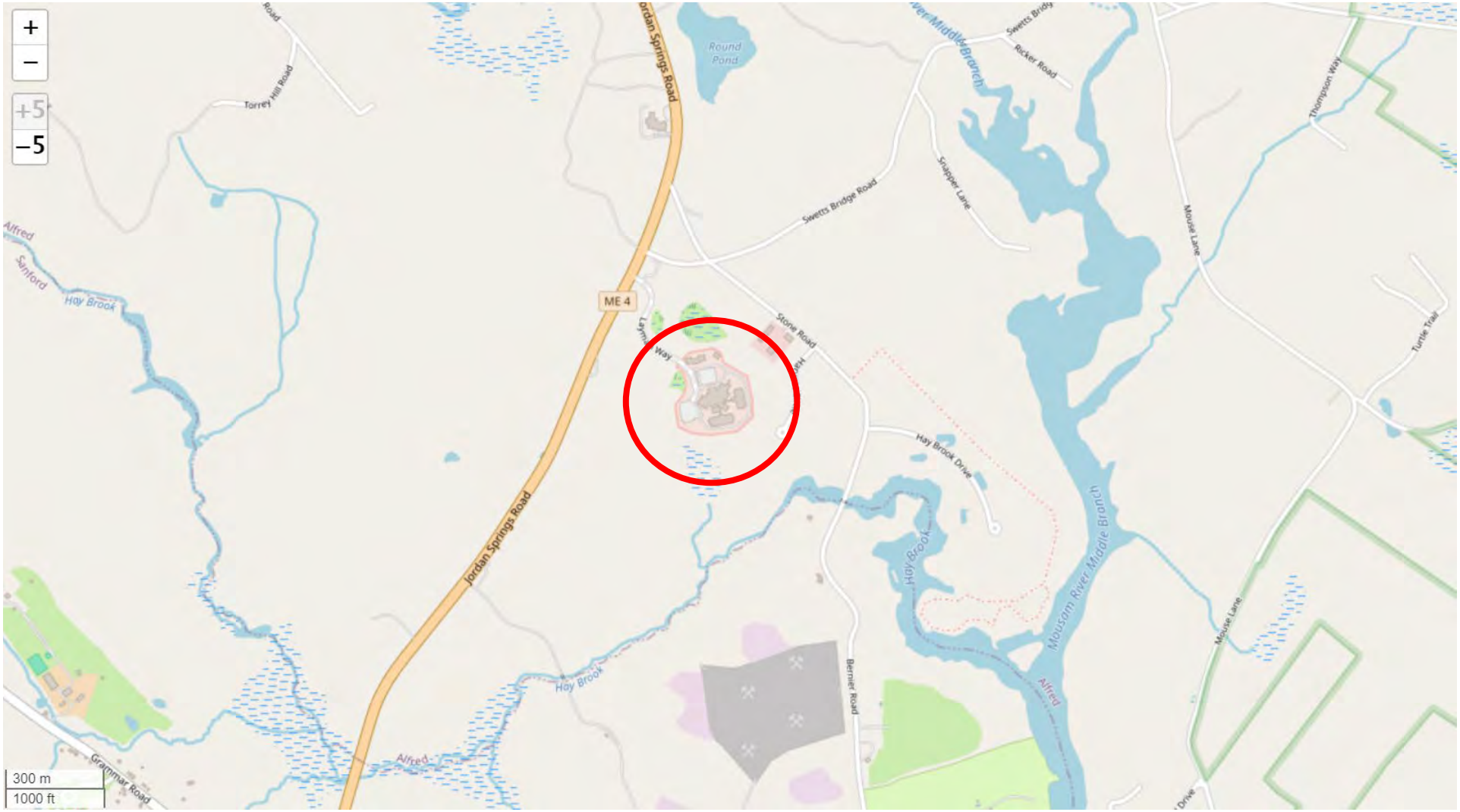
U.S. Fish and Wildlife Service (USFWS). 2023a. Maine – Bald Eagle Nest Locations and Buffer Zones. Accessed March 31, 2023. https://www.arcgis.com/apps/webappviewer/index.html?id=796b7baa18de43b49f911fe82dc4a0f1.

_____. 2023b. Information for Planning and Consultation (IPaC) Search of the Project Vicinity. Accessed May 17, 2023, 2021. https://ipac.ecosphere.fws.gov/.

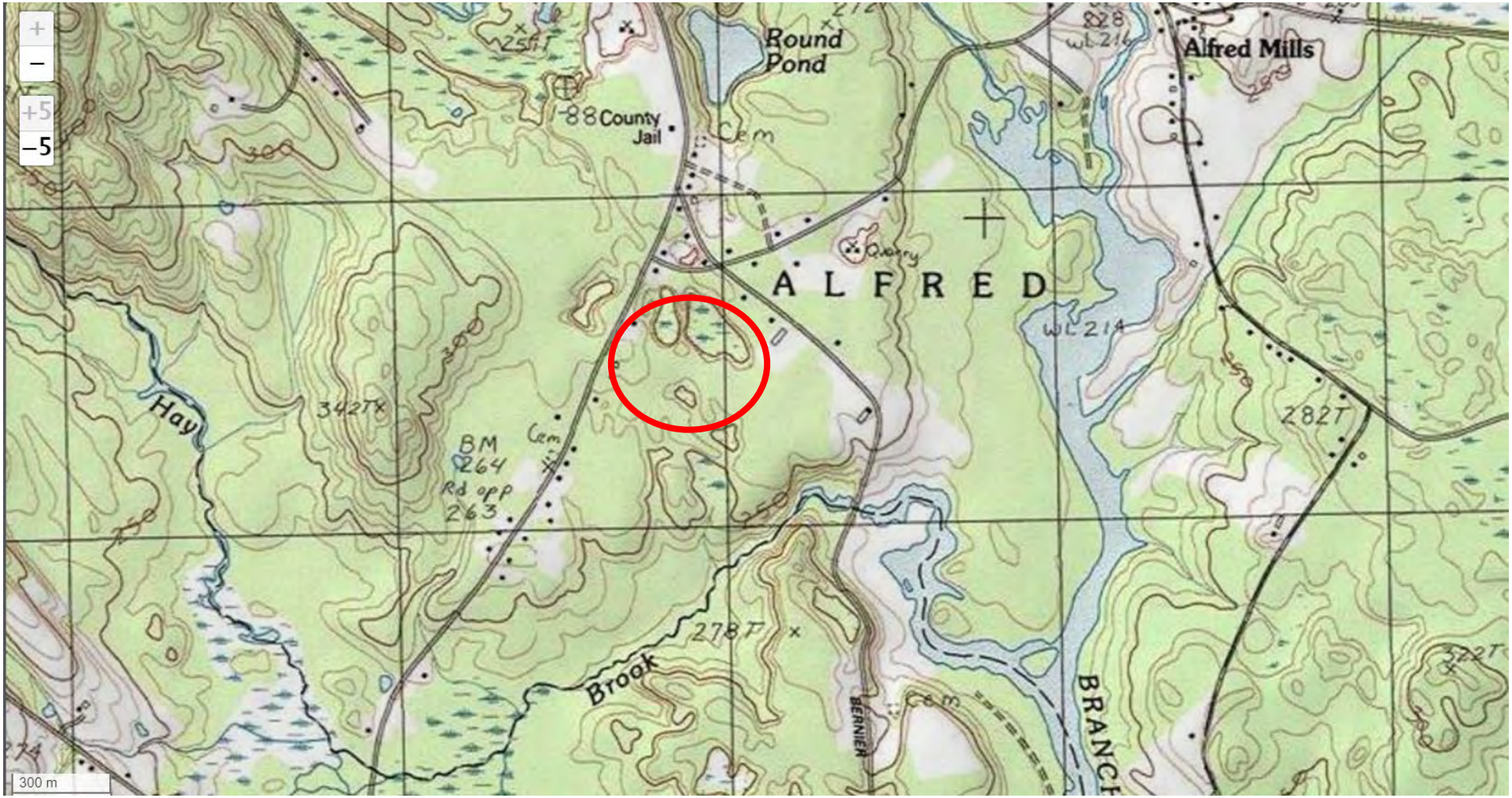
APPENDIX A:

Maps and Figures

Location Map

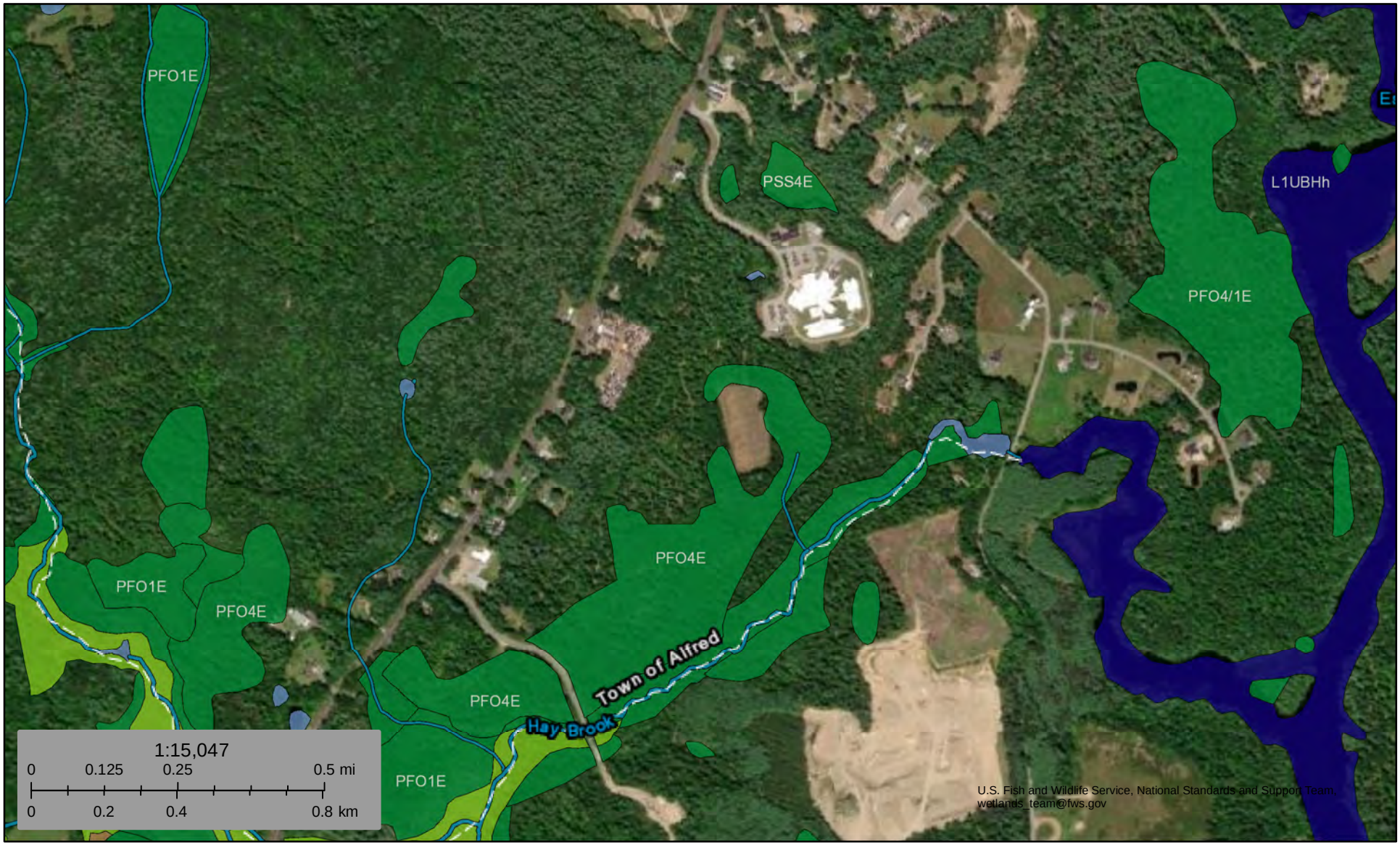


Topographic Map



U.S. Fish and Wildlife Service
National Wetlands Inventory

York County EOC



March 15, 2023

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

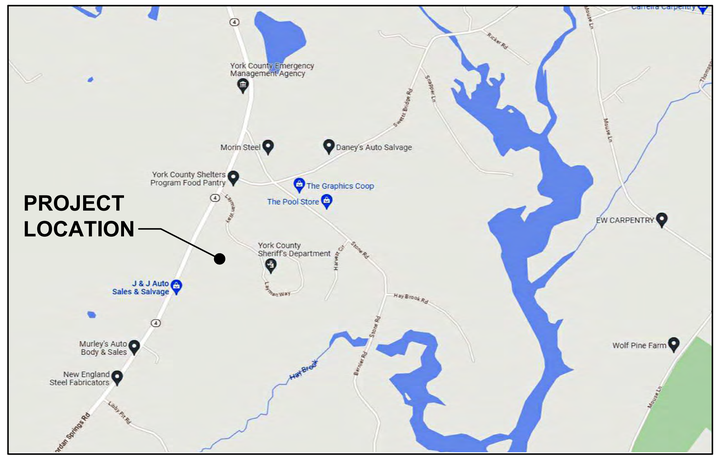
This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

APPENDIX B:

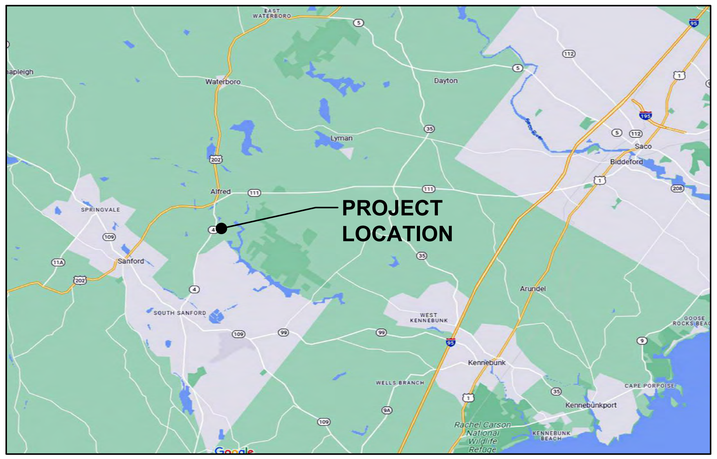
Project Documents and Designs

YORK COUNTY REGIONAL TRAINING CENTER AND REGIONAL RECOVERY CENTER

ALFRED, MAINE



LOCATION MAP NORTH



VICINITY MAP NORTH

OAK POINT ASSOCIATES

ARCHITECTURE - ENGINEERING - PLANNING

231 MAIN STREET, BIDDEFORD, MAINE 04005

FOR PERMITTING PURPOSES ONLY - NOT FOR CONSTRUCTION

NO.	DATE	DESCRIPTION	BY

REVISIONS

OAK POINT ASSOCIATES architecture engineering planning
231 MAIN STREET, BIDDEFORD, MAINE 04005
(T) 207.283.0193 (F) 207.283.4283
www.oakpoint.com

LASSEL ARCHITECTS
370 MAIN STREET
SOUTH BERWICK, MAINE 03908
207 384 2049

STATE OF MAINE
WADE A. LIPPERT
No. 10428
REGISTERED PROFESSIONAL ENGINEER
11/17/23

DESIGNED BY: WAL
DRAWN BY: DEW
CHECKED BY:
PROJECT: 22204.24

YORK COUNTY
45 KENNEBUNK ROAD
ALFRED, ME 04002

YORK COUNTY REGIONAL TRAINING CENTER AND REGIONAL RECOVERY CENTER
LAYMAN WAY ALFRED, MAINE 04002

TITLE SHEET

SCALE: AS NOTED
DATE: 11/17/2023
DWG: G-001
SHEET: 1 OF 27

CIVIL NOTES

1. BOUNDARY AND EXISTING CONDITIONS INFORMATION IS BASED ON A PLAN ENTITLED "PLAN SHOWING A BOUNDARY AND EXISTING CONDITIONS SURVEY FOR THE INHABITANTS OF THE COUNTY OF YORK" PREPARED BY CORNER POST LAND SURVEYING, INC. DATED JUNE 15, 2022.
2. EXISTING UNDERGROUND UTILITIES ARE SHOWN IN THEIR APPROXIMATE LOCATIONS ONLY. PRIOR TO SOIL DISTURBANCE, DETERMINE THE EXACT LOCATION OF ALL UNDERGROUND UTILITIES IN THE PROJECT AREA. CONTRACT WITH A PRIVATE UNDERGROUND UTILITY LOCATING COMPANY FOR LOCATING AND MARKING EXISTING UNDERGROUND UTILITIES ON THE PROJECT SITE. MAINTAIN THE UTILITY MARKOUT FOR THE DURATION OF THE PROJECT.
3. IN ADDITION, NOTIFY THE MAINE "DIG–SAFE" SYSTEM (CALL 811 OR 1–888–344–7233) AND OBTAIN A DIG–SAFE TICKET NUMBER. WAIT THE REQUIRED TIME PERIOD (72 HOURS IN MAINE EXCLUDING WEEKENDS AND HOLIDAYS) PRIOR TO BEGINNING WORK. HAVE THE DIG–SAFE TICKET NUMBER AVAILABLE ON SITE DURING PROSECUTION OF THE WORK.
4. HORIZONTAL COORDINATES ARE BASED ON THE MAINE STATE PLANE COORDINATE SYSTEM (NAD 83), WEST ZONE. THE VERTICAL DATUM IS THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
5. THE PROJECT IS SUBJECT TO THE FOLLOWING PERMITS WHICH ARE BEING OBTAINED BY THE ARCHITECT/ENGINEER FOR THE OWNER.
   a. MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION (MDEP) "SITE LOCATION OF DEVELOPMENT PERMIT".
   b. MAINE DEPARTMENT OF HEALTH AND HUMAN SERVICES "SUBSURFACE WASTEWATER DISPOSAL SYSTEM PERMIT".
   c. TOWN OF ALFRED "LAND USE PERMIT".
   d. MAINE DEPARTMENT OF TRANSPORTATION "TRAFFIC MOVEMENT PERMIT".
6. ALL KNOWN CONDITIONS OF THE PERMITS HAVE BEEN INCLUDED IN THE CONTRACT DRAWINGS AND SPECIFICATIONS. ABIDE BY ALL CONDITIONS OF THE PERMITS.
7. WETLAND DELINEATION BY MARK J. HAMPTON OCTOBER 2021.

CIVIL ABBREVIATIONS

AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY TRANSPORTATION OFFICIALS
ALUM	ALUMINUM
APPROX	APPROXIMATE
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
AVG	AVERAGE
BLDG	BUILDING
BMPs	BEST MANAGEMENT PRACTICES
CB	CATCH BASIN
L	CENTERLINE
CI	CAST IRON
COMM	COMMUNICATIONS
CONC	CONCRETE
DIA	DIAMETER
E	EASTING
ELEV	ELEVATION
EXIST	EXISTING
EW	EACH WAY
FFE	FINISH FLOOR ELEVATION
FG	FINISH GRADE
FND	FOUNDATION
FT	FEET
FTG	FOOTING
GAL	GALLON
GALV	GALVANIZED
GPS	GLOBAL POSITIONING SYSTEM
INV	INVERT
KLPD	KENNEBUNK LIGHT AND POWER DISTRICT
MAX	MAXIMUM
MDEP	MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
MDOT	MAINE DEPARTMENT OF TRANSPORTATION
MIN	MINIMUM
MUTCD	MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES
N	NORTHING
NIC	NOT IN CONTRACT
NPDES	NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM
OC	ON CENTER
OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
PE	POLYETHYLENE
PSI	POUNDS PER SQUARE INCH
PT	PRESERVATIVE TREATED
PV	PHOTOVOLTAIC
PVC	POLYVINYL CHLORIDE
R	RADIUS
REINF	REINFORCED
RGS	RIGID GALVANIZED STEEL
SCH	SCHEDULE
SEC	SECOND
SF	SQUARE FOOT
SQ	SQUARE
SS	STAINLESS STEEL
STL	STEEL
SIM	SIMILAR
SS	STAINLESS STEEL
TOC	TOP OF CURB
TOW	TOP OF WALL
TYP	TYPICAL
UD	UNDERDRAIN
WWF	WELDED WIRE FABRIC

CIVIL LEGEND

	EXISTING UTILITY POLE
	EXISTING SURVEY CONTROL POINT
	EXISTING SIGN
	EXISTING WATER WELL
	EXISTING DECIDUOUS TREE
	EXISTING CONIFEROUS TREE
	EXISTING SHRUB
262	EXISTING CONTOUR LINE
EOE/C	EXISTING OVERHEAD ELECTRIC AND COMMUNICATION LINES
EUE	EXISTING UNDERGROUND ELECTRIC LINE(S)
EUD	EXISTING UNDERDRAIN LINE
EUC	EXISTING UNDERGROUND COMMUNICATIONS LINE(S)
EW	EXISTING WATER LINE
	EXISTING EDGE OF ASPHALT CONCRETE PAVEMENT
	EXISTING BUILDING LINE
	EXISTING LOT LINE
	EXISTING TREELINE
	TREELINE
UE(2–2.5")	UNDERGROUND ELECTRIC LINE (CONDUIT NUMBER AND SIZE AS INDICATED)
UC(2–2")	UNDERGROUND COMMUNICATIONS LINE (CONDUIT NUMBER AND SIZE AS INDICATED)
UD(4")	UNDERDRAIN LINE (SIZE AS INDICATED)
UE(1")	UNDERGROUND ELECTRIC LINE (CONDUIT SIZE AS INDICATED)
W(1.25")	WATER LINE (SIZE AS INDICATED)
SS(4")	GRAVITY SANITARY SEWER LINE (PIPE SIZE AS INDICATED)
PSS(2")	PUMPED SANITARY SEWER LINE (PIPE SIZE AS INDICATED)
SD(6")	STORM DRAIN LINE (PIPE SIZE AS INDICATED)
228	CONTOUR LINE
FS	SEDIMENT CONTROL FILTER SOCK
	BUILDING LINE
	EDGE OF ASPHALT CONCRETE PAVEMENT
7.60'E	EXISTING SPOT GRADE
8.50'F	FINISH SPOT GRADE
	SIGN
B–1	SOIL BORING LOCATION (SOIL BORING LOGS ARE INCLUDED AS AN APPENDIX TO SPECIFICATION SECTION 312000, EARTH MOVING)
C	COMMUNICATIONS HANDHOLE
E	ELECTRIC HANDHOLE
3	LAYOUT POINT

FOR PERMITTING PURPOSES ONLY - NOT FOR CONSTRUCTION

NO.	DATE	DESCRIPTION	BY

REVISIONS

OAK POINT ASSOCIATES
architecture engineering planning
231 MAIN STREET, BIDDEFORD, MAINE 04005
(T) 207.283.0193 (F) 207.283.4283
www.oakpoint.com

LASSEL ARCHITECTS
370 MAIN STREET
SOUTH BERWICK, MAINE 03908
207 384 2049

STATE OF MAINE
WADE A. LIPPERT
No. 10426
LICENSED
PROFESSIONAL ENGINEER
11/17/23

DESIGNED BY: WAL
DRAWN BY: DEW
CHECKED BY:

PROJECT: 22204.24

YORK COUNTY
45 KENNEBUNK ROAD
ALFRED, ME 04002

YORK COUNTY REGIONAL TRAINING CENTER AND REGIONAL RECOVERY CENTER
LAYMAN WAY ALFRED, MAINE 04002

CIVIL NOTES, LEGEND, ABBREVIATIONS AND LIST OF DRAWINGS

SCALE: AS NOTED

DATE: 11/17/2023

DWG: C-001

SHEET: 2 OF 27

NOTE:

SEE SHEETS CG101, CG102, CG103, C-501, AND C-502 FOR EROSION CONTROL MEASURES.

1 CX101 EXISTING CONDITIONS SITE PLAN
SCALE: 1"=100'

GRAPHIC SCALE
100' 50' 0 100' 300'
1"=100
CHECK GRAPHIC SCALE BEFORE USING

NO.	DATE	DESCRIPTION	BY
REVISIONS			

FOR PERMITTING PURPOSES ONLY - NOT FOR CONSTRUCTION

OAK POINT ASSOCIATES
architecture engineering planning
231 MAIN STREET, BIDDEFORD, MAINE 04005
(T) 207.283.0193 (F) 207.283.4283
www.oakpoint.com

LASSEL ARCHITECTS
370 MAIN STREET
SOUTH BERWICK, MAINE 03908
207 384 2049

STATE OF MAINE
WADE A. LIPPERT
No. 10428
REGISTERED PROFESSIONAL ENGINEER
11/17/23

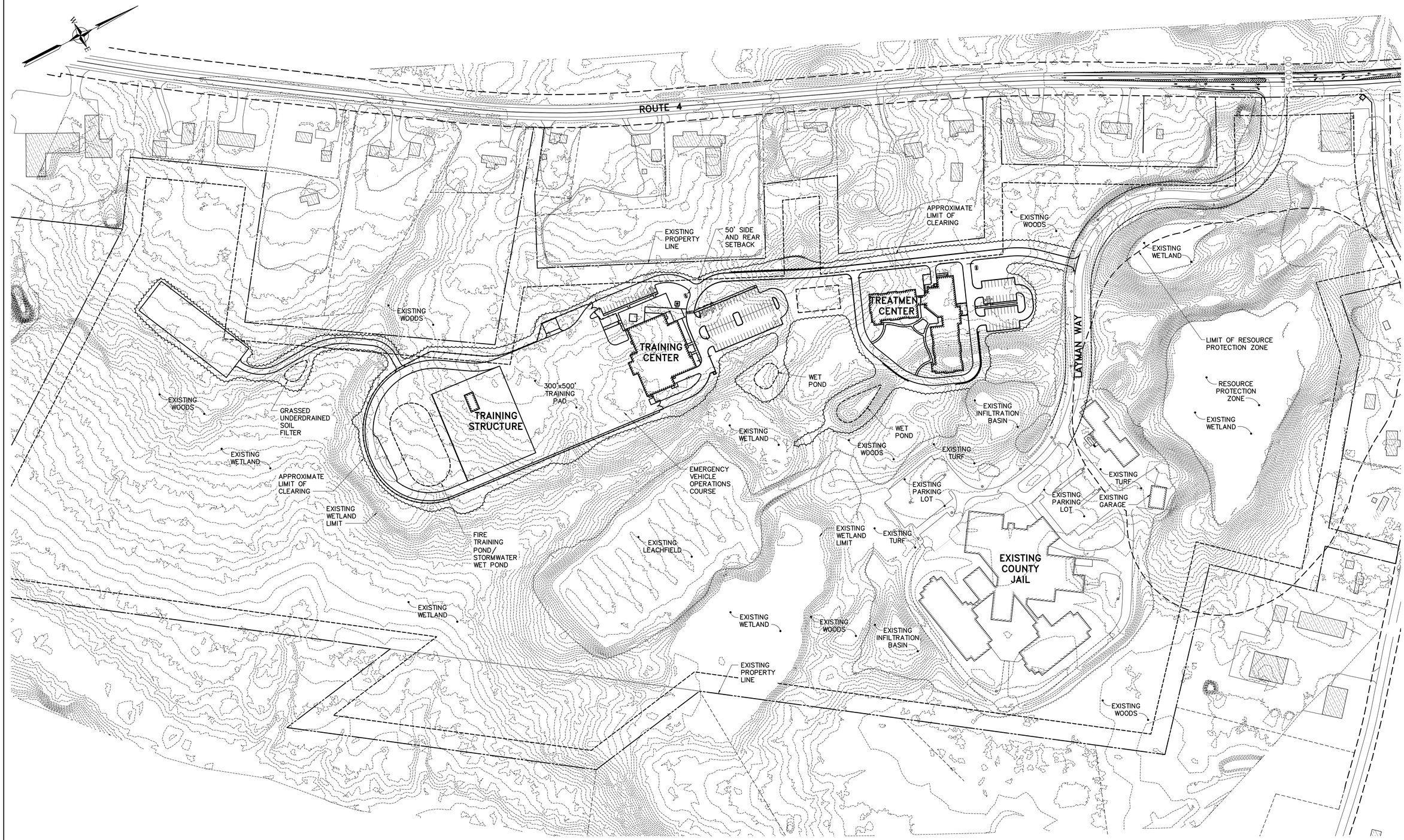
DESIGNED BY: WAL
DRAWN BY: WAL
CHECKED BY:
PROJECT: 22204.24

YORK COUNTY
45 KENNEBUNK ROAD
ALFRED, ME 04002

YORK COUNTY REGIONAL TRAINING CENTER AND REGIONAL RECOVERY CENTER
LAYMAN WAY ALFRED, MAINE 04002

EXISTING CONDITIONS AND REMOVALS SITE PLAN

SCALE: AS NOTED
DATE: 11/17/2023
DWG: CD101
SHEET: 3 OF 27



1 CS101 OVERALL SITE PLAN
SCALE: 1"=100'

GRAPHIC SCALE
100' 50' 0 100' 300'
1"=100
CHECK GRAPHIC SCALE BEFORE USING

NO.	DATE	DESCRIPTION	BY

REVISIONS

FOR PERMITTING PURPOSES ONLY - NOT FOR CONSTRUCTION

OAK POINT ASSOCIATES
architecture engineering planning
231 MAIN STREET, BIDDEFORD, MAINE 04005
(T) 207.283.0193 (F) 207.283.4283
www.oakpoint.com

LASSEL ARCHITECTS
370 MAIN STREET
SOUTH BERWICK, MAINE 03908
207 384 2049

STATE OF MAINE
WADE A. LIPPERT
No. 10428
REGISTERED PROFESSIONAL ENGINEER
11/17/23

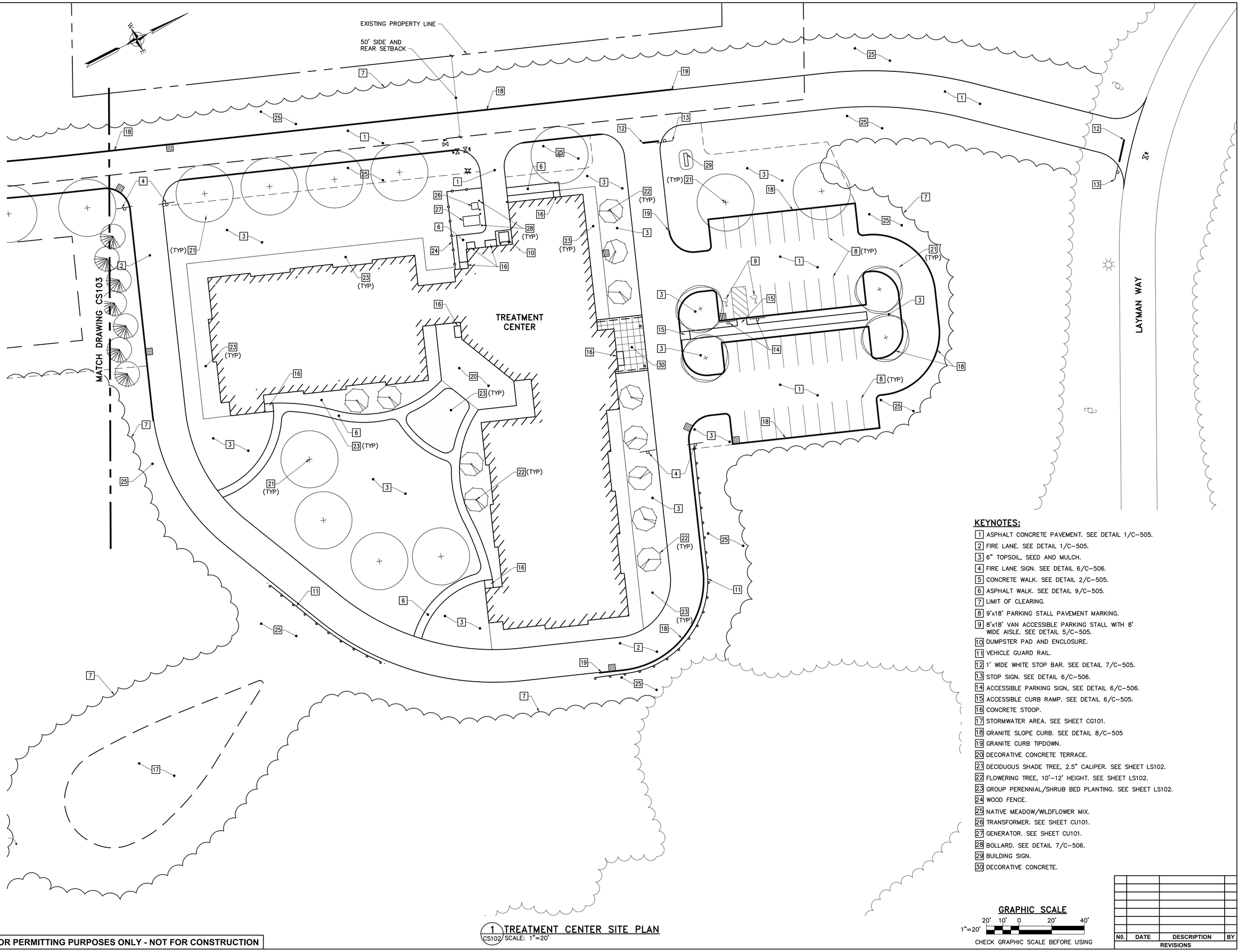
DESIGNED BY: WAL
DRAWN BY: WAL
CHECKED BY:
PROJECT: 22204.24

YORK COUNTY
45 KENNEBUNK ROAD
ALFRED, ME 04002

YORK COUNTY REGIONAL TRAINING CENTER AND REGIONAL RECOVERY CENTER
LAYMAN WAY ALFRED, MAINE 04002

OVERALL SITE PLAN

SCALE: AS NOTED
DATE: 11/17/2023
DWG: CS101
SHEET: 4 OF 27



KEYNOTES:

1. ASPHALT CONCRETE PAVEMENT. SEE DETAIL 1/C-505.
2. FIRE LANE. SEE DETAIL 1/C-505.
3. 6" TOPSOIL, SEED AND MULCH.
4. FIRE LANE SIGN. SEE DETAIL 6/C-506.
5. CONCRETE WALK. SEE DETAIL 2/C-505.
6. ASPHALT WALK. SEE DETAIL 9/C-505.
7. LIMIT OF CLEARING.
8. 9'x18' PARKING STALL PAVEMENT MARKING.
9. 8'x18' VAN ACCESSIBLE PARKING STALL WITH 8' WIDE AISLE. SEE DETAIL 5/C-505.
10. DUMPSTER PAD AND ENCLOSURE.
11. VEHICLE GUARD RAIL.
12. 1' WIDE WHITE STOP BAR. SEE DETAIL 7/C-505.
13. STOP SIGN. SEE DETAIL 6/C-506.
14. ACCESSIBLE PARKING SIGN, SEE DETAIL 6/C-506.
15. ACCESSIBLE CURB RAMP. SEE DETAIL 6/C-505.
16. CONCRETE STOOP.
17. STORMWATER AREA. SEE SHEET CG101.
18. GRANITE SLOPE CURB. SEE DETAIL 8/C-505
19. GRANITE CURB TIPDOWN.
20. DECORATIVE CONCRETE TERRACE.
21. DECIDUOUS SHADE TREE, 2.5" CALIPER. SEE SHEET LS102.
22. FLOWERING TREE, 10'-12' HEIGHT. SEE SHEET LS102.
23. GROUP PERENNIAL/SHRUB BED PLANTING. SEE SHEET LS102.
24. WOOD FENCE.
25. NATIVE MEADOW/WILDFLOWER MIX.
26. TRANSFORMER. SEE SHEET CU101.
27. GENERATOR. SEE SHEET CU101.
28. BOLLARD. SEE DETAIL 7/C-506.
29. BUILDING SIGN.
30. DECORATIVE CONCRETE.

GRAPHIC SCALE
20' 10' 0 20' 40'
1"=20'
CHECK GRAPHIC SCALE BEFORE USING

1 TREATMENT CENTER SITE PLAN
CS102 SCALE: 1"=20'

FOR PERMITTING PURPOSES ONLY - NOT FOR CONSTRUCTION

OAK POINT ASSOCIATES
architecture engineering planning
231 MAIN STREET, BIDDEFORD, MAINE 04005
(T) 207.283.0193 (F) 207.283.4283
www.oakpoint.com

LASSEL ARCHITECTS
370 MAIN STREET
SOUTH BERWICK, MAINE 03908
207 384 2049

STATE OF MAINE
WADE A. LIPPERT
No. 10428
REGISTERED PROFESSIONAL ENGINEER
11/17/23

DESIGNED BY: WAL
DRAWN BY: WAL
CHECKED BY:
PROJECT: 22204.24

YORK COUNTY
45 KENNEBUNK ROAD
ALFRED, ME 04002

YORK COUNTY REGIONAL TRAINING CENTER AND REGIONAL RECOVERY CENTER
LAYMAN WAY ALFRED, MAINE 04002

RECOVERY CENTER SITE PLAN

SCALE: AS NOTED
DATE: 11/17/2023
DWG: CS102
SHEET: 5 OF 27

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

EXISTING PROPERTY LINE

50' SIDE AND REAR SETBACK

MATCH DRAWING CS104

MATCH DRAWING CS102

TRAINING CENTER

EXISTING WETLAND LIMIT

EXISTING WETLAND

1 CS103 TRAINING CENTER SITE PLAN
SCALE: 1"=20'

KEYNOTES:

1. ASPHALT CONCRETE PAVEMENT. SEE DETAIL 1/C-505.
2. GRANITE SLOPE CURB. SEE DETAIL 8/C-505.
3. 6" TOPSOIL, SEED AND MULCH.
4. UNIT PAVERS.
5. CONCRETE WALK. SEE DETAIL 2/C-505.
6. GRANITE CURB TIPDOWN.
7. LIMIT OF CLEARING.
8. 9'x18' PARKING STALL PAVEMENT MARKING.
9. 8'x18' VAN ACCESSIBLE PARKING STALL WITH 8' WIDE AISLE. SEE DETAIL 5/C-505.
10. 8'x18' ACCESSIBLE PARKING STALL WITH 5' WIDE AISLE. SEE DETAIL 5/C-505.
11. VEHICLE GUARD RAIL.
12. 1' WIDE WHITE STOP BAR. SEE DETAIL 7/C-505.
13. STOP SIGN. SEE DETAIL 6/C-506.
14. ACCESSIBLE PARKING SIGN. SEE DETAIL 6/C-506.
15. ACCESSIBLE CURB RAMP. SEE DETAIL 6/C-505.
16. CONCRETE STOOP.
17. STORMWATER AREA. SEE SHEET CG101.
18. PAINTED CROSSWALK.
19. GRANITE CURB. SEE DETAIL 2/C-505.
20. FLAG POLE. SEE DETAIL 2/C-506.
21. SEPTIC DISPOSAL FIELD. SEE SHEET CU102.
22. DUMPSTER PAD AND ENCLOSURE.
23. 6' HIGH CHAIN LINK FENCE. SEE DETAIL 3/C-506
24. ASPHALT CONCRETE WALK. SEE DETAIL 2/C-505.
25. 6' HIGH, 26' WIDE DOUBLE LEAF CHAIN LINK SWING GATE.
26. 6' HIGH, 10' WIDE DOUBLE LEAF CHAIN LINK SWING GATE.
27. GENERATOR. SEE SHEET CU102.
28. 6' HIGH, 5' WIDE CHAIN LINK SWING GATE.
29. DECORATIVE CONCRETE.
30. DECIDUOUS SHADE TREE, 2.5" CALIPER. SEE SHEET LS101.
31. FLOWERING TREE, 10'-12' HEIGHT. SEE SHEET LS101.
32. GROUP PERENNIAL/SHRUB BED PLANTING. SEE SHEET LS101.
33. EVERGREEN BUFFER, 8'-10 HEIGHT. SEE SHEET LS101.
34. NATIVE MEADOW/WILDFLOWER MIX.
35. TRANSFORMER. SEE SHEET CU102.
36. "AUTHORIZED VEHICLES ONLY" SIGN.
37. BUILDING SIGN.
38. 6" PLANTING SOIL AND SOD.

GRAPHIC SCALE
20' 10' 0 20' 40'
1"=20'
CHECK GRAPHIC SCALE BEFORE USING

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

FOR PERMITTING PURPOSES ONLY - NOT FOR CONSTRUCTION

OAK POINT ASSOCIATES
architecture engineering planning
231 MAIN STREET, BIDDEFORD, MAINE 04005
(T) 207.283.0193 (F) 207.283.4283
www.oakpoint.com

LASSEL ARCHITECTS
370 MAIN STREET
SOUTH BERWICK, MAINE 03908
207 384 2049

STATE OF MAINE
WADE A. LIPPERT
No. 10428
REGISTERED PROFESSIONAL ENGINEER
11/17/23

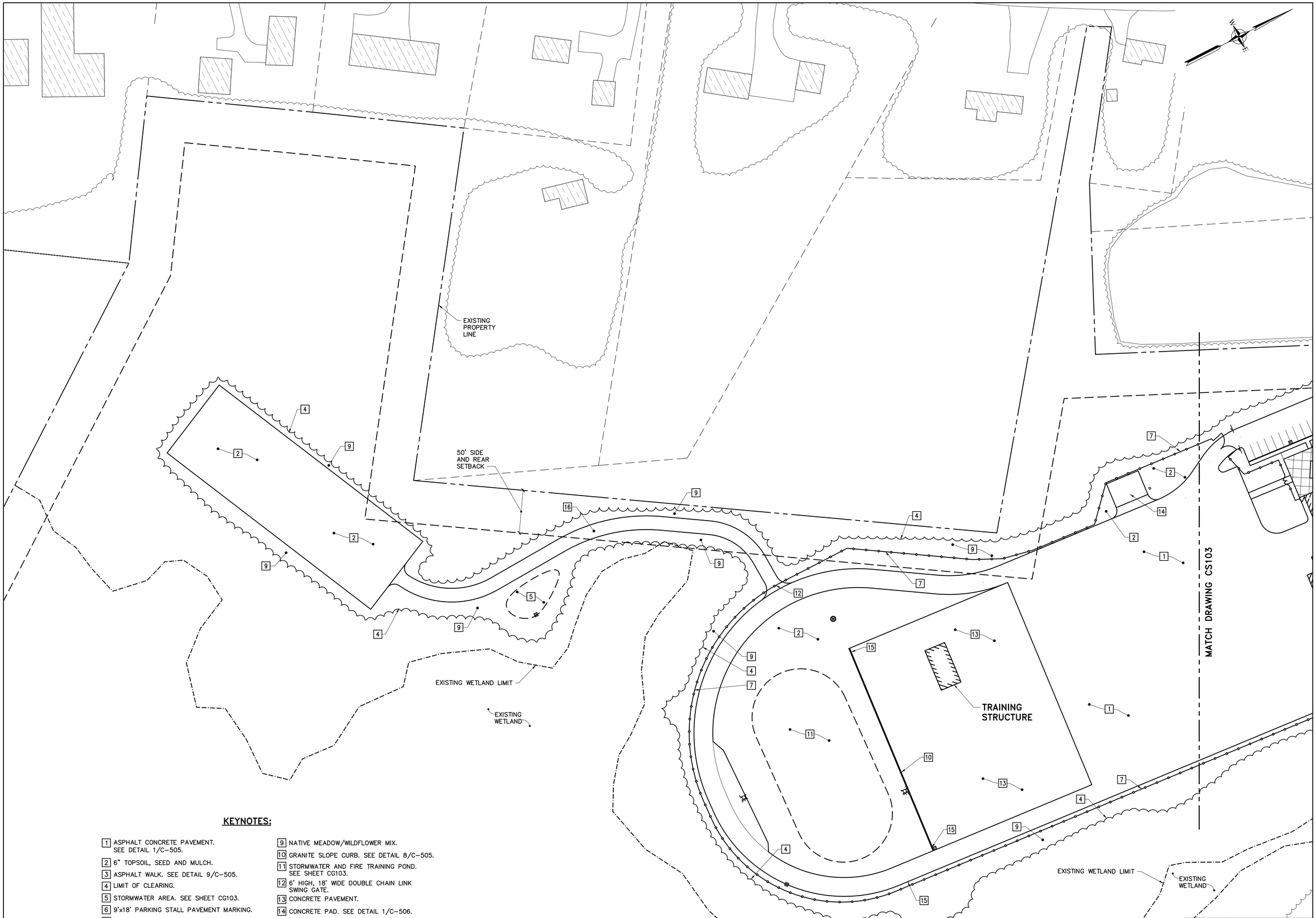
DESIGNED BY: WAL
DRAWN BY: WAL
CHECKED BY:
PROJECT: 22204.24

YORK COUNTY
45 KENNEBUNK ROAD
ALFRED, ME 04002

YORK COUNTY REGIONAL TRAINING CENTER AND REGIONAL RECOVERY CENTER
LAYMAN WAY ALFRED, MAINE 04002

TRAINING CENTER SITE PLAN

SCALE: AS NOTED
DATE: 11/17/2023
DWG: CS103
SHEET: 6 OF 27



KEYNOTES:

1. ASPHALT CONCRETE PAVEMENT. SEE DETAIL 1/C-505.
2. 6" TOPSOIL, SEED AND MULCH.
3. ASPHALT WALK. SEE DETAIL 9/C-505.
4. LIMIT OF CLEARING.
5. STORMWATER AREA. SEE SHEET CG103.
6. 9'x18' PARKING STALL PAVEMENT MARKING.
7. 6' HIGH CHAIN LINK FENCE. SEE DETAIL 3/C-506.
8. 6' HIGH, 6' WIDE CHAIN LINK GATE.
9. NATIVE MEADOW/WILDFLOWER MIX.
10. GRANITE SLOPE CURB. SEE DETAIL 8/C-505.
11. STORMWATER AND FIRE TRAINING POND. SEE SHEET CG103.
12. 6' HIGH, 18' WIDE DOUBLE CHAIN LINK SWING GATE.
13. CONCRETE PAVEMENT.
14. CONCRETE PAD. SEE DETAIL 1/C-506.
15. GRANITE CURB TIPDOWN.
16. GRAVEL ROAD.

1 SOUTH SITE PLAN
CS104 SCALE: 1"=40'

GRAPHIC SCALE
1"=40' 40' 20' 0 40' 80'
CHECK GRAPHIC SCALE BEFORE USING

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

FOR PERMITTING PURPOSES ONLY - NOT FOR CONSTRUCTION

OAK POINT ASSOCIATES
architecture engineering planning
231 MAIN STREET, BIDDEFORD, MAINE 04005
(T) 207.283.0193 (F) 207.283.4283
www.oakpoint.com

LASSEL ARCHITECTS
370 MAIN STREET
SOUTH BERWICK, MAINE 03908
207.384.2049

STATE OF MAINE
WADE A. LIPPERT
No. 10428
REGISTERED PROFESSIONAL ENGINEER
11/17/23

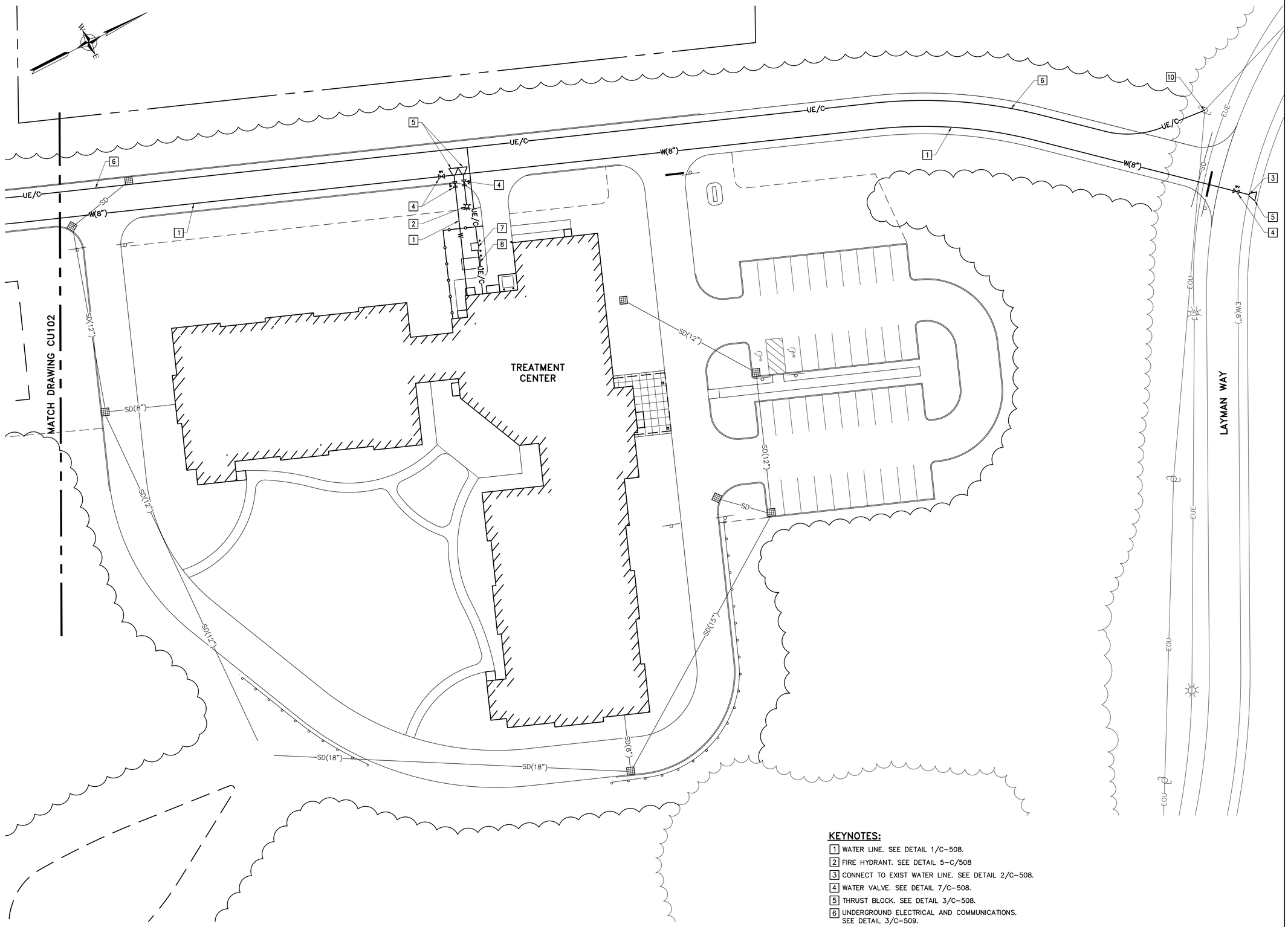
DESIGNED BY: WAL
DRAWN BY: WAL
CHECKED BY:
PROJECT: 22204.24

YORK COUNTY
45 KENNEBUNK ROAD
ALFRED, ME 04002

YORK COUNTY REGIONAL TRAINING CENTER AND REGIONAL RECOVERY CENTER
LAYMAN WAY ALFRED, MAINE 04002

SOUTH SITE PLAN

SCALE: AS NOTED
DATE: 11/17/2023
DWG: CS104
SHEET: 7 OF 27



KEYNOTES:

1. WATER LINE. SEE DETAIL 1/C–508.
2. FIRE HYDRANT. SEE DETAIL 5–C/508
3. CONNECT TO EXIST WATER LINE. SEE DETAIL 2/C–508.
4. WATER VALVE. SEE DETAIL 7/C–508.
5. THRUST BLOCK. SEE DETAIL 3/C–508.
6. UNDERGROUND ELECTRICAL AND COMMUNICATIONS. SEE DETAIL 3/C–509.
7. PAD MOUNTED TRANSFORMER.
8. GENERATOR.
9. SEWER LINE. SEE DETAIL 1/C–508.
10. UTILITY POLE RISER. SEE DETAIL 5/C–509.

1 CU101 TREATMENT CENTER UTILITY PLAN
SCALE: 1"=20'

GRAPHIC SCALE
1"=20'
20' 10' 0 20' 40'
CHECK GRAPHIC SCALE BEFORE USING

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

FOR PERMITTING PURPOSES ONLY - NOT FOR CONSTRUCTION

OAK POINT ASSOCIATES
architecture engineering planning
231 MAIN STREET, BIDDEFORD, MAINE 04005
(T) 207.283.0193 (F) 207.283.4283
www.oakpoint.com

LASSEL ARCHITECTS
370 MAIN STREET
SOUTH BERWICK, MAINE 03908
207 384 2049

STATE OF MAINE
WADE A. LIPPERT
No. 10428
REGISTERED PROFESSIONAL ENGINEER
11/17/23

DESIGNED BY: WAL
DRAWN BY: WAL
CHECKED BY:
PROJECT: 22204.24

YORK COUNTY
45 KENNEBUNK ROAD
ALFRED, ME 04002

YORK COUNTY REGIONAL TRAINING CENTER AND REGIONAL RECOVERY CENTER
LAYMAN WAY ALFRED, MAINE 04002

TREATMENT CENTER UTILITY PLAN

SCALE: AS NOTED
DATE: 11/17/2023
DWG: CU101
SHEET: 8 OF 27

MATCH INSET PLAN 2/CU102

MATCH DRAWING CU101

TRAINING CENTER

BURN TOWER

EXISTING WETLAND LIMIT

EXISTING WETLAND

W(8")
SD(12")
SD(15")
SD(18")
SD(6")
UE/C
UC
UE
UD
SS
SF
W

1 TRAINING CENTER UTILITY PLAN
CU102 SCALE: 1"=20'

2 TRAINING CENTER WELL UTILITY PLAN
CU102 SCALE: 1"=40'

3 TRAINING CENTER DRY HYDRANT UTILITY PLAN
CU102 SCALE: 1"=40'

SD(2)(24")
SD(12")

KEYNOTES:

1. WATER LINE. SEE DETAIL 1/C-508.
2. FIRE HYDRANT. SEE DETAIL 5/C-508.
3. WATER VALVE. SEE DETAIL 7/C-508.
4. THRUST BLOCK. SEE DETAIL 3/C-508.
5. UNDERGROUND ELECTRICAL AND COMMUNICATIONS. SEE DETAIL 3/C-509.
6. UNDERGROUND ELECTRICAL. SEE DETAIL 3/C-509.
7. DRY HYDRANT.
8. WELL.
9. PAD MOUNTED TRANSFORMER.
10. GENERATOR.
11. UNDERGROUND COMMUNICATIONS. SEE DETAIL 3/C-509.
12. SEPTIC DISPOSAL FIELD.
13. ELECTRICAL HANDHOLE. SEE DETAIL 9/C-509.
14. SEWER LINE. SEE DETAIL 1/C-508.
15. DECONTAMINATION STORAGE TANK.

GRAPHIC SCALES

1"=20' — 20' 10' 0 20' 40'

1"=40' — 40' 20' 0 40' 80'

CHECK GRAPHIC SCALES BEFORE USING

NO.	DATE	DESCRIPTION	BY
REVISIONS			

FOR PERMITTING PURPOSES ONLY - NOT FOR CONSTRUCTION

OAK POINT ASSOCIATES
architecture engineering planning
231 MAIN STREET, BIDDEFORD, MAINE 04005
(T) 207.283.0193 (F) 207.283.4283
www.oakpoint.com

LASSEL ARCHITECTS
370 MAIN STREET
SOUTH BERWICK, MAINE 03908
207 384 2049

STATE OF MAINE
WADE A. LIPPERT
No. 10428
LICENSED
PROFESSIONAL ENGINEER

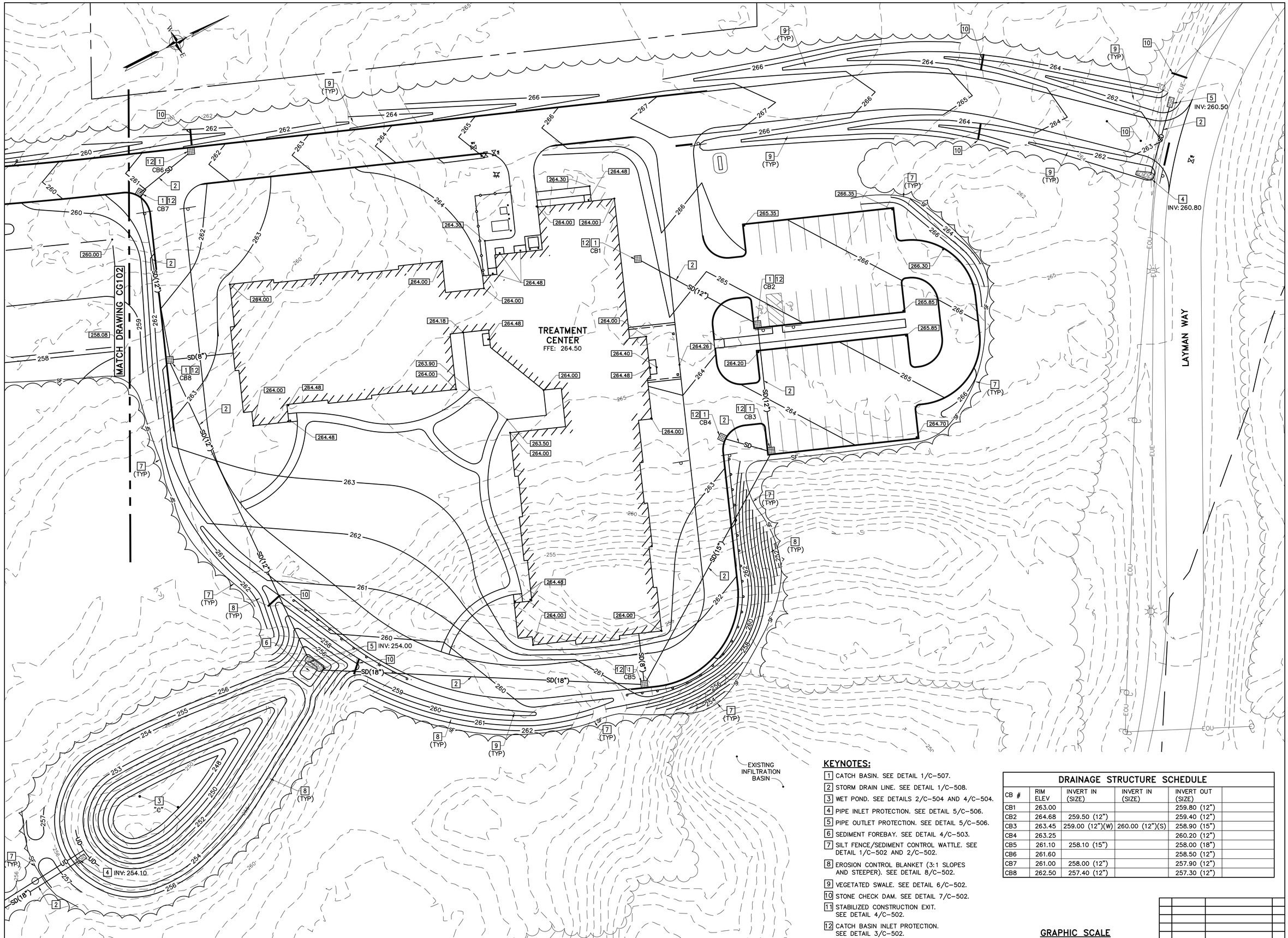
DESIGNED BY: WAL
DRAWN BY: WAL
CHECKED BY:
PROJECT: 22204.24

YORK COUNTY
45 KENNEBUNK ROAD
ALFRED, ME 04002

YORK COUNTY REGIONAL TRAINING CENTER AND REGIONAL RECOVERY CENTER
LAYMAN WAY ALFRED, MAINE 04002

TRAINING CENTER UTILITY PLAN

SCALE: AS NOTED
DATE: 11/17/2023
DWG: CU102
SHEET: 9 OF 27



KEYNOTES:

1. CATCH BASIN. SEE DETAIL 1/C-507.
2. STORM DRAIN LINE. SEE DETAIL 1/C-508.
3. WET POND. SEE DETAILS 2/C-504 AND 4/C-504.
4. PIPE INLET PROTECTION. SEE DETAIL 5/C-506.
5. PIPE OUTLET PROTECTION. SEE DETAIL 5/C-506.
6. SEDIMENT FOREBAY. SEE DETAIL 4/C-503.
7. SILT FENCE/SEDIMENT CONTROL WATTLE. SEE DETAIL 1/C-502 AND 2/C-502.
8. EROSION CONTROL BLANKET (3:1 SLOPES AND STEEPER). SEE DETAIL 8/C-502.
9. VEGETATED SWALE. SEE DETAIL 6/C-502.
10. STONE CHECK DAM. SEE DETAIL 7/C-502.
11. STABILIZED CONSTRUCTION EXIT. SEE DETAIL 4/C-502.
12. CATCH BASIN INLET PROTECTION. SEE DETAIL 3/C-502.

DRAINAGE STRUCTURE SCHEDULE

CB #	RIM ELEV	INVERT IN (SIZE)	INVERT IN (SIZE)	INVERT OUT (SIZE)	
CB1	263.00			259.80 (12")	
CB2	264.68	259.50 (12")		259.40 (12")	
CB3	263.45	259.00 (12")(W)	260.00 (12")(S)	258.90 (15")	
CB4	263.25			260.20 (12")	
CB5	261.10	258.10 (15")		258.00 (18")	
CB6	261.60			258.50 (12")	
CB7	261.00	258.00 (12")		257.90 (12")	
CB8	262.50	257.40 (12")		257.30 (12")	

GRAPHIC SCALE
20' 10' 0 20' 40'
1"=20'
CHECK GRAPHIC SCALE BEFORE USING

1 TREATMENT CENTER GRADING AND DRAINAGE PLAN
CG101 SCALE: 1"=20'

FOR PERMITTING PURPOSES ONLY - NOT FOR CONSTRUCTION

NO.	DATE	DESCRIPTION	BY

REVISIONS

OAK POINT ASSOCIATES
architecture engineering planning
231 MAIN STREET, BIDDEFORD, MAINE 04005
(T) 207.283.0193 (F) 207.283.4293
www.oakpoint.com

LASSEL ARCHITECTS
370 MAIN STREET
SOUTH BERWICK, MAINE 03908
207 384 2049

STATE OF MAINE
WADE A. LIPPERT
No. 10428
REGISTERED PROFESSIONAL ENGINEER
11/24

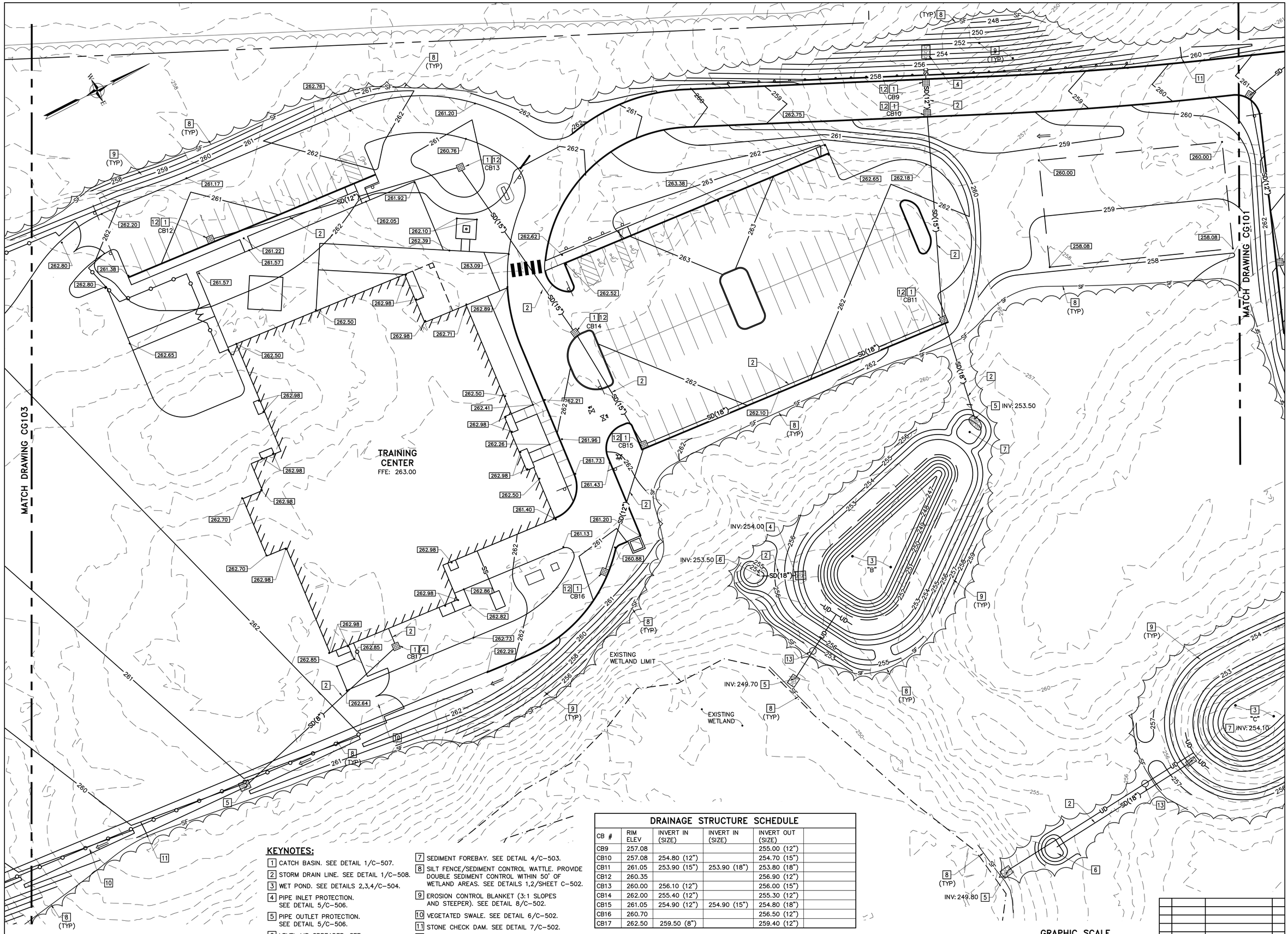
DESIGNED BY: WAL
DRAWN BY: WAL
CHECKED BY:
PROJECT: 22204.24

YORK COUNTY
45 KENNEBUNK ROAD
ALFRED, ME 04002

YORK COUNTY REGIONAL TRAINING CENTER AND REGIONAL RECOVERY CENTER
LAYMAN WAY ALFRED, MAINE 04002

TREATMENT CENTER GRADING AND DRAINAGE PLAN

SCALE: AS NOTED
DATE: 01/17/2024
DWG: CG101
SHEET: 10 OF 27



KEYNOTES:

1. CATCH BASIN. SEE DETAIL 1/C-507.
2. STORM DRAIN LINE. SEE DETAIL 1/C-508.
3. WET POND. SEE DETAILS 2,3,4/C-504.
4. PIPE INLET PROTECTION. SEE DETAIL 5/C-506.
5. PIPE OUTLET PROTECTION. SEE DETAIL 5/C-506.
6. LEVEL LIP SPREADER. SEE DETAIL 5/C-503.
7. SEDIMENT FOREBAY. SEE DETAIL 4/C-503.
8. SILT FENCE/SEDIMENT CONTROL WATTLE. PROVIDE DOUBLE SEDIMENT CONTROL WITHIN 50' OF WETLAND AREAS. SEE DETAILS 1,2/SHEET C-502.
9. EROSION CONTROL BLANKET (3:1 SLOPES AND STEEPER). SEE DETAIL 8/C-502.
10. VEGETATED SWALE. SEE DETAIL 6/C-502.
11. STONE CHECK DAM. SEE DETAIL 7/C-502.
12. CATCH BASIN INLET PROTECTION. SEE DETAIL 3/C-502.
13. UNDERDRAIN OUTLET STRUCTURE. SEE DETAIL 5/C-504.

DRAINAGE STRUCTURE SCHEDULE

CB #	RIM ELEV	INVERT IN (SIZE)	INVERT IN (SIZE)	INVERT OUT (SIZE)	
CB9	257.08			255.00 (12")	
CB10	257.08	254.80 (12")		254.70 (15")	
CB11	261.05	253.90 (15")	253.90 (18")	253.80 (18")	
CB12	260.35			256.90 (12")	
CB13	260.00	256.10 (12")		256.00 (15")	
CB14	262.00	255.40 (12")		255.30 (12")	
CB15	261.05	254.90 (12")	254.90 (15")	254.80 (18")	
CB16	260.70			256.50 (12")	
CB17	262.50	259.50 (8")		259.40 (12")	

1 CG102 TRAINING CENTER GRADING AND DRAINAGE PLAN
SCALE: 1"=20'

GRAPHIC SCALE
20' 10' 0 20' 40'
1"=20'
CHECK GRAPHIC SCALE BEFORE USING

FOR PERMITTING PURPOSES ONLY - NOT FOR CONSTRUCTION

NO.	DATE	DESCRIPTION	BY
1	2/6/2024	STORMWATER REV.	WL

REVISIONS

OAK POINT ASSOCIATES
architecture engineering planning
231 MAIN STREET, BIDDEFORD, MAINE 04005
(T) 207.283.0193 (F) 207.283.4293
www.oakpoint.com

LASSEL ARCHITECTS
370 MAIN STREET
SOUTH BERWICK, MAINE 03908
207 384 2049

WADE A. LIPPERT No. 10428 STATE OF MAINE REGISTERED PROFESSIONAL ENGINEER 11/24

DESIGNED BY: WAL
DRAWN BY: WAL
CHECKED BY:
PROJECT: 22204.24

YORK COUNTY
45 KENNEBUNK ROAD
ALFRED, ME 04002

YORK COUNTY REGIONAL TRAINING CENTER AND REGIONAL RECOVERY CENTER
LAYMAN WAY ALFRED, MAINE 04002

TRAINING CENTER GRADING AND DRAINAGE PLAN

SCALE: AS NOTED
DATE: 01/17/2024
DWG: CG102
SHEET: 11 OF 27

DRAINAGE STRUCTURE SCHEDULE					
CB #	RIM ELEV	INVERT IN (SIZE)	INVERT IN (SIZE)	INVERT IN (SIZE)	INVERT OUT (SIZE)
CB18	255.00				252.00 (12")
CB19	248.00				244.30 (8")

KEYNOTES:

1. CATCH BASIN. SEE DETAIL 1/C-507.
2. STORM DRAIN LINE. SEE DETAIL 1/C-508.
3. GRASSED UNDERDRAINED SOIL FILTER. SEE DETAILS 1,2/SHEET C-503.
4. WET POND. SEE DETAILS 1,4/C-504.
5. PIPE INLET PROTECTION. SEE DETAIL 5/C-506.
6. PIPE OUTLET PROTECTION. SEE DETAIL 5/C-506.
7. LEVEL LIP SPREADER. SEE DETAIL 5/C-503.
8. SILT FENCE/SEDIMENT CONTROL WATTLE. PROVIDE DOUBLE SEDIMENT CONTROL WITHIN 50' OF WETLAND AREAS. SEE DETAILS 1,2/SHEET C-502.
9. EROSION CONTROL BLANKET (3:1 SLOPES AND STEEPER). SEE DETAIL 8/C-502.
10. VEGETATED SWALE. SEE DETAIL 6/C-502.
11. STONE CHECK DAM. SEE DETAIL 7/C-502.
12. CATCH BASIN INLET PROTECTION. SEE DETAIL 3/C-502.
13. UNDERDRAIN OUTLET STRUCTURE. SEE DETAIL 5/C-504.

1 CG103 SOUTH GRADING AND DRAINAGE PLAN
SCALE: 1"=40'

GRAPHIC SCALE
1"=40' 40' 20' 0 40' 80'
CHECK GRAPHIC SCALE BEFORE USING

FOR PERMITTING PURPOSES ONLY - NOT FOR CONSTRUCTION

1	2/6/2024	STORMWATER REV.	WL
NO.	DATE	DESCRIPTION	BY
REVISIONS			

OAK POINT ASSOCIATES
architecture engineering planning
231 MAIN STREET, BIDDEFORD, MAINE 04005
(T) 207.283.0193 (F) 207.283.4283
www.oakpoint.com

LASSEL ARCHITECTS
370 MAIN STREET
SOUTH BERWICK, MAINE 03908
207 384 2049

STATE OF MAINE
WADE A. LIPPERT
No. 10428
REGISTERED PROFESSIONAL ENGINEER
11/24

DESIGNED BY: WAL
DRAWN BY: WAL
CHECKED BY:
PROJECT: 22204.24

YORK COUNTY
45 KENNEBUNK ROAD
ALFRED, ME 04002

YORK COUNTY REGIONAL TRAINING CENTER AND REGIONAL RECOVERY CENTER
LAYMAN WAY ALFRED, MAINE 04002

SOUTH GRADING AND DRAINAGE PLAN

SCALE: AS NOTED
DATE: 01/17/2024
DWG: CG103
SHEET: 12 OF 27

EROSION AND SEDIMENT CONTROL NOTES

A. GENERAL NOTES

1. DURING CONSTRUCTION AND THEREAFTER, IMPLEMENT EROSION CONTROL MEASURES AS INDICATED AND SPECIFIED, AS WELL AS ADDITIONAL MEASURES NECESSARY TO CONTROL EROSION AND SEDIMENTATION IN ACCORDANCE WITH THE MAINE EROSION AND SEDIMENT CONTROL LAW. EROSION CONTROL MEASURES MUST BE IN ACCORDANCE WITH THE CURRENT EDITION "MAINE EROSION AND SEDIMENT CONTROL PRACTICES FIELD GUIDE FOR CONTRACTORS" BY THE MAINE DEP.

2. LIMIT AREAS OF EXPOSED SOILS TO THOSE AREAS THAT WILL ACTIVELY BE WORKED. TEMPORARILY STABILIZE ANY AREA OF DISTURBED SOIL THAT REMAINS UNWORKED FOR MORE THAN 7 DAYS USING TEMPORARY MULCHING (IF THE SOIL WILL BE PERMANENTLY STABILIZED WITHIN 30 DAYS) OR TEMPORARY SEEDING AND MULCHING (IF THE SOIL WILL NOT BE PERMANENTLY STABILIZED WITHIN 30 DAYS). PERMANENTLY STABILIZE AREAS OF DISTURBED SOIL BROUGHT TO FINAL GRADE WITHIN 7 DAYS. DISTURBED SOILS DO NOT INCLUDE COMPACTED GRAVEL OR STRUCTURAL FILL FOR ROADS, PARKING LOTS, AND BUILDING FOUNDATIONS.

3. PROVIDE MINIMUM 6" LAYER OF PLANTING SOIL, SEED, AND MULCH ON ALL DISTURBED AREAS NOT OTHERWISE SPECIFIED. ACCOMPLISH PERMANENT SEEDING BETWEEN THE DATES OF APRIL 15 AND SEPTEMBER 15, UNLESS OTHERWISE APPROVED BY THE CONTRACTING OFFICER. WATER ALL VEGETATED AREAS AS NECESSARY TO ESTABLISH A VIGOROUS GRASS. REFER TO SPECIFICATION SECTIONS 329113, SOIL PREPARATION AND 329200, TURF AND GRASSES FOR REQUIREMENTS FOR PERMANENT SEEDING.

B. INSPECTION AND MAINTENANCE

1. AT A MINIMUM, INSPECT EROSION, SEDIMENTATION, AND STORMWATER CONTROL MEASURES, AREAS WHERE STORMWATER RUNOFF LEAVES THE SITE, DISTURBED AREAS, AREAS USED FOR STORAGE, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE EVERY SEVEN DAYS OR AFTER A 1/2" RAINFALL EVENT. CHECK IF EROSION AND SEDIMENT CONTROL MEASURES INSTALLED ARE OPERATING AS INTENDED. DETERMINE IF EROSION CONTROL MEASURES NEED TO BE REPAIRED, REPLACED OR MAINTAINED. IDENTIFY LOCATIONS WHERE NEW OR MODIFIED EROSION CONTROL MEASURES ARE NECESSARY AND INCIDENTS OF NON-COMPLIANT DISCHARGES. IF A NON-COMPLIANT DISCHARGE IS OBSERVED, IDENTIFY THE LOCATION, CHARACTER OF THE EVENT, ACTION TAKEN, AND REPORT THE EVENT TO THE OWNER.

2. KEEP A LOG (REPORT) SUMMARIZING THE SCOPE OF THE INSPECTION, NAME(S) AND QUALIFICATIONS OF THE PERSONNEL MAKING THE INSPECTION, THE DATE(S) OF THE INSPECTION, AND MAJOR OBSERVATIONS RELATING TO OPERATION OF EROSION AND SEDIMENTATION CONTROLS AND POLLUTION PREVENTION MEASURES. MAJOR OBSERVATIONS MUST INCLUDE: BMPs THAT NEED TO BE MAINTAINED, LOCATION(S) OF BMPs THAT FAILED TO OPERATE AS INTENDED, AND LOCATION(S) WHERE ADDITIONAL BMPs ARE NEEDED. ADDITIONAL MEASURES USED TO CORRECT DEFICIENCIES OR ENHANCE CONTROLS MUST ALSO BE INDICATED IN THE LOG AND DATED.

3. MAINTAIN ALL EROSION CONTROL MEASURES FOR THE LIFE OF THE PROJECT AND UNTIL PERMANENT STABILIZATION OF THE ENTIRE SITE IS ESTABLISHED. PERMANENT STABILIZATION MUST CONSIST OF AT LEAST 90-PERCENT VEGETATION, PAVEMENT, GRAVEL BASE, OR RIPRAP. PROTECT STABILIZED AREAS FROM EROSION AND IMMEDIATELY REPAIR/REVEGETATE ERODED AREAS.

4. REMOVE TEMPORARY EROSION CONTROL MEASURES WITHIN 30 DAYS AFTER THE TRIBUTARY AREA HAS BEEN PERMANENTLY STABILIZED. REMOVE ACCUMULATED SEDIMENTS AND STABILIZE THE DISTURBED AREA.

C. SOIL STOCKPILE STABILIZATION

1. SELECT SOIL STOCKPILE LOCATIONS SUCH THAT THEY WILL NOT IMPEDE DRAINAGE NOR INTERFERE WITH WORK ON THE SITE.

2. PROVIDE SILT FENCE (SEE DETAIL 1/C-502) OR SEDIMENT CONTROL WATTLE (SEE DETAIL 2/C-502) AROUND THE DOWNGRADE EDGE OF SOIL AND FILL STOCKPILES.

3. STOCKPILES EXPECTED TO REMAIN IN PLACE FOR LESS THAN 30 DAYS MUST BE STABILIZED WITH MULCH OR COVERED WITH AN ANCHORED TARP WITHIN 7 DAYS OF FORMATION OF THE STOCKPILE, AND PRIOR TO ANY RAINFALL. STOCKPILES EXPECTED TO REMAIN IN PLACE FOR LONGER THAN 30 DAYS MUST BE STABILIZED WITH TEMPORARY SEED AND MULCH WITHIN 7 DAYS OF FORMATION OF THE STOCKPILE, AND PRIOR TO ANY RAINFALL.

D. SEQUENCE OF CONSTRUCTION

1. STAKE OUT WORK AND PROVIDE PERIMETER EROSION CONTROLS, AS INDICATED.

2. CLEAR TREES AND BRUSH AND GRUB OUT STUMPS. REMOVE TURF AND HEAVY GRASSES WITHIN THE LIMIT OF WORK. REMOVE SITE FEATURES/ EXISTING ITEMS AS INDICATED.

3. STRIP AND STOCKPILE EXISTING TOPSOIL. STABILIZE SOIL STOCKPILES AS INDICATED AND SPECIFIED. REMOVE SOIL AND DIRT FROM PAVED SURFACES DAILY.

4. SHAPE SWALES AND TREATMENT BASINS (WITHOUT DRAINAGE AND FILTER COURSES) TO PROMOTE DRAINAGE AND ROUGH GRADE THE SITE TO SUBGRADE ELEVATIONS. LAYOUT UTILITIES AND COMMENCE UNDERGROUND UTILITY AND STORM DRAINAGE WORK. BACKFILL UTILITIES IMMEDIATELY FOLLOWING ACCEPTABLE TEST RESULTS. AS UTILITIES ARE COMPLETED UNDER PARKING AREAS AND WALKWAYS, PROVIDE AGGREGATE SUBBASE AND BASE COURSES FOR PARKING AREAS AND WALKWAYS.

5. COMMENCE FOUNDATION PREPARATION WORK AND BUILDING FOUNDATION CONSTRUCTION. BACKFILL FOUNDATIONS UPON APPROVAL OF BELOW GRADE WORK AND ACCEPTABLE TEST RESULTS.

6. PROVIDE BINDER COURSE ASPHALT PAVEMENT AND CONCRETE WALKS AS SOON AS PRACTICABLE AFTER ESTABLISHING SUBBASE OR BASE COURSES.

7. SPREAD PREPARED PLANTING SOIL AND PROVIDE PERMANENT SEEDING AND MULCH FOR AREAS TO BE VEGETATED. WATER SEEDED AREAS AS NECESSARY DURING THE ESTABLISHMENT PERIOD TO ENSURE A VIGOROUS TURFGRASS IS ESTABLISHED.

8. UPON ESTABLISHMENT OF PERMANENT STABILIZATION (SATISFACTORY TURF AND BINDER COURSE PAVEMENT), REMOVE SEDIMENT FROM TREATMENT BASINS AND CONSTRUCT TREATMENT AREAS (DRAINAGE AND FILTER LAYERS).

9. COORDINATE WITH THE DESIGN ENGINEER FOR REQUIRED REVIEWS OF TREATMENT AREA CONSTRUCTION.

10. PROVIDE WEARING COURSE ASPHALT CONCRETE PAVING AND MAINTENANCE OF VEGETATED AND OTHER AREAS OF THE SITE UNTIL FINAL ACCEPTANCE BY THE OWNER.

11. REMOVE TEMPORARY EROSION CONTROL MEASURES FOLLOWING ACCEPTABLE PERMANENT STABILIZATION. RESTORE AREAS DISTURBED BY REMOVAL OF EROSION CONTROL MEASURES.

E. TEMPORARY SEEDING

1. BEDDING – REMOVE STONES AND TRASH WITHIN THE SEEDING AREA. TILL THE SOIL TO A DEPTH OF ABOUT 3" TO PREPARE SEED BED AND MIX THE FERTILIZER INTO THE SOIL.

2. FERTILIZER – SPREAD 10-10-10 FERTILIZER UNIFORMLY OVER THE AREA AT A RATE OF 300 POUNDS PER ACRE (7 LBS/1,000 SF) PRIOR TO TILLING.

3. SEED MIXTURE – USE ANY OF THE FOLLOWING IN UPLAND AREAS:

TEMPORARY SEEDING RATES			
SPECIES	PER ACRE	PER 1,000 SF	SEEDING DATES
WINTER RYE	112 LBS	2.6 LBS	8/15-10/1
OATS	80 LBS	1.8 LBS	4/1-7/1 & 8/15-9/15
ANNUAL RYE GRASS	40 LBS	0.9 LBS	4/1-7/1 WITH MULCH

4. MULCHING FOR TEMPORARY SEEDING – MULCH THE SEEDED AREA TO FACILITATE GERMINATION. APPLY MULCH IN THE FORM OF HAY OR STRAW AT A RATE OF 70 TO 90 LBS PER 1,000 SF.

F. MULCHING

1. MULCH AREAS THAT HAVE BEEN TEMPORARILY OR PERMANENTLY SEEDED WITH STRAW OR FIBER MULCH IMMEDIATELY FOLLOWING SEEDING.

2. MULCH AREAS THAT CANNOT BE SEEDED BECAUSE OF THE SEASON WITH ORGANIC MULCH AND SEED THE AREAS AS SOON AS WEATHER OR SEASONAL CONDITIONS PERMIT.

3. USE TEMPORARY MULCHING IN ACCORDANCE WITH THE TABLE BELOW ON SLOPES, CHANNELS, OTHER EROSION PRONE AREAS, AND EXPOSED SOILS THAT CANNOT RECEIVE PERMANENT COVER WITHIN 14 DAYS OF DISTURBANCE OR WITHIN 7 DAYS IN AREAS WITHIN 100' OF A PROTECTED NATURAL RESOURCE (WETLANDS AND WATERWAYS).

MULCHING RATES		
MULCH TYPE	RATE PER 1,000 SF	USE AND COMMENTS
HAY OR STRAW	70 TO 90 LBS * * DOUBLE THE RATE FOR OVER WINTER STABILIZATION	MOLD FREE AND DRY, MAY BE USED WITH PLANTINGS. ANCHOR IN AREAS OF STRONG WIND AND SLOPES GREATER THAN 5%.
WOOD CHIPS OR BARK MULCH	3" THICK OR MORE	USE IN FLAT AREAS AND SHORT 4:1 SLOPES.
EROSION CONTROL BLANKETS	SEE DETAIL 8/C-502	DITCHES AND STEEP SLOPES.
EROSION CONTROL MIX	2" FOR SLOPES FLATTER THAN 3:1 OR 4" FOR SLOPES GREATER THAN 3:1.	FOR USE ON SLOPES LESS THAN 45%.

G. PERMANENT SEEDING

1. SPREAD PLANTING SOIL TO MINIMUM DEPTH OF 6 INCHES AND FINE GRADE: USE ON-SITE STRIPPED AND STOCKPILED TOPSOIL OR IMPORTED TOPSOIL. MODIFY EXISTING AND IMPORTED TOPSOIL WITH SOIL AMENDMENTS AND FERTILIZER, IF REQUIRED, TO PRODUCE A PLANTING SOIL MIXTURE BEST FOR TURF GRASS AND MEADOW GROWTH. CLEAN PLANTING SOIL OF ROOTS, PLANTS, SOD, STONES, CLAY LUMPS AND OTHER EXTRANEOUS MATERIALS 2 INCHES OR LARGER IN ANY DIMENSION.

2. REFER TO SPECIFICATION SECTION 329115, "SOIL PREPARATION (PERFORMANCE SPECIFICATION)" FOR ADDITIONAL PLANTING SOIL REQUIREMENTS. REFER TO SPECIFICATION SECTION 329200, "TURF AND GRASSES" FOR ADDITIONAL PERMANENT SEEDING REQUIREMENTS.

3. SATISFACTORY SEEDED TURF AND MEADOW: PROVIDE A HEALTHY, UNIFORM, CLOSE STAND OF VEGETATION, FREE OF WEEDS AND SURFACE IRREGULARITIES, WITH COVERAGE EXCEEDING 90 PERCENT OVER ANY 10 SQUARE FEET AND BARE SPOTS NOT EXCEEDING 5 BY 5 INCHES.

H. DUST CONTROL

1. IMPLEMENT DUST CONTROL MEASURES TO CONTROL BLOWING AND MOVEMENT OF DUST. CONTROL DUST USING ONE OR MORE OF THE FOLLOWING METHODS OR OTHER METHOD APPROVED BY THE OWNER:

a) MULCHES – MULCH AREAS SUBJECT TO DUST MOVEMENT IN ACCORDANCE WITH THE MaESC GUIDELINES;

b) WATERING – SPRINKLE AREAS SUBJECT TO DUST MOVEMENT WITH WATER UNTIL THE SURFACE IS WET. REPEAT SPRINKLING AS REQUIRED TO PREVENT MOVEMENT OF DUST.

c) CALCIUM CHLORIDE – CALCIUM CHLORIDE MUST BE IN THE FORM OF LOOSE, DRY GRANULES OR FLAKES OF A SIZE SUITABLE FOR COMMONLY USED SPREADERS. CALCIUM CHLORIDE MUST BE APPLIED AT A RATE THAT WILL KEEP THE SURFACE MOIST BUT NOT CAUSE POLLUTION OR PLANT DAMAGE.

I. EROSION CONTROL BLANKET

1. EXCELSIOR EROSION CONTROL BLANKET MUST CONSIST OF A MACHINE PRODUCED MAT OF CURLED WOOD EXCELSIOR COVERED WITH EITHER A 3 BY 1 INCH WEAVE OF TWISTED CRAFT PAPER OR A 2 BY 1 INCH BIODEGRADABLE EXTRUDED PLASTIC MESH. THE MAT MUST BE OF CONSISTENT THICKNESS WITH FIBERS EVENLY DISTRIBUTED THROUGHOUT. 80 PERCENT OF THE FIBERS MUST BE OVER 6 INCHES IN LENGTH. MINIMUM WIDTH: 48 INCHES, MINIMUM WEIGHT: 0.8 POUNDS PER SQUARE YARD.

2. STRAW-COCONUT EROSION CONTROL MAT MUST CONSIST OF A MACHINE PRODUCED MAT OF 70 PERCENT WHEAT STRAW AND 30 PERCENT COCONUT FIBER WITH PHOTODEGRADABLE NETTING ON BOTH SIDES AND SEWN TOGETHER WITH COTTON THREAD. MINIMUM WIDTH: 48 INCHES, MINIMUM WEIGHT: 0.75 POUNDS PER SQUARE YARD.

3. JUTE EROSION CONTROL BLANKET MUST BE OF UNIFORM PLAIN WEAVE SINGLE JUTE YARN AVERAGING APPROXIMATELY 130 POUNDS PER SPINDLE OF 14,400 YARDS. THE YARN MUST BE LOOSELY TWISTED AND WOVEN INTO 48 INCH WIDE BLANKETS WITH A MINIMUM AVERAGE WEIGHT OF 1.0 POUNDS PER SQUARE YARD.

J. EROSION CONTROL MIX

WELL-GRADED WITH AN ORGANIC COMPONENT COMPOSED OF FIBROUS AND ELONGATED FRAGMENTS THAT IS 50 TO 100% OF THE TOTAL DRY WEIGHT, THE MINERAL PORTION OF THE MIX MUST BE NATURALLY INCLUDED IN THE MANUFACTURING PROCESS WITH NO STONES LARGER 3" IN ANY DIMENSION NOR LARGE AMOUNTS OF SILTS AND CLAYS. IF THE EROSION CONTROL MIX IS GENERATED FROM STUMP GRINDING, THE MINERAL SOIL ORIGINATES FROM THE ROOT BALL AND SHOULD NOT BE REMOVED BEFORE GRINDING. THE MIX MUST BE FREE OF REFUSE, MATERIAL TOXIC TO PLANT GROWTH, AND UNSUITABLE MATERIAL, INCLUDING BARK CHIPS, GROUND CONSTRUCTION DEBRIS AND REPROCESSED WOOD PRODUCTS.

K. RIPRAP

1. RIPRAP MUST CONSIST OF A WELL GRADED MIXTURE OF SOUND, DURABLE ROCK WHICH WILL NOT DISINTEGRATE BY EXPOSURE TO WATER OR WEATHER AND WITH A SPECIFIC GRAVITY OF AT LEAST 2.5. ANGULAR FIELD STONE, ROUGH QUARRY STONE OR BLASTED LEDGE ROCK MAY BE USED. APPROXIMATELY 50-PERCENT OF THE STONE BY WEIGHT MUST BE LARGER THAN THE MEDIAN STONE SIZE (D50 SIZE) INDICATED. THE MAXIMUM STONE SIZE MUST BE 1.5 TIMES THE MEDIAN SIZE. INCLUDE ENOUGH SMALLER STONES TO FILL THE VOIDS IN THE LARGER STONES.

L. HOUSEKEEPING

1. HANDLE AND DISPOSE OF POLLUTANTS, INCLUDING WASTE MATERIALS AND DEMOLITION DEBRIS, IN A MANNER THAT DOES NOT CAUSE CONTAMINATION OF SURFACE WATER OR OTHER PROTECTED RESOURCES.

2. COVER, CONTAIN, AND PROTECT FROM VANDALISM CHEMICALS, LIQUID PRODUCTS, PETROLEUM PRODUCTS, AND NON-INERT WASTES PRESENT ON THE SITE. STORE ONLY SUFFICIENT AMOUNTS OF MATERIALS TO COMPLETE THE JOB.

3. DISPOSE OF NOT TO BE USED SURPLUS MATERIALS OFF SITE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND STATE AND FEDERAL CODES AND REGULATIONS.

4. CONSTRUCTION EQUIPMENT AND VEHICLES MUST BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTATIVE MAINTENANCE TO MINIMIZE POTENTIAL FOR LEAKAGE OR BREAKDOWN. NECESSARY REPAIR AND MAINTENANCE OF EQUIPMENT AND/OR VEHICLES MUST BE CONDUCTED USING SPILL PREVENTION MEASURES, INCLUDING DRIP PANS AND PLASTIC BENEATH THE VEHICLE, AND ONLY IN LOCATIONS APPROVED BY THE OWNER. CLEAN CONTAMINATED SURFACES IMMEDIATELY FOLLOWING ANY DISCHARGE OR SPILL INCIDENT.

5. CONCRETE TRUCKS MUST DISCHARGE AND WASH OUT SURPLUS CONCRETE AND DRUM WASH WATER IN A SINGLE CONTAINED AREA ON SITE WHERE WATER WILL NOT RUNOFF OR INFILTRATE INTO THE GROUND. THE CONTAINED WASHOUT AREA MUST BE A MINIMUM OF 100 FEET FROM PROTECTED NATURAL RESOURCES AND AS APPROVED BY THE CONTRACTING OFFICER.

6. APPLY AGRICULTURAL CHEMICALS, INCLUDING FERTILIZER, IN A MANNER AND APPLICATION RATE THAT WILL NOT RESULT IN LOSS OF CHEMICAL TO SURFACE WATER RUNOFF. FOLLOW MANUFACTURERS' RECOMMENDATIONS FOR APPLICATION RATES AND PROCEDURES.

7. SPILLS MUST BE CLEANED UP IMMEDIATELY AFTER DISCOVERY IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDED METHODS. KEEP MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP IN THE MATERIAL STORAGE AREA, INCLUDING BROOMS, DUSTPANS, MOPS, RAGS, GLOVES, GOGGLES, KITTY LITTER, SAND, SAWDUST AND PLASTIC OR METAL TRASH CONTAINERS. SPILLS OF TOXIC OR HAZARDOUS MATERIALS MUST BE REPORTED TO THE OWNER AND MDEP IMMEDIATELY REGARDLESS OF THE SIZE.

M. WINTER STABILIZATION (NOVEMBER 1 THROUGH APRIL 15)

1. DISTURBED SLOPES (SLOPES GREATER THAN 10 PERCENT). SEED AND MULCH SLOPES TO BE VEGETATED BY OCTOBER 1ST. IF ANY SLOPE GREATER THAN 10 PERCENT IIS NOT STABILIZED BY OCTOBER 1ST, TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE SLOPE FOR LATE FALL AND WINTER:

a. STABILIZE THE SOIL WITH TEMPORARY VEGETATION AND EROSION CONTROL BLANKETS – BY OCTOBER 1st SEED THE DISTURBED SLOPE WITH ANNUAL RYEGRASS AT A SEEDING RATE OF 3 POUNDS PER 1000 SQUARE FEET AND THEN INSTALL EROSION CONTROL BLANKETS OR ANCHORED HAY MULCH OVER THE SEEDING. MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR FAILS TO COVER AT LEAST 70% OF THE SLOPE BY NOVEMBER 1ST, COVER THE SLOPE WITH A LAYER OF EROSION CONTROL MIX AS DESCRIBED BELOW.

b. STABILIZE THE SLOPE WITH EROSION CONTROL MIX – PLACE A 4-INCH THICK LAYER OF EROSION CONTROL MIX ON THE SLOPE BY NOVEMBER 15th.

2. DISTURBED SOILS – SEED AND MULCH DISTURBED SOILS ON THE SITE BY OCTOBER 1ST. IF DISTURBED AREAS ARE NOT STABILIZED BY OCTOBER 1ST, TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE SOIL FOR LATE FALL AND WINTER:

a. STABILIZE THE SOIL WITH TEMPORARY VEGETATION – BY OCTOBER 1st SEED THE DISTURBED SOIL WITH ANNUAL RYEGRASS AT A SEEDING RATE OF 3 POUNDS PER 1000 SQUARE FEET, LIGHTLY MULCH THE SEEDED SOIL WITH HAY OR STRAW AT 75 POUNDS PER 1000 SQUARE FEET, AND ANCHOR THE MULCH WITH PLASTIC NETTING. MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR FAILS TO COVER AT LEAST 75% OF THE DISTURBED SOIL BEFORE NOVEMBER 1, MULCH THE AREA FOR OVER-WINTER PROTECTION AS DESCRIBED BELOW.

b. STABILIZE THE SOIL WITH MULCH – BY NOVEMBER 15th, MULCH THE DISTURBED SOIL BY SPREADING HAY OR STRAW AT A RATE OF AT LEAST 150 POUNDS PER 1000 SQUARE FEET SUCH THAT NO SOIL IS VISIBLE THROUGH THE MULCH. IMMEDIATELY AFTER APPLYING THE MULCH, ANCHOR WITH NETTING OR OTHER APPROVED METHOD.

FOR PERMITTING PURPOSES ONLY - NOT FOR CONSTRUCTION

NO.	DATE	DESCRIPTION	BY
1	2/6/2024	STORMWATER REV.	WL

REVISIONS

OAK POINT ASSOCIATES
architecture engineering planning
231 MAIN STREET, BIDDEFORD, MAINE 04005
(T) 207.283.0193 (F) 207.283.4283
www.oakpoint.com

LASSEL ARCHITECTS
370 MAIN STREET
SOUTH BERWICK, MAINE 03908
207.384.2049

STATE OF MAINE
WADE A. LIPPERT
No. 10428
REGISTERED PROFESSIONAL ENGINEER
11/24

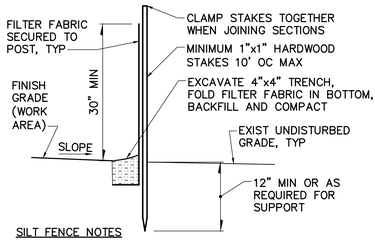
DESIGNED BY: WAL
DRAWN BY: DEW
CHECKED BY:
PROJECT: 22204.24

YORK COUNTY
45 KENNEBUNK ROAD
ALFRED, ME 04002

YORK COUNTY REGIONAL TRAINING CENTER AND REGIONAL RECOVERY CENTER
LAYMAN WAY ALFRED, MAINE 04002

EROSION AND SEDIMENTATION CONTROL NOTES

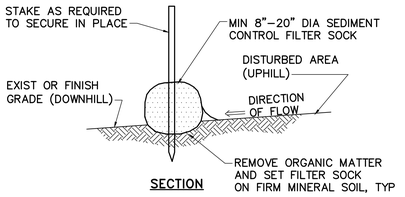
SCALE: AS NOTED
DATE: 01/17/2024
DWG: C-501
SHEET: 13 OF 27



SILT FENCE NOTES

1. FILTER FABRIC MUST BE A PERVIOUS SHEET OF PROPYLENE, NYLON, POLYESTER, OR ETHYLENE YARN CONFORMING TO MDEP GUIDELINES.
2. INSTALL SILT FENCE ALONG THE CONTOUR AND WITH ENDS TURNED UPSLOPE TO CREATE PONDED AREAS FOR SOIL SETTLEMENT.
3. INSPECT SILT FENCES AFTER EACH RAINFALL AND MAKE NECESSARY REPAIRS/REPLACEMENT IMMEDIATELY.
4. REMOVE SEDIMENT DEPOSITS BEFORE DEPOSITS EXCEED 9" IN DEPTH.
5. REMOVE SILT FENCE AFTER SATISFACTORY VEGETATIVE COVER IS ESTABLISHED. FINISH GRADE, SEED AND MULCH DISTURBED AREA.
6. WITHIN 50 FEET OF WETLAND AREAS PROVIDE DOUBLE SILT FENCE SEPARATED BY 3 FEET.

1 TYP SILT FENCE DETAIL
C-501 C-502 NOT TO SCALE

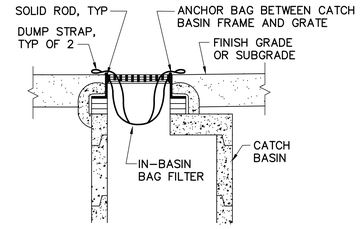


SECTION

SEDIMENT CONTROL FILTER SOCK NOTES:

1. SEDIMENT CONTROL FILTER SOCKS MUST CONSIST OF STRAW, SHREDDED BARK, STUMP GRINDINGS, OR OTHER ORGANIC MATERIALS WRAPPED IN BIODEGRADABLE TUBULAR NETTED OR SIMILAR ENCASING MATERIAL AND MUST BE MANUFACTURED FOR THE PURPOSE OF TEMPORARY SEDIMENT CONTROL. INSTALL FILTER SOCKS ACCORDING TO MANUFACTURER RECOMMENDATIONS.
2. INSTALL FILTER SOCKS ALONG THE CONTOUR AND WITH ENDS TURNED UPSLOPE TO CREATE PONDED AREAS FOR SOIL SETTLEMENT.
3. INSTALL FILTER SOCKS FIRMLY ON MINERAL SOIL AND ABUT ENDS TIGHTLY. DO NOT OVERLAP ENDS. SECURELY STAKE FILTER SOCKS IN PLACE TO PREVENT MOVEMENT AND UNDERMINING.
4. REMOVE SEDIMENT ACCUMULATIONS WHEN EXCEEDING ONE HALF THE EXPOSED HEIGHT OF THE FILTER SOCK.
5. SEDIMENT CONTROL FILTER SOCKS MUST REMAIN IN PLACE UNTIL ALL DISTURBED AREAS ARE STABILIZED.
6. WITHIN 50 FEET OF WETLAND AREAS PROVIDE DOUBLE WATTLE SEPARATED BY 3 FEET.

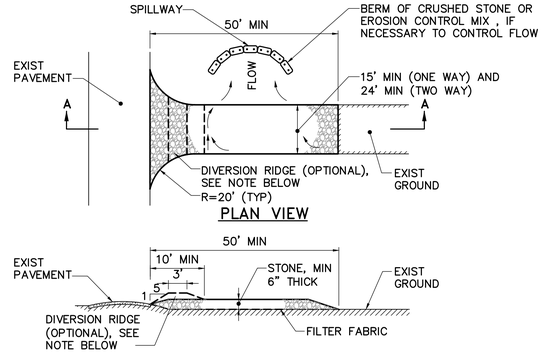
2 SEDIMENT CONTROL WATTLE DETAIL
CG101 C-502 NOT TO SCALE



INLET PROTECTION NOTES:

1. IN-BASIN BAG FILTERS MUST BE A WOVEN POLYPROPYLENE WITH THE FOLLOWING MINIMUM PROPERTIES:
   a. GRAB TENSILE STRENGTH ACCORDING TO ASTM D-4632: 300 LBS
   b. PUNCTURE RESISTANCE ACCORDING TO ASTM D-4833: 120 LBS
   c. MULLEN BURST ACCORDING TO ASTM D-3786: 800 PSI
   d. FLOW RATE ACCORDING TO ASTM D-4491: 44 GAL/MIN/FT
2. BAG FILTER SEAMS MUST BE DOUBLE STITCHED WITH HIGH-STRENGTH NYLON THREAD AND MUST HAVE A AVERAGE WIDE WIDTH STRENGTH PER ASTM D 4884 OF 165 LBS/INCH.
3. INSPECT INLET PROTECTION WEEKLY AND AFTER EACH RAINFALL EVENT. CLEAN OUT, REPAIR OR REPLACE INLET PROTECTION PROMPTLY AS REQUIRED TO MAINTAIN IN GOOD WORKING CONDITION.
4. INSTALL AND EMPTY BAG FILTERS IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS.

3 TYP INLET PROTECTION DETAIL
CG101,CG102 C-502 NOT TO SCALE

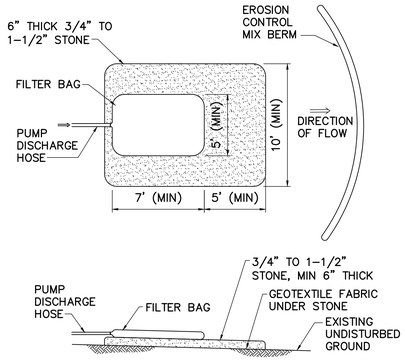


SECTION A-A

STABILIZED CONSTRUCTION EXIT NOTES

1. STONE FOR A STABILIZED CONSTRUCTION EXIT MUST BE ANGULAR 1 TO 3 INCH STONE OR APPROVED EQUAL.
2. SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARD THE CONSTRUCTION EXIT MUST BE PIPED BENEATH THE EXIT. IF PIPING IS IMPRACTICAL, A DIVERSION RIDGE WITH 5:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY BE SUBSTITUTED FOR THE PIPE. IF THE ENTRANCE / EXIT SLOPES 5% OR MORE TOWARD THE EXISTING ROAD A DIVERSION RIDGE IS REQUIRED.
3. MAINTAIN THE EXIT IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, WASHED, OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
4. WHEELS MUST BE CLEANED TO REMOVE MUD PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT MUST BE PERFORMED ON AN AREA STABILIZED WITH STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.

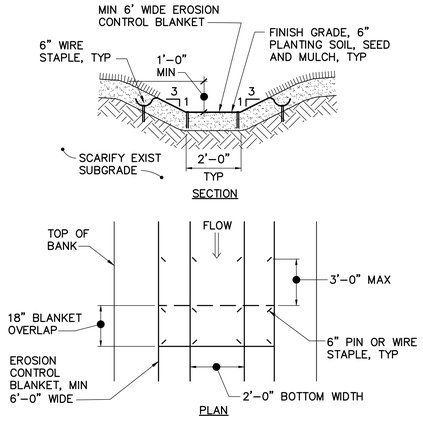
4 STABILIZED CONSTRUCTION EXIT DETAIL
CD101,CG101 C-502 NOT TO SCALE



SEDIMENT FILTER NOTES:

1. LOCATE DEWATERING SEDIMENT FILTERS A MINIMUM OF 100 FEET FROM PROTECTED NATURAL RESOURCES (WETLANDS OR WATERBODIES).
2. DEWATERING SEDIMENT FILTERS MUST BE A NON-WOVEN GEOTEXTILE FABRIC WITH THE FOLLOWING MINIMUM PROPERTIES:
   a. WEIGHT IN ACCORDANCE WITH ASTM D3776: 8 OZ/YARD
   b. GRAB TENSILE STRENGTH IN ACCORDANCE WITH ASTM D4632: 203 LBS
   c. PUNCTURE RESISTANCE IN ACCORDANCE WITH ASTM D4833: 130 LBS
   d. MULLEN BURST STRENGTH IN ACCORDANCE WITH ASTM D3786: 400 PSI
   e. FLOW RATE IN ACCORDANCE WITH ASTM D4491: 80 GAL/MIN/SF
3. INSTALL, OPERATE AND REMOVE DEWATERING SEDIMENT FILTERS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND PRINTED INSTRUCTIONS.

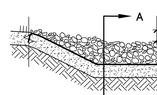
5 DEWATERING SEDIMENT FILTER DETAIL
C-502 NOT TO SCALE



VEGETATED SWALE NOTES

1. PARABOLIC CROSS SECTION MAY BE USED IN LIEU OF TRAPEZOIDAL CROSS SECTION INDICATED.
2. GRADE THE SWALE SUBGRADE TO A SMOOTH, EVEN SURFACE. REMOVE ANY PROTRUDING ROCKS, STUMPS, AND ROOTS.
3. START EROSION CONTROL BLANKET INSTALLATION AT THE LOWEST POINT AND WORK UPSTREAM.
4. ENSURE THE BLANKET HAS FIRM, CONTINUOUS CONTACT WITH THE UNDERLYING SOIL. IF NEEDED, USE ADDITIONAL PINS.
5. STABILIZE SWALES WITH PLANTING SOIL, SEED, AND EROSION CONTROL BLANKET IMMEDIATLEY UPON ESTABLISHMENT OF FINAL SUBGRADE.

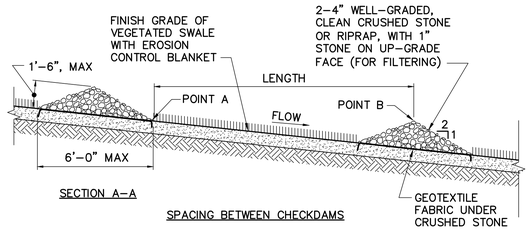
6 TYP VEGETATED SWALE DETAIL
CG101 C-502 NOT TO SCALE



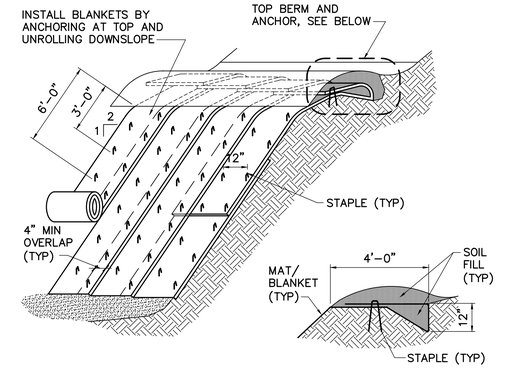
TYPICAL ELEVATION

CHECK DAM NOTES:

1. INSTALL CHECK DAMS IMMEDIATELY AFTER ESTABLISHING FINISH GRADE OF SWALE.
2. ENSURE CENTER OF CHECK DAM IS LOWER THAN THE SIDES TO PREVENT FLOW AROUND CHECK DAM.
3. PROVIDE DISTANCE BETWEEN CHECK DAMS SUCH THAT POINT A AND POINT B ARE AT THE SAME ELEVATION.
4. REMOVE CHECK DAMS ONCE THE SWALE OR DITCH HAS BEEN FULLY STABILIZED. AFTER REMOVAL, SCARIFY, SEED AND MULCH THE DISTURBED AREA IMMEDIATELY.



7 TYP STONE CHECK DAM DETAIL
CG101 C-502 NOT TO SCALE



NOTES:

1. INSTALL BLANKETS PER MANUFACTURER'S WRITTEN RECOMMENDATIONS.
2. SLOPE SURFACE MUST BE FREE OF ROCKS, CLODS, STICKS AND GRASS. BLANKETS MUST HAVE GOOD SOIL CONTACT.
3. APPLY PERMANENT SEEDING BEFORE PLACING BLANKETS.
4. LAY BLANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH SOIL, DO NOT STRETCH.

8 EROSION CONTROL BLANKET ON SLOPE DETAIL
CG101 C-502 NOT TO SCALE

FOR PERMITTING PURPOSES ONLY - NOT FOR CONSTRUCTION

NO.	DATE	DESCRIPTION	BY
1	2/6/2024	STORMWATER REV.	WL

REVISIONS

OAK POINT ASSOCIATES architecture engineering planning
231 MAIN STREET, BIDDEFORD, MAINE 04005
(T) 207.283.0193 (F) 207.283.4283
www.oakpoint.com

LASSEL ARCHITECTS
370 MAIN STREET
SOUTH BERWICK, MAINE 03908
207.384.2049

STATE OF MAINE — WADE A. LIPPERT No. 10428 — REGISTERED PROFESSIONAL ENGINEER — 11/24

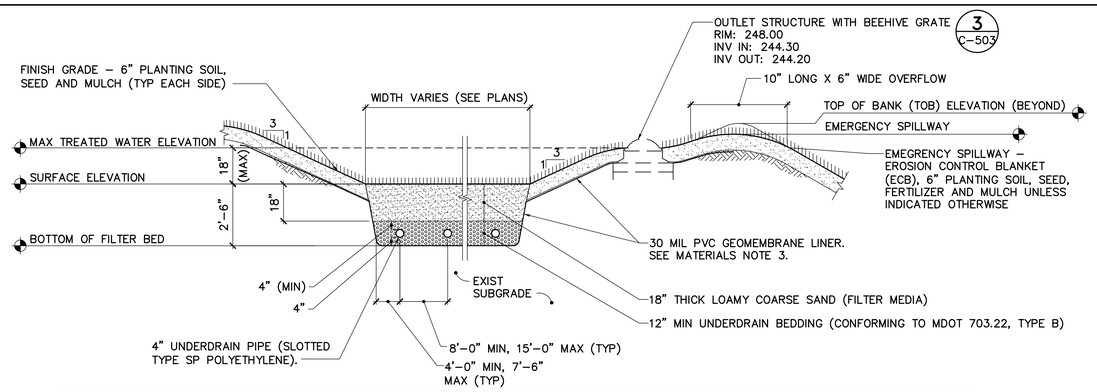
DESIGNED BY: WAL
DRAWN BY: DEW
CHECKED BY:
PROJECT: 22204.24

YORK COUNTY
45 KENNEBUNK ROAD
ALFRED, ME 04002

YORK COUNTY REGIONAL TRAINING CENTER AND REGIONAL RECOVERY CENTER
LAYMAN WAY ALFRED, MAINE 04002

EROSION AND SEDIMENTATION CONTROL DETAILS

SCALE: AS NOTED
DATE: 01/17/2024
DWG: C-502
SHEET: 14 OF 27



GRASSED UNDERDRAINED SOIL FILTER SCHEDULE

TREATMENT AREA	SURFACE ELEV	MAX TREATED WATER ELEV	TOB ELEV	SPILLWAY ELEV	SPILLWAY LENGTH	SPILLWAY BREDTH	BOTTOM OF FILTER BED ELEV	PERIMETER AT BOTTOM	BOTTOM SURFACE AREA	SURFACE AREA AT MAX TREATED WATER ELEV
Q1	246.50	248.00	249.00	248.50	8 FT	6 FT	245.00	180 FT	2,060 FT^2	3,090 FT^2

GRASSED UNDERDRAINED SOIL FILTER NOTES

PHASING

1. PHASE CONSTRUCTION SO THAT SOIL FILTER IS INSTALLED AFTER THE WATERSHED AREAS THAT DRAIN TO IT HAVE BEEN PERMANENTLY STABILIZED WITH 90% VEGETATION OR OTHER FINAL SURFACES HAVE BEEN CONSTRUCTED. OBTAIN ENGINEER'S WRITTEN PERMISSION TO INSTALL TREATMENT AREAS PRIOR TO PERMANENT STABILIZATION OF TRIBUTARY AREAS AND PROVIDE 3" MINIMUM PLANTING SOIL LAYER OVER THE FILTER MEDIA. REMOVE PLANTING SOIL LAYER ONCE TRIBUTARY AREAS ARE PERMANENTLY STABILIZED.
2. SOIL FILTERS CAN BE USED AS TEMPORARY SEDIMENTATION BASINS DURING CONSTRUCTION WITH ENGINEER'S WRITTEN PERMISSION. IF PERMISSION IS GRANTED BY THE ENGINEER, PROVIDE 3" MINIMUM PLANTING SOIL LAYER OVER THE FILTER MEDIA. REMOVE PLANTING SOIL LAYER ONCE TRIBUTARY AREAS HAVE BEEN PERMANENTLY STABILIZED WITH 90% VEGETATION OR OTHER FINAL SURFACES.

INSTALLATION/COMPACTION

1. INSTALL MATERIALS IN 2" TO 9" LIFTS. AND COMPACT FILTER MEDIA AND TOPSOIL TO 90% TO 92% STANDARD PROCTOR IN ACCORDANCE WITH ASTM D698

CONSTRUCTION INPSECTION/OVERSIGHT

1. THE OWNER SHALL RETAIN THE SERVICES OF AN INSPECTOR (DESIGN ENGINEER) TO INSPECT/OVERSEE THE CONSTRUCTION AND STABILIZATION OF ALL STORMWATER MANAGEMENT STRUCTURES. ONCE THE STORM WATER MANAGEMENT STRUCTURES ARE CONSTRUCTED AND STABILIZED, THE INSPECTOR (OR OWNER) SHALL NOTIFY THE ENGINEER IN WRITING WITHIN 30 DAYS TO STATE THAT THE POND HAS BEEN COMPLETED. ACCOMPANYING THE NOTIFICATION SHALL BE A LOG OF THE INSPECTIONS GIVING THE DATE OF EACH INSPECTION, THE TIME OF EACH INSPECTION, THE ITEMS INSPECTED ON EACH VISIT, AND THE RESULTS OF THE INSPECTION. INCLUDE IN THE NOTIFICATION TESTING DATA/SIEVE ANALYSIS DATA OF MATERIALS THAT MAKE UP THE SOIL FILTER (TYPE B UNDERDRAIN MATERIAL, FILTER MEDIA AND FILTER TOPSOIL).
2. ALL MATERIAL USED FOR THE CONSTRUCTION OF THE FILTER BASIN IS SUBJECT TO APPROVAL BY THE INSPECTOR AFTER TESTS BY A CERTIFIED LABORATORY SHOW THAT THEY ARE PASSING THE SPECIFICATIONS. INSPECTION OF THE FILTER BASIN SHALL BE PROVIDED FOR EACH PHASE OF CONSTRUCTION. AT A MINIMUM, INSPECTIONS WILL OCCUR:
   A. AFTER PRELIMINARY CONSTRUCTION OF THE FILTER GRADES AND ONCE THE UNDERDRAIN PIPES ARE INSTALLED BUT NOT BACKFILLED;
   B. AFTER THE DRAINAGE LAYER IS CONSTRUCTED AND PRIOR TO THE INSTALLATION OF THE FILTER MEDIA/FILTER SAND;
   C. AFTER THE FILTER MEDIA/FILTER SAND HAS BEEN INSTALLED.
   D. AFTER THE GRASSED UNDERDRAINED SOIL FILTER HAS BEEN SEEDED.
   E. ALL MATERIAL USED FOR THE CONSTRUCTION OF THE FILTER BASIN IS SUBJECT TO APPROVAL BY THE INSPECTOR AFTER TESTS BY A CERTIFIED LABORATORY SHOW THAT THEY ARE PASSING THE SPECIFICATIONS.
3. NOTIFY THE OWNER/INSPECTOR AT LEAST 72 HOURS PRIOR TO THE ANTICIPATED COMPLETION OF EACH OF THE ITEMS LISTED ABOVE TO COORDINATE TIMING OF INSPECTIONS.

MATERIALS

1. PROVIDE THE FOLLOWING SEED MIXTURE OR APPROVED EQUAL ON THE BOTTOM AND SIDES OF ALL TREATMENT AREAS (APPLY SEED MIXTURE AT 23 LB/ACRE OR AS RECOMMENDED BY SEED SUPPLIER):
   35% LITTLE BLUESTEM
   25% INDIAN GRASS
   20% VIRGINIA WILD RYE
   10% BIG BLUESTEM
   5% SWITCH GRASS
   5% CREEPING RED FESCUE
2. FILTER MEDIA AND SOIL TOPSOIL SHALL CONFORM TO THE GRADATIONS INDICATED ON THIS DRAWING AND BE FREE FROM ADMIXTURES OF SUBSOIL, REFUSE, GLASS, STONES GREATER 2", CLODS, ROOTS AND OTHER UNDESIRABLE FOREIGN MATTER.
3. EXTEND LINER TO EMERGENCY SPILLWAY ELEVATION. ALL SEAMS, PIPE PENETRATIONS, AND POINTS OF POSSIBLE LEAKAGE MUST BE SEALED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

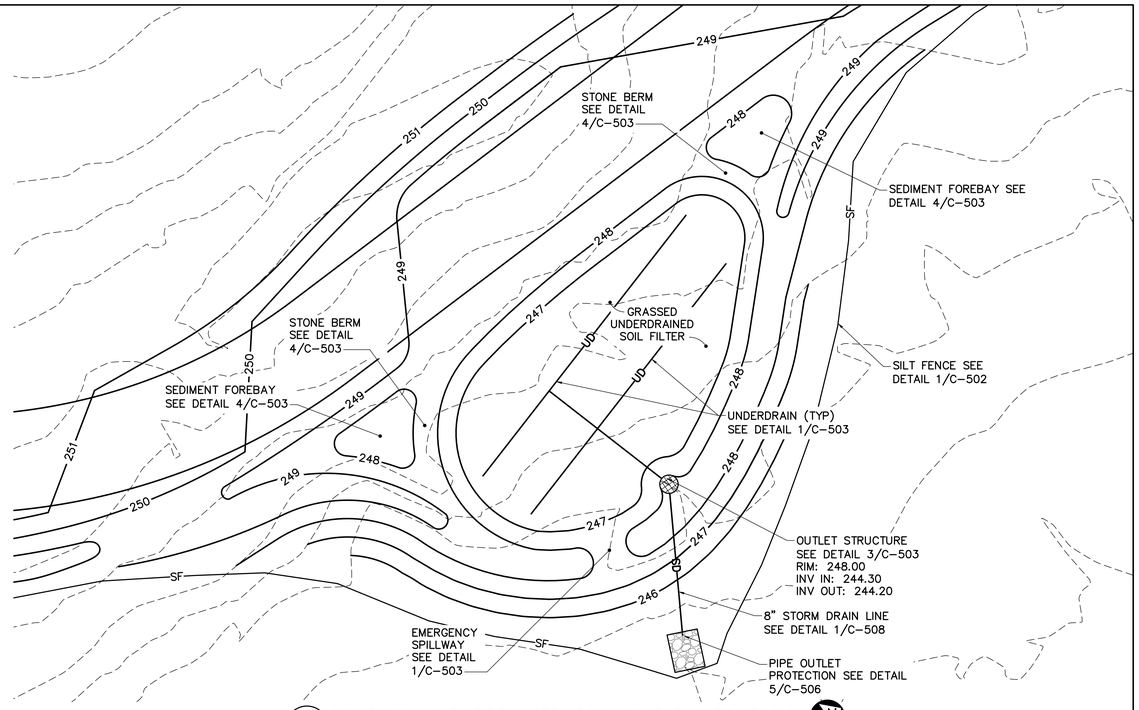
TESTING AND SUBMITTALS

TESTING AND SUBMITTALS: IDENTIFY THE LOCATION OF THE SOURCE OF EACH COMPONENT OF THE SOIL FILTER SYSTEMS. SAMPLES USED FOR ANALYSIS SHALL BE A COMPOSITE OF AT LEAST THREE DIFFERENT LOCATIONS (GRABS) FROM THE STOCKPILE OR PIT FACE (SAMPLE SIZE REQUIRED WILL BE DETERMINED BY THE TESTING LABORATORY). SUBMIT ALL RESULTS OF THE FOLLOWING FIELD AND LABORATORY TESTING TO THE OWNER/ARCHITECT FOR REVIEW AND APPROVAL:

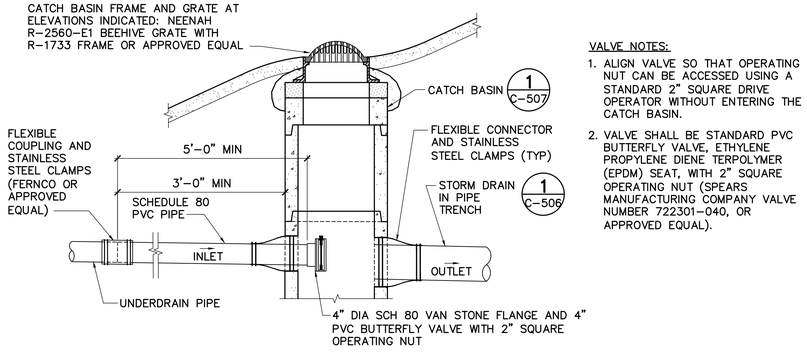
1. PERFORM AND SUBMIT A SIEVE ANALYSIS CONFORMING TO ASTM C136 (STANDARD TEST METHOD FOR SIEVE ANALYSIS OF FINE AND COARSE AGGREGATES; 1996A) FOR ALL MATERIALS USED TO CONFIRM THE MEET THE REQUIRED GRADATIONS.
2. PERFORM HYDROMETER TEST OF ASTM D422 AND ORGANIC CONTENT DETERMINATION FOR FILTER TOPSOIL AND FILTER MEDIA TO CONFIRM THEY MEET THE REQUIRED CLAY CONTENT AND ORGANIC CONTENT.
3. PERFORM A PERMEABILITY TEST ON THE SOIL FILTER MEDIA, SOIL FILTER TOPSOIL, AND FILTER SAND CONFORMING TO ASTM D2434 WITH THE MIXTURE COMPACTED TO 80–82% OF MAXIMUM DRY DENSITY BASED ON ASTM D698. THE RESULTING PERMEABILITY SHALL BE BETWEEN 1 AND 2 INCHES PER HOUR.

MATERIAL GRADATION REQUIREMENTS			
SIEVE SIZE	% PASSING BY WEIGHT		
	FILTER MEDIA**	MDOT 703.22, TYPE B	MDOT 703.22, TYPE C
2"	100	–	–
1"	–	95–100	100
3/4"	–	–	90–100
1/2"	–	75–100	–
3/8"	–	–	0–75
#4	–	50–100	0–25
#8	–	–	0–5
#10	85–100	15–80	–
#16	–	–	–
#20	70–100	0–15	–
#30	–	–	–
#40	–	0–5	–
#50	–	–	–
#60	15–40	–	–
#100	–	–	–
#200	8–15	–	–
CLAY	< 2%	–	–

**PERMEABILITY OF SOIL FILTER MEDIA AND FILTER TOPSOIL SHALL BE BETWEEN 1 AND 2 INCHES PER HOUR.



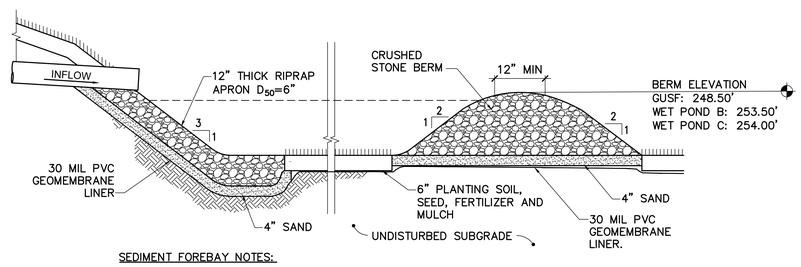
2 GRASSED UNDERDRAINED SOIL FILTER SITE PLAN
C-503 (2) C-503 SCALE: 1"=10'



VALVE NOTES:

1. ALIGN VALVE SO THAT OPERATING NUT CAN BE ACCESSED USING A STANDARD 2" SQUARE DRIVE OPERATOR WITHOUT ENTERING THE CATCH BASIN.
2. VALVE SHALL BE STANDARD PVC BUTTERFLY VALVE, ETHYLENE PROPYLENE DIENE TERPOLYMER (EPDM) SEAT, WITH 2" SQUARE OPERATING NUT (SPEARS MANUFACTURING COMPANY VALVE NUMBER 722301-040, OR APPROVED EQUAL).

3 OUTLET STRUCTURE
C-503 (3) C-503 NOT TO SCALE

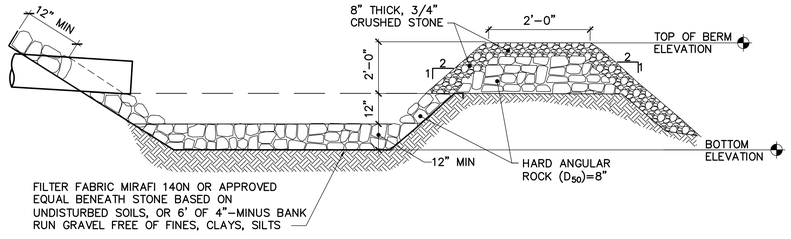


1 GRASSED UNDERDRAINED SOIL FILTER (GUSF) DETAIL
CS101 (1) C-503 NOT TO SCALE

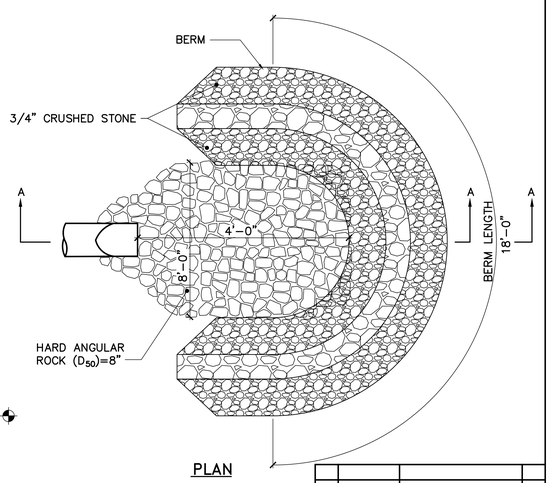
SEDIMENT FOREBAY NOTES:

1. DO NOT DIRECT RUNOFF TO THE SEDIMENT FOREBAY UNTIL THE CONTRIBUTING DRAINAGE AREAS ARE COMPLETELY STABILIZED.
2. LIMIT DISCHARGE OF SEDIMENT LADEN WATERS FROM CONSTRUCTION ACTIVITIES INTO THE SEDIMENT FOREBAY DURING ANY STAGE OF CONSTRUCTION. REMOVE ACCUMULATED SEDIMENT FROM FOREBAY PRIOR TO PROJECT COMPLETION.
3. DO NOT COMPACT THE SUBGRADE OR OPERATE VEHICLES OR EQUIPMENT WITHIN THE SEDIMENT FOREBAY.

4 SEDIMENT FOREBAY SECTION
CG101,CG102,CG103 (4) C-503 NOT TO SCALE



SECTION A-A



PLAN

5 TYP LEVEL SPREADER DETAIL
CG101,CG102,CG103 (5) C-503 NOT TO SCALE

GRAPHIC SCALE
10' 5' 0 10' 20'
1"=10'
CHECK GRAPHIC SCALE BEFORE USING

FOR PERMITTING PURPOSES ONLY - NOT FOR CONSTRUCTION

OAK POINT ASSOCIATES architecture engineering planning
231 MAIN STREET, BIDDEFORD, MAINE 04005
(T) 207.283.0193 (F) 207.283.4283
www.oakpoint.com

LASSEL ARCHITECTS
370 MAIN STREET
SOUTH BERWICK, MAINE 03908
207 384 2049

STATE OF MAINE
WADE A. LIPPERT
No. 10428
REGISTERED PROFESSIONAL ENGINEER
11/24

DESIGNED BY: WAL
DRAWN BY: DEW
CHECKED BY:
PROJECT: 22204.24

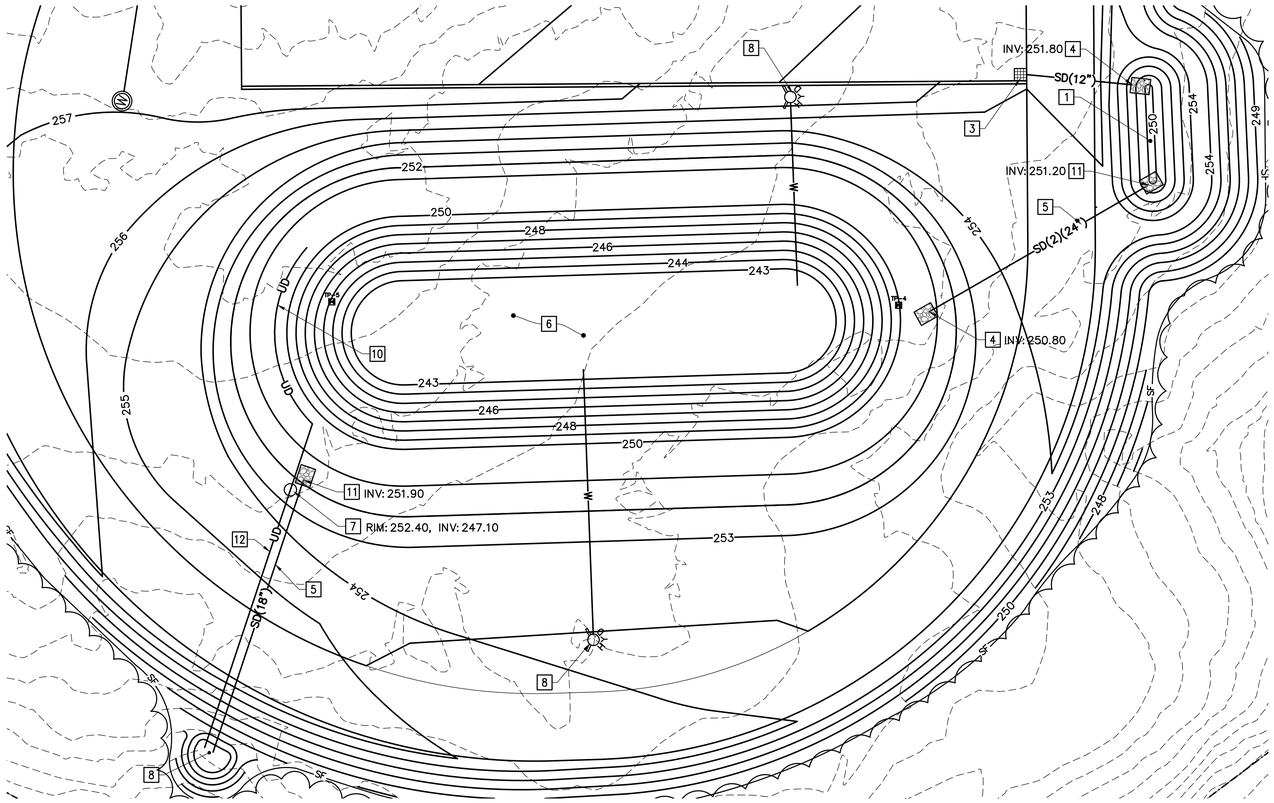
YORK COUNTY
45 KENNEBUNK ROAD
ALFRED, ME 04002

YORK COUNTY REGIONAL TRAINING CENTER AND REGIONAL RECOVERY CENTER
LAYMAN WAY ALFRED, MAINE 04002

SITE DETAILS - 1

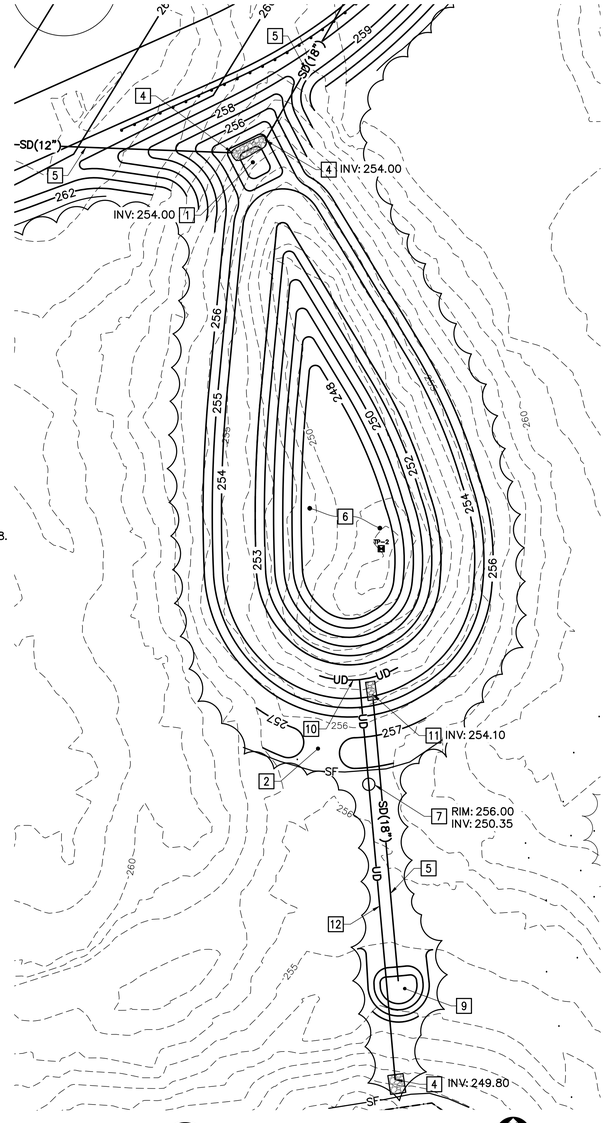
SCALE: AS NOTED
DATE: 01/17/2024
DWG: C-503
SHEET: 15 OF 27

NO.	DATE	DESCRIPTION	BY
		REVISIONS	
2	2/6/2024	STORMWATER REV.	WL
1	1/31/2024	RESPONSE TO DEP	WL



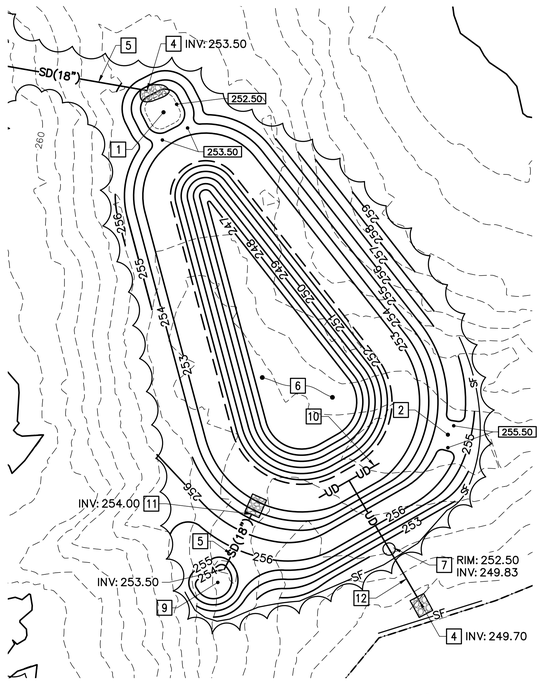
1 FIRE TRAINING POND/STORMWATER WET POND "A"
CS102 C-504 SCALE: 1"=20'

GRID NORTH



2 STORMWATER WET POND "C"
CS102 C-504 SCALE: 1"=20'

GRID NORTH



2 STORMWATER WET POND "B"
CS102 C-504 SCALE: 1"=20'

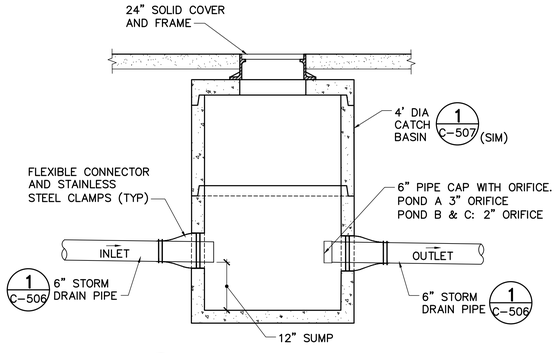
GRID NORTH

KEYNOTES: (THIS SHEET ONLY)

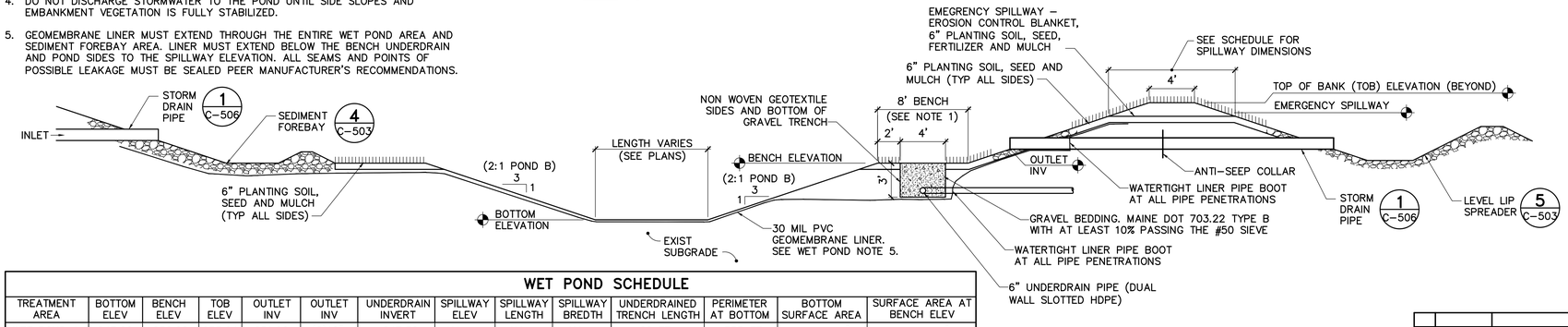
1. SEDIMENT FOREBAY. SEE DETAIL 4/C-503.
2. EMERGENCY SPILLWAY. SEE DETAIL 4/C-504.
3. CATCH BASIN. SEE DETAIL 1/C-507.
4. PIPE OUTLET PROTECTION. SEE DETAIL 5/C-506.
5. STORM DRAIN LINE. SEE DETAIL 1/C-508.
6. WET POND WITH LINER. SEE DETAIL 4/C-504.
7. UNDERDRAIN OUTLET STRUCTURE. SEE DETAIL 5/C-504.
8. DRY HYDRANT.
9. LEVEL SPREADER. SEE DETAIL 5/C-503.
10. UNDERDRAIN IN GRAVEL BEDDING. SEE DETAIL 4/C-504.
11. PIPE INLET PROTECTION. SEE DETAIL 8/C-506.
12. 6" UNDERDRAIN OUTLET PIPE (SOLID). SEE DETAIL 1/C-508.

WET POND NOTES

1. SLOPE BENCH 10:1 TOWARD POND.
2. EMBANKMENT FILL MUST BE FREE OF FROZEN SOIL, ROCKS OVER FOUR INCHES, SOD, BRUSH, STUMPS, TREE ROOTS, WOOD, OR OTHER PERISHABLE MATERIALS. EMBANKMENT FILL MUST BE COMPACTED TO 90% OF THE MAXIMUM DENSITY AS DETERMINED BY STANDARD PROCTOR (ASTM-D698).
3. CONSTRUCTION OF WET PONDS SHOULD BE STARTED NO LATER THAN SEPTEMBER 1 OR BEFORE JUNE 1. IF SIDE SLOPES AND BANKS CANNOT BE REVEGETATED OR STABILIZED BEFORE WINTER, BASIN CONSTRUCTION SHOULD BE DELAYED TO THE FOLLOWING GROWING SEASON. SEEDING MUST OCCUR BY SEPTEMBER 15 OR OTHER STABILIZATION MEASURES MUST BE IMPLEMENTED BEFORE WINTER. SEE WINTER STABILIZATION NOTES ON SHEET C-501.
4. DO NOT DISCHARGE STORMWATER TO THE POND UNTIL SIDE SLOPES AND EMBANKMENT VEGETATION IS FULLY STABILIZED.
5. GEOMEMBRANE LINER MUST EXTEND THROUGH THE ENTIRE WET POND AREA AND SEDIMENT FOREBAY AREA. LINER MUST EXTEND BELOW THE BENCH UNDERDRAIN AND POND SIDES TO THE SPILLWAY ELEVATION. ALL SEAMS AND POINTS OF POSSIBLE LEAKAGE MUST BE SEALED PEER MANUFACTURER'S RECOMMENDATIONS.



5 UNDERDRAIN OUTLET STRUCTURE
C-503 C-503 NOT TO SCALE



WET POND SCHEDULE

TREATMENT AREA	BOTTOM ELEV	BENCH ELEV	TOB ELEV	OUTLET INV	OUTLET INV	UNDERDRAIN INVERT	SPILLWAY ELEV	SPILLWAY LENGTH	SPILLWAY BREDTH	UNDERDRAINED TRENCH LENGTH	PERIMETER AT BOTTOM	BOTTOM SURFACE AREA	SURFACE AREA AT BENCH ELEV
WET POND A	243.00	250.00	253.64	251.90	(2)18"	247.50	NA	NA	NA	62 FT	355 FT	5,130 FT^2	12,070 FT^2
WET POND B	245.00	252.50	256.70	254.00	18"	250.00	255.50	10 FT	10 FT	23 FT	118 FT	900 FT^2	3,470 FT^2
WET POND C	246.50	253.00	257.60	254.10	18"	250.50	256.50	12 FT	10 FT	26 FT	189 FT	987 FT^2	5,820 FT^2

4 WET POND DETAIL
CG101,CG102,CG103,C-504 C-504 NOT TO SCALE

GRAPHIC SCALE
1"=20' 20' 10' 0 20' 40'
CHECK GRAPHIC SCALE BEFORE USING

NO.	DATE	DESCRIPTION	BY
2	2/6/2024	STORMWATER REV.	WL
1	1/31/2024	RESPONSE TO DEP	WL
REVISIONS			

B-7

FOR PERMITTING PURPOSES ONLY - NOT FOR CONSTRUCTION

OAK POINT ASSOCIATES architecture engineering planning
231 MAIN STREET, BIDDEFORD, MAINE 04005
(T) 207.283.0193 (F) 207.283.4283
www.oakpoint.com

LASSEL ARCHITECTS
370 MAIN STREET
SOUTH BERWICK, MAINE 03908
207 384 2049

STATE OF MAINE
WADE A. LIPPERT
No. 10428
REGISTERED PROFESSIONAL ENGINEER
11/24

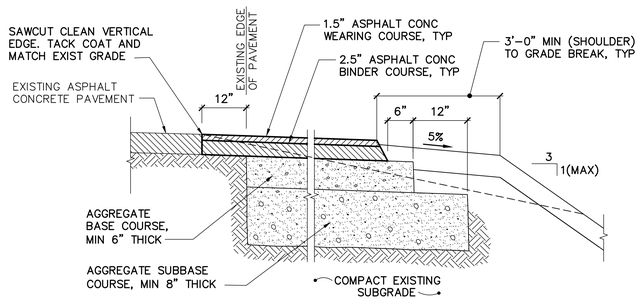
DESIGNED BY: WAL
DRAWN BY: DEW
CHECKED BY:
PROJECT: 22204.24

YORK COUNTY
45 KENNEBUNK ROAD
ALFRED, ME 04002

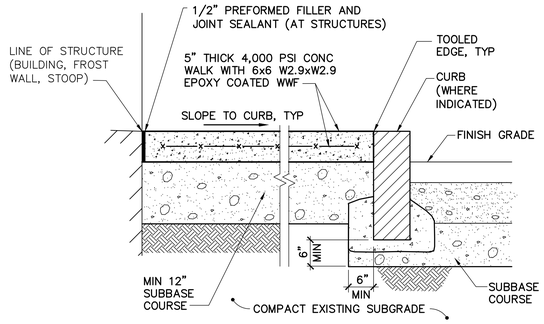
YORK COUNTY REGIONAL TRAINING CENTER AND REGIONAL RECOVERY CENTER
LAYMAN WAY ALFRED, MAINE 04002

SITE DETAILS - 2

SCALE: AS NOTED
DATE: 01/17/2024
DWG: C-504
SHEET: 16 OF 27

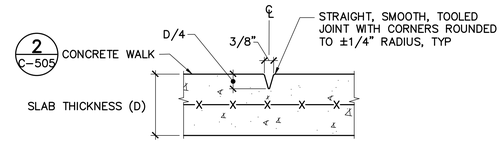


1 C-505 **ASPHALT CONCRETE PAVEMENT DETAIL**
CS101 NOT TO SCALE

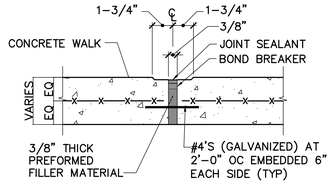


2 C-505 **TYPICAL CONCRETE WALK DETAIL**
CS101, C-505 NOT TO SCALE

CONCRETE WALK NOTES:
1. PROVIDE MEDIUM BROOM FINISH PERPENDICULAR TO DIRECTION OF TRAVEL.
2. PROVIDE TOOLED CONTROL JOINTS AT 5'-0" TO 6'-0" ON CENTER, EQUALLY SPACED UNLESS INDICATED OTHERWISE, AND AT ALL EDGES. (3 C-505)
3. MAINTAIN 1.50% CROSS SLOPE AWAY FROM THE BUILDING, UNLESS INDICATED OTHERWISE.

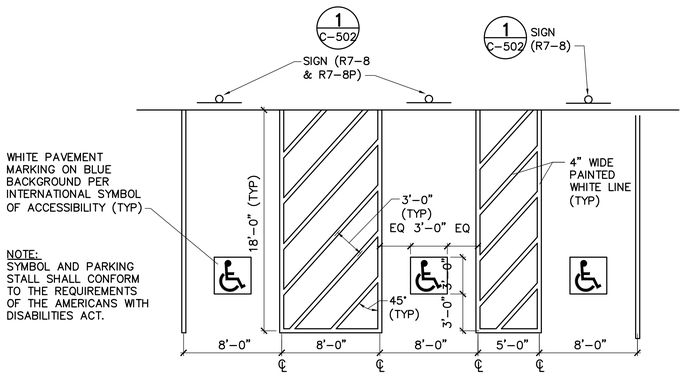


3 C-505 **TOOLED CONTROL JOINT DETAIL**
CS101, C-505 NOT TO SCALE

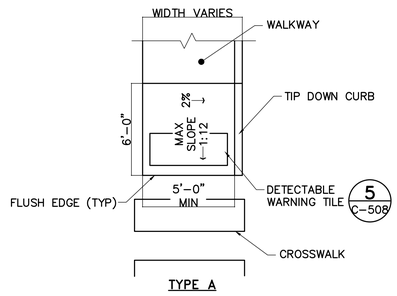


NOTES:
1. TOOLED JOINT SURFACE SHALL BE SMOOTH AND AT A CONSTANT DEPTH.
2. BREAK REINFORCING AT EXPANSION JOINT.

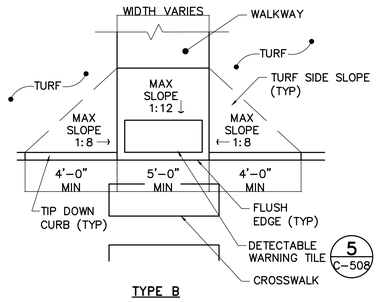
4 C-50 **EXPANSION JOINT**
CS101,CS102,C-505 NOT TO SCALE



5 C-505 **ACCESSIBLE PARKING STALL AND PAVEMENT MARKING**
CS101,CS102 NOT TO SCALE

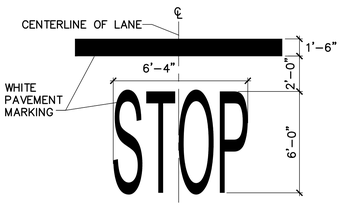


TYPE A



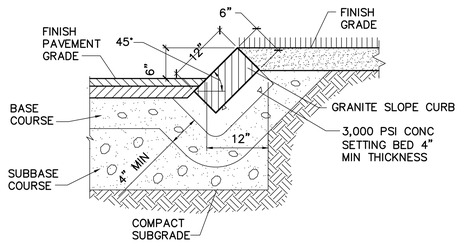
TYPE B

6 C-505 **ACCESSIBLE RAMP**
CS102,C-505 NOT TO SCALE

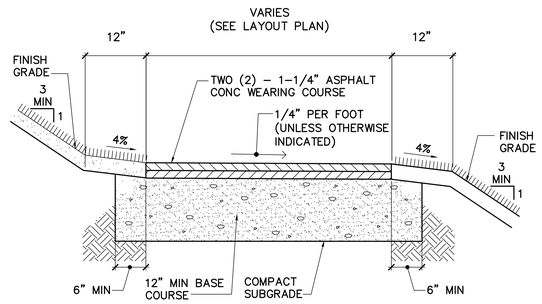


NOTE:
PAVEMENT MARKINGS SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (MUTCD), BY USDOT–FHWA, LATEST EDITION, AND NHDOT STANDARD SPECIFICATIONS.

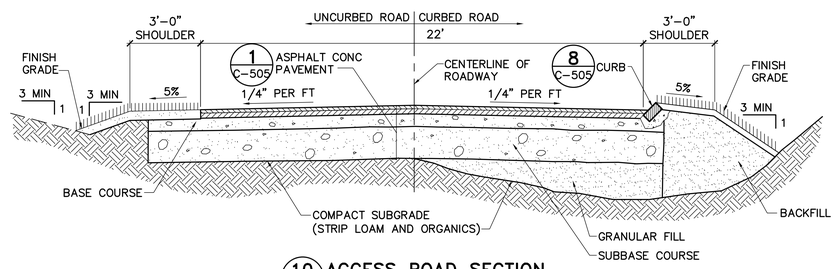
7 C-505 **STOP BAR AND LEGEND**
CS101 NOT TO SCALE



8 C-505 **GRANITE SLOPE CURB**
CS101 NOT TO SCALE



9 C-505 **ASPHALT CONCRETE WALK**
CS101,CS102 NOT TO SCALE



10 C-505 **ACCESS ROAD SECTION**
CS101,CS102,CS103 NOT TO SCALE

FOR PERMITTING PURPOSES ONLY - NOT FOR CONSTRUCTION

NO.	DATE	DESCRIPTION	BY

REVISIONS

SCALE: AS NOTED
DATE: 11/17/2023
DWG: C-505
SHEET: 17 OF 27

OAK POINT ASSOCIATES architecture engineering planning
231 MAIN STREET, BIDDEFORD, MAINE 04005
(T) 207.283.0193 (F) 207.283.4283
www.oakpoint.com

LASSEL ARCHITECTS
370 MAIN STREET
SOUTH BERWICK, MAINE 03908
207 384 2049

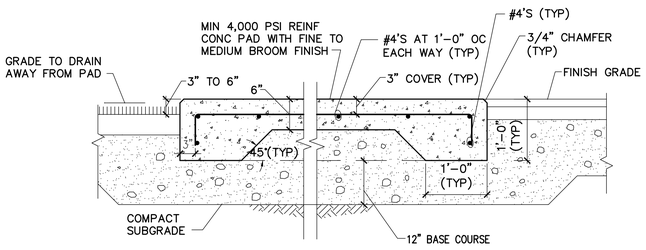
STATE OF MAINE — WADE A. LIPPERT No. 10428 — REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: WAL
DRAWN BY: DEW
CHECKED BY:
PROJECT: 22204.24

YORK COUNTY
45 KENNEBUNK ROAD
ALFRED, ME 04002

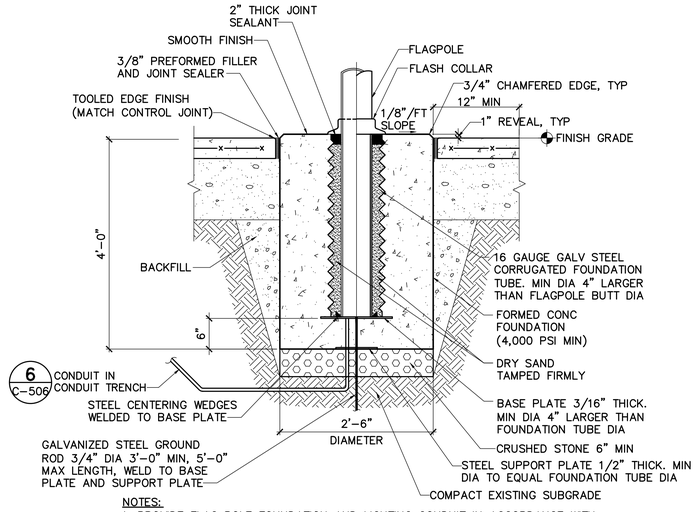
YORK COUNTY REGIONAL TRAINING CENTER AND REGIONAL RECOVERY CENTER
LAYMAN WAY ALFRED, MAINE 04002

SITE DETAILS - 3



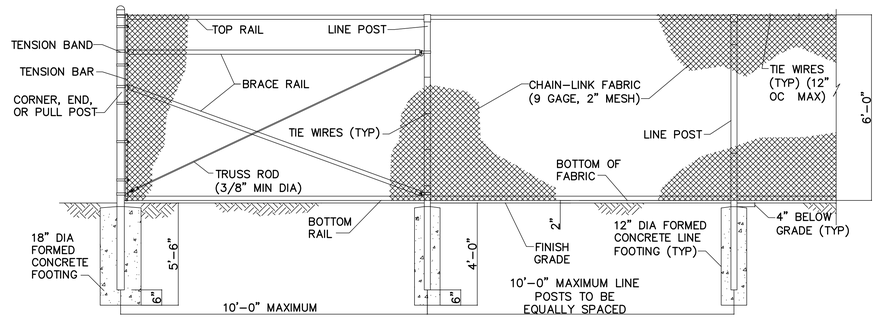
NOTES:
1. THE PAD SHALL BE FLUSH WITH ABUTTING PAVED OR CONCRETE FINISH SURFACES, UNLESS INDICATED OTHERWISE.
2. REINFORCING SHALL BE GALVANIZED.

1 CONCRETE PAD
CS101,CU101 | C-506 NOT TO SCALE

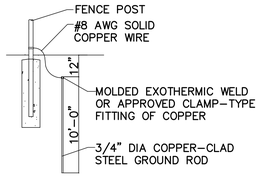


NOTES:
1. PROVIDE FLAG POLE FOUNDATION AND LIGHTING CONDUIT IN ACCORDANCE WITH MANUFACTURER'S WRITTEN RECOMMENDATIONS.
2. DIMENSIONS INDICATED ARE APPROXIMATE. COORDINATE FINAL DIMENSIONS WITH FLAGPOLE MANUFACTURER'S WRITTEN REQUIREMENTS.
3. GROUND FLAGPOLE IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE.

2 FLAGPOLE FOUNDATION DETAIL
CS103 | C-506 NOT TO SCALE



FENCE DETAIL

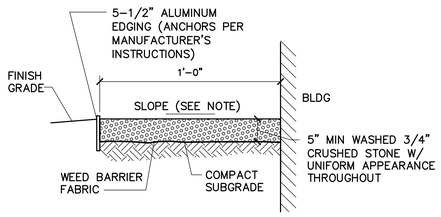


GROUNDING DETAIL

STEEL POST SCHEDULE	
USE AND SECTION	MINIMUM OUTSIDE DIMENSIONS (NOMINAL)
CORNER, END & PULL POSTS TUBULAR – ROUND	2.875" O.D.
LINE POSTS TUBULAR – ROUND	2.375" O.D.
TOP, BOTTOM & BRACE RAILS TUBULAR – ROUND TUBULAR – SQUARE H-SECTION C-SECTION (ROLL-FORMED)	1.66" O.D. 1.50" SQ. 1.625" x 1.50" 1.625" x 1.25"

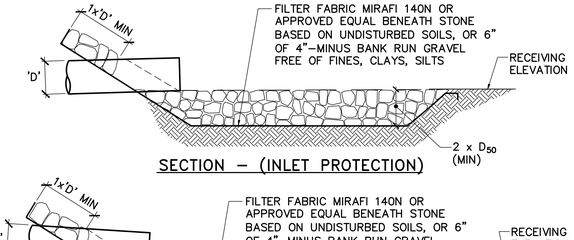
NOTES:
1. WIRE TIES, RAILS, POSTS, AND BRACES SHALL BE CONSTRUCTED ON THE SECURE SIDE OF THE FENCE ALIGNMENT. CHAIN-LINK FABRIC SHALL BE PLACED ON THE SIDE OPPOSITE THE SECURE AREA.
2. ONLY 9-GAGE GALVANIZED STEEL TIE WIRES SHALL BE USED FOR FASTENING THE FENCE FABRIC TO FENCE POSTS AND RAILS. 16-GAGE, STAINLESS STEEL TIE WIRES SHALL BE USED FOR FASTENING FENCE FABRIC TO TENSION WIRES.

3 PERIMETER CHAIN LINK FENCE
CS103 | C-506 NOT TO SCALE

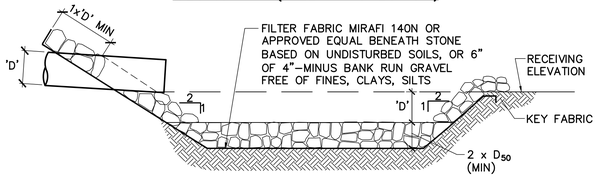


NOTES:
1. SLOPE SURFACE AND SUBGRADE OF CRUSHED STONE AWAY FROM THE BUILDING AT 5%.
2. EDGING SHALL BE EXTRUDED ALUMINUM ALLOY, MILL FINISH, 3/16"x5-1/2".
3. WEED BARRIER FABRIC: NONWOVEN GEOTEXTILE FILTER FABRIC – POLYPROPYLENE OR POLYESTER FABRIC, 3 OZ./SQ. YD. MINIMUM, COMPOSED OF FIBERS FORMED INTO A STABLE NETWORK SO THAT FIBERS RETAIN THEIR RELATIVE POSITION. FABRIC SHALL BE INERT TO BIOLOGICAL DEGRADATION AND RESIST NATURALLY ENCOUNTERED CHEMICALS, ALKALIS, AND ACIDS.

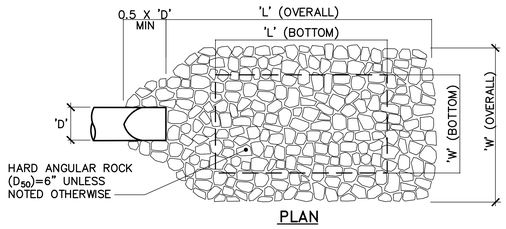
4 DRIP STRIP
CS102,CS103 | C-506 NOT TO SCALE



SECTION – (INLET PROTECTION)



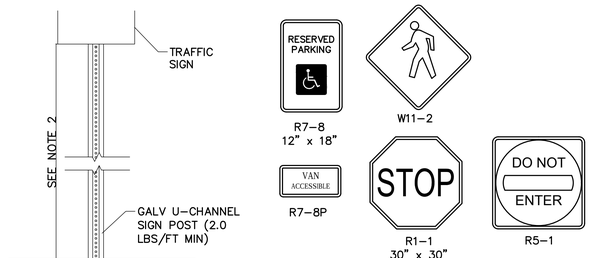
SECTION – (OUTLET PROTECTION)



PLAN

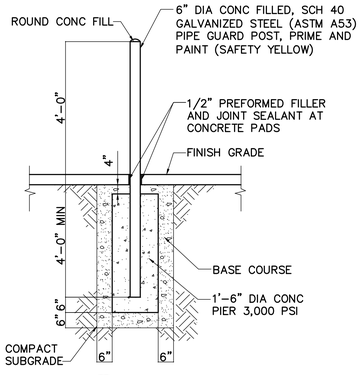
PIPE INLET/OUTLET PROTECTION NOTES:
1. IN DEFINED CHANNELS, APRON SHALL EXTEND FULL WIDTH OF BOTTOM AND UP TO THE TOP OF THE BANK.
2. SEE DRAWINGS CG101, CG102, AND CG103 FOR LOCATIONS AND RIPRAP OUTLET DIMENSIONS.

5 PIPE INLET/OUTLET PROTECTION DETAIL
CG101,CG102 | C-506 NOT TO SCALE



NOTES:
1. SIGNS SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (MUTCD), BY USDOT-FHWA, LATEST EDITION, AND NHDOT STANDARD SPECIFICATIONS.
2. 5 FEET. FOR SIGNS INSTALLED ON THE SIDE OF THE ROAD THE HEIGHT, SHALL BE MEASURED VERTICALLY FROM THE BOTTOM OF THE SIGN TO THE ELEVATION OF THE NEAR EDGE OF PAVEMENT.

6 TRAFFIC SIGN POST & SIGN
CS102,CS103 | C-506 NOT TO SCALE



7 PIPE BOLLARD
CS102 | C-506 NOT TO SCALE

FOR PERMITTING PURPOSES ONLY - NOT FOR CONSTRUCTION

NO.	DATE	DESCRIPTION	BY
REVISIONS			

OAK POINT ASSOCIATES architecture engineering planning
231 MAIN STREET, BIDDEFORD, MAINE 04005
(T) 207.283.0193 (F) 207.283.4283
www.oakpoint.com

LASSEL ARCHITECTS
370 MAIN STREET
SOUTH BERWICK, MAINE 03908
207 384 2049

STATE OF MAINE
WADE A. LIPPERT
No. 10428
REGISTERED PROFESSIONAL ENGINEER
11/17/23

DESIGNED BY: WAL
DRAWN BY: DEW
CHECKED BY:
PROJECT: 22204.24

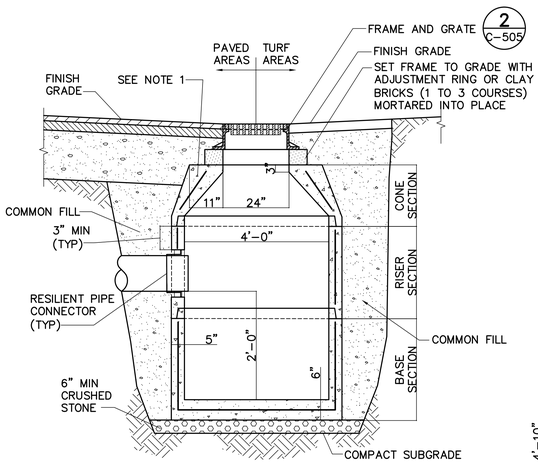
YORK COUNTY
45 KENNEBUNK ROAD
ALFRED, ME 04002

YORK COUNTY REGIONAL TRAINING CENTER AND REGIONAL RECOVERY CENTER
LAYMAN WAY ALFRED, MAINE 04002

SITE DETAILS - 4

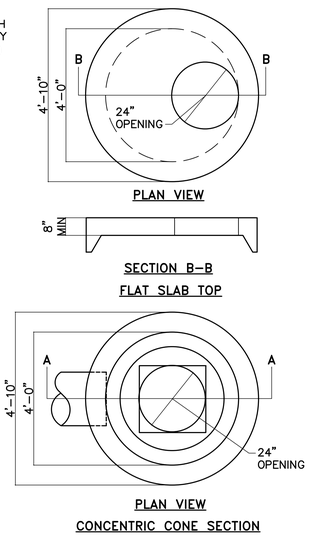
SCALE: AS NOTED
DATE: 11/17/2023
DWG: C-506
SHEET: 18 OF 27

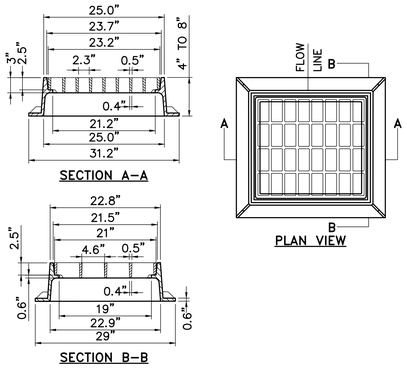
NOTES:
1. CONE SECTIONS MAY BE EITHER CONCENTRIC OR ECCENTRIC, OR FLAT SLAB TOPS MAY BE USED WHERE PIPE WOULD OTHERWISE ENTER INTO THE CONE SECTION OF THE STRUCTURE AND WHERE PERMITTED.
2. OUTSIDE EDGES OF PIPES SHALL PROJECT 1" TO 3" BEYOND INSIDE WALL OF STRUCTURE.
3. PRECAST SECTIONS SHALL HAVE A TONGUE AND GROOVE JOINT 4" HIGH AT AN 11° ANGLE CENTERED IN THE WIDTH OF THE WALL AND SHALL BE ASSEMBLED USING 2 STRIPS OF 1" DIA BUTYL RUBBER SEALANT IN THE JOINT.
4. STRUCTURES WITH MULTIPLE PIPES SHALL HAVE A MINIMUM OF 12" OF INSIDE SURFACE BETWEEN HOLES, NO MORE THAN 75% OF A HORIZONTAL CROSS-SECTION SHALL BE HOLES, AND THERE SHALL BE NO HOLES CLOSER THAN 3" TO JOINTS.
5. CONCRETE 5,000 PSI AFTER 28 DAYS.
6. PROVIDE REINFORCING TO ACHIEVE AASHTO HS-20 LOADING CLASSIFICATION.
7. CATCH BASIN SHALL CONFORM TO ASTM C478.
8. PROVIDE PIPE PENETRATIONS AS INDICATED ON SHEET CG101.
9. THE PAVEMENT ELEVATION AT THE CATCH BASIN GRATE SHALL BE 0.1' ABOVE THE RIM ELEVATION.



SECTION A-A

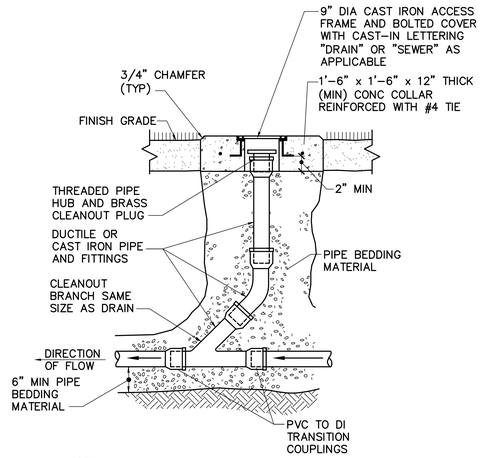
1 CATCH BASIN
CG101,CG102 C-507 NOT TO SCALE





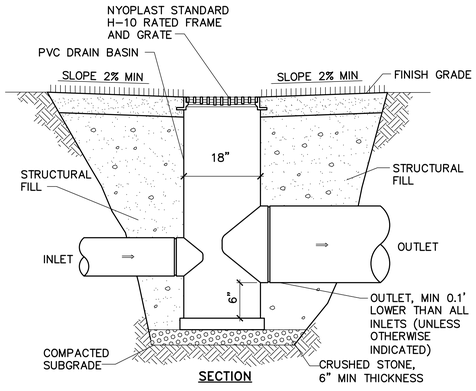
NOTES:
1. FRAME AND GRATE SHALL BE NHDOT TYPE "B".
2. DIMENSIONS ARE NOMINAL.

2 FRAME AND GRATE
C-507 C-507 NOT TO SCALE



NOTE:
1. INLINE CLEANOUT SHOWN. FOR CLEANOUTS AT THE END OF LINES, PROVIDE 45 DEGREE BEND IN LIEU OF WYE.

3 CLEANOUT
C-507 C-507 NOT TO SCALE

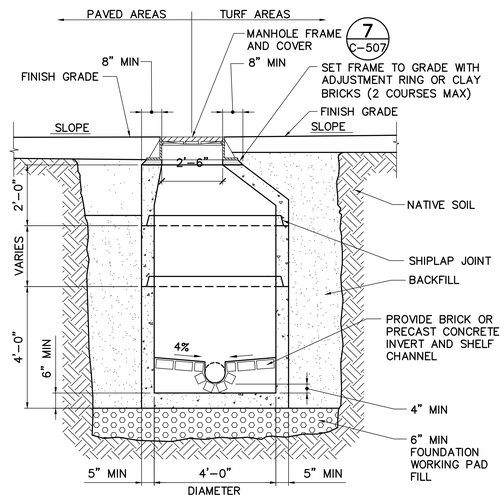


SECTION

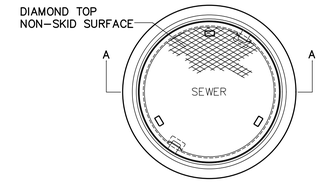
NOTES:
1. PROVIDE PIPE PENETRATION AS INDICATED ON THE SITE UTILITY PLAN.
2. PVC CATCH BASIN SHALL BE NYOPLAST DRAIN BASIN, H-20 RATED OR APPROVED EQUAL.

5 DRAIN BASIN
C-507 C-507 NOT TO SCALE

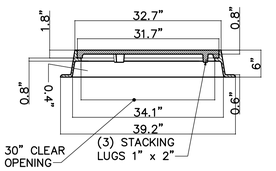
SEWER MANHOLE NOTES:
1. CONCRETE: 4,000 PSI AFTER 28 DAYS.
2. REINFORCING: HS-20 LOADING.
3. SHIPLAP JOINTS SHALL BE SEALED WITH 2 STRIPS OF 1" DIA BUTYL RUBBER SEALANT.
4. PROVIDE LOCK JOINT FLEXIBLE PIPE SLEEVES, CAST INTO BASE.
5. PLUG LIFTING HOLES WITH GROUT AFTER PLACING MANHOLE.
6. INVERT SHELF TO BE PLACED AFTER LEAKAGE TEST UNLESS PRECAST CONCRETE.
7. INVERT BRICKS SHALL BE LAID ON EDGE.
8. INVERTS SHALL BE LAID OUT IN CURVES OF THE LONGEST POSSIBLE RADIUS TANGENT TO THE CENTERLINE OF THE PIPES.



6 SANITARY MANHOLE
CU101 C-507 NOT TO SCALE



PLAN VIEW



SECTION

MANHOLE FRAME AND COVER NOTES:
1. ALL DIMENSIONS ARE NOMINAL.
2. 3" HIGH LETTERS ("DRAIN" OR "SEWER" CORRESPONDING TO THE UTILITY) IN THE CENTER OF THE COVER.

7 MANHOLE FRAME AND COVER
C-507 C-507 NOT TO SCALE

FOR PERMITTING PURPOSES ONLY - NOT FOR CONSTRUCTION

NO.	DATE	DESCRIPTION	BY

REVISIONS

OAK POINT ASSOCIATES
architecture engineering planning
231 MAIN STREET, BIDDEFORD, MAINE 04005
(T) 207.283.0193 (F) 207.283.4283
www.oakpoint.com

LASSEL ARCHITECTS
370 MAIN STREET SOUTH BERWICK, MAINE 03908
207 384 2049

STATE OF MAINE
WADE A. LIPPERT
No. 10428
REGISTERED PROFESSIONAL ENGINEER
11/17/23

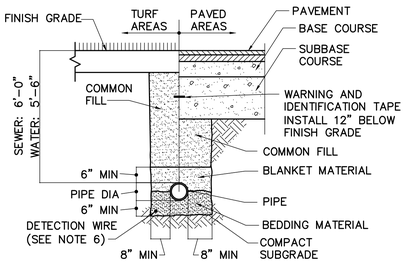
DESIGNED BY: WAL
DRAWN BY: DEW
CHECKED BY:
PROJECT: 22204.24

YORK COUNTY
45 KENNEBUNK ROAD
ALFRED, ME 04002

YORK COUNTY REGIONAL TRAINING CENTER AND REGIONAL RECOVERY CENTER
LAYMAN WAY ALFRED, MAINE 04002

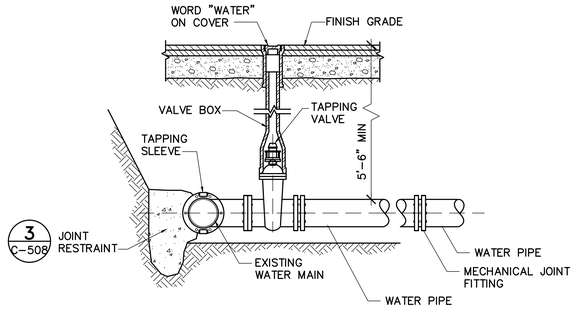
SITE DETAILS - 5

SCALE: AS NOTED
DATE: 11/17/2023
DWG: C-507
SHEET: 19 OF 27



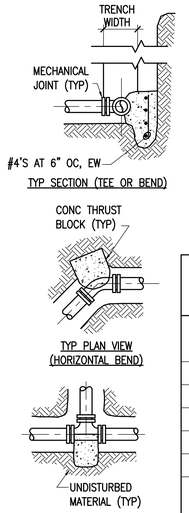
NOTES:
1. EXCAVATION WORK SHALL COMPLY WITH OSHA STANDARDS. TRENCH SIDEWALLS SHALL BE VERTICAL FROM TRENCH BOTTOM TO 12" ABOVE TOP OF PIPE.
2. PROVIDE A MINIMUM OF 6" VERTICAL CLEARANCE BETWEEN CROSSING PIPES.
3. PROVIDE 10' HORIZONTAL CLEARANCE BETWEEN WATER AND SEWER LINE.
4. WHERE 6'-0" MIN COVER OVER SEWER LINE CANNOT BE ACHIEVED PROVIDE 4' WIDE, 4" THICK RIGID FOAM BOARD INSULATION OVER BLANKET MATERIAL. (2-2" LAYERS WITH JOINTS STAGGERED)
5. PROVIDE A SEPARATION OF AT LEAST 18 INCHES BETWEEN THE BOTTOM OF THE WATER PIPING AND THE TOP OF THE SEWER PIPING IN CASES WHERE WATER PIPING CROSSES ABOVE SEWER PIPING. IF SEPARATION CANNOT BE ACHIEVED PROVIDE 6" MIN CONCRETE ENCASEMENT OF WATER PIPE FOR A DISTANCE OF 10' ON EITHER SIDE OF THE CROSSING.

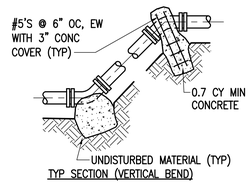
1 PIPE TRENCH
CU101,CU102 — C-508 — NOT TO SCALE



2 WATER SERVICE CONNECTION
CU101 — C-508 — NOT TO SCALE

NOTES:
1. PROVIDE JOINT RESTRAINT FOR TEES, BENDS, AND PLUGS. FOR DUCTILE IRON PIPE PROVIDE CONCRETE THRUST BLOCKS AND WEDGE-ACTION TYPE RETAINER GLANDS. FOR POLYETHYLENE PIPE PROVIDE CONCRETE THRUST BLOCKS.
2. WRAP DI PIPE FITTINGS IN POLYETHYLENE OR BUILDING PAPER PRIOR TO INSTALLATION OF CONCRETE THRUST BLOCKING.
3. PLACE CONCRETE PAVERS OR BRICKS IN FRONT OF PLUGS BEFORE PLACING THRUST BLOCKS.
4. PLACE THRUST BLOCKS AGAINST UNDISTURBED MATERIAL. WHERE TRENCH WALL HAS BEEN DISTURBED, EXCAVATE LOOSE MATERIAL AND EXTEND CONCRETE THRUST BLOCK TO UNDISTURBED MATERIAL. AREA OF THRUST BLOCKS SHOWN ARE BASED ON A MINIMUM SOIL BEARING CAPACITY OF 1,500 POUNDS PER SQUARE FOOT AND 1.5 SAFETY FACTOR. BEARING CAPACITY MAY BE ALTERED BASED ON CONDITIONS ENCOUNTERED WITH APPROVAL BY THE CONTRACT ADMINISTRATOR.
5. EXTEND CONCRETE THRUST BLOCKING THE ENTIRE LENGTH OF THE FITTING. DO NOT COVER ANY PART OF THE JOINT WITH CONCRETE.
6. PROVIDE LIFT HOOKS INTO THRUST BLOCKS AT END CAPS AND PLUGS.
7. CONCRETE THRUST BLOCKS SHALL BE 3,000 PSI (MIN) PORTLAND CEMENT CONCRETE.
8. PROVIDE CONCRETE THRUST BLOCKING IN ACCORDANCE WITH NFPA 24.
9. PROVIDE WEDGE-ACTION TYPE RETAINER GLANDS ACCORDING TO THE MANUFACTURERS INSTRUCTIONS.



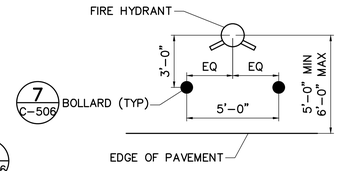


THRUST BLOCK SCHEDULE
SQUARE FEET OF CONCRETE THRUST BLOCKING BEARING ON UNDISTURBED MATERIAL (BASED ON 100 PSI WORKING PRESSURE)

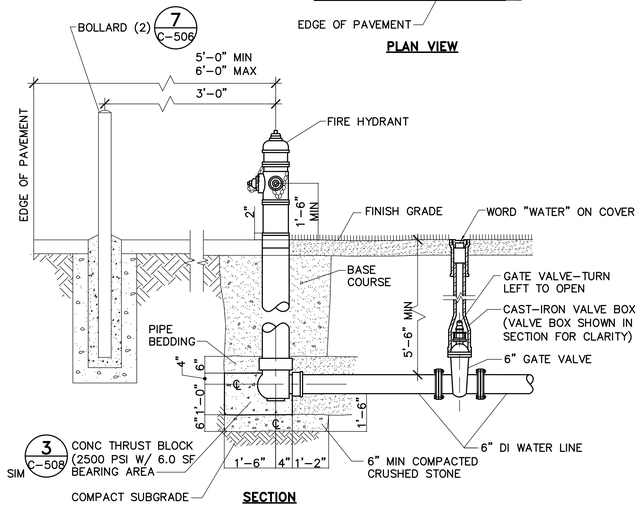
REACTION TYPE	PIPE SIZE (INCHES)				
	4"	6"	8"	10"	12"
TEE	1.4	2.8	4.8	7.3	10.3
90° BEND	1.9	4.0	6.8	10.3	14.5
45° BEND	1.0	2.2	3.7	5.6	7.9
22.5° BEND	0.5	1.1	1.9	2.8	4.0
11.25° BEND	0.3	0.6	1.0	1.4	2.0

NOTE: FOR OTHER PRESSURES, AREA OF CONCRETE THRUST BLOCKING IS DIRECTLY PROPORTIONAL TO AREAS SHOWN IN ABOVE TABLE.

3 JOINT RESTRAINT
CU101,CU102,C-507 — C-508 — NOT TO SCALE

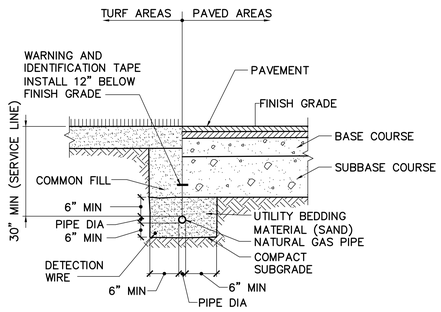


PLAN VIEW



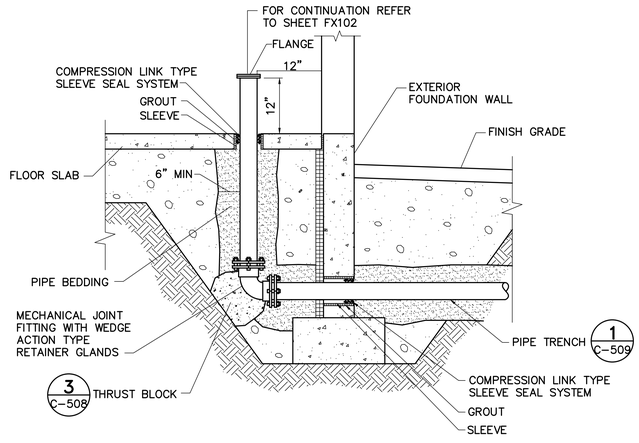
SECTION

5 FIRE HYDRANT
CU101,CU102 — C-508 — NOT TO SCALE

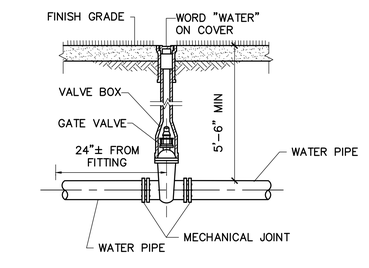


NOTES:
1. INSTALLATION SHALL CONFORM TO UNITIL STANDARDS AND SPECIFICATIONS.
2. PROVIDE A MINIMUM OF 12 INCHES CLEARANCE FROM ALL OTHER UTILITIES AND OBSTRUCTIONS.

4 PROPANE GAS PIPE TRENCH
CU102 — C-508 — NOT TO SCALE



6 WATER LINE ENTRANCE
CU101,CU102 — C-508 — NOT TO SCALE



7 WATER VALVE
CU101,CU102 — C-508 — NOT TO SCALE

FOR PERMITTING PURPOSES ONLY - NOT FOR CONSTRUCTION

NO.	DATE	DESCRIPTION	BY

REVISIONS

OAK POINT ASSOCIATES
architecture engineering planning
231 MAIN STREET, BIDDEFORD, MAINE 04005
(T) 207.283.0193 (F) 207.283.4283
www.oakpoint.com

LASSEL ARCHITECTS
370 MAIN STREET
SOUTH BERWICK, MAINE 03908
207 384 2049

STATE OF MAINE — WADE A. LIPPERT — No. 10428 — REGISTERED PROFESSIONAL ENGINEER — 11/17/23

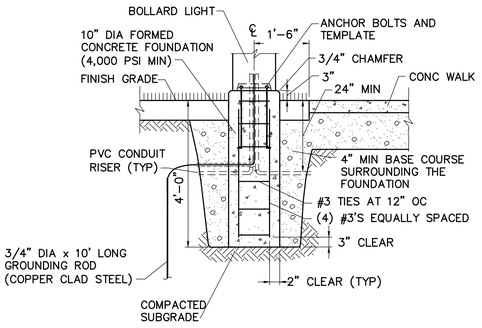
DESIGNED BY: WAL
DRAWN BY: DEW
CHECKED BY:
PROJECT: 22204.24

YORK COUNTY
45 KENNEBUNK ROAD
ALFRED, ME 04002

YORK COUNTY REGIONAL TRAINING CENTER AND REGIONAL RECOVERY CENTER
LAYMAN WAY ALFRED, MAINE 04002

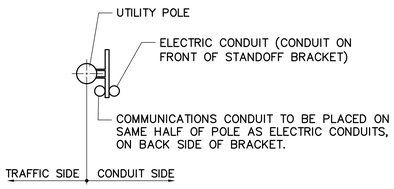
SITE DETAILS - 6

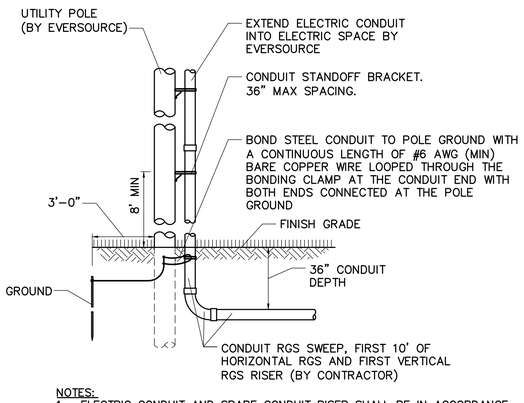
SCALE: AS NOTED
DATE: 11/17/2023
DWG: C-508
SHEET: 20 OF 27



1 BOLLARD LIGHT/CONC FOUNDATION

CS102,CU101,ES101 C-509 NOT TO SCALE

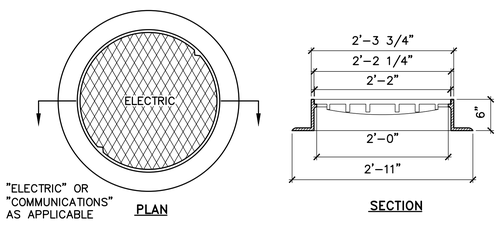




NOTES:
1. ELECTRIC CONDUIT AND SPARE CONDUIT RISER SHALL BE IN ACCORDANCE WITH UTILITY COMPANY STANDARD.
2. COMMUNICATION CONDUIT RISER SHALL BE IN ACCORDANCE WITH UTILITY COMPANY STANDARDS AND SPECIFICATIONS. PROVIDE SWEEP AND FIRST SECTION OF VERTICAL CONDUIT SIMILAR TO ELECTRIC RISER INSTALLATION.
3. TOP END OF VERTICAL RISER CONDUITS SHALL BE WEATHER-SEALED AFTER INSTALLATION OF CABLES. TEMPORARILY CAP THE TOP END OF THE VERTICAL RISER CONDUIT UNTIL CABLES ARE INSTALLED.

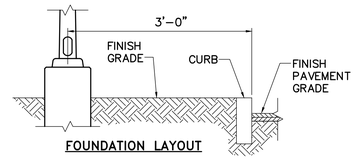
5 UTILITY POLE CONDUIT RISER

CU101,ES101 C-509 NOT TO SCALE

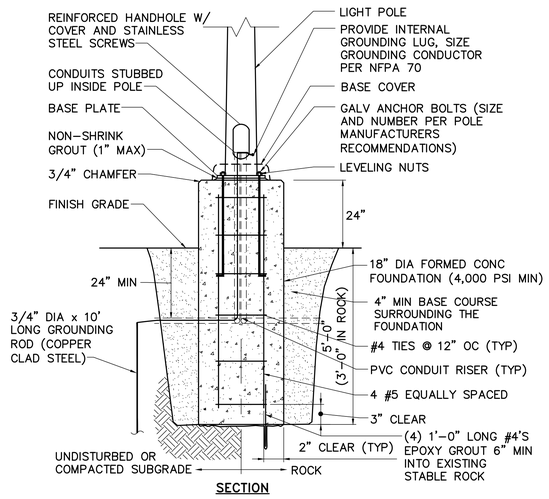


7 ELECTRIC MANHOLE FRAME AND COVER

C-509 NOT TO SCALE



FOUNDATION LAYOUT

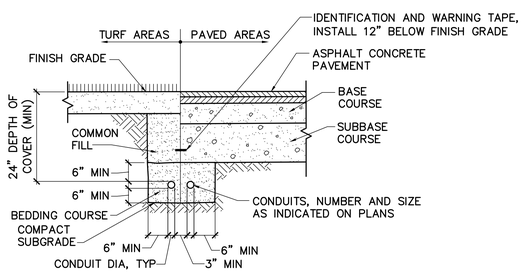


SECTION

NOTES:
1. EXPOSED CONCRETE SHALL HAVE A SMOOTH RUBBED FINISH.
2. REFER TO LIGHT POLE BASE COORDINATES ON SHEET CS101 FOR LOCATION OF LIGHT POLE BASES.

2 LIGHT POLE/CONC FOUNDATION

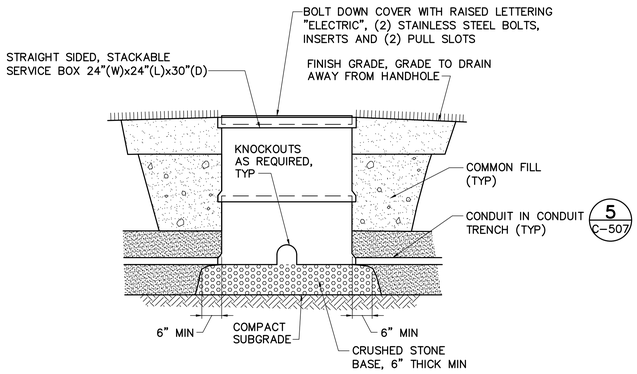
CS101,CU101,ES101 C-509 NOT TO SCALE



NOTE:
1. PROVIDE 3" MIN SEPARATION BETWEEN LIKE UTILITIES AND 6" MIN SEPARATION BETWEEN COMMUNICATIONS AND ELECTRICAL CONDUITS.

6 LIGHTING CONDUIT TRENCH

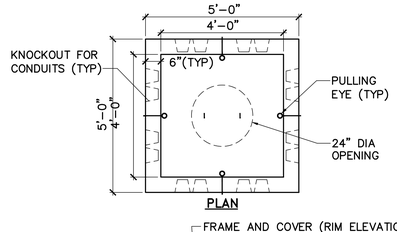
CU101,CU102 C-509 NOT TO SCALE



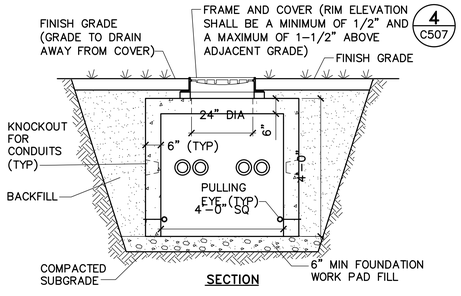
NOTES:
1. HOUSING AND COVER SHALL BE POLYMER CONCRETE REINFORCED WITH A HEAVY WEAVE FIBERGLASS REINFORCING WITH A COMPRESSIVE STRENGTH NO LESS THAN 10,000 PSI AND ABLE TO SUPPORT A SERVICE LOAD OF NO LESS THAN 20,800 POUNDS OVER A 10"x10" AREA.
2. HANDHOLE BOX AND COVER SHALL BE LISTED BY UNDERWRITERS LABORATORIES.

8 ELECTRIC HANDHOLE

CU101 C-509 NOT TO SCALE



PLAN

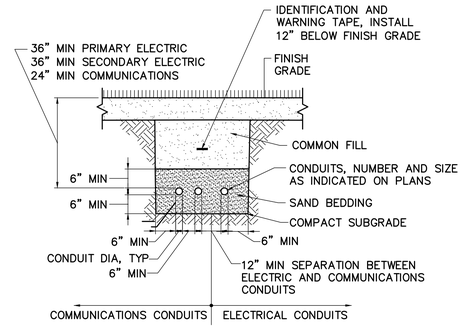


SECTION

ELECTRIC MANHOLE NOTES:
1. PULLING EYE TO BE 3/4"x8" GALVANIZED EYEBOLT WITH 2" EYE. EYEBOLT TO EXTEND THROUGH WALL WITH A 6" GALVANIZED STEEL WASHER ON BOTH SIDES AND FASTENED ON THE OUTSIDE WITH A 2" GALVANIZED STEEL NUT OR EQUIVALENT. ONE OPPOSITE EACH KNOCKOUT.
2. CONCRETE SHALL BE A MINIMUM 5,000 PSI 28 DAY COMPRESSIVE STRENGTH.
3. PROVIDE REINFORCING AS REQUIRED TO ACHIEVE H-20 LOADING CLASSIFICATION.

9 ELECTRIC AND COMMUNICATIONS MANHOLE

CU101,CU102 C-509 NOT TO SCALE



NOTE:
1. ELECTRIC SERVICE TRENCH SHALL CONFORM TO UTILITY CONSTRUCTION STANDARDS.
2. COMMUNICATIONS SERVICE TRENCH SHALL CONFORM TO UTILITY CONSTRUCTION STANDARDS.
3. PROVIDE 18" MIN SEPARATION TO WATER LINES.

10 ELECTRIC AND COMMUNICATIONS SERVICE TRENCH

CU101,ES101 C-509 NOT TO SCALE

FOR PERMITTING PURPOSES ONLY - NOT FOR CONSTRUCTION

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

OAK POINT ASSOCIATES architecture engineering planning
231 MAIN STREET, BIDDEFORD, MAINE 04005
(T) 207.283.0193 (F) 207.283.4283
www.oakpoint.com

LASSEL ARCHITECTS
370 MAIN STREET
SOUTH BERWICK, MAINE 03908
207 384 2049

STATE OF MAINE — WADE A. LIPPERT No. 10428 — REGISTERED PROFESSIONAL ENGINEER — 11/17/23

DESIGNED BY: WAL
DRAWN BY: DEW
CHECKED BY:
PROJECT: 22204.24

YORK COUNTY
45 KENNEBUNK ROAD
ALFRED, ME 04002

YORK COUNTY REGIONAL TRAINING CENTER AND REGIONAL RECOVERY CENTER
LAYMAN WAY ALFRED, MAINE 04002

SITE DETAILS - 7

SCALE: AS NOTED
DATE: 11/17/2023
DWG: C-509
SHEET: 21 OF 27

TEST BORING LOG

MILLER ENGINEERING & TESTING, INC.
100 Sheffield Road - Manchester, NH 03103
Ph. (603) 668-6016 - Fax: (603) 668-8641

Project: York County Facilities Expansion, Alfred, MA
Project No: 22.226.NH
Date Start: 01-18-23
Date End: 01-18-23
Sheet 1 of 1
Boring No: B-1
Location: See Plan
Approx. Surface Elev: 266

GROUNDWATER OBSERVATIONS						
CASING		SAMPLER		Date	Depth	Casing At	Stabilization Period
Type	HSA	SS		01-18-23	None	21'	Upon Completion
Size	2-1/4" ID	1-3/8" ID					
Hammer		140 lbs.					
Fall		30"					

Depth/ Elev.	Cas bl/ft	Sample No.	Depth Range	Pen.	Rec.	BLOWS 0-6"	6-12"	12-18"	18-24"	Strata Change	Sample Description	Notes
0 - 266		S-1	0.0-0.5	6	3	1	1	2	3		S-1: Forest Mat / Topsoil	
		S-1A	0.5-2.0	18	5						S-1A: Brown/Orange, fine to medium sand, little silt, trace gravel, trace roots.	
		S-2	2.0-4.0	24	8	3	3	4	6		S-2: Brown, fine to coarse sand, little gravel, trace silt	
6 - 260		S-3	4.0-6.0	24	15	5	8	8	7		S-3: Brown, fine to medium sand, trace gravel, trace silt	
		S-4	9.0-11.0	24	16	8	16	14	13		S-4: Brown, fine to coarse sand, little gravel, trace silt	
12 - 254												
		S-5	14.0-16.0	24	18	19	19	21	20		S-5: Brown/Orange (mottled), fine sand, trace silt	
18 - 248												
		S-6	19.0-21.0	24	19	7	9	10	11		S-6: Brown, fine sand, trace silt	
											BORING TERMINATED AT 21 ft	
24 - 242												
30 - 236												
36 - 230												

Driller: R. Marcoux
Helper: J. Donahue
Inspector: T. Young

COHESIVE CONSISTENCY (Blows/Foot): 0-2 VERY SOFT; 2-4 SOFT; 4-8 MEDIUM STIFF; 8-15 STIFF; 15-30 HARD
COHESIONLESS (Blows/Foot): 0-4 VERY LOOSE; 4-10 LOOSE; 10-30 MEDIUM DENSE; 30-50 DENSE; 50+ VERY DENSE
PROPORTIONS USED: TRACE: 0-10%; LITTLE: 10-20%; SOME: 20-35%; AND: 35-50%

NOTES:

REMARKS: THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES. TRANSITION MAY BE GRADUAL.
WATER LEVEL READINGS HAVE BEEN MADE IN THE DRILL HOLES AT TIMES AND UNDER CONDITIONS STATED ON THE BORING LOGS.
FLUCTUATIONS IN THE LEVEL OF THE GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

TEST BORING LOG

MILLER ENGINEERING & TESTING, INC.
100 Sheffield Road - Manchester, NH 03103
Ph. (603) 668-6016 - Fax: (603) 668-8641

Project: York County Facilities Expansion, Alfred, MA
Project No: 22.226.NH
Date Start: 01-18-23
Date End: 01-18-23
Sheet 1 of 1
Boring No: B-2
Location: See Plan
Approx. Surface Elev: 256

GROUNDWATER OBSERVATIONS						
CASING		SAMPLER		Date	Depth	Casing At	Stabilization Period
Type	HSA	SS		01-18-23	None	20'	Upon Completion
Size	2-1/4" ID	1-3/8" ID					
Hammer		140 lbs.					
Fall		30"					

Depth/ Elev.	Cas bl/ft	Sample No.	Depth Range	Pen.	Rec.	BLOWS 0-6"	6-12"	12-18"	18-24"	Strata Change	Sample Description	Notes
0 - 256		S-1	0.0-0.5	6	4	1	3	3	5		S-1: Forest Mat / Topsoil	
		S-1A	0.5-2.0	18	6						S-1A: Brown/Orange, fine to medium sand, little silt, trace gravel, trace roots.	
		S-2	2.0-4.0	24	13	5	6	6	7		S-2: Brown, fine to coarse sand, little gravel, trace silt	
6 - 250		S-3	4.0-6.0	24	13	5	7	6	7		S-3: Brown, fine sand, trace silt. trace gravel	
		S-4	9.0-11.0	24	15	4	8	11	10		S-4: Brown, fine sand, trace silt, trace gravel	
12 - 244												
		S-5	14.0-16.0	24	16	3	9	9	10		S-5: Brown, fine sand, trace silt, trace gravel	
18 - 238												
		S-6	19.0-21.0	24	20	7	15	18	19		S-6: Brown, fine sand, little silt	
24 - 232		S-7	24.0-26.0	24	21	6	10	9	11		S-7: Brown, fine sand, little silt (bottom 6" of sample was wet)	
											BORING TERMINATED AT 26 ft	
30 - 226												
36 - 220												

Driller: R. Marcoux
Helper: J. Donahue
Inspector: T. Young

COHESIVE CONSISTENCY (Blows/Foot): 0-2 VERY SOFT; 2-4 SOFT; 4-8 MEDIUM STIFF; 8-15 STIFF; 15-30 HARD
COHESIONLESS (Blows/Foot): 0-4 VERY LOOSE; 4-10 LOOSE; 10-30 MEDIUM DENSE; 30-50 DENSE; 50+ VERY DENSE
PROPORTIONS USED: TRACE: 0-10%; LITTLE: 10-20%; SOME: 20-35%; AND: 35-50%

NOTES:

REMARKS: THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES. TRANSITION MAY BE GRADUAL.
WATER LEVEL READINGS HAVE BEEN MADE IN THE DRILL HOLES AT TIMES AND UNDER CONDITIONS STATED ON THE BORING LOGS.
FLUCTUATIONS IN THE LEVEL OF THE GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

TEST BORING LOG

MILLER ENGINEERING & TESTING, INC.
100 Sheffield Road - Manchester, NH 03103
Ph. (603) 668-6016 - Fax: (603) 668-8641

Project: York County Facilities Expansion, Alfred, MA
Project No: 22.226.NH
Date Start: 01-18-23
Date End: 01-18-23
Sheet 1 of 1
Boring No: B-3
Location: See Plan
Approx. Surface Elev: 259

GROUNDWATER OBSERVATIONS						
CASING		SAMPLER		Date	Depth	Casing At	Stabilization Period
Type	HSA	SS		01-18-23	None	21'	Upon Completion
Size	2-1/4" ID	1-3/8" ID					
Hammer		140 lbs.					
Fall		30"					

Depth/ Elev.	Cas bl/ft	Sample No.	Depth Range	Pen.	Rec.	BLOWS 0-6"	6-12"	12-18"	18-24"	Strata Change	Sample Description	Notes
0 - 259		S-1	0.0-0.5	6	4	1	2	2	3		S-1: Forest Mat / Topsoil	
		S-1A	0.5-2.0	18	10						S-1A: Brown/Orange, fine to medium sand, little silt, trace gravel, trace roots	
		S-2	2.0-4.0	24	14	5	8	9	13		S-2: Brown, fine sand, trace silt, trace gravel	
6 - 253		S-3	4.0-6.0	24	15	8	10	11	10		S-3: Brown, fine sand, trace silt, trace gravel	
		S-4	9.0-11.0	24	15	5	8	8	9		S-4: Brown/Orange (mottled), fine sand, trace silt, trace gravel	
12 - 247												
		S-5	14.0-16.0	24	20	5	8	8	8		S-5: Brown/Orange (mottled), fine sand, little silt, trace gravel	
18 - 241												
		S-6	19.0-21.0	24	23	8	10	13	15		S-6: Brown/Orange (mottled), fine sand, little silt, trace gravel	
											BORING TERMINATED AT 21 ft	
24 - 235												
30 - 229												
36 - 223												

Driller: R. Marcoux
Helper: J. Donahue
Inspector: T. Young

COHESIVE CONSISTENCY (Blows/Foot): 0-2 VERY SOFT; 2-4 SOFT; 4-8 MEDIUM STIFF; 8-15 STIFF; 15-30 HARD
COHESIONLESS (Blows/Foot): 0-4 VERY LOOSE; 4-10 LOOSE; 10-30 MEDIUM DENSE; 30-50 DENSE; 50+ VERY DENSE
PROPORTIONS USED: TRACE: 0-10%; LITTLE: 10-20%; SOME: 20-35%; AND: 35-50%

NOTES:

REMARKS: THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES. TRANSITION MAY BE GRADUAL.
WATER LEVEL READINGS HAVE BEEN MADE IN THE DRILL HOLES AT TIMES AND UNDER CONDITIONS STATED ON THE BORING LOGS.
FLUCTUATIONS IN THE LEVEL OF THE GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

TEST BORING LOG

MILLER ENGINEERING & TESTING, INC.
100 Sheffield Road - Manchester, NH 03103
Ph. (603) 668-6016 - Fax: (603) 668-8641

Project: York County Facilities Expansion, Alfred, MA
Project No: 22.226.NH
Date Start: 01-19-23
Date End: 01-19-23
Sheet 1 of 2
Boring No: B-4
Location: See Plan
Approx. Surface Elev: 265

GROUNDWATER OBSERVATIONS						
CASING		SAMPLER		Date	Depth	Casing At	Stabilization Period
Type	HSA	SS		01-19-23	34'	51'	Upon Completion
Size	2-1/4" ID	1-3/8" ID					
Hammer		140 lbs.					
Fall		30"					

Depth/ Elev.	Cas bl/ft	Sample No.	Depth Range	Pen.	Rec.	BLOWS 0-6"	6-12"	12-18"	18-24"	Strata Change	Sample Description	Notes
0 - 265		S-1	0.0-1.0	12	6	1	1				S-1: Forest Mat / Topsoil	
		S-1A	1.0-2.0	12	5			2	4		S-1A: Brown/Orange, fine to medium sand, little silt, trace gravel, trace roots	
		S-2	2.0-4.0	24	0	5	8	16	13		S-2: No recovery (rock in tip of split-spoon)	
6 - 259		S-3	4.0-6.0	24	15	4	6	8	9		S-3: Brown, fine sand, little silt	
		S-4	9.0-11.0	24	19	6	9	11	13		S-4: Brown, fine sand, little silt	
12 - 253												
		S-5	14.0-16.0	24	18	6	9	9	8		S-5: Brown, fine sand, trace silt	
18 - 247												
		S-6	19.0-21.0	24	17	5	14	15	21		S-6: Brown, fine sand, little silt	
24 - 241												
		S-7	24.0-26.0	24	19	8	10	12	17		S-7: Brown, fine sand, little silt	
30 - 235												
		S-8	29.0-31.0	24	19	8	15	19	21		S-8: Brown, fine sand, little silt	
36 - 229												
		S-9	34.0-36.0	24	15	9	17	19	26		S-9: Brown/Orange (slight mottling), fine sand, little silt, wet	

Driller: R. Marcoux
Helper: J. Donahue
Inspector: T. Young

COHESIVE CONSISTENCY (Blows/Foot): 0-2 VERY SOFT; 2-4 SOFT; 4-8 MEDIUM STIFF; 8-15 STIFF; 15-30 HARD
COHESIONLESS (Blows/Foot): 0-4 VERY LOOSE; 4-10 LOOSE; 10-30 MEDIUM DENSE; 30-50 DENSE; 50+ VERY DENSE
PROPORTIONS USED: TRACE: 0-10%; LITTLE: 10-20%; SOME: 20-35%; AND: 35-50%

NOTES:

REMARKS: THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES. TRANSITION MAY BE GRADUAL.
WATER LEVEL READINGS HAVE BEEN MADE IN THE DRILL HOLES AT TIMES AND UNDER CONDITIONS STATED ON THE BORING LOGS.
FLUCTUATIONS IN THE LEVEL OF THE GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

TEST BORING LOG

MILLER ENGINEERING & TESTING, INC.
100 Sheffield Road - Manchester, NH 03103
Ph. (603) 668-6016 - Fax: (603) 668-8641

Project: York County Facilities Expansion, Alfred, MA
Project No: 22.226.NH
Date Start: 01-19-23
Date End: 01-19-23
Sheet 2 of 2
Boring No: B-4
Location: See Plan
Approx. Surface Elev: 265

GROUNDWATER OBSERVATIONS						
CASING		SAMPLER		Date	Depth	Casing At	Stabilization Period
Type	HSA	SS		01-19-23	34'	51'	Upon Completion
Size	2-1/4" ID	1-3/8" ID					
Hammer		140 lbs.					
Fall		30"					

Depth/ Elev.	Cas bl/ft	Sample No.	Depth Range	Pen.	Rec.	BLOWS 0-6"	6-12"	12-18"	18-24"	Strata Change	Sample Description	Notes
42 - 223		S-10	39.0-41.0	24	24	5	7	10	12		S-10: Brown, fine sand. little silt, wet	
48 - 217		S-11	44.0-46.0	24	13	6	15	18	23		S-11: Brown/Orange (mottled), fine sand little silt, wet (12" of blow-in, in split-spoon)	
		S-12	49.0-51.0	24	12	7	16	21	25		S-12: Brown, fine sand little silt, trace gravel, wet	
											BORING TERMINATED AT 51 ft	
54 - 211												
60 - 205												
66 - 199												
72 - 193												

Driller: R. Marcoux
Helper: J. Donahue
Inspector: T. Young

COHESIVE CONSISTENCY (Blows/Foot): 0-2 VERY SOFT; 2-4 SOFT; 4-8 MEDIUM STIFF; 8-15 STIFF; 15-30 HARD
COHESIONLESS (Blows/Foot): 0-4 VERY LOOSE; 4-10 LOOSE; 10-30 MEDIUM DENSE; 30-50 DENSE; 50+ VERY DENSE
PROPORTIONS USED: TRACE: 0-10%; LITTLE: 10-20%; SOME: 20-35%; AND: 35-50%

NOTES:

REMARKS: THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES. TRANSITION MAY BE GRADUAL.
WATER LEVEL READINGS HAVE BEEN MADE IN THE DRILL HOLES AT TIMES AND UNDER CONDITIONS STATED ON THE BORING LOGS.
FLUCTUATIONS IN THE LEVEL OF THE GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

TEST BORING LOG

MILLER ENGINEERING & TESTING, INC.
100 Sheffield Road - Manchester, NH 03103
Ph. (603) 668-6016 - Fax: (603) 668-8641

Project: York County Facilities Expansion, Alfred, MA
Project No: 22.226.NH
Date Start: 01-19-23
Date End: 01-19-23
Sheet 1 of 1
Boring No: B-5
Location: See Plan
Approx. Surface Elev: 264

GROUNDWATER OBSERVATIONS						
CASING		SAMPLER		Date	Depth	Casing At	Stabilization Period
Type	HSA	SS		01-19-23	None	26'	Upon Completion
Size	2-1/4" ID	1-3/8" ID					
Hammer		140 lbs.					
Fall		30"					

Depth/ Elev.	Cas bl/ft	Sample No.	Depth Range	Pen.	Rec.	BLOWS 0-6"	6-12"	12-18"	18-24"	Strata Change	Sample Description	Notes
0 - 264		S-1	0.0-1.0	12	7	1					S-1: Forest Mat / Topsoil	
		S-1A	1.0-2.0	12	7			1	9		S-1A: Brown/Orange, fine to medium sand, little silt, trace gravel, trace roots.	
		S-2	2.0-4.0	24	14	6	7	4	7		S-2: Brown, fine to medium sand, trace gravel, trace silt	
6 - 258		S-3	4.0-6.0	24	17	2	5	7	9		S-3: Brown, fine sand, little silt	
		S-4	9.0-11.0	24	17	3	5	6	6		S-4: Brown, fine sand, little silt	
12 - 252												
		S-5	14.0-16.0	24	16	2	5	5	6		S-5: Light brown, fine sand, little silt	
18 - 246												
		S-6	19.0-21.0	24	19	4	8	9	10		S-6: Brown, fine sand, little silt	
24 - 240		S-7	24.0-26.0	24	17	5	7	9	8		S-7: Brown, fine sand, little silt	
											BORING TERMINATED AT 26 ft	
30 - 234												
36 - 228												

Driller: R. Marcoux
Helper: J. Donahue
Inspector: T. Young

COHESIVE CONSISTENCY (Blows/Foot): 0-2 VERY SOFT; 2-4 SOFT; 4-8 MEDIUM STIFF; 8-15 STIFF; 15-30 HARD
COHESIONLESS (Blows/Foot): 0-4 VERY LOOSE; 4-10 LOOSE; 10-30 MEDIUM DENSE; 30-50 DENSE; 50+ VERY DENSE
PROPORTIONS USED: TRACE: 0-10%; LITTLE: 10-20%; SOME: 20-35%; AND: 35-50%

NOTES:

REMARKS: THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES. TRANSITION MAY BE GRADUAL.
WATER LEVEL READINGS HAVE BEEN MADE IN THE DRILL HOLES AT TIMES AND UNDER CONDITIONS STATED ON THE BORING LOGS.
FLUCTUATIONS IN THE LEVEL OF THE GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

TEST BORING LOG

MILLER ENGINEERING & TESTING, INC.
100 Sheffield Road - Manchester, NH 03103
Ph. (603) 668-6016 - Fax: (603) 668-8641

Project: York County Facilities Expansion, Alfred, MA
Project No: 22.226.NH
Date Start: 01-19-23
Date End: 01-19-23
Sheet 1 of 1
Boring No: B-6
Location: See Plan
Approx. Surface Elev: 259

GROUNDWATER OBSERVATIONS						
CASING		SAMPLER		Date	Depth	Casing At	Stabilization Period
Type	HSA	SS		01-19-23	None	21'	Upon Completion
Size	2-1/4" ID	1-3/8" ID					
Hammer		140 lbs.					
Fall		30"					

Depth/ Elev.	Cas bl/ft	Sample No.	Depth Range	Pen.	Rec.	BLOWS 0-6"	6-12"	12-18"	18-24"	Strata Change	Sample Description	Notes
0 - 259		S-1	0.0-1.0	12	4	1	4				S-1: Forest Mat / Topsoil	
		S-1A	1.0-2.0	12	3			4	4		S-1A: Brown/Orange, fine sand, some silt, trace roots	
		S-2	2.0-4.0	24	11	5	7	10	9		S-2: Brown/Orange, fine to coarse sand, little gravel, trace silt	
6 - 253		S-3	4.0-6.0	24	14	3	10	10	13		S-3: Brown, fine to coarse sand, trace gravel, trace silt	
		S-4	9.0-10.0	12	10	7	12				S-4: Brown, fine sand, some silt	
12 - 247		S-4A	10.0-11.0	12	9			14	15		S-4A: Brown, fine sand, trace gravel, trace silt	
		S-5	14.0-16.0	24	17	9	16	18	21		S-5: Brown, fine sand, little silt	
18 - 241		S-6	19.0-21.0	24	17	6	12	13	15		S-6: Tan, fine sand, trace silt, trace gravel	
											BORING TERMINATED AT 21 ft	
24 - 235												
30 - 229												
36 - 223												

Driller: R. Marcoux
Helper: J. Donahue
Inspector: T. Young

COHESIVE CONSISTENCY (Blows/Foot): 0-2 VERY SOFT; 2-4 SOFT; 4-8 MEDIUM STIFF; 8-15 STIFF; 15-30 HARD
COHESIONLESS (Blows/Foot): 0-4 VERY LOOSE; 4-10 LOOSE; 10-30 MEDIUM DENSE; 30-50 DENSE; 50+ VERY DENSE
PROPORTIONS USED: TRACE: 0-10%; LITTLE: 10-20%; SOME: 20-35%; AND: 35-50%

NOTES:

REMARKS: THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES. TRANSITION MAY BE GRADUAL.
WATER LEVEL READINGS HAVE BEEN MADE IN THE DRILL HOLES AT TIMES AND UNDER CONDITIONS STATED ON THE BORING LOGS.
FLUCTUATIONS IN THE LEVEL OF THE GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

TEST BORING LOG

MILLER ENGINEERING & TESTING, INC.
100 Sheffield Road - Manchester, NH 03103
Ph. (603) 668-6016 - Fax: (603) 668-8641

Project: York County Facilities Expansion, Alfred, MA
Project No: 22.226.NH
Date Start: 01-17-23
Date End: 01-17-23
Sheet 1 of 1
Boring No: B-7
Location: See Plan
Approx. Surface Elev: 262

GROUNDWATER OBSERVATIONS						
CASING		SAMPLER		Date	Depth	Casing At	Stabilization Period
Type	HSA	SS		01-17-23	14'	21'	Upon Completion
Size	2-1/4" ID	1-3/8" ID					
Hammer		140 lbs.					
Fall		30"					

Depth/ Elev.	Cas bl/ft	Sample No.	Depth Range	Pen.	Rec.	BLOWS 0-6"	6-12"	12-18"	18-24"	Strata Change	Sample Description	Notes
0 - 262		S-1	0.0-0.5	6	4	2					S-1: Forest Mat / Topsoil	
		S-1A	0.5-1.0	6	4		4	12	14		S-1A: Brown/Orange, fine to medium sand, little silt, trace gravel, trace fine roots.	
		S-1B	1.0-2.0	12	6	15	15	14	12		S-1B: Brown, fine to coarse sand, little gravel, trace silt	
		S-2	2.0-4.0	24	14						S-2: Brown, fine to coarse sand, some gravel, trace silt	
6 - 256		S-3	4.0-6.0	24	15	5	8	9	9		S-3: Brown/Orange (slight mottling), fine sand, trace silt	
		S-4	9.0-11.0	24	18	7	13	13	12		S-4: Light brown/orange (slight mottling), fine sand, trace silt	
12 - 250												
		S-5	14.0-16.0	24	23	2	4	5	6		S-5: Gary, brown, silty clay, wet (10 sand lenses; 3 - 1/2" sand layers)	
18 - 244												
		S-6	19.0-21.0	24	7	1	3	3	3		S-6: Gray, clay, wet	
											BORING TERMINATED AT 21 ft	
24 - 238												
30 - 232												
36 - 226												

Driller: R. Marcoux
Helper: J. Donahue
Inspector: T. Young

COHESIVE CONSISTENCY (Blows/Foot): 0-2 VERY SOFT; 2-4 SOFT; 4-8 MEDIUM STIFF; 8-15 STIFF; 15-30 HARD
COHESIONLESS (Blows/Foot): 0-4 VERY LOOSE; 4-10 LOOSE; 10-30 MEDIUM DENSE; 30-50 DENSE; 50+ VERY DENSE
PROPORTIONS USED: TRACE: 0-10%; LITTLE: 10-20%; SOME: 20-35%; AND: 35-50%

NOTES:

REMARKS: THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES. TRANSITION MAY BE GRADUAL.
WATER LEVEL READINGS HAVE BEEN MADE IN THE DRILL HOLES AT TIMES AND UNDER CONDITIONS STATED ON THE BORING LOGS.
FLUCTUATIONS IN THE LEVEL OF THE GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

SOIL TEST BORING LOGS B-1 THROUGH B-7

FOR PERMITTING PURPOSES ONLY - NOT FOR CONSTRUCTION

OAK POINT ASSOCIATES
architecture engineering planning
231 MAIN STREET, BIDDEFORD, MAINE 04005
(T) 207.283.0193 (F) 207.283.4293
www.oakpoint.com

LASSEL ARCHITECTS
370 MAIN STREET
SOUTH BERWICK, MAINE 03908
207 384 2049

STATE OF MAINE
WADE A. LIPPERT
No. 10428
LICENSED
PROFESSIONAL ENGINEER

DESIGNED BY: WAL
DRAWN BY: DEW
CHECKED BY:
PROJECT: 22204.24

YORK COUNTY
45 KENNEBUNK ROAD
ALFRED, ME 04002

YORK COUNTY REGIONAL TRAINING CENTER AND REGIONAL RECOVERY CENTER
LAYMAN WAY ALFRED, MAINE 04002

SOIL TEST BORING LOGS - 1

SCALE: AS NOTED
DATE: 11/17/2023
DWG: B-001
SHEET: 22 OF 27

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

TEST BORING LOG

MILLER ENGINEERING & TESTING, INC.
100 Sheffield Road - Manchester, NH 03103
Ph. (603) 668-6016 - Fax: (603) 668-8641

Project: York County Facilities Expansion, Alfred, MA
Project No: 22.226.NH
Date Start: 01-17-23
Date End: 01-17-23
Sheet 1 of 2
Boring No: B-8
Location: See Plan
Approx. Surface Elev: 262

GROUNDWATER OBSERVATIONS					
CASING	SAMPLER	Date	Depth	Casing At	Stabilization Period
Type: HSA	SS	01-17-23	14'	51'	Upon Completion
Size: 2-1/4" ID	1-3/8" ID				
Hammer:	140 lbs.				
Fall:	30"				

Depth/ Elev.	Cas b/ft	Sample No.	Sample Depth Range	Pen.	Rec.	BLOWS 0-6"	BLOWS 6-12"	BLOWS 12-18"	BLOWS 18-24"	Strata Change	Sample Description	Notes
0 — 262		S-1	0.0-1.0	12	5	1	3				S-1: Forest Mat / Topsoil	
		S-1A	1.0-2.0	12	8			7	9		S-1A: Brown/Orange, fine sand, little silt, trace gravel, trace roots	
		S-2	2.0-4.0	24	13	9	16	17	21		S-2: Brown, fine to medium sand, little gravel, trace silt	
		S-3	4.0-6.0	24	15	7	10	12	12		S-3: Brown, fine sand, trace silt, trace gravel	
6 — 256												
		S-4	9.0-11.0	24	17	6	10	10	9		S-4: Light brown, fine sand, trace silt, trace gravel	
12 — 250												
		S-5	14.0-16.0	24	17	3	9	13	16		S-5: Brown, silt, some fine sand, wet	
18 — 244		S-6	19.0-21.0	24	13	4	11	10	12		S-6: Brown/Orange (slight mottling), fine sand, little silt, wet	
21 — 241		S-7	24.0-26.0	24	13	5	6	6	6		S-7: Brown/Orange (slight mottling), fine sand, little silt, wet (2 - 2" layers of gray clay near bottom of sample)	
30 — 232		S-8	29.0-31.0	24	15	3	3	5	5		S-8: Gray, clay, wet (6 sand lenses)	
36 — 226		S-9	34.0-35.0	12	11	4	5				S-9: Gray, clay, wet (10 sand lenses)	
		S-9A	35.0-36.0	12	9			11	13		S-9A: Brown/Gray, clayey silt, little fine sand, wet	

Driller: R. Marcoux
Helper: J. Donahue
Inspector: T. Young

COHESIVE CONSISTENCY (Blows/Foot): 0-2 VERY SOFT; 2-4 SOFT; 4-8 MEDIUM STIFF; 8-15 STIFF; 15-30 HARD

COHESIONLESS (Blows/Foot): 0-4 VERY LOOSE; 4-10 LOOSE; 10-30 MEDIUM DENSE; 30-50 DENSE; 50+ VERY DENSE

PROPORTIONS USED: TRACE: 0-10%; LITTLE: 10-20%; SOME: 20-35%; AND: 35-50%

NOTES:

REMARKS: THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES. TRANSITION MAY BE GRADUAL.
WATER LEVEL READINGS HAVE BEEN MADE IN THE DRILL HOLES AT TIMES AND UNDER CONDITIONS STATED ON THE BORING LOGS.
FLUCTUATIONS IN THE LEVEL OF THE GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

TEST BORING LOG

MILLER ENGINEERING & TESTING, INC.
100 Sheffield Road - Manchester, NH 03103
Ph. (603) 668-6016 - Fax: (603) 668-8641

Project: York County Facilities Expansion, Alfred, MA
Project No.: 22.226.NH
Date Start: 01-17-23
Date End: 01-17-23
Sheet 2 of 2
Boring No: B-8
Location: See Plan
Approx. Surface Elev: 262

GROUNDWATER OBSERVATIONS					
CASING	SAMPLER	Date	Depth	Casing At	Stabilization Period
Type: HSA	SS	01-17-23	14'	51'	Upon Completion
Size: 2-1/4" ID	1-3/8" ID				
Hammer:	140 lbs.				
Fall:	30"				

Depth/ Elev.	Cas b/ft	Sample No.	Sample Depth Range	Pen.	Rec.	BLOWS 0-6"	BLOWS 6-12"	BLOWS 12-18"	BLOWS 18-24"	Strata Change	Sample Description	Notes
42 — 220		S-10	39.0-40.8	21	14	5	9	10	12		S-10: Brown to gray, fine sand, little silt, wet	
48 — 214		S-11	44.0-46.0	24	24	8	13	16	17		S-11: Gray, fine sand, little silt, wet	
		S-12	49.0-51.0	24	24	6	9	8	13		S-12: Gray, fine sand, little silt, wet	
51 — 208											BORING TERMINATED AT 51 ft	
60 — 202												
66 — 196												
72 — 190												

Driller: R. Marcoux
Helper: J. Donahue
Inspector: T. Young

COHESIVE CONSISTENCY (Blows/Foot): 0-2 VERY SOFT; 2-4 SOFT; 4-8 MEDIUM STIFF; 8-15 STIFF; 15-30 HARD

COHESIONLESS (Blows/Foot): 0-4 VERY LOOSE; 4-10 LOOSE; 10-30 MEDIUM DENSE; 30-50 DENSE; 50+ VERY DENSE

PROPORTIONS USED: TRACE: 0-10%; LITTLE: 10-20%; SOME: 20-35%; AND: 35-50%

NOTES:

REMARKS: THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES. TRANSITION MAY BE GRADUAL.
WATER LEVEL READINGS HAVE BEEN MADE IN THE DRILL HOLES AT TIMES AND UNDER CONDITIONS STATED ON THE BORING LOGS.
FLUCTUATIONS IN THE LEVEL OF THE GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

TEST BORING LOG

MILLER ENGINEERING & TESTING, INC.
100 Sheffield Road - Manchester, NH 03103
Ph. (603) 668-6016 - Fax: (603) 668-8641

Project: York County Facilities Expansion, Alfred, MA
Project No: 22.226.NH
Date Start: 01-18-23
Date End: 01-18-23
Sheet 1 of 1
Boring No: B-9
Location: See Plan
Approx. Surface Elev: 263

GROUNDWATER OBSERVATIONS					
CASING	SAMPLER	Date	Depth	Casing At	Stabilization Period
Type: HSA	SS	01-18-23	12'	21'	Upon Completion
Size: 2-1/4" ID	1-3/8" ID				
Hammer:	140 lbs.				
Fall:	30"				

Depth/ Elev.	Cas b/ft	Sample No.	Sample Depth Range	Pen.	Rec.	BLOWS 0-6"	BLOWS 6-12"	BLOWS 12-18"	BLOWS 18-24"	Strata Change	Sample Description	Notes
0 — 263		S-1	0.0-0.5	6	4	1					S-1: Forest Mat / Topsoil	
		S-1A	0.5-2.0	18	8		1	2	3		S-1A: Brown/Orange, fine sand, some silt, trace gravel, trace roots	
		S-2	2.0-4.0	24	7	6	5	5	9		S-2: Brown, fine to coarse sand, some gravel, trace silt (rock fragment in tip of split spoon)	
		S-3	4.0-6.0	24	11	6	15	19	15		S-3: Brown, fine to coarse sand, some gravel, trace silt	
6 — 257												
		S-4	9.0-11.0	24	13	5	11	10	8		S-4: Brown, fine to coarse sand, little gravel, trace silt	
12 — 251												
		S-5	14.0-16.0	24	21	4	6	7	9		S-5: Brown, fine sand, trace silt, trace gravel, wet (18" of blow-in, in augers at time of sampling)	
18 — 245		S-6	19.0-21.0	24	11	5	9	9	10		S-6: Brown/Orange, fine sand, little silt, wet (14" of blow-in, in split-spoon)	
21 — 239											BORING TERMINATED AT 21 ft	
30 — 233												
36 — 227												

Driller: R. Marcoux
Helper: J. Donahue
Inspector: T. Young

COHESIVE CONSISTENCY (Blows/Foot): 0-2 VERY SOFT; 2-4 SOFT; 4-8 MEDIUM STIFF; 8-15 STIFF; 15-30 HARD

COHESIONLESS (Blows/Foot): 0-4 VERY LOOSE; 4-10 LOOSE; 10-30 MEDIUM DENSE; 30-50 DENSE; 50+ VERY DENSE

PROPORTIONS USED: TRACE: 0-10%; LITTLE: 10-20%; SOME: 20-35%; AND: 35-50%

NOTES:

REMARKS: THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES. TRANSITION MAY BE GRADUAL.
WATER LEVEL READINGS HAVE BEEN MADE IN THE DRILL HOLES AT TIMES AND UNDER CONDITIONS STATED ON THE BORING LOGS.
FLUCTUATIONS IN THE LEVEL OF THE GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

TEST BORING LOG

MILLER ENGINEERING & TESTING, INC.
100 Sheffield Road - Manchester, NH 03103
Ph. (603) 668-6016 - Fax: (603) 668-8641

Project: York County Facilities Expansion, Alfred, MA
Project No: 22.226.NH
Date Start: 01-18-23
Date End: 01-18-23
Sheet 1 of 1
Boring No: B-10
Location: See Plan
Approx. Surface Elev: 262

GROUNDWATER OBSERVATIONS					
CASING	SAMPLER	Date	Depth	Casing At	Stabilization Period
Type: HSA	SS	01-18-23	14'	26'	Upon Completion
Size: 2-1/4" ID	1-3/8" ID				
Hammer:	140 lbs.				
Fall:	30"				

Depth/ Elev.	Cas b/ft	Sample No.	Sample Depth Range	Pen.	Rec.	BLOWS 0-6"	BLOWS 6-12"	BLOWS 12-18"	BLOWS 18-24"	Strata Change	Sample Description	Notes
0 — 262		S-1	0.0-0.5	6	4	6					S-1: Forest Mat / Topsoil	
		S-1A	0.5-1.5	12	8		6	10			S-1A: Brown/Orange, fine to coarse sand, some silt, trace gravel, trace roots	
		S-1B	1.5-2.0	6	5	23	27	48		10'	S-1B: Brown, fine to medium sand, trace gravel, trace silt	
		S-2	2.0-3.5	18	0						S-2: No recovery	
		S-3	4.0-6.0	24	13	5	11	13	15		S-3: Brown/Orange (slight mottling), fine to medium sand, little gravel, trace silt	
6 — 256												
		S-4	9.0-11.0	24	16	3	7	8	9		S-4: Brown/Orange (slight mottling), fine sand, little silt	
12 — 250												
		S-5	14.0-16.0	24	13	3	8	12	11		S-5: Brown/Orange (mottled), fine sand, some silt, wet	
18 — 244		S-6	19.0-21.0	24	15	5	9	10	14		S-6: Brown, fine sand, little silt (3" layer of clayey silt near top of sample)	
24 — 238		S-7	24.0-26.0	24	11	6	11	21	23		S-7: Brown/Orange (slight mottling), fine sand, little silt (14" of blow-in, in split-spoon)	
											BORING TERMINATED AT 26 ft	
30 — 232												
36 — 226												

Driller: R. Marcoux
Helper: J. Donahue
Inspector: T. Young

COHESIVE CONSISTENCY (Blows/Foot): 0-2 VERY SOFT; 2-4 SOFT; 4-8 MEDIUM STIFF; 8-15 STIFF; 15-30 HARD

COHESIONLESS (Blows/Foot): 0-4 VERY LOOSE; 4-10 LOOSE; 10-30 MEDIUM DENSE; 30-50 DENSE; 50+ VERY DENSE

PROPORTIONS USED: TRACE: 0-10%; LITTLE: 10-20%; SOME: 20-35%; AND: 35-50%

NOTES:

REMARKS: THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES. TRANSITION MAY BE GRADUAL.
WATER LEVEL READINGS HAVE BEEN MADE IN THE DRILL HOLES AT TIMES AND UNDER CONDITIONS STATED ON THE BORING LOGS.
FLUCTUATIONS IN THE LEVEL OF THE GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

TEST BORING LOG

MILLER ENGINEERING & TESTING, INC.
100 Sheffield Road - Manchester, NH 03103
Ph. (603) 668-6016 - Fax: (603) 668-8641

Project: York County Facilities Expansion, Alfred, MA
Project No: 22.226.NH
Date Start: 01-17-23
Date End: 01-17-23
Sheet 1 of 1
Boring No: B-11
Location: See Plan
Approx. Surface Elev: 261

GROUNDWATER OBSERVATIONS					
CASING	SAMPLER	Date	Depth	Casing At	Stabilization Period
Type: HSA	SS	01-17-23	14'	31'	Upon Completion
Size: 2-1/4" ID	1-3/8" ID				
Hammer:	140 lbs.				
Fall:	30"				

Depth/ Elev.	Cas b/ft	Sample No.	Sample Depth Range	Pen.	Rec.	BLOWS 0-6"	BLOWS 6-12"	BLOWS 12-18"	BLOWS 18-24"	Strata Change	Sample Description	Notes
0 — 261		S-1	0.0-1.0	12	7	1	2				S-1: Forest Mat / Topsoil	
		S-1A	1.0-2.0	12	5			4	7		S-1A: Brown, fine to medium sand, little silt, trace gravel	
		S-2	2.0-4.0	24	12	4	5	7	9		S-2: Brown, fine to medium sand, little gravel, trace silt	
		S-3	4.0-6.0	24	13	5	6	9	12		S-3: Brown, fine sand, trace silt, trace gravel	
6 — 255												
		S-4	9.0-11.0	24	12	1	6	7	8		S-4: Brown, fine sand, trace silt, trace gravel	
12 — 249												
		S-5	14.0-16.0	24	15	6	8	8	13		S-5: Brown, fine sand, trace silt, trace gravel, wet (slight mottling near bottom of sample)	
18 — 243		S-6	19.0-21.0	24	12	2	10	13	12		S-6: Brown/Orange (mottled), fine sand, trace silt, trace gravel, wet	
23 — 238		S-7	24.0-26.0	24	13	2	4	10	17		S-7: Brown, silt, little fine sand, wet (2" layer of gray, clay near top of sample)	
30 — 231		S-8	29.0-31.0	24	14	5	11	12	17		S-8: Brown, silt, little fine sand, wet (1.5" layer of gray, clay near bottom of sample)	
											BORING TERMINATED AT 31 ft	
36 — 225												

Driller: R. Marcoux
Helper: J. Donahue
Inspector: T. Young

COHESIVE CONSISTENCY (Blows/Foot): 0-2 VERY SOFT; 2-4 SOFT; 4-8 MEDIUM STIFF; 8-15 STIFF; 15-30 HARD

COHESIONLESS (Blows/Foot): 0-4 VERY LOOSE; 4-10 LOOSE; 10-30 MEDIUM DENSE; 30-50 DENSE; 50+ VERY DENSE

PROPORTIONS USED: TRACE: 0-10%; LITTLE: 10-20%; SOME: 20-35%; AND: 35-50%

NOTES:

REMARKS: THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES. TRANSITION MAY BE GRADUAL.
WATER LEVEL READINGS HAVE BEEN MADE IN THE DRILL HOLES AT TIMES AND UNDER CONDITIONS STATED ON THE BORING LOGS.
FLUCTUATIONS IN THE LEVEL OF THE GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

SOIL TEST BORING LOGS B-8 THROUGH B-11

FOR PERMITTING PURPOSES ONLY - NOT FOR CONSTRUCTION

architecture engineering planning
OAK POINT ASSOCIATES
231 MAIN STREET, BIDDEFORD, MAINE 04005
(T) 207.283.0193 (F) 207.283.4283
www.oakpoint.com

LASSEL ARCHITECTS
370 MAIN STREET
SOUTH BERWICK, MAINE 03908
207 384 2049

STATE OF MAINE
WADE A. LIPPERT
No. 10428
REGISTERED PROFESSIONAL ENGINEER
11/17/23

DESIGNED BY: WAL
DRAWN BY: DEW
CHECKED BY:
PROJECT: 22204.24

YORK COUNTY
45 KENNEBUNK ROAD
ALFRED, ME 04002

YORK COUNTY REGIONAL TRAINING CENTER AND REGIONAL RECOVERY CENTER
LAYMAN WAY ALFRED, MAINE 04002

SOIL TEST BORING LOGS - 2

SCALE: AS NOTED
DATE: 11/17/2023
DWG: B-002
SHEET: 23 OF 27

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

TEST PIT LOG

MILLER ENGINEERING & TESTING, INC.
100 Sheffield Road - Manchester, NH 03103
Ph. (603) 668-6016 - Fax: (603) 668-8641

Project: York County Facilities Expansion, Alfred, MA
Project No: 22.226.NH
Date: 01-25-23
Test Pit No: TP-1
Approx. Surface Elev: 252
Location: See Plan

EXCAVATION EQUIPMENT

Contractor: Miller Engineering & Testing Inc. | MET Representative: T. Young
Operator: R. Marcoux
Make: CAT | Model: 305E | Weather: Overcast
Capacity: cu. yds. | Reach: 8.5'

Depth/ Elev.	Strata Change	Soil Description	Boulder Size/Count	Remarks
0 — 252	.6	Forest Mat / Topsoil (10yr 2/1)		
	1.5	Brown/Yellow, fine sand, some silt, little roots (10yr 5/8)		
3 — 249				
	5	Brown, fine sand, some silt (2.5yr 5/8)		
6 — 246				
9 — 243		Brown, fine to coarse sand, some gravel, trace silt (10yr 5/8) TEST PIT TERMINATED AT 9 ft		
12 — 240				
15 — 237				

Ground Water Observations

Date	Time	Depth	Remarks
01-25-23			None

Pit Dimensions

Length 9'
Width 4.5'
Depth 9'
Volume 364.5 cu. ft.

REMARKS: No Redox indicators

TEST PIT LOG

MILLER ENGINEERING & TESTING, INC.
100 Sheffield Road - Manchester, NH 03103
Ph. (603) 668-6016 - Fax: (603) 668-8641

Project: York County Facilities Expansion, Alfred, MA
Project No: 22.226.NH
Date: 01-25-23
Test Pit No: TP-2
Approx. Surface Elev: 250
Location: See Plan

EXCAVATION EQUIPMENT

Contractor: Miller Engineering & Testing Inc. | MET Representative: T. Young
Operator: R. Marcoux
Make: CAT | Model: 305E | Weather: Overcast
Capacity: cu. yds. | Reach: 8.5'

Depth/ Elev.	Strata Change	Soil Description	Boulder Size/Count	Remarks
0 — 250	.5	Forest Mat / Topsoil (10yr 3/1)		
	2.2	Brown/Yellow, fine sand, some silt, little roots (10yr 5/6)		
3 — 247				
6 — 244				
9 — 241		Brown, fine to medium sand, trace silt (2.5y 7/6) TEST PIT TERMINATED AT 8.5 ft		
12 — 238				
15 — 235				

Ground Water Observations

Date	Time	Depth	Remarks
01-25-23			None

Pit Dimensions

Length 9.5'
Width 5'
Depth 8.5'
Volume 403.75 cu. ft.

REMARKS: Bottom bucket out of test pit was wet, but mottled.
No Redox indicators

TEST PIT LOG

MILLER ENGINEERING & TESTING, INC.
100 Sheffield Road - Manchester, NH 03103
Ph. (603) 668-6016 - Fax: (603) 668-8641

Project: York County Facilities Expansion, Alfred, MA
Project No: 22.226.NH
Date: 01-25-23
Test Pit No: TP-3
Approx. Surface Elev: 258
Location: See Plan

EXCAVATION EQUIPMENT

Contractor: Miller Engineering & Testing Inc. | MET Representative: T. Young
Operator: R. Marcoux
Make: CAT | Model: 305E | Weather: Overcast
Capacity: cu. yds. | Reach: 8.5'

Depth/ Elev.	Strata Change	Soil Description	Boulder Size/Count	Remarks
0 — 258	.5	Forest Mat / Topsoil (10yr 2/1)		
	1.5	Brown/Yellow, fine sand, some silt, little roots (10yr 5/8)		
3 — 255				
	5	Brown/Yellow, fine to coarse sand, some gravel, trace silt (10yr 5/8)	Few Cobbles	
6 — 252				
9 — 249		Brown, fine to medium sand, trace silt, trace gravel (2.5y 6/6) TEST PIT TERMINATED AT 9 ft		
12 — 246				
15 — 243				

Ground Water Observations

Date	Time	Depth	Remarks
01-25-23			None

Pit Dimensions

Length 9'
Width 6'
Depth 9'
Volume 486 cu. ft.

REMARKS: No Redox indicators

TEST PIT LOG

MILLER ENGINEERING & TESTING, INC.
100 Sheffield Road - Manchester, NH 03103
Ph. (603) 668-6016 - Fax: (603) 668-8641

Project: York County Facilities Expansion, Alfred, MA
Project No: 22.226.NH
Date: 01-25-23
Test Pit No: TP-4
Approx. Surface Elev: 252
Location: See Plan

EXCAVATION EQUIPMENT

Contractor: Miller Engineering & Testing Inc. | MET Representative: T. Young
Operator: R. Marcoux
Make: CAT | Model: 305E | Weather: Overcast
Capacity: cu. yds. | Reach: 8.5'

Depth/ Elev.	Strata Change	Soil Description	Boulder Size/Count	Remarks
0 — 252	1	Forest Mat / Topsoil (10yr 3/3)		
	2	Brown/Yellow, fine sand, some silt, little roots (10yr 5/8)		
3 — 249				
6 — 246				
9 — 243		Brown, fine to medium sand, trace silt, trace gravel (2.5y 6/6) (rust staining at 6') TEST PIT TERMINATED AT 8.5 ft		
12 — 240				
15 — 237				

Ground Water Observations

Date	Time	Depth	Remarks
01-25-23			None

Pit Dimensions

Length 9'
Width 6.5'
Depth 8.5'
Volume 497.25 cu. ft.

REMARKS:

TEST PIT LOG

MILLER ENGINEERING & TESTING, INC.
100 Sheffield Road - Manchester, NH 03103
Ph. (603) 668-6016 - Fax: (603) 668-8641

Project: York County Facilities Expansion, Alfred, MA
Project No: 22.226.NH
Date: 01-24-23
Test Pit No: TP-5
Approx. Surface Elev: 255
Location: See Plan

EXCAVATION EQUIPMENT

Contractor: Miller Engineering & Testing Inc. | MET Representative: T. Young
Operator: R. Marcoux
Make: CAT | Model: 305E | Weather: Overcast
Capacity: cu. yds. | Reach: 8.5'

Depth/ Elev.	Strata Change	Soil Description	Boulder Size/Count	Remarks
0 — 255	.75	Forest Mat / Topsoil (10yr 2/1)		
	1.5	Brown/Yellow, fine sand, some silt, little fine roots (10yr 5/8)		
3 — 252				
6 — 249				
9 — 246		Brown, fine to medium sand, trace silt, trace gravel (2.5y 6/6) (rust staining at 5.5') TEST PIT TERMINATED AT 8 ft		
12 — 243				
15 — 240				

Ground Water Observations

Date	Time	Depth	Remarks
01-24-23			None

Pit Dimensions

Length 8'
Width 5.5'
Depth 8'
Volume 352 cu. ft.

REMARKS: Test pit walls collapsing in.

TEST PIT LOG

MILLER ENGINEERING & TESTING, INC.
100 Sheffield Road - Manchester, NH 03103
Ph. (603) 668-6016 - Fax: (603) 668-8641

Project: York County Facilities Expansion, Alfred, MA
Project No: 22.226.NH
Date: 01-24-23
Test Pit No: TP-6
Approx. Surface Elev: 252
Location: See Plan

EXCAVATION EQUIPMENT

Contractor: Miller Engineering & Testing Inc. | MET Representative: T. Young
Operator: R. Marcoux
Make: CAT | Model: 305E | Weather: Overcast
Capacity: cu. yds. | Reach: 8.5'

Depth/ Elev.	Strata Change	Soil Description	Boulder Size/Count	Remarks
0 — 252	.5	Forest Mat / Topsoil (10yr 2/1)		
	.75	Brown/Yellow, fine sand, some silt, little fine roots (10yr 5/8)		
3 — 249	3.3			
		Brown, fine sand, some silt, trace fine roots (2.5y 6/8)		
6 — 246				
	8	Brown, fine to medium sand, trace silt (2.5y 7/6) (rust staining at 6') Brown, fine sand, trace silt, wet (2.5y 6/4) TEST PIT TERMINATED AT 8.3 ft		
9 — 243				
12 — 240				
15 — 237				

Ground Water Observations

Date	Time	Depth	Remarks
01-24-23			None

Pit Dimensions

Length 9.5'
Width 3'
Depth 8.3'
Volume 236.55 cu. ft.

REMARKS: Collapsed at 6'

TEST PIT LOGS TP-1 THROUGH TP-6

FOR PERMITTING PURPOSES ONLY - NOT FOR CONSTRUCTION

NO.	DATE	DESCRIPTION	BY

REVISIONS

OAK POINT ASSOCIATES
architecture engineering planning
231 MAIN STREET, BIDDEFORD, MAINE 04005
(T) 207.283.0193 (F) 207.283.4293
www.oakpoint.com

LASSEL ARCHITECTS
370 MAIN STREET
SOUTH BERWICK, MAINE 03908
207 384 2049

STATE OF MAINE
WADE A. LIPPERT
No. 10428
LICENSED
PROFESSIONAL ENGINEER
11/17/23

DESIGNED BY: WAL
DRAWN BY: DEW
CHECKED BY:
PROJECT: 22204.24

YORK COUNTY
45 KENNEBUNK ROAD
ALFRED, ME 04002

YORK COUNTY REGIONAL TRAINING CENTER AND REGIONAL RECOVERY CENTER
LAYMAN WAY ALFRED, MAINE 04002

TEST PIT LOGS

SCALE: AS NOTED
DATE: 11/17/2023
DWG: B-003
SHEET: 24 OF 27

FIRST RESPONDERS
TRAINING CENTER

KEYNOTES: (THIS SHEET ONLY)

1. DECIDUOUS CANOPY TREE.
2. EVERGREEN TREE.
3. FLOWERING UNDERSTORY TREE.
4. SHRUB PLANTING.
5. PERENNIAL/GROUNDCOVER PLANTING.
6. TURFGRASS (SEED).
7. TURFGRASS (SOD).
8. NATIVE MEADOW/RESTORATION SEED MIX, ALL DISTURBED AREAS UNLESS INDICATED OTHERWISE.
9. BENCH.
10. FLAGPOLE.
11. FACILITY IDENTIFICATION SIGN.

1 TRAINING CENTER LANDSCAPE PLAN
CS101 / LS101 SCALE: 1"=20'

GRAPHIC SCALE
20' 10' 0 20' 40'
1"=20'
CHECK GRAPHIC SCALE BEFORE USING

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

FOR PERMITTING PURPOSES ONLY - NOT FOR CONSTRUCTION

OAK POINT ASSOCIATES
architecture engineering planning
231 MAIN STREET, BIDDEFORD, MAINE 04005
(T) 207.283.0193 (F) 207.283.4283
www.oakpoint.com

LASSEL ARCHITECTS
370 MAIN STREET
SOUTH BERWICK, MAINE 03908
207 384 2049

DESIGNED BY: ATD
DRAWN BY: DEW
CHECKED BY: ATD

PROJECT: 22204.24

YORK COUNTY
45 KENNEBUNK ROAD
ALFRED, ME 04002

YORK COUNTY REGIONAL TRAINING CENTER AND REGIONAL RECOVERY CENTER
LAYMAN WAY ALFRED, MAINE 04002

TRAINING CENTER LANDSCAPE PLAN

SCALE: AS NOTED
DATE: 11/17/2023
DWG: LS101
SHEET: 25 OF 27

TREATMENT FACILITY

KEYNOTES: (THIS SHEET ONLY)

1. DECIDUOUS CANOPY TREE.
2. EVERGREEN TREE.
3. UNDERSTORY FLOWERING TREE.
4. SHRUB PLANTING.
5. PERENNIAL/GROUNDCOVER PLANTING.
6. TURFGRASS (SEED).
7. TURFGRASS (SOD).
8. NATIVE MEADOW/RESTORATION SEED MIX. ALL AREAS UNLESS INDICATED OTHERWISE.
9. BENCH.
10. FACILITY IDENTIFICATION SIGN.

1 CS101 / LS102 TREATMENT FACILITY LANDSCAPE PLAN
SCALE: 1"=20'

GRAPHIC SCALE
20' 10' 0 20' 40'
1"=20'
CHECK GRAPHIC SCALE BEFORE USING

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

FOR PERMITTING PURPOSES ONLY - NOT FOR CONSTRUCTION

OAK POINT ASSOCIATES
architecture engineering planning
231 MAIN STREET, BIDDEFORD, MAINE 04005
(T) 207.283.0193 (F) 207.283.4283
www.oakpoint.com

LASSEL ARCHITECTS
370 MAIN STREET
SOUTH BERWICK, MAINE 03908
207 384 2049

DESIGNED BY: ATD
DRAWN BY: DEW
CHECKED BY:

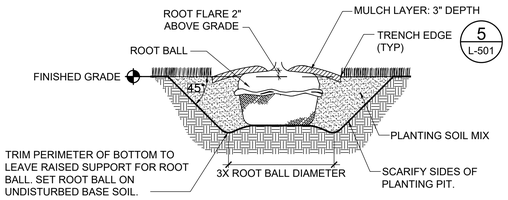
PROJECT: 22204.24

YORK COUNTY
45 KENNEBUNK ROAD
ALFRED, ME 04002

YORK COUNTY REGIONAL TRAINING CENTER AND REGIONAL RECOVERY CENTER
LAYMAN WAY ALFRED, MAINE 04002

TREATMENT FACILITY LANDSCAPE PLAN

SCALE: AS NOTED
DATE: 11/17/2023
DWG: LS102
SHEET: 26 OF 27

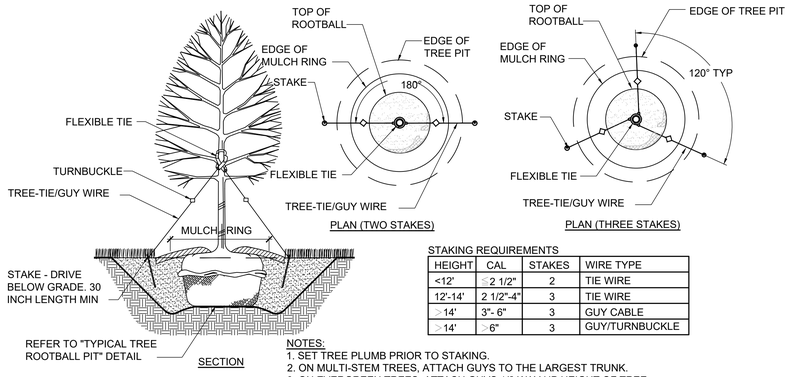


PLANTING PROCEDURE:

1. EXCAVATE CIRCULAR PLANTING PIT 3X THE DIAMETER OF ROOTBALL WITH SIDES SLOPING INWARD AT 45°ANGLE.
2. FILL EXCAVATIONS WITH WATER AND ALLOW TO PERCOLATE. NOTIFY ARCHITECT OF UNEXPECTED WATER SEEPAGE OR RETENTION OF WATER.
3. SET TREE WITH ROOT FLARE 2" ABOVE SURROUNDING FINISHED GRADE. DO NOT BREAK ROOTBALL.
4. REMOVE BURLAP, STRAPS, WIRE CAGE AND OTHER MATERIALS FROM TOP 1/4 OF ROOTBALL.
5. BACK FILL WITH PLANTING SOIL MIX IN LAYERS. TAMP LIGHTLY TO ELIMINATE VOIDS AND AIR POCKETS.
6. WATER THOROUGHLY WHEN ONE-HALF OF PLANTING PIT IS FILLED.
7. PLACE FERTILIZER TABLETS ONE INCH FROM ROOTBALL WHEN ONE-HALF OF PLANTING PIT IS FILLED.
8. PLACE REMAINDER OF FILL AND WATER THOROUGHLY.
9. CONSTRUCT TRENCH EDGE AND MULCH AS SPECIFIED. DO NOT PLACE MULCH WITHIN 3 INCHES OF TRUNK.
10. STABILIZE TREE AS SPECIFIED.

1 TYPICAL TREE ROOTBALL PIT

LS101, LS102 — 1 / L-501 — NOT TO SCALE



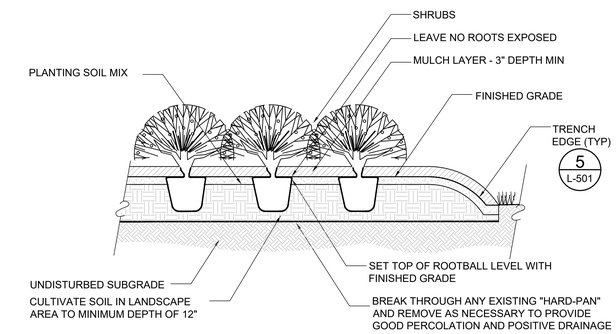
STAKING REQUIREMENTS

HEIGHT	CAL	STAKES	WIRE TYPE
<12'	≥ 2 1/2"	2	TIE WIRE
12'-14'	2 1/2"-4"	3	TIE WIRE
>14'	3"- 6"	3	GUY CABLE
>14'	>6"	3	GUY/TURNBUCKLE

NOTES:
1. SET TREE PLUMB PRIOR TO STAKING.
2. ON MULTI-STEM TREES, ATTACH GUYS TO THE LARGEST TRUNK.
3. ON EVERGREEN TREES, ATTACH GUYS 1/2 WAY UP HEIGHT OF TREE.
4. REMOVE STAKING AND GUYING AFTER ONE YEAR.

2 TREE STAKING AND GUYING

LS101, LS102 — 2 / L-501 — NOT TO SCALE

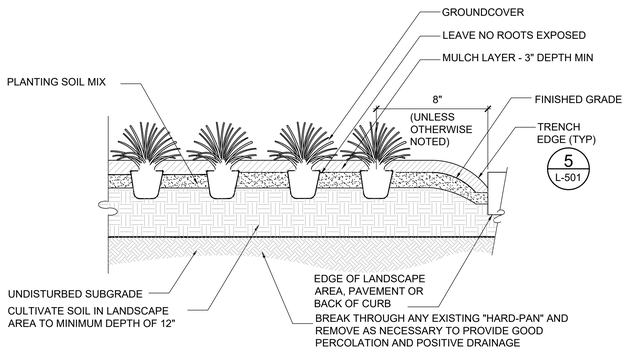


PLANTING PROCEDURE

1. LAY OUT BED AND OUTLINE WITH TRENCH EDGE. PLACE SOIL FROM EDGE WITHIN BED.
2. ROTOTILL BED TO 12" DEPTH. SPREAD 3" MIN. LAYER OF PLANTING SOIL MIX OVER BED. ROTOTILL SOIL MIX INTO TOP OF BED. INSTALL PLANTS AND MULCH. WATER THOROUGHLY.

3 GROUP SHRUB PLANTING

LS101, LS102 — 3 / L-501 — NOT TO SCALE

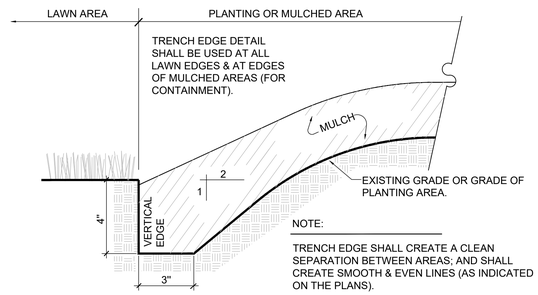


PLANTING PROCEDURE

1. LAY OUT BED AND OUTLINE WITH TRENCH EDGE. PLACE SOIL FROM EDGE WITHIN BED.
2. ROTOTILL BED TO 12" DEPTH. SPREAD 3" MIN. LAYER OF PLANTING SOIL MIX OVER BED. ROTOTILL SOIL MIX INTO TOP OF BED. INSTALL PLANTS AND MULCH. WATER THOROUGHLY.

4 GROUNDCOVER/PERENNIAL PLANTING

LS101, LS102 — 4 / L-501 — NOT TO SCALE

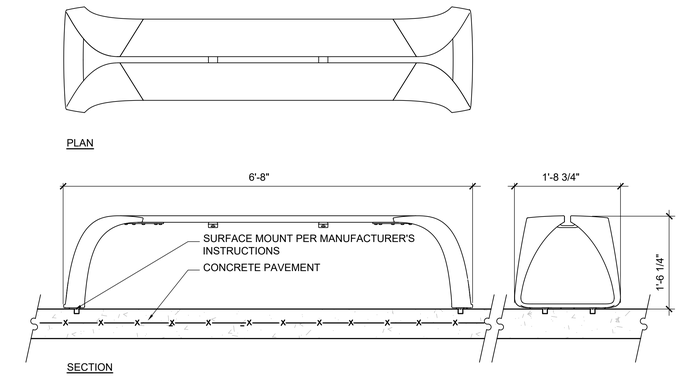


NOTE:

TRENCH EDGE SHALL CREATE A CLEAN SEPARATION BETWEEN AREAS; AND SHALL CREATE SMOOTH & EVEN LINES (AS INDICATED ON THE PLANS).

5 TRENCH EDGE - SECTION

L-501 — 5 / L-501 — NOT TO SCALE



6 BENCH

LS101, LS102 — 6 / L-501 — NOT TO SCALE

FOR PERMITTING PURPOSES ONLY - NOT FOR CONSTRUCTION

NO.	DATE	DESCRIPTION	BY

REVISIONS

OAK POINT ASSOCIATES
architecture engineering planning
231 MAIN STREET, BIDDEFORD, MAINE 04005
(T) 207.283.0193 (F) 207.283.4283
www.oakpoint.com

LASSEL ARCHITECTS
370 MAIN STREET
SOUTH BERWICK, MAINE 03908
207 384 2049

DESIGNED BY: ATD
DRAWN BY: DEW
CHECKED BY: WAL

PROJECT: 22204.24

YORK COUNTY
45 KENNEBUNK ROAD
ALFRED, ME 04002

YORK COUNTY REGIONAL TRAINING CENTER AND REGIONAL RECOVERY CENTER
LAYMAN WAY ALFRED, MAINE 04002

LANDSCAPE DETAILS

SCALE: AS NOTED
DATE: 11/17/2023
DWG: L-501
SHEET: 27 OF 27

APPENDIX C:

Supporting Documents

EXECUTIVE ORDER 11990 PROTECTION OF WETLANDS 8-STEP ANALYSIS (44 CFR PART 9)

TITLE: York County EOC/All-Hazards Training Facility

LOCATION: Jordan Springs Road (Maine Rt-4), Alfred, York County, Maine (43.45278, -70.721150)

PROPOSED ACTION: The County of York, Maine (County) proposes to construct an All-Hazards Training Facilities on a County-owned parcel in Alfred, ME. In addition to providing a training facility for first responders, a portion of the facility would house an Emergency Operations Center (EOC) for the monitoring, preparation for, and management of emergency and disaster events.

DESCRIPTION OF PROJECT:

Under the Proposed Action, the County proposes to complete the following to construct the All-Hazards Training Facility:

- Clearing approximately 18.51-acres of predominantly forested land.
- Constructing a first responder training center, substance abuse treatment facility, burn tower, fire training pond, a 300-ft by 500-ft concrete training pad, vehicle storage, and a K-9 training area.
- Installing updated stormwater management consisting of grassed under-drained soil filters and wet ponds.
- Installing an approximately 10,532-gallon per day septic system between the responder training center and the substance abuse treatment center to manage wastewater from both facilities.
- Tying into existing public water, electric, and telecommunications utilities currently servicing the County Jail.
- Installing a culvert(s) to facilitate the crossing of the emergency vehicles operations course/access road over a delineated forested/shrub wetland.
- The planting of native meadow mix, deciduous or decorative trees, and perennial/shrub beds in unhardened areas of the site following construction

STEP 1 Determine whether the proposed action is located in the 100-year floodplain, which includes the Coastal High Hazard Area (500-year floodplain for critical actions) and/or within a designated wetland. 44 CFR Part 9.7

Per Flood Insurance Rate Map panel 2301910025C dated May 18, 1998, the proposed project area is located outside of all Special Flood Hazard Areas (SFHAs). No Base Flood Elevation or 500-year floodplain have been established for this area; however, based on elevation contours demarcated within design plans prepared by Oak Point Associates and Lassel Architects dated February 03, 2023, the project is located approximately 25-ft above the SFHA at its lowest point.

Based on the U.S. Fish and Wildlife Service's National Wetlands Inventory, a portion of the project plat contains a freshwater forested/shrub wetland (PFO4E). In October of 2021, Mark Hampton Associates, Inc. completed a wetlands delineation of a 70+ acre parcel on which the proposed project would be constructed. Results of the delineation confirmed the presence of forested wetlands as well as the presence of a scrub shrub wetland and a peatland wetland on the subject property, and those wetlands in and around the project site are demarcated on the February 2023 design plans. In the County's Maine Natural Resource Protection Act Permit By Rule application, the project is adjacent to Substantial Vernal Pool Habitat.

STEP 2 Notify the public at the earliest possible time of the intent to carry out an action in a floodplain or wetland, and involve the affected and interested public in the decision-making process. 44 CFR Part 9.8

An Initial Public Notice was posted in the Portland Press Herald on June 23, 2023. Additionally, A Notice of Intent to File and Public Meeting was posted on the County's website at https://www.yorkcountymaine.gov/post/public-notice-notice-of-intent-to-file-and-public-meeting on June 09, 2023. The notice informed the public of the County's intent to file a Site Location of Development Act permit application with the Maine Department of Environmental Protection (ME DEP) and to hold an informational meeting to discuss the anticipated environmental impacts of the proposed project.

STEP 3 Identify and evaluate practicable alternatives to locating the proposed action in a floodplain or wetland (including alternatives sites, actions and the "no action" option). If a practicable alternative exists outside the floodplain or wetland, FEMA must take the practicable alternative. 44 CFR Part 9.9

Alternatives:

1. No Action Alternative – Under the No Action alternative, no FEMA funding would be provided for the construction of the EOC. Since FEMA is only funding the EOC portion of the project, it is likely that some or all of the All-Hazards Training Facility would proceed under other funding sources.

2. Alternative as originally presented to FEMA – This alternative is for the clearing of approximately18.51-acres of undeveloped County-owned land to construct the All-Hazards Training Facility. This would include the construction of the facility's access road/emergency vehicle operations course at the location of an unmaintained forest road through a forested wetland. This would result in the permanent conversion of approximately 4,120-ft^2 of wetland.
3. Alternatives Outside a Wetland (Preferred Alternative) – The County selected the project site because it is the only County-owned parcel large enough to accommodate the proposed facilities. This alternative deletes the access road and emergency vehicles operations course from the proposal and in doing so, eliminates all direct impacts to wetlands.

STEP 4 Identify the potential direct and indirect impacts associated with the occupancy or modification of floodplains or wetlands and the potential direct and indirect support of floodplain or wetland development that could result from the proposed action. 44 CFR Part 9.10

There would be no short or long-term impacts to floodplains.

Short-term construction activities could result in the accidental releases of fuel or lubricants caused by potential minor leaks from construction equipment which could cause contaminants to run off into nearby wetlands. Additionally, ground disturbance caused by construction activities have the potential to cause erosion which could lead to sedimentation in wetlands in and adjacent to the site. This has the potential to be exacerbated by the removal of approximately 18.51-acres of trees and vegetation.

Long-term facility operations could adversely affect wetlands in the area of the site by introducing pollutants, including fuel and lubricants from vehicles and equipment, nutrients, and suspended solids carried by runoff from hardened surfaces; however, stormwater treatment systems incorporated into project design would be expected to minimize these impacts. The installation of on-site septic could introduce wastewater contaminants to nearby wetlands; however, the use of an advance secondary treatment system incorporated in the septic design would be expected to minimize impacts of wastewater contaminants on nearby wetlands.

Although the removal of trees and vegetation during construction has the potential to result in increased erosion of devegetated areas, which could adversely impact the beneficial functions of nearby wetlands, unhardened surfaces within the project area would be planted with deciduous or decorative trees or shrubs which would be expected to stabilize the site in the long term. Additionally, disturbed areas surrounding the proposed facility would be planted with native meadow and/or wildflower mix which would provide additional erosion control and buffer between wetlands areas.

STEP 5 Minimize the potential adverse impacts of the proposed action and support to or within floodplains or wetland to be identified under Step 4, restore and preserve the natural and beneficial values served by floodplains and wetlands. 44 CFR Part 9.11

The Proposed Action would minimize potential wetland impacts identified in Step 4 through a combination of project design and best management practices. BMPs that are expected to reduce or minimize adverse wetlands impacts include the following:

- The County must a obtain a permit or authorization from the ME DEP under the Maine Stormwater Management Law and comply with all conditions of that permit. This includes compliance with the Basic Standards set forth under the Maine Stormwater Rule (Maine Code of Rules 096 Chapter 500). The Basic Standards would be implemented through BMPs including but not limited to:
    - The use of sediment barriers placed down gradient of exposed soils;
    - The installation of inlet protection on downstream structures;
    - The use of mulch or temporary seeding for temporary stabilization;
    - The use of erosion control blankets, netting, or rip rap in erosion-prone areas (e.g. steep slopes and vegetated ditches);
    - Pipe protection (rip rap) at storm drain outfalls; and
    - Excavation dewatering (silt bags or sediment ponds) when excavating below groundwater
- The County must obtain a Maine Pollutant Discharge Elimination System (MPDES) permit from the ME DEP including authorization under the Maine Construction General Permit and comply with any requirements of that permit;
- ME DEP – NRPA Permit by Rule authorization has been received. Authorization # PBR_ID-78222; and
- The implementation of a deed restriction which would prohibit the use of phosphorous containing fertilizers which could be transported to nearby wetlands.

Design features that are expected to reduce minimize or avoid adverse wetlands impacts include the following:

- The installation of lined wet ponds and grassed under-drained soil filters which would capture sediment and reduce the amount of pollutants entering nearby wetlands from site runoff;
- The installation of an engineered septic system with advance treatment which would reduce wastewater contaminants by approximately 50 percent compared to a traditional system and would reduce contaminant transport to wetlands in and around the site; and

- The planting of trees, shrubs, and wildflowers/native meadow in unhardened areas in and around the proposed facility which would stabilize soils, prevent erosion, and act as a buffer around wetlands in the area of the site.

STEP 6 Reevaluate the proposed action to determine first, if it is still practicable in light of its exposure to flood hazards, the extent to which it will aggravate the hazards to others, and its potential to disrupt floodplain and wetland values and second, if alternatives preliminarily rejected at Step 3 are practicable in light of the information gained in Steps 4 and 5. FEMA shall not act in a floodplain or wetland unless it is the only practicable location. 44 CFR Part 9.9

The Proposed Action remains practicable because it meets the purpose and need of the project to provide an EOC and emergency response training center for the County while minimizing adverse impacts to wetland through measures described in Step 5. Minimization and avoidance of wetlands impacts would be accomplished through a combination of project design and BMPs.

STEP 7 Prepare and provide the public with a finding and public explanation of any final decision that the floodplain or wetland is the only practicable alternative. 44 CFR Part 9.12

Public notice will be provided by FEMA and York County as part of the Environmental Assessment process.

STEP 8 Review the implementation and post - implementation phases of the proposed action to ensure that the requirements stated in 44 CFR Part 9.11 are fully implemented. Oversight responsibility shall be integrated into existing processes.

The FEMA grant would be conditioned for the project proponent to secure federal, state, and local permits for work in the wetland. Compliance with all federal, state, and local permits will be determined as part of the grant closeout process. Full detail of the conditions placed on the grant can be found in the Record of Environmental Consideration.