

Section 14

Basic Standards

TABLE OF CONTENTS

14.0	EROSION AND SEDIMENT CONTROL.....	14-1
14.1	Introduction.....	14-1
14.2	Construction of Roads and Turbine Pads.....	14-2
14.3	Transmission Line Construction.....	14-2
14.4	Temporary Erosion Control Measures.....	14-2
14.5	Temporary Sediment Barriers.....	14-5
14.6	Overwinter Construction and Stabilization.....	14-6
14.7	Permanent Erosion Control Measures.....	14-7
14.8	Permanent Erosion Control Devices.....	14-8

TABLES

Table 14.1.	Temporary Seeding Specifications	14-3
Table 14.2.	Temporary Mulching and Seeding Schedules.....	14-4
Table 14.3.	Permanent Seeding Specifications	14-7

ATTACHMENT

Attachment 14-1 Third-Party Inspection Form

14.0 EROSION AND SEDIMENT CONTROL

14.1 Introduction

The Canton Mountain Wind Project (Project) includes approximately 7,175 linear feet of gravel road improvement and temporary widening on Ludden Lane; 8,600 linear feet of improvement and temporary widening on a private, unnamed logging road; and approximately 10,600 linear feet of new roads, including (i) a 3,425-foot-long access road to the ridgeline, (ii) an approximately 7,175-linear-foot ridgeline road that will connect the wind turbine tower foundations, and (iii) a 360-foot-long access road to the operations and maintenance (O&M) building. The Project also includes a 3,500-square-foot O&M building and an approximately 7,500-square-foot parking lot. When construction of the Project is complete, the total impervious area will be 9 acres, and the total developed area will be 9.6 acres. Power from the turbines will be collected in a 34.5-kilovolt (kV) underground collector line system buried within the ridgeline road work limits, which will transition to an aboveground collector line approximately 3,425 feet south of the intersection of the proposed access road and the ridgeline road. From there it will continue aboveground, mounted on wood poles, for approximately 1.6 miles down the access road towards Ludden Lane. The line will intersect the existing right-of-way built for the Saddleback Ridge Wind Project (Maine Department of Environmental Protection [Maine DEP] license L-25137-24-A-N/L-25137-TG-B-N). The line will travel 1.10 miles within the existing utility corridor to the planned Central Maine Power Company (CMP) Ludden Lane Substation that will connect the Project to a 115-kV regional transmission line.

Disturbed areas adjacent to proposed project facilities will be restored and revegetated following construction. Initially, new access roads will be 24 feet wide, and the ridgeline roads will be 32 feet wide to allow for large construction equipment. Following construction, both the new access and ridgeline roads will be reduced to a final width of 12 feet by placing top soil, seeding and mulching to establish natural vegetation on the downgradient portion of the road side. These roads will also have periodic turnouts approximately 10 feet wide to allow for passing vehicles. The road base will remain in place and the vegetated portion (12 feet for the new access road and 20 feet for the ridgeline road) will be maintained as permanent vegetated meadow buffers. The existing access road, Ludden Lane, which is currently 14 to 18 feet wide will be widened to 16 to 20 feet during construction, and will be restored to its original width following construction.

Soil erosion is the detachment of soil particles by water, ice, gravity, or wind. This is a naturally occurring process that can also be caused by human activities that involve soil disturbance. Soil erosion can lead to sedimentation when eroded soil particles are carried by water and deposited and can have adverse effects on aquatic and terrestrial natural resources.

The erosion potential for projects involving soil disturbance on mountainsides can be very high. Large watersheds comprised of steep slopes and shallow-to-bedrock soils (with a low capacity to absorb water) can result in unusually large volumes of runoff moving at high velocities. These factors can contribute to erosion of disturbed soils and lead to sedimentation downstream. However, the linear nature of the project design, along with carefully designed stormwater management and erosion control measures, reduces the potential for substantive erosion and sedimentation downstream from the Project. In addition, Canton Mountain Wind, LLC (CMW) has proposed construction of the Project in segments (as described below in Section 14.2), thereby reducing the extent of exposed, disturbed soils at any given time. CMW plans to

utilize Maine DEP's Third-Party Inspection Program and will contract an independent environmental inspector approved by the Maine Department of Environmental Protection.

14.2 Construction of Roads and Turbine Pads

Construction of all roads and turbine pads will be performed in accordance with design specifications to avoid damaging, and thus changing the runoff characteristics, of adjacent undisturbed surroundings. It is best to construct the roads in the spring, summer, or fall. Winter construction is also possible; however, techniques for overwinter construction and stabilization, explained in Section 14.6, shall be used. The roads will be constructed in segments. Each segment shall not exceed an area that can be stabilized within one week. While it is acceptable to clear vegetation from the entire road system in one effort, any further construction involving soil disturbance or grading must be done incrementally. Clearing is defined as the cutting and removing of over-story vegetative cover. After clearing, erosion control barriers must be installed. Only then can grubbing and earthwork commence. Grubbing is defined as the removal of grass, stumps, roots, shrubs, and low trees, and it is the initial action that exposes soils to erosive forces. Earthwork is defined as the movement of soil by mechanical means. Earthwork includes excavation, filling, shaping, trenching, placement of gravel, and grading. Sediments trapped by erosion control barriers will be removed during construction in accordance with project specifications.

Each segment of road shall be properly finished and stabilized before removing the erosion control barriers. Temporary and permanent erosion and sedimentation control techniques proposed as part of the Project are described in the following sections.

14.3 Transmission Line Construction

Existing roads and temporary construction access within the transmission corridor will be used to access the transmission line during construction and no new impervious area will be created. The transmission line along the access and ridgeline roads will be installed during road construction, so that no additional erosion control measures, unless near a protected resource, beyond those used for road construction will be needed. The installation of the transmission line within the existing Saddleback Ridge Wind corridor will create little chance of erosion as the only work proposed includes setting transmission poles, installing guy wires to secure the poles, and stringing the transmission wire. However, erosion control methods will be implemented when needed, according to the following "toolbox" system (also found on sheet C-411-29 in Exhibit 2):

- In areas showing a high groundwater table, or where a high water table is suspected, timber matting should be used to avoid damaging the existing surface.
- In areas where there is a high possibility of erosion, erosion control barriers will be used.
- If underdrainage is opened during the course of construction, slash can be used to seal the rut.
- Any area that is damaged during construction must be restored upon completion.

14.4 Temporary Erosion Control Measures

Exposed soils shall be seeded, mulched, and stabilized. Temporary seeding and mulching will be used to create temporary vegetated cover that will reduce erosion and sedimentation by stabilizing disturbed areas

that will not be brought to final grade within 30 days and up to one year. This is the most efficient way to control sheet and rill erosion.

Temporary Vegetation planted in compliance with the Temporary Seeding Specifications in Table 14.1 will be applied to exposed soils that are not to be fine-graded within 30 days of grubbing or earthwork.

Table 14.1. Temporary Seeding Specifications

Seed Type	Pounds of Seed per Acre	Seeding Depth	Recommended Seeding Dates	Remarks
Winter Rye	112	1-1.5 in.	8/15 – 10/15	Good for fall seeding. Select a hardy species, such as Aroostook Rye.
Oats	80	1-1.5 in.	4/15 – 7/1 8/15 – 9/15	Best for spring seeding. Early seeding will die when winter weather moves in, but mulch provides protection.
Annual Rye Grass	40	.25 in.	4/15 – 7/1	Grows quickly but is of short duration. Use where appearance is important. With mulch, seeding may be done throughout growing season.
Sudan Grass	40	.5-1 in.	5/15 – 8/15	Good growth during hot summer periods.
Perennial Rye Grass	40	.25 in.	8/15 – 9/15	Good cover, longer lasting than annual rye grass. Mulching will allow seeding throughout growing season.
Dormant Seeding Mix		1 in.	10/15 – 4/15	Refer to Temporary Mulching and/or Permanent Vegetation.
Winter Rye	112			
Annual Rye	40			

Where soil has been compacted by construction operations, loosen the soil to a depth of two inches before applying seed. Mulch will be applied over all seeded areas.

Temporary Mulching will be performed on exposed soils to protect them from erosion and aid the growth of vegetation. Hay or straw mulches, erosion control mix, and erosion control blankets can be used. Hay or straw mulches or erosion control mix can be applied to any disturbed slopes less than 2:1. Erosion control blankets or netted hay or straw mulches can be used to stabilize slopes between 2:1 and 1:1. Any slope greater than 2:1 that will not hold mulch and seed will require riprap or other stabilization. The project engineer, in consultation with the third-party environmental inspector, will determine the most practical mulch for each scenario at the site. In sensitive areas, such as within 100 feet of streams, wetlands, and in lake watersheds, temporary mulching must be applied within seven days of exposing the soil and prior to storm events. In other areas, the time period can range from 14 to 30 days according to site conditions. Areas that have been seeded will be mulched immediately following seeding. Areas that cannot be seeded during the growing season (April 15 – September 15) will be mulched for overwinter protection and will be seeded at the beginning of the next growing season. These areas will be mulched to a depth of four inches for the overwinter period. If permanent vegetation is desired, the mulch will be removed in the springtime, and the area will be seeded and re-mulched. Temporary mulching rates are shown in Table 14.2 below.

Table 14.2. Temporary Mulching and Seeding Schedules

Maximum Expected Interim Period ¹ (Days)	Temporary Mulching ² (Hay)	Temporary Seeding
0-7 (0-2)	None	None
7-30 (2-14)	2 bales per 1,000 sq.ft.	None
30-60 (14-30)	2 bales per 1,000 sq.ft.	Per temporary seeding specifications in Table 14.1
More than 7 days during winter season	4 bales per 1,000 sq.ft.	Dormant seeding only ³

1. Values in parentheses indicates interim period for sensitive and critical areas. Interim Period is defined as any period where exposed soil is not actively being worked on.
2. Mulch application rates shall be doubled for winter construction.
3. Refer to Section 14.6 for dormant seeding procedures.

Hay or Straw Mulches shall be applied at a rate of two bales per 1,000 square feet and shall cover 75% to 90% of ground surface. If the mulch is applied to slopes between 2:1 and 1:1, netting will be used to anchor the mulch. Netting can be jute, wood fiber, or plastic. Only clean straw mulch will be used within wetlands and within 25 feet of state or federal jurisdictional streams.

Erosion Control Mix mulch will be used to prevent erosion. This mulch will consist of primarily organic material and may include shredded bark, stump grindings, composted bark or other acceptable products in compliance with project specifications. The erosion control mix will be used as a stand-alone reinforcement on slopes up to 2:1, frozen ground or forested areas, and at the edge of gravel parking areas and areas under construction. Erosion control mix shall not be used within jurisdictional wetlands or waterbodies. Erosion control mix composition shall meet the standards listed on sheets C-410-29 and C-411-29 in Exhibit 1.

Erosion Control Blankets can be used for slopes steeper than 2:1. These blankets are a combination of mulch and netting designed to retain soil moisture and modify soil temperature. Erosion control blankets should be used on the base of grassed waterways, steep slopes, and on disturbed soils within 100 feet of lakes, streams, and wetlands during the growing season (April 15 – September 15). During the late fall and winter seasons (September 15 – April 15), blankets should also be added to side slopes of grassed waterways and moderate slopes, in addition to areas mentioned above.

Topsoil will be stockpiled uphill of erosion and sediment control barriers for reuse on-site. These stockpiles will be placed in areas of minimal erosion, such as flat surfaces. Stockpiles remaining for extended periods of time will be stabilized and surrounded by erosion control barriers.

Stabilized Construction Exits will reduce the amount of sediment tracked onto public roads. The Project will have one permanent construction exit from Ludden Lane in Canton. All project roads will contain a road surface topped with 4-inch stone. The exit road will not have any additional stabilization unless CMW's engineer or a third-party environmental inspector determines that a stabilized construction exit is warranted; CMW will employ the appropriate protective measures.

Maintenance will be performed to all erosion control elements as needed. All mulches must be inspected weekly, especially after significant rainstorm events. Significant rainstorm events are defined as rainfall of a half-inch or more in a 24-hour period. If less than 90% of the soil surface is covered in mulch, additional mulch will be immediately added. Nets must be inspected after all rainstorm events for failure. If washouts occur, the nets will be reinstalled after damage to the slope has been repaired. These inspections will take place until 95% of the soil is vegetated with grass or stabilized with mulch.

14.5 Temporary Sediment Barriers

Sediment barriers will be installed on the downhill side along the contour of all construction. Erosion control mix berms and geosynthetic berms will be used to intercept and retain small amounts of sediment from disturbed and unprotected areas during access and ridgeline road construction. Silt fences, hay bales, or other means may be used as determined by the third-party environmental inspector and shall be utilized wherever needed. Sediment barriers will not be installed in areas of concentrated flow. Sediment barriers shall be installed prior to any soil disturbance in the contributing drainage area above them. Silt fences or hay bales will be used in areas where entrenchment and driving stakes are possible. Erosion control mix berms or continuous contained berms will be used where soil cover is shallow or ground is frozen. Sediment barriers will be doubled within 100 feet of any wetland or stream. The contractor and/or project engineer, in consultation with the third-party environmental inspector, will determine the most practical sediment barrier for each scenario at the site.

Silt Fences utilize synthetic filter fabrics. The synthetic fabric is attached with a series of one-inch square hardwood stakes. The filter fabric will be a pervious sheet of propylene, nylon, polyester, or ethylene yarn. The filter fabric will contain ultraviolet inhibitors and stabilizers to provide a minimum of six months of expected usable construction life at a temperature range of 0 degrees (°) Fahrenheit (F) to 120°F. The height of the silt fence shall not exceed 36 inches. If joints between the filter fabric are necessary, they will be spliced at stakes with an overlap of 6 inches. Stake spacing shall not exceed 6 feet. Ten inches of the filter fabric shall be imbedded in a 4-inch-wide by 6-inch-deep trench located on the upgradient side of the barrier. The trench will then be backfilled and compacted over the filter fabric. Pre-fabricated silt fences are acceptable if installed to the manufacturer's standards.

Hay Bales will be placed in a single row, lengthwise along the contour, with ends tightly abutting adjacent hay bales. The hay bale barrier will be entrenched to a depth of 6 inches and backfilled. Soil backfill will be used to conform to the ground level on the downhill side and shall be built up against the uphill side of the barrier. At least two hardwood stakes shall be driven a minimum of 12 inches into the ground. The gaps between bales shall be wedged with hay to prevent water from leaking through the bales.

Erosion Control Mix Berms primarily consist of organic material and may include shredded bark, stump grindings, composted bark, or acceptable manufactured products. The mix will contain a well-graded mixture of particles and may contain rocks less than 4 inches in diameter. The mix will also abide by certain standards listed on sheet C-510-33 in Exhibit 1. The erosion control mix berms must be placed along a relatively level contour. The barrier should be a minimum of 12 inches high, as measured on the uphill side of the barrier. These berms are very effective on frozen or heavily rooted ground. Erosion control berms will not be used within wetlands.

Geosynthetic Berms consist of a filter sock full of erosion control mix. The organic mix is placed in the synthetic tubular netting and performs as a sturdy sediment barrier. This method works well in areas where trenching is not possible, such as on frozen ground or bedrock outcrops. The detail is shown on sheet C-5104-33.

Maintenance will be performed on all erosion control elements as needed. Sediment barriers will be inspected weekly and immediately after each significant rainfall event. They will be repaired if there is any sign of erosion or sedimentation below them. Damaged or degraded fabric on a silt fence will be replaced immediately. Sediment deposits should be removed after each storm event. They must be removed when deposits reach one-half the height of the barrier. Any sediment remaining after a barrier is no longer needed should be graded, prepared, and seeded.

14.6 Overwinter Construction and Stabilization

Overwinter construction and stabilization will be necessary if an area of construction has not been stabilized with a road gravel base, 75% mature vegetation cover, or riprap by November 15. The winter construction period is November 1 to April 15. Winter excavation and earthwork shall be conducted on no more than 1 acre of the site without stabilization at one time. Exposed areas are to be limited to areas (1) where work will occur within 15 days and (2) that can be mulched in one day prior to any snow event. Areas within 100 feet of any natural resource and lacking 75% mature vegetative cover shall be mulched by December 1 and protected with an erosion control cover. A double row of sediment barriers will be placed between the disturbed area and any natural resource during winter construction. When the ground is frozen, sediment barriers may consist of erosion control berms and continuous contained berms. Mulch application shall be doubled to 4 bales per 1,000 square feet of hay or straw mulch or a 4-inch layer of erosion control mix. Mulch will be applied after snow is removed to a 1-inch depth. All areas will be properly stabilized with anchored hay or straw or erosion control matting at the end of each day of final grading. Permanent seeding shall not be attempted by the contractor, unless advised by the engineer. Dormant seeding will be applied between October 15 and April 15 at the appropriate specified rates (Table 14-1).

Site Stabilization Schedule Before Winter

September 15	All disturbed areas must be seeded and mulched. All slopes will be stabilized, seeded, and mulched. All grass lined ditches must be stabilized with mulch or an erosion control blanket.
October 1	All disturbed areas to be protected with an annual grass must be seeded at a seeding rate of 3 pounds per 1,000 square feet and mulched.
November 15	All stone-lined ditches and channels must be constructed and stabilized. All slopes requiring riprap must be constructed by this date.
December 1	All disturbed areas where the growth of vegetation fails to be at least 3 inches tall or at least 75% of the disturbed soil is covered by vegetation, must be protected for over-winter.

All disturbed areas shall be inspected in the spring. Any damaged spots will be repaired. Spring seeding will commence as shown in Table 14-3. An established vegetative cover means a minimum of 85 to 90% of an area is vegetated with vigorous growth.

14.7 Permanent Erosion Control Measures

Permanent Vegetation cover will be used on most disturbed areas to permanently stabilize the soil and reduce sediment and runoff. Spring seeding usually gives the best results for all seed mixes. Permanent seeding will be done 45 days prior to the first killing frost or, as an alternative to permanent seeding, dormant seeding can be utilized with mulch after the first killing frost and before snowfall. Permanent seeding will be applied in compliance with specifications provided in Table 14.3.

Table 14.3. Permanent Seeding Specifications

September 15 – May 15 (Over-winter)		May 15 – September 15	
Seed Type	Percent by Weight	Seed Type	Percent by Weight
Winter Rye	80%	Red Fescue	50%
Red Fescue	10%	Sheep Fescue	25%
Sheep Fescue	5%	Red Top	5%
Red Top	1%	White Clover	10%
White Clover	2%	Annual Rye	10%
Annual Rye	2%		

Riprap Slope Stabilization will be used on slopes between 1:1 and ½:1 and in areas where existing conditions require it. Riprap is a permanent, erosion-resistant ground cover constructed of large, loose, angular or sub-angular rounded stone. Riprap protects the soil from concentrated runoff and slows the velocity of runoff, which enhances the potential for infiltration. The application of riprap is composed of three sections. Before riprap is added to a slope, the surface is to be covered with a geosynthetic filter fabric or a gravel filter blanket. Once the filter fabric or blanket is secured, it is covered with a layer of riprap. These layers are stabilized at the toe of the slope with larger entrenched stones. The riprap will have a mean size (D₅₀) of 6 inches. The riprap can be produced on-site using a rock crusher as long as it meets project specifications. Any slope receiving riprap stabilization will first be cleared of trees, stumps, and other brush. If fill is added to the area, it will be compacted to 95% determined by Standard Proctor Density. The geotextile filter fabric should be placed directly on the prepared slope. The edges should overlap and be entrenched at the upper and lower ends of the slope. The entrenched toe can be secured with larger stone. The fabric will be anchored to the slope according to the manufacturer’s recommendations. The riprap will then be added to its full thickness in one operation. The finished slope shall not contain pockets of small stones or clusters of large stones. Hand placing may be necessary to achieve a good distribution.

Maintenance: Riprap-stabilized slopes require inspections in the spring, in the fall, and after severe storms during construction and operation of the Project. Severe slumping or sliding may indicate that the slope is failing internally. Careful inspection of the land located on both sides of the riprap is necessary because of the potential for erosion to be accelerated in these areas.

Dust Control is necessary when disturbed soils are exposed to wind. When the soil dries out dusty conditions can occur. Dust can cause off-site damage, be a health hazard to humans, wildlife and plant life, or become a traffic safety hazard. Dust will be reduced by using phasing of construction to minimize the area of disturbed land at one time. Mulching and vegetative cover will also be used to reduce dust, and rock crushers will utilize water sprays to control dust.

14.8 Permanent Erosion Control Devices

Riprap Ditches will be used to protect road surfaces from erosion and to slow runoff velocities. These riprap-lined ditches will be installed along the upgradient shoulder of proposed roads. Stormwater will be intercepted in these ditches, slowing runoff and preserving the condition of gravel roads. The ditch will be constructed in two layers. First, a layer of filter fabric is laid and secured, similar to riprap slope stabilization. Riprap is then added on the filter fabric cautiously. The riprap will be Maine Department of Transportation (DOT) 703.29 Stone Ditch Protection specification and will have a D_{50} of 6 inches (shown on sheet C-511-33 in Exhibit 1). The riprap can be produced on-site using a rock crusher. The finished slope shall not contain pockets of small stone or clusters of large stones. Hand placing may be necessary to achieve a good distribution.

Pipes/Culverts will be used to carry water from upgradient roadside ditches under the road. These culverts and pipes are spaced incrementally along the road to drain the stormwater based on flow anticipated stormwater flow characteristics and topographic conditions. The culverts vary between 12- and 18-inch pipes flared at both ends. Culvert inlets and outlets are detailed on sheets C-503-33 and C-504-33 in Exhibit 1.

Maintenance: The inlet and outlet of all culverts and pipes will be inspected in the spring, in late fall, and after significant rain events. Sediment collected at these locations will be removed, as needed, after each inspection to maintain capacity of the culverts.

Level Spreaders/Ditch Turnouts are used at the outlet of culverts and ditches to convert concentrated flow into sheet flow. Sheet flow is more natural and reduces erosion and the movement of sediment. Level spreaders must be installed with 0% grade on the spreader lip to ensure a uniform distribution of flow. Each level spreader shall have a riprap receiving area with the capacity to pass the flow without erosion. The receiving area shall be stable prior to the construction of the level spreader. If a vegetative cover is required downgradient, level spreaders must be installed during the growing season. Level spreaders and ditch turnouts are detailed on sheets C-503-33 and C-504-33 in Exhibit 1.

Maintenance: Level spreaders will be inspected at least once a year for signs of channelization or sedimentation. Damage to level spreaders or associated ditches will be repaired immediately. Level spreaders filled with sediment will be cleaned out regularly.

Attachment 14-1
Third-Party Inspection Form

Special Condition
for
Third Party Inspection Program

THIRD-PARTY INSPECTION PROGRAM

1.0 THE PURPOSE OF THE THIRD-PARTY INSPECTION

As a condition of this permit, the Maine Department of Environmental Protection (MDEP) requires the permit applicant to retain the services of a third-party inspector to monitor compliance with MDEP permit conditions during construction. The objectives of this condition are as follows:

- 1) to ensure that all construction and stabilization activities comply with the permit conditions and the MDEP-approved drawings and specifications,
- 2) to ensure that field decisions regarding erosion control implementation, stormwater system installation, and natural resource protection are based on sound engineering and environmental considerations, and
- 3) to ensure communication between the contractor and MDEP regarding any changes to the development's erosion control plan, stormwater management plan, or final stabilization plan.

This document establishes the inspection program and outlines the responsibilities of the permit applicant, the MDEP, and the inspector.

2.0 SELECTING THE INSPECTOR

At least 30 days prior to starting any construction activity on the site, the applicant will submit the names of at least two inspector candidates to the MDEP. Each candidate must meet the minimum qualifications listed under section 3.0. The candidates may not be employees, partners, or contracted consultants involved with the permitting of the project or otherwise employed by the same company or agency except that the MDEP may accept subcontractors who worked for the project's primary consultant on some aspect of the project such as, but not limited to, completing wetland delineations, identifying significant wildlife habitats, or conducting geotechnical investigations, but who were not directly employed by the applicant, as Third Party inspectors on a case by case basis. The MDEP will have 15 days from receiving the names to select one of the candidates as the inspector or to reject both candidates. If the MDEP rejects both candidates, then the MDEP shall state the particular reasons for the rejections. In this case, the applicant may either dispute the rejection to the Director of the Bureau of Land and Water Quality or start the selection process over by nominating two, new candidates.

3.0 THE INSPECTOR'S QUALIFICATIONS

Each inspector candidate nominated by the applicant shall have the following

minimum qualifications:

- 1) a degree in an environmental science or civil engineering, or other demonstrated expertise,
- 2) a practical knowledge of erosion control practices and stormwater hydrology,
- 3) experience in management or supervision on large construction projects,
- 4) the ability to understand and articulate permit conditions to contractors concerning erosion control or stormwater management,
- 5) the ability to clearly document activities being inspected,
- 6) appropriate facilities and, if necessary, support staff to carry out the duties and responsibilities set forth in section 6.0 in a timely manner, and
- 7) no ownership or financial interest in the development other than that created by being retained as the third-party inspector.

4.0 INITIATING THE INSPECTOR'S SERVICES

The applicant will not formally and finally engage for service any inspector under this permit condition prior to MDEP approval or waiver by omission under section 2.0. No clearing, grubbing, grading, filling, stockpiling, or other construction activity will take place on the development site until the applicant retains the MDEP-approved inspector for service.

5.0 TERMINATING THE INSPECTOR'S SERVICES

The applicant will not terminate the services of the MDEP-approved inspector at any time between commencing construction and completing final site stabilization without first getting written approval to do so from the MDEP.

6.0 THE INSPECTOR'S DUTIES AND RESPONSIBILITIES

The inspector's work shall consist of the duties and responsibilities outlined below.

- 1) Prior to construction, the inspector will become thoroughly familiar with the terms and conditions of the state-issued site permit, natural resources protection permit, or both.
- 2) Prior to construction, the inspector will become thoroughly familiar with the proposed construction schedule, including the timing for installing and removing erosion controls, the timing for constructing and stabilizing any basins or ponds, and the deadlines for completing stabilization of disturbed soils.

- 3) Prior to construction, the inspector will become thoroughly familiar with the project plans and specifications, including those for building detention basins, those for installing the erosion control measures to be used on the site, and those for temporarily or permanently stabilizing disturbed soils in a timely manner.
- 4) During construction, the inspector will monitor the contractor's installation and maintenance of the erosion control measures called for in the state permit(s) and any additional measures the inspector believes are necessary to prevent sediment discharge to off-site properties or natural resources. This direction will be based on the approved erosion control plan, field conditions at the time of construction, and the natural resources potentially impacted by construction activities.
- 5) During construction, the inspector will monitor the contractor's construction of the stormwater system, including the construction and stabilization of ditches, culverts, detention basins, water quality treatment measures, and storm sewers.
- 6) During construction, the inspector will monitor the contractor's installation of any stream or wetland crossings.
- 7) During construction, the inspector will monitor the contractor's final stabilization of the project site.
- 8) During construction, the inspector will keep logs recording any rain storms at the site, the contractor's activities on the site, discussions with the contractor(s), and possible violations of the permit conditions.
- 9) During construction, the inspector will inspect the project site at least once a week and before and after any significant rain event. The inspector will photograph all protected natural resources both before and after construction and will photograph all areas under construction. All photographs will be identified with, at a minimum the date the photo was taken, the location and the name of the individual taking the photograph. *Note: the frequency of these inspections as contained in this condition may be varied to best address particular project needs.*
- 10) During construction, the inspector will prepare and submit weekly (*or other frequency*) inspection reports to the MDEP.
- 11) During construction, the inspector will notify the designated person at the MDEP immediately of any sediment-laden discharges to a protected natural resource or other significant issues such as the improper construction of a stormwater control structure or the use of construction plans not approved by the MDEP.

7.0 INSPECTION REPORTS

The inspector will submit weekly written reports (*or at another designated frequency*),

including photographs of areas that are under construction, on a form provided by the Department to the designated person at the MDEP. Each report will be due at the MDEP by the Friday (*or other designated day*) following the inspection week (Monday through Sunday).

The weekly report will summarize construction activities and events on the site for the previous week as outlined below.

- 1) The report will state the name of the development, its permit number(s), and the start and end dates for the inspection week (Monday through Sunday).
- 2) The report will state the date(s) and time(s) when the inspector was on the site making inspections.
- 3) The report will state the date(s) and approximate duration(s) of any rainfall events on the site for the week.
- 4) The report will identify and describe any erosion problems that resulted in sediment leaving the property or sediment being discharged into a wetland, brook, stream, river, lake, or public storm sewer system. The report will describe the contractor's actions to repair any damage to other properties or natural resources, actions to eliminate the erosion source, and actions to prevent future sediment discharges from the area.
- 5) The report will list the buildings, roads, parking lots, detention basins, stream crossings or other features open to construction for the week, including those features or areas actively worked and those left unworked (dormant).
- 6) For each area open to construction, the report will list the date of initial soil disturbance for the area.
- 7) For each area open to construction, the report will note which areas were actively worked that week and which were left dormant for the week. For those areas actively worked, the report will briefly state the work performed in the area that week and the progress toward final stabilization of the area -- e.g. "grubbing in progress", "grubbing complete", "rough grading in progress", "rough grading complete", "finish grading in progress", "finish grading complete", "permanent seeding completed", "area fully stable and temporary erosion controls removed", etc.
- 8) For each area open to construction, the report will list the erosion and sedimentation control measures installed, maintained, or removed during the week.
- 9) For each erosion control measure in-place, the report will note the condition of the measure and any maintenance performed to bring it to standard.

Third Party Inspection Form

This report is prepared by a Third Party Inspector to meet the requirements of the Third Party Inspector Condition attached as a Special Condition to the Department Order that was issued for the project identified below. The information in this report/form is not intended to serve as a determination of whether the project is in compliance with the Department permit or other applicable Department laws and rules. Only Department staff may make that determination.

TO: <i>PM, Maine DEP (@maine.gov)</i>	FROM:
PROJECT NAME/ LOCATION:	DEP #:
DATE OF INSPECTION:	DATE OF REPORT:
WEATHER:	CONDITIONS:

SITE CHARACTERISTICS:

# ACRES OPEN:	# ACRES ACTIVE:	# ACRES INACTIVE:
LOCATION OF OPEN LAND:	LOCATION OF ACTIVE LAND:	LOCATION OF INACTIVE LAND:
OPEN SINCE:	OPEN SINCE:	OPEN SINCE:

PROGRESS OF WORK:

INSPECTION OF:	Satisfactory	Minor Deviation (corrective action required)	Unsatisfactory (include photos)
STORMWATER CONTROL (VEGETATIVE & STRUCTURAL BMP'S)			
EROSION & SEDIMENTATION CONTROL (TEMPORARY & PERMANENT BMP'S)			
OTHER: (PERMIT CONDITIONS, ENGINEERING DESIGN, ETC.)			

COMMENTS/CORRECTIVE ACTIONS TAKEN (attach additional sheets as necessary):_

Photos (must be labeled with date, photographer and location):

Cc:		
<i>Original and all copies were sent by email only.</i>		