	Building
Subject	Planning Board Site Plan Review – Lakeside Concrete Commercial/Office
From	Carla Nixon, Town Planner
То	Town of Cumberland Planning Board
Date	June 10, 2021

1. REQUEST/PROJECT DESCRIPTION:

The Applicant is Lakeside Concrete Cutting and Abatement Professionals, Inc. of 590 County Road, Suite 2, Westbrook, Maine. The Applicant is requesting Planning Board Site Plan Review for the construction of a one-story, 15,000 sf. office building, associated parking, infrastructure, and landscaping on Lot #3 of the Heritage Village (formerly Cumberland Foreside Village) subdivision. There is an entrance from Route 1 that will be shared with Lot 4.

The 2.55 acre parcel is shown on Tax Assessor Map R01, Lot 11-3 and is located within the Office Commercial - South (OC-S) zoning district with a contract zoning overlay.

Curtis Neufeld, P.E., of Sitelines Civil Engineers and Land Surveyors prepared the site plan and will represent the Applicant at the Planning Board meeting.

This project is subject to review under the provisions of the Site Plan Ordinance and the Route 1 Design Standards.

2. **DESCRIPTION:**

Proposed Use:	Business and Professional Office and Contractor's Space.
Water:	Public
Sewer:	Public
Floodplain:	Map #230162-0018C. Designation: Zone C: minimal flooding
Fire Protection:	A sprinkler and alarm system is proposed.
Right, Title or Interest :	Purchase and Sale Agreement (see Planner's comments #1 and
	#2 below)

3. OUTSIDE AGENCY APPROVALS:

<u>MDEP Site Location of Development permit:</u> Awaiting updated SLODA permit <u>MDEP Stormwater Permit: Outstanding.</u> <u>Maine Historic Preservation Commission</u>: Letter on file dated 12/2/15 <u>Maine Dept. of Inland Fisheries & Wildlife</u>: Letter on file dated 12/10/15 <u>Maine Dept. of Agriculture, Conservation and Forestry</u>: Letter on file dated 11/7/15

4. WAIVER REQUESTS:

- 1. Waiver from High Intensity Soil Survey SME recommends approval of this waiver.
- 2. Waiver from Hydrogeologic evaluation SME recommends approval of this waiver given that the lot will served by public sewer.
- 3. Waiver from Traffic Study SME recommends approval of this waiver based on historical traffic permitting obtained for the subdivision and the limited amount of peak hour traffic proposed for the development.

4. Waiver from Market Study – SME recommends approval of this waiver.

5. DEPARTMENT HEAD REVIEW COMMENTS:

Dan Small, Fire Chief:

- 1) Fire suppression sprinkler system.
- 2) Monitored fire alarm system.
- 3) Key Box approved by the fire department.

Charles Rumsey, Police Chief: No Concerns

6. TOWN PLANNER'S COMMENTS:

- 1. Is there an expiration date for the purchase and sale agreement?
- 2. Who is the owner of the parcel now? P & S states Lola in Pearls, LLC
- 3. Add label for path along Route 1.
- 4. Amend the plan to show that the entrance drive is to be shared with Lot 4.
- 5. Will the parking spaces along the rear of the parking lot allow for the turning movements of the trucks to the loading areas?
- 6. The West Elevation is labelled as facing Sky View Drive, however the site plan shows the overhead doors facing the rear of the lot. All elevation drawings should be relabelled correctly.
- 7. Can wood or vinyl fencing replace the proposed chain link fencing shown on the plan?

7. PEER REVIEW ENGINEER'S COMMENTS: Dan Diffin, P.E., Sevee and Maher Engineers.

Chapter 229: Site Plan Review

SME has reviewed the applicable sections of Chapter 229 and has provided comments for those sections. The remaining sections have been reviewed and found to comply with Chapter 229 requirements.

Section 229-10A- Utilization of the Site

- 1. Please provide details on how the steep slopes will be stabilized on the north portion of the site.
- 2. There does not appear to be any wetlands indicated on the plans or notes pertaining to a wetland investigation that has been completed within the last five years. Please confirm that the site has been reviewed for wetlands.

Section 229-10B – Traffic Access and Parking

- 3. Please revise the site review checklist (53 spaces) to match the number of parking spaces shown on the Site Layout & Utility Plan, Drawing C3 (50 spaces).
- 4. The parking spaces shown on the plans are generally 10-feet by 18.5-feet and are oversized compared to the required parking dimensions in the Town's Ordinance. If reduced, the pavement at the site could be reduced. Please explain the intent of the oversized parking.
- 5. There is no striped loading zone adjacent to the northern-most ADA Parking Space. SME recommends that the parking spaces be shifted to accommodate a 5-foot wide striped loading/unloading area can be accommodated.

Section 229-10C – Stormwater Management and Erosion Control

6. Please include location of stabilized construction entrance on the plans.

- 7. Please add details for the proposed sediment barrier, catch basin inlet protection, and the stabilized construction entrance to the drawings.
- 8. The swale along the pavement on the north corner of the parking lot appears to direct runoff from the upgradient areas, Subcatchment 12S onto proposed pavement, not around the parking lot as indicated on Drawing DR2. Please update the grading of the swale around the parking lot or revise the drainage drawings to address the stormwater flowing onto the parking area.
- 9. A more defined ditch along the western portion of the parking lot is recommended to provide a minimum depth of 12-inches. This will permit the ditch to handle the flows from the upgradient areas during large rainfall events and minimize icing during winter snow melt over the parking lot. As graded, it appears that the swale is only 3-inches to 4-inches deep on the northern and western edges of the pavement.
- 10. It appears that there is greater than the maximum allowable 18-inches over the bottom of the soil filter basin. SME recommends that the spillway or DMH #1 be lowered to 96.5 to provide a maximum storage depth of 18-inches.
- 11. The Tc path for Subcatchment 1S in existing and Subcatchment 12S indicates that sheet flow occurs over "Smooth Surfaces" which results in a much shorter Tc path than Subcatchments 2S and 3S. It is expected that there is Sheet Flow within this subcatchment where it is wooded. Please review and update the Tc path, or comment on why it should not be updated.

Section 229-10D – Water, Sewer, and Fire Protection

- 12. Please provide correspondence from the Portland Water District proving they will be able to serve the building.
- 13. Please provide invert information for the proposed sewer connection to the Town sewer.

Section 229-10G – Historical and Archaeological Resources

14. Please provide the recent correspondence from MHPC verifying that there are no historical resources at the site.

Section 229-10H – Exterior Lighting

- 15. Please confirm that the exterior lighting will only be on during the actual hours of operation and one hour prior to and one hour following the hours of operation.
- 16. It appears that site lighting is being shown on the abutting property to the northeast owned by Elikris Realty. SME recommends that the Applicant provide an agreement with the abutting property owner permitting these improvements on their property.

Section 229-10H – Buffering and Landscaping

- 17. It appears that landscaping is shown on the abutting property to the northeast Owned by Elikris Realty. SME recommends that the Applicant provide an agreement with the abutting property owner permitting these improvements on their property.
- 18. Please provide details for the dumpster enclosure demonstrating proper screening of the dumpsters.

Section 229-10M – Design and Performance Standards

19. Please provide a narrative demonstrating compliance with the Route 1 Design Guidelines.

General Comments

- 20. SME recommends that Planning Board approval be conditioned on approval of the Site Location of Development Act (SLODA) License
- 21. SME understands that the ground mounted sign to be located at the edge of the entrance has not been finalized. SME recommends that approval be conditioned on submission and approval of the signage design and details.

22. Plan Sheet C2

- a. It is recommended that the parking in the northern most corner be revised with a landscape island to separate the parking the four parking spaces that are shown off-set from the 28 spaces. As designed, there is a likely conflict with vehicles parked in the northern most space along the 28-space stretch and the southern space in the 4-space stretch.
- 23. Plan Sheet C3
 - a. The paved connection to the Integrative Health Center does not appear to match into the edge of existing pavement.
 - b. There is a chain link fence shown on the abutting property to the north. Please confirm that there is an agreement in place to complete this work with the abutting property owner.
 - c. Please provide spot grades along the southern curb line to indicate flow direction toward CB #2.
- 24. Plan Sheet C7
 - a. The barrier free parking sign detail notes "(IN GRASS)" but the sign is within the sidewalk pavement. Please provide a revised detail to match plan conditions.
 - b. Please provide a detail for the pavement striping shown on the plans.

SITE PLAN REVIEW APPROVAL STANDARDS AND CRITERIA

Chapter 229 - Site Plan Review, Section 10: Approval Standards and Criteria

The following criteria shall be used by the Planning Board in reviewing applications for site plan review and shall serve as minimum requirements for approval of the application. The application shall be approved unless the Planning Board determines that the applicant has failed to meet one or more of these standards. In all instances, the burden of proof shall be on the applicant who must produce evidence sufficient to warrant a finding that all applicable criteria have been met.

A. Utilization of the Site

Utilization of the Site - The plan for the development, including buildings, lots, and support facilities, must reflect the natural capabilities of the site to support development. Environmentally sensitive areas, including but not limited to, wetlands, steep slopes, floodplains, significant wildlife habitats, fisheries, scenic areas, habitat for rare and endangered plants and animals, unique natural communities and natural areas, and sand and gravel aquifers must be maintained and preserved to the maximum extent. The development must include appropriate measures for protecting these resources, including but not limited to, modification of the proposed design of the site, timing of construction, and limiting the extent of excavation.

The proposed development of an office building on an approved subdivision lot is an appropriate utilization of the site. There are letters on file from State agencies that were provided during the subdivision review process in 2015 that show there are no wildlife habitats. MDEP is reviewing the plan for an amended Site Location of Development amendment permit. Receipt of this permit is a proposed condition of approval.

Based on the above findings of fact, the Board finds the standards of this section have been met.

B. Traffic, Circulation and Parking

(1) **Traffic Access and Parking.** Vehicular access to and from the development must be safe and convenient.

(a) Any driveway or proposed street must be designed so as to provide the minimum sight distance according to the Maine Department of Transportation standards, to the maximum extent possible.

(b) Points of access and egress must be located to avoid hazardous conflicts with existing turning movements and traffic flows.

(c) The grade of any proposed drive or street must be not more than + 3% for a minimum of two (2) car lengths, or forty (40) feet, from the intersection.

(d) The intersection of any access/egress drive or proposed street must function: (a) at a Level of Service D, or better, following development if the project will generate one thousand (1,000) or more vehicle trips per twenty-four (24) hour period; or (b) at a level which will allow safe access into and out of the project if less than one thousand (1,000) trips are generated.

(e) Where a lot has frontage on two (2) or more streets, the primary access to and egress from the lot must be provided from the street where there is less potential for traffic congestion and for traffic and pedestrians hazards. Access from other streets may be allowed if it is safe and does not promote short cutting through the site.

(f) Where it is necessary to safeguard against hazards to traffic and pedestrians and/ or to avoid traffic congestion, the applicant shall be responsible for providing turning lanes, traffic directional islands, and traffic controls within public streets.

(g) Access ways must be designed and have sufficient capacity to avoid queuing of entering vehicles on any public street.

(h) The following criteria must be used to limit the number of driveways serving a proposed project:

(1) No use which generates less than one hundred (1) vehicle trips per day shall have more than one (1) two-way driveway onto a single roadway. Such driveway must be no greater than thirty (30) feet wide.

(2) No use which generates one hundred (1) or more vehicle trips per day shall have more than two (2) points of entry from and two (2) points of egress to a single roadway. The combined width of all access ways must not exceed sixty (60) feet.

(2) Access way Location and Spacing

Access ways must meet the following standards:

(a) Private entrance / exits must be located at least fifty (50) feet from the closest un-signalized intersection and one hundred fifty (150) feet from the closest signalized intersection, as measured from the point of tangency for the corner to the point of tangency for the access way. This requirement may be reduced if the shape of the site does not allow conformance with this standard.

(b) Private access ways in or out of a development must be separated by a minimum of seventy-five (75) feet where possible.

(3) Internal Vehicular Circulation. The layout of the site must provide for the safe movement of passenger, service, and emergency vehicles through the site.

(a) Projects that will be served by delivery vehicles must provide a clear route for such vehicles with appropriate geometric design to allow turning and backing.

(b) Clear routes of access must be provided and maintained for emergency vehicles to and around buildings and must be posted with appropriate signage (fire lane - no parking).

(c) The layout and design of parking areas must provide for safe and convenient circulation of vehicles throughout the lot.

(d) All roadways must be designed to harmonize with the topographic and natural features of the site insofar as practical by minimizing filling, grading, excavation, or other similar activities which result in unstable soil conditions and soil erosion, by fitting the development to the natural contour of the land and avoiding substantial areas of excessive grade and tree removal, and by retaining existing vegetation during construction. The road network must provide for vehicular, pedestrian, and cyclist safety, all season emergency access, snow storage, and delivery and collection services.

(4) Parking Layout and Design. Off street parking must conform to the following standards:(a) Parking areas with more than two (2) parking spaces must be arranged so that it is not necessary for vehicles to back into the street.

(b) All parking spaces, access drives, and impervious surfaces must be located at least fifteen (15) feet from any side or rear lot line, except where standards for buffer yards require a greater distance. No parking spaces or asphalt type surface shall be located within fifteen (15) feet of the front property line. Parking lots on adjoining lots may be connected by accessways not exceeding twenty-four (24) feet in width.

(c) Parking stalls and aisle layout must conform to the following standards.

Stall Width	Skew Width	Stall Depth Width	Aisle
9'-0"		18'-0"	24'-0" 2-way
8'-6"	10'-6"	18'-0"	16'-0" 1-way
8'-6"	12'-9"	17'-6"	12'-0" 1-way
8'-6"	17'-0"	17'-0"	12'-0" 1 way
	Stall Width 9'-0" 8'-6" 8'-6" 8'-6"	Stall Skew Width Width 9'-0"	Stall Skew Stall Width Width Depth Width 9'-0" 18'-0" 8'-0" 8'-6" 10'-6" 18'-0" 8'-6" 12'-9" 17'-6" 8'-6" 17'-0" 17'-0"

(d) In lots utilizing diagonal parking, the direction of proper traffic flow must be indicated by signs, pavement markings or other permanent indications and maintained as necessary.

(e) Parking areas must be designed to permit each motor vehicle to proceed to and from the parking space provided for it without requiring the moving of any other motor vehicles.

(f) Provisions must be made to restrict the "overhang" of parked vehicles when it might restrict traffic flow on adjacent through roads, restrict pedestrian or bicycle movement on adjacent walkways, or damage landscape materials.

(5) Building and Parking Placement

(a) The site design should avoid creating a building surrounded by a parking lot. Parking should be to the side and preferably in the back. In rural, uncongested areas buildings should be set well back from the road so as to conform to the rural character of the area. If the parking is in front, a generous, landscaped buffer between road and parking lot is to be provided. Unused areas should be kept natural, as field, forest, wetland, etc.

(b) Where two or more buildings are proposed, the buildings should be grouped and linked with sidewalks; tree planting should be used to provide shade and break up the scale of the site. Parking areas should be separated from the building by a minimum of five (5) to ten (10) feet. Plantings should be provided along the building edge, particularly where building facades consist of long or unbroken walls.

(6) Pedestrian Circulation: The site plan must provide for a system of pedestrian ways within the development appropriate to the type and scale of development. This system must connect the major building entrances/ exits with parking areas and with existing sidewalks, if they exist or are planned in the vicinity of the project. The pedestrian network may be located either in the street right-of-way or outside of the right-of-way in open space or recreation areas. The system must be designed to link the project with residential, recreational, and commercial facilities, schools, bus stops, and existing sidewalks in the neighborhood or, when appropriate, to connect the amenities such as parks or open space on or adjacent to the site.

The entrance location meets the above requirements. Adequate sight distance has been provided at the entrance/exit location. A copy of the Traffic Movement Permit from MDOT has been provided. An MDOT Driveway Entrance Permit was previously provided. There is a sidewalk along the sides of the building that lead to entrances. The placement of the building, parking and overhead garage doors have been appropriately sited to reflect the requirements of the Route 1 Design Standards. The proposed use will have minimal traffic generation since it does not include retail space or services that require customers coming into the building. Some of the parking spaces as shown on the plan need to be modified as per the Town Engineer.

Based on the above findings of fact, the Board finds the standards of this section have been met.

C. Stormwater Management and Erosion Control

(1) Stormwater Management. Adequate provisions must be made for the collection and disposal of all stormwater that runs off proposed streets, parking areas, roofs, and other surfaces, through a stormwater drainage system and maintenance plan, which must not have adverse impacts on abutting or downstream properties.

(a) To the extent possible, the plan must retain stormwater on the site using the natural features of the site.

(b) Unless the discharge is directly to the ocean or major river segment, stormwater runoff systems must detain or retain water such that the rate of flow from the site after development does not exceed the predevelopment rate.

(c) The applicant must demonstrate that on - and off-site downstream channel or system capacity is sufficient to carry the flow without adverse effects, including but not limited to, flooding and erosion of shoreland areas, or that he / she will be responsible for whatever improvements are needed to provide the required increase in capacity and / or mitigation.

(d) All natural drainage ways must be preserved at their natural gradients and must not be filled or converted to a closed system unless approved as part of the site plan review.

(e) The design of the stormwater drainage system must provide for the disposal of stormwater without damage to streets, adjacent properties, downstream properties, soils, and vegetation.

(f) The design of the storm drainage systems must be fully cognizant of upstream runoff which must pass over or through the site to be developed and provide for this movement.

(g) The biological and chemical properties of the receiving waters must not be degraded by the stormwater runoff from the development site. The use of oil and grease traps in manholes, the use of on-site vegetated waterways, and vegetated buffer strips along waterways and drainage swales, and the reduction in use of deicing salts and fertilizers may be required, especially where the development stormwater discharges into a gravel aquifer area or other water supply source, or a great pond.

(2) Erosion Control

(a) All building, site, and roadway designs and layouts must harmonize with existing topography and conserve desirable natural surroundings to the fullest extent possible, such that filling, excavation and earth moving activity must be kept to a minimum. Parking lots on sloped sites must be terraced to avoid undue cut and fill, and / or the need for retaining walls. Natural vegetation must be preserved and protected wherever possible.

(b) Soil erosion and sedimentation of watercourses and water bodies must be minimized by an active program meeting the requirements of the Maine Erosion and Sediment Control Handbook for Construction: Best Management Practices, dated March 1991, and as amended from time to time.

A stormwater management report (including erosion control) was submitted in the application and reviewed by the Town Engineer who has noted that several adjustments are required. A Maine DEP Site Location of Development Act permit is required and is under review at this time by MDEP. This review by MDEP will include a stormwater review. These items are listed as proposed conditions of approval.

Based on the above findings of fact, the Board finds the standards of this section have been met.

(D) Water, Sewer, and Fire Protection

(1) Water Supply Provisions: The development must be provided with a system of water supply that provides each use with an adequate supply of water. If the project is to be served by a public water supply, the applicant must secure and submit a written statement from the supplier that the proposed water supply system conforms with its design and construction standards, will not result in an undue burden on the source of distribution system, and will be installed in a manner adequate to provide needed domestic and fire protection flows.

(2) Sewage Disposal Provisions: The development must be provided with a method of disposing of sewage which is in compliance with the State Plumbing Code. If provisions are proposed for onsite waste disposal, all such systems must conform to the Subsurface Wastewater Disposal Rules.
(3) Utilities: The development must be provided with electrical, telephone, and telecommunication service adequate to meet the anticipated use of the project. New utility lines and facilities must be screened from view to the extent feasible. If the service in the street or on adjoining lots is underground, the new service must be placed underground.

(4) Fire Protection: The site design must comply with the Fire Protection Ordinance. The Fire Chief shall issue the applicant a "Certificate of Compliance" once the applicant has met the design requirement of the Town's Fire Protection Ordinance.

The proposed development will connect to the existing utilities located in the Route 1 right of way. There will be public water for both domestic drinking water and fire protection. The subdivision received approval from the PWD. There will be underground electric, cable and telephone/data. There will also be a connection to the natural gas main on Route 1. The building will be sprinkled and equipped with an alarm system.

Based on the above findings of fact, the Board finds the standards of this section have been met.

E. Water Protection

(1) **Groundwater Protection:** The proposed site development and use must not adversely impact either the quality or quantity of groundwater available to abutting properties or to the public water supply systems. Applicants whose projects involve on-site water supply or sewage disposal systems with a capacity of two thousand (2,000) gallons per day or greater must demonstrate that the groundwater at the property line will comply, following development, with the standards for safe drinking water as established by the State of Maine.

(2) Water Quality: All aspects of the project must be designed so that:

(a) No person shall locate, store, discharge, or permit the discharge of any treated, untreated, or inadequately treated liquid, gaseous, or solid materials of such nature, quantity, obnoxious, toxicity, or temperature that may run off, seep, percolate, or wash into surface or groundwaters so as to contaminate, pollute, or harm such waters or cause nuisances, such as objectionable shore deposits, floating or submerged debris, oil or scum, color, odor, taste, or unsightliness or be harmful to human, animal, plant, or aquatic life.

(b) All storage facilities for fuel, chemicals, chemical or industrial wastes, and biodegradable raw materials, must meet the standards of the Maine Department of Environmental Protection and the State Fire Marshall's Office.

(3) Aquifer Protection: If the site is located within the Town Aquifer Protection Area, a positive finding by the Board that the proposed plan will not adversely affect the aquifer is required.

The site is not located within the Town Aquifer Protection Area. All storage for fuel, chemicals, chemical or industrial wastes, biodegradable raw materials or liquid, gaseous or solid materials will meet the standards of the Maine Department of Environmental Protection and the State Fire Marshal's office. The project will be served by public water and sewer.

Based on the materials included in the application, the Board finds that the standards of this section have been met.

F. Floodplain Management

If any portion of the site is located within a special flood hazard area as identified by the Federal Emergency Management Agency, all use and development of that portion of the site must be consistent with the Town's Floodplain management provisions.

The site is not located within a floodplain as shown on the submitted FEMA map.

Based on the above finding of fact, the Board finds the standards of this section have been met.

G. Historic and Archaeological Resources

If any portion of the site has been identified as containing historic or archaeological resources, the development must include appropriate measures for protecting these resources, including but not limited to, modification of the proposed design of the site, timing of construction, and limiting the extent of excavation.

A letter dated November, 2015 is on file from the Maine Historic Preservation Commission stating that there will be no impact on historical or archaeological resources.

Based on the above finding of fact, the Board finds the standards of this section have been met.

H. Exterior Lighting

The proposed development must have adequate exterior lighting to provide for its safe use during nighttime hours, if such use is contemplated. All exterior lighting must be designed and shielded to avoid undue glare, adverse impact on neighboring properties and rights - of way, and the unnecessary lighting of the night sky.

The exterior lighting will includes pole and building mounted fixtures as well as pedestrian level bollard lights. The catalogue cut sheets show that the fixtures are full cut-off. The photometric plan provided shows that light is cast over the property lines and the Town Engineer has recommended that permission from abutting property owners be obtained. Alternatively, the lighting plan could be adjusted. The exterior lights will be off during nonbusiness hours and one hour after and following hours of operation.

Based on the above findings of fact, the Board finds the standards of this section have been met.

I. Buffering and Landscaping

(1) Buffering of Adjacent Uses: The development must provide for the buffering of adjacent uses where there is a transition from one type of use to another use and for the screening of mechanical equipment and service and storage areas. The buffer may be provided by distance, landscaping, fencing, changes in grade, and / or a combination of these or other techniques.

(2) Landscaping: Landscaping must be provided as part of site design. The landscape plan for the entire site must use landscape materials to integrate the various elements on site, preserve and enhance the particular identity of the site, and create a pleasing site character. The landscaping should define street edges, break up parking areas, soften the appearance of the development, and protect abutting properties.

Buffers in the form of fences, grade changes, and landscaping have been designed to screen service and storage areas. A landscape plan showing a mixture of deciduous and non-deciduous trees and shrubs and perennials has been provided. Due to drainage design, plantings are not proposed around the foundation.

Based on the above findings of fact, the Board finds the standards of this section have been met.

J. Noise

The development must control noise levels such that it will not create a nuisance for neighboring properties.

The proposed office building use will not cause noise levels that would be a nuisance for neighboring properties. The backing up of trucks to the loading bays may create noise audible beyond the property lines. The hours of operation for truck deliveries/pick-ups shall be limited to daylight hours.

Based on the above findings of fact, the Board finds the standards of this section have been met.

K. Storage of Materials

(1) Exposed nonresidential storage areas, exposed machinery, and areas used for the storage or collection of discarded automobiles, auto parts, metals or other articles of salvage or refuse must have sufficient setbacks and screening (such as a stockade fence or a dense evergreen hedge) to provide a visual buffer sufficient to minimize their impact on abutting residential uses and users of public streets.

(2) All dumpsters or similar large collection receptacles for trash or other wastes must be located on level surfaces which are paved or graveled. Where the dumpster or receptacle is located in a yard which abuts a residential or institutional use or a public street, it must be screened by fencing or landscaping.

(3) Where a potential safety hazard to children is likely to arise, physical screening sufficient to deter small children from entering the premises must be provided and maintained in good condition.

All storage areas and dumpsters are screened by either fencing or landscaping. A shed is proposed to be constructed as an accessory building to store materials containing asbestos until they could be properly disposed of. The location of this storage building is not shown on the plan nor is a dumpster screening detail provided. Both of these items are listed as proposed conditions of approval.

Based on the above findings of fact, the Board finds the standards of this section have been met.

L. Capacity of the Applicant

The applicant must demonstrate that he / she has the financial and technical capacity to carry out the project in accordance with this ordinance and the approved plan.

<u>Technical Ability:</u> The applicant has retained the services of Sitelines, PA that has extensive experience planning and designing commercial developments.

<u>Financial Capacity:</u> Attachment G of the application includes a letter of financial capacity from Bangor Savings Bank.

Based on the above findings of fact, the Board finds the standards of this section have been met.

M. Design and Performance Standards

- (1) Route 1 Design Standards
- (2) Route 1 Design Standards: APPLICABLE
- (3) Town Center District Design and Performance Standards
- (4) Village Mixed Use Performance Standards.

ROUTE 1 DESIGN AND PERFORMANCE STANDARDS

Route 1 Design Standards Ordinance Requirements

1.2 Site Planning and Design

1.1 Master Planning

On properties that are large enough to accommodate more than a single structure, developers will be expected to prepare a conceptual master plan to show the Planning Board the general location of future buildings, parking lots, circulation patterns, open space, utilities, provisions for stormwater management, and other components of site development.

On sites with multiple buildings, the outdoor space defined by the structures should be designed as a focal point for the development, with provisions for seating and other outdoor use. Landscaping, bollards and other site features should maintain a safe separation between vehicles and pedestrians.

FINDING: A subdivision plan was previously approved by the Planning Board which shows the location of this lot.

1.2 Professional Design

Developers shall have their site plans designed by licensed professionals (civil engineers, architects or landscape architects) as required by State of Maine professional licensing requirements to address the health, safety, welfare and visual pleasure of the general public, during all hours of operation and all seasons of the year.

FINDING: Sitelines, PA provided all required professional services.

1.3 Route One Buffer Strip

Developments should be designed to preserve the naturally forested character of much of the Rt. 1 corridor. A 75' setback is recommended.

FINDING: This setback is provided for.

1.4 Vehicular Access

Development along Cumberland's Route 1 corridor should promote safe, user-friendly and efficient vehicular movement while reducing both the number of trips on the roadway and the number of curb cuts wherever possible. The vehicular movements discussed in this chapter, both on-site and off-site, shall be designed by a professional engineer and shall be in conformance with all Maine Department of Transportation requirements.

FINDING: There is one access point from Route 1 as per the approved subdivision plan. This will be a shared entrance with Lot 4.

1.4.1 Route 1 Curb Cuts

To promote vehicular, bicycle and pedestrian safety, the number of curb cuts on Route 1 should be kept to a minimum. Adjacent uses are encouraged to use shared driveways wherever possible, thereby reducing the number of turning motions onto and off of Route 1. This practice will increase motorist, bicycle and pedestrian safety, and has the added environmental benefit of helping to reduce impervious (paved) area.

Driveways and their associated turning movements should be carefully designed and spaced to reduce interruptions in Route 1's level of service and to promote safe and easily understandable vehicular movements. Where curb cuts will interrupt sidewalks, ADA requires that the cross slope not exceed 2% in order to maintain accessibility.

New driveways and existing driveways for which the use has changed or expanded require a Maine Department of Transportation "Driveway Entrance Permit." The Planning Board will not grant project approval until the Town has been provided a copy of the permit, or alternately, until the applicant provides the Town a letter from the DOT stating that such a permit is not required. The MDOT may also require a Traffic Movement Permit if the number of vehicle trips exceeds the threshold established by the MDOT.

FINDING: There is one access point from Route 1 as per the approved subdivision plan. This will be a shared entrance with Lot 4.

1.4.2 Site Circulation

Internal vehicular movement on each site should be designed to achieve the following goals: to ensure the safety of motorists, delivery vehicles, pedestrians and cyclists by providing clear cues to the motorist as to where to drive or park, etc., once they enter the site. Landscaping, to reduce impervious areas, is encouraged as much possible.

Every effort should be made to restrict paved surfaces to a maximum of two sides of the building. The site should not feature a building surrounded by drive lanes and parking.

To ensure safe and easily understandable circulation, parking spaces, directional arrows, crosswalks and other markings on the ground should be painted on the pavement paint or shown by other suitable methods.

FINDING: The plan reflects all of the above recommended features.

1.4.3 Driveways between Parcels

Driveways between adjacent parcels should be used where feasible in order to make deliveries easier and reduce unnecessary trips and turning movements on Route 1.

These driveways should provide safe, direct access between adjacent lots, but only where the paved areas of the two adjacent lots are reasonably close together. However, they are inappropriate where they would require excessive impervious (paved) area or impose undue financial burden on the owner.

All such driveways between parcels should have pedestrian walkways when possible.

FINDING: The approved subdivision plan shows a driveway along the rear of Lots 2, 3 and 4. The driveway from Rt. 1 is to be shared with Lot # 4.

1.5 Building Placement

Objective: Buildings should be placed on their sites in a way that is sensitive to existing site conditions and respectful of adjacent uses.

1.5.1 Location of Building on the Site

In placing the building on the site, the designer should carefully consider the building's relationship to existing site features such as the size of the site, existing vegetation and topography, drainage, etc., as well as the abutting land uses.

The site design should make every effort to avoid creating a building surrounded by parking lot. In addition, buildings should generally be square to Route 1 and should avoid unusual geometry in building placement unless the site requires it.

FINDING: The location of the building on the site is appropriate.

1.5.2 Building Entrances

The building's main entrance should be a dominant architectural feature of the building, clearly demarcated by the site design and landscaping. Main entrances should front onto the most convenient parking area.

At building entrance areas and drop-off areas, site furnishings such as benches, sitting walls and, if appropriate, bicycle racks should be encouraged. Additional plantings may be desirable at these points to clearly identify the building entrance and to invite pedestrians into it.

Where building entrances do not face Route 1, the Route 1 façade should still be made interesting and attractive to drivers on Route 1.

FINDING: The building entrances are covered and set off by architectural details.

1.5.3 Building Setbacks

If adjacent building facades are parallel with Route 1 and buildings have consistent setbacks from Route 1, the visual effect from the road will be orderly and attractive.

Side and rear building setbacks must conform to the requirements of the underlying zone.

FINDING: All setbacks are conforming and appropriate.

1.5.4 Hillside Development

When a proposed development is located on a hillside that is visible from Route 1 or from other public areas, its presence will be much more obvious than development on a level site. Because of this, it is even more important that the structure be designed to fit harmoniously into the visual environment. The use of berms and plantings, where appropriate, will help soften the impact of buildings located in open fields.

Site clearing should also be minimized and vegetation should be retained or provided to minimize the visual impact of the development. Issues of drainage, run-off and erosion should also be closely examined.

FINDING: N/A

1.5.5 Universal Accessibility

Development of all properties, buildings, parking lots, crosswalks, walkways and other site features must comply with the applicable standards of the Americans with Disabilities Act (ADA).

1.6 Parking

Objective: Development should provide safe, convenient and attractive parking. Parking lots should be designed to complement adjacent buildings, the site and the Route 1 corridor without becoming a dominant visual element. Every effort should be made to break up the scale of parking lots by reducing the amount of pavement visible from the road. Careful attention should be given to circulation, landscaping, lighting and walkways.

FINDING: The parking is located to the rear and sides of the building. There is no parking in front of the building.

1.6.1 Location

Parking lots should be located to the side or rear of buildings. Parking should only be placed between the building and Route 1 if natural site constraints such as wetlands or topography, allow no other option. If parking must be built between the building and Route 1, it should be limited, if at all possible, to only one row of parking spaces and be adequately buffered.

FINDING: There is no parking between the building and Route 1.

1.6.2 Landscaping

A 75' buffer between Route 1 and buildings and parking is intended to insure that views from Route One are not of expanses of asphalt.will be required of each new development that is on Route 1

Parking should be separated from the building by a landscaped strip a minimum of five to ten feet wide.

Landscaping around and within parking lots will shade hot surfaces and visually soften the appearance of the hard surfaces. Parking lots should be designed and landscaped to create a pedestrian-friendly environment. A landscaped border around parking lots is encouraged, and landscaping should screen the parking area from adjacent residential uses. Tree plantings between rows of parking are very desirable. Granite curbs, while more expensive, are more attractive and require less maintenance than asphalt ones.

FINDING: The 75' buffer is shown on the plan.

Snow Storage

Provision should be made for snow storage in the design of all parking areas, and these areas should be indicated on the site plan. The area used for snow storage should not conflict with proposed landscaping or circulation patterns. These areas should be sited to avoid problems with visibility, drainage or icing during winter months.

FINDING: Locations for snow storage are shown on the plan.

1.6.4 Impervious Surfaces

The amount of paved surface required for parking, driveways and service areas should be limited as much as possible in order to provide green space, reduce run-off and preserve site character. This will have the added benefit of reducing construction and maintenance costs.

FINDING: The plan reflects these recommendations.

1.7 Service Areas

Objective: Service areas include exterior dumpsters, recycling facilities, mechanical units, loading docks and other similar uses. Service areas associated with uses along Route 1 should be designed to

meet the needs of the facility with a minimum of visual, odor or noise problems. They should be the smallest size needed to fit the specific requirements of the building and its intended operation, and should be fully screened from view by either plantings or architectural elements such as attractive fences.

FINDING: Service areas are located to the rear of the building.

1.7.1 Location

Service areas should, if possible, be located so that they are not visible from Route 1 or from the building entrance. Locations that face abutting residential properties should also be avoided wherever possible.

Dumpster, recycling facilities and other outdoor service facilities should be consolidated into a single site location, in accordance with appropriate life safety requirements.

FINDING: Service areas are not visible from Route 1.

1.7.2 Design

Service areas should be designed to accommodate the turning movements of anticipated vehicles, and should be separated from other vehicle movements, parking areas and pedestrian routes.

Wherever possible, service drives should be separated from areas where people will be walking by landscaped islands, grade changes, berms, or other devices to minimize conflicts.

Gates on enclosures should be designed to prevent sagging or binding. Wooden fencing is always preferred, but where chain link is necessary for safety considerations, it should be screened by landscaping and painted a dark color, or coated with dark vinyl.

FINDING: The above criteria has been met.

1.7.3 Buffering/Screening

Service areas should be screened to minimize visibility from sensitive viewpoints such as Route 1, nearby residential dwellings, public open space, pedestrian pathways, and building entrances. Landscape screening may consist of evergreen trees, shrubs, and/or planted earth berms. Architectural screening may consist of walls, fences or shed structures, and should complement the design of the main structure through repetition of materials, detailing, scale and color.

Where plantings do not survive, or where they grow to a point where they no longer serve as effective screens, they shall be replaced or supplemented to meet the intent of the plan as approved by the Planning Board.

FINDING: The above criteria has been met.

1.8 Open Space

Objective: In order to provide an attractive, hospitable and usable environment, future development along Route 1 should have generous amounts of open space and attractive site details for such elements as pavement, curbing, sitting and other public areas, landscaping, planters, walls, signage, lighting, bollards, waste receptacles and other elements in the landscape.

FINDING: The site plan shows open areas around the building.

1.8.1 Internal Walkways

Internal walkways should invite pedestrians onto the property and make them feel welcome.

Walkways extending the full length of a commercial building are encouraged along any façade that features a customer entrance and an abutting parking area. Such walkways should be located five to ten feet from the face of the building to allow for planting beds. Such walkways should be shown on the project's landscaping plan.

Wherever feasible, interconnections between adjacent properties should be developed to encourage pedestrian movement and reduce vehicle trips.

At a minimum bituminous concrete should be used as the primary material for internal walkways, except that for entrance areas and other special features the use of brick or special paving shall be encouraged. Walkways should be separated from parking areas and travel lanes by raised curbing. Granite is strongly preferred for its durability, appearance and low maintenance requirements.

Driveway crosswalks should be marked by a change in pavement texture, pattern or color to maximize pedestrian safety in parking and other potentially hazardous areas.

FINDING: There are walkways along three sides of the building.

1.8.2 Landscaping

Where there are trees in the 75" buffer between Route 1 and the building, existing healthy trees should be maintained in their natural state. Where there are few or no trees in the 75' buffer, the buffer area should be landscaped either with trees, or with flowering shrubs, fencing, or such architectural elements as stone walls.

Where plantings do not survive, or grow to a point where they no longer serve as effective buffers, they shall be replaced or enhanced to meet the intent of the approved plan.

FINDING: Due to necessary grading for stormwater management, some existing trees will be removed, however additional plantings will buffer the building in time.

1.8.3 Usable Open Space

Whenever possible, site plans should provide inviting open spaces where people can sit, relax and socialize. Open spaces should be thought of as outdoor rooms, with consideration to ground surfaces, landscaping, lighting and other physical elements. Examples of such spaces include a forecourt outside a building entrance, or a peaceful place outdoors where employees can sit down and eat lunch or have breaks.

FINDING: There are open space areas on the site.

1.9 Buffering of Adjacent Uses

Objective: Buffering or screening may be necessary to effectively separate quite different land uses such as housing and office or commercial buildings. Plantings, earth berms, stone walls, grade changes, fences, distance and other means can be used to create the necessary visual and psychological separation.

1.9.1 Appropriateness

The selection of the proper type of buffer should result from considering existing site conditions, distances to property lines, the intensity (size, number of users) of the proposed land use, and the degree of concern expressed by the Planning Department, Planning Board, and abutting landowners.

Discussions regarding the need for buffers, and appropriate sizes and types, should begin at the sketch plan stage of review.

1.9.2 Design

Buffers and screens should be considered an integral part of the site and landscaping plans. Stone walls, plantings, fencing, landforms, berms, and other materials used for buffers should be similar in form, texture, scale and appearance to other landscape elements. Structural measures, such as screening walls, should likewise be related to the architecture in terms of scale, materials, forms and surface treatment.

1.9.3 Maintenance

Where plantings do not survive, or where they grow to a point where they no longer serve as effective buffers, they shall be replaced or supplemented to meet the intent of the plan as approved by the Planning Board.

FINDING: The above criteria has been met.

1.10 Erosion, Sedimentation and Stormwater Management

Objective: Protecting the natural environment in Cumberland is as much a priority in these design guidelines as protecting the visual environment. A developer should take every measure possible in the construction and operation of a project to ensure that little or no adverse impact to the natural environment occurs. These measures should be as visually attractive as possible.

1.10.1 Erosion and Sedimentation

Before any site work, construction or the disturbance of any soil occurs on a property, methods, techniques, designs, practices and other means to control erosion and sedimentation, as approved or required by the Maine Department of Environmental Protection, shall be in place. For guidance developers should refer to "Maine Erosion and Sedimentation Control Handbook for Construction – Best Management Practices," produced by the Cumberland County Soil and Water Conservation District and the Maine DEP.

FINDING: The erosion and sedimentation control plan has been reviewed by the Town Engineer and is currently being reviewed by MDEP.

1.11 Utilities

Objective: It is important to make efficient use of the utility infrastructure that exists along the Route 1 corridor, and to ensure that utility connections to individual development lots are as inconspicuous as possible.

FINDING: All utilities will be underground from Route 1.

1.11.1 Water and Sewer

All proposed development along the Route 1 Corridor must connect to the municipal water supply and the municipal sewer, wherever such connections are available. Proposed connections are subject to review by the Town and/or its peer reviewers.

FINDING: There will be a connection to the public water line.

1.11.2 Electric, Telephone and Cable

Electric, telephone, cable and other wired connections from existing utilities on Route 1 should be made to individual development lots via underground conduit wherever possible. This prevents the accumulation of unsightly overhead wires, and preserves the natural character of the corridor.

2. Building Types

The purpose of these guidelines is to encourage architectural styles within the Route 1 corridor that draw their inspiration from traditional New England examples. "Vernacular" or commonly used styles that are well represented in Cumberland are center-chimney Federal buildings in brick or clapboard, 1 and a half story Greek Revival "capes" with dormers, in white clapboard with corner pilasters or columns, and Victorians buildings with more steeply pitched roofs, porches and gingerbread trim. Except for mill buildings, the scale and nature of older commercial buildings in towns like Cumberland and Yarmouth, was similar to that of houses of the same period. Modern interpretations and versions of these styles, are entirely appropriate and encouraged. Because of their larger size, traditional barns are also sometimes used as inspiration for modern commercial buildings.

2.1 General Architectural Form

Traditional New England buildings look like they do because of the climate, the materials and technologies available for building and the styles and fads of the 19th century. This is what is meant when people talk about "vernacular architecture". It is the architecture that develops in a particular geographic area. Typically, while there may be architects who work in a particular "vernacular", vernacular architecture evolves over time and is not the product of a particular person's powerful vision.

These guidelines encourage the use of materials and forms that are characteristic of the construction of ordinary houses and commercial buildings of 19th century in northern New England, and particularly in Maine. Modern interpretations and versions of these materials and forms are entirely appropriate and encouraged.

FINDING: The building design reflects the above criteria by using clapboard style siding in appropriate earth tone colors.

2.1.1 Roofs

Because of the need to shed snow, New England roofs have generally been pitched rather than flat. Federal roofs are sometimes gambrel-shaped. In the Greek Revival style they are often gabled or have dormers, and have decorative "returns" at the bottom edge of the gable or dormers, suggesting the pediment of a Greek temple. Victorian houses typically have more steeply sloped roofs. Flat roofs are to be avoided.

FINDING: The roofline is flat to accommodate HVAC equipment, however the use of facades in sections of the roofline break up the effect of the flat roof and screen the HVAC equipment.

2.1.2 Windows

Windows are typically vertical rectangles, often with two or more panes of glass. They may have shutters. If shutters are used, each should be wide enough to actually cover half of the window. Horizontal and vertical "lights", rows of small panes of New England buildings such as parapets. Where parapets are used to break up a flat roofline, the height of glass, are common over and next to doors. Window frames often have a decorative wood or stone pediment over them.

FINDING: The windows reflect the above criteria.

2.1.3 Detailing

Each historical period also has its characteristic embellishments. Federal buildings may have a decorative fanlight over the entrance door. Greek Revival buildings have corner-boards in the form of

pilasters or even rows of actual columns across 1 façade, below a pediment. Victorian buildings use a wealth of turned columns and decorative scroll-work and shingle-work. Too many embellishments can look "busy", and mixing the details of several periods or styles can also spoil the desired effect. Modern interpretations of older styles often used simplified forms to suggest the details that were more elaborately defined in earlier periods.

FINDING: The detailing reflects the above criteria.

2.1.4 Building Materials

Traditional siding materials common to Northern New England are brick, painted clapboard and either painted or unpainted shingles. Contemporary materials that have the same visual characteristics as traditional materials (e.g., cemeticious clapboards or vinyl siding) are acceptable if attention is paid to detailing (e.g., corners, trim at openings, changes in material). Metal cladding is not permitted.

Common traditional roofing materials are shingles – cedar originally or asphalt now, as well as standing seam metal. Where visible, the roofing color should be selected to complement the color and texture of the building's façade. Roofing colors are usually darker than the color of the façade.

Colors commonly found in historic New England houses vary by period. In the Federal and Greek Revival periods, white was the most common color, often with green or black shutters. But houses were not infrequently painted "sober" colors such as dull mustard or gray. In the Victorian period much brighter colors were often used, with trim in complementary colors. The characteristic colors for barns are white, barn red, or weathered shingle.

FINDING: The building materials reflect the above criteria.

2.2 Large Scale Buildings

Objective: Due to their visibility and mass, the design of new large structures (10,000 square feet or greater) have the ability to greatly enhance or detract from Route 1's visual character. These structures should be designed as attractive pieces of commercial architecture that are responsive to their site and compatible with adjacent development.

FINDING: The building reflects the above criteria.

2.2.1 Design and Massing

Large structures should be designed so that their large mass is broken up into smaller visual components through the use of clustered volumes, projections, recesses and varied façade treatment. The design should provide variation to add shadow and depth and a feeling of reduced scale.

FINDING: The building reflects the above criteria.

2.2.2 Site Design

Wherever possible, large buildings should fit into the existing topography and vegetation, and should not require dramatic grade changes around their perimeter. Landscaping, site walls, pedestrian amenities and existing trees can be effective in reducing the apparent scale of large buildings.

FINDING: The building reflects the above criteria.

2.2.3 Architectural Details

Large structures should have the same degree of detailing found in well-designed smaller and medium sized buildings along the Route 1 corridor. Architectural details can be used to reduce the scale and uniformity of large buildings. Elements such as colonnades, pilasters, gable ends, awnings, display windows and appropriately positioned light fixtures can be effective means of achieving a human scale.

FINDING: The building reflects the above criteria.

2.2.4 Facades and Exterior Walls

Unbroken facades in excess of 80 feet are overwhelming whether they are visible from Route 1, other roadways or pedestrian areas, or when they abut residential areas. Breaking up the plane of the wall can reduce this sense of overwhelming scale. Where the plane of the wall is broken, the offset should be proportionate to the building's height and length. A general rule of thumb for such projections or recesses is that their depth shall be at least 3% of the façade's length, and they shall extend for at least 20% of the façade's length.

Other devices to add interest to long walls include strong shadow lines, changes in rooflines, pilasters and similar architectural details, as well as patterns in the surface material and wall openings. All façade elements should be coordinated with the landscape plan.

Facades of commercial buildings that face Route 1 or other roadways should have transparent openings (e.g. display windows or entry areas) along 30% or more of the length of the ground floor. Blank or unadorned walls facing public roads, residential neighborhoods, or abutting properties are boring and unattractive.

FINDING: The building reflects the above criteria.

2.2.5 Building Entrances

Large structures should have clearly defined and highly visible entrances emphasized through such devices as significant variations in rooflines or cornice lines, changes in materials, porticos, landscape treatments, distinctive lighting or other architectural treatments.

FINDING: The building reflects the above criteria.

2.3 Linear Commercial Buildings

Objective: Linear commercial structures, such as multi-tenant offices or commercial buildings may be appropriate along Route 1 provided that they are designed with façade and roofline elements that reduce their sense of large scale and add visual interest.

2.3.1 Design

Buildings with multiple storefronts should be visually unified through the use of complementary architectural forms, similar materials and colors, consistent details, and a uniform signage size and mounting system.

FINDING: The building reflects the above criteria.

2.3.2 Façade Design

The use of covered walkways, arcades, or open colonnades is strongly encouraged along long facades to provide shelter, encourage people to walk from store to store, and to visually unite the structure. Pedestrian entrances to each business or tenant should be clearly defined and easily accessible.

FINDING: The building reflects the above criteria.

2.3.3 Focal Points

Linear commercial buildings can include a focal point – such as a raised entranceway or clock tower, or other architectural element – to add visual interest and help reduce the scale of the building.

FINDING: The building reflects the above criteria.

2.3.4 Façade Offsets

Variations in the plane of the front façade add visual interest. They also create opportunities for common entries, and social or landscaped spaces.

FINDING: The building reflects the above criteria.

2.3.5 Rooflines

Variations in rooflines, detailing, cornice lines and building heights should be incorporated into the design to break up the scale of linear commercial buildings.

FINDING: The building reflects the above criteria.

2.4 Smaller Freestanding Commercial Buildings

Objective: Smaller freestanding commercial buildings can easily make use of traditional New England building forms and should be designed to be attractive pieces of architecture, expressive of their use and compatible with surrounding buildings.

2.4.1 Single Use Buildings

Buildings that are constructed for use by a single business are generally smaller in scale than multitenant buildings. Single use buildings should be designed to be attractive and architecturally cohesive. To the greatest extent possible, the same materials, window types and roof types should be used throughout.

FINDING: The building reflects the above criteria.

2.4.2 Franchise Design

Franchise architecture with highly contrasting color schemes, non-traditional forms, reflective siding and roof materials are not related to any traditional New England style. They are buildings that are stylized to the point where the structure is a form of advertising. However, franchises have been willing to use existing "vernacular" buildings, and sometimes have designs that somewhat reflect local styles.

FINDING: N/A

2.4.3. Mixed Use Buildings

Buildings containing mixed uses (e.g., health club on the first floor with professional offices on the second floor) are encouraged. The architecture of a mixed-use building can reflect the different uses on the upper floors by a difference in façade treatment, as long as the building has a unified design theme.

FINDING: N/A

2.5 Residential Structures

Objective: Cumberland's future housing stock in the Route 1 corridor should be well designed and constructed, and is encouraged to have some connection to the traditional styles of New England residential architecture. The large mass of multiplex dwellings, can be broken up by façade articulation and architectural detailing in order to reduce their apparent size.

Building form and massing can conform to traditional New England residences by using gable or gambrel roofs with generous overhangs. Traditional vertically hung windows are encouraged. Garages should not constitute a major element of the front of the house that faces the street, but should be located to the side or rear wherever possible.

Dwellings with ells and additions, and ones with multiple roof planes harken back to traditional New England farm and seaside homes. Box-like, ranch or split-level "contractor modern" type dwellings do not particularly reflect Maine styles.

Similarly, traditional New England building materials such as wooden shingles and clapboards are encouraged. Modern low-maintenance materials such as cemeticious shingles and clapboards may be substituted.

FINDING: N/A

2.6 Residential Care Facilities

Objective: Ensure that the future needs of Cumberland's aging population are met in healthy and welldesigned facilities, and that the architecture and site design of such facilities fit into the Cumberland context.

The design of Residential Care Facilities can also draw on the local vernacular architecture of gable roofs, multiple building forms and traditional materials. Landscaping, site design and resident amenities will also be of concern to the Planning Board. The site should offer outdoor amenities such as decks, terraces, gardens, gazebos, lawns or similar features. Residential Care Facilities should be buffered from roadways and adjacent uses as much as possible.

FINDING: N/A

2.7 Hotels

Objective: To ensure that any future hotels in the Town of Cumberland are in keeping with the character of the surrounding area, and that the scale and design respects the architectural context of the region.

Using traditional building materials and colors is encouraged, and the use of large blocks of bright, primary colors is discouraged.

The signage and lighting standards contained in this publication will help as well.

FINDING: N/A

2.7.1 All Building Types: Awnings and Canopies

Awnings and canopies can enhance the appearance and function of a building by providing shade, shelter, shadow patterns, and visual interest. Where awnings are used, they should complement the overall design and color of the building.

Whether fixed or retractable, awnings and canopies should be an integral element of the architecture. They should be located directly over windows and doors to provide protection from the elements. Awnings or canopies should not be used as light sources or advertising features. Graphics and wording located on canopies and awnings will be considered part of the total signage area. Any such graphics shall be designed as an integral part of the signage program for the property, and coordinated with other sign elements in terms of typeface, color and spacing.

FINDING: N/A

3 Signage

Signs play a central role in providing much-needed information and setting the tone for the Route 1 corridor. They inform motorists and pedestrians and have a direct effect on the overall appearance of the roadway. Signage should not create visual clutter along the roadway, yet must provide basic, legible information about commercial goods and services. Signs should be compatible with the architecture and the context of the development.

3.1 Sign Design

Objective: Commercial uses along Route 1 in Cumberland should be identified by attractive, legible signs that serve the need of the individual business, while complementing the site and the architecture. All signage shall comply with the requirements of the Zoning Ordinance of the Town of Cumberland.

3.1.1 Signage Plan

For development proposals requiring one or more signs, the applicant shall provide a detailed signage plan as part of Site Plan or Subdivision review. The signage plan should show the location of all signs on a site plan drawing and on building elevations, as well as sign construction details, dimensions, elevations, etc., and accurate graphic representations of the proposed wording.

FINDING: TBD with sign permit application

3.1.2 Sign Location

Signs should be placed in locations that do not interfere with the safe and logical usage of the site. They should not block motorists' lines of sight or create hazards for pedestrians or bicyclists. Roof mounted signs are not encouraged.

FINDING: Complies

3.1.3 Sign Design

The shape and materials and finish of all proposed signage should complement the architectural features of the associated building. Simple geometric forms are preferable for all signs. All signage shall comply with the requirements of the Zoning Ordinance of the Town of Cumberland.

FINDING: TBD with sign permit application

3.1.4 Sign Colors

Signs should be limited to two or three contrasting colors that are clearly complimentary to the colors of the associated building.

FINDING: TBD with sign permit application

3.1.5 Sign Content

To ensure a clear and easily readable message, a single sign with a minimum of informational content should be used. As a general rule no more than about 30 letters should be used on any sign.

Lettering on any sign intended to be read by passing motorists needs to be legible at the posted speed limit. In general a minimum letter height of 6 inches is appropriate. Smaller letters can require motorists to slow down thereby creating traffic and safety hazards. Upper and lower case lettering is preferred to all upper case, as it is easier to read.

The use of variable message "reader boards", sponsor logos, slogans or other messages that promote products or services other than the tenants' are not permitted.

Signage for any proposed development should prominently feature its assigned street address to facilitate general way-finding and e-911 emergency response.

FINDING: TBD with sign permit application

3.2 Sign Type

Objective: To ensure that any sign type complements the architecture of the associated building, and to ensure that they are attractively designed and functional while clearly delivering the intended information.

3.2.1 Building Mounted Signs

Building or façade mounted signs should be designed as an integral element of the architecture, and should not obscure any of the architectural details of the building. Signage should be mounted on vertical surfaces and should not project past or interfere with any fascia trim. Signs should be located a minimum of 18" from the edge of a vertical wall, however the overall proportions of both the wall and sign should be taken into consideration in the placement of the sign.

Flush mounted (flat) signage should be mounted with concealed hardware. Perpendicularly mounted hanging signs should be mounted with hardware designed to complement the building's architecture. All metal hardware should be corrosion and rust resistant to prevent staining or discoloration of the building.

FINDING; TBD with sign permit application

3.2.2 Freestanding Signs

An alternative to a façade-mounted sign is a freestanding "pylon" sign. These signs are typically located between the building and the roadway right-of-way, adjacent to the site's vehicular entry point.

As with façade-mounted signage, design and content standards shall apply. Because freestanding signs amount to architecture themselves, it is important that they be carefully designed to complement the associated building. This will entail similar forms, materials, colors and finishes. Landscaping surrounding the base of such signs shall be consistent with the landscaping of the entire site.

Where a freestanding sign lists multiple tenants, there should be an apparent hierarchy: i.e., Address, name of the building or development, primary tenant, other tenants.

FINDING: TBD with sign permit application

3.2.3 Wayfinding Signs

To prevent visual clutter and motorist confusion, additional smaller signs indicating site circulation are generally discouraged. However they are sometimes needed to clarify complex circulation patterns. Wayfinding signage is also sometimes required to indicate different areas of site usage, such as secondary building entries, loading, or service areas. The Planning Board shall exercise its discretion in the requirement or prohibition of such signs.

Where required, wayfinding signage should be unobtrusive, no taller than absolutely necessary, and shall complement the overall architecture and signage plan in terms of materials, color, form and finishes.

FINDING: TBD with sign permit application

3.3 Sign Illumination

Only externally lit signs are permitted in the Route 1 corridor because, compared with internally lit signs, the direction and intensity of the light can be more easily controlled. Externally illuminated signs are made of an opaque material and have a dedicated light fixture or fixtures mounted in close proximity, aimed directly at the sign face. The illumination level on the vertical surface of the sign should create a noticeable contrast with the surrounding building or landscape without causing undue reflection or glare.

Lighting fixtures should be located, aimed and shielded such that light is only directed onto the surface of the sign. Wherever possible, fixtures should be mounted above the sign and be aimed downward to prevent illumination of the sky.

FINDING: Complies

4 Lighting

Outdoor lighting is used to identify businesses and illuminate roadways, parking lots, yards, sidewalks and buildings. When well designed and properly installed it can be very useful in providing us with better visibility, safety, and a sense of security, while at the same time minimizing energy use and operating costs. If outdoor lighting is not well designed or is improperly installed it can be a costly and inefficient nuisance. The main issues are glare (hampering the safety of motorists and pedestrians rather than enhancing it), light trespass (shining onto neighboring properties and into residential windows), energy waste (lighting too brightly or lighting areas other than intended or necessary), and sky glow (lighting shining outward and upward washing out views of the nighttime sky).

4.1 Good Lighting

Objective: Good lighting does only the job it is intended to do, and with minimum adverse impact on the environment. Common sense and respect for neighbors goes a long way toward attaining this goal.

The applicant should provide sufficient lighting for the job without over-illuminating.

Fixtures should be fully shielded, giving off no light above the horizontal plane. They should also direct the light onto the intended areas. Fully shielded produce very little glare, which can dazzle the eyes of motorists and pedestrians.

The height and positioning of fixtures is also important, since even well shielded fixtures placed on tall poles can create light trespass. Fixtures should be positioned to uniformly illuminate the subject area. Hot spots created by too-bright or too-low fixtures make the in between areas seem dark, which can create safety problems.

High efficiency lamps are encouraged. Shielded lights can be lower in wattage, and will actually light an area better than unshielded high-output lights because they don't waste light by casting it outward and upward.

FINDING: Complies

4.2 The Lighting Plan

Objective: As part of Site Plan or Subdivision review the Planning Board may, at its discretion, require that a lighting plan be provided. It should be prepared by a professional with expertise in lighting design. The intent of the lighting plan is to show how the least amount of light possible will be provided to achieve the lighting requirements.

4.2.1 Elements of the Lighting Plan

In addition to meeting the requirements of the Zoning Ordinance, the Lighting Plan should contain a narrative that describes the hierarchy of site lighting, describes how lighting will be used to provide safety and security, and describes how it will achieve aesthetic goals. The Lighting Plan should include specifications and illustrations of all proposed fixtures, including mounting heights, photometric data, and other descriptive information. It should also include a maintenance and replacement schedule for the fixtures and bulbs.

The Planning Board may require a photometric diagram that shows illumination levels from all externally and internally visible light sources, including signage.

The location and design of lighting systems should complement adjacent buildings, pedestrian routes, and site plan features. Pole fixtures should be proportionate to the buildings and spaces they are designed to illuminate.

Buffers, screen walls, fencing and other landscape elements should be coordinated with the lighting plan to avoid dark spots and potential hiding places.

Where proposed lighting abuts residential areas, parking lot lighting and other use-related site lighting should be substantially reduced in intensity within one hour of the business closing.

FINDING: Complies

4.3 Types of Lighting

4.3.1 Façade and Landscaping Lighting

Lighting on the front of a building can highlight architectural features or details of a building and add depth and interest to landscaping. This style of lighting should not be used to wash an entire façade in light or light the entire yard. Rather should be used to emphasize particular aspects of the project. All fixtures should be located, aimed and shielded so that they only illuminate the façade or particular plantings and do not illuminate nearby roadways, sidewalks or adjacent properties. For lighting a façade, the fixtures should be designed to illuminate the portion of the face of the building from above, aimed downward, to eliminate skyglow.

4.3.2 Parking Lot and Driveway Lighting

Parking lot and driveway lighting should be designed to provide the minimum lighting necessary for safety and visibility. Poles and fixtures should be in proportion to the roadways and areas they are intended to illuminate.

All fixtures should be fully shielded or "cut-off" style, such that no light is cast above the horizontal plane. Decorative fixtures are strongly encouraged as long as they meet the cut-off criteria, and their design and color complements the architecture and landscaping of the project.

FINDING: Complies

4.3.3 Pedestrian Lighting

Places where people walk, such as sidewalks, stairs, sitting areas, curbs and landscaping should be adequately but not excessively illuminated.

Mounting heights for pedestrian lighting should be appropriate in design and scale for the project and its setting. Bollard fixtures of 3' to 4' in height and ornamental fixtures of up to 12' in height are encouraged. Fixtures should be a maximum of 1 watts and should not create glare or light trespass onto abutting properties.

FINDING: Complies

EXPIRATION OF APPROVAL: Construction of the improvements covered by any site plan approval must be substantially commenced with 12 months of the date upon which the approval was granted. If construction has not been substantially commenced within 12 months of the date upon which approval was granted, the approval shall be null and void. If construction has not been substantially completed within 24 months of the date upon which approval was granted or within a time period as specified by the Planning Board, the approval shall be null and void. The applicant may request an extension of the period. Such request must be made in writing and must be made to the Planning Board. The Planning Board may grant up to two one-year extensions to the period if the approved plan conforms to the ordinances in effect at the time the extension is granted and any and all federal and state approvals and permits are current.

STANDARD CONDITION OF APPROVAL: This approval is dependent upon and limited to the proposals and plans contained in the application and supporting documents submitted by the applicant. Any variation from the plans, proposals and supporting documents, except de minimis changes as so determined by the Town Planner which do not affect approval standards, is subject to review and approval of the Planning Board prior to implementation.

PROPOSED CONDITIONS OF APPROVAL:

- 1. A preconstruction conference is required prior to the start of construction.
- 2. The amended SLODA permit shall be submitted to the Town Planner prior to the preconstruction conference.
- 3. All review comments by the Town Engineer shall be addressed prior to the preconstruction conference.
- 4. A performance guarantee in an amount and form acceptable to the Town Manager will be required prior to the preconstruction conference.
- 5. All clearing limits shall be flagged and approved by the Town Engineer prior to the preconstruction conference.
- 6. A blasting permit, if required, shall be obtained from the Code Enforcement Officer.
- 7. All legal and technical review fees shall be paid to the Town prior to the preconstruction conference.
- 8. Any required local, State or Federal permits shall be submitted to the Town Planner prior to the preconstruction conference.
- 9. An electronic copy of the as-built plans shall be submitted to the Town Planner prior to the release of any remaining inspection fees.
- 10. A sign permit for the proposed ground mounted sign to be located at the edge of the entrance is required.
- 11. Exterior lighting will only be on during the actual hours of operation and one hour prior to and one hour following the hours of operation.
- 12. Truck deliveries/pick-ups should be limited to daylight hours.
- 13. All storage for fuel, chemicals, chemical or industrial wastes, biodegradable raw materials or liquid, gaseous or solid materials shall meet the standards of the Maine Department of Environmental Protection and the State Fire Marshal's office.
- 14. The location of the proposed storage building is not shown on the plan nor is a dumpster screening detail provided.
- 15. The recommendations of the Fire Chief should be shown on the plan.

June 14, 2021



4306-7

Carla Nixon, Town Planner Town of Cumberland 290 Tuttle Road Cumberland, Maine 04021

Re: Response to Review Comments <u>PROPOSED COMMERCIAL/OFFICE BUILDING</u> <u>ROUTE 1, CUMBERLAND</u> Tax Map R01, Lot 11-3

Dear Ms. Nixon:

We have reviewed the comments provided by you and have prepared the following responses to address your concerns. The comments are reiterated in italics for reference with our response, in bold, immediately following:

TOWN PLANNER'S COMMENTS:

1. Is there an expiration date for the purchase and sale agreement?

The buyer has 180 days to obtain permits. Based on the contract date of February 17, 2021, the PSA would be valid until August 16, 2021.

2. Who is the owner of the parcel now? P & S states Lola in Pearls, LLC

The parcel is currently owned by Beacon Properties, LLC. The buyer will be Lola in Pearls LLC and Lakeside Concrete Cutting will be a tenant.

3. Add label for path along Route 1.

The path has been labeled.

4. Amend the plan to show that the entrance drive is to be shared with Lot 4.

The plan has been revised to indicate the driveway will be shared.

5. Will the parking spaces along the rear of the parking lot allow for the turning movements of the trucks to the loading areas?

SITELINES • CIVIL ENGINEERS • LAND SURVEYORS

119 Purinton Road, Suite A, Brunswick Landing, Brunswick, ME 04011 207-725-1200 • www.sitelinespa.com A WB-65 tractor-trailer can back up square to the overhead doors if there are no cars parked in the spaces. If there are cars parked in the spaces, the truck can maneuver the trailer to near the overhead doors. Since the building does not have a loading dock, and deliveries will be offloaded with a forklift, the trailer does not need to be square to the building. However, if a handful of spaces are made available, the trailer can be flush to the building. This can be accomplished by placing cones in the stalls on days when a delivery is schedules.

6. The West Elevation is labelled as facing Sky View Drive; however, the site plan shows the overhead doors facing the rear of the lot. All elevation drawings should be re-labelled correctly.

The elevation labels have been revised.

7. Can wood or vinyl fencing replace the proposed chain link fencing shown on the plan?

The fencing at the top of the cut slope was selected as black vinyl coated chain link because it will be minimally visible and exceptionally durable with minimal maintenance. This was intended to 'fade into the background'. Wood or vinyl would be more prone to damage from water or cold temperatures.

We trust these responses will address the comments provided. Please feel free to contact me if additional information is needed. We appreciate your assistance with this application.

Very truly yours,

Ill Curtis Y. Neufeld, P.E.

Vice President

Enclosure





tim@atlanticenviromaine.com 207-837-2199 www.atlanticenviromaine.com

June 14, 2021

Mr. Curtis Neufeld Sitelines PA 119 Purinton Road, Suite A Brunswick, ME 04011

RE: Wetland Delineation at (Map R-01, Lot 11-3) off us U.S. Route 1 in Cumberland, Maine.

Dear Mr. Nuefeld,

At your request, Atlantic Environmental, LLC. (AE) completed a Wetland Delineation within a 2.55 acre parcel identified on Tax Map R-01 as Lot #11-3 in the Town of Cumberland, Maine. This work was performed on June 12, 2021. Wetland delineations are based on the *Regional supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0)*. This is a multi parameter approach that requires hydrophilic vegetation, hydric soils, and indicators of hydrology to meet the definition of a wetland. While onsite AE also looked for other regulated natural resources such as potentially significant vernal pools, streams and rare, threatened or endangered species.

Site Description

The site is currently undeveloped with the exception of a walking trail along the eastern edge of the parcel. The topography of the site slopes gently to the east. Some forestry activity has taken place as noted by the skidder trails.

Wetland Delineation

The parcel is dominated by upland vegetation including white pine, red maple, red oak, American beech, balsam fir, bracken fern, starflower, spinulose wood fern, and sarsaparilla. Soils within the site were non-hydric and no indicators of hydrology were noted within the parcel. Along the walking trail a culvert was noted. While the vegetation within that area was dominated by sensitive fern (FACW) that species is often associated with disturbed sites. Additionally the soils were found to be non-hydric within that location.

Potential Vernal Pools

While onsite, AE looked for potentially significant vernal pools that are regulated under Chapter 335 of the Natural Resources Protection Act. The upland areas are somewhat flat with a gentle slope to the east. No topographic changes or isolated depressions that have the potential to hold enough water to create vernal pool habitats were found.

River, Stream, or Brook

No rivers, streams or brooks were found within the parcel.

Conclusion

Based on our field assessment no wetlands, streams, potentially significant vernal pools or other regulated natural resources exist onsite.

Thank you for the opportunity to work with you on this project. Please do not hesitate to contact me at 207-837-2199 or via email at tim@atlanticenviromaine.com if you have additional questions.

Sincerely, Atlantic Environmental LLC.

Timothy A. Forrester, Owner

initity A. Fametor

PWS #1933







Photograph One. View of the upland vegetation at Map R-01, Lot 11-3, U.S. Route 1 in Cumberland, Maine. Photographer: Tim Forrester, Atlantic Environmental, LLC. Date: June 12, 2021



Photograph Two. View of the culvert adjacent to the walking trail at Map R-01, Lot 11-3, U.S. Route 1 in Cumberland, Maine.

Photographer: Tim Forrester, Atlantic Environmental, LLC.

Date: June 12, 2021





ALL TERMINATIONS AND CONNECTIONS OF SERVICES SHALL BE IN COMPLIANCE WITH REQUIREMENTS OF THE PORTLAND WATER DISTRICT. ALL BACKFILLING AND COMPACTION OF WATER AND SEWER LINE TRENCHES SHALL BE AS APPROVED BY THE LOCAL UTILITY DISTRICT.

THE CONTRACTOR SHALL CONTACT DIGSAFE (888-344-7233) PRIOR TO COMMENCING EXCAVATION.

THE BASIS FOR PROJECT LAYOUT AND FOR CONSTRUCTION ELEVATIONS IS THE BASELINE AND BENCHMARK EXISTING ON THE SITE AND SHOWN ON THE

3. THE CONTRACTOR SHALL CONFIRM HORIZONTAL AND VERTICAL CONTROL BEFORE BEGINNING WORK.

SEE PLUMBING AND ELECTRICAL PLANS FOR LOCATION AND INVERTS OF SLEEVES IN FOUNDATIONS. 5. ELECTRIC SERVICE SHALL BE INSTALLED IN CONDUIT UNDER PAVEMENT AND

CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF ALL SEWER, WATER, ELECTRICAL, AND SANITARY CONDUIT, MANHOLES, TRANSFORMERS, AND

FITTINGS FOR APPROVAL. 7. CONTRACTOR SHALL VERIFY LOCATION OF EXISTING UTILITIES PRIOR TO

8. DUCTILE IRON PIPE SHALL MEET THE REQUIREMENTS OF AWWA C150 AND

C151, CLASS 52, AND HAVE PUSH ON OR FLANGED JOINTS AS REQUIRED. FITTINGS SHALL HAVE MECHANICAL JOINTS WITH RETAINER GLANDS. 9. SANITARY SEWER PIPE AND FITTINGS SHALL BE SDR-35 PVC.

10. INSTALL 2" RIGID STYROFOAM INSULATION OVER SANITARY SEWER IN AREAS

WHERE THERE IS LESS THAN 4' OF COVER. 11. CONNECTIONS AT MANHOLES/CATCH BASINS SHALL HAVE A FLEXIBLE BOOT

CAST ONTO THE BARREL AND SECURED WITH STAINLESS STEEL BANDS. 12. SEE SHEET C5 FOR GRADING, DRAINAGE, STORM DRAIN DATA & EROSION

13. BUILDING FOOTPRINT SHOWN IS NOT FOR FOUNDATION LAYOUT. REFER TO STRUCTURAL/ARCHITECTURAL DRAWINGS.

14. ALL PIPING MATERIAL TO THE BALL VALVE SHALL BE 1" OR 2" TYPE K COPPER AND ALL CONTROL VALVES SHALL BE LOCATED WITHIN THE

15. ALL DOMESTIC WATER SERVICES ON THE BUILDING SIDE OF THE CONTROL VALVE SHALL BE EITHER 2" TYPE K COPPER OR 2" CTS PE RATED AT 200 PSI. IF THE PE IS USED, AN 8 GAUGE WIRE SHALL BE ATTACHED TO THE PIPE WITH ONE END BROUGHT ALONGSIDE THE CURB BOX FOR LOCATING

16. ANY CURB BOXES LOCATED WITHIN PAVEMENT SHALL BE INSTALLED INSIDE A

17. ALL MATERIALS SHOWN SHALL BE NEW AND FURNISHED BY CONTRACTOR AS PART OF CONTRACT WORK. ONLY ITEMS SPECIFICALLY IDENTIFIED TO BE SALVAGED MAY BE RE-USED WITHOUT PRIOR WRITTEN PERMISSION.

			NET CHANGE IN IMPERVIOUS AREA: +54,996 S.F. (1.26 AC)
OFFICE CO	DMMERCIAL-SOUTH ZONING DISTRICT (OC-S)		8. WAIVERS REQUESTED: HIGH INTENSITY SOILS SURVEY
ANDARD	REQUIRED	PROPOSED	HYDRO GEOLOGIC EVALUATION TRAFFIC STUDY
Έ :	1 AC.	2.55 AC.	
ONTAGE:	150'	370'	9. LOT TO BE SERVED BY PUBLIC WATER AND SEWER,
BACKS:			10. FOWER, TELEFHONE AND CABLE ARE TO BE UNDERGROUND.
	25'	25'	TI. THE DEVELOPER / OWNER WILL BE RESPONSIBLE FOR MAINTAINING THE ACCES DRIVE AND PARKING AREAS, INCLUDING PLOWING.
	65'	65'	12. PROJECT IS SUBJECT TO DEP PERMIT L-21578-39-C-N & L-21578-TB-D-N
	20'	20'	UTILITY NOTES:
:	40' OFFICE - 1 PER 250 S.F. = 30 INDUSTRIAL - 1 PER 1.2 EMPLOYEES = 8 TOTAL = 38	<40' 60	1. INFORMATION REGARDING THE LOCATION OF EXISTING UNDERGROUND UTILITIES A COMPILATION OF THAT FOUND IN THE FIELD AND THAT SHOWN ON A PREVIOUS PLANS, AND SHALL NOT BE CONSIDERED AN AS-BUILT PLAN. CONTRACTOR SHALL RESPONSIBLE FOR FIELD VERIFYING UTILITY LOCATIONS PRIOR TO COMMENCING WO NOTIFY ENGINEER OF ANY DISCREPANCY BETWEEN UTILITIES AS SHOWN AND AS
	EWER STRUCTURE DATA: MH#1 IM: 101.42 IV.IN: 95.21 IV.OUT: 95.11 (TO EX-SMH#1) X-SMH#1 IM: 98.44 IV. IN: 94.25 1: 8" PVC L=171' S=0.0050 MIN. 2: 6" PVC L=80' S=0.0050 MIN.		 FOUND. CONTRACTOR SHALL NOTIFY DIG-SAFE PRIOR TO EXCAVATION. 1-888-344-7233 LAYOUT NOTES: ALL DIMENSIONING, UNLESS NOTED OTHERWISE, IS TO THE FACE OF CURB OR FOUNDATION. BOUNDARY INFORMATION ON LAYOUT PLAN IS FOR REFERENCE ONLY, REFER TO CERTIFIED BOUNDARY PLANS FOR BOUNDARY INFORMATION. ALL HANDICAP ACCESSIBLE PARKING SPACES, RAMPS AND SIDEWALKS SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE AMERICANS WITH DISABILITIES ACT (ADA). ALL SITE SIGNAGE AND PAVEMENT MARKINGS SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. (MUTCD) BUILDING FOUNDATION SHOWN IS NOT FOR FOUNDATION LAYOUT. COORDINATE SITE WORK WITH ARCHITECTURAL DRAWINGS INCLUDING BUILDING FEATURES AND FOUNDATION PLAN. REFER TO SHEET C4 FOR GRADING AND DRAINAGE INFORMATION. REFER TO SHEET L1 FOR LANDSCAPE INFORMATION.
\	OHE		3.06-14-21REVISED PER REVIEW COMMENTS SUBMITTED FOR FINAL APPROVAL062.06-03-21REVISED PER TOWN PLANNER COMMENTS061.05-05-21SUBMITTED TO TOWN OF CUMBERLAND06
			SITE LAYOUT & UTILITY PLAN
			COMMERCIAL/OFFICE BUILDINGS U.S. ROUTE 1, CUMBERLAND, MAINE
			PREPARED FOR: LAKESIDE CONCRETE CUTTING & ABATEMENT PROFESSION 590 COUNTY ROAD, SUITE 2, WESTBROOK, ME 040
APHIC	SCALE 30 60 CUR SCALE		SITELINES 119 PURINTON ROAD, SUITE A BRUNSWICK, MAINE 04011 207.725.1200 CIVIL ENGINEERS • PLANNERS • LAND SURVEYORS
(IN FEET) 三 灵 、 977	·9	FIELD WK: MC & CR SCALE: $1'' = 30'$ SHEET:

4/CENSEV

06 - 03 -

DRN BY: NCR

CH'D BY: CYN

DATE: 03/08/21



FILE: 4306-SITE

MAP/LOT: R01/11-3

JOB #: 4306

SITE PLAN REVIEW

COMMERCIAL/OFFICE BUILDING

ROUTE 1 CUMBERLAND, MAINE

May 5, 2021

Prepared For



590 County Road, Suite 2 Westbrook, Maine 04092



119 Purinton Road, Suite A, Brunswick Landing, Brunswick, ME 04011 207-725-1200 • www.sitelinespa.com

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May 5, 2021



4306-7

Carla Nixon, Town Planner Town of Cumberland 290 Tuttle Road Cumberland, Maine 04021

Re: Site Plan Review <u>PROPOSED COMMERCIAL/OFFICE BUILDING</u> <u>ROUTE 1, CUMBERLAND</u> Tax Map R01, Lot 11-3

Dear Ms. Nixon:

On behalf of Lakeside Concrete Cutting Inc. (Applicant), Sitelines, PA is pleased to submit the enclosed Site Plan Review Application for the development of a commercial/office building located along Route 1 in Cumberland. This letter is intended to summarize the project in order to facilitate the review process.

PROPERTY

The applicant has a purchase and sale agreement for a parcel of land located along Route 1 in Cumberland. The parcel is identified as Tax Map R01, Lot 11-3 on the Town of Cumberland Tax Maps. The parcel contains 2.55± acres and has frontage on Route 1. The site has not been previously developed and consists mostly of forested area. Contractor's space and business and professional offices are permitted uses in the OC-S zoning district.

SITE DESIGN

The proposed site consists of an approximately 15,000 s.f. building, associated parking, infrastructure, and landscaping. A total of 50 parking spaces will be provided for the building, two (2) of which will be ADA compliant. The site will be accessed via a new curb cut on Route 1. Water, sewer, electric, and natural gas utilities are available to the parcel and contact has been made with the respective utility providers.

The site is part of the previously approved Cumberland Foreside Village Subdivision and will require an amendment to the existing Site Location of Development Act (SLODA) permit. The development also has an approved driveway entrance permit from the Maine Department of Transportation.

Based on the specifics of the project, the applicant requests waivers for the following application items:

• High intensity soils survey

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Site Plan Review Application Proposed Commercial/Office Building 5/5/2021 Page 2

- Hydro geologic evaluation:
- Traffic Study
- Market Study

Review Standards

To facilitate your review of our proposal, the following issues are summarized in accordance with *Chapter 229, Section 10 – Approval Standards and Criteria* of the Ordinance:

A. Utilization of the Site

There are no environmentally sensitive areas, such as wetlands, floodplains, significant wildlife habitats, fisheries, scenic areas, habitats for rare or endangered plants and animals, unique nature communities and natural areas, or sand and gravel aquifers present on site. Impacts to areas of steep slope have been minimized to the greatest extent possible.

B. Traffic, Circulation, and Parking

The location of the entrance drive provides adequate sight distance in both directions. Parking spaces have been designed to conform with the Town of Cumberland standards. A driveway entrance permit from the Maine Department of Transportation has already been obtained for the site. A copy of the traffic movement permit is included with this submission under supporting documents. The proposed use will have minimal traffic generation since it does not include retail space or services that include customers coming to the building.

C. Stormwater Management and Erosion Control

A stormwater management plan and erosion control plan have been included in Attachment I of this application.

D. Water, Sewer, and Fire Protection

Water and sewer services will be extended to the lots from the existing utilities located on Route 1. The Portland Water District indicated their ability to serve the entire project at the time of original permitting. A copy of that letter is included under Supporting Documents.

E. Water Protection

It is not anticipated that the proposed site development will adversely the quality of quantity of groundwater available to abutting properties or public water supply systems. The project will not extract groundwater for operations or irrigation. The new building will utilize the existing public sewer system. Stormwater runoff from the developed areas will be directed to a new grassed underdrained soil filter which will be lined with an impermeable liner to prevent any groundwater contamination.

All storage for fuel, chemicals, chemical or industrial waters, and biodegradable raw materials will meet the standards of the Maine Department of Environmental Protection and the State Fire



Site Plan Review Application Proposed Commercial/Office Building 5/5/2021 Page 3

Marshal's office. The site is not located within the aquifer protection area as identified on the Official Aquifer Protection Map.

F. Floodplain Management

The site is located in Zone C (areas of minimal flooding risk) as identified by the Federal Emergency Management Agency Flood Insurance Rate Map included in Attachment F of this application.

G. Historic and Archaeological Resources

There are no known historic or archaeological resources located on site. A letter verifying that there are no historic or archaeological resources on site was provided by the Maine Historic Preservation Commission during the DEP Site Location of Development Permit process, and is included under Supporting Documents.

H. Exterior Lighting

Exterior lighting has been designed to provide adequate lighting for parking areas. Full cutoff fixtures will be utilized to avoid glare and adverse impact on neighboring properties and rightsof-way, and any unnecessary lighting of the night sky. Details of the lighting fixtures have been included in Attachment H and a photometric plan showing lighting levels throughout the development has been included on Sheet L2.

I. Buffering and Landscaping

Buffers in the form of fences, grade changes, and landscaping, have been designed to screen service and storage areas and generally soften the appearance of the development. A detailed landscape plan has been included on sheet L1.

J. Noise

It is not anticipated that the development will create a noise level that will be a nuisance for adjacent properties.

K. Storage of Materials

All storage areas and dumpsters are screened by either fencing or landscaping. A shed is proposed to be constructed as an accessory building to store materials containing asbestos until they could be properly disposed of.

L. Capacity of the Applicant

Evidence of financial capacity has been included in Attachment G of this application. The design team, led by Sitelines, PA, has extensive experience planning, designing, and gaining approvals for commercial development projects throughout the state.

M. Design and Performance Standards



Site Plan Review Application Proposed Commercial/Office Building 5/5/2021 Page 4

As the site is located along Route 1, the Route 1 Design Guidelines are applicable and have been followed to the greatest extend possible.

SUMMARY

We look forward to presenting the project to the Planning Board at the workshop on June 15. Should you have any questions, please call or contact me at cneufeld@sitelinespa.com.

Very truly yours,

fl

Curtis Y. Neufeld, P.E. Vice-President

Enclosures

cc: Ryan Peters, Lakeside Concrete Cutting & Abatement Professionals



Attachment A Application Form & Checklists

A completed copy of the Site Plan Review Application Form and the Checklist are enclosed.

SITE PLAN REVIEW Town of Cumberland

Appendix C Planning Board Site Plan Review Application

Applicant's name		
Applicant's address		
Cell phone	Home phone	Office phone
Email Address		
Project address		
Project name		
Describe project		
Number of employees		
Days and hours of operation		
Project review and notice fee _		
Name of representative		
Contact information: Cell:	_	Office:
What is the applicant's interest Own Lease Pu If you are not the owner, list or	in the property? Irchase and sale agree wner's name, address	ement(provide copy of document) and phone number
If you are not the owner, list ov Boundary Survey Submitted? Yes No Are there any deed restrictions and show easement location or	wner's name, address or easements? Yes _ n site plan.	and phone number
Building Information Are there existing buildings on Will they be removed? Yes prior to demolition.) Will a new structure(s) be built Describe: Number of new buildings Square footage Number of floor levels including	the site? Yes No(Not t on the site? Yes ng basement	NoNumber: e: A demolition permit is required 10 days No

Parking

Number of existing parking spaces ______ Number of new parking spaces ______ Number of handicapped spaces ______ Will parking area be paved? ____Yes ____No

Entrance

Location: _____ Width___Length _____ Is it paved?____Yes____No____If not, do you plan to pave it?

Where will snow storage for entrance and parking be located? Show on site plan.

Utilities

Water: Public water _____ Well ____ (Show location on site plan.)

Sewer/septic: Public sewer____Private septic____Show location on site plan and submit HHE-200 septic design or location of passing test pit locations if new system is proposed. Also show any wells on abutting properties within 200 feet of the site.

Electric: On site? Yes____No ___

Show location of existing and proposed utilities on the site plan and indicate if they are above or below ground.

Signs

- 0 ··	
Number:	
Size:	
Material:	
Submit sign design and compl	eted sign application.
Will the sign be lighted?	Submit information on type and wattage of lights.
Show location of sign(s) on th	e site plan.

Natural Features

Show 1	ocation of any of th	e following of	n the site plan:		
River_	Stream	Wetland	Pond	Lake	Stone walls
Are the	ere any other histori	c or natural fe	atures?		

Lighting

Will there be any exterior lights? Yes _____ No____Show location on site plan (e.g., pole fixtures, wall packs on building) and provide fixture and lumen information.

Trees

Show location of existing trees on the site plan and indicate if any are to be removed.

Landscaping

Is there existing landscaping on the site? Yes _____ No____Show type and location on site plan.

Is new landscaping proposed? (Note: if property has frontage on Route 100, a twenty-five-foot landscape easement to the Town is required.)

Buffering

Show any existing or proposed buffering measures for adjacent properties, e.g., plantings, fences.

Erosion Control

Has an erosion and sedimentation control plan been submitted? Yes _____ No _____

Stormwater Management Plan

Provide stormwater information for both pre and post development of the site. Show location of any detention areas and/or culverts on the site plan.

Fire Protection

Location of nearest hydrant _____ Sprinklers? Yes _____ No ____ Do you plan to have an alarm system? Yes _____ No ____ Please contact the Fire/EMS Department at 829-4573 to discuss any Town or state requirements.

Trash

Will trash be stored inside ______ outside _____. If outside, will a dumpster be used? Yes ______No _____. Show location on site plan and show type of screening proposed (e.g., fencing, plantings).

Technical Capacity

List and provide contact information for all consultants who worked on the project, for example: licensed land surveyor, licensed soils evaluator, professional engineer, attorney, etc.

Financial Capacity

Please indicate how project will be financed. If obtaining a bank loan, provide a letter from the bank ______

•	Zoning district:			
•	Minimum lot size:			
•	Classification of proposed use:			
•	Parcel size:	_		
•	Frontage:			
•	Setbacks: Front	Side	Rear	
•	Board of Appeals Required?			
•	Tax MapLot	Deed bool	<u> </u>	Deed page
•	Floodplain map number	De	signation	
•	Vernal pool identified?			
•	Is parcel in a subdivision?			
•	Outside agency permits require	ed:		
	MDEP Tier 1 MDEP	Tier 2	_Army C	orps of Engineers
	MDEP general construction (st	tormwater) pern	nit (for dist	turbance of 1 acre or more)
•	MDOT entrance permit			
•	MDOT traffic movement perm	it		
•	Traffic study required			
•	Hydrogeologic evaluation			
•	Market study			
•	Route 1 Design Guidelines?			
•	Route 100, VMU or TCD Desi	ign Standards?		
•		-		

Applicant's signature _____

Submission date: _____

PLANNING BOARD SITE PLAN REVIEW SUBMISSION CHECKLIST

FOR ALL PROJECTS:

Submission Requirement	Provide Location in Application Packet (e.g., plan sheet number, binder section, narrative	If requesting a waiver, indicate below:
Example: Erosion Control	Plan Sheet E-1	
General Information:		
Completed Site Plan Application		
Form		
Names and addresses of all		
consultants		
Narrative describing existing		
conditions and the proposed project		
Evidence of right, title or interest		
(deed, option, etc.)		
Names and Addresses of all property		
owners within 200 feet		
Boundaries of all contiguous property		
under control of owner		
Tax map and lot numbers		
Area of the parcel		
FEMA Floodplain designation & map		
#		
Zoning classification		
Evidence of technical and financial		
capability to carry out the project		
Boundary survey		
List of waiver requests on separate		
sheet with reason for request.		
Proposed solid waste disposal plan		
Existing Conditions Plan showing:		
Name, registration number and seal		
of person who prepared plan		
North arrow, date, scale, legend		
Area of the parcel		
Setbacks and building envelope		
Utilities, including sewer & water,		
culverts & drains, on-site sewage		
Location of any septic systems		
Location, names, widths of existing		
public or private streets ROW's		

Location, dimension of ground floor	
elevation of all existing buildings	
Location, dimension of existing	
driveways, parking, loading,	
walkways	
Location of intersecting roads &	
driveways within 200 feet of the site	
Wetland areas	
Natural and historic features such as	
water bodies, stands of trees,	
streams, graveyards, stonewalls,	
Tioodplains	
drainage agrees the site % off site	
drainage across the site & off site	
Location, none view, dimensions and	
Location and dimensions of existing	
easements & conjes of documents	
Location of nearest fire hydrant or	
water supply for fire protection	
Proposed Development Site Plan	
showing:	
Name of development	
Date	
North arrow	
Scale	
Legend	
Landscape plan	
Stormwater management	
Wetland delineation	
Current & proposed stands of trees	
Erosion control plan	
Landscape plan	
Lighting/photometric plan	
Location and dimensions of all	
proposed buildings	
Location and size of utilities, including	
sewer, water, culverts and drains	
Location and dimension of proposed	
on-site septic system; test pit	
locations and nitrate plumes	
Location of wells on subject property	
and within 200° of the site	
Location, names and widths of	
existing and proposed streets and	
I KUWS	

Location and dimensions of all	
accessways and loading and	
unloading facilities	
Location and dimension of all existing	
and proposed pedestrian ways	
Location, dimension and # of spaces	
of proposed parking areas, including	
handicapped spaces	
Total floor area and ground coverage	
of each proposed building and	
structure	
Proposed sign location and sign	
lighting	
Proposed lighting location and details	
Covenants and deed restrictions	
proposed	
Snow storage location	
Solid waste storage location and	
fencing/buffering	
Location of all fire protection	
Location of all temporary &	
permanent monuments	
Street plans and profiles	

ADDITIONAL REQUIREMENTS FOR MAJOR SITE PLAN PROJECTS:

Submission Requirement	Provide Location in Application Packet (e.g., plan sheet number, binder section, narrative	If requesting a waiver, indicate below:
High intensity soils survey		
Hydro geologic evaluation		
Traffic Study		
Market Study		
Location of proposed recreation areas (parks, playgrounds, other public areas)		
Location and type of outdoor furniture and features such as benches, fountains.		

May 5, 2021



4306-2

Mr. Ryan Peters Lakeside Concrete Cutting & Abatement Professionals 590 County Road, Suite 2 Westbrook, Maine 04092 <via email>

Re: Designation of Agent Authorization Commercial/Office Building Cumberland, Maine Tax Map R01, Lot 11-3

Dear Ryan:

As required by various approval agencies, please indicate by signing below that Sitelines, PA is authorized to act as agent for Lakeside Concrete Cutting & Abatement Professionals, for the specific purpose of preparation and submission of local and state permitting applications on your behalf for the proposed Commercial/Office Building to be located off U.S. Route 1 in Cumberland, Maine.

Sincerely,

1/1

Curtis Neufeld, P.E. Vice President

The undersigned hereby gives Sitelines, PA the authority to act as agent for Lakeside Concrete Cutting & Abatement Professionals for the specific purpose of preparation and submission of local and state permitting applications for the project specifically identified above.

Ryan Peters, President

Date

SITELINES • CIVIL ENGINEERS • LAND SURVEYORS 119 Purinton Road, Suite A, Brunswick Landing, Brunswick, ME 04011 207-725-1200 • www.sitelinespa.com

<u>Attachment B</u> Right, Title, & Interest

Copies of the current deed are included with this attachment.

DLN: 1001940076313

SHORT FORM QUITCLAIM DEED WITH COVENANT

HERITAGE VILLAGE DEVELOPMENT GROUP, LLC, a Florida limited liability company, with a mailing address of 2630 Harborside Drive, Longboat Key, FL 34228 (the "Grantor"), FOR CONSIDERATION PAID, grants to **BEACON PROPERTIES, LLC.**, a Maine limited liability company with a mailing address of <u>S Mouldon St. Porthanol ME</u> (the "Grantee"), with QUITCLAIM COVENANT, certain real property, together with any improvements thereon, situated in the Town of Cumberland, County of Cumberland and State of Maine, and more particularly described on Exhibit A attached hereto and made a part hereof.

Reference is hereby made to Quitclaim Deed granted by Cumberland Foreside Village, LLC to Heritage Village Development Group, LLC dated October 10, 2017 and recorded in recorded in Book 34376, Page 332, as affected by Corrective Deed dated April 9, 2018 and recorded in the said Registry of Deeds in Book 34767, Page 164.

IN WITNESS WHEREOF, Heritage Village Development Group, LLC has caused this instrument to be executed by Peter D. Kennedy, its Manager and Sole Member thereunto duly authorized, as of this \sum day of October, 2019.

WITNESS:

State of Maine County of Cumberland, ss. HÉRITAGE VILLAGE DEVELOPMENT GROUP, LLC

Peter D. Kennedy

Its Manager and Sole Member

October 8, 2019

PERSONALLY APPEARED the above-named Peter D. Kennedy, Manager and Sole Member of Heritage Village Development Group, LLC as aforesaid, and acknowledged the foregoing instrument to be his free act and deed in his said capacity and the free act and deed of said limited liability company.

Before me,

nary Greek

Notary Public/Attorney at Law Print Name: Marie Gresik Commission Expires: 6/1/2025

DOC :53723 BK:36100 PG:40 RECEIVED - RECORDED, CUMBERLAND COUNTY REGISTER OF DEEDS 10/23/2019, 11:37:02A Register of Deeds Nancy A. Lane E-RECORDED

EXHIBIT A

Property Description

A certain lot or parcel of land, together with the buildings and improvements thereon, situated on the Northerly side of U.S. Route 1, in the Town of Cumberland, County of Cumberland, State of Maine, and being Commercial Lot 3 as shown on Fourth Amended Subdivision Plan, Cumberland Foreside Village for Cumberland Foreside Village, LLC by Owen Haskell, Inc. dated January 26, 2007 and recorded at the Cumberland County Registry of Deeds in Plan Book 217, Page 85, as may have been further amended (the "Plan").

This conveyance is made subject to all restrictions, covenants, conditions, and easements of record that may affect the premises herein conveyed.







One Canal Plaza, Portland, ME 04101 • 207.772.1333

CONTRACT FOR THE SALE OF REAL ESTATE

Date: Wednesday, February 17, 2021

RECEIVED OF: Lola in Pearls LLC whose mailing address is <u>12 Railroad Street, Newport, ME 04953</u> hereinafter called the Purchaser(s), the sum of **Determinant Determinant** Dollars (**Determinant** as earnest money deposit and in part payment of the purchase price of the following described real estate, situated in the municipality of <u>Cumberland, ME</u>, County of <u>Cumberland</u>, State of Maine and located at <u>Lot 3 Captain's Landing, US Route 1</u> being the property owned by the Seller(s) at the above address, and described at said County's Registry of Deeds Book <u>36100</u>, Page <u>39</u> and further described as: <u>a 2.55+/- acre parcel of land further described by the **Town of Cumberland Assessor on Tax Map R1 Block 11 Lot 3** upon the terms and conditions indicated below:</u>

- 1. PERSONAL PROPERTY: The following items of personal property are included in this sale (if applicable): <u>N/A</u>.
- 2. PURCHASE PRICE: The TOTAL purchase price being **Dollars** Dollars **Dollars** to be paid as follows: **Earnest deposit within three (3) business days of the Effective Date of the Contract and the balance to be paid in cash or certified funds at closing**.
- 3. EARNEST MONEY/ACCEPTANCE: <u>The Boulos Company</u> shall hold said earnest money in a non-interest bearing account and act as Escrow Agent until closing; this offer shall be valid until <u>2/19/2021</u> at <u>12:00</u>PM; and, in in the event of the Seller's non-acceptance, this earnest money shall be returned promptly to the Purchaser(s).
- 4. TITLE: That a deed, conveying good and merchantable title in accordance with standards adopted by the Maine Bar Association shall be delivered to the Purchaser(s) and this transaction shall be closed and the Purchaser(s) shall pay the balance due and execute all necessary papers on or before **Five (5) days after expiration of all contingencies of this Contract**. If Seller(s) is unable to convey in accordance with the provisions of this paragraph, then the Seller(s) shall have a reasonable time period, not to exceed thirty (30) days, from the time the Seller(s) receives written notice of the defect, unless otherwise agreed to by both parties, to remedy the title, after which time, if such defect is not corrected so that there is merchantable title, the Purchaser(s) may, within fifteen (15) days thereafter, at Purchaser's option, declare the contract null and void and any earnest money shall be returned to the Purchaser(s) and neither party shall have any further obligation hereunder. If the Purchaser(s) does not declare the contract void within the period set forth above, the Purchaser(s) shall have waived the right to object to title. The Seller(s) hereby agrees to make a good-faith effort to cure any title defect during such period.
- 5. DEED: That the property shall be conveyed by a <u>**quit claim with covenant deed**</u>, and shall be free and clear of all encumbrances except building and zoning restrictions of record, restrictive covenants and conditions of record and usual public utilities servicing the property and shall be subject to applicable land use and building laws and regulations.
- 6. POSSESSION /OCCUPANCY: Possession/occupancy of premises shall be given to Purchaser(s) immediately at closing, subject to any leases, unless otherwise agreed by both parties in writing.
- 7. LEASES/TENANT SECURITY DEPOSITS: Seller(s) agrees to transfer at closing to Purchaser(s) all Seller(s)' rights under the current leases to the property and all security deposits held by Seller(s) pursuant to said leases.
- 8. RISK OF LOSS: Until the transfer of title, the risk of loss or damage to said premises by fire or otherwise, is assumed by the Seller(s) unless otherwise agreed in writing. Said premises shall then be in substantially the same condition as at present, excepting reasonable use and wear.
- 9. PRORATIONS: The following items shall be prorated as of the date of closing:
 - a. Real Estate Taxes based on the municipality's tax year. Seller is responsible for any unpaid taxes for prior years.
 - b. Fuel
 - c. <u>N/A</u>
 - d. Rents
 - e. Metered utilities, such as water and sewer, shall be paid by Seller(s) through the date of closing.
 - f. Purchaser(s) and Seller(s) shall each pay its transfer tax as required by the State of Maine.
- 10. INSPECTIONS: The Purchaser(s) is encouraged to seek information from professionals regarding any specific issue of concern. Purchaser(s) acknowledges receipt of disclosure form attached hereto. The Agent makes **kp** warranties

Seller_____ Purchaser_____

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regarding the condition, permitted use or value of the Seller's real or personal property. This Contract is subject to the following inspections, with the results being satisfactory to the Purchaser(s):

YPE OF INSPECTION	YES	NO	RESULTS REPORTED	TYPE OF INSPECTION	YES	NO	RESULTS <u>REPORTED</u>
a. General Building		\boxtimes	Within <u>days</u>	g. Lead Paint		\boxtimes	Within <u>#</u> days
b. Sewage Disposal		\boxtimes	Within <u>#</u> days	h. Pests		\boxtimes	Within <u>#</u> days
c. Water Quality		\boxtimes	Within <u>#</u> days	i. ADA		\boxtimes	Within <u>#</u> days
d. Radon Air Quality		\boxtimes	Within <u>#</u> days	j. Wetlands		\boxtimes	Within <u>#</u> days
e. Radon Water Quality		\boxtimes	Within <u>#</u> days	k. Environmental Scan	\boxtimes		Within <u>30</u> days
f. Asbestos Air Quality		\boxtimes	Within <u>#</u> days	1. Other: Permit/approva	als 🖂		Within <u>180</u> days
				Design/cost estimating			

The use of days is intended to mean from the effective date of this Contract. All inspections will be done by inspectors chosen and paid for by the Purchaser(s). If the result of any inspection or other condition specified herein is unsatisfactory to the Purchaser(s), in Purchaser(s) sole discretion, Purchaser(s) may declare the Contract null and void by notifying Seller(s) in writing within the specified number of days, and any earnest money shall be returned to the Purchaser(s). If the Purchaser(s) does not notify the Seller(s) that an inspection is unsatisfactory within the time period set forth above, this contingency is waived by the Purchaser(s). In the absence of inspection(s) mentioned above, the Purchaser(s) is relying completely upon Purchaser's own opinion as to the condition of the property.

- 11. FINANCING: This contract is subject to an approved <u>Enter mortgage</u>, mortgage of <u>Enter percentage</u>, <u>%</u> of purchase price, at an interest rate not to exceed <u>Enter maximum percentage</u>. % per annum and amortized over a period of not less than <u>Enter # of years</u>. years.
 - a) If Seller, or Sellers agent, is not notified to the contrary in writing within <u>Enter number of days</u>. days of the effective date of this contract, then this financing condition shall be deemed to have been waived by Purchaser(s).
 - b) The Purchaser(s) is under a good faith obligation to seek and accept financing on the above described terms. The Purchaser(s) acknowledges that a breach of this good faith obligation to seek and accept financing on the above described terms will be a breach of this Contract.
 - e) If any of the above financing conditions are not met, Purchaser(s) may declare the Contract null and void by notifying Seller(s) in writing within the specified number of days, and any earnest money shall be returned to the Purchaser(s).
- 12. AGENCY DISCLOSURE: The Purchaser(s) and Seller(s) acknowledge that they have been informed that the Selling Licensee is acting as a <u>Purchaser's</u> agent in this transaction and is representing <u>the Purchaser(s)</u> and that the Listing Licensee is acting as <u>Seller's</u> agent in this transaction and is representing <u>the Seller(s)</u>.
- 13. DEFAULT: If Purchaser(s) fails to perform any of the terms of this Contract or is otherwise in default of any of its obligations, Seller shall have the option of either retaining the earnest money as full and complete liquidated damages or employing all available legal and equitable remedies. Notwithstanding any other provision of this agreement, Escrow Agent shall have the right to require written releases from both parties prior to releasing the earnest money to either party. If a dispute arises between Purchaser(s) and Seller as to the existence of a default hereunder and/or the release of the earnest money and said dispute is not resolved by the parties within (30) days, Escrow Agent may elect to file an action in interpleader and deposit the earnest money in the court to resolve said dispute, or otherwise disburse the earnest money pursuant to Maine Real Estate Commission regulations. Purchaser(s) and Seller, jointly and severally, shall indemnify Escrow Agent for all costs, losses, expenses, and damages, including reasonable attorneys' fees, incurred by Escrow Agent in connection with said action and/or in connection with any dispute relating to this Contract and/or the Deposit.
- 14. MEDIATION: Any dispute or claim arising out of or relating to this Contract or the premises addressed in this Contract shall be submitted to mediation in accordance with the Maine Residential Real Estate Mediation Rules of the American Arbitration Association. This clause shall survive the closing of this transaction.
- 15. PRIOR STATEMENTS: Any verbal representations, statements and agreements are not valid unless contained herein. This Contract completely expresses the obligations of the parties. This is a Maine contract and shall be construed according to the laws of Maine.
- 16. HEIRS/ASSIGNS: This Contract is assignable YES <u>■</u> NO <u>□</u>. This Contract shall extend to and be obligatory upon heirs, personal representatives, successors, and assigns (if assignment is allowed by the terms of this Contract), of the respective parties.
- 17. COUNTERPARTS: This Contract may be signed on any number of identical counterparts, including telefacsimilie copies, with the same binding effect as if the signatures were on one instrument. Original or telefacsimilied signatures are binding.



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- 18. BINDING CONTRACT: This Contract is a binding contract when signed by both Seller(s) and Purchaser(s) and when that fact has been communicated to all parties or to their agents. The Effective Date of the Contract is noted below. Time is of the essence of this Contract.
- 19. REVIEW OF LEASES AND INCOME AND EXPENSE INFORMATION: The Seller(s) shall provide the Purchaser(s) with copies of all leases and income & expense information regarding the subject property within XXX (X) days from the effective date of this Contract. Purchaser shall have XXX (X) days from such delivery to review leases and income & expense information regarding the property. If the result of the review is unsatisfactory to the Purchaser(s), in Purchaser(s) sole discretion, Purchaser(s) may declare the Contract null and void by notifying the Seller(s) in writing within the specified number of days set forth above, and any earnest money shall be returned to the Purchaser(s). If the Purchaser(s) does not notify the Seller(s) that the review is unsatisfactory within the time period set forth above, this contingency is waived by the Purchaser(s).
- 20. Seller(s) and Purchaser(s) acknowledge receipt of the Maine Real Estate Commission Disclosure of Agency Relationship Form (Form #2), if the property is, or has a component of, one to four residential dwelling units.
- 21. ADDENDA: This Contract has addenda containing additional terms and conditions YES 🗖 NO 🗌

A COPY OF THIS CONTRACT IS TO BE RECEIVED BY ALL PARTIES AND, BY SIGNATURE, RECEIPT OF A COPY IS HEREBY ACKNOWLEDGED. IF NOT FULLY UNDERSTOOD CONSULT AN ATTORNEY.

Seller(s) acknowledges that the laws of the State of Maine provide that every buyer of real property located in Maine must withhold a withholding tax equal to $2 \frac{1}{2}\%$ of the consideration unless the Seller(s) furnishes to the Buyer(s) a certificate by the Sellor(abstating, under penalty of perjury, that Seller(s) is/are a resident of Maine or the transfer is otherwise exempt from

Kyan Piters	2/18/2021	
Lola in Pearls LLC	Date	
Ryan Peters		
Name/Title	Soc. Sec # or Tax I.D.	

The Seller(s) accepts the offer and agrees to deliver the above-mentioned property at the price and upon the terms and conditions set forth above and agrees to pay the Broker the commission for services herein according to the Listing Agreement or if there is no Listing Agreement in the sum of: Five percent (5%) split 50/50. The obligation to pay said commission or sum shall survive the closing of this transaction. Seller agrees that Broker may apply any deposit(s) received in connection with the sale of the Property toward commissions due and payable under this Agreement. If the earnest money is forfeited by Purchaser(s), it shall be evenly distributed between the Broker and Seller(s), provided, however, that Broker's portion shall not exceed the full amount of the commission specified. In the event the Seller(s) defaults on its obligations hereunder, The Boulos Company shall be entitled to costs of collection, including reasonable attorneys' fees.

Signed this: _____ day of _____, ____. Effective date of Contract: _____, day of _____,

The Listing Licensee is Mark Malone of Malone Commercial Brokers (Company). The Selling Licensee is Chris Paszyc of The Boulos Company (Company).

Beacon Properties LLC

Date

Name/Title

Soc. Sec # or Tax I.D.

Offer reviewed and refused on ____

, Seller

DS

Attachment C Abutting Property Owners

A copy of the abutters map and a list of abutting property owners are included in this attachment for reference.

ABUTTERS WITHIN 500' OF THE SUBJECT PROPERTY

N/F

Hardy Street LLC 70 Sunset Park Road Ellsworth, ME 04605 Map R01, Lot 11-1

N/F

Integrative Health Center of Maine LLC 222 Auburn Street, Suite 102 Portland, ME 04103 Map R01, Lot 11-2 (Unit 1)

N/F

844 Stevens Avenue LLC 844 Stevens Avenue Portland, ME 04103 Map R01, Lot 11-2 (Unit 2)

N/F

Elikris Realty LLC 11 Coleman Way Falmouth, ME 04105 Map R01, Lot 11-4

N/F

Belted Cow Realty LLC 42 U.S. Route 1, Suite 2 Cumberland Forside, ME 04110 Map R01, Lot 11-5

N/F

Heritage Village Development Group LLC C/O Tom Harmon, CPA The Swanson Group 838 Main Street Westbrook, ME 04092 Map R01, Lot 11-7

N/F

Friends School of Portland 11 U.S. Route 1 Cumberland, Foreside, ME 04110 Map R01, Lot 10

N/F

Parker David A. & Linda G. 11 Amy Lane Cumberland Foreside, ME 04110 Map U04, Lot 8A (Unit 1)

N/F

Strang Burgess, Meredith N 10 Amy Lane Cumberland Foreside, ME 04110 Map U04 Lot 8A (Unit 2)

N/F

Charest Thomas R. & Dunker Thomas A. 6 Amy Lane Cumberland Foreside, ME 04110 Map U04, Lot 8A (Unit 3)

N/F

Moroney, Brian 4 Amy Lane Cumberland Foreside, ME 04110 Map U04, Lot 8A (Unit 4)

N/F

Koshliek Vicki L. & John Mark 5 True Spring Drive Cumberland Foreside, ME 04110 Map U04, Lot 8A (Unit 5)

N/F

Hunter, Marcia & Wolinsky, Peter 7 True Spring Drive Cumberland Foreside, ME 04110 Map U04, Lot 8A (Unit 6)

N/F

Oneill, Frank J. & Indart, Monica 1 Granite Ridge Road Cumberland Foreside, ME 04110 Map U04, Lot 8A (Unit 7)

N/F

Woodbury, Douglas E. 2 Granite Ridge Road Cumberland Foreside, ME 04110 Map U04, Lot 8A (Unit 8)

N/F

Bonville, Steven E. & Jane S. 3 Granite Ridge Road Cumberland Foreside, ME 04110 Map U04, Lot 8A (Unit 9)

N/F

Chapin, Gary L. & Alice M. 5 Granite Ridge Road Cumberland Foreside, ME 04110 Map U04, Lot 8A (Unit 10)

N/F

Matulonis Robert & Marianne 7 Granite Ridge Road Cumberland Foreside, ME 04110 Map U04, Lot 8A (Unit 11)

N/F

Peard, Patricia A. & Brock, Alice C. 9 Granite Ridge Road Cumberland Foreside, Me 04110

ABUTTERS WITHIN 500' OF THE SUBJECT PROPERTY

Map U04, Lot 8A (Unit 12)

N/F

Carole A. Potter, As Trustee 1813 NW Buttonbush Circle Palm City, FL 34990 Map U04, Lot 8A (Unit 13)

N/F

Goldfarb Matthew S. & Lynn K. 17 Granite Ridge Road Cumberland Foreside, ME 04110 Map U04, Lot 8A (Unit 14)

N/F

Victor & Jillian Parisien Living Trust 23 Granite Ridge Road Cumberland Foreside, ME 04110 Map U04, Lot 8A (Unit 15)

N/F

Dilworth, Edward L. & Susan J. 25 Granite Ridge Road Cumberland Foreside, ME 04110 Map U04, Lot 8A (Unit 16)

N/F

Foley, Thomas A. & Janet L 29 Granite Ridge Road Cumberland Foreside, ME 04110 Map U04, Lot 8A (Unit 17)

N/F

Penrose Carolyn C. 31 Granite Ridge Road Cumberland Foreside, ME 04110 Map U04, Lot 8A (Unit 18)

N/F

Schneit Francine E. 35 Granite Ridge Road Cumberland Foreside, ME 04110 Map U04, Lot 8A (Unit 19)

N/F

Cimino Elizabeth K 24480 Reserve Court, Apt. 102 Bonita Springs, FL 34134 Map U04, Lot 8A (Unit 20)

N/F

Gotto, Antonio M. Jr. & Anita S. 3666 Wickersham Lane Houston, TX 77027-4138 Map U04, Lot 8B (Unit 1)

N/F

Garon, Loralane R. & Cloudman, Timothy K 7 Eagles Way Cumberland Foreside, ME 04110 Map U04, Lot 8B (Unit 2)

N/F

Cassidy, Jennifer L. & Bruce R. 12 Eagles Way Cumberland Foreside, ME 04110 Map U04, Lot 8B (Unit 3)

N/F Walsh, Joan E. & Robert C. 10 Eagles Way Cumberland Foreside, ME 04110 Map U04, Lot 8B (Unit 4)

N/F

Goble, Teri L. & Stephen 12411 Verandah Boulevard Naples, FL 33905 Map U04, Lot 8B (Unit 5)

N/F

Knupp, Robert & Judith A. 4 Eagles Way Cumberland Foreside, ME 04110 Map U04, Lot 8B (Unit 6)

N/F

Nastro, Timothy J. & Ellen Jane 15 Falcon Drive Cumberland Foreside, ME 04110 Map U04, Lot 8B (Unit 7)

N/F

Griffin, Thomas & Elizabeth 17 Falcon Drive Cumberland Foreside, ME 04110 Map U04, Lot 8B (Unit 8)

N/F

Hintze, Robert W. & Barbara W. 337 Marsh Creek Road Venice, FL 34292 Map U04, Lot 8B (Unit 9)

N/F

Volk, Gail J. 23 Falcon Drive Cumberland Foreside, ME 04110 Map U04, Lot 8B (Unit 10)

N/F Berger, John H., Susan L. & Kristine

27 Falcon Drive Cumberland Foreside, ME 04110

ABUTTERS WITHIN 500' OF THE SUBJECT PROPERTY

Map U04, Lot 8B (Unit 11)

N/F Gauthier, Emile Paul 29 Falcon Drive Cumberland Foreside, ME 04110 Map U04, Lot 8B (Unit 12)

N/F

Thomas, Carolyn H. 20 Falcon Drive Cumberland Foreside, ME 04110 Map U04, Lot 8B (Unit 13)

N/F

Mclean, Mary Ann 22 Falcon Drive Cumberland Foreside, ME 04110 Map U04, Lot 8B (Unit 14)

<u>Attachment D</u> <u>Photographs</u>

Photographs of the project area are included for reference.

D

PROPOSED COMMERCIAL/OFFICE BUILDING U.S. ROUTE 1, CUMBERLAND, MAINE Existing Conditions



Photo 1 – Existing Site Conditions



Photo 2 – Existing Site Conditions

Photographs taken by Sitelines, PA; May, 2021

<section-header>

Photo 3 – Existing Site Conditions



Photo 4 – Existing Site Conditions

Photographs taken by Sitelines, PA; May, 2021

PROPOSED COMMERCIAL/OFFICE BUILDING U.S. ROUTE 1, CUMBERLAND, MAINE Existing Conditions



Photo 5 – Existing Site Conditions



Photo 6 – Route 1 Facing Southwest

Photographs taken by Sitelines, PA; May, 2021

PROPOSED COMMERCIAL/OFFICE BUILDING U.S. ROUTE 1, CUMBERLAND, MAINE Existing Conditions



Photo 7 – Route 1 Facing Northeast

Attachment E Supporting Documents

Copies of relevant correspondence and documents pertaining to the project are enclosed.

Commercial/Office Buildings <u>BLASTING PLAN</u>

A. SITE PLAN

Refer to project drawings. It is assumed that all proposed construction has the potential to require blasting.

B. REPORT

1. ASSESSMENT

An assessment for the potential of adverse effects of blasting on protected natural resources, and structures and wells not owned or controlled by the applicant must be prepared and must consider at a minimum ground vibration, peak particle velocity, noise and airblast effects, and onsite and offsite ground and surface water quality and quantity. According to US. Office of Surface Mining Reclamation and Enforcement (OSMRE), there are three potential causes of blasting damage: "Flyrock, airblast, and ground motion. Flyrock and airblast are less frequently the cause of damage to structure than is ground motion. However, airblast is often the source of annoyance.

AIRBLAST

Airblast is the airborne shock wave from the detonation of explosives. Airblasts may or may not be audible depending on the frequency of the shock waves generated. A low frequency blast may be inaudible, but may create a high decibel level and may possibly cause damage. Conversely, a blast generating shock waves with a predominant frequency in the range of human hearing may generate a relatively low decibel level but will sound loud and will be more disturbing to area residents, even though it's total energy is low and the potential for structural damage virtually nonexistent.

According to the Blasting Guidance Manual (BGM), <u>structural damage from airblast is rare</u>. However subjective response to airblast can make it the most significant of the three adverse effects of blasting.

State regulations further limit the maximum allowable airblast at any protected location. Construction contracts issued for the proposed work will require that airblast limits be in accordance with all State regulations, and that monitoring be undertaken as required by the regulations. (See Chapter 375.10 (C)(4)(c) for sound level limits).

GROUND MOTION

According to the BGM ground motion is the most frequently sited cause of blast vibration damage and, apart from flyrock, is in fact the most likely cause of real damage. Ground motion is also a frequent cause of imagined damage: "The subjective perception of ground motion is probably as serious a problem as the possibility of actual physical damage. When subjected to any significant ground motion the perceptible shaking of a residence will cause some degree of subjective reaction by the occupants of that building. The extent of this subjective reaction can lead to complaints of damage, real or imagined."

One component of ground motion is particle velocity. Particle velocity is defined in the BGM as "a measure of ground vibration". It describes the velocity at which a particle of ground vibrates when excited by a seismic wave.

Seismic monitoring will be undertaken by the blaster in accordance with the regulations. The performance standard for ground motion shall be based upon Figure B-1 of Appendix B, U.S. Bureau of Mines Report of Investigations 8507.

2. <u>BLASTING PLAN</u>

The blaster will be required to use sufficient stemming, matting or natural protective cover to prevent flyrock from leaving the property of the owner or from entering protected natural resources or natural buffer strips.

Crushed rock or other suitable materials will be used for stemming when available. Native gravel, drilled cuttings or other material may be used for stemming only if no other suitable material is available. Flyrock will be controlled by using appropriate cover techniques. The blaster will be required to take special precautions in the loading, delaying, initiating and confinement of each blast with mats or other methods so as to control the throw of fragments, thus preventing bodily injury or damage to the owner's property or adjacent properties.

Natural buffer strips between the blasting areas and the abutting properties will be maintained insomuch as possible. Assuming that the erosion and sedimentation control plan is properly implemented by the contractor, it is anticipated no discharge of sediments will occur which would adversely affect the water quality of the streams near the parcel.

PREBLAST BLAST SURVEY

Construction contracts will require that the contractor perform a preblast survey of all offsite structures within 500 'of any area requiring blasting. The contractor will also be required to provide the owner with a blasting log. The blasting log shall contain the following information:

- 1. name of the blasting company or blasting contractor,
- 2. location, date and time of blast,
- 3. name, signature and social security number of blaster,
- 4. type of material blasted, number and spacing of holes and depth of burden or stemming,
- 5. diameter and depth of holes,
- 6. type of explosives used,
- 7. total amount of explosives used,
- 8. method of firing or type of circuit,
- 9. direction and distance in feet to the nearest dwelling, public building, school, church or commercial institution or building neither owned or controlled by the developer,
- 10. weather conditions including factors such as wind direction and cloud cover,
- 11. amount of mats or other protection used,
- 12. type of detonators used and delay periods used,
- 13. the exact location of the monitoring equipment and relation of each to the blast,
- 14. seismographic readings and sound levels.

All blasting at the site shall be undertaken in accordance with all applicable regulations including regulations published by the OSMRE, OSHA, recommendations outlined in the BMG and state regulations regarding blasting. Signage, warnings and access control during blast events shall be in accordance with state and federal requirements, including OSHA regulations regarding the blasting and use of explosives.

CONCLUSION

- Assuming compliance with all applicable regulations, site permits and the erosion control plans, no adverse impacts upon protected natural resources, structures and wells not owned by the applicant, or ground and surface water quantity and quality are anticipated.
- As always, it will be incumbent upon the blasting contractor to undertake the operations in accordance with the regulations.

Project: Identification #: Permit Category: Traffic Engineer:

Applicant: Project Location:

GOVERNOR

JOHN ELIAS BALDACCI



Cumberland Foreside Village, LLC Route 1, near Falmouth Town Line Cumberland Tax Map R01/11,11B Lots 8, 7 and 7A 12 lot Commercial Subdivision Reg. 01-00070-A-N

COMMISSIONER

DAVID A. COLE

STATE OF MAINE DEPARTMENT OF TRANSPORTATION 16 STATE HOUSE STATION AUGUSTA, MAINE 04333-0016

> 200 PCE Bill Bray 235 Bancroft St Portland, ME 04102

Pursuant to the provision of 23 M.R.S.A. § 704-A and Chapter 305 of the Department's Regulations, the Maine Department of Transportation (MaineDOT) has considered the application of Cumberland Foreside Village, LLC with supportive data, agency review and other related materials on file.

PROJECT DESCRIPTION

The applicant proposes to construct a 12 Commercial Subdivision with approximately 305,575 square feet of building area. The site will be accessed via 4 full movement driveways onto Route 1, the first driveway is the southernmost and will serve lots 1, and lots 7 through 12, the next northerly driveway will serve lots 2, 3 and 4 and separate driveways will serve lots 5 and 6.. The entrances will all have one ingress and one egress lane. The site is expected to generate 437 AM and 394 PM weekday peak hour trip ends of the generator.



Based on a review of the files and related information, MaineDOT approves the Traffic Movement Permit Application of Cumberland Foreside Village, LLC subject to the following conditions:

MITIGATION

On-Site Mitigation

A. All entrances shall be served by a 12 foot wide center left turn lane on Route 1. The turn lane shall have appropriate tapers at both ends and shall be fully shadowed by a stamped bituminous island (painted red). The existing shoulder areas that would become travelway would need to have the pavement structure enhanced to carry traffic. The proposed shoulder widths shall be 4 feet each side of the



B. The southernmost entrance serving lots 1 and 7 through 12 shall have an exclusive right turn lane into the site.

C. Each entrances shall have overhead illumination, if not existing, to illuminate the intersection per MaineDOT standards at a minimum. Overhead lighting shall have an average of 0.6 to 1.0 foot candles,

PRINTED ON RECYCLED PAPER

THE MAINE DEPARMENT OF TRANSPORTATION IS AN AFFIRMATIVE ACTION · EQUAL OPPORTUNITY EMPLOYER

Cumberland – Cumberland Foreside Village Reg. 01-00070-A-N Page 2 of 2 with the maximum to minimum lighting ratio of not more than 10:1 and an average to minimum light level of not more than 4:1. D. Any and all existing entrances not identified above shall be removed and cubing replaced (if applicable). All associated existing entrance pavement and/or gravel shall be removed and the area loamed and seeded (or similar) such that the entrance will not be mistaken for a functional entrance.

Off-Site Mitigation

Overall

2

A. Provide all necessary auxiliary signs, striping and pavement markings to implement the improvements described herein according to State of Maine and/or National standards.

B. All plantings and signs (existing and/or proposed; permanent and/or temporary) shall be placed and maintained such that they do not block available sight distances and do not violate the State's "Installations and Obstructions" law. No signage or plantings shall be allowed within the "clear zone" if they constitute a deadly fixed object as determined by MaineDOT. All signs shall meet MRSA Title 23, Chapter 21, Section 1914: "On-Premise Signs".

C. If any of the supporting data or representations for which this permit is based changes in any way or is found to be incorrect / inaccurate, the applicant shall request in writing from MaineDOT a decision of what impacts those changes will have on the permit. The applicant will then be required to submit those changes for review and approval and additional mitigation as a result of those changes may be required at the expense of the applicant.

D. Because the proposed project affects the State Highway and drainage systems and requires improvement to that system, the applicant must obtain approval of the design plans and coordinate work through MaineDOT's State Traffic Engineer or Assistant State Traffic Engineer, who can be reached at (207) 624-3620 in Augusta.

By: Stephen Landry, P/E. Assistant State Traffic Engineer





FAX NO. :

Jan. 24 2007 10:08AM P1



 Permit Number: 6127
 Location:
 Route: 0001X, Rte. 1

 Owner:
 Cumberland Foreside Vill., LLC
 Municipality: Cumberland

 Owner::
 S0 Gray Rd.
 Tax Map: R01; Lot Number: 11B

 Address:
 S0 Gray Rd.
 Culvert Size: "

Telephone: (207)797-9093

Culvert Type: N/R Culvert Length: ' Date of Permit: 04-JAN-07 Approved Entrance Width: 24'

In accordance with rules promulgated under 23 M.R.S.A., Chapter 13, Subchapter I, Section 704, the Maine Department of Transportation (MaineDOT) approves a permit and grants permission to perform the necessary grading to construct, in accordance with sketch or attached plan, an Entrance to [a] <u>Commercial Industrial</u> at a point <u>3372' N</u> from <u>Town Line</u>; <u>Falmouth-Cumberland</u>, subject to the Chapter 299 Highway Driveway and Entrance Rules, standard conditions and special conditions (if any) listed below.

Conditions of Approval:

DESIS.

This permittee acknowledges and agrees to comply with the Standard Conditions of Approval attached hereto and to any Specific Conditions of Approval shown here.

Approved Special Condition(s):

* Might require a Traffic Movement Permit.

* In the town of Cumberland on the westerly side of Route 1, approximately 3372 feet northerly of the Cumberland-Falmouth town line

Approved by:

Date:

10 1



FAX NO. :

Maine Department of Transportation Driveway/Entrance Permit

Route: 0001X, Rte.1 Location: Municipality: Cumberland Permit Number: 6126 County: Cumberland Cumberland Foreside Vill. , LLC Tax Map: R01; Lot Number: 7,8,8A-11 Owner: 50 Gray Rd. Culvert Size: " Address: Falmouth, ME 04105 Culvert Type: N/R Culvert Length: ' (207)797-9093 Date of Permit: 08-JAN-07 Telephone: Approved Entrance Wildth: 24'

In accordance with rules promulgated under 23 M.R.S.A., Chapter 13, Subchapter I, Section 704, the Maine Department of Transportation (MaineDOT) approves a permit and grants permission to perform the necessary grading to construct, in accordance with sketch or attached plan, a Permit by Rule Forestry to [a] Forest Management/Farming at a point 487 N from Town Line; Falmouth-Cumberland, subject to the Chapter 299 Highway Driveway and Entrance Rules, standard conditions and special conditions (if any) listed below.

Conditions of Approval:

This permittee acknowledges and agrees to comply with the Standard Conditions of Approval attached hereto and to any Specific Conditions of Approval shown here.

Approved Special Condition(s):

* In the town of Cumberland on the westerly side of Route 1, approximately 487 northerly of The . Cumberland-Falmouth town line,

Approved by:

-5-07 Date: _

1 1





FAX NO. :

Jan. 24 2007 10:08AM P3

State of Maine Department of Transportation Entrance / Driveway Details

PLAN





Edge of Paved Roadway

GENERAL NOTES -

1. ALL RESIDENTAL OR COMMERCIAL DRIVES WITH 10% GRADE OR MORE SLOPING DOWN TOWARDS THE HIGHWAY SHALL BE PAVED TO THE RIGHT OF WAY LINE, AS A MINIMUM, INCUDING SHOULDER, IF GRAVEL AND HAVE DITCHES TO CONTROL RUNOFF. 2. DRIVES SLOPING TO THE HIGHWAY SHALL BE CROWNED (1/2" PER FT. MINIMUM). 3. TO THE MAXIMUM EXTENT PRACTICAL, THE ENTRANCE MUST BE CONSTRUCTED PERPENDICULAR TO THE HIGHWAY AT THE POINT OF ACCESS. EXCEPT WHERE CURBING EXISTS OR IS PROPOSED, THE MINIMUM RADIUS ON THE EDGES OF THE ENTRANCE MUST BE 10 FEET OR AS OTHERWISE REQUIRED AS SHOWN. 4. ENTRANCES/DRIVEWAYS WILL BE BUILT WITH AN ADEQUATE TURN-AROUND AREA ON SITE TO ALLOW ALL VEHICLES TO MANUVER AND PARK WITHOUT BACKING ONTO THE HIGHWAY. THIS TURN-AROUND SHALL BE AT LEAST 8 FEET WIDE BY 15 FEET LONG. 5. ENTRANCES/DRIVEWAYS AND OTHER ASSOCIATED SITE WORK WHICH DIRECTS WATER (RUNOFF) TOWARD THE HIGHWAY MUST BE CONSTRUCTED, CROWNED STABILIZED AND MAINTAINED WITH MATERIALS AND APPROPRIATE TEMPORARY/PERMANENT EROSION CONTROL MATERIALS IN ACCORDANCE WITH MOOT BEST MANAGEMENT PRACTICES. 6. THE PROFILE OF THE ENTRANCES MUST COMPLY WITH THE DETAILS SHOWN ON PAGE 2.
FAX NO. :

Jan. 24 2007 10:09AM P4

STANDARD CONDITIONS

- 1. Comply with all design information, plans, and proposals contained in the application.
- Provide, erect and maintain all necessary barricades, lights, warning signs and other devices to safeguard traffic properly while the construction is in progress.
- At no time cause the highway to be closed to traffic.
 Where the driveway is located within a curb, curb and gutter, and/or sidewalk section, completely remove the existing curb, curb and gutter, and/or sidewalk as may be required to create the driveway and restore drainage. All driveways abutting sidewalk sections shall meet the requirements set forth in the Americans with Disabilities Act of 1990, 42 U.S.C. Sec. 12131 et seq.
 Obtain, have delivered to the site and install any culverts and/or drainage structures which may be necessary for drainage, the size, type and length as called for in the permit pursuant to 23 M.R.S.A. Sec. 705. All culverts and/or drainage structures shall be new.
 - Permit expires if construction work has not commenced within 24 months of issuance and must be substantially complete within twelve months of commencement of construction.
 - Comply with all applicable federal, state and municipal regulations and ordinances.
 - Not alter, without the express written consent of the MaineDOT, any culverts or drainage swales within the MaineDOT right of way.
 - 9. File a copy of the approved driveway permit with the affected municipality or LURC, as appropriate, within 5 business days of receiving the MaineDOT approval; and mail a copy of the approved driveway permit to the immediate abutter(s) within 5 business days of receiving the MaineDOT approval.
 - 10. Shall construct and maintain the entrance side slopes to be no steeper than 3 horizontal to 1 vertical.
 - 11. Notify the MaineDOT of a proposed change to use served by driveway/entrance when increase in traffic flow is expected to occur.

FURTHER CONDITION OF THE PERMIT:

The owner shall assume the defense of, and pay all damages, fines, and penalties for which he/she shall become liable, and shall indemnify and safe harmless said Department, its representatives, agents and employees from liability, actions against all suits, claims, damages for wrongful death, personal injuries or property damage suffered by any person or association which results from the willful or negligent action or inaction of the owner/applicant/agent and in proceedings of every kind arising out of the construction and maintenance of said entrance(s), including snow removal. Nothing herein shall, nor is intended to, waive any defense, immunity or limitation of liability which may be available to the MaineDOT, their officers, agents or employees under the Maine Tort Claims Act or any other privileges and/or immunities provided by law. It is a further condition that the owner will agree to keep the right of way inviolate for public highway purposes and no signs (other than traffic signs and signals), posters,

billboards, roadside stands, culvert end walls or private installations shall be permitted within Right of Way limits. FAX NO. :

Jan. 24 2007 10:09AM P5

STANDARD CONDITIONS

- 1. Comply with all design information, plans, and proposals contained in the application.
- 2. Provide, erect and maintain all necessary barricades, lights, warning signs and other devices to safeguard traffic properly while the construction is in progress.
- 3. At no time cause the highway to be closed to traffic.
- 4. Where the driveway is located within a curb, curb and gutter, and/or sidewalk section, completely remove the existing curb, curb and gutter, and/or sidewalk as may be required to create the driveway and restore drainage. All driveways abutting sidewalk sections shall meet the requirements set forth in the Americans with Disabilities Act of 1990, 42 U.S.C. Sec. 12131 et seq. ... 5. Obtain, have delivered to the site and install any culverts and/or drainage structures which may be necessary for drainage, the size, type and length as called for in the permit pursuant to 23 M.R.S.A. Sec. 705. All culverts and/or drainage structures shall be new.
 - 6. Permit expires if construction work has not commenced within 24 months of issuance and must be substantially complete within twelve months of commencement of construction.
 - 7. Comply with all applicable federal, state and municipal regulations and ordinances.
 - 8. Not alter, without the express written consent of the MaineDOT, any culverts or drainage swales within the MaineDOT right of way.
 - 9. File a copy of the approved driveway permit with the affected municipality or LURC, as appropriate, within 5 business days of receiving the MaineDOT

approval; and mail a copy of the approved driveway permit to the immediate abutter(s) within 5 business days of receiving the MaineDOT approval. 10. Shall construct and maintain the entrance side slopes to be no steeper than 3 horizontal to 1 vertical.

11. Notify the MaineDOT of a proposed change to use served by driveway/entrance when increase in traffic flow is expected to occur.

FURTHER CONDITION OF THE PERMIT:

The owner shall assume the defense of, and pay all damages, fines, and penalties for which he/she shall become liable, and shall indemnify and safe harmless said Department, its representatives, agents and employees from liability, actions against all Buits, claims, damages for wrongful death, personal injuries or property damage suffered by any person or association which results from the willful or negligent action or inaction of the owner/applicant/agent and in proceedings of every kind arising out of the construction and maintenance of said entrance(s), including snow removal. Nothing herein shall, nor is intended to, waive any defense, immunity or limitation of liability which may be available to the Mainepor, their officers, agents or employees under the Maine Tort Claims Act or any other privileges and/or immunities provided by law. It is a further condition that the owner will agree to keep the right of way inviolate for public highway purposes and no signs (other than traffic signs and signals), posters, billboards, roadside stands, culvert end walls or private installations shall be permitted within Right of Way limits.

Attachment F Supporting Graphics

This attachment includes supporting materials and graphics for this application. This includes an excerpt of the applicable USGS 7.5-minute quadrangle map, an excerpt of the FEMA flood rate insurance map (FIRM), a reduced size copy of the tax map, and a NRCS soils map.







U.S. Fish and Wildlife Service National Wetlands Inventory

NWI Map



April 2, 2021

Wetlands

.

Estuarine and Marine Deepwater

- Estuarine and Marine Wetland
- Freshwater Forested/Shrub Wetland

Freshwater Emergent 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.









rcial	Rural Residential 2
ial 1	Medium Density Residential
al 2	Village Medium Density Residential
	Low Density Residential
	Island Residential
	Overlay Zones
	Shoreland Zoning

The depiction of the Shoreland Overlay districts on the Official Zoning Map for the Town of Cumberland is merely illustrative of their general location. The boundaries of these districts shall be determined by measurement of the distance indicated on the map from the normal high water mark of the water body or the upland edge of wetland vegetation, regardless of the location of the boundary on the map. See Overlay Zoning Map for detailed Overlay Districts.

> Sturdivant Island



Basket Island



Attachment G Financial and Technical Capability

This attachment includes a Certificate of Good Standing from the Department of the Secretary of the State and a letter of financial capacity from Bangor Savings Bank.

State of Maine



Department of the Secretary of State

I, the Secretary of State of Maine, certify that according to the provisions of the Constitution and Laws of the State of Maine, the Department of the Secretary of State is the legal custodian of the Great Seal of the State of Maine which is hereunto affixed and that the paper to which this is attached is a true copy from the records of this Department.



In testimony whereof, I have caused the Great Seal of the State of Maine to be hereunto affixed. Given under my hand at Augusta, Maine, this twenty-first day of April 2021.

henna Bellous

Shenna Bellows Secretary of State

Additional Addresses

Legal Name	Title	Name	Charter #	Status		
LAKESIDE CONCRETE	Clerk	RYAN C PETERS	20120938 D	GOOD STANDING		
CUTTING INC						
Home Office Address (of foreign entity) Other Mailing Address Address in Maine						



May 5, 2021

RE: Letter of Financial Capacity - Lakeside Concrete Cutting, Inc. Commercial / Office Building, U.S. Route 1, Cumberland, Maine

To whom it may concern:

Please accept this letter as confirmation that Lakeside Concrete Cutting, Inc. and its president, Ryan C. Peters, maintain a comprehensive banking relationship with Bangor Savings Bank. All accounts, including both deposits and loans, have been handled in an excellent manner.

We have reviewed the preliminary information for the proposed Commercial / Office Building project on U.S. Route 1, in Cumberland, Maine. It is understood that the estimated development costs are approximately \$2,500,000.00. While this is not a commitment to lend funds, Lakeside Concrete Cutting, Inc. has demonstrated the capacity to inject funds and/or obtain any necessary financing if all typical requirements are met. Further, based on our review of the preliminary scope of construction and cash flow, it is expected that the general contractor, Bowman Constructors, has the necessary components to successfully complete this project on time and on budget.

Please feel free to contact me with any questions that you might have.

Sincerely,

Fred A. Beaur

Fred A. Brown Vice President – Commercial Relationship Manager

cc: Ryan C. Peters, Lakeside Concrete Cutting, Inc.

Attachment H Lighting Details

Information on the proposed lighting is enclosed for reference.

4306



VIPER I LIMINAIRE

FEATURES

- · Small size companion to Viper Large
- Wide choice of different LED wattage configurations
- Nine optical distributions
- Designed to replace HID lighting up to 400W MH or HPS
- · Suitable for wet locations



CONTROL TECHNOLOGY

NX DISTRIBUTED

wiSCAPE[®] energeni



SPECIFICATIONS

CONSTRUCTION

- Manufactured with die cast aluminum
- · Coated with a polyester finish that meets ASTM B117 corrosion test requirements and ASTM D522 cracking and loss of adhesion test requirements
- IFS polyester powder-coat electrostatically applied and thermocured. IFS finish consists of a five stage pretreatment regimen with a polymer primer sealer and top coated with a thermoset super TGIC polyester powder coat finish
- The finish meets the AAMA 2604 performance specification which includes passing a 3,000-hour salt spray test for corrosion resistance and resists cracking or loss of adhesion per ASTM D522 and resists surface impacts of up to 160 inch-pounds
- · External hardware is corrosion resistant

OPTICS

- · Cartridge is held together with internal brass standoffs soldered to the board so that it can be field replaced as a one-piece optical system
- · One-piece silicone gasket ensures a weatherproof seal around each individual optic
- One-piece optical cartridge system consisting of an LED engine, optics, gasket and stainless steel bezel

INSTALLATION

· Mounting options for horizontal arm, vertical tenon or traditional arm mounting available. Mounting hardware included

DATE:	LOCATION:
TYPE:	PROJECT:

CATALOG #:





RELATED PRODUCTS

8 Viper Large

ELECTRICAL

- Luminaire accepts 100V through 277V, 347V or 480V input 50 Hz to 60 Hz (UNV)
- Power factor is ≥ .90 at full load
- Dimming drivers are standard, but must contact factory to request wiring leads for purpose of external dimming controls
- · Component-to-component wiring within the luminaire may carry no more than 80% of rated load and is certified by UL for use at 600VAC at 90°C or higher
- · Plug disconnects are certified by UL for use at 600 VAC, 13A or higher. 13A rating applies to primary (AC) side only
- Fixture electrical compartment contains all LED driver components and a push-button terminal block for AC power connections
- Optional 7-pin ANSI C136.41-2013 Twist-Lock® photo control receptacle available. Compatible with ANSI C136.41 external wireless control devices
- Ambient operating temperature -40°C to 25°C
- Surge protection: 20kA
- Lifeshield™ Circuit (<u>see Electrical Data</u>)

CONTROLS

· Available with an optional passive infrared (PIR) motion sensor capable of detecting motion 360° around the luminaire. When no motion is detected for the specified time, the motion response system reduces the wattage to factory preset level, reducing the light level accordingly. When motion is detected by the PIR sensor, the luminaire returns to full wattage and full light output. Please contact Beacon Products if

project requirements vary from standard configuration

- Available with Energeni for optional set dimming, timed dimming with simple delay, or timed dimming based on time of night
- In addition, Viper can be specified with SiteSync[™] wireless control system for reduction in energy and maintenance costs while optimizing light quality 24/7

CERTIFICATIONS

- DLC[®] (DesignLights Consortium) Qualified. Please refer to the DLC website for specific product qualifications at www.designlights.org
- Certified to UL 1598 and UL 8750
- 3G rated for ANSI C136.31 high vibration applications with MAF mounting
- IDA approved
- This product is approved by the Florida Fish and Wildlife Conservation Commission. Separate spec available online

WARRANTY

- 5 year warranty
- See HLI Commercial and Industrial Outdoor Lighting Warranty for additional information

KEY DATA						
Lumen Range	5400–16,216					
Wattage Range	55–136					
Efficacy Range (LPW)	100–124					
Reported Life (Hours)	L70>377,000					
Input Current Range (Amps)	0.1–1.1					





VIPER S SMALL VIPER LUMINAIRE

ORDERING GUIDE

CATALOG #

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

Example: VPS-24L-55-4K7-4W-UNV-A-DB-TL-GENI-04-BC

VPS	-	-		_		-		-			-		
Series LED Engine		LED Engine		LED Engine CCT/CRI ⁷		Distri	Distribution		Rotation		Volta	Voltage	
VPS	Viper	24L-55	55W, LED array	3K7	3000K, 70 CRI	FR	Type 1/Front Row	Blank	No rota	tion	UNV	120–277V	
	Small	36L-65	65W, LED array	4K7	4000K, 70 CRI	2	Type 2	L	Optic ro	otation left ⁵	347	347V	
		36L-80	80W, LED array	5K7	5000K, 70 CRI	3	Туре 3	R	Optic ro	otation right ⁵	480	480V	
		48L-110	110W, LED array			4	Type 4						
		60L-136	136W, LED array			4W	Type 4 Wide						
						5QM	Type 5QM						
						5R	Type 5R (rectangular)						
						5W	Type 5W (round wide)						
						тс	Tennis Court						
Moun	ting			— Colo	r	— Contr	ol Options			Options			
Moun A	ting Rectang	gular Arm (for or round pole	merly RA) for	Colo BL DB	r Black Textured Dark Bronze	- Contr 7PR	ol Options 7-Pin Receptacle o cap, photo control,	nly (shorti or wirele	ing ss	Options F Fusing BSP Bird Sr	nikos		
Moun A MAF	ting Rectang square Mast Ar	gular Arm (for or round pole m Fitter (form	merly RA) for e herly SF2) for 2%"	- Colo BL DB	r Black Textured Dark Bronze Textured	- Contr 7PR	ol Options 7-Pin Receptacle o cap, photo control, control provided b	nly (shorti or wirele y others)	- ing ss	Options F Fusing BSP Bird Sp BC Backst	vikes	able for	
Moun A MAF K	ting Rectang square Mast Ar OD hori Knuckle	gular Arm (for or round pole m Fitter (form zontal arm e (formerly Pk	merly RA) for e herly SF2) for 2%" (2) limit to 30° tilt	- Colo BL DB GYS	r Black Textured Dark Bronze Textured Light Gray Smooth	Contr 7PR 7PR-5	ol Options 7-Pin Receptacle o cap, photo control, control provided by C 7-Pin Receptacle w Cap	nly (shorti or wirele y others) ı/Shorting	ing ss	Options F Fusing BSP Bird Sp BC Backst FR, 2, 3	pikes nield (availa 3, 4, 4W Oj	able for ptics)	
Moun A MAF K	ting Rectang square Mast Ar OD hori Knuckle or 2%" (tenon	gular Arm (for or round pole m Fitter (form zontal arm e (formerly Pk OD horizonta	merly RA) for e terly SF2) for 2%" (2) limit to 30° tilt al arm or vertical	Colo BL DB GYS PS	r Black Textured Dark Bronze Textured Light Gray Smooth Platinum Silver Smooth	- Contr 7PR 7PR-5 7PR-1	ol Options 7-Pin Receptacle o cap, photo control, control provided b GC 7-Pin Receptacle w Cap Cap CPin Receptacle w photo control	nly (shorti or wirele y others) //Shorting //Twist-Lo	ng ss ck®	Options F Fusing BSP Bird Sp BC Backsi FR, 2, 3	bikes nield (availa 3, 4, 4W Oj	able for ptics)	
Moun A MAF K WB	ting Rectang square Mast Ar OD hori Knuckle or 23% tenon Wall Bra	gular Arm (for or round pol m Fitter (form zontal arm e (formerly Pk OD horizonta acket	merly RA) for e ierly SF2) for 2%" (2) limit to 30° tilt al arm or vertical	Colo BL DB GYS PS WH	R Black Textured Dark Bronze Textured Light Gray Smooth Platinum Silver Smooth White Textured	- Contr 7PR 7PR-5 7PR-1 SCP/	ol Options 7-Pin Receptacle o cap, photo control, control provided by CC 7-Pin Receptacle w Cap Cap Cap Cap Cap Programmable Oct	nly (shorti or wirele y others) //Shorting //Twist-Lo cupancy	ng ss ck®	Options F Fusing BSP Bird Sp BC Backst FR, 2, 3	bikes hield (availa 3, 4, 4W Oj	able for ptics)	
Moun A MAF K WB AD	ting Rectang square Mast Ar OD hori Knuckle or 2%" tenon Wall Bra Univers	gular Arm (for or round pol m Fitter (form zontal arm e (formerly Pk OD horizonta acket al Arm for sq	merly RA) for e lerly SF2) for 2%" (2) limit to 30° tilt al arm or vertical uare pole	Colo BL DB GYS PS WH CC	r Black Textured Dark Bronze Textured Light Gray Smooth Platinum Silver Smooth White Textured Custom Color	- Contri 7PR 7PR-5 7PR-1 SCP/	ol Options 7-Pin Receptacle o cap, photo control, control provided by C 7-Pin Receptacle w Cap C 7-Pin Receptacle w photo control F Programmable Oct Sensor w/ daylight	nly (shorti or wirele y others) //Shorting //Twist-Lo cupancy control ^{1,2}	ing I ss I .6	Options F Fusing BSP Bird Sp BC Backst FR, 2, 3	bikes hield (availa 3, 4, 4W Op	able for ptics)	
Moun A MAF K WB AD AD3	ting Rectang square Mast Ar OD hori Knuckle or 2%" tenon Wall Bra Univers Adapted	gular Arm (for or round pol m Fitter (form zontal arm e (formerly Pk OD horizonta acket al Arm for sq r for 2.4"—4.1"	merly RA) for enerly SF2) for 2%" (2) limit to 30° tilt al arm or vertical uare pole round pole	- Colo BL DB GYS PS WH CC	r Black Textured Dark Bronze Textured Light Gray Smooth Platinum Silver Smooth White Textured Custom Color	- Contri 7PR 7PR-5 7PR-1 SCP/ GENI	ol Options 7-Pin Receptacle o cap, photo control, control provided by C 7-Pin Receptacle w Cap C 7-Pin Receptacle w photo control F Programmable Oc: Sensor w/ daylight XX ENERGENI ³	nly (shorti or wirele y others) //Shorting //Twist-Lo cupancy control ^{1,2}	ng I SS I .6	Options F Fusing BSP Bird Sp BC Backst FR, 2, 3	bikes hield (availa 3, 4, 4W Op	able for ptics)	
Moun A MAF K WB AD AD3 AD4	ting Rectang square Mast Ar OD hori Knuckle or 2%" tenon Wall Bra Univers Adapter Adapter	jular Arm (for or round pol m Fitter (form zontal arm e (formerly Pk OD horizonta acket al Arm for sq r for 2.4"–5.3	merly RA) for enerly SF2) for 2%" (2) limit to 30° tilt al arm or vertical uare pole round pole " round pole	- Colo BL DB GYS PS WH CC	r Black Textured Dark Bronze Textured Light Gray Smooth Platinum Silver Smooth White Textured Custom Color	- Contri 7PR 7PR-5 7PR-1 SCP/ GENI SWP	ol Options 7-Pin Receptacle o cap, photo control, control provided by C 7-Pin Receptacle w Cap C 7-Pin Receptacle w photo control F Programmable Occ Sensor w/ daylight XX ENERGENI ³ SiteSync Pre-Comm	nly (shorti or wirele y others) //Shorting //Twist-Lo cupancy control ^{1,2} nission ^{1,4}	ng ss ck® .6	Options F Fusing BSP Bird Sp BC Backst FR, 2, 3	oikes nield (availa 3, 4, 4W Op	able for ptics)	
Mour A MAF K WB AD AD3 AD4 AD5	ting Rectang square Mast Ar OD hori Knuckle or 2%" (tenon Wall Bra Univers Adapter Adapter Adapter	gular Arm (for or round pole m Fitter (form zontal arm e (formerly Pk OD horizonta acket al Arm for sq r for 2.4"–4.1" r for 4.2"–5.3	merly RA) for enerly SF2) for 2%" (2) limit to 30° tilt al arm or vertical uare pole round pole " round pole " round pole	- Colo BL DB GYS PS WH CC	r Black Textured Dark Bronze Textured Light Gray Smooth Platinum Silver Smooth White Textured Custom Color	- Contr 7PR 7PR-5 7PR-1 SCP/ GENI SWP SWPI	ol Options 7-Pin Receptacle o cap, photo control, control provided by C 7-Pin Receptacle w Cap C 7-Pin Receptacle w photo control F Programmable Occ Sensor w/ daylight XX ENERGENI ³ SiteSync Pre-Comm Soncort ^{12,4}	nly (shorti or wirele y others) //Twist-Lo cupancy control ^{1,2} mission ^{1,4}	ng ss ck [®] ,6	Options F Fusing BSP Bird Sp BC Backst FR, 2, 3	oikes nield (availa 3, 4, 4W Op	able for ptics)	

House Side Shield Accessorie	?S	Mounting Accessories		Notes:		
HSS/VP-S/90-FB/XXX	90° shield front or back	VPL-AD-RPA3	2.4"–4.1" Round Pole	2	Specify mounting height; 8 = 8' or less, 40 = 9' to 40'	
HSS/VP-S/90-LR/XXX	90° shield left or right		Adapter for AD arm	3	3 Specify routine setting code (example GENI-04). See <u>ENERGENI brochure</u> and instructions for setting table and options. Not available with sensor or SiteSync opt	
HSS/VP-S/270-FB/XXX	270° shield front or back	VPL-AD-RPA4	4.2"–5.3" Round Pole Adapter for AD arm	4	Specify group and zone at time of order. See <u>www.hubbelliighting.com/sitesync</u> for further details. Order at least one SiteSync interface accessory SWUSB or SWTAB. Each option contains SiteSync License, GUI, and Bridge Node	
HSS/VP-S/270-LR/XXX	270° shield left or right	VPL-AD-RPA5	5.5"–5.9" Round Pole	5	Only available with FR, 2, 3, 4, 4W and 5R distributions	
HSS/VP-S/360/XXX Deplace XXX with potentian for deal	Full shield	VPL-AD-RPA6	6.0"–6.5" Round Pole Adapter for AD arm	6	Order at least one SCP-REMOTE per project location to program and control the occupancy sensor	

Replace XXX with notation for desired finish color. Refer to page 8 for shield images.

Accessories and Services (Ordered Separately)

SCP-REMOTE	Remote Control for SCP/_F option. Order at least one per project to program and control the occupancy sensor
SWUSB*	SiteSync interface software loaded on USB flash drive for use with owner supplied PC (Windows based only). Includes SiteSync license, software and USB radio bridge node
SWTAB*	Windows tablet and SiteSync interface software. Includes tablet with preloaded software, SiteSync license and USB radio bridge node
SWBRG	SiteSync USB radio bridge node only. Order if a replacement is required or if an extra bridge node is requested
SW7PR+	SiteSync 7-Pin on fixture module On/Off/Dim, Daylight Sensor 120–480VAC
* When ordering SiteSy + Available as a SiteSyr	nc at least one of these two interface options must be ordered per project. nc retrofit solution for fixtures with an existing 7-pin receptacle.

Hubbell Control Solutions — Accessories (Sold Separately)

NX Distributed Intelligence[™]

NXOFM-1R1D-UNV On-fixture Module (7-pin), On / Off / Dim, Daylight Sensor with HubbNET Radio and Bluetooth® Radio, 120–480VAC

wiSCAPE® Lighting Control

- WIR-RME-L
- -L On-fixture Module (7-pin or 5-pin), On / Off / Dim, Daylight Sensor with wiSCAPE Radio, 110–480VAC

Options provided for use with integrated sensor, please view specification sheet ordering information table for details.

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PER S SMALL VIPER LUMINAIRE

DIMENSIONS







23/8" Adjustable Knuckle (K) (formerly PK2)



Side View

Limit to 30° tilt. Sensor, photocell and wireless controls should not be tilted above horizontal.

Back View



AD Decorative Arm







VIPER S SMALL VIPER LUMINAIRE

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

PHOTOMETRY

The following diagrams represent the general distribution options offered for this product. For detailed information on specific product configurations, see <u>website photometric test reports</u>.

Type FR – Front Row/Auto Optic





Type 5R (rectangular)

	5	~	
7 (
	2	1	





Type 5W (round wide)





Type 5QM

Type TC







VIPER S SMALL VIPER LUMINAIRE

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

ELECTRICAL DATA

# OF LEDS	NUMBER OF DRIVERS	DRIVE CURRENT (mA)	INPUT VOLTAGE (V)	SYSTEM POWER (w)	CURRENT (Amps)
			120		0.5
24	1	700 4	277	FF	0.2
24	'	700 mA	347	55	0.2
			480		0.1
			120		0.65
		525 mA	277	65	0.28
		525 IIIA	347	65	0.22
26	1		480		0.16
30		700 mA	120	80	0.7
			277		0.3
			347		0.2
			480		0.2
	1		120	110	0.9
10		700 mA	277		0.4
40			347		0.3
			480		0.2
			120		1.1
60	1	700 mA	277	126	0.5
00	1	700 1114	347	130	0.4
			480		0.3

	PROJECTED LUMEN MAINTENANCE									
Ambient Temp.	0	25,000	50,000	TM-21-11 60,000 ¹	100,000	Calculated L70 (HOURS)				
25°C / 77°C	1	0.97	0.95	0.95	0.92	>377,000				
1 Projected per IESNA Data references the ex based on 10,000 hour	TM-21-11. xtrapolated performance s of LED testing per IES	e projections for the 60 NA LM-80-08.	LED base model in a 2	5°C ambient,						

LIFESHIELD[™] CIRCUIT

Protects luminaire from excessive temperature. The device activates at a specific, factory-preset temperature and progressively reduces power over a finite temperature range. Operation is smooth and undetectable to the eye. Thermal circuit is designed to "fail on", allowing the luminaire to revert to full power in the event of an interruption of its power supply or faulty wiring connection to the drivers. The device can co-exist with other 0–10V control devices (occupancy sensors, external dimmers, etc.)

ADDITIONAL INFORMATION

ROTATION OPTIONS







LING Series SI ENIDER WALLBACK

FEATURES

- · Two sizes for a variety of applications
- Ranges from 10W to 80W with up to 8000 lumens
- SG1 Series replaces from 100W-150W HID; SG2 Series replaces from 150W-250W HID
- · Comfort lens available as an option or accessory provides glare control and enhanced uniformity
- · Knuckle and trunnion accessory mounting kits available for flood applications
- IP65 and certified to UL 1598 for use in wet locations up to 40°C ambient
- DLC (DesignLights Consortium Qualified see www.designlights.org



DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

tradeSELECT





RELATED PRODUCTS								
8 LNC Litepak	8 LNC2 Litepak	8 LNC3 Lite						
8 LNC4 Litepak	8 GeoPak	8 <u>GeoPak</u> 2						

SPECIFICATIONS

HOUSING

- Rugged die-cast aluminum housing with corrosion resistant powder coat finish
- · Heating dissipating fins provide superior thermal performance extending the life of the electronic components
- Impact resistant tempered glass offers zero uplight
- Comfort lens available as an option or accessory to reduce glare (7-10% lumen reduction) and provide better uniformity

OPTICS

- 3000K, 4000K and 5000K CCT nominal with 70 CRI
- Smaller SG1 housing has 2 LEDs, larger SG2 housing has 3 LEDs

INSTALLATION

- · Side hinge allows for easy installation and wiring
- · Side movement avoids damage to the lens and helps prevent injury common in drop down hinge designs
- · Mounts to 4" junction box and includes a gasket to help seal electrical connections
- Four 1/2" threaded conduits hubs for surface conduit provided

ELECTRICAL

- 120-277V, 50/60Hz electronic drivers
- 347V and 480V available in large SG2 housing
- 10KA surge protection included

OPTIONS/CONTROLS

- Button photocontrol for dusk to dawn energy savings. Stock versions include 120V-277V PC with a cover which provides a choice to engage photocontrol or not. PC is installed in top hub
- Occupancy sensor available for on/off and dimming control in larger SG2 housing
- SiteSync[™] wireless lighting control delivers flexible control strategies for reducing power consumption and minimizing maintenance costs while delivering the right light levels with a simple and affordable wireless solution.
- · See ordering information or visit www.hubbelllighting.com/sitesync for more details
- · Battery backup options available in larger SG2 housing rated for either 0° C or -30° C. Performance exceeds NEC requirement providing 1 fc minimum over 10'x10' at 11' mounting height

CERTIFICATIONS

- DesignLights Consortium® (DLC) qualified. Please refer to the DLC website for specific product qualifications at www.designlights.org
- Listed to UL1598 for use in wet location, listed for -40°C to 40°C applications
- IDA approved with zero uplight for 3000K and warmer CCTs

• IP65

- WARRANTY 5 year limited warranty
- · See HLI Standard Warranty for additional information

KEY DATA	A
Lumen Range	2263-8079
Wattage Range	21–80
Efficacy Range (LPW)	101–113
Fixture Projected Life (Hours)	L70>50K
Weights lbs. (kg)	4.3–11 (2.0–5.0)



8 PHOTOMETRY

8 SG2 PSG PAGE



SLING SERIES

SLENDER WALLPACK

ORDERING GUIDE



Example: SG1-20-3K7-FT-UNV-DB-PCU-CS

CATALOG #

ORDERING INFORMATION

	Housing		_	ССТ	/CRI	-	Distribution	-	Volta	ge]-	Colo	r/Finish	-	Control C	options	- c	Optio	ns
	SG1-10	Size 1, 10W		3K7	3000K,		FT Fwd Throw)	UNV	120V-277V		DB	Textured Dark		PCU	Button Photocontrol (120-277V)	C	s	Comfort Lens
<	SG1-20	Size 1, 20W	5		70 CRI				120	120V			Bronze		SCP ^{1,2,3}	Hi-Lume 1% 3-wire /	E	1,2	Batter 0°C
	SG1-30	Size 1 30W	(4K7	4000K,				277	277V		BL	Textured Black			EcoSystem LED Driver	E	H ^{1,2}	Battery w/ heater
	001-00	Size 1, 30W		\sim	10 CR				UHV	347V-480V		wн	Textured White		SWP ^{1,2}	Hi-Lume 1% 2-wire LED Driver			-20°C
	SG1-40	Size 1, 40W		5K7	5000K,							GYS	Smooth Gray			(120V only)			
	SG2-50	Size 2, 50W			70 CRI							PS	Smooth Plat. Silver		SWPM ^{1,2}	Osram dimming to 1% 0–10V			
	SG2-80	Size 2, 80W										сс	Custom Color		Specify N	ITG HT for SCO/SCP & SWPM			
															8F	Up to 8'			
															20F	Up to 20'			
			1	1							1	1							

Notes:

1 Available in SG2 only, UHV available in SG2-50 only

2 Sensor controls & battery backup can not be used with flood accessory or kit or for inverted/up mounting, 120-227V only for SCO/SCP, 120 or 277 only for SWP, SWPM, E & EH

3 Must order minimum of one remote control to program dimming settings, 0-10V fully adjustable dimming with automatic daylight calibration and different time delay settings, 120-277V only

STOCK ORDERING INFORMATION

Catalog Number	CCT/CRI	Wattage	Mounting Height	Color	Color	Delivered Lumens	LPW	Weight Ibs. (kg)
SG1-10-PCU	5000K/70	11W	8–12ft	120-277V	Dark Bronze	1349	122	4.3 (2.0)
SG1-10-4K-PCU	4000K/70	11W	8–12ft	120–277V	Dark Bronze	1424	129	4.3 (2.0)
SG1-20-PCU	5000K/70	21W	8–12ft	120-277V	Dark Bronze	2263	108	4.3 (2.0)
SG1-20-4K-PCU	4000K/70	21W	8–12ft	120-277V	Dark Bronze	2310	110	4.3 (2.0)
SG1-30-PCU	5000K/70	29W	10–15ft	120–277V	Dark Bronze	3270	113	4.3 (2.0)
SG1-30-4K-PCU	4000K/70	29W	10–15ft	120-277V	Dark Bronze	3060	105	4.3 (2.0)
SG1-40-PCU	5000K/70	38W	10–15ft	120–277V	Dark Bronze	4008	105	4.3 (2.0)
SG1-40-4K-PCU	4000K/70	38W	10–15ft	120–277V	Dark Bronze	4070	106	4.3 (2.0)
SG2-50-PCU	5000K/70	51W	12–18ft	120–277V	Dark Bronze	5548	110	11 (5.0)
SG2-50-4K-PCU	4000K/70	51W	12–18ft	120-277V	Dark Bronze	5526	109	11 (5.0)
SG2-80-PCU	5000K/70	80W	15–25ft	120–277V	Dark Bronze	8061	101	11 (5.0)
SG2-80-4K-PCU	4000K/70	80W	15–25ft	120-277V	Dark Bronze	8079	101	11 (5.0)





SLING SERIES

TYPE: PROJECT: CATALOG #:

LOCATION:

DATE:

ORDERING GUIDE

OPTIONS AND ACCESSORIES

Catalog Number	Description	Weight Ibs. (kg)
SG1-CS	Acrylic comfort lens for SG1	1 (.45)
SG2-CS	Acrylic comfort lens for SG2	1 (.45)
SG1-YOKE	SG1 Series Yoke/Floodlight mount kit, includes visor	2.0 (1.0)
SG1-KNUCKLE	SG1 Series Knuckle/Floodlight mount kit, includes visor	2.0 (1.0)
SG2-YOKE	SG2 Series Yoke/Floodlight mount kit, includes visor	2.0 (1.0)
SG2-KNUCKLE	SG2 Series Knuckle/Floodlight mount kit, includes visor	2.0 (1.0)
SCP-REMOTE*	Remote control for SCP option. Order at least one per project to program and control fixtures	1 (.45)
SG2-PMA-3-XX	3" Pole Mount adapter for SG2, both square and round, XX= finish	7 (3.5)
SG2-PMA-4-XX	4" Pole Mount adapter for SG2, both square and round, XX= finish	7 (3.5)
SG2-PMA-5-XX	5" Pole Mount adapter for SG2, both square and round, XX= finish	7 (3.5)
SG2-PMA-6-XX	6" Pole Mount adapter for SG2, both square and round, XX= finish	7 (3.5)
SG1-SPC	Vandal Resistant Lens (shield polycarbonate), SG1	3 (1.5)
SG2-SPC	Vandal Resistant Lens (shield polycarbonate), SG2	3 (1.5)
SG1-WCP	Universal Wall Cover Plate, Dark Bronze, SG1	10 (5)
SG2-WCP-H	Horizontal Mount Wall Cover Plate, Dark Bronze, SG2	10 (5)
SG2-WCP-V	Vertical Mount Wall Cover Plate, Dark Bronze, SG2	10 (5)
SG2XL-WCP-H	Horizontal Mount Wall Cover Plate, DB, SG2 with battery or sensor	10 (5)
SG2XL-WCP-V	Vertical Mount Wall Cover Plate, DB, SG2 with battery or sensor	10 (5)

ACCESSORIES AND SERVICES (ORDERED SEPARATELY)

Control Options									
SWUSB ¹	SiteSync [™] interface software loaded on USB flash drive for use with owner supplied PC (Windows based only). Includes SiteSync [™] license, software and USB radio bridge node.								
SWTAB ¹	Windows tablet and SiteSync [™] interface software. Includes tablet with preloaded software, SiteSync [™] license and USB radio bridge node.								
SWBRG ²	SiteSync [™] USB radio bridge node only. Order if a replacement is required or if an extra bridge node is requested.								

Notes:

1~ When ordering SiteSync $^{\bowtie}$ at least one of these two interface options must be ordered per project.

2 If needed, an additional Bridge Node can be ordered.





SLING SERIES

SLENDER WALLPACK

DATE:	LOCATION:
TYPE:	PROJECT:

PERFORMANCE DATA

Description	System	5K (500	5K (5000K NOMINAL 70 CRI)						4K (4000K NOMINAL 70 CRI)					3K (3000K NOMINAL 80 CRI)				
LEDs		Current	Watts	Lumens	LPW	В	U	G	Lumens	LPW	В	U	G	Lumens	LPW	В	υ	G
SG1-10	2	140mA	11	1349	122	1	0	0	1424	129	1	0	0	1003	91	1	0	0
SG1-20	2	250mA	21	2449	115	1	0	0	2310	110	1	0	0	2054	95	1	0	0
SG1-30	2	350mA	29	3332	117	2	0	0	3060	106	1	0	0	2913	100	1	0	0
SG-40	2	450mA	38	4008	105	2	0	0	4070	106	2	0	0	3845	100	2	0	0
SG2-50-UHV	3	350mA	44	4633	106	2	0	0	4609	105	2	0	0	3895	90	2	0	0
SG2-50	3	415mA	51	5548	109	2	0	0	5526	107	2	0	0	4700	92	2	0	0
SG2-80	3	650mA	80	7851	98	2	0	1	8079	103	2	0	1	6721	86	2	0	1

CATALOG #:

*347 and 480 VAC input Lumen values are from photometric test performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown. Actual performance may differ as a result of end-user environment application and inherent performance balances of the electrical components.

ELECTRICAL DATA

Catalog number	# of Drivers	Input Voltage	Current (AMPS)	System Power
561.10	1	120	0.09	11.0
561-10	1	277	0.04	11.0
561.20	1	120	0.18	21.0
5GI-20	1	277	0.08	21.0
501 20	1	120	0.24	28.9
SG1-30	1	277	0.10	28.9
562.40	1	120	0.32	38.3
5G2-40	1	277	0.14	38.3
	1	347	0.13	43.5
SG-50-UHV	1	480	0.18	43.5
5C2 F0	1	120	0.42	50.6
362-50	1	277	0.18	50.6
563.80	1	120	0.68	79.8
362-80	1	277	0.29	79.8

PROJECTED LUMEN MAINTENANCE

Ambient Temperature	OPERATING HOURS					
	0	25,000	50,000	TM-21-11 ¹ L96 60,000	100,000	L70 (Hours)
25°C / 77°F	1.00	0.98	0.97	0.96	0.95	>791,000
40°C / 104°F	0.99	0.98	0.96	0.96	0.94	>635,000

1. Projected per IESNA TM-21-11 * (Nichia 219B, 700mA, 85°C Ts, 10,000hrs) Data references the extrapolated performance projections for the base model in a 40°C ambient, based on 10,000 hours of LED testing per IESNA LM-80-08





SLI	NG	SE	R	ES
SLEND	ER WAL	LPACK		

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

LUMINAIRE AMBIENT TEMPERATURE FACTOR (LATF)

Ambient Te	Lumen Multiplier	
0° C	32° F	1.02
10° C	50° F	1.01
20° C	68° F	1.00
25° C	77° F	1.00
30° C	86° F	1.00
40° C	104° F	0.99
50° C	122° F	0.96

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

DIMENSIONS





А	В	с	Weight
4.19"	7.80"	6.61"	4.4lbs
(107mm)	(198mm)	(168mm)	(2kg)





А	В	С	Weight
5.80" (147mm)	11.14" (283mm)	9.52" (242mm)	111bs (5kg)

SG2 with occupancy sensor and battery options



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SLING SERIES SLENDER WALLPACK

PHOTOMETRY

SG1-10-4K7

LUMINAIRE DATA

Description	4000 Kelvin, 70 CRI
Distribution Type	Forward Throw
Delivered Lumens	1424
Watts	11.4
Efficacy	125
Mounting	Wall

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	996.6	70.0
Downward House Side	427.8	30.0
Downward Total	1424.4	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	1424.4	100.0



SG1-20-4K7

LUMINAIRE DATA

Description	4000 Kelvin, 70 CRI
Distribution Type	Foward Throw
Delivered Lumens	2310
Watts	20.9
Efficacy	111
Mounting	Wall

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	1618	70.0
Downward House Side	692.1	30
Downward Total	2310	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	2310.3	100.0

ISOMETRIC FOOTCANDLE



SG1-30

LUMINAIRE DATA

Description	4000 Kelvin, 70 CRI
Distribution Type	Forward Throw
Delivered Lumens	3060
Watts	29.1
Efficacy	105
Mounting	Wall

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	2619.4	70.9
Downward House Side	890.4	29.1
Downward Total	3059.8	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	3059.8	100.0

ISOMETRIC FOOTCANDLE



DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	





SLING SERIES SLENDER WALLPACK

PHOTOMETRY

SG1-40-4K7

LUMINAIRE DATA

Description	4000 Kelvin, 70 CRI
Distribution Type	Foward Throw
Delivered Lumens	4070
Watts	38.1
Efficacy	107
Mounting	Wall

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	2857.7	70.2
Downward House Side	1215.5	29.8
Downward Total	4070.2	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	4070.2	100.0



SG2-50-4K7

LUMINAIRE DATA

Description	4000 Kelvin, 70 CRI
Distribution Type	Foward Throw
Delivered Lumens	5525.7
Watts	51.7
Efficacy	107
Mounting	Wall

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	4611.8	83.5
Downward House Side	913.9	16.5
Downward Total	5525.7	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	5525.7	100.0

ISOMETRIC FOOTCANDLE



SG2-80-4K7

LUMINAIRE DATA

Description	4000 Kelvin, 70 CRI
Distribution Type	Foward Throw
Delivered Lumens	8453
Watts	78.5
Efficacy	108
Mounting	Wall

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	6677.7	79.0
Downward House Side	1775.5	21.0
Downward Total	8453.2	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	8453.2	100.0

ISOMETRIC FOOTCANDLE



DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

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AIROLED-SPEC	





SLING SERIES SLENDER WALLPACK

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

ADDITIONAL INFORMATION

Shipping Information

Catalog Number		Carton Dimensions			Carton Qty.	
	CTN	Length Inch (cm)	Width Inch (cm)	Height Inch (cm)	per Master Pack	Pallet Qty.
SG1	4.35lbs (2kg)	9.5 (24)	8.25 (21)	5.25 (13)	6	98
SG2	11lbs (5kg)	14 (36)	11.5 (29)	8 (20)	2	64

Accessories and Services





Visor



Mounting Options

Acrylic comfort lens provides glare control, improved visual comfort and better uniformity

Visor accessory accessory kits

Flood mounting accessories - 1/2" threaded included with mounting knuckle or yoke (includes grommet and 3' SO cord)



Photocontrol option available for energysaving dusk-to-dawn operation

Hinged Housing Door



Side hinged for easy installation and wiring access, single screw secures housing closure









SG(X)-WCP-H



SG(X)-WCP-V

Features



Battery back up feature with side indicator.

Exceeds Life Safety Code average illuminance of 1.0 fc. at 12' mounting height. Assumes open space with no obstructions. Battery backup units consume 6W when charging a dead battery and 2W during maintenance charging. EH (units with a heater) consume up to an additional 8W when charging if the battery temp is lower than 10°C

Diagrams for illustration purposes only, please consult factory for application layout.





SiteSync[™] Lighting Control delivers flexible control strategies for reducing power consumption and minimizing maintenance costs while delivering the right light levels with a simple and affordable wireless solution.









l	Cat.#
ſ	Job

Type



Approvals

SPECIFICATIONS Intended Use

The Beacon Viper luminaire is available in two sizes with a wide choice of different LED wattage configurations and optical distributions designed to replace HID lighting up to 1000W MH or HPS. Luminaires are suitable for wet locations.

Construction:

- Manufactured with die cast aluminum.
- Coated with a polyester finish that meets ASTM B117 corrosion test requirements and ASTM D522 cracking and loss of adhesion test requirements.
- External hardware is corrosion resistant. One piece optical cartridge system consisting of an LED engine, LED lamps, optics, gasket
- and stainless steel bezel. Cartridge is held together with internal brass standoffs soldered to the board so that it can be field replaced as a one piece optical system.
- Two-piece silicone and microcellular polyurethane foam gasket ensures a weather-proof seal around each individual optic.

Electrical:

- Luminaire accepts 100V through 277V, 50 Hz to 60 Hz (UNV), 347V, or 480V input.
- Power factor is ≥ .90 at full load.
- All electrical components are rated at 50,000 hours at full load and 25°C ambient conditions per MIL- 217F Notice 2.
- Dimming drivers are standard, but must contact factory to request wiring leads for purpose of external dimming controls.
- Component-to-component wiring within the luminaire may carry no more than 80% of rated load and is certified by UL for use at 600VAC at 90°C or higher.
- Plug disconnects are certified by UL for use at 600 VAC, 13A or higher. 13A rating applies to primary (AC) side only.
- Fixture electrical compartment shall contain all LED driver components and shall be provided with a push-button terminal block for AC power connections.
- Optional 7-pin ANSI C136.41-2013 twist-lock photo control receptacle available. Compatible with ANSI C136.41 external wireless control devices
- Surge protection 20kA.
- Lifeshield[™] Circuit protects luminaire from excessive temperature. The device shall activate at a specific, factory-preset temperature, and progressively reduce power over a finite temperature range. Operation shall be smooth and undetectable to the eye. Thermal circuit is designed to "fail on", allowing the luminaire to revert to full power in the event of an interruption of its power supply, or faulty wiring connection to the drivers. The device shall be able to co-exist with other 0-10V control devices (occupancy sensors, external dimmers, etc.).

CERTIFICATIONS/LISTINGS



Controls/Options:

- · Available with an optional passive infrared (PIR) motion sensor capable of detecting motion 360° around the luminaire. When no motion is detected for the specified time, the motion response system reduces the wattage to factory preset level, reducing the light level accordingly. When motion is detected by the PIR sensor, the luminaire returns to full wattage and full light output. Please contact Beacon Products if project requirements vary from standard configuration · Available with Energeni for optional set dimming, timed dimming with simple delay, or
- timed dimming based on time of night (see www.beaconproducts.com/products/energeni) • In addition, Viper can be specified
- with SiteSync[™] wireless control system for reduction in energy and maintenance costs while optimizing light quality 24/7. For more details, see ordering information or visit: www.hubbelllighting.com/sitesync

Installation:

· Mounting options for horizontal arm, vertical tenon or traditional arm mounting available. Mounting hardware included.

Finish:

- · IFS polyester powder-coat electrostatically applied and thermocured. IFS finish consists of a five stage pretreatment regimen with a polymer primer sealer and top coated with a thermoset super TGIC polyester powder coat finish
- The finish meets the AAMA 2604 performance specification which includes passing a 3000 hour salt spray test for corrosion resistance and resists cracking or loss of adhesion per ASTM D522 and resists surface impacts of up to 160 inch-pounds.

Certifications/Ratings:

- DesignLights Consortium (DLC) qualified, consult DLC website for more details: http:// www.designlights.org/QPL
- Certified to UL 1598 and CSA C22.2 No. 250.0
- 3G rated for ANSI C136.31 high vibration applications with MAF mounting
- IDA approved

Warranty:

Five year limited warranty for more information visit: www.hubbelllighting.com/resources/warranty



DIMENSIONS



MOUNTING OPTIONS





Side View



Back View



Rectangular Arm (A)





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our most popular brands in a broad range of award-winning product families.

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PERFORMANCE DATA		5K			4K				3K									
				(5000K nominal, 70 CRI)			(4000K nominal, 70 CRI)				(3000K nominal, 70 CRI)							
# LED'S	DRIVE Current (Milliamps)	SYSTEM WATTS	DISTRIBUTION TYPE	LUMENS	LPW ¹	В	U	G	LUMENS	LPW ¹	B	U	G	LUMENS	LPW ¹	В	U	G
			FR	18220	132	2	0	2	18783	137	2	0	2	16341	119	2	0	2
			2	17228	125	2	0	2	17761	129	2	0	2	15452	112	2	0	2
			4	16864	125	2	0	3	17386	129	2	0	3	15478	112	2	0	3
64	625 mA	135W	4W	16797	122	2	0	3	17317	126	2	0	3	15066	109	2	0	3
			5QM	17259	125	4	0	2	17792	129	4	0	2	15479	112	4	0	2
			5QN	18023	131	4	0	0	18580	135	4	0	0	16165	117	4	0	0
			5W	16498	127	4	0	2	17940	124	4	0	3	14797	108	4	0	2
			FR	23230	128	2	0	2	23948	132	2	0	2	20835	115	2	0	2
			2	21965	121	3	0	3	22645	125	3	0	3	19701	109	2	0	3
			4	21502	119	2	0	4	22003	123	2	0	4	19734	109	2	0	4
80	700 mA	180W	4W	21416	118	2	0	4	22079	122	2	0	4	19209	106	2	Ő	4
			5QM	22005	121	4	0	2	22686	125	4	0	2	19736	109	4	0	2
			50	22979	12/	4		1	23689	131	4	0	1	10000	114	4	0	
			5W	21035	116	5	0	3	21686	120	5	0	3	18867	104	4	0	3
			FR	27849	121	2	0	2	28711	125	2	0	2	24978	108	2	0	2
			2	26334	114	3	0	3	27148	118	3	0	4	23619	102	3	0	3
			4	25777	114	2	0	4	26575	115	2	0	5	23059	103	2	0	4
80	875 mA	235W	4W	25675	111	3	0	4	26469	115	3	0	4	23028	100	3	0	4
			5QM	26381	114	4	0	2	27196	118	4	0	2	23661	103	4	0	2
			5UN 5B	27548	119	5		5	28400	123	5	0	5	23868	107	5	0	4
			5W	25218	109	5	0	3	25998	113	5	0	3	22618	98	5	0	3
			FR	27876	128	2	0	2	28738	132	2	0	2	25002	115	2	0	2
			2	26359	121	3	0	3	27174	125	3	0	4	23641	109	3	0	3
			4	25802	119	2		4	26600	125	$\frac{3}{2}$	0	4	23081	109	3	0	4
96	700 mA	220W	4W	25700	118	3	0	4	26494	122	3	0	4	23050	106	3	0	4
			5QM	26406	121	4	0	2	27222	125	4	0	2	23683	109	4	0	2
			5QN	27575	127	5	0	1	28427	131	5	0	1	24732	114	5	0	1
			5W	25242	116	5	0	3	26023	120	5	0	3	22640	104	4	0	3
			FR	33419	121	3	0	2	34453	125	3	0	2	29974	108	2	Ő	2
			2	31600	114	3	0	4	32577	118	3	0	4	28342	102	3	0	4
			3	31654	114	3	0	5	32633	118	3	0	5	28390	103	3	0	4
96	875 mA	280W	4 4W	30810	112	3	0	5	31763	115	3	0	5	27634	100	2	0	4
			5QM	31657	114	5	0	3	32636	118	5	0	3	28393	103	4	Ō	2
			5QN	33058	119	5	0	1	34080	123	5	0	1	29650	101	5	0	1
			5W	31933	109	5		5	32921	113	5		5	28641	104 08	5	0	3
			FR	35666	113	3	0	2	36769	117	3	0	2	31989	101	2	0	2
			2	33725	107	3	0	4	34768	110	3	0	4	30248	96	3	0	4
			3	33782	107	3	0	5	34827	110	3	0	5	30299	96	3	0	4
96	1000mA	315W ²	4 4W	32882	105	2	0	5	33899	108	2	0	5	29009	<u>94</u> 93	2	0	5
		01011	5QM	33785	107	5	0	3	34830	110	5	0	3	30302	96	5	0	2
			5QN	35280	112	5	0	1	36371	115	5	0	1	31643	100	5	0	1
			5R	34080	108	5	0	5	35134	111	5	0	5	30567	97	5	0	5
			SW FR	39569	102	3		4	43125	110	3	0	4	37518	92 96	3	0	4
			2	39569	101	3	0	4	40793	104	3	Ŏ	4	35490	91	3	0	4
			3	39619	101	3	0	5	40845	104	3	0	5	35535	91	3	0	5
06	1005mA	2051412	4	38723	98	3		5	39921	101	3		5	34731	88	2	0	5
90	AIIICZZOIIIA	29200-	4W	39623	101	5 5	0	3	40848	101	5 5	0	3	35538	<u> </u>	5	0	3
			5QN	41394	105	5	Ő	1	42675	109	5	<u>0</u>	1	37127	95	5	0	1
			5R	39969	102	5	0	5	41205	105	5	0	5	35848	91	5	0	5
1	1		5W	3/8//	1 97	15	10	14	39048	1 100	15	10	14	33986	87	5	0	4

¹ Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown. Actual performance may differ as a result of end-user environment and application. ² 315W and 395W 3000K versions are not DLC QPL listed. Reference highlighted cells in table.





PHOTOMETRICS



Type 5W

Type 5QN

Type 5QM

Type 5R









ELECTRICAL DATA

	NUMBER OF	DRIVE CURRENT	INPUT VOLTAGE	SYSTEM POWER	CURRENT
# OF LEDS	DRIVERS	(mA)	(V)	(w)	(Amps)
			120		1.4
64	1	625 mA	277	135	0.6
			480		0.5
			120		1.8
80	2	700 mA	277	180	0.8
00	2	700 IIIA	347	100	0.6
			480		0.5
	2		120		2.4
80		875 mA	2//	235	1.0
			347		0.8
	2	700 mA	120		2.0
			277	220	1.0
96			347		0.8
			480		0.6
			120		2.8
06	2	975 mA	277	280	1.2
90	2	075 MA	347	200	1.0
			480		0.7
			120		3.2
96	2	1000 mA	2//	315	1.4
			480		0.8
			120		4.0
96	2	1225 mA	277	305	1.7
30	2	1223 IIIA	347	390	1.4
			480		1.0

PROJECTED LUMEN MAINTENANCE

AMBIENT TEMP.	0	25,000	50,000	'TM-21-11 60,000	100,000	Calculated L70 (HOURS)
25°C / 77°C	1	0.98	0.97	0.97	0.96	>377,000

¹ Projected per IESNA TM-21-11

Data references the extrapolated performance projections for the 700mA base model in a 25°C ambient, based on 10,000 hours of LED testing per IESNA LM-80-08.

Compatible with Pole drill pattern B3 Config. EPA Config. EPA 4" Suggested distance from 3 @ 120° 3.0 1 1.2 top of pole 2.50" Ø5/8"·· 2X Ø5/16"… 2 @ 90° 1.9 3 @ 90° 3.1 Rectangular Arm -Ø4" Pole 2 @ 180° 2.4 4 @ 90° 3.8 -Ø5" Pole -Ø6" Pole

EPA



DRILL PATTERN

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HUBBELL Lighting

HOUSE SIDE SHIELD FIELD INSTALL ACCESSORIES



HSS/EVP-L/90-FB/XXX 90° shield front or back (2 shields shown)



HSS/EVP-L/270-LR/XXX 270° shield left or right (1 shield shown in right orientation)



HSS/EVP-L/90-LR/XXX 90° shield left or right (1 shield shown in left orientation)



HSS/EVP-L/360/XXX Full shield (1 shield shown)



HSS/EVP-L/270-FB/XXX 270° shield front or back (1 shield shown in back orientation)





<u>Attachment I</u> <u>Stormwater Management Report</u>

The Stormwater Management Report has been enclosed for your reference. The backup information is not included in the copies provided to the Planning Board but were included in the submission to the Town Engineer.

I

Lakeside Concrete Cutting & Abatement Professionals U.S. Route 1, Cumberland, Maine

STORMWATER MANAGEMENT PLAN

Introduction

Lakeside Concrete Cutting & Abatement Professionals (herein referred to as Applicant) is proposing the construction of a single-story, 15,000 s.f. commercial/office building, associated parking, infrastructure, and landscaping situated on a site with frontage on U.S. Route 1 in Cumberland, Maine. The proposed development will result in approximately 60,609 (1.39 acres) of impervious area. The increased runoff from the site will be directed to a Grassed Underdrained Soil Filter for water quality treatment and water quantity mitigation.

As the project results in more than an acre, but less than three acres, of new impervious area, it is required to conform to Basic and General Standards in accordance with Chapter 500 of the DEP rules. A Stormwater Management Law permit will be required for the development.

Study Methodology

Topographical data was obtained from on the ground survey. Hydrologic boundaries were generated using the topographic mapping and the drainage patterns were verified by a site reconnaissance visit.

Surficial soils located in the vicinity of the site were obtained from the United States Department of Agriculture Natural Resources Conservation Service Soil Survey Geographic (SSURGO) Database. The Applicant's parcel includes the soil classifications listed below. Soils units found in the development area are primarily Scantic.

	I	Iydrologic Group	
Soils Series	Symbol(s)	(HSG) **	
Nicholville Very Fine Sandy Loam	BgB	C/D	
Buxton Silt Loam	BuC2	C/D	
Lyman-Abram Complex	HsC	D	
Scantic Silt Loam	Sn	D	

SOILS TYPES IN LOCAL STUDY AREA

**Hydrologic Soils Group taken from SCS TR-55 Manual

Test pits were completed at the site by Summit Geoengineering. A copy of the Test Pit Results has been enclosed with this submission.

Basic Standards

Erosion control BMPs are shown on the project drawings, and notes and details on implementing them are included on separate drawing in the set. The Contractor will be responsible for maintaining the BMPs throughout construction. After the site is stabilized and accepted by the owner, the owner will be responsible for maintaining the permanent BMPs.

Disturbed area will be minimized by clearing only the amount of land required for the construction.

Major site work activities and their sequence follow:

SITELINES • CIVIL ENGINEERS • LAND SURVEYORS

119 Purinton Road, Suite A, Brunswick Landing, Brunswick, ME 04011 207-725-1200 • www.sitelinespa.com Stormwater Management Plan Lakeside Concrete Cutting & Abatement Professionals U.S. Route 1, Cumberland, Maine Page 2 of 5

- 1. Install stabilized construction entrance.
- 2. Cut and remove trees around area of work, as necessary, leaving the duff layer in place.
- 3. Set sediment barrier and erosion control measures around the perimeter of the limits of work. Stumps shall be ground onsite and used for sediment barrier and/or mulch.
- 4. Clear and grub work site as needed to execute plans using caution not to over expose the site. Topsoil salvaged shall be stockpiled and protected against erosion.
- 5. Install storm drainage and infrastructure, including access.
- 6. Construct buildings.
- 7. Construct pavement.
- 8. Loam, seed, and mulch disturbed areas.
- 9. Monitor site for signs of erosion monthly and after major storm events.
- 10. Removal of temporary erosion control measures. Ninety (90) days post construction or upon satisfactory establishment of vegetation has been obtained.
- 11. Inspect site semi-annually for any sign of erosion or area requiring additional seeding.

The contractor shall monitor the disturbed area for signs of erosion or sediment transport off-site and take corrective action immediately. Inspections shall be logged using the form supplied in the stormwater facilities maintenance plan and kept on file. Completed logs shall be maintained by the Applicant after construction.

Flooding Standard

The project area is located in Zone C (Areas of Minimal Flooding) of the Flood Insurance Rate Maps (FIRMs) for Cumberland County, Maine. The project area is located on Panel 18 of 25 (Community Panel 230162-0018-C Effective October 15, 1985). An excerpt of the applicable FIRM is enclosed with this package. There is no impact from flooding anticipated for this project.

Off-Site Watersheds

There are portions of watersheds that are off-site that were reviewed as part of the stormwater analysis. The off-site portions are located upgradient of the site, northwest of the project.

On-Site Subcatchments

Pre-Development Conditions

The pre-development hydrologic analysis is based on the existing site condition which is undeveloped and wooded. Under pre-development conditions, the site drains from northwest to southeast. Runoff from the front portion of the site is conveyed into the existing storm drain system in U.S. Route 1.

Subcatchment 1S represents approximately 4.59 acres. The area is comprised mostly of woods and a small portion of lawn. Runoff leaves the site towards Route 1 where it is conveyed in the existing storm drain system.
Subcatchment 2S represents approximately 1.11 acres. The area is comprised mostly of woods and a small portion of lawn. Runoff leaves the site towards Route 1 where it is conveyed in the existing storm drain system.
Subcatchment 3S represents approximately 7.73 acres. The area of is comprised mostly of off-site woods and a small portion of lawn and road. Runoff leaves the site towards Route 1 where it is conveyed in the existing storm drain system.



Stormwater Management Plan Lakeside Concrete Cutting & Abatement Professionals U.S. Route 1, Cumberland, Maine Page 3 of 5

Post-Development Conditions

Under post-development conditions, the commercial/office building will be constructed with associated paved access, landscaping, and infrastructure. Stormwater runoff from the new impervious area will be directed to a Grassed Underdrained Soil Filter. A summary of the subcatchments is provided below:

- Subcatchment 10S represents approximately 1.85 acres. The area of is comprised mostly of woods and includes the proposed lawn and landscaping for site and the proposed grassed slopes of the grading surrounding the site. Runoff leaves the site towards Route 1 where it is conveyed in the existing storm drain system.
- Subcatchment 11S represents approximately 1.77 acres comprised of roof and pavement of the proposed building as well as the landscaped area of the proposed Grassed Underdrained Soil Filter (GUSF). Stormwater runoff drains into the Filter and is discharged to the existing storm drain system in U.S. Route 1.
- Subcatchment 12S represents approximately 3.13 acres. The area of is comprised mostly of woods and includes the proposed lawn and landscaping for site and the proposed grassed slopes of the grading surrounding the site. Runoff leaves the site towards Route 1 where it is conveyed in the existing storm drain system.
- Subcatchment 13S represents approximately 7.59 acres. The area is comprised mostly of off-site woods and includes the proposed lawn and landscaping for site and the proposed grassed slopes of the grading surrounding the site. Runoff leaves the site towards Route 1 where it is conveyed in the existing storm drain system.

<u>Results</u>

A comparison of pre-development and post-development peak rates of stormwater runoff at the Analysis Points is presented in the following tables. Peak runoff rates were estimated for the 2-, 10-, and 25-year, 24-hour storm events.

Analysis Point 1 (POI#1)	Peak Runoff Rate (cfs)							
Design Storm	Pre-Development	Post-Development	Difference					
2-year	9.12	9.15	0.03					
10-year	15.73	15.25	-0.48					
25-year	21.06	19.56	-1.50					

Analysis Point 2 (POI#2)	Peak Runoff Rate (cfs)						
Design Storm	Pre-Development	Post-Development	Difference				
2-year	8.88	8.41	-0.47				
10-year	17.57	15.30	-2.27				
25-year	24.94	20.95	-3.99				



Stormwater Management Plan Lakeside Concrete Cutting & Abatement Professionals U.S. Route 1, Cumberland, Maine Page 4 of 5

As shown in the tables above, the total net peak rate of flow leaving the site is for all storm events. While there is an increase in peak runoff rate at POI#1 for the 2-year design storm, it is anticipated that the 0.03 cfs increase would not significantly impact downstream watersheds.

General Standard

An analysis of the pre-development and post-development areas shows that the runoff from 96% of the proposed impervious area and 80% of the proposed developed area on the parcel will be directed to the Grassed Underdrained Soil Filter for treatment and detention. The results are presented in the following table.

	Treatment Percentage Table										
	Impervious Area (s.f.)	Impervious (% of Total)	Developed Area (s.f.)	Developed Area (% of Total)	Treatment Method						
Treated	58,513	96.5	76,931	80.3	GUSF						
Untreated	2,096	3.5	18,822	19.7	None						
Total	60,609	100	95,753	100							

The proposed project will create approximately 60,609 s.f. (1.39 acres) of new impervious area. Runoff from approximately 58,513 s.f. (1.34) acres), or 96%, of the impervious area will be conveyed to the Grassed Underdrained Soil Filter for treatment and detention. In the post-development condition, the site will include approximately 35,144 s.f. (0.81 acres) of landscaped area, for a total of 95,753 s.f. (2.20 acres) of developed area. Runoff from approximately 16,322 s.f. (0.37 acres) of landscaped area will be conveyed to the Filter, resulting in 76,931 s.f. (1.77 acres), or 80%, of the developed areas directed to the GUSF for treatment and detention.

Water Quality

The project is required to provide stormwater treatment for 95% of the impervious area and 80% of the developed area. This foal for water quality treatment is achieved through the use of a Grassed Underdrained Soil Filter.

Grassed Underdrained Soil Filter

A Grassed Underdrained Soil Filter with underdrains and liners is proposed for the treatment and detention of the runoff from the proposed site, including the developed landscaped area, paved parking and access aisles, and self-storage building roofs. The filter has been sized so that the surface area of the filter is greater than 5% of the impervious tributary area plus 2% of the landscaped tributary area. The media is 18" thick and designed to store a treatment volume greater than 1.0 inch over the impervious area and 0.4 inches over the landscaped area, and filter at a rate of 2.41 inches per hour. Separation is provided between the bottom of the filter media and the high seasonal water table and liners are proposed for the bottoms of the systems. The maximum depth of stored runoff is less than 18 inches. Overflows have been included in the design to allow for detention within the grassed underdrained soil filter footprint.

	А	В	С	D	E	F
Subcatchment	Impervious Area (s.f)	Landscaped Area (s.f.)	Treatment Volume (c.f.)	Storage provided (c.f.)	Filter Area Required (s.f.)	Filter Area Provided (s.f.)
	(From Plan)	(From Plan)	(A)x 1" + (B) x 0.4"	(From Plan	(A) x 5% + (B) x 2%	(From Plan)
11S	58,513	24,769	5,702	10,491	3,421	3,431

Conclusion

Through the implementation of erosion and sedimentation control measures and best management practices,


Stormwater Management Plan Lakeside Concrete Cutting & Abatement Professionals U.S. Route 1, Cumberland, Maine Page 5 of 5

the project complies with the requirements of the Basic Standard.

By collecting and treating runoff from new impervious area, 96% of the new impervious area will be treated in accordance with Chapter 500. Similarly, 81% of the developed area will be treated prior to discharge from the site. The runoff from the development will not adversely impact the existing storm drains in U.S. Route 1, the adjacent parcels, or the receiving water bodies. By capturing and treating runoff from the impervious surfaces and developed areas the project likewise meets the applicable portions of the General Standard. The General Standard is met and exceeded. By providing detention in the proposed stormwater management BMPs, the peak runoff rates of the post-development condition are reduced to below the pre- development peak runoff rates; the project is not subject to the requirements of the Flooding Standard but the development has been designed so that the project complies with the requirements of the Flooding Standard.

- Attachment 1 Pre-Development HydroCAD Report
- Attachment 2 Pre-Development Watershed Map
- Attachment 3 Post-Development HydroCAD Report
- Attachment 4 Post-Development Watershed Map





Area Listing (all nodes)

Area	CN	Description
(acres)		(subcatchment-numbers)
0.011	98	Paved parking, HSG A (3S)
0.052	98	Paved parking, HSG C (1S)
2.507	98	Paved parking, HSG D (1S, 3S)
0.047	36	Woods, Fair, HSG A (3S)
1.349	73	Woods, Fair, HSG C (1S, 2S)
9.466	79	Woods, Fair, HSG D (1S, 2S, 3S)
13.432	82	TOTAL AREA

Soil Listing (all nodes)

Area	Soil	Subcatchment
(acres)	Group	Numbers
0.058	HSG A	3S
0.000	HSG B	
1.401	HSG C	1S, 2S
11.973	HSG D	1S, 2S, 3S
0.000	Other	
13.432		TOTAL AREA

Ground Covers (all nodes)

HSG-A	HSG-B	HSG-C	HSG-D	Other	Total	Ground	Subcatchment
 (acres)	(acres)	(acres)	(acres)	(acres)	(acres)	Cover	Numbers
0.011	0.000	0.052	2.507	0.000	2.570	Paved parking	1S, 3S
0.047	0.000	1.349	9.466	0.000	10.862	Woods, Fair	1S, 2S, 3S
0.058	0.000	1.401	11.973	0.000	13.432	TOTAL AREA	

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			Pip	e Listing	(all nod	les)			
Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Diam/Width (inches)	Height (inches)	Inside-Fill (inches)
1	1S	0.00	0.00	14.0	0.0210	0.025	12.0	0.0	0.0

Dine Listing (all nodes)

4306 Pre	Type I
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Time span=0.00-48.00 hrs, dt=0.05 hrs, 961 points Runoff by SCS TR-20 method, UH=SCS, Weighted-CN Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S:1S	Runoff Area=199,932 sf 44.47% Impervious Runoff Depth=1.83"
	Flow Length=1,160' Tc=7.8 min CN=87 Runoff=9.12 cfs 0.699 af
Subcatchment2S: 2S	Runoff Area=48,289 sf 0.00% Impervious Runoff Depth=0.97"
	Flow Length=494' Tc=23.7 min CN=74 Runoff=0.74 cfs 0.090 af
Subcatchment3S: 3S	Runoff Area=336,890 sf 6.84% Impervious Runoff Depth=1.33"
	Flow Length=1,131' Tc=18.5 min CN=80 Runoff=8.21 cfs 0.854 af
Reach POI#1: POI#1	Inflow=9.12 cfs 0.699 af
	Outflow=9.12 cfs 0.699 af
Reach POI#2: POI#2	Inflow=8.88 cfs 0.944 af
	Outflow=8.88 cfs 0.944 af
Total Bunoff Area = 1	2 422 ac Bunoff Volume = 1 642 of Average Bunoff Donth = 1 47

Total Runoff Area = 13.432 ac Runoff Volume = 1.643 af Average Runoff Depth = 1.47" 80.87% Pervious = 10.862 ac 19.13% Impervious = 2.570 ac

Summary for Subcatchment 1S: 1S

Runoff = 9.12 cfs @ 12.11 hrs, Volume= 0.699 af, Depth= 1.83"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type III 24-hr 2-YR Rainfall=3.10"

A	rea (sf)	CN D	escription					
	18,721	73 V	Voods, Fai	r, HSG C				
	2,270	98 P	aved park	ing, HSG C	;			
	92,301	79 V	Voods, Fai	r, HSG D				
	86,640	98 P	aved park	ing, HSG D				
1	99,932	87 V	87 Weighted Average					
1	11,022	5	5.53% Per	vious Area				
	88,910	4	4.47% Imp	pervious Are	ea			
_		~		.	— • • • •			
	Length	Slope	Velocity	Capacity	Description			
(min)	(teet)	(π/π)	(IT/SEC)	(CTS)				
1.4	150	0.0350	1.84		Sheet Flow, A-B			
0.5	40	0.0050	4.04		Smooth surfaces n= 0.011 P2= 3.10"			
0.5	42	0.0350	1.31		Shallow Concentrated Flow, B-C			
16	122	0 0000	1 55		Shallow Concentrated Flow C D			
1.0	452	0.0000	4.55		Unnaved Ky= 16.1 fns			
11	194	0.3300	2 87		Shallow Concentrated Flow D-F			
	10-1	0.0000	2.07		Woodland $Kv = 5.0 \text{ fps}$			
2.8	267	0.1000	1.58		Shallow Concentrated Flow, E-F			
					Woodland Kv= 5.0 fps			
0.1	14	0.0210	3.42	2.68	Pipe Channel, F-G			
					12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25'			
					n= 0.025 Corrugated metal			
0.3	61	0.0500	3.35		Shallow Concentrated Flow, G-H			
					Grassed Waterway Kv= 15.0 fps			

7.8 1,160 Total

Summary for Subcatchment 2S: 2S

Runoff = 0.74 cfs @ 12.36 hrs, Volume= 0.090 af, Depth= 0.97"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type III 24-hr 2-YR Rainfall=3.10"

Area (sf)	CN	Description
40,038	73	Woods, Fair, HSG C
8,251	79	Woods, Fair, HSG D
48,289	74	Weighted Average
48,289		100.00% Pervious Area

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Type III 24-hr 2-YR Rainfall=3.10" Printed 5/11/2021

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Тс	Length	Slope	Velocity	Capacity	Description
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
0.2	33	0.1600	2.49		Sheet Flow, A-B
					Smooth surfaces n= 0.011 P2= 3.10"
19.8	117	0.1400	0.10		Sheet Flow, B-C
					Woods: Dense underbrush n= 0.800 P2= 3.10"
2.0	212	0.1250	1.77		Shallow Concentrated Flow, C-D
					Woodland Kv= 5.0 fps
1.7	132	0.0700	1.32		Shallow Concentrated Flow, D-E
					Woodland Kv= 5.0 fps

23.7 494 Total

Summary for Subcatchment 3S: 3S

Runoff	=	8.21 cfs @	12.27 hrs,	Volume=	0.854 af, Depth= 1.33	3"
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Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type III 24-hr 2-YR Rainfall=3.10"

A	rea (sf)	CN E	Description					
	496	98 F	Paved parking, HSG A					
	2,044	36 V	/oods, Fair, HSG A					
	22,550	98 F	Paved park	ing, HSG D				
3	11,800	79 V	Voods, Fai	r, HSG D				
3	36,890	80 V	Veighted A	verage				
3	13,844	44 93.16% Pervious Area						
	23,046	6	5.84% Impe	ervious Area	а			
-				A B				
	Length	Slope	Velocity	Capacity	Description			
(min)	(feet)	(ft/ft)	(ft/sec)	(CIS)				
11.0	150	0.2500	0.23		Sheet Flow, A-B			
					Woods: Light underbrush n= 0.400 P2= 3.10"			
3.2	212	0.0500	1.12		Shallow Concentrated Flow, B-C			
					Woodland Kv= 5.0 fps			
4.3	769	0.0400	3.00		Shallow Concentrated Flow, D-E			
					Grassed Waterway Kv= 15.0 fps			
18.5	1,131	Total						

Summary for Reach POI#1: POI#1

Inflow Area	a =	4.590 ac, 4	4.47% Imp	ervious,	Inflow	Depth =	1.8	33" for 2-1	R even	t
Inflow	=	9.12 cfs @	12.11 hrs,	Volume	=	0.699	af			
Outflow	=	9.12 cfs @	12.11 hrs,	Volume	=	0.699	af,	Atten= 0%,	Lag= 0	.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Summary for Reach POI#2: POI#2

Inflow A	Area =	8.842 ac,	5.98% Impervious,	Inflow Depth = 1.2	28" for 2-YR event
Inflow	=	8.88 cfs @	12.27 hrs, Volume	= 0.944 af	
Outflow	/ =	8.88 cfs @	12.27 hrs, Volume	= 0.944 af,	Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

4306 Pre	Type III 24-hr 10-YR Rainfall=4.60"
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Ru Reach routing	Time span=0.00-48.00 hrs, dt=0.05 hrs, 961 points unoff by SCS TR-20 method, UH=SCS, Weighted-CN g by Stor-Ind+Trans method - Pond routing by Stor-Ind method
Subcatchment1S:1S	Runoff Area=199,932 sf 44.47% Impervious Runoff Depth=3.19" Flow Length=1,160' Tc=7.8 min CN=87 Runoff=15.73 cfs 1.221 af
Subcatchment 2S: 2S	Runoff Area=48,289 sf 0.00% Impervious Runoff Depth=2.05" Flow Length=494' Tc=23.7 min CN=74 Runoff=1.65 cfs 0.189 af
Subcatchment3S: 3S	Runoff Area=336,890 sf 6.84% Impervious Runoff Depth=2.55" Flow Length=1,131' Tc=18.5 min CN=80 Runoff=16.04 cfs 1.642 af
Reach POI#1: POI#1	Inflow=15.73 cfs 1.221 af Outflow=15.73 cfs 1.221 af
Reach POI#2: POI#2	Inflow=17.57 cfs 1.831 af Outflow=17.57 cfs 1.831 af

Total Runoff Area = 13.432 acRunoff Volume = 3.052 afAverage Runoff Depth = 2.73"80.87% Pervious = 10.862 ac19.13% Impervious = 2.570 ac

Summary for Subcatchment 1S: 1S

Runoff = 15.73 cfs @ 12.11 hrs, Volume= 1.221 af, Depth= 3.19"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type III 24-hr 10-YR Rainfall=4.60"

7.8 1,160 Total

Summary for Subcatchment 2S: 2S

Runoff = 1.65 cfs @ 12.34 hrs, Volume= 0.189 af, Depth= 2.05"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type III 24-hr 10-YR Rainfall=4.60"

Area (sf)	CN	Description
40,038	73	Woods, Fair, HSG C
8,251	79	Woods, Fair, HSG D
48,289	74	Weighted Average
48,289		100.00% Pervious Area

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Type III 24-hr 10-YR Rainfall=4.60" Printed 5/11/2021 HydroCAD® 10.00-25 s/n 01100 © 2019 HydroCAD Software Solutions LLC

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.2	33	0.1600	2.49		Sheet Flow, A-B
					Smooth surfaces n= 0.011 P2= 3.10"
19.8	117	0.1400	0.10		Sheet Flow, B-C
					Woods: Dense underbrush n= 0.800 P2= 3.10"
2.0	212	0.1250	1.77		Shallow Concentrated Flow, C-D
					Woodland Kv= 5.0 fps
1.7	132	0.0700	1.32		Shallow Concentrated Flow, D-E
					Woodland Kv= 5.0 fps

23.7 494 Total

Summary for Subcatchment 3S: 3S

Runoff	=	16.04 cfs @	12.26 hrs,	Volume=	1.642 af,	Depth= 2.55"
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Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type III 24-hr 10-YR Rainfall=4.60"

A	rea (sf)	CN D	Description		
	496	98 F	aved park	ing, HSG A	
	2,044	36 V	Voods, Fai	r, HSG A	
	22,550	98 F	aved park	ing, HSG D	
3	11,800	79 V	Voods, Fai	r, HSG D	
3	36,890	80 V	Veighted A	verage	
3	13,844	9	3.16% Per	vious Area	
	23,046	6	.84% Impe	ervious Area	а
-		01		0	
I C	Length	Slope	Velocity	Capacity	Description
(min)	(teet)	(π/π)	(IT/SEC)	(CIS)	
11.0	150	0.2500	0.23		Sheet Flow, A-B
					Woods: Light underbrush n= 0.400 P2= 3.10"
3.2	212	0.0500	1.12		Shallow Concentrated Flow, B-C
					Woodland Kv= 5.0 fps
4.3	769	0.0400	3.00		Shallow Concentrated Flow, D-E
					Grassed Waterway Kv= 15.0 fps
18.5	1,131	Total			

Summary for Reach POI#1: POI#1

Inflow /	Area =	4.590 ac, 44	1.47% Imp	ervious,	Inflow	Depth =	3.1	9" for 10	-YR ever	nt
Inflow	=	15.73 cfs @	12.11 hrs,	Volume	=	1.221	af			
Outflov	v =	15.73 cfs @	12.11 hrs,	Volume	=	1.221	af,	Atten= 0%,	Lag= 0	.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Summary for Reach POI#2: POI#2

Inflow A	Area	=	8.842 ac,	5.98% Imper	rvious, Inflo [,]	w Depth = 2.4	48" for 10-	YR event
Inflow	:	=	17.57 cfs @	12.26 hrs, \	√olume=	1.831 af		
Outflow	/	=	17.57 cfs @	12.26 hrs, \	√olume=	1.831 af,	Atten= 0%,	Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

4306 Pre	Type III 24-hr 25-YR Rainfall=5.80
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	-

Time span=0.00-48.00 hrs, dt=0.05 hrs, 961 points Runoff by SCS TR-20 method, UH=SCS, Weighted-CN Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S:1S	Runoff Area=199,932 sf 44.47% Impervious Runoff Depth=4.33" Flow Length=1,160' Tc=7.8 min CN=87 Runoff=21.06 cfs 1.655 af
Subcatchment 2S: 2S	Runoff Area=48,289 sf 0.00% Impervious Runoff Depth=3.02" Flow Length=494' Tc=23.7 min CN=74 Runoff=2.45 cfs 0.279 af
Subcatchment 3S: 3S	Runoff Area=336,890 sf 6.84% Impervious Runoff Depth=3.60" Flow Length=1,131' Tc=18.5 min CN=80 Runoff=22.64 cfs 2.321 af
Reach POI#1: POI#1	Inflow=21.06 cfs 1.655 af Outflow=21.06 cfs 1.655 af
Reach POI#2: POI#2	Inflow=24.94 cfs 2.600 af Outflow=24.94 cfs 2.600 af
Total Runoff Area = 13	3.432 ac Runoff Volume = 4.254 af Average Runoff Depth = 3.80"

otal Runoff Area = 13.432 ac Runoff Volume = 4.254 af Average Runoff Depth = 3.80" 80.87% Pervious = 10.862 ac 19.13% Impervious = 2.570 ac

Summary for Subcatchment 1S: 1S

Runoff = 21.06 cfs @ 12.11 hrs, Volume= 1.655 af, Depth= 4.33"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type III 24-hr 25-YR Rainfall=5.80"

_	A	rea (sf)	CN D	escription		
		18,721	73 V	Voods, Fai	r, HSG C	
		2,270	98 P	aved park	ing, HSG C	
		92,301	79 V	Voods, Fai	r, HSG D	
_		86,640	98 P	aved park	ing, HSG D	
	1	99,932	87 V	Veighted A	verage	
	1	11,022	5	5.53% Pei	rvious Area	
		88,910	4	4.47% Imp	pervious Are	ea
	т.	المربع والم	01	\/_l!	O a m a a ita a	Description
	IC (min)	Length			Capacity	Description
_	(11111)	(1661)			(015)	Obset Flow A D
	1.4	150	0.0350	1.04		Smooth surfaces n= 0.011 P2= 3.10"
	05	42	0 0350	1 31		Shallow Concentrated Flow B-C
	0.0	74	0.0000	1.01		Short Grass Pasture Kv= 7.0 fps
	1.6	432	0.0800	4.55		Shallow Concentrated Flow, C-D
						Unpaved Kv= 16.1 fps
	1.1	194	0.3300	2.87		Shallow Concentrated Flow, D-E
						Woodland Kv= 5.0 fps
	2.8	267	0.1000	1.58		Shallow Concentrated Flow, E-F
						Woodland Kv= 5.0 fps
	0.1	14	0.0210	3.42	2.68	Pipe Channel, F-G
						12.0" Round Area= 0.8 st Perim= 3.1' r= 0.25'
	0.0	64	0.0500	2.25		n= 0.025 Corrugated metal
	0.3	01	0.0500	3.35		Shahow Concentrated Flow, G-H
_	70	1 160	Total			Glassed Walerway NV- 13.0 Ips
	1.0	1,100	rolar			

Summary for Subcatchment 2S: 2S

Runoff = 2.45 cfs @ 12.33 hrs, Volume= 0.279 af, Depth= 3.02"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type III 24-hr 25-YR Rainfall=5.80"

Area (sf)	CN	Description
40,038	73	Woods, Fair, HSG C
8,251	79	Woods, Fair, HSG D
48,289	74	Weighted Average
48,289		100.00% Pervious Area

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Type III 24-hr 25-YR Rainfall=5.80" Printed 5/11/2021 HydroCAD® 10.00-25 s/n 01100 © 2019 HydroCAD Software Solutions LLC

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.2	33	0.1600	2.49		Sheet Flow, A-B
					Smooth surfaces n= 0.011 P2= 3.10"
19.8	117	0.1400	0.10		Sheet Flow, B-C
					Woods: Dense underbrush n= 0.800 P2= 3.10"
2.0	212	0.1250	1.77		Shallow Concentrated Flow, C-D
					Woodland Kv= 5.0 fps
17	132	0 0700	1 32		Shallow Concentrated Flow, D-E
	.02	0.0100			Woodland $Kv = 5.0 \text{ fps}$

23.7 494 Total

Summary for Subcatchment 3S: 3S

Runoff 22.64 cfs @ 12.25 hrs, Volume= 2.321 af, Depth= 3.60" =

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type III 24-hr 25-YR Rainfall=5.80"

Ar	rea (sf)	CN E	Description		
	496	98 F	aved park	ing, HSG A	
	2,044	36 V	Voods, Fai	r, HSG A	
:	22,550	98 F	aved park	ing, HSG D	
3	11,800	79 V	Voods, Fai	r, HSG D	
3	36,890	80 V	Veighted A	verage	
3	13,844	9	3.16% Per	vious Area	
:	23,046	6	.84% Impe	ervious Area	а
т.	المربع مرالم	01	\/_l!	0	Description
IC (min)	Length			Capacity	Description
(1111)			(IL/Sec)	(CIS)	
11.0	150	0.2500	0.23		Sheet Flow, A-B
					Woods: Light underbrush n= 0.400 P2= 3.10"
3.2	212	0.0500	1.12		Shallow Concentrated Flow, B-C
4.0	700	0.0400	0.00		Woodland Kv= 5.0 fps
4.3	769	0.0400	3.00		Shallow Concentrated Flow, D-E
					Grassed Waterway Kv= 15.0 fps
18.5	1,131	Total			

Summary for Reach POI#1: POI#1

Inflow /	Area =	4.590 ac,	44.47% Impervi	ous, Inflow	Depth = 4.3	3" for 25-	YR event
Inflow	=	21.06 cfs @	12.11 hrs, Vo	lume=	1.655 af		
Outflov	v =	21.06 cfs @	12.11 hrs, Vo	lume=	1.655 af,	Atten= 0%,	Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Summary for Reach POI#2: POI#2

Inflow /	Area =	8.842 ac,	5.98% Impervious,	Inflow Depth = 3.4	53" for 25-YR event
Inflow	=	24.94 cfs @	12.26 hrs, Volume	= 2.600 af	
Outflow	v =	24.94 cfs @	12.26 hrs, Volume	= 2.600 af,	Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs



Area Listing (all nodes)

Area	CN	Description
 (acres)		(subcatchment-numbers)
0.569	39	>75% Grass cover, Good, HSG A (11S)
1.745	89	Gravel roads, HSG C (12S)
0.853	98	Paved parking, HSG A (11S)
0.052	98	Paved parking, HSG C (10S)
1.477	98	Paved parking, HSG D (10S, 12S, 13S)
0.344	98	Roofs, HSG A (11S)
0.149	73	Woods, Fair, HSG C (13S)
1.345	79	Woods, Fair, HSG D (12S)
6.695	83	Woods, Poor, HSG D (13S)
1.077	76	Woods/grass comb., Fair, HSG C (10S)
14.306	84	TOTAL AREA

Soil Listing (all nodes)

Area	Soil	Subcatchment
(acres)	Group	Numbers
1.766	HSG A	11S
0.000	HSG B	
3.023	HSG C	10S, 12S, 13S
9.517	HSG D	10S, 12S, 13S
0.000	Other	
14.306		TOTAL AREA

4306 Post

0.000

0.000

0.000

1.766

0.000

0.000

0.000

0.000

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0.149

0.000

1.077

3.023

1.345

6.695

0.000

9.517

12S, 13S

13S

	Ground Covers (all hodes)									
HSG-A	HSG-B	HSG-C	HSG-D	Other	Total	Ground	Subcatchment			
(acres)	(acres)	(acres)	(acres)	(acres)	(acres)	Cover	Numbers			
0.569	0.000	0.000	0.000	0.000	0.569	>75% Grass cover, Good	11S			
0.000	0.000	1.745	0.000	0.000	1.745	Gravel roads	12S			
0.853	0.000	0.052	1.477	0.000	2.382	Paved parking	10S,			
							11S,			
							12S, 13S			
0.344	0.000	0.000	0.000	0.000	0.344	Roofs	11S			

0.000

0.000

0.000

0.000

1.495

6.695

1.077

14.306

Woods, Fair

Woods, Poor

TOTAL AREA

Woods/grass comb., Fair 10S

Ground Covers (all nodes)

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	ripe Listing (an notes)									
Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Diam/Width (inches)	Height (inches)	Inside-Fill (inches)	
1	10S	0.00	0.00	31.0	0.0050	0.010	12.0	0.0	0.0	
2	12S	0.00	0.00	56.0	0.0050	0.010	24.0	0.0	0.0	
3	12S	0.00	0.00	102.0	0.0050	0.010	24.0	0.0	0.0	
4	13S	0.00	0.00	70.0	0.0050	0.010	24.0	0.0	0.0	
5	POI#1	83.68	78.05	98.0	0.0574	0.011	24.0	0.0	0.0	
6	POI#2	90.02	85.59	105.2	0.0421	0.011	24.0	0.0	0.0	
7	1P	91.90	89.50	33.0	0.0727	0.010	12.0	0.0	0.0	
8	2P	93.50	90.50	89.0	0.0337	0.010	24.0	0.0	0.0	

Pipe Listing (all nodes)

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Time span=0.00-48.00 hrs, dt=0.05 hrs, 961 points Runoff by SCS TR-20 method, UH=SCS, Weighted-CN Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment10S: 10S	Runoff Area=80,714 sf 41.88% Impervious Runoff Depth=1.67" Flow Length=677' Tc=15.5 min CN=85 Runoff=2.70 cfs 0.258 af
Subcatchment11S:11S	Runoff Area=76,931 sf 67.80% Impervious Runoff Depth=1.26" Tc=5.0 min CN=79 Runoff=2.58 cfs 0.186 af
Subcatchment12S:12S	Runoff Area=136,202 sf 1.18% Impervious Runoff Depth=1.67" Flow Length=1,255' Tc=8.0 min CN=85 Runoff=5.65 cfs 0.436 af
Subcatchment13S:13S	Runoff Area=329,305 sf 9.47% Impervious Runoff Depth=1.60" Flow Length=1,133' Tc=26.6 min CN=84 Runoff=8.42 cfs 1.007 af
Reach POI#1: POI#1 24.0" Round Pipe n=0.011	Avg. Flow Depth=0.51' Max Vel=14.45 fps Inflow=9.19 cfs 0.880 af L=98.0' S=0.0574 '/' Capacity=64.08 cfs Outflow=9.15 cfs 0.880 af
Reach POI#2: POI#2 24.0" Round Pipe n=0.011 I	Avg. Flow Depth=0.53' Max Vel=12.63 fps Inflow=8.42 cfs 1.007 af =105.2' S=0.0421 '/' Capacity=54.86 cfs Outflow=8.41 cfs 1.007 af
Pond 1P: GUSF#1	Peak Elev=95.03' Storage=100 cf Inflow=2.58 cfs 0.186 af Outflow=2.41 cfs 0.186 af
Pond 2P: Detention Area 24.0" Ro	Peak Elev=94.55' Storage=1,699 cf Inflow=5.65 cfs 0.436 af und Culvert n=0.010 L=89.0' S=0.0337 '/' Outflow=4.62 cfs 0.436 af
Tatal Dun off Anna - 44.00	Coo Dunoff Valumo - 4 007 of Augusto Dunoff Douth - 4 50

Total Runoff Area = 14.306 ac Runoff Volume = 1.887 af Average Runoff Depth = 1.58" 80.94% Pervious = 11.579 ac 19.06% Impervious = 2.726 ac

Summary for Subcatchment 10S: 10S

Runoff = 2.70 cfs @ 12.22 hrs, Volume= 0.258 af, Depth= 1.67"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type III 24-hr 2-YR Rainfall=3.10"

A	rea (sf)	CN D	escription		
	46,912	76 V	Voods/gras	s comb., F	air, HSG C
	2,270	98 P	aved park	ing, HSG C	
	31,532	98 P	aved park	ing, HSG D	
	80,714	85 V	Veighted A	verage	
	46,912	5	8.12% Per	vious Area	
	33,802	4	1.88% Imp	pervious Are	ea
			•		
Tc	Length	Slope	Velocity	Capacity	Description
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
12.0	150	0.2000	0.21		Sheet Flow, A-B
					Woods: Light underbrush n= 0.400 P2= 3.10"
0.6	70	0.1600	2.00		Shallow Concentrated Flow, B-C
					Woodland Kv= 5.0 fps
0.3	151	0.3300	8.62		Shallow Concentrated Flow, C-D
					Grassed Waterway Kv= 15.0 fps
0.1	31	0.0050	4.17	3.28	Pipe Channel, D-E
					12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25'
					n= 0.010 PVC, smooth interior
2.5	275	0.0700	1.85		Shallow Concentrated Flow, E-F
					Short Grass Pasture Kv= 7.0 fps
15.5	677	Total			

Summary for Subcatchment 11S: 11S

Runoff = 2.58 cfs @ 12.08 hrs, Volume= 0.186 af, Depth= 1.26"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type III 24-hr 2-YR Rainfall=3.10"

A	rea (sf)	CN	Description			
	37,162	98	Paved park	ing, HSG A		
	24,769	39	>75% Gras	s cover, Go	od, HSG A	
	15,000	98	Roofs, HSC	β A		
	76,931	79	Weighted A	verage		
	24,769	769 32.20% Pervious Area				
	52,162	67.80% Impervious Area				
Тс	Length	Slope	e Velocity	Capacity	Description	
<u>(min)</u>	(feet)	(ft/ft	:) (ft/sec)	(cfs)		
5.0					Direct Entry,	

Summary for Subcatchment 12S: 12S

Runoff = 5.65 cfs @ 12.12 hrs, Volume= 0.436 af, Depth= 1.67"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type III 24-hr 2-YR Rainfall=3.10"

A	rea (sf)	CN E	Description		
	75,991	89 G	Gravel road	ls, HSG C	
	58,601	79 V	Voods, Fai	r, HSG D	
	1,610	98 F	aved park	ing, HSG D	
1	36,202	85 V	Veighted A	verage	
1	34,592	9	8.82% Per	vious Area	
	1,610	1	.18% Impe	ervious Area	3
Тс	Length	Slope	Velocity	Capacity	Description
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
1.1	113	0.0350	1.74		Sheet Flow, A-B
					Smooth surfaces n= 0.011 P2= 3.10"
0.5	37	0.0310	1.32		Sheet Flow, B-C
					Smooth surfaces n= 0.011 P2= 3.10"
0.8	61	0.0350	1.31		Shallow Concentrated Flow, C-D
o -	100				Short Grass Pasture Kv= 7.0 fps
0.7	186	0.0800	4.55		Shallow Concentrated Flow, D-E
0.0	474	0.0500	0.50		Unpaved KV= 16.1 fps
3.2	474	0.2500	2.50		Shallow Concentrated Flow, E-F
0.1	EG		6.60	20.90	Woodland KV= 5.0 fps
0.1	00	0.0050	0.02	20.60	Pipe Channel, F-G
					24.0 Round Alea- 5.1 St Penin - 0.5 $1-0.50$
03	50	0 0400	3 00		Shallow Concentrated Flow, G H
0.5	50	0.0400	5.00		Grassed Waterway, Ky= 15.0 fps
03	102	0 0050	6.62	20.80	Pine Channel H-I
0.0	102	0.0000	0.02	20.00	24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50'
					n=0.010 PVC smooth interior
1.0	176	0.0400	3.00		Shallow Concentrated Flow, I-J
			0.00		Grassed Waterway Kv= 15.0 fps
8.0	1,255	Total			· · ·

Summary for Subcatchment 13S: 13S

Runoff = 8.42 cfs @ 12.38 hrs, Volume= 1.007 af, Depth= 1.60"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type III 24-hr 2-YR Rainfall=3.10"

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 Type III 24-hr
 2-YR Rainfall=3.10"

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/	Area (sf)	CN D	escription		
	6,503	73 V	Voods, Fai	r, HSG C	
	291,616	83 V	Voods, Poo	or, HSG D	
	31,186	98 P	aved park	ing, HSG D	
	329,305	84 V	Veighted A	verage	
	298,119	9	0.53% Per	vious Area	
	31,186	9	.47% Impe	ervious Area	a
_				_	
Tc	Length	Slope	Velocity	Capacity	Description
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
19.1	150	0.2500	0.13		Sheet Flow, A-B
					Woods: Dense underbrush n= 0.800 P2= 3.10"
3.3	212	0.0450	1.06		Shallow Concentrated Flow, B-C
					Woodland Kv= 5.0 fps
4.0	680	0.0350	2.81		Shallow Concentrated Flow, C-D
	70	0 0050	0.00	~~~~~	Grassed Waterway Kv= 15.0 fps
0.2	70	0.0050	6.62	20.80	Pipe Channel, D-E
					24.0" Round Area= 3.1 st Perim= 6.3' $r= 0.50'$
0.0	04	0 0000	44.00		n= 0.010 PVC, smooth interior
0.0	21	0.3300	11.66		Shallow Concentrated Flow, E-F
					Paved Kv= 20.3 lps

26.6 1,133 Total

Summary for Reach POI#1: POI#1

Inflow Are	a =	6.746 ac, 2	29.80% Imper	vious, Inflow	Depth = 1.57"	for 2-YR event
Inflow	=	9.19 cfs @	12.17 hrs, V	/olume=	0.880 af	
Outflow	=	9.15 cfs @	12.17 hrs, V	/olume=	0.880 af, Atte	en= 0%, Lag= 0.2 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Max. Velocity= 14.45 fps, Min. Travel Time= 0.1 min Avg. Velocity = 4.25 fps, Avg. Travel Time= 0.4 min

Peak Storage= 62 cf @ 12.17 hrs Average Depth at Peak Storage= 0.51' Bank-Full Depth= 2.00' Flow Area= 3.1 sf, Capacity= 64.08 cfs

24.0" Round Pipe n= 0.011 Concrete pipe, straight & clean Length= 98.0' Slope= 0.0574 '/' Inlet Invert= 83.68', Outlet Invert= 78.05'



Summary for Reach POI#2: POI#2

 Inflow Area =
 7.560 ac,
 9.47% Impervious, Inflow Depth =
 1.60" for 2-YR event

 Inflow =
 8.42 cfs @
 12.38 hrs, Volume=
 1.007 af

 Outflow =
 8.41 cfs @
 12.38 hrs, Volume=
 1.007 af, Atten= 0%, Lag= 0.3 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Max. Velocity= 12.63 fps, Min. Travel Time= 0.1 min Avg. Velocity = 5.08 fps, Avg. Travel Time= 0.3 min

Peak Storage= 70 cf @ 12.38 hrs Average Depth at Peak Storage= 0.53' Bank-Full Depth= 2.00' Flow Area= 3.1 sf, Capacity= 54.86 cfs

24.0" Round Pipe n= 0.011 Concrete pipe, straight & clean Length= 105.2' Slope= 0.0421 '/' Inlet Invert= 90.02', Outlet Invert= 85.59'



Summary for Pond 1P: GUSF#1

Inflow Are	a =	1.766 ac, 6	67.80% Impervious	, Inflow Depth =	1.26" for	2-YR event
Inflow	=	2.58 cfs @	12.08 hrs, Volum	ie= 0.186	ð af	
Outflow	=	2.41 cfs @	12.10 hrs, Volum	ie= 0.186	ວaf, Atten= 6	5%, Lag= 0.8 min
Primary	=	2.41 cfs @	12.10 hrs, Volum	ie= 0.186	ö af	-

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs / 2 Peak Elev= 95.03' @ 12.10 hrs Surf.Area= 3,483 sf Storage= 100 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow) Center-of-Mass det. time= 0.5 min (847.2 - 846.7)

Volume	Invert	Ava	il.Storage	Storage	e Description	
#1	95.00'		14,272 cf	Custor	n Stage Data (Pris	matic)Listed below (Recalc)
Elevation (feet)	Surf (.Area sq-ft)	Inc (cubic	.Store c-feet)	Cum.Store (cubic-feet)	
95.00		3,431		0	0	
96.00	:	5,231		4,331	4,331	
97.00	•	7,088		6,160	10,491	
97.50	ł	8,038		3,782	14,272	

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Type III 24-hr 2-YR Rainfall=3.10" Printed 5/11/2021 Page 11

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Device	Routing	Invert	Outlet Devices
#1	Device 2	95.00'	2.41 cfs Exfiltration at all elevations
#2	Primary	91.90'	12.0" Round Culvert
			L= 33.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 91.90' / 89.50' S= 0.0727 '/' Cc= 0.900
			n= 0.010 PVC, smooth interior, Flow Area= 0.79 sf
#3	Primary	97.25'	279.0' long x 6.0' breadth Broad-Crested Rectangular Weir
			Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00
			2.50 3.00 3.50 4.00 4.50 5.00 5.50
			Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65
			2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Primary OutFlow Max=2.41 cfs @ 12.10 hrs HW=95.03' (Free Discharge) -2=Culvert (Passes 2.41 cfs of 4.84 cfs potential flow) —1=Exfiltration (Exfiltration Controls 2.41 cfs)

-3=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Summary for Pond 2P: Detention Area

Inflow Area	a =	3.127 ac,	1.18% Impervious,	Inflow Depth = 1.	67" for 2-YR	l event
Inflow	=	5.65 cfs @	12.12 hrs, Volume	= 0.436 af		
Outflow	=	4.62 cfs @	12.19 hrs, Volume	= 0.436 af,	Atten= 18%,	Lag= 4.3 min
Primary	=	4.62 cfs @	12.19 hrs, Volume	= 0.436 af		-

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs / 3 Peak Elev= 94.55' @ 12.19 hrs Surf.Area= 2,513 sf Storage= 1,699 cf

Plug-Flow detention time= 13.3 min calculated for 0.435 af (100% of inflow) Center-of-Mass det. time= 13.6 min (843.0 - 829.4)

Volume	Inv	ert Avail.S	torage Storage	Description	
#1	93.	50' 7	,146 cf Custom	n Stage Data (Prismatic)Listed below (Recalc)	
Elevatio (fee 93.5 94.0 95.0	on et) 50 00 00	Surf.Area (sq-ft) 1,117 1,378 3,432	Inc.Store (cubic-feet) 0 624 2,405	Cum.Store (cubic-feet) 0 624 3,029	
96.0)0 Deutiere	4,803	4,118	7,146	
<u>Device</u> #1	Routing Primary	<u>Inver</u> 93.50	Outlet Device 0' 24.0" Round L= 89.0' CPI Inlet / Outlet I n= 0.010 PV	S J Culvert P, projecting, no headwall, Ke= 0.900 Invert= 93.50' / 90.50' S= 0.0337 '/' Cc= 0.900 (C, smooth interior, Flow Area= 3.14 sf	

Primary OutFlow Max=4.58 cfs @ 12.19 hrs HW=94.55' (Free Discharge) —1=Culvert (Inlet Controls 4.58 cfs @ 2.75 fps)

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Time span=0.00-48.00 hrs, dt=0.05 hrs, 961 points Runoff by SCS TR-20 method, UH=SCS, Weighted-CN Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment11S: 11SRunoff Area=76,931 sf67.80% ImperviousRunoff Depth=2Tc=5.0 minCN=79Runoff=5.10 cfs0.36	2.46" 32 af
Subcatchment 12S: 12SRunoff Area=136,202 sf1.18% ImperviousRunoff Depth=3Flow Length=1,255'Tc=8.0 minCN=85Runoff=10.07 cfs0.78	3.00" 32 af
Subcatchment13S: 13SRunoff Area=329,305 sf9.47% ImperviousRunoff Depth=2Flow Length=1,133'Tc=26.6 minCN=84Runoff=15.31 cfs1.85	2.91" 31 af
Reach POI#1: POI#1 Avg. Flow Depth=0.66' Max Vel=16.73 fps Inflow=15.27 cfs 1.60 24.0" Round Pipe n=0.011 L=98.0' S=0.0574 '/' Capacity=64.08 cfs Outflow=15.25 cfs 1.60)8 af)8 af
Reach POI#2: POI#2 Avg. Flow Depth=0.72' Max Vel=14.96 fps Inflow=15.31 cfs 1.83 24.0" Round Pipe n=0.011 L=105.2' S=0.0421 '/' Capacity=54.86 cfs Outflow=15.30 cfs 1.83	31 af 31 af
Pond 1P: GUSF#1 Peak Elev=95.39' Storage=1,457 cf Inflow=5.10 cfs 0.36 Outflow=2.41 cfs 0.36	52 af 53 af
Pond 2P: Detention Area Peak Elev=94.97' Storage=2,926 cf Inflow=10.07 cfs 0.78 24.0" Round Culvert n=0.010 L=89.0' S=0.0337 '/' Outflow=8.06 cfs 0.78	32 af 32 af

Total Runoff Area = 14.306 ac Runoff Volume = 3.438 af Average Runoff Depth = 2.88" 80.94% Pervious = 11.579 ac 19.06% Impervious = 2.726 ac

Summary for Subcatchment 10S: 10S

Runoff = 4.83 cfs @ 12.21 hrs, Volume= 0.463 af, Depth= 3.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type III 24-hr 10-YR Rainfall=4.60"

 A	rea (sf)	CN D	Description						
	46,912	76 V	Voods/gras	s comb., F	air, HSG C				
	2,270	98 F	B Paved parking, HSG C						
	31,532	98 F	aved park	ing, HSG D					
	80,714	85 V	Veighted A	verage					
	46,912	5	8.12% Per	vious Area					
	33,802	4	1.88% Imp	pervious Are	ea				
Тс	Length	Slope	Velocity	Capacity	Description				
 (min)	(feet)	(ft/ft)	(ft/sec)	(cfs)					
12.0	150	0.2000	0.21		Sheet Flow, A-B				
					Woods: Light underbrush n= 0.400 P2= 3.10"				
0.6	70	0.1600	2.00		Shallow Concentrated Flow, B-C				
					Woodland Kv= 5.0 fps				
0.3	151	0.3300	8.62		Shallow Concentrated Flow, C-D				
					Grassed Waterway Kv= 15.0 fps				
0.1	31	0.0050	4.17	3.28	Pipe Channel, D-E				
					12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25'				
					n= 0.010 PVC, smooth interior				
2.5	275	0.0700	1.85		Shallow Concentrated Flow, E-F				
					Short Grass Pasture Kv= 7.0 fps				
15.5	677	Total							

Summary for Subcatchment 11S: 11S

Runoff = 5.10 cfs @ 12.08 hrs, Volume= 0.362 af, Depth= 2.46"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type III 24-hr 10-YR Rainfall=4.60"

Α	rea (sf)	CN	Description				
	37,162	98	Paved park	ing, HSG A			
	24,769	39	>75% Gras	s cover, Go	ood, HSG A		
	15,000	98	Roofs, HSC	β A			
	76,931	79	Weighted Average				
	24,769		32.20% Pervious Area				
	52,162		67.80% Impervious Area				
Тс	Length	Slop	e Velocity	Capacity	Description		
<u>(min)</u>	(feet)	(ft/ft	:) (ft/sec)	(cfs)			
5.0					Direct Entry,		

Summary for Subcatchment 12S: 12S

Runoff = 10.07 cfs @ 12.11 hrs, Volume= 0.782 af, Depth= 3.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type III 24-hr 10-YR Rainfall=4.60"

A	rea (sf)	CN D	escription		
	75,991	89 G	Gravel road	ls, HSG C	
	58,601	79 V	Voods, Fai	r, HSG D	
	1,610	98 F	aved park	ing, HSG D	
1	36,202	85 V	Veighted A	verage	
1	34,592	9	8.82% Per	vious Area	
	1,610	1	.18% Impe	ervious Area	3
Тс	Length	Slope	Velocity	Capacity	Description
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
1.1	113	0.0350	1.74		Sheet Flow, A-B
					Smooth surfaces n= 0.011 P2= 3.10"
0.5	37	0.0310	1.32		Sheet Flow, B-C
					Smooth surfaces n= 0.011 P2= 3.10"
0.8	61	0.0350	1.31		Shallow Concentrated Flow, C-D
07	400	0 0000			Short Grass Pasture Kv= 7.0 fps
0.7	186	0.0800	4.55		Shallow Concentrated Flow, D-E
2.0	474	0.0500	2 50		Unpaved KV= 16.1 fps
3.Z	4/4	0.2500	2.50		Shallow Concentrated Flow, E-F
0.1	56		6 62	20.80	Pipe Channel E C
0.1	50	0.0050	0.02	20.80	24.0" Pound Area 3.1 sf Porim $-6.3' \text{ r} = 0.50'$
					24.0 Round Area- 5.1 St Penin- 0.5 1- 0.50
03	50	0 0400	3 00		Shallow Concentrated Flow, G-H
0.0	00	0.0400	0.00		Grassed Waterway Ky= 15.0 fps
0.3	102	0 0050	6 62	20.80	Pipe Channel H-I
0.0	102	0.0000	0.02	20.00	24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50'
					n=0.010 PVC, smooth interior
1.0	176	0.0400	3.00		Shallow Concentrated Flow, I-J
					Grassed Waterway Kv= 15.0 fps
8.0	1,255	Total			· ·

Summary for Subcatchment 13S: 13S

Runoff = 15.31 cfs @ 12.37 hrs, Volume= 1.831 af, Depth= 2.91"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type III 24-hr 10-YR Rainfall=4.60"

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Type III 24-hr 10-YR Rainfall=4.60" Printed 5/11/2021 LLC Page 15

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A	rea (sf)	CN D	escription		
	6,503	73 V	Voods, Fai	r, HSG C	
2	291,616	83 V	Voods, Poo	or, HSG D	
	31,186	98 P	aved park	ing, HSG D	
3	329,305	84 V	Veighted A	verage	
2	298,119	9	0.53% Per	vious Area	
	31,186	9	.47% Impe	ervious Area	a
Тс	Length	Slope	Velocity	Capacity	Description
<u>(min)</u>	(feet)	(ft/ft)	(ft/sec)	(cfs)	
19.1	150	0.2500	0.13		Sheet Flow, A-B
					Woods: Dense underbrush n= 0.800 P2= 3.10"
3.3	212	0.0450	1.06		Shallow Concentrated Flow, B-C
					Woodland Kv= 5.0 fps
4.0	680	0.0350	2.81		Shallow Concentrated Flow, C-D
					Grassed Waterway Kv= 15.0 fps
0.2	70	0.0050	6.62	20.80	Pipe Channel, D-E
					24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50'
					n= 0.010 PVC, smooth interior
0.0	21	0.3300	11.66		Shallow Concentrated Flow, E-F
					Paved Kv= 20.3 tps

26.6 1,133 Total

Summary for Reach POI#1: POI#1

Inflow .	Area	=	6.746 ac, 2	29.80% Impe	ervious,	Inflow Depth =	2.8	36" for 10)-YR event	
Inflow		=	15.27 cfs @	12.20 hrs,	Volume	= 1.608	af			
Outflov	N	=	15.25 cfs @	12.20 hrs,	Volume	= 1.608	af,	Atten= 0%	,Lag= 0.2	2 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Max. Velocity= 16.73 fps, Min. Travel Time= 0.1 min Avg. Velocity = 4.87 fps, Avg. Travel Time= 0.3 min

Peak Storage= 89 cf @ 12.20 hrs Average Depth at Peak Storage= 0.66' Bank-Full Depth= 2.00' Flow Area= 3.1 sf, Capacity= 64.08 cfs

24.0" Round Pipe n= 0.011 Concrete pipe, straight & clean Length= 98.0' Slope= 0.0574 '/' Inlet Invert= 83.68', Outlet Invert= 78.05'



Summary for Reach POI#2: POI#2

 Inflow Area =
 7.560 ac,
 9.47% Impervious, Inflow Depth =
 2.91" for 10-YR event

 Inflow =
 15.31 cfs @
 12.37 hrs, Volume=
 1.831 af

 Outflow =
 15.30 cfs @
 12.37 hrs, Volume=
 1.831 af, Atten= 0%, Lag= 0.2 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Max. Velocity= 14.96 fps, Min. Travel Time= 0.1 min Avg. Velocity = 5.81 fps, Avg. Travel Time= 0.3 min

Peak Storage= 108 cf @ 12.37 hrs Average Depth at Peak Storage= 0.72' Bank-Full Depth= 2.00' Flow Area= 3.1 sf, Capacity= 54.86 cfs

24.0" Round Pipe n= 0.011 Concrete pipe, straight & clean Length= 105.2' Slope= 0.0421 '/' Inlet Invert= 90.02', Outlet Invert= 85.59'



Summary for Pond 1P: GUSF#1

Inflow Are	ea =	1.766 ac, 67.80% Impervious, Ir	nflow Depth = 2.46" for	10-YR event
Inflow	=	5.10 cfs @ 12.08 hrs, Volume=	0.362 af	
Outflow	=	2.41 cfs @ 12.00 hrs, Volume=	0.363 af, Atten=	53%, Lag= 0.0 min
Primary	=	2.41 cfs @ 12.00 hrs, Volume=	0.363 af	-

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs / 2 Peak Elev= 95.39' @ 12.26 hrs Surf.Area= 4,125 sf Storage= 1,457 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow) Center-of-Mass det. time= 2.6 min (829.9 - 827.3)

Volume	Invert	Ava	il.Storage	Storage	e Description	
#1	95.00'		14,272 cf	Custor	n Stage Data (Pris	matic)Listed below (Recalc)
Elevation (feet)	Surf (.Area sq-ft)	Inc (cubic	.Store c-feet)	Cum.Store (cubic-feet)	
95.00	(3,431		0	0	
96.00	Ę	5,231		4,331	4,331	
97.00	-	7,088		6,160	10,491	
97.50	8	8,038		3,782	14,272	

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Type III 24-hr 10-YR Rainfall=4.60" Printed 5/11/2021 HydroCAD® 10.00-25 s/n 01100 © 2019 HydroCAD Software Solutions LLC Page 17

Device	Routing	Invert	Outlet Devices
#1	Device 2	95.00'	2.41 cfs Exfiltration at all elevations
#2	Primary	91.90'	12.0" Round Culvert
			L= 33.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 91.90' / 89.50' S= 0.0727 '/' Cc= 0.900
			n= 0.010 PVC, smooth interior, Flow Area= 0.79 sf
#3	Primary	97.25'	279.0' long x 6.0' breadth Broad-Crested Rectangular Weir
			Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00
			2.50 3.00 3.50 4.00 4.50 5.00 5.50
			Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65
			2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Primary OutFlow Max=2.41 cfs @ 12.00 hrs HW=95.04' (Free Discharge) -2=Culvert (Passes 2.41 cfs of 4.85 cfs potential flow) —1=Exfiltration (Exfiltration Controls 2.41 cfs)

-3=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Summary for Pond 2P: Detention Area

Inflow Are	ea =	3.127 ac,	1.18% Impervious,	Inflow Depth = 3.0	00" for 10-YR event
Inflow	=	10.07 cfs @	12.11 hrs, Volume=	= 0.782 af	
Outflow	=	8.06 cfs @	12.19 hrs, Volume=	= 0.782 af,	Atten= 20%, Lag= 4.5 min
Primary	=	8.06 cfs @	12.19 hrs, Volume=	= 0.782 af	-

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs / 3 Peak Elev= 94.97' @ 12.19 hrs Surf.Area= 3,370 sf Storage= 2,926 cf

Plug-Flow detention time= 11.6 min calculated for 0.782 af (100% of inflow) Center-of-Mass det. time= 11.1 min (823.8 - 812.7)

Volume	Inv	ert Avail.	Storage S	Storage	Description	
#1	93.	50' 7	7,146 cf	Custom	Stage Data (Pi	r ismatic) Listed below (Recalc)
Elevatio	on et)	Surf.Area (sq-ft)	Inc.S (cubic-	Store feet)	Cum.Store (cubic-feet)	
93.5 94.0 95.0 96.0	50 00 00 00	1,117 1,378 3,432 4,803	2 4	0 624 ,405 ,118	0 624 3,029 7,146	
Device	Routing	Inve	ert Outlet	Devices	6	
#1	Primary	93.5	0' 24.0'' L= 89. Inlet / n= 0.0	Round .0' CPF Outlet Ir 010 PVC	Culvert P, projecting, no hvert= 93.50' / 9 C, smooth interio	headwall, Ke= 0.900 0.50' S= 0.0337 '/' Cc= 0.900 or, Flow Area= 3.14 sf

Primary OutFlow Max=8.00 cfs @ 12.19 hrs HW=94.96' (Free Discharge) —1=Culvert (Inlet Controls 8.00 cfs @ 3.25 fps)

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Time span=0.00-48.00 hrs, dt=0.05 hrs, 961 points Runoff by SCS TR-20 method, UH=SCS, Weighted-CN Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment10S: 10S	Runoff Area=80,714 sf 41.88% Impervious Runoff Depth=4.11" Flow Length=677' Tc=15.5 min CN=85 Runoff=6.57 cfs 0.635 af	
Subcatchment11S:11S	Runoff Area=76,931 sf 67.80% Impervious Runoff Depth=3.50" Tc=5.0 min CN=79 Runoff=7.24 cfs 0.515 af	
Subcatchment 12S: 12S	Runoff Area=136,202 sf 1.18% Impervious Runoff Depth=4.11" Flow Length=1,255' Tc=8.0 min CN=85 Runoff=13.67 cfs 1.072 af	
Subcatchment 13S: 13S	Runoff Area=329,305 sf 9.47% Impervious Runoff Depth=4.01" Flow Length=1,133' Tc=26.6 min CN=84 Runoff=20.97 cfs 2.526 af	
Reach POI#1: POI#1 24.0" Round Pipe n=0.011	Avg. Flow Depth=0.76' Max Vel=17.92 fps Inflow=19.58 cfs 2.221 af L=98.0' S=0.0574 '/' Capacity=64.08 cfs Outflow=19.56 cfs 2.221 af	
Reach POI#2: POI#2 24.0" Round Pipe n=0.011 L	Avg. Flow Depth=0.86' Max Vel=16.29 fps Inflow=20.97 cfs 2.526 af .=105.2' S=0.0421 '/' Capacity=54.86 cfs Outflow=20.95 cfs 2.526 af	
Pond 1P: GUSF#1	Peak Elev=95.82' Storage=3,430 cf Inflow=7.24 cfs 0.515 af Outflow=2.41 cfs 0.514 af	
Pond 2P: Detention Area 24.0" Ro	Peak Elev=95.28' Storage=4,062 cf Inflow=13.67 cfs 1.072 af und Culvert n=0.010 L=89.0' S=0.0337 '/' Outflow=10.63 cfs 1.072 af	

Total Runoff Area = 14.306 ac Runoff Volume = 4.749 af Average Runoff Depth = 3.98" 80.94% Pervious = 11.579 ac 19.06% Impervious = 2.726 ac
Summary for Subcatchment 10S: 10S

Runoff = 6.57 cfs @ 12.21 hrs, Volume= 0.635 af, Depth= 4.11"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type III 24-hr 25-YR Rainfall=5.80"

	A	rea (sf)	CN D	Description						
		46,912	76 V	Voods/gras	s comb., F	air, HSG C				
		2,270	98 F	aved park	ing, HSG C					
		31,532	98 F	aved park	ing, HSG D					
80,714 85 Weighted Average										
		46,912	5	8.12% Per	vious Area					
		33,802	4	1.88% Imp	pervious Are	ea				
	Тс	Length	Slope	Velocity	Capacity	Description				
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)					
	12.0	150	0.2000	0.21		Sheet Flow, A-B				
						Woods: Light underbrush n= 0.400 P2= 3.10"				
	0.6	70	0.1600	2.00		Shallow Concentrated Flow, B-C				
						Woodland Kv= 5.0 fps				
	0.3	151	0.3300	8.62		Shallow Concentrated Flow, C-D				
						Grassed Waterway Kv= 15.0 fps				
	0.1	31	0.0050	4.17	3.28	Pipe Channel, D-E				
						12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25'				
						n= 0.010 PVC, smooth interior				
	2.5	275	0.0700	1.85		Shallow Concentrated Flow, E-F				
						Short Grass Pasture Kv= 7.0 fps				
	15.5	677	Total							

Summary for Subcatchment 11S: 11S

Runoff = 7.24 cfs @ 12.08 hrs, Volume= 0.515 af, Depth= 3.50"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type III 24-hr 25-YR Rainfall=5.80"

Α	rea (sf)	CN	Description								
	37,162	98	Paved park	aved parking, HSG A							
	24,769	39	>75% Gras	75% Grass cover, Good, HSG A							
	15,000	98	Roofs, HSC	β A							
	76,931	79 Weighted Average									
	24,769		32.20% Pervious Area								
	52,162		67.80% Imp	pervious Ar	ea						
Тс	Length	Slop	e Velocity	Capacity	Description						
<u>(min)</u>	(feet)	(ft/ft	:) (ft/sec)	(cfs)							
5.0					Direct Entry,						

Summary for Subcatchment 12S: 12S

Runoff = 13.67 cfs @ 12.11 hrs, Volume= 1.072 af, Depth= 4.11"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type III 24-hr 25-YR Rainfall=5.80"

A	rea (sf)	CN D	escription		
	75,991	89 G	Gravel road	ls, HSG C	
	58,601	79 V	Voods, Fai	r, HSG D	
	1,610	98 F	aved park	ing, HSG D	
1	36,202	85 V	Veighted A	verage	
1	34,592	9	8.82% Per	vious Area	
	1,610	1	.18% Impe	ervious Area	3
Тс	Length	Slope	Velocity	Capacity	Description
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
1.1	113	0.0350	1.74		Sheet Flow, A-B
					Smooth surfaces n= 0.011 P2= 3.10"
0.5	37	0.0310	1.32		Sheet Flow, B-C
					Smooth surfaces n= 0.011 P2= 3.10"
0.8	61	0.0350 1.3			Shallow Concentrated Flow, C-D
07	400				Short Grass Pasture Kv= 7.0 fps
0.7	186	0.0800	4.55		Shallow Concentrated Flow, D-E
2.0	474	0.0500	2 50		Unpaved KV= 16.1 fps
3.Z	4/4	0.2500	2.50		Shallow Concentrated Flow, E-F
0.1	56		6 62	20.80	Pipe Channel E C
0.1	50	0.0050	0.02	20.80	24.0" Pound Area 3.1 sf Porim $-6.3' \text{ r} = 0.50'$
					24.0 Round Area- 5.1 St Penin- 0.5 1- 0.50
03	50	0 0400	3 00		Shallow Concentrated Flow, G-H
0.0	00	0.0400	0.00		Grassed Waterway Ky= 15.0 fps
0.3	102	0 0050	6 62	20.80	Pipe Channel H-I
0.0	102	0.0000	0.02	20.00	24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50'
					n=0.010 PVC, smooth interior
1.0	176	0.0400	3.00		Shallow Concentrated Flow, I-J
					Grassed Waterway Kv= 15.0 fps
8.0	1,255	Total			· ·

Summary for Subcatchment 13S: 13S

Runoff = 20.97 cfs @ 12.36 hrs, Volume= 2.526 af, Depth= 4.01"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Type III 24-hr 25-YR Rainfall=5.80"

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Type III 24-hr 25-YR Rainfall=5.80" Printed 5/11/2021 HydroCAD® 10.00-25 s/n 01100 © 2019 HydroCAD Software Solutions LLC Page 21

	A	rea (sf)	CN E	Description		
		6,503	73 V	Voods, Fai	r, HSG C	
	2	91,616	83 V	Voods, Poo	or, HSG D	
_		31,186	98 F	Paved park	ing, HSG D	
	3	29,305	84 V	Veighted A	verage	
	2	98,119	ç	0.53% Per	vious Area	
		31,186	ç).47% Impe	ervious Area	3
	-				.	
		Length	Slope	Velocity	Capacity	Description
_	(min)	(feet)	(π/π)	(TT/SeC)	(CTS)	
	19.1	150	0.2500	0.13		Sheet Flow, A-B
	0.0	040	0.0450	4.00		Woods: Dense underbrush n= 0.800 P2= 3.10"
	3.3	212	0.0450	1.06		Shallow Concentrated Flow, B-C
	10	680	0 0350	2 81		Shallow Concentrated Flow, C.D.
	4.0	000	0.0550	2.01		Grassed Waterway, Ky= 15.0 fps
	02	70	0 0050	6 62	20.80	Pine Channel D-F
	0.2	10	0.0000	0.02	20.00	24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50'
						n= 0.010 PVC, smooth interior
	0.0	21	0.3300	11.66		Shallow Concentrated Flow, E-F

26.6 1,133 Total

Summary for Reach POI#1: POI#1

Paved Kv= 20.3 fps

Inflow A	Area	. =	6.746 ac, 2	29.80% Impe	ervious,	Inflow Depth =	3.9	95" for 2	25-YR event	
Inflow		=	19.58 cfs @	12.20 hrs,	Volume	= 2.221	af			
Outflov	N	=	19.56 cfs @	12.20 hrs,	Volume	= 2.221	af,	Atten= 0	%, Lag= 0.2	min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Max. Velocity= 17.92 fps, Min. Travel Time= 0.1 min Avg. Velocity = 5.26 fps, Avg. Travel Time= 0.3 min

Peak Storage= 107 cf @ 12.20 hrs Average Depth at Peak Storage= 0.76' Bank-Full Depth= 2.00' Flow Area= 3.1 sf, Capacity= 64.08 cfs

24.0" Round Pipe n= 0.011 Concrete pipe, straight & clean Length= 98.0' Slope= 0.0574 '/' Inlet Invert= 83.68', Outlet Invert= 78.05'



Summary for Reach POI#2: POI#2

 Inflow Area =
 7.560 ac,
 9.47% Impervious, Inflow Depth =
 4.01" for 25-YR event

 Inflow =
 20.97 cfs @
 12.36 hrs, Volume=
 2.526 af

 Outflow =
 20.95 cfs @
 12.36 hrs, Volume=
 2.526 af, Atten= 0%, Lag= 0.2 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs Max. Velocity= 16.29 fps, Min. Travel Time= 0.1 min Avg. Velocity = 6.25 fps, Avg. Travel Time= 0.3 min

Peak Storage= 135 cf @ 12.36 hrs Average Depth at Peak Storage= 0.86' Bank-Full Depth= 2.00' Flow Area= 3.1 sf, Capacity= 54.86 cfs

24.0" Round Pipe n= 0.011 Concrete pipe, straight & clean Length= 105.2' Slope= 0.0421 '/' Inlet Invert= 90.02', Outlet Invert= 85.59'



Summary for Pond 1P: GUSF#1

Inflow Area	a =	1.766 ac, 6	7.80% Impe	rvious,	Inflow Dep	oth =	3.50"	for 25-Y	R event	
Inflow	=	7.24 cfs @	12.08 hrs,	Volume	= C).515 a	af			
Outflow	=	2.41 cfs @	11.90 hrs, '	Volume	= C).514 a	af, Atte	n= 67%,	Lag= 0.0 mi	in
Primary	=	2.41 cfs @	11.90 hrs, '	Volume	= C).514 a	af		-	

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs / 2 Peak Elev= 95.82' @ 12.38 hrs Surf.Area= 4,911 sf Storage= 3,430 cf

Plug-Flow detention time= 9.0 min calculated for 0.514 af (100% of inflow) Center-of-Mass det. time= 6.9 min (824.1 - 817.2)

Volume	Invert	Ava	il.Storage	Storage	e Description	
#1	95.00'		14,272 cf	Custor	n Stage Data (Pris	matic)Listed below (Recalc)
Elevation (feet)	Surf (.Area sq-ft)	Inc (cubic	.Store c-feet)	Cum.Store (cubic-feet)	
95.00	4	3,431		0	0	
96.00	ļ	5,231		4,331	4,331	
97.00	-	7,088		6,160	10,491	
97.50	8	8,038		3,782	14,272	

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Type III 24-hr 25-YR Rainfall=5.80" Printed 5/11/2021 HydroCAD® 10.00-25 s/n 01100 © 2019 HydroCAD Software Solutions LLC Page 23

Device	Routing	Invert	Outlet Devices
#1	Device 2	95.00'	2.41 cfs Exfiltration at all elevations
#2	Primary	91.90'	12.0" Round Culvert
			L= 33.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 91.90' / 89.50' S= 0.0727 '/' Cc= 0.900
			n= 0.010 PVC, smooth interior, Flow Area= 0.79 sf
#3	Primary	97.25'	279.0' long x 6.0' breadth Broad-Crested Rectangular Weir
			Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00
			2.50 3.00 3.50 4.00 4.50 5.00 5.50
			Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65
			2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Primary OutFlow Max=2.41 cfs @ 11.90 hrs HW=95.03' (Free Discharge) -2=Culvert (Passes 2.41 cfs of 4.84 cfs potential flow) —1=Exfiltration (Exfiltration Controls 2.41 cfs)

-3=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Summary for Pond 2P: Detention Area

Inflow Area	a =	3.127 ac,	1.18% Impervious,	Inflow Depth = 4.1	11" for 25-YR event
Inflow	=	13.67 cfs @	12.11 hrs, Volume=	= 1.072 af	
Outflow	=	10.63 cfs @	12.19 hrs, Volume=	= 1.072 af,	Atten= 22%, Lag= 4.9 min
Primary	=	10.63 cfs @	12.19 hrs, Volume=	= 1.072 af	-

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs / 3 Peak Elev= 95.28' @ 12.19 hrs Surf.Area= 3,823 sf Storage= 4,062 cf

Plug-Flow detention time= 9.9 min calculated for 1.071 af (100% of inflow) Center-of-Mass det. time= 10.1 min (813.9 - 803.7)

Volume	Inv	ert Avail.S	torage St	torage D	Description	
#1	93.	50' 7	,146 cf C	ustom	Stage Data (Pi	r ismatic) Listed below (Recalc)
Elevatio (fee	on et)	Surf.Area (sq-ft)	Inc.St (cubic-fe	ore eet)	Cum.Store (cubic-feet)	
93.5 94.0 95.0 96.0	50)0)0)0	1,117 1,378 3,432 4,803	6 2,4 4,1	0 524 105 118	0 624 3,029 7,146	
Device	Routing	Inve	rt Outlet [Devices		
#1	Primary	93.50)' 24.0" F L= 89.0 Inlet / C n= 0.01	Round (' CPP, Outlet In 0 PVC	Culvert , projecting, no vert= 93.50' / 9 , smooth interio	headwall, Ke= 0.900 0.50' S= 0.0337 '/' Cc= 0.900 or, Flow Area= 3.14 sf

Primary OutFlow Max=10.59 cfs @ 12.19 hrs HW=95.28' (Free Discharge) —1=Culvert (Inlet Controls 10.59 cfs @ 3.59 fps)

CONSTRUCTION STORMWATER INSPECTION AND MAINTENANCE LOG Lakeside Concrete Cutting & Abatement Professionals

U.S. Route 1, Cumberland, Maine

	Performed by:	Date:
Feature	Description of maintenance	Recorded Observation/Corrective Action Taken or Required
	Inspect after every major storm, and at least every six months, to ensure proper function.	
Grassed Underdrained Soil Filter	Remove sediment and plant debris.	
	Repair bare areas or erosion rills with new filter media, seed, and mulch	
Catab Dasing	Inspect for presence of sediment in traps; remove sediment if within 1 foot of outlet invert or hood.	
& Outlet Control	Inspect for presence of trash and debris.	
Structures	Inspect oil adsorbent material (Smart Sponge). Replace per manufacturers recommendations.	
Storm Drain Pipes &	Inspect for evidence of sediment	
Drainage Manholes	Inspect for clogging debris and material	
Paved	Inspect for excessive sediment deposits, trash and debris.	
Surfaces	Inspect for evidence of cracking	
	Inspect for vegetative cover of at least 90%	
Vegetative Surfaces	Inspect for any signs of erosion or bare spots.	
	Fertilize only once yearly, to be in the spring, and at lowest recommended concentrations.	

<u>Attachment J</u> <u>Geotechnical Report</u>

A copy of the Geotechnical Report is included for reference.

J



						S	OIL BORI	NG LOG	Boring #:	B-SETBACK	
		SUM	MIT			Project:	Proposed Offic	ce Building	Project #:	21106	
		GEOENGINEERI	NG SERVICES			Location:	US Rt 1		Sheet:	1 of 1	
Drilling (<u>^</u> 0.	Summit Geoer	aineerina Sei	rvices Inc		Boring Elevation	128 5 ft +/-	ΥL.	Cliku by.		
Driller:		S. Floyd	igineering bei	vices, inc		Reference:	eference: Untitled Plan from the client				
Summit	Staff:	C. Plante, E.I.				Date started:	4/6/2021	Date Completed:	4/6/2021		
DF	DRILLING METHOD SAMPLER				.		ESTIMATED GROUND W	ATER DEPTH	<u></u>		
venicie: Model:		Spade Shovel	Lengtn: Diameter:			4/6/2021	Depth	Elevation	None observed	rerence	
Method:		opude enerei	Hammer:			., 0/2021					
Hamme	Style:		Method:								
Depth	No	Pen/Rec (in)	Denth (ft)	blows/6"	Elev.		SAMP		Geological/ Test Data	Geological	
(11.)	NO.		Deptil (It)	010113/0	(10.)	Dark brown Silty	fine SAND, tra	ace rootlets, loose, moist,		TOPSOIL	
1					127.5	SM					
2					-	Hand	dig to 1 ft - Re	fusal on bedrock			
2 <u>-</u>					-						
3											
4					-						
-											
5											
6											
-											
7											
8											
-											
9_					-						
10											
-											
11_					-						
12											
10											
13											
14											
15		-			-						
15											
16											
17											
1/											
18					-						
19					-						
	<u> </u>				1						
20					-						
21					1						
22					-						
Granul	ar Soils	Cohesiv	e Soils	% Comp	osition	NOTES:	PP = Pocket Per	netrometer, MC = Moisture Co	ontent	Soil Moisture Condition	
Blows/ft.	Density	Blows/ft.	Consistency V. soft	ASTM D	02487	Bedrock Inints	LL = Liquid Limi	t, PI = Plastic Index, FV = Fig. Shear Strength, $Su(r) = Reg$	eld Vane Test holded Shear Strength	Dry: $S = 0\%$ Humid: $S = 1 \text{ to } 25\%$	
5-10	Loose	2-4	Soft	< 5% 7	Ггасе	Shallow = 0 to 35	degrees		see enour ourongul	Damp: $S = 26$ to 50%	
11-30	Compact	5-8	Firm	5-15%	Little	Dipping = 35 to 55	degrees			Moist: $S = 51$ to 75%	
31-50 >50	Dense V. Dense	9-15 16-30	Stiff V. Stiff	15-30% > 30%	Some With	Steep = 55 to 90 degrees W				wet: $S = 76$ to 99% Saturated: $S = 100\%$	
		>30	Hard			Boulders = diamet	er > 12 inches, (Cobbles = diameter < 12 inch	es and > 3 inches	20070	
						Gravel = < 3 inch	oulders = diameter > 12 inches, Cobbles = diameter < 12 inches and > 3 inches avel = < 3 inch and > No 4, Sand = < No 4 and >No 200, Silt/Clay = < No 200				

						SOIL BORING LOG			Boring #:	B-EOP 1	
		CILAA	AAIT			Project:	Proposed Offic	ce Building	Project #:	21106	
		30/1				Location:	US Rt 1		Sheet:	1 of 1	
		GEOENGINEERI	NG SERVICES			City, State:	Cumberland, N	ME	Chkd by:		
Drilling	Co:	Summit Geoer	gineering Se	rvices, Inc		Boring Elevation	118 ft +/-				
Driller:		S. Floyd				Reference:	Untitled Plan f	rom the client			
Summit	Staff:	C. Plante, E.I.				Date started:	4/6/2021	Date Completed:	4/6/2021		
DF	RILLING	METHOD	S	AMPLER				ESTIMATED GROUND W	ATER DEPTH		
Vehicle:		AMS PP	Length:	24" SS		Date Depth Elevation			Re	ference	
Model:		VTR 9500	Diameter:	2"OD/1.5"	'ID	4/6/2021			None observed		
Method:		2 1/4" HSA	Hammer:	140 lb							
Hamme	r Style:	Automatic	Method:	ASTM D15	586						
Depth					Elev.		SAMP	LE	Geological/	Geological	
(ft.)	No.	Pen/Rec (in)	Depth (ft)	blows/6"	(ft.)		DESCRIP	TION	Test Data	Stratum	
	S-1	24/6	0-2	WH	-	Dark brown Silty	fine SAND, tra	ace rootlets, loose, moist,			
1				2		SM				TOPSOIL	
2				L O for E"	116	Crow/white where	thorad rack in	choon tin			
<u>ک</u> _				9101.5	115 7	Gray/white whea		spoon up			
з					115.7	End of	Boring at 2.3	ft - Auger refusal			
<u> </u>						End of	bornig at 2.5	n Auger refusar		BEDROCK	
4										DEDROCK	
-											
5											
-											
6											
7					-						
					-						
8_											
0					-						
9					-						
10											
10											
11					1						
-											
12											
13											
14											
14_					-						
15					-						
15					-						
16											
-					1						
17]						
-											
18					l						
19					-						
20					-						
20	+				1						
21					1						
	1										
22					1						
-					1						
]						
Granul	ar Soils	Cohesiv	e Soils	% Comp	osition	NOTES:	PP = Pocket Per	netrometer, MC = Moisture C	ontent	Soil Moisture Condition	
Blows/ft.	. Density	Blows/ft.	Consistency	ASTM D	2487	ļ	LL = Liquid Limi	it, PI = Plastic Index, FV = Fi	eld Vane Test	Dry: S = 0%	
0-4	V. Loose	<2	V. soft			Bedrock Joints	Su = Undrained	Shear Strength, Su(r) = Ren	nolded Shear Strength	Humid: S = 1 to 25%	
5-10	Loose	2-4	Soft	< 5% 1	Ггасе	Shallow = 0 to 35	degrees			Damp: S = 26 to 50%	
11-30	Compact	5-8	Firm	5-15%	Little	Dipping = 35 to 55	degrees			Moist: S = 51 to 75%	
31-50	Dense	9-15	Stiff	15-30%	Some	Steep = 55 to 90 c	legrees			Wet: $S = 76 \text{ to } 99\%$	
>50	v. Dense	16-30	V. Stiff	> 30%	with	Boulders - diamat	or > 17 inchor (Cobbles - diamotor < 12 :	es and > 2 inches	Saturated: $S = 100\%$	
		~30	i idi u			Boulders = diameter > 12 inches, Cobbles = diameter < 12 inches and > 3 inches Gravel = < 3 inch and > No 4, Sand = < No 4 and >No 200, Silt/Clay = < No 200					

						SOIL BORING LOG			Boring #:	B-EOP 2
		SILA	AAIT			Project:	Proposed Offic	ce Building	Project #:	21106
						Location:	US Rt 1		Sheet:	1 of 1
		GEOENGINEERI	NG SERVICES			City, State:	Cumberland, N	ME	Chkd by:	
Drilling (Co:	Summit Geoer	ngineering Se	rvices, Inc		Boring Elevation	103 ft +/-			
Driller:	C 1 (S. Floyd				Reference:	Untitled Plan f	rom the client	4/6/2024	
Summit	Stan:	C. Plante, E.I.	c			Date started:	4/6/2021			
Ur Vohiclo:	ALLING		Jonath:			Data	Dopth	ESTIMATED GROUND W		foronco
Model:		VTR 9500	Diameter:	27 33 2"0D/1.5"	ID	4/6/2021	11 ft	92 ft +/-	Estimated in spoon s	samples: cave-in at 1 ft
Method:		2 1/4" HSA	Hammer:	140 lb		., .,				
Hammer	r Style:	Automatic	Method:	ASTM D15	86					
Depth		•			Elev.		SAMP	LE	Geological/	Geological
(ft.)	No.	Pen/Rec (in)	Depth (ft)	blows/6"	(ft.)		DESCRIP	TION	Test Data	Stratum
	S-1	24/15	0-2	WH	102.5	Dark brown fine	Sandy SILT, tr	ace roots, soft, moist, ML		TOPSOIL
1 -				2		Light brown fine	Sandy SILT, So	oft, moist to wet, ML		
2	-			3						
-										
3										
4_										
5	-									
<u> </u>	S-2	24/24	5-7	2		Olive Silty CLAY,	some fine San	d seams, heavily mottled,	PP = 3.0 - 3.8 tsf	
6		-		5		stiff, moist, CL				GLACIAL
				6						MARINE
7_				7						
8										
9										
10_		24/24	10.10							
11	5-3	24/24	10-12	1	$\overline{}$	Grayish olive Silt	y CLAY, trace i	rine Sand, soft, moist to		
				3		Light brown Clay	ey fine SAND,	loose, wet, SC	+	
12				5	91	, J	, ,			
						End	of Boring at 12	tt - No refusal		
13_										
14										
-										
15										
16										
10										
17										
18										
19										
20										
21										
²¹ -	+									
22										
Granul	ar Soile	Coherin	o Soils	0/ Come	ocition	NOTES	DD - Dockot Do	antromator MC - Mainture Co	ntont	Soil Maistura Condition
Blows/ft	aı 30115 Densitv	Conesiv Blows/ft	Consistency		2487	NUTES:	LL = Liquid Limi	it. PI = Plastic Index FV = Fie	ld Vane Test	Drv: $S = 0\%$
0-4	V. Loose	<2	V. soft	, GAH D	,	Bedrock Joints	Su = Undrained	Shear Strength, Su(r) = Rem	olded Shear Strength	Humid: $S = 1$ to 25%
5-10	Loose	2-4	Soft	< 5% T	race	Shallow = 0 to 35	degrees		-	Damp: S = 26 to 50%
11-30	Compac	5-8	Firm	5-15%	Little	Dipping = 35 to 55	degrees			Moist: S = 51 to 75%
31-50	Dense	9-15	Stiff	15-30%	Some	Steep = 55 to 90 c	legrees			Wet: $S = 76 \text{ to } 99\%$
>50	v. Dense	>30	v. Stiff Hard	> 30%	VVICN	Boulders = diamet	er > 12 inches (Cobbles = diameter < 12 inch	es and > 3 inches	saturated: S = 100%
						Gravel = < 3 inch	and > No 4, San	$d = \langle No 4 and \rangle No 200, Silt$	/Clay = < No 200	

						SOIL BORING LOG			Boring #:	B-EOP 3
		SUM	AAIT			Project:	Proposed Offic	ce Building	Project #:	21106
						Location:	US Rt 1		Sheet:	1 of 1
		GEOENGINEERI	NG SERVICES			City, State:	Cumberland, N	ME	Chkd by:	
Drilling (Co:	Summit Geoer	ngineering Se	rvices, Inc		Boring Elevation	98 ft +/-			
Driller:	C 1 (S. Floyd				Reference:	Untitled Plan f	rom the client	4/6/2024	
Summit	Staff:	C. Plante, E.I.	c			Date started:	4/6/2021			
Ur Vohiclo:	ALLING		Jonath:			Data	Dopth	ESTIMATED GROUND V		foronco
Model:		VTR 9500	Diameter:	27 33 2"0D/1.5"	'ID	4/6/2021	10 ft	88 ft +/-	Estimated in spoon s	samples: cave-in at
Method:		2 1/4" HSA	Hammer:	140 lb		., .,			1.5 ft	
Hammer	r Style:	Automatic	Method:	ASTM D15	586					
Depth					Elev.		SAMP	LE	Geological/	Geological
(ft.)	No.	Pen/Rec (in)	Depth (ft)	blows/6"	(ft.)		DESCRIP	TION	Test Data	Stratum
	S-1	24/22	0-2	WH	97.5	Forest Duff		for a Cound all all all the		TOPSOIL
1 -				4		Grayish olive Cla	iyey SILI, trace	e fine Sand, slightly	PP = 4.0 - 4.3 tsr	
2	-			8		moticu, sun, m				
-										
3										
4_										
5										
<u> </u>	S-2	24/24	5-7	2		Grayish olive Cla	yey SILT, trace	e fine Sand, heavily	PP = 3.0 - 3.5 tsf	GLACIAL
6		-		4		mottled, stiff, mo	oist, ML			MARINE
				6						
7_	-			7						
8										
	1									
9										
10										
10	C-3	24/24	10-12	1	<u> </u>	Gray Silby CLAY	come firm brai	ids trace fine Sand soft		
11	5-5	27/27	10-12	2		wet, CL		ius, trace fille Saliu, solt,		
-				1						
12				2	86					
12						End	of Boring at 12	ft - No refusal		
15										
14										
_										
15										
16										
	1									
17										
10										
18	+									
19	<u> </u>									
20										
21										
22										
Granul	ar Soile	Coheciw	e Soils	% Comp	osition	NOTES	PD = Pocket Por	petrometer MC - Moisturo (ontent	Soil Moisture Condition
Blows/ft.	Densitv	Blows/ft.	Consistency	ASTM D	2487		LL = Liquid Limi	t, PI = Plastic Index. $FV = F$	ield Vane Test	Dry: $S = 0\%$
0-4	V. Loose	<2	V. soft			Bedrock Joints	Su = Undrained	Shear Strength, Su(r) = Re	molded Shear Strength	Humid: $S = 1$ to 25%
5-10	Loose	2-4	Soft	< 5% T	Trace	Shallow = 0 to 35	degrees			Damp: S = 26 to 50%
11-30	Compact	5-8	Firm	5-15%	Little	Dipping = 35 to 55	o degrees			Moist: $S = 51$ to 75%
31-50 >50	V. Dense	9-15 16-30	Stiff V Stiff	15-30% > 30%	Some With	sceep = 55 to 90 c	legrees			wet: $S = 76$ to 99% Saturated: $S = 100\%$
2.50	1. DC130	>30	Hard	- 5070		Boulders = diamet	er > 12 inches, (Cobbles = diameter < 12 inc	hes and > 3 inches	Saturatean 5 - 10070
						Gravel = < 3 inch	and > No 4, San	d = < No 4 and >No 200, S	it/Clay = < No 200	

						S	OIL BORI	NG LOG	Boring #:	B-S/W
		CILLA	AAT			Project:	Proposed Offic	re Building	Project #:	21106
		SOW	MI			Location:	US Rt 1		Sheet:	1 of 1
		GEOENGINEERI	NG SERVICES			City, State:	Cumberland, N	1E	Chkd by:	
Drilling	Co:	Summit Geoer	ngineering Se	rvices, Inc		Boring Elevation	97 ft +/-			
Driller:		S. Floyd				Reference:	Untitled Plan f	rom the client		
Summit	Staff:	C. Plante, E.I.				Date started:	4/6/2021	Date Completed:	4/6/2021	
DF	RILLING	METHOD	S	AMPLER			I	ESTIMATED GROUND	WATER DEPTH	
Vehicle:		AMS PP	Length:	24" SS		Date	Depth	Elevation	Re	ference
Model:		VTR 9500	Diameter:	2"OD/1.5"	ID	4/6/2021	0 ft	97 ft +/-	At surface after inst	allation of the well
Method:	r Stulo:	2 1/4" HSA	Hammer: Method:		86					
Denth	i Style.	Automatic	Methou.	ASTRIDIS	Flev		SAMD	F	Geological/	Geological
(ft.)	No.	Pen/Rec (in)	Depth (ft)	blows/6"	(ff.)		DESCRIP	TION	Test Data	Stratum
()	S-1	24/18	0-2	WH	96.5	Forest Duff	2100111			TOPSOIL
1				WH		Grayish olive Cla	iyey SILT, trace	fine Sand, slightly		
-				3		mottled, firm, m	oist, ML			
2				4						
3_										
4										
· ·										GLACIAL
5				1						MARINE
-	S-2	24/24	5-7	2		Grayish olive Silt	ty CLAY, trace f	ine Sand seams,	PP = 2.3 tsf	
6				5		moderately mott	led, stiff, moist	, CL		
_				4						
· ·				5						
8										
Ŭ -										
9					88					
-										
10										MARINE
	S-3	24/24	10-12	9		Brown medium t	to coarse SAND	, trace Silt, compact,		REGRESSIVE
11_				8	86	saturated, SP	vot 11 ft			CLACIAL
12				50 for 5"	85.1	Weathered rock	in spoon tip			TILI
					00.1	End of	Boring at 11.9	ft - Spoon refusal		PROBABLE
13							-			BEDROCK
14						Well installed to	monitor ground	d water		
15				-						
15						10 feet of riser				
16						10 1000 01 11301				
						SAND (11.9'-5')				
17						BENTONITE (5'-4	4.5')			
				ļ		BACKFILL (4.5'-0).5')			
18						BENTONITE (0.5	o'-0')			
10										
19	+									
20										
-										
21										
22										
	<u> </u>									
Granul	ar Soils	Cohesiv	e Soils	% Comp	osition	NOTES:	PP = Pocket Per	etrometer, MC = Moisture	Content	Soil Moisture Condition
Blows/ft.	. Density	Blows/ft.	Consistency	ASTM D	2487	situation NOTES: PP = pocket penetrometer, MC = moisture content Soil moisture Content 487 LL = Liquid Limit, PI = Plastic Index, FV = Field Vane Test Dry: S =			Dry: S = 0%	
0-4	V. Loose	<2	V. soft			Bedrock Joints	Su = Undrained	Shear Strength, $Su(r) = Re$	emolded Shear Strength	Humid: S = 1 to 25%
5-10	Loose	2-4	Soft	< 5% 1	Trace	Shallow = 0 to 35	degrees			Damp: $S = 26$ to 50%
11-30	Compac	5-8	Firm	5-15%	% Little Dipping = 35 to 55 degrees Moist: S = 51 to 7 % Come State State State			Moist: $S = 51 \text{ to } 75\%$		
31-50 >50	V. Dense	9-15 16-30	SUIT V Stiff	15-30% > 30%	% Some Steep = 55 to 90 degrees Wet: S = 76 to 99 % With Saturated: S = 10 Saturated: S = 10			saturated: S = 100%		
- 50	•• DC150	>30	Hard	2 3070	% With Boulders = diameter > 12 inches, Cobbles = diameter < 12 inches and > 3 inches					
					Gravel = < 3 inch and > No 4, Sand = < No 4 and >No 200, Silt/Clay = < No 200					

						SOIL BORING LOG			Boring #:	B-BCOR 1	
		CILLA	AALT			Proiect:	Proposed Offic	e Buildina	Project #:	21106	
		20W	MI			Location:	US Rt 1	y	Sheet:	1 of 1	
		GEOENGINEERI	NG SERVICES			City, State:	Cumberland, N	1E	Chkd by:		
Drilling	Co:	Summit Geoer	ngineering Ser	rvices, Inc		Boring Elevation	109 ft +/-				
Driller:		S. Floyd				Reference:	Untitled Plan f	rom the client			
Summit	Staff:	C. Plante, E.I.				Date started:	4/6/2021	Date Completed:	4/6/2021		
DF	RILLING	METHOD	S	AMPLER			I	ESTIMATED GROUND	WATER DEPTH		
Vehicle:		AMS PP	Length:	24" SS		Date	Depth	Elevation	Reference		
Model:		VTR 9500	Diameter:	2"OD/1.5"	ID	4/6/2021 3.0 ft 106 ft +/-			Measured 15 min after completion		
Method: Hammer	r Style	2 1/4 HSA	Method:		86						
Denth	i Style.	Automatic	Fictiou.	ASTRIDIS	Flev		SAMP	F	Geological/	Geological	
(ft.)	No.	Pen/Rec (in)	Depth (ft)	blows/6"	(ft.)		DESCRIP	TION	Test Data	Stratum	
	S-1	24/11	0-2	1	108.5	Dark brown fine	Sandy SILT, tra	ace roots, soft, moist, M	L	TOPSOIL	
1		-		4		Reddish brown S	Silty fine SAND,	tr Clay, loose, moist, SM	1		
				2		Note: Large blac	k Gravel piece	at 0.5 ft		MARINE	
2				4						REGRESSIVE	
2					$\overline{}$						
3_						Hard augering at	+ 3 ft			GLACIAL	
4	-				104.8	nara augening a				TILL	
-						End of	Boring at 4.2 f	t - Auger refusal		PROBABLE	
5							-		BEDROCK		
6											
7											
8											
9											
10	-										
11											
12											
-											
13											
14											
14											
15											
16											
17											
10											
10											
19											
20											
21	+										
22											
	1										
						<u> </u>					
Granul	ar Soils	Cohesiv	e Soils	% Comp	osition	NOTES:	PP = Pocket Per	etrometer, MC = Moisture	Content	Soil Moisture Condition	
Blows/ft.	Density	Blows/ft.	Consistency	ASTM D	2487	 _	LL = Liquid Limit	t, PI = Plastic Index, FV = I	Field Vane Test	Dry: S = 0%	
0-4	V. Loose	<2	V. soft		-	Bedrock Joints	Su = Undrained	Shear Strength, $Su(r) = Re$	molded Shear Strength	Humid: $S = 1 \text{ to } 25\%$	
5-10 11-30	LOOSE	2-4 5-8	SOIT	< 5% 5-15%	i ittle	Single $= 0$ to 35	uegrees dearees			Damp: $S = 26 \text{ to } 50\%$ Moist: $S = 51 \text{ to } 75\%$	
31-50	Dense	9-15	Stiff	15-30%	Little Dipping = 35 to 55 degrees Moist: S = 51 to 75% Some Steep = 55 to 90 degrees Wet: S = 76 to 99%			Wet: S = 76 to 99%			
>50	V. Dense	16-30	V. Stiff	> 30%	b With Saturated: S = 100%						
		>30	Hard		Boulders = diameter > 12 inches, Cobbles = diameter < 12 inches and > 3 inches						
						Gravel = < 3 inch and > No 4, Sand = < No 4 and >No 200, Silt/Clay = < No 200					

					S	OIL BORI	NG LOG	Boring #:	B-BCOR 2	
		SUM	MIT			Project:	Proposed Office	ce Building	Project #:	21106
		GEOENGINEERI	NG SERVICES			Location:	US Rt 1		Sheet:	1 of 1
5.00						City, State:	Cumberland, I	ME	Chkd by:	
Drilling (Co:	Summit Geoer	ngineering Se	rvices, Inc		Boring Elevation	101 ft +/-	irom the client		
Driller: Summit	Staff:	C. Plante, F.I.				Date started:	4/6/2021	Date Completed:	4/6/2021	
DF	RILLING	METHOD	S	AMPLER			., 0,2021	ESTIMATED GROUND W	ATER DEPTH	
Vehicle:		AMS PP	Length:	24" SS		Date	Depth	Elevation	Re	ference
Model:		VTR 9500	Diameter:	2"OD/1.5"	ID	4/6/2021	5.7 ft	95.3 ft +/-	Measured after com	pletion
Method:	: Chudau	2 1/4" HSA	Hammer:	140 lb	·oc					
Hammel Denth	r Style:	Automatic	Method:	ASTM DIS	Flov		SAMD	 E	Geological/	Geological
(ft.)	No.	Pen/Rec (in)	Depth (ft)	blows/6"	(ft.)		DESCRIP	TION	Test Data	Stratum
(,	S-1	24/22	0-2	2	()	Brown medium-o	coarse SAND, s	ome Gravel, loose, moist,		
1		-		3		SP				FILL
-				4						
2_				3	99					
3										
4										
-										
5_	5-2	24/24	5-7	3	$\overline{}$	Grav Clavev SILT	some brown	fine Sand seams heavily		GI ACTAI
6	52	21/21	57	4		mottled, stiff, mo	pist, ML	The band beams, nearly		MARINE
-				6						
7				8						
Q										
<u> </u>										
9						Hard augering at	: 9.5 ft			
					91.5	Brown fine Sand	y SILT, very so	ft, saturated, ML		
10	S-3	24/6	10-12	20 for 0"		End of	Boring at 9.5 f	t - Spoon refusal		PROBABLE
11										BEDROCK
-										
12										
12										
15										
14										
15										
16	-									
17										
10										
10	1									
19										
20										
21	 									
l	L									
22										
	<u> </u>									
Granul	ar Soils	Cohesiv	re Soils	% Comp	osition	NOTES:	PP = Pocket Per	netrometer, MC = Moisture Co	ntent	Soil Moisture Condition
Blows/ft.	. Density	Blows/ft.	Consistency	ASTM D	2487		LL = Liquid Limi	t, PI = Plastic Index, FV = Fie	ld Vane Test	Dry: S = 0%
0-4	V. Loose	<2	V. soft			Bedrock Joints	Su = Undrained	Shear Strength, Su(r) = Rem	olded Shear Strength	Humid: S = 1 to 25%
5-10	Loose	2-4	Soft	< 5% T	Trace	Shallow = 0 to 35	degrees			Damp: $S = 26$ to 50%
11-30 31_50	Compac	5-8 0_1=	Firm Chiff	5-15%	LITTLE	Dipping = 35 to 55	aegrees			Moist: $S = 51$ to 75%
>50	V. Dense	16-30	V. Stiff	> 30%	With	Sieep - 55 to 90 t	icyi ees			Saturated: S = 100%
		>30	Hard			Boulders = diameter	er > 12 inches, (Cobbles = diameter < 12 inche	es and > 3 inches	
						Gravel = < 3 inch	and > No 4, San	$d = \langle No 4 and \rangle No 200, Silt$	/Clay = < No 200	

						S	OIL BORI	NG LOG	Boring #:	B-BCOR 3
		CILLA	AALT			Project:	Proposed Offic	e Building	Project #:	21106
		20/M	MI			Location:	US Rt 1	J	Sheet:	1 of 1
		GEOENGINEERI	NG SERVICES			City, State:	Cumberland, M	1E	Chkd by:	
Drilling (Co:	Summit Geoer	ngineering Sei	rvices, Inc		Boring Elevation	94 ft +/-			
Driller:		S. Floyd				Reference:	Untitled Plan fi	rom the client		
Summit	Staff:	C. Plante, E.I.	-			Date started:	4/6/2021	Date Completed:	4/6/2021	
DF	RILLING	METHOD	S/	AMPLER				ESTIMATED GROUND V	VATER DEPTH	-
Vehicle: Model:			Length: Diamotor:	24" SS 2"00/1 E"	חז	Date	Depth 10 ft	Elevation	Kei Ectimated in choon o	rerence
Method:		2 1/4" HSA	Hammer:	2 0D/1.5 140 lb	ID	4/0/2021	10 10	0410 +/-		amples, cave-in ac
Hammer	r Style:	Automatic	Method:	ASTM D15	86					
Depth	Ī				Elev.		SAMPI	E	Geological/	Geological
(ft.)	No.	Pen/Rec (in)	Depth (ft)	blows/6"	(ft.)		DESCRIP	TION	Test Data	Stratum
	S-1	24/21	0-2	1	93.5	Forest Duff				TOPSOIL
1	-			WH		Grayish olive fin	e Sandy SILT, s	ome Clay, slightly		
2				3		mottled, soft, m	oist, ML			
<u>ک</u>				5						
3	-									
4										
5	6.2	24/24								
6	5-2	24/24	5-7	3		Grayish olive Sill	ty CLAY, trace f	ine Sand seams, slightly	PP = 2.8 - 3.5 tsr	
· ·				4		mottled, mm, m	UISL, CL			
7				7						
-										
8										
										GLACIAL
9_										MARINE
10					∇					
10	S-3	24/24	10-12	WH	~	Gray Silty CLAY,	very soft, satu	rated, CL	+	
11				WH		- , - , - ,	-,,	, -		
_				WH						
12	-			WH						
12										
15										
14										
-										
15										
10	S-4	24/24	15-17	WH	77.0	Grayish olive Silt	ty CLAY, trace f	ine Sand, very soft,		
16	-			20 for 1"	//.9	saturated, CL End of	Boring at 16.1	ft - Spoon refusal		
17				201011			boring at 10.1			BEDROCK
- · ·						Note: Small Grav	vel pieces at 15	.7 ft		
18										
19										
20	<u> </u>									
21										
22										
Granul	ar Soils	Cohesiv	e Soils	% Comp	osition	NOTES:	PP = Pocket Pen	etrometer, MC = Moisture C	ontent	Soil Moisture Condition
Blows/ft.	Density	Blows/ft.	Consistency	ASTM D	2487		LL = Liquid Limit	t, PI = Plastic Index, FV = Fi	eld Vane Test	Dry: S = 0%
0-4	V. Loose	<2	V. soft			Bedrock Joints	Su = Undrained	Shear Strength, Su(r) = Rer	nolded Shear Strength	Humid: S = 1 to 25%
5-10	Loose	2-4	Soft	< 5% T	race	Shallow = 0 to 35	degrees			Damp: $S = 26$ to 50%
11-30 31-50	Compact	5-8 0_1F	Firm Chiff	5-15%	LITTIE		o uegrees			Wet: $S = 51 \text{ to } /5\%$
>50	V. Dense	16-30	V. Stiff	> 30%	With	Siech - 22 (0 80 (ucyi cc3			Saturated: S = 100%
	_ 5.150	>30	Hard			Boulders = diamet	er > 12 inches, C	Cobbles = diameter < 12 incl	nes and > 3 inches	
						Gravel = < 3 inch	and > No 4, Sand	d = < No 4 and >No 200, Si	lt/Clay = < No 200	

						S	SOIL BORI	NG LOG	Boring #:	B-BCOR 4
		SILA	AAIT			Project:	Proposed Offic	e Building	Project #:	21106
		30/1				Location:	US Rt 1		Sheet:	1 of 1
		GEOENGINEERI	NG SERVICES			City, State:	Cumberland, M	1E	Chkd by:	
Drilling	Co:	Summit Geoer	ngineering Se	rvices, Inc		Boring Elevation	99.5 ft +/-			
Driller:		S. Floyd				Reference:	Untitled Plan fi	rom the client		
Summit	Staff:	C. Plante, E.I.	-			Date started:	4/6/2021	Date Completed:	4/6/2021	
DF	RILLING	METHOD	Si 	AMPLER				ESTIMATED GROUND W	ATER DEPTH	~
Vehicle:			Length: Diamotory	24" 55	סזי	Date	Depth	Elevation	Ke Manaurad after com	rerence
Method		2 1/4" HSA	Hammer:	2 0D/1.5 140 lb	ID	4/0/2021	5.1 ft	94.4 10 +/-		piedon
Hammer	r Style:	Automatic	Method:	ASTM D15	586					
Depth	T Ó				Elev.		SAMPI	E	Geological/	Geological
(ft.)	No.	Pen/Rec (in)	Depth (ft)	blows/6"	(ft.)		DESCRIP	TION	Test Data	Stratum
	S-1	24/22	0-2	1	99	Dark brown fine	Sandy SILT, tra	ace roots, soft, moist, ML		TOPSOIL
1				4		Olive fine Sandy	SILT, with Clay	, slightly mottled, stiff,	PP = 1.5 - >4.5 tsf	
				5		moist, ML				
2_				/						
2										
5										
4										
-										
5					\square					
	S-2	24/21	5-7	2		Olive Silty CLAY,	, trace fine Sand	d seams, moderately	PP = 2.8 - 3.5 tsf	
6				4		mottled, stiff, m	oist, CL			
-				5						
· -				5						
8										MARINE
- -										
9										
-										
10										
	S-3	24/24	10-12	WH		Olive Silty CLAY,	very soft, mois	st to wet, CL		
11				2		Olive Clayey fine	e SAND, very loo	ose, wet, SC		
12	-			1		Gray Silty CLAY	very soft wet	<u></u>		
12				1		Gray Silly CEAT,	very sort, wet,	CL		
13										
-										
14										
15	6.4	24/20	15 17	12	84.5	Duran and C				
16	5-4	24/20	15-17	12		sturated SP	AND, WITH Grave	er, slightly mottled, dense,	,	
10				15		Saturateu, Sr				
17				6						GLACIAL
	1		1							TILL
18										
19					80.5		6 Davie 2, 10,0	A		
20						End o	i Boring at 19 f	- Auger refusal		PROBABLE
20										BLDROCK
21	 									
<u></u> -	1									
22										
			_	_	L					
Granul	ar Soils	Cohesiv	e Soils	% Compo	osition	NOTES:	PP = Pocket Pen	etrometer, MC = Moisture Co	ontent	Soil Moisture Condition
Blows/ft.	Density	Blows/ft.	Consistency	ASTM D	02487	Podrock Jainta		F_{1} , P_{1} = Plastic Index, FV = Fig.	eld Vane Test	Dry: $S = 0\%$
0-4 5-10	v. LOOSE	<2 2-4	v. sort	< 5% T	Trace	$\frac{\text{Deurock Joints}}{\text{Shallow} = 0 \text{ to } 35}$	Ju = Unurained	onear orrengin, ou(r) = Ren	ioided Shear Strength	Turniu: $S = 1 \text{ to } 25\%$ Damp: $S = 26 \text{ to } 50\%$
11-30	Compact	5-8	Firm	5-15%	Little	Dipping = $35 \text{ to } 55$	5 degrees			Moist: $S = 51$ to 75%
31-50	Dense	9-15	Stiff	15-30%	Some	Steep = 55 to 90 d	degrees			Wet: S = 76 to 99%
>50	V. Dense	16-30	V. Stiff	> 30%	With		-			Saturated: S = 100%
		>30	Hard			Boulders = diamet	er > 12 inches, C	cobbles = diameter < 12 inch	es and > 3 inches	
						Gravel = < 3 inch	and > No 4, Sand	$d = \langle No 4 and \rangle No 200, Sil$	t/Clay = < No 200	

					SOIL PROBE LOG			Probe #:	P-1
		SILM	MAIT		Project:	Proposed Offi	ce Building	Project #:	21106
		30/1			Location:	US Rt 1		Sheet:	1 of 1
		GEOENGINEERI	NG SERVICES		City, State:	Cumberland,	ME	Chkd by:	
Drilling (Co:	Summit Geoer	ngineering Se	rvices, Inc	Probe Elevation	: 102 ft +/-			
Driller:	C 1 (S. Floyd			Reference:	Untitled Plan	from the client	4/6/2024	
Summit	Staff:	C. Plante, E.I.			Date started:	4/6/2021	Date Completed:	4/6/2021	
DRILLIN	GMETH		PLCU	ush Type	Data	Danth	ESTIMATED GROUND		
Venicie: Model:			PUSH: HAMMED:	SOTT/LOOSE	Date	Depth	Elevation	KE	terence
Method:		2 1/4" HSA	VIBRATION:	Stiff/Dense					
Hammer	Style:	Automatic							
Depth					•	•	PUSH/SOIL		Probable Geologic
(ft.)	P	ush Type	Depth (ft)	Elevation (ft)		D	ESCRIPTION		Stratum
		PUSH							
1_		_							
2		_							
² _									
3									GLACIAL
									MARINE
4									
5									
c		♥	5.3	96.7		End of Drok	at 53 ft Draha rafina	1	
0_							e di 5.5 il - Piope refusa	I	
7									DEDROCK
-									
8									
9_									
10									
10_									
11									
-									
12									
12									
13_									
14	-								
15									
16									
17				<u> </u>					
18									
19									
20	L								
20									
21									
22				<u> </u>					
		_							
Granula Blows /6	ar Soils	Cohesiv	/e Soils	% Composition	NOTES:	PP = Pocket Pe	netrometer, MC = Moisture	Content	Soil Moisture Condition
n-4	V. Loose	biows/π. <2	V soft	ASTM D248/	Bedrock loints	Su = Liquia Lim	it, F1 = Plasuc Index, FV =	melded Shear Strength	Dry: $5 = 0\%$ Humid: $S = 1 \text{ to } 25\%$
5-10	Loose	2-4	Soft	< 5% Trace	Shallow = 0 to 35	degrees	z snear strength, su(r) – K	anolaca oncar ou englit	Damp: $S = 26 \text{ to } 50\%$
11-30	Compact	5-8	Firm	5-15% Little	Dipping = 35 to 5	5 degrees			Moist: $S = 51$ to 75%
31-50	Dense	9-15	Stiff	15-30% Some	Steep = 55 to 90	degrees			Wet: S = 76 to 99%
>50	V. Dense	16-30	V. Stiff	> 30% With					Saturated: S = 100%
		>30	Hard		Boulders = diame Gravel = < 3 inch	ter > 12 inches, and > No 4, Sar	Cobbles = diameter < 12 in d = < No 4 and $>No 200$,	ches and > 3 inches Silt/Clay = < No 200	

					SOIL PROBE LOG			Probe #:	P-2
		SUM	MIT		Project:	Proposed Offi	ce Building	Project #:	21106
		GEOENGINEERI	ING SERVICES		Location:	US Rt 1		Sheet:	1 of 1
	-				City, State:	Cumberland, I	ME	Chkd by:	
Drilling (L0:	Summit Geoer	ngineering Se	rvices, Inc	Probe Elevation	: 106 ft +/-	fears the aliant		
Driller: Summit	Staff.	C Plante F I			Reference: Date started:	4/6/2021	Date Completed:	4/6/2021	
DRILLIN	IG METH	OD	P	ush Type		., 0, 2022	ESTIMATED GROUND	WATER DEPTH	
Vehicle:		AMS PP	PUSH:	Soft/Loose	Date	Depth	Elevation	Re	ference
Model:		9500 VTR	HAMMER:	Firm/Compact					
Method:	Chulan	2 1/4" HSA	VIBRATION:	Stiff/Dense					
Hammer Depth	r Style:	Automatic				1			Prohable Geologic
(ft.)	P	ush Type	Depth (ft)	Elevation (ft)		D	ESCRIPTION		Stratum
(-)		PUSH							
1									
2		_							
2_		-							
3									PROBABLE
-									GLACIAL
4		_							MARINE
F									
5_									
6									
7_		1							
8		•	7.5	98.5		End of Borin	a at 7.5 ft - Probe refusa		PROBABLE
-									BEDROCK
9									
10									
10_									
11									
12									
12_									
13									
14									
15									
-									
16			-						
17				├					
- · ·									
18				 					
19				├					
20									
21				├ ────┤					
22									
				 					
Granul	ar Soils	Cohesiv	l /e Soils	% Composition	NOTES:	PP = Pocket Pe	netrometer, MC = Moisture	Content	Soil Moisture Condition
Blows/ft.	Density	Blows/ft.	Consistency	ASTM D2487		LL = Liquid Lim	it, PI = Plastic Index, FV =	Field Vane Test	Dry: S = 0%
0-4	V. Loose	<2	V. soft		Bedrock Joints	Su = Undrained	I Shear Strength, Su(r) = Re	molded Shear Strength	Humid: S = 1 to 25%
5-10	Loose	2-4	Soft	< 5% Trace	Shallow = 0 to 35	degrees			Damp: S = 26 to 50%
11-30 31-50	Compact	5-8 9-15	Firm Stiff	5-15% Little	Dipping = 35 to 5 Steep = 55 to 90	5 degrees degrees			Moist: $S = 51 \text{ to } /5\%$ Wet: $S = 76 \text{ to } 90\%$
>50	V. Dense	16-30	V. Stiff	> 30% With	5000 - 55 10 90				Saturated: S = 100%
		>30	Hard		Boulders = diame	ter > 12 inches,	Cobbles = diameter < 12 in	ches and > 3 inches	
					Gravel = < 3 inch	and > No 4, Sar	$d = \langle No \ 4 \ and \rangle No \ 200, \ 5$	Silt/Clay = < No 200	

Attachment K Architecture

The floor plan and architectural elevations are included here for reference.

4306

PLAN SUBMISSION NOTES

- 1. THIS PLAN IS FOR TOWN OF CUMBERLAND BUILDING CODE, LIFE SAFETY CODE, ADA, FIRE MARSHAL AND OCCUPANCY APPROVAL ONLY.
- PLAN BASED ON PLAN PROVIDED BY THE OWNER.
 THE PLUMBING, ELECTRICAL, AND MECHANICAL DESIGN
- OF THE BUILDING IS BY THE OWNER.
- 4. IBC 2015 USE GROUP: BUSINESS (B)
 5. 2018 NFPA LIFE SAFETY OCCUPANCY: BUSINESS
- 6. CONSTRUCTION TYPE: TYPE V B (UNPROTECTED)

LEGEND

- PROPOSED WALL

 XXX

 1-HR. FIRE RATED WALL

 EXIT

 EXIT SIGN
- EMERGENCY LIGHTINGFIRE EXTINGUISHER
 - , INC LATINGUISHEK



	WINDOW SCHEDULE											
NO.	QUANTITY	UNIT DIMENSION	TYPE	FRAME								
A	24	3'-4" x 4'-10"	FIXED STOREFRONT	ALUMINUM								
B	12	6'-0" x 2'-6"	FIXED STOREFRONT	ALUMINUM								
Ċ	1	3'-4" x 7'-2"	FIXED STOREFRONT	ALUMINUM								
	2	2'-2" x 7'-2"	FIXED STOREFRONT	ALUMINUM								
	2	2'-2" x 7'-2"	FIXED STOREFRONT	ALUMINUM								

FLOOR PLAN SCALE 5/32" = 1'-0"

	DOO	OR SCHEI	DULE	
ΝΤΙΤΥ	SIZE	TYPE	FRAME	REMARKS
2	3'-0" x 6'-8"	METAL INSULATED	METAL	HINGES, LEVER HARDWARE, PANIC HARDWARE ENTRY LOCKSET, ADA THRESHOLD
4	6'-0" x 6'-8"	FULL GLASS STOREFRONT	METAL	HINGES, PUSH BAR, D-RING PULL HANDLE, CLOSER, ENTRY LOCKSET, 14" TRANSOM
8	3'-0" x 6'-8"	SOLID WOOD	METAL	HINGES, LEVER HARDWARE, ENTRY LOCKSET
2	3'-0" x 6'-8"	SOLID WOOD	METAL	HINGES, LEVER HARDWARE, CLOSER PRIVACY LOCKSET
2	3'-0" x 6'-8"	HOLLOW METAL FIRE-RATED	METAL	HINGES, LEVER HARDWARE, PANIC HARDWARE, CLOSER, PASSAGE LOCKSET, 1-HR FIRE RATED
5	12'-0" x 14'-0"	OVERHEAD	N/A	TRACK, OPERATOR
2	3'-0" x 6'-8"	HOLLOW METAL	METAL	HINGES, LEVER HARDWARE, CLOSER ENTRY LOCKSET
1	3'-0" x 6'-8"	HOLLOW METAL	METAL	HINGES, LEVER HARDWARE, CLOSER, PRIVACY LOCKSET, 1-HR FIRE RATED
2	3'-0" x 6'-8"	SOLID WOOD	METAL	HINGES, LEVER HARDWARE, PANIC HARDWARE, CLOSER, PASSAGE LOCKSET

EAST ELEVATION (FACING U.S. ROUTE 1) SCALE 5/32" = 1'-0"

C A.E.HOdSdon Consul TING ENGINEERS TO Common Street Waterville, Maine 04901 (207) 873-5164
Image: Sector
PRELIMINARY NOT FOR CONSTRUCTION
ELEVATIONS ELEVATIONS ELEVATIONS COMMERCIAL/OFFICE BUILDINGS OF U.S. ROUTE 1 U.S. R

NORTH ELEVATION (FACING WOODED LOT) SCALE 1/4" = 1'-0"

Image: Second constraints Image: Second constraints
ELIMINARY Image: Constant of the second
ELEVATIONS ELEVATIONS DC DC DC DC DC DC DC DC DC DC

<u>Attachment L</u> <u>Site Plans</u>

The project site plans are included for review as a separate plan set of full site documents.

4306

GENERAL NOTES:

1. DRAWINGS ARE BASED ON BOUNDARY AND TOPOGRAPHIC SURVEY INFORMATION FROM MULTIPLE SOURCES BY SITELINES, PA.

2. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR THE ELEVATION OF THE EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION HAS NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVES AND IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR SHALL CALL THE APPROPRIATE UTILITY COMPANY AND DIG SAFE (1-800-DIG-SAFE) AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IN AREAS OF POTENTIAL CONFLICTS TEST PITS SHALL BE REQUIRED TO VERIFY EXISTING UTILITY LOCATION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.

3. RIM ELEVATIONS OF PROPOSED SANITARY SEWER MANHOLES AND ASSOCIATED STRUCTURES ARE APPROXIMATE. FINAL ELEVATIONS ARE TO BE SET FLUSH AND CONSISTENT WITH THE GRADING PLANS. ADJUST ALL OTHER RIM ELEVATIONS OF MANHOLES, WATER GATES, GAS GATES AND OTHER UTILITIES TO FINISH GRADE WITHIN LIMITS OF WORK.

4. THE LOCATION, SIZE, DEPTH, AND SPECIFICATIONS FOR CONSTRUCTION OF PROPOSED PRIVATE UTILITY SERVICES SHALL BE INSTALLED ACCORDING TO THE REQUIREMENTS PROVIDED BY, AND APPROVED BY THE RESPECTIVE UTILITY COMPANY (GAS, TELEPHONE, ELECTRIC, CABLE AND FIRE ALARM). FINAL DESIGN LOADS AND LOCATIONS TO BE COORDINATED WITH CONSTRUCTION MANAGER AND ARCHITECT.

5. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION, SIZE, INVERTS AND TYPES OF EXISTING PIPES AT ALL PROPOSED POINTS OF CONNECTION PRIOR TO ORDERING MATERIALS. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATIONS, ELEVATION, AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED IN WRITING TO THE CONSTRUCTION MANAGER REPRESENTATIVE FOR THE RESOLUTION OF THE CONFLICT.

6. THE CONTRACTOR SHALL VERIFY ALL CRITICAL DIMENSIONS AND GRADES BEFORE WORK BEGINS. CONTRACTOR SHALL CONFIRM LOCATION AND DEPTH ALL UTILITY LINE CROSSINGS WITH TEST PITS PRIOR TO BEGINNING WORK. CONFLICTS SHALL BE REPORTED IN WRITING TO CONSTRUCTION MANAGER FOR RESOLUTION OF THE CONFLICT.

7. ALL AREAS OUTSIDE THE LIMIT OF WORK THAT ARE DISTURBED SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE. ALL AREAS DISTURBED DURING CONSTRUCTION NOT COVERED WITH BUILDINGS. STRUCTURES. OR PAVEMENT SHALL RECEIVE 4 INCHES OF LOAM AND SEED.

8. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS AND SHALL BE RESPONSIBLE FOR PAYING ANY FEES FOR ANY POLE RELOCATION AND FOR THE ALTERATION OR ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE, CABLE, FIRE ALARM AND ANY OTHER PRIVATE UTILITIES BY THE UTILITY COMPANIES.

9. UPON AWARD OF CONTRACT, CONTRACTOR SHALL MAKE ALL NECESSARY CONSTRUCTION NOTIFICATIONS AND APPLY FOR AND OBTAIN ALL NECESSARY PERMITS PAY ALL FEES AND POST ALL BONDS ASSOCIATED WITH THE WORK INDICATED ON THE DRAWINGS AND AS SPECIFIED

10. ALL PROPERTY MONUMENTATION DISTURBED DURING CONSTRUCTION SHALL BE RESET TO THEIR ORIGINAL LOCATION BY A MAINE REGISTERED LICENSED PROFESSIONAL LAND SURVEYOR (PLS) AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL PREPARE AN AS-BUILT PLAN SURVEY SHOWING LOCATIONS OF ALL SURFACE FEATURES AND SUBSURFACE UTILITY SYSTEMS INCLUDING THE LOCATION TYPE, SIZE AND INVERTS.

11. THE CONTRACTOR SHALL INSTALL ALL EROSION CONTROL MEASURES PRIOR TO EARTHWORK OPERATION AND MAINTAIN ALL EROSION CONTROL MEASURES AND SEEDED EMBANKMENTS DURING CONSTRUCTION. EROSION CONTROL SHALL BE REMOVED ONLY UPON THE ESTABLISHMENT OF ALL LANDSCAPED AREAS. ALL WORK SHALL BE IN COMPLIANCE WITH THE ENVIRONMENTAL QUALITY HANDBOOK FOR EROSION AND SEDIMENT CONTROL, LATEST EDITION, AS ADOPTED BY THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

12. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SITE SECURITY AND JOB SAFETY. ALL CONSTRUCTION ACTIVITY SHALL BE I ACCORDANCE WITH OSHA STANDARDS AND LOCAL REQUIREMENTS.

13. ALL MATERIALS AND CONSTRUCTION METHODS USED WITHIN THE PUBLIC RIGHT-OF-WAY SHALL CONFORM TO ALL LOCAL MUNICIPAL STANDARDS AND MAINE DEPARTMENT OF TRANSPORTATION SPECIFICATIONS.

14. THE CONTRACTOR IS REQUIRED TO CONTROL DUST DURING CONSTRUCTION. EXPOSED SOIL AREAS SHALL BE SPRAYED WITH WATER AS NEEDED TO CONTROL DUST EMISSIONS. COVER EXPOSED SOIL AREAS AS QUICKLY AS PRACTICAL TO PREVENT WINDS FROM GENERATING DUST.

15. ALL HANDICAP ACCESSIBLE PARKING SPACES, RAMPS AND SIDEWALKS SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE AMERICANS WITH DISABILITIES ACT (ADA).

16. ALL SITE SIGNAGE AND PAVEMENT MARKINGS SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.

17. THE CONTRACTOR SHALL ANTICIPATE THAT GROUNDWATER WILL BE ENCOUNTERED DURING CONSTRUCTION AND SHALL INCLUDE SUFFICIENT COSTS WITHIN THEIR BID TO PROVIDE DEWATERING AS NECESSARY. NO SEPARATE PAYMENT SHALL BE MADE TO THE CONTRACTOR FOR DEWATERING.

18. ALL MATERIALS SHALL BE NEW AND PROVIDED BY THE CONTRACTOR.

19. CONTRACTOR SHALL PROVIDE NOTIFICATION TO THE NAVY COORDINATOR PRIOR TO START OF CONSTRUCTION.

LAYOUT NOTES:

1. ALL DIMENSIONING, UNLESS NOTED OTHERWISE, IS TO THE FACE OF CURB OR FOUNDATION.

2. OFFSETS TO CATCH BASINS AND MANHOLES ARE TO THE CENTER OF THE FRAME

3. PIPE LENGTH EQUALS THE CENTER TO CENTER DISTANCES BETWEEN CATCH BASINS AND/OR MANHOLES MINUS ONE HALF THE DIAMETER OF EACH CATCH BASIN OR MANHOLE.

4. BOUNDARY INFORMATION ON LAYOUT PLAN IS FOR REFERENCE ONLY, REFER TO CERTIFIED BOUNDARY PLANS FOR BOUNDARY INFORMATION.

GRADING AND DRAINAGE NOTES:

1. UNLESS OTHERWISE NOTED, ALL STORM DRAIN PIPE SHALL BE IN ACCORDANCE WITH MDOT SPECIFICATIONS SECTION 603. PIPE CULVERTS AND STORM DRAINS, LATEST REVISION WITH THE EXCEPTION THAT THE ONLY ACCEPTABLE TYPES OF PIPE ARE AS FOLLOWS: POLYVINYL CHLORIDE PIPE (PVC) SDR 35

SMOOTH BORE POLYETHYLENE PIPE - HDPE N-12 ADS OR SDR 35

2. TOPSOIL STRIPPED IN AREAS OF CONSTRUCTION THAT IS SUITABLE FOR REUSE AS LOAM SHALL BE STOCKPILED ON SITE AT A LOCATION TO BE DESIGNATED BY OWNER. UNSUITABLE SOIL SHALL BE SEPARATED, REMOVED AND DISPOSED OF AT AN APPROVED DISPOSAL LOCATION OFF SITE.

3. THE CONTRACTOR SHALL ANTICIPATE THAT GROUNDWATER WILL BE ENCOUNTERED DURING CONSTRUCTION AND SHALL INCLUDE SUFFICIENT COSTS WITHIN THEIR BID TO PROVIDE DEWATERING AS NECESSARY. NO SEPARATE PAYMENT SHALL BE MADE TO THE CONTRACTOR FOR DEWATERING.

PERMITTING REQUIREMENTS:

AGENCY:	PERMIT:
TOWN OF CUMBERLANI	O SITE PLAN APPROVAL BUILDING

MAINE DEPARTMENT STORMWATER LAW PERMIT **OF ENVIRONMENTAL** PROTECTION

STATUS: PENDING (BY CONTRACTOR) PENDING

WILLIAM LONGLEY TOWN OF CUMBERLAND 290 TUTTLE ROAD CUMBERLAND, MAINE 04021 207-829-2207

CENTRAL MAINE POWER 280 BATH ROAD **BRUNSWICK, MAINE 04011** 207-721-8054

COMCAST CONSTRUCTION OFFICE 336 BATH ROAD BRUNSWICK, MAINE, 04011 207-729-6660

STATE LAW REQUIRES ADVANCE NOTICE OF AT LEAST 3 BUSINESS DAYS BEFORE YOU DIG. GRADE OR EXCAVATE FOR THE MARKING

OF UNDERGROUND UTILITIES

CALL DIG SAFE UTILITY LOCATION

COMMERCIAL/OFFICE BUILDING

ROUTE 1 CUMBERLAND, MAINE

PREPARED FOR: LAKESIDE CONCRETE CUTTING INC. **590 COUNTY ROAD, SUITE 2, WESTBROOK, MAINE 04092**

TOWN/UTILITY CONTACTS

CODE ENFORCEMENT

ELECTRIC SERVICE

TELEPHONE SERVICE

FAIRPOINT BATH ROAD (P.O. BOX 360) **BRUNSWICK, MAINE 04011** 207-442-8018

CABLE SERVICE

WATER SERVICE

PORTLAND WATER DISTRICT 225 DOUGLASS STREET PO BOX 3553 PORTLAND. MAINE 04104

SANITARY SEWER

TOWN OF CUMBERLAND WILLIAM SHANE, P.E., TOWN MANAGER 290 TUTTLE ROAD CUMBERLAND, MAINE 04021 207-829-2205

PUBLIC WORKS DEPARTMENT

CHRISTOPHER BOLDUC, PUBLIC SERVICES DIRECTOR 290 TUTLE ROAD CUMBERLAND, MAINE 04021 207-829-2220

CUMBERLAND FIRE DEPARTMENT

DANIEL SMALL, FIRE CHIEF 366 TUTTLE ROAD CUMBERLAND, MAINE 04021 207-829-5421

CIVIL ENGINEER

SITELINES P.A. ATTN: CURTIS Y. NEUFELD. P.E. 119 PURINTON ROAD, SUITE A BRUNSWICK, MAINE 04011 207-725-1200 WWW.SITELINESPA.COM

SURVEYOR

SITELINES P.A. ATTN: KEVIN CLARK, P.L.S. 119 PURINTON ROAD, SUITE A **BRUNSWICK. MAINE 04011** 207-725-1200 WWW.SITELINESPA.COM

	SHEET INDEX		
SHEET #	SHEET TITLE:	SCALE:	
C1	COVER SHEET	NTS	
C2	EXISTING CONDITIONS PLAN	1"=30'	
С3	SITE LAYOUT & UTILITY PLAN	1"=30'	
C4	GRADING & DRAINAGE PLAN	1"=30'	
С5	SITE PROFILE	VARIES	
C6	BLASTING PLAN	1"=100'	
C7	SITE DEVELOPMENT DETAILS	NTS	
C8	STORMWATER DETAILS	NTS	
С9	EROSION CONTROL DETAILS AND NOTES	NTS	
L1	LANDSCAPE PLAN	1"=30'	
L2	SITE PHOTOMETRIC PLAN	1"=30'	

PROJECT TEAM GEOTECHNICAL SUMMIT GEOENGINEERING SERVICES **173 PLEASANT STREET** ROCKLAND, MAINE 04841

207-318-7761

DRN BY: NCR

CH'D BY: CYN

DATE: 03/08/21

06-03-21

JOB #: 4306

MAP/LOT: R01/11-3

FILE: 4306-COV-DET

	EVISTING	LEGEND	PROPOSED
32 SAL SERVICES EET	EXISTING 5/8'	IRON MARKER FOUND "REBAR TOPPED WITH AN ALUMINUM CATCH BASIN SEWER MANHOLE FIRE HYDRANT WATER GATE VALVE WATER SHUT-OFF BLOW-OFF/CLEAN-OUT UTILITY POLE UTILITY LINE PROPERTY LINE EASEMENTS SETBACK/BUFFER STREAM	I.D. CAP
04841	6"S 6"S 8"W	CURB EDGE OF PAVEMENT BUILDING STORM DRAIN(SEE PLAN FOR SIZE) SEWER LINE(SEE PLAN FOR SIZE) WATER LINE(SEE PLAN FOR SIZE) WATER LINE(SEE PLAN FOR SIZE) UNDERDRAIN(SEE PLAN FOR SIZE) SLOPE ARROW CONTOURS TREE LINE SEDIMENT BARRIER RIPRAP PROPOSED PAVEMENT	
		SPOT GRADE	× B100.00
	2. 06-03-2 1. 05-05-2	21 REVISED PER TOWN PLANNER COM 21 SUBMITTED TO TOWN OF CUMBERL	MENTS CYN AND CYN
PROGRESS PRI THIS PLAN IS ISSUE REVIEW AND INFORM PURPOSES ONLY. PLAN IS SUBJECT CHANGE AND IS NO PRICING OR CONSTRU PRICING BASED ON PLAN IS NOT B UNLESS SIGNED BY CONTRACTOR AND OV	INT D FOR MATION THIS T TO T FOR ICTION. THIS INDING BOTH WNER. 590 COU	COVER SHE COMMERCIAL/OFFICE E U.S. ROUTE 1, CUMBERL	ET BUILDINGS AND, MAINE TEMENT PROFESSIONALS STBROOK, ME 04092
CURTIS K NEUFELD 9779	CIVIL EI FIELD WK:	SIT 119 PUR BRUN NGINEERS • PLANNERS • MC & CR SCALE: NTS	ELINES RINTON ROAD, SUITE A SWICK, MAINE 04011 207.725.1200 LAND SURVEYORS SHEET:

ISSUED FOR: PERMITTING REVIEW

OFFICE COMMERCIAL-SOUTH ZONING DISTRICT (OC-S)				
IG STANDARD	REQUIRED	PROPOSED		
OT SIZE:	1 AC.	2.55 AC.		
T FRONTAGE:	150'	370'		
A SETBACKS:				
ONT:	25'	25'		
AR:	65'	65'		
)E:	20'	20'		
EIGHT:	40'	<40'		
G	OFFICE – 1 PER 250 S.F. = 30	60		

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ROCK REMOVAL GUIDELINES:

THESE GUIDELINES APPLY TO ROCK REMOVAL ASSOCIATED WITH THE CONSTRUCTION OF THE BUILDING, ROAD, AND 2. THE LOCAL MUNICIPALITY AND THE BOARD WHEN THE DURATION OF THE NIGHTTIME CONSTRUCTION ACTIVITY IS UTILITIES AT LAKESIDE CONCRETE CUTTING & ABATEMENT PROFESSIONALS. ROCK EXCAVATION IS THE REMOVAL AND GREATER THAN 90 DAYS. DISPOSAL OF MATERIALS THAT CANNOT BE EXCAVATED WITHOUT MODERN, TRACK-MOUNTED, HEAVY-DUTY EXCAVATING EQUIPMENT, WITHOUT DRILLING, BLASTING, OR RIPPING. TYPICAL MATERIALS CLASSIFIED AS ROCK ARE SOLID ROCK, ROCK IN LEDGES, AND ROCKHARD CEMENTITIOUS AGGREGATE DEPOSITS ONE CUBIC YARD OR MORE (b)SOUND FROM CONSTRUCTION ACTIVITIES BETWEEN 7:00 A.M. AND 7:00 P.M. SHALL NOT EXCEED THE FOLLOWING LIMITS AT ANY PROTECTED LOCATION: IN VOLUME. DURATION OF ACTIVITY

NOTIFICATIONS:

THE CONTRACTOR SHALL PROVIDE WRITTEN NOTICE TO THE ABUTTING PROPERTIES A MINIMUM OF ONE WEEK IN ADVANCE OF PRE-BLAST SURVEYS. A WRITTEN SCHEDULE OF THE LIKELY BLASTING WILL BE FILED WITH THE PLANNING DEPARTMENT PRIOR TO CONSTRUCTION AND WILL BE UPDATED MONTHLY UNTIL THE WORK IS COMPLETE.

BLASTING PROCEDURES:

ALL BLASTING WILL BE PERFORMED IN ACCORDANCE WITH ALL PERTINENT PROVISIONS OF THE "MANUAL OF ACCIDENT PREVENTION IN CONSTRUCTION" ISSUED BY THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA, INC., AND MAINE DEPARTMENT OF TRANSPORTATION SPECIFICATIONS SECTION 105.2.7, "USE OF EXPLOSIVES". BLASTING THROUGH THE OVERBURDEN WILL BE ALLOWED UNDER THE FOLLOWING CONDITIONS:

1. ALL BLASTS MUST BE COVERED WITH APPROPRIATE MATS AND/OR EARTH. 2.DRILLING EQUIPMENT WILL BE EQUIPPED WITH SUITABLE DUST CONTROL APPARATUS THAT MUST BE KEPT IN REPAIR AND USED DURING ALL DRILLING OPERATIONS.

3.BLASTING WILL NOT PRODUCE PEAK PARTICLE VELOCITIES IN EXCESS THOSE SHOWN IN FIGURE B-1 APPENDIX B, U.S. BUREAU OF MINES REPORT OF INVESTIGATIONS 8507, AT THE CLOSEST STRUCTURE OR WATER SUPPLY WELL

4. SOUND FROM CONSTRUCTION OF DEVELOPMENTS. (a)THE SOUND FROM CONSTRUCTION ACTIVITIES BETWEEN 7:00 P.M. AND 7:00 A.M. IS SUBJECT TO THE FOLLOWING LIMITS:

(i) SOUND FROM NIGHTTIME CONSTRUCTION ACTIVITIES SHALL BE SUBJECT TO THE NIGHTTIME ROUTINE OPERATION SOUND LEVEL LIMITS CONTAINED IN SECTION 10. "NOISE CONTROL", C. "NOISE LEVEL LIMITS" SUBSECTIONS 1(a) AND 1(b) OF MAINE DEP CHAPTER 375 "NO ADVERSE EFFECT STANDARDS OF THE SITE LOCATION OF DEVELOPMENT".

(ii)IF CONSTRUCTION ACTIVITIES ARE CONDUCTED CONCURRENTLY WITH ROUTINE OPERATION, THEN THE COMBINED TOTAL OF CONSTRUCTION AND ROUTINE OPERATION SOUND SHALL BE SUBJECT TO THE NIGHTTIME ROUTINE OPERATION SOUND LEVEL LIMITS CONTAINED IN SUBSECTIONS 1(a) AND 1(b).

(iii)HIGHER LEVELS OF NIGHTTIME CONSTRUCTION SOUND ARE PERMITTED WHEN A DULY ISSUED PERMIT AUTHORIZING NIGHTTIME CONSTRUCTION SOUND IN EXCESS OF THESE LIMITS HAS BEEN GRANTED BY: 1. THE LOCAL MUNICIPALITY WHEN THE DURATION OF THE NIGHTTIME CONSTRUCTION ACTIVITY IS LESS THAN OR EQUAL TO 90 DAYS.

12 HOURS 8 HOURS 6 HOURS 4 HOURS 3 HOURS 2 HOURS 1 HOUR OR LESS

(c)ALL EQUIPMENT USED IN CONSTRUCTION ON DEVELOPMENT SITES SHALL COMPLY WITH APPLICABLE FEDERAL NOISE REGULATIONS AND SHALL INCLUDE ENVIRONMENTAL NOISE CONTROL DEVICES IN PROPER WORKING CONDITION, AS ORIGINALLY PROVIDED WITH THE EQUIPMENT BY ITS MANUFACTURER.

5.ALL BLASTS MUST BE MONITORED USING FIELD SEISMOGRAPHS. ALL FIELD SEISMOGRAPHS MUST RECORD THE FULL ANALOG WAVE FORM OF EACH OF THE 3 MUTUALLY PERPENDICULAR COMPONENTS OF MOTION IN TERMS OF PARTICLE VELOCITY. ALL SEISMOGRAPHS MUST BE CAPABLE OF SENSOR CHECK AND MUST BE CALIBRATED ACCORDING TO THE MANUFACTURERS RECOMMENDATIONS.

6.TO THE EXTENT POSSIBLE, BLASTING WILL BE ACCOMPLISHED TOWARD AN OPEN FACE FOR RELIEF PURPOSES. 7.FLYROCK. THE CONTRACTOR IS TO CONTROL FLYROCK WITH MATS OR OTHER SUITABLE COVER TO PREVENT FLYROCK FROM ENTERING ANY WETLANDS. PRE-BLAST SURVEY:

THE CONTRACTOR WILL CONDUCT A PRE-BLAST SURVEY OF ALL STRUCTURES WITHIN 500' OF THE BLAST AREA, AND PROVIDE THE TOWN WITH A WRITTEN REPORT OF THE PRE-BLAST SURVEY PRIOR TO ANY BLASTING. AT A MINIMUM THE SURVEY WILL COVER THE EXTERIOR OF EACH BUILDING, INCLUDING EXPOSED FOUNDATIONS. INTERIOR SURVEYS ARE AT THE DISCRETION OF THE INDIVIDUAL PROPERTY OWNERS. VIDEOTAPE WITH VOICE MUST BE EMPLOYED AND CLEAR IDENTIFICATION OF EACH STRUCTURE AND PART OF THAT STRUCTURE IS REQUIRED.

TEST BLAST:

THE BLASTING CONTRACTOR WILL DEVELOP A TEST SHOT UNDER THE OBSERVATION OF THE TOWN'S DESIGNATED INSPECTOR. THE TEST SHOT MUST BE INSTRUMENTED WITH AT LEAST TWO (2) RECORDING SEISMOGRAPHS ORIENTED AT RIGHT ANGLES TO EACH OTHER AND SPACED EQUIDISTANT FROM THE SHOT. THE SHOT AND SEISMOGRAPHS SHOULD BE ORIENTED TO PROVIDE DATA PARALLEL AND PERPENDICULAR TO THE GENERAL BEDROCK TREND AT THE SITE.

2.THE REPORT SUBMITTED TO THE TOWN ENGINEER MUST INCLUDE AS A MINIMUM A LIST OF THE HOMES AND OTHER BUILDINGS INSPECTED AND INDICATE THE TYPE OF INSPECTION.

RECORDS:

- 1. THE CONTRACTOR WILL PROVIDE THE TOWN WITH A BLASTING LOG FOR ALL BLASTS INCLUDING BLASTS. THE BLASTING LOG MUST CONTAIN THE FOLLOWING INFORMATION:
- a. NAME OF BLASTING COMPANY OF BLASTING CONTRACTOR. b. LOCATION, DATE, AND TIME OF BLAST.
- c.NAMES, SIGNATURE, AND SOCIAL SECURITY NUMBER OF BLASTER. d. TYPE OF MATERIAL BLASTED. e.NUMBER AND SPACING OF HOLES AND DEPTH OF BURDEN OR STEMMING. f. DIAMETER AND DEPTH OF HOLES.
- TYPE OF EXPLOSIVES USED.
- . TOTAL AMOUNT OF EXPLOSIVES USED. MAXIMUM AMOUNT OF EXPLOSIVES USED PER DELAY PERIOD OF 8 MILLISECONDS OR GREATE MAXIMUM NUMBER OF HOLES PER DELAY PERIOD OF 8 MILLISECONDS OR GREATER.
- METHOD OF FIRING AND TYPE OF CIRCUIT. I. DIRECTION AND DISTANCE IN FEET TO THE NEAREST DWELLING, PUBLIC BUILDING, SCHOOL, C COMMERCIAL OR INSTITUTIONAL BUILDING NEITHER OWNED NOR CONTROLLED BY THE DEVELO m.WEATHER CONDITIONS, INCLUDING FACTORS SUCH AS WIND DIRECTION AND CLOUD COVER.
- n. HEIGHT OR LENGTH OF STEMMING.
- AMOUNT OF MATS OR OTHER PROTECTION USED.
 TYPE OF DETONATORS USED AND DELAY PERIODS USED.
 THE EXACT LOCATION OF EACH SEISMOGRAPH AND THE DISTANCE OF EACH SEISMOGRAPH F BLAST.
- r. SEISMOGRAPHIC READINGS. s. NAME AND SIGNATURE OF THE PERSON OPERATING EACH SEISMOGRAPH. t. NAMES OF THE PERSON AND THE FIRM ANALYZING THE SEISMOGRAPHIC DATA.

THE TEST					
TER.		2. 06-03-21 REVISED PER TO	OWN PLANNER COMMENTS	CYN	
CHURCH OR OPER.	PROGRESS PRINT THIS PLAN IS ISSUED FOR REVIEW AND INFORMATION PURPOSES ONLY. THIS	1. 05-05-21 SUBMITTED TO TITLE: BLA	TOWN OF CUMBERLAND	CYN	
ROM THE PURPOSES ONLY. THIS PLAN IS SUBJECT TO CHANGE AND IS NOT FOR PRICING OR CONSTRUCTION. PRICING BASED ON THIS PLAN IS NOT BINDING PLAN IS NOT BINDING		PROJECT: COMMERCIAL/OFFICE BUILDINGS U.S. ROUTE 1, CUMBERLAND, MAINE			
	UNLESS SIGNED BY BOTH CONTRACTOR AND OWNER.	PREPARED FOR: LAKESIDE CONCRETE CU 590 COUNTY ROAD,	TTING & ABATEMENT PROFESS SUITE 2, WESTBROOK, ME (SIONALS 04092	
GRAPHIC SCALE ⁰ ⁵⁰ ¹⁰⁰ ²⁰⁰	CURTIS	CIVIL ENGINEERS • F	SITELINE 119 PURINTON ROAD, SUITE BRUNSWICK, MAINE 0401 207.725.1200 PLANNERS • LAND SURVEYO	A 1 PRS	
(IN FEET) 1 inch = 100 ft.	PR 9779	FIELD WK: MC & CR DRN BY: NCR	SCALE: 1" = 100' SHEET: JOB #: 4306 ••••••••••••••••••••••••••••••••••••		
ISSUED FOR: ERMITTING REVIEW	06-03-21	CH'D BY: CYN DATE: 03/08/21	MAP/LOT: R01/11-3 FILE: 4306-SITE	0	
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RIP-RAP STONE D50 = 6" DEPTH = 15" EXISTING GROUND GEOTEXTILE FABRIC (MIRAFI 500X) 4" SAND LAYER 6" x 6" PRESSURE-TREATED BATTER BOARDS, NAILED TOGETHER W/GALVANIZED SPIKES, TO INVERT OF SPILL-WAY. MIN DEPTH: 1.0' BELOW BOTTOM OF RIP-RAP	

06–03–21 DATE: 03/08/21

FILE: 4306-COV-DET

EROSION AND SEDIMENTATION NOTES: 1. CONTRACTOR SHALL REFER TO THE FOLLOWING REFERENCES FOR THE DESIGN AND INSTALLATION OF TEMPORARY AND PERMANENT EROSION AND SEDIMENTATION CONTROL PRACTICES: • 2016 REVISION TO THE 2003 MAINE EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES MANUAL FOR DESIGNERS AND ENGINEERS	 D. WHERE TEMPORARY SEEDING IS RETHE PREVIOUSLY NOTED SEEDING E. FERTILIZING, SEEDING AND MULCH F. ALTERNATIVE HAY MULCH SHALL MACHINERY ALONE WILL NOT SUFF
• 2014 REVISION TO THE 2003 MAINE EROSION AND SEDIMENT CONTROL FIELD GUIDE FOR CONTRACTORS GENERAL EROSION AND SEDIMENTATION CONTROL PRACTICES:	5. FOLLOWING FINAL SEEDING, THE SIT RESEEDING WILL BE CARRIED OUT BY TI EXISTING CATCH IS INADEQUATE.
EROSION/SEDIMENT CONTROL DEVICES: THE FOLLOWING EROSION SEDIMENTATION CONTROL DEVICES ARE PROPOSED FOR CONSTRUCTION ON THIS PROJECT. INSTALL THESE DEVICES AS INDICATED ON THE PLANS.	MONITORING SCHEDULE: THE CONTRACTOR IS RESPONSIBLE FOR
1. SEDIMENT BARRIER: PRIOR TO THE START OF CONSTRUCTION, SILT SOXX OR APPROVED EQUAL WILL BE INSTALLED ALONG THE DOWN GRADING EDGES OF DISTURBED AREAS TO TRAP RUNOFF BORNE SEDIMENTS UNTIL THE SITE IS STABILIZED. THE STANDARD FOR STABILIZED IS 90% COVERAGE OF SEEDED AREAS. IN AREAS WHERE STORMWATER DISCHARGES THE SEDIMENT BARRIER WILL BE REINFORCED WITH HAY BALES TO HELP MAINTAIN THE INTEGRITY OF THE	OF THE EROSION AND SEDIMENTATION OF MEASURES WILL BE APPLIED AS NEEDED INSPECTION WILL BE MADE OF ALL ERO 1. HAY BALE BARRIERS, SEDIMENT BAR
SEDIMENT BARRIER AND TO PROVIDE ADDITIONAL TREATMENT. 2. HAY BALES: HAY BALES TO BE PLACED IN LOW FLOW DRAINAGE SWALES AND PATHS TO TRAP SEDIMENTS AND REDUCE RUNOFF VELOCITIES. DO NOT PLACE HAY BALES IN FLOWING WATER OR STREAMS.	OR IMMEDIATELY FOLLOWING ANY SIGNIF WHEN IT REACHES A DEPTH OF 6" AND BARRIERS PROVE TO BE INEFFECTIVE, T
3. RIPRAP: PROVIDE RIPRAP IN AREAS WHERE CULVERTS DISCHARGE OR AS SHOWN ON THE PLANS.	2. VISUALLY INSPECT RIPRAP ONCE A SEDIMENT TRAPPED BEHIND THESE DEVI
4. LOAM, SEED, & MULCH: ALL DISTURBED AREAS, WHICH ARE NOT OTHERWISE TREATED, SHALL RECEIVE PERMANENT SEEDING AND MULCH TO STABILIZE THE DISTURBED AREAS. THE DISTURBED AREAS WILL BE REVEGETATED WITHIN 5 DAYS OF FINAL GRADING. SEEDING REQUIREMENTS ARE PROVIDED AT THE END OF THIS SPECIFICATION.	3. REVEGETATION OF DISTURBED AREA AREA MIX" AND INSPECTED ON A WEEK
5. STRAW AND HAY MULCH: USED TO COVER DENUDED AREAS UNTIL PERMANENT SEED OR EROSION CONTROL MEASURES ARE IN PLACE. MULCH BY ITSELF CAN BE USED ON SLOPES LESS THAN 15% IN SUMMER AND 8% IN WINTER. JUTE MESH IS TO BE USED OVER MULCH ONLY.	EXPOSED AREAS WILL BE RESEEDED AS RIPRAP FOR SLOPES IN EXCESS OF 3:1
6. IN LIEU OF MULCH, USE EROSION CONTROL BLANKET (EQUAL TO NORTH AMERICAN GREEN SC150) TO STABILIZE AREAS OF CONCENTRATED FLOW AND DRAINAGE WAYS.	FROM THE MAINE DEPARTMENT OF ENVI
7. STABILIZED CONSTRUCTION ENTRANCE: PRIOR TO THE START OF CONSTRUCTION, A STABILIZED CONSTRUCTION ENTRANCE WILL BE INSTALLED AND UTILIZED FOR CONTRACTOR ACCESS. TRACKED MUD OR SEDIMENT SHALL BE REMOVED PRIOR TO THE NEXT STORM EVENT.	1. SPILL PREVENTION. CONTROLS MUST STORED ON SITE TO ENTER STORMWATE TO STORMWATER. THE SITE CONTRACTO CONTAINMENT, AND RESPONSE PLANNIN
TEMPORARY EROSION/SEDIMENTATION CONTROL MEASURES: PROVIDE THE FOLLOWING TEMPORARY EROSION/SEDIMENTATION CONTROL MEASURES PROIR TO THE START OF CONSTRUCTION OF THE DEVELOPMENT:	NOTE: ANY SPILL OR RELEASE OF TOX SPILLS, CALL 1-800-482-0777 WHICH CALL 1-800-452-4664 WHICH IS AVAII
1. SEDIMENT BARRIER ALONG THE DOWNGRADIENT SIDE OF THE PARKING AREAS AND OF ALL FILL SECTIONS. THE SEDIMENT BARRIER SHALL BE INSTALLED PRIOR TO THE START OF THE CONSTRUCTION AND WILL REMAIN IN PLACE UNTIL THE SITE IS 90% REVEGETATED.	AT : HTTP://WWW.MAINE.GOV/DEP/SPIL 2. GROUNDWATER PROTECTION. DURING WITH THE POTENTIAL TO CONTAMINATE
2. HAY BALES PLACED AT KEY LOCATIONS TO SUPPLEMENT THE SEDIMENT BARRIER.	TO AN INFILTRATION AREA. AN "INFILTR SOILS, TOPOGRAPHY AND OTHER RELEV BERMS, SUMPS, AND OTHER FORMS OF
 A. SOIL STOCKPILE SIDE SLOPES SHALL NOT EXCEED 2:1. B. AVOID PLACING TEMPORARY STOCKPILES IN AREAS WITH SLOPES OVER 10 PERCENT, OR NEAR DRAINAGE SWALES. C. STABILIZE STOCKPILES WITHIN 7 DAYS BY TEMPORARILY SEEDING WITH A HYDROSEED METHOD CONTAINING AN EMULSIFIED MULCH TACKIFIER OR BY COVERING THE STOCKPILE WITH MULCH. D. SURROUND STOCKPILE SOIL WITH SEDIMENT BARRIER AT BASE OF PILE. 	USED TO ISOLATE PORTIONS OF THE SI PROJECT PROPOSING INFILTRATION OF S DISCHARGE OF STORMWATER TO THE IN ORDER TO PREVENT THE ACCUMULATION DESTABILIZATION.
E. STORMWATER SHOULD BE PREVENTED FROM RUNNING ONTO STOCKPILES. 4. ALL DENUDED AREAS WHICH HAVE BEEN ROUGH GRADED AND ARE NOT LOCATED WITHIN THE BUILDING PAD, OR	NOTE: LACK OF APPROPRIATE POLLUTA THE GROUNDWATER QUALITY STANDARD
PARKING AND DRIVEWAY SUBBASE AREA SHALL RECEIVE MULCH WITHIN 7 DAYS AFTER CESSATION THE CONSTRUCTION ACTIVITIES. STABILIZE ANY EXPOSED SOIL WITH MULCH, OR OTHER NON—ERODIBLE COVER. IN THE EVENT THE CONTRACTOR COMPLETES FINAL GRADING AND INSTALLATION OF LOAM AND SOD WITHIN THE TIME PERIODS PRESENTED ABOVE, INSTALLATION OF MULCH AND NETTING, WHERE APPLICABLE, IS NOT REQUIRED.	3. FUGITIVE SEDIMENT AND DUST. ACTIO EROSION OF SOILS OR FUGITIVE DUST E CONTROL, BUT OTHER WATER ADDITIVES SHALL BE INSTALLED AT THE END OF T
5. IF WORK IS CONDUCTED BETWEEN OCTOBER 15 AND APRIL 15, ALL DENUDED AREAS ARE TO BE COVERED WITH HAY MULCH, APPLIED AT TWICE THE NORMAL APPLICATION RATE, AND ANCHORED WITH FABRIC NETTING. THE PERIOD BETWEEN FINAL GRADING AND MULCHING SHALL BE REDUCED TO A 7 DAY MAXIMUM.	SEDIMENT. IF OFF-SITE TRACKING OCCU WEEK AND PRIOR TO SIGNIFICANT STORI PROBLEMS, SHOULD WET DOWN UNPAVE ADDITIVE TO SUPPRESS FUGITIVE SEDIM
6. TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED ONCE THE SITE HAS BEEN STABILIZED OR IN AREAS WHERE PERMANENT EROSION CONTROL MEASURES HAVE BEEN INSTALLED.	4. DEBRIS AND OTHER MATERIALS. MINI MATERIALS, TRASH, FERTILIZERS, PESTIC PRECIDITATION AND STORMWATER BUIND
7. WHENEVER PRACTICABLE, NO DISTURBANCE ACTIVITIES SHOULD TAKE PLACE WITHIN 50 FEET OF ANY WETLAND. IF DISTURBANCE ACTIVITIES TAKE PLACE BETWEEN 30 FEET AND 50 FEET OF ANY WETLAND, AND STORMWATER DISCHARGES THROUGH THE DISTURBED AREAS TOWARD THE WETLAND, PERIMETER EROSION CONTROLS MUST BE DOUBLED. IF DISTURBANCE ACTIVITIES TAKE PLACE LESS THAN 30 FEET FROM ANY PROTECTED NATURAL RESOURCE, AND STORMWATER DISCHARGES THROUGH THE DISTURBED AREAS TOWARD THE PROTECTED NATURAL RESOURCE, PERIMETER EROSION CONTROLS MUST BE DOUBLED AND DISTURBED AREAS MUST BE TEMPORARILY OR PERMANENTLY STABILIZED WITHIN 7 DAYS.	5. EXCAVATION DE-WATERING. EXCAVAT COFFER DAMS, PONDS, AND OTHER ARE MOST CASES THE COLLECTED WATER IS COLLECTED WATER REMOVED FROM THE NATURAL WOODED BUFFERS OR REMOVE
8. AREAS WITHIN 75 FT OF A WETLAND WILL BE STABILIZED WITHIN 48 HOURS OF INITIAL DISTURBANCE OF THE SOIL OR PRIOR TO ANY STORM EVENT, WHICHEVER COMES FIRST.	OF SEDIMENT POSSIBLE, LIKE A COFFER AREAS OF THE SITE. EQUIVALENT MEAS
9. ALL AREAS WITHIN 75 FEET OF A WETLAND MUST BE PROTECTED WITH A DOUBLE ROW OF SEDIMENT BARRIERS DURING WINTER CONSTRUCTION (NOVEMBER 1 THROUGH APRIL 15).	FROM THE PONDED AREA, EITHER THRO DESIGNED TO COLLECT THE MAXIMUM A
10. TEMPORARY SEDIMENT BASINS MAY BE INSTALLED DOWNGRADIENT OF THE DISTURBED AREAS. THESE BASINS MUST BE DESIGNED TO PROVIDE STORAGE FOR EITHER THE CALCULATED RUNOFF FROM A 2-YEAR, 24-HOUR STORM OR PROVIDE FOR 3,600 CUBIC FEET OF CAPACITY PER ACRE DRAINING TO THE BASIN. OUTLET STRUCTURES MUST DISCHARGE WATER FROM THE SURFACE OF THE BASIN WHENEVER POSSIBLE. EROSION CONTROLS AND VELOCITY DISSIPATION DEVICES MUST BE USED IF THE DISCHARGING WATERS ARE LIKELY TO CREATE EROSION. ACCUMULATED SEDIMENT MUST BE REMOVED AS NEEDED FROM THE BASIN TO MAINTAIN AT LEAST ½ OF THE DESIGN CAPACITY OF THE BASIN.	 6. AUTHORIZED NON-STORMWATER DISC WHERE ALLOWED NON-STORMWATER DISC ENSURE THE IMPLEMENTATION OF APPR COMPONENT(S) OF THE DISCHARGE AUT
11. EXCAVATION AND EARTHWORK SHALL BE COMPLETED SUCH THAT NO MORE THAN 1 ACRE OF THE SITE IS WITHOUT STABILIZATION AT ANY ONE TIME. AT ANY TIME, THE DENUDED AREA WILL NOT EXCEED THAT WHICH CAN BE MULCHED IN ONE DAY	 (a) DISCHARGES FROM FIREFIGHTING A (b) FIRE HYDRANT FLUSHINGS (c) VEHICLE WASHWATER IF DETERGEN
PERMANENT EROSION CONTROL MEASURES:	 (c) VEHICLE WASHWATER IF DETERGEN UNDERCARRIAGE AND TRANSMISSIO (d) DUST CONTROL RUNOFF IN ACCOR (e) ROUTINE EXTERNAL BUILDING WAS
1. ALL AREAS DISTURBED DURING CONSTRUCTION, BUT NOT SUBJECT TO OTHER RESTORATION (PAVING, RIPRAP, ETC.), WILL BE LOAMED, LIMED, FERTILIZED AND SEEDED. NATIVE TOPSOIL SHALL BE STOCKPILED AND REUSED FOR FINAL RESTORATION	 DETERGENTS; (f) PAVEMENT WASHWATER (WHERE S ALL SPILLED MATERIAL HAD BEEN (a) UNCONTAMINATED AIR CONDITIONING
2. SLOPES GREATER THAN 2:1 WILL RECEIVE RIPRAP. (NONE ANTICIPATED)	 (h) UNCONTAMINATED GROUNDWATER (i) FOUNDATION OR FOOTER DRAIN-W
POST-CONSTRUCTION REVEGETATION: THE FOLLOWING GENERAL PRACTICES WILL BE USED TO PREVENT EROSION AS SOON AS AN AREA IS READY TO UNDERGO FINAL GRADING.	 (j) UNCONTAMINATED EXCAVATION DE (k) POTABLE WATER SOURCES INCLUD (I) LANDSCAPE IRRIGATION.
1. A MINIMUM OF 6" OF LOAM WILL BE SPREAD OVER DISTURBED AREAS AND GRADED TO A UNIFORM DEPTH AND NATURAL APPEARANCE, OR STONE WILL BE PLACED ON SLOPES TO STABILIZE SURFACES.	7. UNAUTHORIZED NON-STORMWATER D AUTHORIZE A DISCHARGE THAT IS MIXED COMPLIANCE WITH APPENDIX C (6). SPE
2. IF FINAL GRADING IS REACHED DURING THE NORMAL GROWING SEASON (4/15 TO 9/15), PERMANENT SEEDING WILL BE DONE AS SPECIFIED BELOW. PRIOR TO SEEDING, LIMESTONE SHALL BE APPLIED AT A RATE OF 138 LBS/1000 SQ. FT. AND 10: 20: 20 FERTILIZER AT A RATE OF 18.4 LBS/1000 SQ.FT WILL BE APPLIED. BROADCAST SEEDING AT THE FOLLOWING RATES:	 (a) WASTEWATER FROM THE WASHOUT COMPOUNDS OR OTHER CONSTRUCT (b) FUELS, OILS OR OTHER POLLUTAN
LAWNS SHALL BE: ALLEN, STERLING & LATHROP 'TUFFTURF', 70% DIAMOND TALL FESCUE, 20% PLEASURE OLUS PERENNIAL RYEGRASS, 10% BARON KENTUCKY BLUEGRASS. SEEDING RATE SHALL BE 7–LBS./1,000 SQ. FT.	 (c) SOAPS, SOLVENTS, OR DETERGENT (d) TOXIC OR HAZARDOUS SUBSTANCE
SWALES SHALL BE: WILDFLOWER MEADOW: (SEED) FESTUCA OVINA SHEEP FESCUE; SOW AT A RATE OF 12 OZ. PER 1,000 SQFT. TRIFOLIUM REPENS WHITE CLOVER; SOW AT A RATE OF ½ OZ.PER 1,000 SQFT. (FLOWERS) ACHILLEA MILLEFOLIUM YARROW, AQUILEGEA CANADENSIS COLUMBINE, ASCLEPIAS TUBEROSE BUTTERFLY MILKWEED, ASTER NOVAE—ANGLIAE NEW—ENGLAND ASTER, BAPTISIA AUSTRALIS WILD INDIGO, BOLTONIA ASTEROIDS FALSE ASTER, CHRYSANTHEMUM LEUCANTHEMUM OXEYE DAISY, DIGITALIS PURPUREA FOXGLOVE, ECHINACEA PURPUREA PURPLE CONEFLOWER, LUPINUS PERENNIS LUPINE, MONARDA FISTULOSA BERGAMOT, PAPAVER ORIENTALE ORIENTAL POPY, RUDBECKIA HIRTA BLACK—EYED SUSAN, SALVIA OFFICINALIS SAGE; SOW AT A RATE OF 1/3 OZ. EACH PER 1,000 SQFT. OR 4 OZ. PER 1,000 SQFT. IN	CONSTRUCTION PHASE: THE FOLLOWING GENERAL PRACTICES WI 1. INSTALL STABILIZED CONSTRUCTION 2. ONLY THOSE AREAS NECESSARY FO
3. AN AREA SHALL BE MULCHED IMMEDIATELY AFTER IS HAS BEEN SEEDED. MULCHING SHALL CONSIST OF HAY MULCH, HYDRO-MULCH, JUTE NET OVER MULCH, PRE-MANUFACTURED EROSION MATS OR ANY SUITABLE SUBSTITUTE DEEMED	CONTOUR, AT OR JUST BELOW THE LI WAY TO PROTECT IT FROM CONSTRUCTION
ACCEPTABLE BY THE DESIGNER. A. HAY MULCH SHALL BE APPLIED AT THE RATE OF 2 TONS PER ACRE. HAY MULCH SHALL BE SECURED BY EITHER: (NOTE: SOIL SHALL NOT BE VISIBLE)	 CLEAR AND GRUB WORK SITE AS N STORMWATER MANAGEMENT SYSTEM
 I. BLING DRIVEN OVER BY IRACKED CONSTRUCTION EQUIPMENT ON GRADES OF 5% AND LESS. II. BLANKETED BY TACKED PHOTODEGRADABLE/BIODEGRADABLE NETTING, OR WITH SPRAY, ON GRADES GREATER THAN 5%. III. SEE NOTE 6, GENERAL NOTES, AND NOTE 8, WINTER CONSTRUCTION. B. HYDRO-MULCH SHALL CONSIST OF A MIXTURE OF EITHER ASPHALT, WOOD FIBER OR PAPER FIBER AND WATER SPRAYED OVER A SEEDED ABEA. HYDRO AND CH SHALL NOT DE HOED DETWEEN A 45. 	10 THESE SYSTEMS. NO STORMWATER S STABILIZED. TEMPORARY INFILTRATION E FROM THE SITE DURING CONSTRUCTION 6. DISTURBED AREAS WILL BE DEDUCE
SPRATED OVER A SEEDED AREA. HTDRO-MULCH SHALL NOT BE USED BETWEEN 9/15 AND 4/15. 4. CONSTRUCTION SHALL BE PLANNED TO ELIMINATE THE NEED FOR SEEDING BETWEEN SEPTEMBER 15 AND APRIL 15. SHOULD SEEDING BE NECESSARY BETWEEN SEPTEMBER 15 AND APRIL 15 THE FOLLOWING PROCEDURE SHALL BE FOLLOWED.	WITHIN 30 DAYS OF THE INITIAL DISTU WILL BE SAVED FOR LATER USE WHERE TO AN APPROVED LOCATION.
 A. ONLY UNFROZEN LOAM SHALL BE USED. B. LOAMING, SEEDING AND MULCHING WILL NOT BE DONE OVER SNOW OR ICE COVER. IF SNOW EXISTS, IT MUST BE REMOVED PRIOR TO PLACEMENT OF SEED. C. WHERE PERMANENT SEEDING IS NECESSARY, ANNUAL WINTER RYE (1.2 LBS/1000 SQ.FT) SHALL BE ADDED TO THE 	7. AT A MINIMUM, THE EROSION CON FOLLOWING ANY SIGNIFICANT RAINFALL WHEN IT REACHES A DEPTH OF 6 INCI INSTALLED AS INDICATED ON THE DRAW

PREVIOUSLY NOTED AREAS.

RATE HING SHALL BE APPLIED TO LOAM THE DAY THE LOAM IS SPREAD BY MACHINERY. . BE SECURED WITH PHOTODEGRADABLE/BIODEGRADABLE NETTING. TRACKING BY

TE WILL BE INSPECTED EVERY 30 DAYS UNTIL 85% COVER HAS BEEN ESTABLISHED. HE CONTRACTOR WITHIN 10 DAYS OF NOTIFICATION BY THE ENGINEER THAT THE

INSTALLING, MONITORING, MAINTAINING, REPAIRING, REPLACING AND REMOVING ALL CONTROLS OR APPOINTING A QUALIFIED SUBCONTRACTOR TO DO SO. MAINTENANCE D DURING THE ENTIRE CONSTRUCTION CYCLE. AFTER EACH RAINFALL, A VISUAL DSION AND SEDIMENTATION CONTROLS AS FOLLOWS:

RRIER, AND STONE CHECK DAMS SHALL BE INSPECTED AND REPAIRED ONCE A WEEK FICANT RAINFALL. SEDIMENT TRAPPED BEHIND THESE BARRIERS SHALL BE EXCAVATED REDISTRIBUTED TO AREAS UNDERGOING FINAL GRADING. SHOULD THE HAY BALE THE CONTRACTOR SHALL INSTALL SEDIMENT BARRIER BEHIND THE HAY BALES.

WEEK OR AFTER EACH SIGNIFICANT RAINFALL AND REPAIR AS NEEDED. REMOVE VICES ONCE IT ATTAINS A DEPTH EQUAL TO 1/2 THE HEIGHT OF THE DAM OR RISER. ITE OR TO AN AREA UNDERGOING FINAL GRADING.

AS WITHIN 25' OF DRAINAGE-COURSE/STREAM WILL BE SEEDED WITH THE "MEADOW KLY BASIS OR AFTER EACH SIGNIFICANT RAINFALL AND RESEEDED AS NEEDED. NEEDED UNTIL THE AREA HAS OBTAINED 100% GROWTH RATE. PROVIDE PERMANENT AND WITHIN 25' OF DRAINAGE COURSE.

/IRONMENTAL PROTECTION, CHAPTER 500, APPENDIX C.

BE USED TO PREVENT POLLUTANTS FROM CONSTRUCTION AND WASTE MATERIALS ER, WHICH INCLUDES STORAGE PRACTICES TO MINIMIZE EXPOSURE OF THE MATERIALS R MUST DEVELOP, AND IMPLEMENT AS NECESSARY, APPROPRIATE SPILL PREVENTION, IG MEASURES.

(IC OR HAZARDOUS SUBSTANCES MUST BE REPORTED TO THE DEPARTMENT. FOR OIL IS AVAILABLE 24 HOURS A DAY. FOR SPILLS OF TOXIC OR HAZARDOUS MATERIAL. LABLE 24 HOURS A DAY. FOR MORE INFORMATION, VISIT THE DEPARTMENT'S WEBSITE ILLS/EMERGSPILLRESP/

CONSTRUCTION. LIQUID PETROLEUM PRODUCTS AND OTHER HAZARDOUS MATERIALS GROUNDWATER MAY NOT BE STORED OR HANDLED IN AREAS OF THE SITE DRAINING RATION AREA" IS ANY AREA OF THE SITE THAT BY DESIGN OR AS A RESULT OF VANT FACTORS ACCUMULATES RUNOFF THAT INFILTRATES INTO THE SOIL. DIKES, SECONDARY CONTAINMENT THAT PREVENT DISCHARGE TO GROUNDWATER MAY BE TTE FOR THE PURPOSES OF STORAGE AND HANDLING OF THESE MATERIALS. ANY STORMWATER MUST PROVIDE ADEQUATE PRE-TREATMENT OF STORMWATER PRIOR TO IFILTRATION AREA. OR PROVIDE FOR TREATMENT WITHIN THE INFILTRATION AREA, IN IN OF FINES, REDUCTION IN INFILTRATION RATE, AND CONSEQUENT FLOODING AND

ANT REMOVAL BEST MANAGEMENT PRACTICES (BMPS) MAY RESULT IN VIOLATIONS OF) ESTABLISHED BY 38 M.R.S.A. 465-C(1).

IONS MUST BE TAKEN TO ENSURE THAT ACTIVITIES DO NOT RESULT IN NOTICEABLE EMISSIONS DURING OR AFTER CONSTRUCTION. OIL MAY NOT BE USED FOR DUST MAY BE CONSIDERED AS NEEDED. A STABILIZED CONSTRUCTION ENTRANCE (SCE) THE EXIST PAVED ACCESS TO THE SITE TO MINIMIZE TRACKING OF MUD AND JRS, PUBLIC ROADS SHOULD BE SWEPT IMMEDIATELY AND NO LESS THAN ONCE A RM EVENTS. OPERATIONS DURING DRY MONTHS, THAT EXPERIENCE FUGITIVE DUST ED ACCESS ROADS ONCE A WEEK OR MORE FREQUENTLY AS NEEDED WITH A WATER IENT AND DUST.

IMIZE THE EXPOSURE OF CONSTRUCTION DEBRIS, BUILDING AND LANDSCAPING CIDES, HERBICIDES, DETERGENTS, SANITARY WASTE AND OTHER MATERIALS TO OFF. THESE MATERIALS MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE.

TION DE-WATERING IS THE REMOVAL OF WATER FROM TRENCHES, FOUNDATIONS, EAS WITHIN THE CONSTRUCTION AREA THAT RETAIN WATER AFTER EXCAVATION. IN HEAVILY SILTED AND HINDERS CORRECT AND SAFE CONSTRUCTION PRACTICES. THE PONDED AREA, EITHER THROUGH GRAVITY OR PUMPING, MUST BE SPREAD THROUGH ED TO AREAS THAT ARE SPECIFICALLY DESIGNED TO COLLECT THE MAXIMUM AMOUNT RDAM SEDIMENTATION BASIN. AVOID ALLOWING THE WATER TO FLOW OVER DISTURBED SURES MAY BE TAKEN IF APPROVED BY THE DEPARTMENT.

ED FOR THIS PROJECT. SHOULD IT BE NECESSARY, THE COLLECTED WATER REMOVED OUGH GRAVITY OR PUMPING MUST BE REMOVED TO AREAS THAT ARE SPECIFICALLY AMOUNT OF SEDIMENT POSSIBLE, LIKE A SEDIMENT TRAP (SEE DETAIL THIS SHEET). DEWATERING DISCHARGE PLAN SHALL BE SUBMITTED TO THE OWNER'S

CHARGES. IDENTIFY AND PREVENT CONTAMINATION BY NON-STORMWATER DISCHARGES. SCHARGES EXIST. THEY MUST BE IDENTIFIED AND STEPS SHOULD BE TAKEN TO ROPRIATE POLLUTION PREVENTION MEASURES FOR THE NON-STORMWATER JTHORIZED NON-STORMWATER DISCHARGES ARE:

ACTIVITY;

INTS ARE NOT USED AND WASHING IS LIMITED TO THE EXTERIOR OF VEHICLES (ENGINE, ION WASHING IS PROHIBITED): RDANCE WITH PERMIT CONDITIONS AND CHAPTER 500 APPENDIX (C)(3):

SHDOWN, NOT INCLUDING SURFACE PAINT REMOVAL, THAT DOES NOT INVOLVE

SPILLS/LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE NOT OCCURRED. UNLESS REMOVED) IF DETERGENTS ARE NOT USED;

ING OR COMPRESSOR CONDENSATE; OR SPRING WATER;

WATER WHERE FLOWS ARE NOT CONTAMINATED; EWATERING (SEE REQUIREMENTS IN APPENDIX C(5));

DING WATERLINE FLUSHINGS; AND

DISCHARGES. THE DEPARTMENT'S APPROVAL UNDER CHAPTER 500 DOES NOT ED WITH A SOURCE OF NON STORMWATER, OTHER THAN THOSE DISCHARGES IN PECIFICALLY, THE DEPARTMENT'S APPROVAL DOES NOT AUTHORIZE DISCHARGES OF THE

OR CLEANOUT OF CONCRETE, STUCCO, PAINT, FORM RELEASE OILS, CURING CTION MATERIALS; NTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE; ITS USED IN VEHICLE AND EQUIPMENT WASHING; AND CES FROM A SPILL OR OTHER RELEASE.

WILL BE USED TO PREVENT EROSION DURING CONSTRUCTION OF THIS PROJECT. I ENTRANCE AND MAINTAIN UNTIL SITE IS PAVED.

OR CONSTRUCTION WILL BE DISTURBED.

TRUCTION, SEDIMENT BARRIER WILL BE INSTALLED ACROSS THE SLOPE(S), ON THE IMITS OF CLEARING OR GRUBBING, AND/OR JUST ABOVE ANY ADJACENT TRAVELLED ION-RELATED EROSION.

NEEDED TO EXECUTE PLANS USING CAUTION NOT TO OVER EXPOSE THE SITE.

WILL BE INSTALLED PRIOR TO CONSTRUCTION OF SITE ELEMENTS THAT DISCHARGE SHALL BE DIRECTED TO THE BIORETENTION FILTERS UNTIL THE SITE IS COMPLETELY BASINS SHALL BE INSTALLED TO COLLECT ANY INFILTRATE ANY STORMWATER RUNOFF AND PRIOR TO STABILIZATION.

ANENTLY STABILIZED WITHIN 15 DAYS OF FINAL GRADING, OR TEMPORARILY STABILIZED JRBANCES OF SOILS. DISTURBED AREAS WILL BE STABILIZED BEFORE STORMS. LOAM POSSIBLE. EXCESS SOIL MATERIALS WILL BE USED AS FILL OR REMOVED FROM SITE

NTROL MEASURES SHALL BE REVIEWED AND REPAIRED ONCE A WEEK OR IMMEDIATELY OR SNOWMELT. SEDIMENT TRAPPED BEHIND THESE BARRIERS SHALL BE EXCAVATED CHES AND BE DISCARDED ON THE SITE. ALL EROSION CONTROL MEASURES SHALL BE

EQUIRED, ANNUAL WINTER RYE (2.6 LBS/1000 SQ. FT.) SHALL BE SOWN INSTEAD OF 8. LOAM, LIME, FERTILIZE, SEED, AND MULCH LANDSCAPED AND OTHER DISTURBED AREAS.

9. ONCE THE SITE IS STABILIZED AND A 90% CATCH OF VEGETATION HAS BEEN OBTAINED, REMOVE ALL TEMPORARY EROSION CONTROL MEASURES.

10. TOUCH UP LOAM AND SEED.

NOTE: ALL DENUDED AREAS NOT SUBJECT TO FINAL PAVING, RIPRAP OR GRAVEL SHALL BE REVEGETATED. **EROSION CONTROL DURING WINTER CONSTRUCTION:** 1. WINTER CONSTRUCTION PERIOD: NOVEMBER 1 THROUGH APRIL 15.

2. WINTER EXCAVATION AND EARTHWORK SHALL BE COMPLETED SUCH THAT NO MORE THAN ONE (1) ACRE OF THE SITE IS WITHOUT STABILIZATION AT ANY ONE TIME.

3. EXPOSED AREA SHALL BE LIMITED TO THOSE AREAS TO BE MULCHED IN ONE DAY. AT THE END OF EACH WORK WEEK NO AREAS MAY BE LEFT UNSTABILIZED OVER THE WEEKEND.

4. CONTINUATION OF EARTHWORK OPERATIONS ON ADDITIONAL AREAS SHALL NOT BEGIN UNTIL THE EXPOSED SOIL SURFACE ON THE AREA BEING WORKED HAS BEEN STABILIZED, SUCH THAT NO LARGER AREA OF THE SITE IS WITHOUT EROSION CONTROL PROTECTION AS LISTED IN ITEM 2 ABOVE.

5. AN AREA SHALL BE CONSIDERED TO HAVE BEEN STABILIZED WHEN EXPOSED SURFACES HAVE BEEN EITHER MULCHED WITH STRAW OR HAY AT A RATE OF 150 LB. PER 1000 S.F. (WITH OR WITHOUT SEEDING) OR DORMANT SEEDED, MULCHED AND ANCHORED SUCH THAT SOIL SURFACE IS NOT VISIBLE THROUGH THE MULCH. NOTE: AN AREA IS ALSO CONSIDERED STABLE IF SODDED, COVERED WITH GRAVEL (PARKING LOTS) OR STRUCTURAL SAND.

6. BETWEEN THE DATES OF OCTOBER 15 AND APRIL 1, LOAM OR SEED WILL NOT BE REQUIRED. DURING PERIODS OF ABOVE FREEZING TEMPERATURES THE SLOPES SHALL BE FINE GRADED AND EITHER PROTECTED WITH MULCH OR TEMPORARILY SEEDED AND MULCHED UNTIL SUCH TIME AS THE FINAL TREATMENT CAN BE APPLIED. IF THE DATE IS AFTER NOVEMBER 1 AND IF THE EXPOSED AREA HAS BEEN LOAMED, FINAL GRADED WITH A UNIFORM SURFACE, THEN THE AREA MAY BE DORMANT SEEDED AT A RATE OF 3 TIMES HIGHER THAN SPECIFIED FOR PERMANENT SEED AND THEN MULCHED. IF CONSTRUCTION CONTINUES DURING FREEZING WEATHER, ALL EXPOSED AREAS SHALL BE CONTINUOUSLY GRADED BEFORE FREEZING AND THE SURFACE TEMPORARILY PROTECTED FROM EROSION BY THE APPLICATION OF MULCH. SLOPES SHALL NOT BE LEFT UNEXPOSED OVER THE WINTER OR ANY OTHER EXTENDED TIME OF WORK SUSPENSION UNLESS TREATED IN THE ABOVE MANNER. UNTIL SUCH TIME AS WEATHER CONDITIONS ALLOW. DITCHES TO BE FINISHED WITH THE PERMANENT SURFACE TREATMENT, EROSION SHALL BE CONTROLLED BY THE INSTALLATION OF BALES OF HAY, SEDIMENT BARRIER OR STONE CHECK DAMS IN ACCORDANCE WITH THE STANDARD DETAILS SHOWN ON THE DESIGN DRAWINGS. NOTE: DORMANT SEEDING SHOULD NOT BE ATTEMPTED UNLESS SOIL TEMPERATURE REMAINS BELOW 50 DEGREES AND DAY TIME TEMPERATURES REMAIN IN THE 30'S.

7. MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL DRAINAGE WAYS, SLOPES GREATER THAN 3% FOR SLOPES EXPOSED TO DIRECT WINDS AND FOR ALL OTHER SLOPES GREATER THAN 8%. VEGETATED DRAINAGE SWALES SHALL BE LINED WITH STRAW-COCONUT EROSION CONTROL BLANKET (NORTH AMERICAN GREEN SC150 OR APPROVED EQUAL).

8. BETWEEN THE DATES OF OCTOBER 15 TO NOVEMBER 1, WINTER RYE IS RECOMMENDED FOR STABILIZATION. AFTER NOVEMBER 1, WINTER RYE IS NOT EFFECTIVE. AROUND NOVEMBER 15 OR LATER, ONCE TEMPERATURES OF THE AIR AND SOIL PERMIT, DORMANT SEEDING IS EFFECTIVE.

9. IN THE EVENT OF SNOWFALL (FRESH OR CUMULATIVE) GREATER THAN 1 INCH DURING WINTER CONSTRUCTION PERIOD ALL SNOW SHALL BE REMOVED FROM THE AREAS OF SEEDING AND MULCHING PRIOR TO PLACEMENT. 10. ALL AREAS WITHIN 75 FEET OF A PROTECTED NATURAL RESOURCE MUST BE PROTECTED WITH A DOUBLE ROW OF SEDIMENT BARRIERS.

SITE INSPECTION AND MAINTENANCE:

WEEKLY INSPECTIONS, AS WELL AS ROUTINE INSPECTIONS FOLLOWING EACH RAINFALL, SNOWSTORM, OR THAWING, SHALL BE CONDUCTED BY THE GENERAL CONTRACTOR OF ALL TEMPORARY AND PERMANENT EROSION CONTROL DEVICES UNTIL FINAL ACCEPTANCE OF THE PROJECT (90% GRASS CATCH). RAINFALL OF 0.5 INCHES OR MORE OF RAIN IN 24 CONSECUTIVE HOURS SHALL TRIGGER AN INSPECTION. SNOWFALL OF 2 INCHES OR MORE SHALL TRIGGER AN INSPECTION. CORRECTIVE ACTION SHALL BE STARTED BY THE END OF THE NEXT WORK DAY AND COMPLETED WITHIN SEVEN (7) DAYS OR BEFORE THE NEXT STORM EVENT AS NOTED ABOVE. INSPECTIONS SHALL BE PERFORMED BY SOMEONE WITH KNOWLEDGE OF EROSION AND STORMWATER CONTROL INCLUDING THE STANDARDS AND CONDITIONS IN THE PERMIT ISSUED FOR THE PROJECT. THE SCOPE OF CONSTRUCTION INSPECTIONS INCLUDES DISTURBED AREAS AND IMPERVIOUS AREAS, MATERIAL STORAGE AREAS, AND VEHICLE ACCESS POINTS IN ADDITION TO ESC MEASURES. NECESSARY REPAIRS SHALL BE MADE TO CORRECT UNDERMINING OR DETERIORATION. FINAL ACCEPTANCE SHALL INCLUDE A SITE INSPECTION TO VERIFY THE STABILITY OF ALL DISTURBED AREAS AND SLOPES. UNTIL FINAL INSPECTION, ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL IMMEDIATELY BE CLEANED, AND REPAIRED BY THE GENERAL CONTRACTOR AS REQUIRED. DISPOSAL OF ALL TEMPORARY EROSION AND CONTROL DEVICES SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. RECORDS OF INSPECTIONS SHALL BE KEPT FOR THREE (3) YEARS

MAINTENANCE. IF BEST MANAGEMENT PRACTICES (BMPS) NEED TO BE REPAIRED, THE REPAIR WORK SHOULD BE INITIATED UPON DISCOVERY OF THE PROBLEM BUT NO LATER THAN THE END OF THE NEXT WORKDAY. IF ADDITIONAL BMPS OR SIGNIFICANT REPAIR OF BMPS ARE NECESSARY, IMPLEMENTATION MUST BE COMPLETED WITHIN 7 CALENDAR DAYS AND PRIOR TO ANY STORM EVENT (RAINFALL). ALL MEASURES MUST BE MAINTAINED IN EFFECTIVE OPERATING CONDITION UNTIL AREAS ARE PERMANENTLY STABILIZED.

DOCUMENTATION. KEEP A LOG (REPORT) SUMMARIZING THE INSPECTIONS AND ANY CORRECTIVE ACTION TAKEN. THE LOG MUST INCLUDE THE NAME(S) AND QUALIFICATIONS OF THE PERSON MAKING THE INSPECTIONS. THE DATE(S) OF THE INSPECTIONS. AND MAJOR CONTROLS, MATERIALS STORAGE AREAS, AND VEHICLES ACCESS POINTS TO THE PARCEL. MAJOR OBSERVATIONS MUST INCLUDE BMPS THAT NEED MAINTENANCE, BMPS THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE FOR A PARTICULAR LOCATION, AND LOCATION(S) WHERE ADDITIONAL BMPS ARE NEEDED. FOR EACH BMP REQUIRING MAINTENANCE, BMP NEEDING REPLACEMENT, AND LOCATION NEEDING ADDITIONAL BMPS, NOTE IN THE LOG THE CORRECTIVE ACTION TAKEN AND WHEN IT WAS TAKEN.

THE LOG MUST BE MADE ACCESSIBLE TO DEPARTMENT STAFF AND A COPY MUST BE PROVIDED UPON REQUEST. THE PERMITTEE SHALL RETAIN A COPY OF THE LOG FOR A PERIOD OF AT LEAST THREE YEARS FROM THE COMPLETION OF PERMANENT STABILIZATION.

IT IS RECOMMENDED THAT THE OWNER HIRE THE SERVICES OF THE DESIGN ENGINEER TO PROVIDE COMPLIANCE INSPECTIONS (DURING ACTIVE CONSTRUCTION) RELATIVE TO IMPLEMENTATION OF THE STORMWATER AND EROSION CONTROL PLANS. SUCH INSPECTIONS SHOULD BE LIMITED TO ONCE A WEEK OR AS NECESSARY AND BE REPORTABLE TO THE OWNER, TOWN AND DEP.

DURING WINTER CONSTRUCTION, THE EROSION CONTROL MEASURES SHALL BE INSPECTED AFTER EACH RAINFALL, SNOWSTORM, OR THAWING, AND A MINIMUM OF ONCE PER WEEK.

SHORT-TERM SEDIMENTATION MAINTENANCE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CLEAN OUT ALL SWALES AND STRUCTURES PRIOR TO TURNING PROJECT OVER.

3. LONG-TERM PROVISIONS FOR PERMANENT MAINTENANCE OF ALL EROSION AND SEDIMENTATION CONTROL DEVICES AFTER ACCEPTANCE OF THE PROJECT SHALL BE THE RESPONSIBILITY OF THE OWNER.

PROGRESS PRINT	2. 06-03-21 REVISED PER	TOWN PLANNER COMMENTS	CYN
REVIEW AND INFORMATION	1. 05-05-21 SUBMITTED TO	TOWN OF CUMBERLAND	CYN
PURPOSES ONLY. THIS			TL C
CHANGE AND IS NOT FOR	EROSION	CONTROL DETA	AILS
PRICING OR CONSTRUCTION.	A	ND NOTES	
PLAN IS NOT BINDING	PROJECT:		
UNLESS SIGNED BY BOTH	COMMERC	NAL/OFFICE BUILDINGS	5
CONTRACTOR AND CHILER.	U.S. ROUTE	1. CUMBERLAND. MA	INE
ISSUED FOR:		·, · · · · · · · · · · · · · · · · · ·	
PERMITTING LAKESIDE CONCRETE CUTTING & ABATEMENT PROFESSION			
	590 COUNTY ROAD.	SUITE 2. WESTBROOK	. ME 04092
	,		,
SNILLU.		SITELI	NFS
WE OF MAN			
		BRUNSWICK, MA	INE 04011
CURTIS		207.725.12	200
NEUFELD	CIVIL ENGINEERS •	PLANNERS • LAND SU	RVEYORS
9779	FIELD WK: MC & CR	SCALE: NTS	SHEET:
CENSED • A	DRN BY: NCR	JOB #: 4306	
	CH'D BY: CYN	MAP/LOT: R01/11-3	U 7
06-03-21	DATE: 03/08/21	FILE: 4306-COV-DET	

PLANT LIST			
BOTANICAL NAME	COMMON NAME	QTY	SIZE
ACER X FREEMANII 'CELZAM'	CELEBRATION MAPLE	24	2"CAL
AMELANCHIER CANADENSIS	SERVICEBERRY	47	5–6' HEIGHT
PICEA GLAUCA	WHITE SPRUCE	7	6–7' HEIGHT
RHODODENDRON PJM	PJM RHODODENDRON	14	30" HT
HEMEROCALLIS STELLA D'ORO	STELLA D'ORO DAYLILLY	16	1 GAL.

Symbol	Label	QTY	Catalog Number	Description	Lum. Lumens	LLF	Wattage
€	А	6	SGI-20-4K7-FT	SLING SERIES WALLPACK	2,309	0.9	20
Q	В	10	VP-L-80L-180-4K7-4W	LARGE VIPER	19,860	0.9	180
Q	С	3	VP-S-24L-39-4K7-5QM	SMALL VIPER	4,500	0.9	39

Statistics								
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min		
CTAT ZONE #1		0.4.6.	745-	0 4 5-	47.0.4	054		






	STORMWATER TREATMENT METHOD SIZING - GRASS UNDERDRAINED SOIL FILTER						
	(A)	(B)	(C)	(D)	(E)	(F)	(G)
SUBCATCHMENT	IMPERVIOUS AREA (S.F.)	LANDSCAPED AREA (S.F.)	TREATMENT VOLUME (C.F.)	STORAGE PROVIDED (C.F.)	FILTER AREA REQUIRED (S.F.)	FILTER AREA PROVIDED (S.F.)	TREATMENT METHOD
	(FROM PLAN)	(FROM PLAN)	[(A) X 1"] + [B X 0.4]"		[(A) X 5%] + [(B) X 2%]		
11S	58,513	24,769	5,702	10,491	3,421	3,431	GUSF

TREATMENT PERCENTAGE TABLE					
	IMPERVIOUS AREA (S.F.)	IMPERVIOUS (% OF TOTAL)	DEVELOPED AREA	DEVELOPED AREA (% OF TOTAL)	STORMWATER TREATMENT METHOD
TOTAL	60,609	100	95,753	100	
TREATED	58,513	96.5	76,931	80.3	GUSF
UNTREATED	2,096	3.5	18,822	19.7	NONE



		WATER	QUALITY PLAN	V
		PROJECT: COMMERCI U.S. ROUTE	AL/OFFICE BUILDINGS 1, CUMBERLAND, MA	S INE
		PREPARED FOR: LAKESIDE CONCRETE CU 590 COUNTY ROAD,	TTING & ABATEMENT P SUITE 2, WESTBROOK	ROFESSIONALS , ME 04092
GRAPHIC SCALE ⁰ ²⁵ ⁵⁰ ¹⁰⁰ ¹⁰⁰	CURTIS		SITELI 119 PURINTON ROJ BRUNSWICK, MA 207.725.12 PLANNERS • LAND SU	NES AD, SUITE A INE 04011 200 RVEYORS
(IN FEET $)1 inch = 50 ft$	9779 JU	FIELD WK: MC &CR	SCALE: 1" = 50'	SHEET:
1 mon – 00 1t.	/CENSED	DRN BY: NCR	JOB #: 4306	
ISSUED FOR:	Conta Tar	CH'D BY: CYN	MAP/LOT: R01/11-3	
MITTING REVIEW	05-05-21	DATE: 03/08/21	FILE: 4306-SITE	

1. 05-05-21 SUBMITTED TO TOWN OF CUMBERLAND

CYN





= IMPERVIOUS AREA TREATED

= DEVELOPED AREA TREATED

LEGEND:

GENERAL NOTES:

1. DRAWINGS ARE BASED ON BOUNDARY AND TOPOGRAPHIC SURVEY INFORMATION FROM MULTIPLE SOURCES BY SITELINES, PA.

2. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR THE ELEVATION OF THE EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION HAS NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVES AND IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR SHALL CALL THE APPROPRIATE UTILITY COMPANY AND DIG SAFE (1-800-DIG-SAFE) AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IN AREAS OF POTENTIAL CONFLICTS TEST PITS SHALL BE REQUIRED TO VERIFY EXISTING UTILITY LOCATION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.

3. RIM ELEVATIONS OF PROPOSED SANITARY SEWER MANHOLES AND ASSOCIATED STRUCTURES ARE APPROXIMATE. FINAL ELEVATIONS ARE TO BE SET FLUSH AND CONSISTENT WITH THE GRADING PLANS. ADJUST ALL OTHER RIM ELEVATIONS OF MANHOLES, WATER GATES, GAS GATES AND OTHER UTILITIES TO FINISH GRADE WITHIN LIMITS OF WORK.

4. THE LOCATION, SIZE, DEPTH, AND SPECIFICATIONS FOR CONSTRUCTION OF PROPOSED PRIVATE UTILITY SERVICES SHALL BE INSTALLED ACCORDING TO THE REQUIREMENTS PROVIDED BY, AND APPROVED BY THE RESPECTIVE UTILITY COMPANY (GAS, TELEPHONE, ELECTRIC, CABLE AND FIRE ALARM). FINAL DESIGN LOADS AND LOCATIONS TO BE COORDINATED WITH CONSTRUCTION MANAGER AND ARCHITECT.

5. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION, SIZE, INVERTS AND TYPES OF EXISTING PIPES AT ALL PROPOSED POINTS OF CONNECTION PRIOR TO ORDERING MATERIALS. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATIONS, ELEVATION, AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED IN WRITING TO THE CONSTRUCTION MANAGER REPRESENTATIVE FOR THE RESOLUTION OF THE CONFLICT.

6. THE CONTRACTOR SHALL VERIFY ALL CRITICAL DIMENSIONS AND GRADES BEFORE WORK BEGINS. CONTRACTOR SHALL CONFIRM LOCATION AND DEPTH ALL UTILITY LINE CROSSINGS WITH TEST PITS PRIOR TO BEGINNING WORK. CONFLICTS SHALL BE REPORTED IN WRITING TO CONSTRUCTION MANAGER FOR RESOLUTION OF THE CONFLICT.

7. ALL AREAS OUTSIDE THE LIMIT OF WORK THAT ARE DISTURBED SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE. ALL AREAS DISTURBED DURING CONSTRUCTION NOT COVERED WITH BUILDINGS, STRUCTURES, OR PAVEMENT SHALL RECEIVE 4 INCHES OF LOAM AND SEED.

8. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS AND SHALL BE RESPONSIBLE FOR PAYING ANY FEES FOR ANY POLE RELOCATION AND FOR THE ALTERATION OR ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE, CABLE, FIRE ALARM AND ANY OTHER PRIVATE UTILITIES BY THE UTILITY COMPANIES.

9. UPON AWARD OF CONTRACT, CONTRACTOR SHALL MAKE ALL NECESSARY CONSTRUCTION NOTIFICATIONS AND APPLY FOR AND OBTAIN ALL NECESSARY PERMITS, PAY ALL FEES AND POST ALL BONDS ASSOCIATED WITH THE WORK INDICATED ON THE DRAWINGS AND AS SPECIFIED.

10. ALL PROPERTY MONUMENTATION DISTURBED DURING CONSTRUCTION SHALL BE RESET TO THEIR ORIGINAL LOCATION BY A MAINE REGISTERED LICENSED PROFESSIONAL LAND SURVEYOR (PLS) AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL PREPARE AN AS-BUILT PLAN SURVEY SHOWING LOCATIONS OF ALL SURFACE FEATURES AND SUBSURFACE UTILITY SYSTEMS INCLUDING THE LOCATION TYPE, SIZE AND INVERTS.

11. THE CONTRACTOR SHALL INSTALL ALL EROSION CONTROL MEASURES PRIOR TO EARTHWORK OPERATION AND MAINTAIN ALL EROSION CONTROL MEASURES AND SEEDED EMBANKMENTS DURING CONSTRUCTION. EROSION CONTROL SHALL BE REMOVED ONLY UPON THE ESTABLISHMENT OF ALL LANDSCAPED AREAS. ALL WORK SHALL BE IN COMPLIANCE WITH THE ENVIRONMENTAL QUALITY HANDBOOK FOR EROSION AND SEDIMENT CONTROL, LATEST EDITION, AS ADOPTED BY THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

12. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SITE SECURITY AND JOB SAFETY. ALL CONSTRUCTION ACTIVITY SHALL BE IN ACCORDANCE WITH OSHA STANDARDS AND LOCAL REQUIREMENTS.

13. ALL MATERIALS AND CONSTRUCTION METHODS USED WITHIN THE PUBLIC RIGHT-OF-WAY SHALL CONFORM TO ALL LOCAL MUNICIPAL STANDARDS AND MAINE DEPARTMENT OF TRANSPORTATION SPECIFICATIONS.

14. THE CONTRACTOR IS REQUIRED TO CONTROL DUST DURING CONSTRUCTION. EXPOSED SOIL AREAS SHALL BE SPRAYED WITH WATER AS NEEDED TO CONTROL DUST EMISSIONS. COVER EXPOSED SOIL AREAS AS QUICKLY AS PRACTICAL TO PREVENT WINDS FROM GENERATING DUST.

15. ALL HANDICAP ACCESSIBLE PARKING SPACES, RAMPS AND SIDEWALKS SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE AMERICANS WITH DISABILITIES ACT (ADA).

16. ALL SITE SIGNAGE AND PAVEMENT MARKINGS SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.

17. THE CONTRACTOR SHALL ANTICIPATE THAT GROUNDWATER WILL BE ENCOUNTERED DURING CONSTRUCTION AND SHALL INCLUDE SUFFICIENT COSTS WITHIN THEIR BID TO PROVIDE DEWATERING AS NECESSARY. NO SEPARATE PAYMENT SHALL BE MADE TO THE CONTRACTOR FOR DEWATERING.

18. ALL MATERIALS SHALL BE NEW AND PROVIDED BY THE CONTRACTOR.

19. CONTRACTOR SHALL PROVIDE NOTIFICATION TO THE NAVY COORDINATOR PRIOR TO START OF CONSTRUCTION.

LAYOUT NOTES:

1. ALL DIMENSIONING, UNLESS NOTED OTHERWISE, IS TO THE FACE OF CURB OR FOUNDATION.

2. OFFSETS TO CATCH BASINS AND MANHOLES ARE TO THE CENTER OF THE FRAME

3. PIPE LENGTH EQUALS THE CENTER TO CENTER DISTANCES BETWEEN CATCH BASINS AND/OR MANHOLES MINUS ONE HALF THE DIAMETER OF EACH CATCH BASIN OR MANHOLE.

4. BOUNDARY INFORMATION ON LAYOUT PLAN IS FOR REFERENCE ONLY, REFER TO CERTIFIED BOUNDARY PLANS FOR BOUNDARY INFORMATION.

GRADING AND DRAINAGE NOTES:

1. UNLESS OTHERWISE NOTED, ALL STORM DRAIN PIPE SHALL BE IN ACCORDANCE WITH MDOT SPECIFICATIONS SECTION 603. PIPE CULVERTS AND STORM DRAINS, LATEST REVISION WITH THE EXCEPTION THAT THE ONLY ACCEPTABLE TYPES OF PIPE ARE AS FOLLOWS:

POLYVINYL CHLORIDE PIPE (PVC) SDR 35 SMOOTH BORE POLYETHYLENE PIPE - HDPE N-12 ADS OR SDR 35

2. TOPSOIL STRIPPED IN AREAS OF CONSTRUCTION THAT IS SUITABLE FOR REUSE AS LOAM SHALL BE STOCKPILED ON SITE AT A LOCATION TO BE DESIGNATED BY OWNER. UNSUITABLE SOIL SHALL BE SEPARATED, REMOVED AND DISPOSED OF AT AN APPROVED DISPOSAL LOCATION OFF SITE.

3. THE CONTRACTOR SHALL ANTICIPATE THAT GROUNDWATER WILL BE ENCOUNTERED DURING CONSTRUCTION AND SHALL INCLUDE SUFFICIENT COSTS WITHIN THEIR BID TO PROVIDE DEWATERING AS NECESSARY. NO SEPARATE PAYMENT SHALL BE MADE TO THE CONTRACTOR FOR DEWATERING.

PERMITTING REQUIREMENTS:

AGENCY:	PERMIT:	STATUS:
TOWN OF CUMBERLAN	D SITE PLAN APPROVAL BUILDING	PENDING (BY CON
MAINE DEPARTMENT OF ENVIRONMENTAL	STORMWATER LAW PERMIT	PENDINC

TRACTOR)

CENTRAL MAINE POWER 280 BATH ROAD **BRUNSWICK, MAINE 04011** 207-721-8054







PROTECTION

STATE LAW REQUIRES ADVANCE NOTICE OF AT LEAST 3 BUSINESS DAYS BEFORE YOU DIG GRADE OR EXCAVATE FOR THE MARKING OF UNDERGROUND UTILITIES

COMMERCIAL/OFFICE BUILDING

ROUTE 1 CUMBERLAND, MAINE

PREPARED FOR: LAKESIDE CONCRETE CUTTING INC. **590 COUNTY ROAD, SUITE 2, WESTBROOK, MAINE 04092**

TOWN/UTILITY CONTACTS

CODE ENFORCEMENT

WILLIAM LONGLEY TOWN OF CUMBERLAND 290 TUTTLE ROAD CUMBERLAND, MAINE 04021 207-829-2207

ELECTRIC SERVICE

TELEPHONE SERVICE

FAIRPOINT BATH ROAD (P.O. BOX 360) **BRUNSWICK, MAINE 04011** 207-442-8018

CABLE SERVICE

COMCAST CONSTRUCTION OFFICE 336 BATH ROAD BRUNSWICK, MAINE, 04011 207-729-6660

WATER SERVICE

PORTLAND WATER DISTRICT 225 DOUGLASS STREET PO BOX 3553 PORTLAND, MAINE 04104

SANITARY SEWER

TOWN OF CUMBERLAND WILLIAM SHANE, P.E., TOWN MANAGER 290 TUTTLE ROAD CUMBERLAND, MAINE 04021 207-829-2205

PUBLIC WORKS DEPARTMENT

CHRISTOPHER BOLDUC, PUBLIC SERVICES DIRECTOR 290 TUTLE ROAD CUMBERLAND, MAINE 04021 207-829-2220

CUMBERLAND FIRE DEPARTMENT

DANIEL SMALL, FIRE CHIEF 366 TUTTLE ROAD CUMBERLAND, MAINE 04021 207-829-5421

CIVIL ENGINEER

SITELINES P.A. ATTN: CURTIS Y. NEUFELD. P.E. 119 PURINTON ROAD, SUITE A BRUNSWICK, MAINE 04011 207-725-1200 WWW.SITELINESPA.COM

SURVEYOR

SITELINES P.A. ATTN: KEVIN CLARK, P.L.S. 119 PURINTON ROAD, SUITE A **BRUNSWICK, MAINE 04011** 207-725-1200 WWW.SITELINESPA.COM

SHEET INDEX			
SHEET #	SHEET TITLE:	SCALE:	
C1	COVER SHEET	NTS	
C2	EXISTING CONDITIONS PLAN	1"=30'	
С3	SITE LAYOUT & UTILITY PLAN	1"=30'	
C4	GRADING & DRAINAGE PLAN	1"=30'	
C5	SITE PROFILE	VARIES	
C6	BLASTING PLAN	1"=100'	
C7	SITE DEVELOPMENT DETAILS	NTS	
C8	STORMWATER DETAILS	NTS	
С9	EROSION CONTROL DETAILS AND NOTES	NTS	
L1	LANDSCAPE PLAN	1"=30'	
L2	SITE PHOTOMETRIC PLAN	1"=30'	



LEGEND

SEWER MANHOLE

EXISTING

OHF -----

V///////

_____6"S_____

_____8"W_____

- - - - - 100 - - -

IRON MARKER FOUND 5/8" REBAR TOPPED WITH AN ALUMINUM I.D. CAP CATCH BASIN

PROPOSED

FIRE HYDRANT WATER GATE VALVE WATER SHUT-OFF BLOW-OFF/CLEAN-OUT UTILITY POLE UTILITY LINE ------ UGE -----(OVERHEAD UTILITY LINE) (OVERHEAD UTILITY LINE) PROPERTY LINE EASEMENTS ____ · ____ · ____ SETBACK/BUFFEF _____ STREAM CURB EDGE OF PAVEMENT BUILDING STORM DRAIN(SEE PLAN FOR SIZE) SEWER LINE(SEE PLAN FOR SIZE) WATER LINE(SEE PLAN FOR SIZE) UNDERDRAIN(SEE PLAN FOR SIZE) _____ -1.5% SLOPE ARROW 100 CONTOURS TREE LINE SEDIMENT BARRIER RIPRAP

PROPOSED PAVEMENT

SPOT GRADE

T100.50 × B100.00

CYN NALS 092

FILE: 4306-COV-DET

PROJECT TEAM GEOTECHNICAL SUMMIT GEOENGINEERING SERVICES **173 PLEASANT STREET** ROCKLAND, MAINE 04841

207-318-7761

		1. 05–05–21 SUBMITTED	TO TOWN OF CUMBERLAND	
	PROGRESS PRINT THIS PLAN IS ISSUED FOR REVIEW AND INFORMATION	TITLE:	COVER SHEET	
	PURPOSES ONLY. THIS PLAN IS SUBJECT TO CHANGE AND IS NOT FOR PRICING OR CONSTRUCTION. PRICING BASED ON THIS PLAN IS NOT BINDING UNLESS SIGNED BY BOTH CONTRACTOR AND OWNER.	PROJECT: COMMEN U.S. ROU PREPARED FOR: LAKESIDE CONCRETE 590 COUNTY ROAL	RCIAL/OFFICE BUILDING TE 1, CUMBERLAND, M CUTTING & ABATEMENT D, SUITE 2, WESTBROC	GS AINE PROFESSIOI DK, ME 040
	CURTIS	CIVIL ENGINEERS	SITEL 119 PURINTON R BRUNSWICK, M 207.725. PLANNERS • LAND S	OAD, SUITE A AINE 04011 1200 URVEYORS
	PR 9779	FIELD WK: MC &CR	SCALE: NTS	SHEET:
	CENSED CONSED	DRN BY: NCR	JOB #: 4306	
D FOR:	OTAL TA	CH'D BY: CYN	MAP/LOT: R01/11-3	

05–05–21 DATE: 03/08/21

ISSUED FOR: PERMITTING REVIEW





NOTES:

THIS PLAN DEPICTS CONDITIONS FOUND AND SURVEYED BY SITELINES PA AS OF FEBRUARY 2021. SUPPORTING DATA IS FROM THE INFORMATION BELOW. 1. <u>TITLE REFERENCE FOR SURVEYED PARCEL:</u>

BK 36100, PG 39

2. PLAN REFERENCE(S):

(1) FOURTH AMENDED SUBDIVISION PLAN CUMBERLAND FORESIDE VILLAGE, US ROUTE ONE, CUMBERLAND, PREPARED BY OWEN HASKELL INC., FALMOUTH, ME, AND RECORDED IN CUMBERLAND COUNTY REGISTRY OF DEEDS PLAN BOOK 217, PAGE 85 ON MARCH 23, 2017

3. AREA INFORMATION:

2.55 ACRES

- 4. TAX MAP REFERENCE:
- TAX MAP RO1, LOT 11-3.

5. BASIS OF BEARINGS:

- BEARINGS ARE MAGNETIC AND ARE BASED ON HAND COMPASS BEARINGS ALONG RANDOM TRAVERSE LINES.
- 6. UTILITY INFORMATION:

THERE MAY BE UNDERGROUND CONDUIT, WIRES, CABLES AND/OR STRUCTURES NOT SHOWN ON THIS PLAN. THE LOCATIONS SHOWN ARE BASED ON SURFACE FEATURES VISIBLE AT THE TIME OF SURVEY AND POSSIBLY FROM INFORMATION PROVIDED BY THE OWNER, MUNICIPAL GIS DATA, AND/OR UTILITY COMPANIES. NO EXCAVATIONS WERE MADE DURING THE COURSE OF THE SURVEY TO VERIFY OR LOCATE ANY UNDERGROUND STRUCTURES. IT IS THE RESPONSIBILITY OF THE OWNER/CONTRACTOR TO VERIFY THE LOCATION OF ANY UNDERGROUND UTILITIES PRIOR TO EXCAVATING BY CONTACTING THE APPROPRIATE UTILITY COMPANY. STATE LAW REQUIRES DIG-SAFE BE CONTACTED PRIOR TO EXCAVATION.

1. 05-05-21 SUBMITTED TO TOWN OF CUMBERLAND

CYN

	TE OF MA	TITLE: EXISTINC	G CONDITIONS I	PLAN
	<pre> KEVIN % F. P. CLARK K</pre>	PROJECT: COMMER U.S. ROUT	RCIAL/OFFICE BUILDIN E 1, CUMBERLAND, M	GS IAINE
		PREPARED FOR: LAKESIDE CONCRETE (590 COUNTY ROAD	CUTTING & ABATEMENT , SUITE 2, WESTBROO	PROFESSIONAL DK, ME 04092
RAPHIC SCALE	CURTIS	CIVIL ENGINEERS	SITEL 119 PURINTON R BRUNSWICK, M 207.725 PLANNERS • LAND S	OAD, SUITE A IAINE 04011 .1200 URVEYORS
(IN FEET)	PA 9779	FIELD WK: MC &CR	SCALE: 1" = 30'	SHEET:
1 inch = 30 ft.	- Clensed	DRN BY: NCR	JOB #: 4306	
ISSUED FOR:	110 ONTA Julal	CH'D BY: CYN	MAP/LOT: R01/11-3	
ITTING REVIEW	05-05-21	DATE: 03/08/21	FILE: 4306-SITE	1



UTILITY NOTES:

ALL TERMINATIONS AND CONNECTIONS OF SERVICES SHALL BE IN COMPLIANCE WITH REQUIREMENTS OF THE PORTLAND WATER DISTRICT. ALL BACKFILLING AND COMPACTION OF WATER AND SEWER LINE TRENCHES SHALL BE AS APPROVED BY THE LOCAL UTILITY DISTRICT.

THE CONTRACTOR SHALL CONTACT DIGSAFE (888-344-7233) PRIOR TO COMMENCING EXCAVATION.

THE BASIS FOR PROJECT LAYOUT AND FOR CONSTRUCTION ELEVATIONS IS THE BASELINE AND BENCHMARK EXISTING ON THE SITE AND SHOWN ON THE DRAWINGS.

3. THE CONTRACTOR SHALL CONFIRM HORIZONTAL AND VERTICAL CONTROL BEFORE BEGINNING WORK.

4. SEE PLUMBING AND ELECTRICAL PLANS FOR LOCATION AND INVERTS OF SLEEVES IN FOUNDATIONS.

5. ELECTRIC SERVICE SHALL BE INSTALLED IN CONDUIT UNDER PAVEMENT AND CONCRETE.

6. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF ALL SEWER, WATER, ELECTRICAL, AND SANITARY CONDUIT, MANHOLES, TRANSFORMERS, AND FITTINGS FOR APPROVAL.

CONTRACTOR SHALL VERIFY LOCATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.

8. DUCTILE IRON PIPE SHALL MEET THE REQUIREMENTS OF AWWA C150 AND C151, CLASS 52, AND HAVE PUSH ON OR FLANGED JOINTS AS REQUIRED. FITTINGS SHALL HAVE MECHANICAL JOINTS WITH RETAINER GLANDS.

9. SANITARY SEWER PIPE AND FITTINGS SHALL BE SDR-35 PVC.

10. INSTALL 2" RIGID STYROFOAM INSULATION OVER SANITARY SEWER IN AREAS WHERE THERE IS LESS THAN 4' OF COVER.

11. CONNECTIONS AT MANHOLES/CATCH BASINS SHALL HAVE A FLEXIBLE BOOT CAST ONTO THE BARREL AND SECURED WITH STAINLESS STEEL BANDS. 12. SEE SHEET C5 FOR GRADING, DRAINAGE, STORM DRAIN DATA & EROSION

CONTROL MEASURES. 13. BUILDING FOOTPRINT SHOWN IS NOT FOR FOUNDATION LAYOUT. REFER TO

STRUCTURAL/ARCHITECTURAL DRAWINGS. 14. ALL PIPING MATERIAL TO THE BALL VALVE SHALL BE 1" OR 2" TYPE K

COPPER AND ALL CONTROL VALVES SHALL BE LOCATED WITHIN THE EASEMENT AREA.

15. ALL DOMESTIC WATER SERVICES ON THE BUILDING SIDE OF THE CONTROL VALVE SHALL BE EITHER 2" TYPE K COPPER OR 2" CTS PE RATED AT 200 PSI. IF THE PE IS USED, AN 8 GAUGE WIRE SHALL BE ATTACHED TO THE PIPE WITH ONE END BROUGHT ALONGSIDE THE CURB BOX FOR LOCATING PURPOSES.

16. ANY CURB BOXES LOCATED WITHIN PAVEMENT SHALL BE INSTALLED INSIDE A GATE BOX TOP.

17. ALL MATERIALS SHOWN SHALL BE NEW AND FURNISHED BY CONTRACTOR AS PART OF CONTRACT WORK. ONLY ITEMS SPECIFICALLY IDENTIFIED TO BE SALVAGED MAY BE RE-USED WITHOUT PRIOR WRITTEN PERMISSION.

OFFICE COMMERCIAL-SOUTH ZONING DISTRICT (OC-S)				
G STANDARD	REQUIRED	PROPOSED		
T SIZE:	1 AC.	2.55 AC.		
T FRONTAGE:	150'	370'		
SETBACKS:				
ONT:	25'	25'		
AR:	65'	65'		
E:	20'	20'		
EIGHT:	40'	<40'		
0	OFFICE - 1 PER 250 S.F. = 30	50		

SEWER STRUCTURE DATA: SMH#1

INV.IN: TBD

S1: 6" PVC L=167' S=0.0050



LAKESIDE CONCRETE CUTTING & ABATEMENT PROFESSIONALS 590 COUNTY ROAD, SUITE 2, WESTBROOK, ME 04092

GRAPHIC SCALE	CURTIS	CIVIL ENGINEERS • F	SITELI 119 PURINTON ROA BRUNSWICK, MAI 207.725.12 PLANNERS • LAND SU	NES AD, SUITE A INE 04011 200 RVEYORS
(IN FEET)	PR 9779	FIELD WK: MC &CR	SCALE: 1" = 30'	SHEET:
1 inch = 50 rt.	//CENSED	DRN BY: NCR	JOB #: 4306	C^2
ISSUED FOR:	Otto Otto L	CH'D BY: CYN	MAP/LOT: R01/11-3	UJ
MITTING REVIEW	05-05-21	DATE: 03/08/21	FILE: 4306-SITE	



GENERAL NOTES:

1. <u>TITLE REFERENCE FOR SURVEYED PARCEL:</u>

BK 36100, PG 39

2. PLAN REFERENCE(S):

1) FOURTH AMENDED SUBDIVISION PLAN CUMBERLAND FORESIDE VILLAGE, US ROUTE ONE, CUMBERLAND, PREPARED BY OWEN HASKELL INC., FALMOUTH, ME, AND RECORDED IN CUMBERLAND COUNTY REGISTRY OF DEEDS PLAN BOOK 217, PAGE 85 ON MARCH 23, 2017

3. AREA INFORMATION:

LOT AREA: 110,921 S.F. (2.55 ACRES)

4. TAX MAP REFERENCE:

TAX MAP RO1, LOT 11-3.

5. BASIS OF BEARINGS:

BEARINGS ARE REFERENCED TO MAGNETIC.

6. FLOOD ZONE INFORMATION:

PARCEL IS LOCATED WITHIN ZONE C (AREAS OF MINIMAL FLOODING) OF THE FLOOD INSURANCE RATE MAPS FOR CUMBERLAND COUNTY, MAINE. THE PROJECT IS LOCATED ON PANEL 18 OF 25 (COMMUNITY PANEL 230162 0018 C, EFF. DATE OCTOBER 15, 1985)

7. IMPERVIOUS AREA:

EXISTING IMPERVIOUS AREA: 0 S.F. (0.00 AC) PROPOSED IMPERVIOUS AREA: 60,609 S.F. (1.39 AC)

NET CHANGE IN IMPERVIOUS AREA: +60,609 S.F. (1.39 AC) 8. WAIVERS REQUESTED:

HIGH INTENSITY SOILS SURVEY HYDRO GEOLOGIC EVALUATION TRAFFIC STUDY MARKET STUDY

9. LOT TO BE SERVED BY PUBLIC WATER AND SEWER,

10. POWER, TELEPHONE AND CABLE ARE TO BE UNDERGROUND.

11. THE DEVELOPER / OWNER WILL BE RESPONSIBLE FOR MAINTAINING THE ACCESS







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ROCK REMOVAL GUIDELINES

THESE GUIDELINES APPLY TO ROCK REMOVAL ASSOCIATED WITH THE CONSTRUCTION OF THE BUILDING, ROAD, AND 2. THE LOCAL MUNICIPALITY AND THE BOARD WHEN THE DURATION OF THE NIGHTTIME CONSTRUCTION ACTIVITY IS UTILITIES AT LAKESIDE CONCRETE CUTTING & ABATEMENT PROFESSIONALS. ROCK EXCAVATION IS THE REMOVAL AND GREATER THAN 90 DAYS. RECORDS: DISPOSAL OF MATERIALS THAT CANNOT BE EXCAVATED WITHOUT MODERN, TRACK-MOUNTED, HEAVY-DUTY EXCAVATING EQUIPMENT, WITHOUT DRILLING, BLASTING, OR RIPPING. TYPICAL MATERIALS CLASSIFIED AS ROCK ARE SOLID ROCK, ROCK IN LEDGES, AND ROCKHARD CEMENTITIOUS AGGREGATE DEPOSITS ONE CUBIC YARD OR MORE 1. THE CONTRACTOR WILL PROVIDE THE TOWN WITH A BLASTING LOG FOR ALL BLASTS INCLUDING THE TEST (b)SOUND FROM CONSTRUCTION ACTIVITIES BETWEEN 7:00 A.M. AND 7:00 P.M. SHALL NOT EXCEED THE FOLLOWING LIMITS AT ANY PROTECTED LOCATION: BLASTS. THE BLASTING LOG MUST CONTAIN THE FOLLOWING INFORMATION: a. NAME OF BLASTING COMPANY OF BLASTING CONTRACTOR. b. LOCATION, DATE, AND TIME OF BLAST. IN VOLUME.

NOTIFICATIONS:

1. THE CONTRACTOR SHALL PROVIDE WRITTEN NOTICE TO THE ABUTTING PROPERTIES A MINIMUM OF ONE WEEK IN ADVANCE OF PRE-BLAST SURVEYS. A WRITTEN SCHEDULE OF THE LIKELY BLASTING WILL BE FILED WITH THE PLANNING DEPARTMENT PRIOR TO CONSTRUCTION AND WILL BE UPDATED MONTHLY UNTIL THE WORK IS COMPLETE.

BLASTING PROCEDURES:

ALL BLASTING WILL BE PERFORMED IN ACCORDANCE WITH ALL PERTINENT PROVISIONS OF THE "MANUAL OF ACCIDENT PREVENTION IN CONSTRUCTION" ISSUED BY THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA, INC., AND MAINE DEPARTMENT OF TRANSPORTATION SPECIFICATIONS SECTION 105.2.7, "USE OF EXPLOSIVES". BLASTING THROUGH THE OVERBURDEN WILL BE ALLOWED UNDER THE FOLLOWING CONDITIONS:

1. ALL BLASTS MUST BE COVERED WITH APPROPRIATE MATS AND/OR EARTH. 2.DRILLING EQUIPMENT WILL BE EQUIPPED WITH SUITABLE DUST CONTROL APPARATUS THAT MUST BE KEPT IN REPAIR AND USED DURING ALL DRILLING OPERATIONS.

3.BLASTING WILL NOT PRODUCE PEAK PARTICLE VELOCITIES IN EXCESS THOSE SHOWN IN FIGURE B-1 APPENDIX B, U.S. BUREAU OF MINES REPORT OF INVESTIGATIONS 8507, AT THE CLOSEST STRUCTURE OR WATER SUPPLY WELL.

4. SOUND FROM CONSTRUCTION OF DEVELOPMENTS. (a)THE SOUND FROM CONSTRUCTION ACTIVITIES BETWEEN 7:00 P.M. AND 7:00 A.M. IS SUBJECT TO THE FOLLOWING LIMITS:

(i) SOUND FROM NIGHTTIME CONSTRUCTION ACTIVITIES SHALL BE SUBJECT TO THE NIGHTTIME ROUTINE OPERATION SOUND LEVEL LIMITS CONTAINED IN SECTION 10. "NOISE CONTROL", C. "NOISE LEVEL LIMITS" SUBSECTIONS 1(a) AND 1(b) OF MAINE DEP CHAPTER 375 "NO ADVERSE EFFECT STANDARDS OF THE SITE LOCATION OF DEVELOPMENT".

(ii)IF CONSTRUCTION ACTIVITIES ARE CONDUCTED CONCURRENTLY WITH ROUTINE OPERATION, THEN THE COMBINED TOTAL OF CONSTRUCTION AND ROUTINE OPERATION SOUND SHALL BE SUBJECT TO THE NIGHTTIME ROUTINE OPERATION SOUND LEVEL LIMITS CONTAINED IN SUBSECTIONS 1(a) AND 1(b).

(iii)HIGHER LEVELS OF NIGHTTIME CONSTRUCTION SOUND ARE PERMITTED WHEN A DULY ISSUED PERMIT AUTHORIZING NIGHTTIME CONSTRUCTION SOUND IN EXCESS OF THESE LIMITS HAS BEEN GRANTED BY: 1. THE LOCAL MUNICIPALITY WHEN THE DURATION OF THE NIGHTTIME CONSTRUCTION ACTIVITY IS LESS THAN OR EQUAL TO 90 DAYS. DURATION OF ACTIVITY 12 HOURS

8 HOURS 5 HOURS 4 HOURS 3 HOURS 2 HOURS 1 HOUR OR LESS

(c)ALL EQUIPMENT USED IN CONSTRUCTION ON DEVELOPMENT SITES SHALL COMPLY WITH APPLICABLE FEDERAL NOISE REGULATIONS AND SHALL INCLUDE ENVIRONMENTAL NOISE CONTROL DEVICES IN PROPER WORKING CONDITION, AS ORIGINALLY PROVIDED WITH THE EQUIPMENT BY ITS MANUFACTURER.

5.ALL BLASTS MUST BE MONITORED USING FIELD SEISMOGRAPHS. ALL FIELD SEISMOGRAPHS MUST RECORD THE FULL ANALOG WAVE FORM OF EACH OF THE 3 MUTUALLY PERPENDICULAR COMPONENTS OF MOTION IN TERMS OF PARTICLE VELOCITY. ALL SEISMOGRAPHS MUST BE CAPABLE OF SENSOR CHECK AND MUST BE CALIBRATED ACCORDING TO THE MANUFACTURERS RECOMMENDATIONS.

6.TO THE EXTENT POSSIBLE, BLASTING WILL BE ACCOMPLISHED TOWARD AN OPEN FACE FOR RELIEF PURPOSES. 7.FLYROCK. THE CONTRACTOR IS TO CONTROL FLYROCK WITH MATS OR OTHER SUITABLE COVER TO PREVENT FLYROCK FROM ENTERING ANY WETLANDS. PRE-BLAST SURVEY:

THE CONTRACTOR WILL CONDUCT A PRE-BLAST SURVEY OF ALL STRUCTURES WITHIN 500' OF THE BLAST AREA, AND PROVIDE THE TOWN WITH A WRITTEN REPORT OF THE PRE-BLAST SURVEY PRIOR TO ANY BLASTING. AT A MINIMUM THE SURVEY WILL COVER THE EXTERIOR OF EACH BUILDING, INCLUDING EXPOSED FOUNDATIONS. INTERIOR SURVEYS ARE AT THE DISCRETION OF THE INDIVIDUAL PROPERTY OWNERS. VIDEOTAPE WITH VOICE MUST BE EMPLOYED AND CLEAR IDENTIFICATION OF EACH STRUCTURE AND PART OF THAT STRUCTURE IS REQUIRED.

TEST BLAST:

THE BLASTING CONTRACTOR WILL DEVELOP A TEST SHOT UNDER THE OBSERVATION OF THE TOWN'S DESIGNATED INSPECTOR. THE TEST SHOT MUST BE INSTRUMENTED WITH AT LEAST TWO (2) RECORDING SEISMOGRAPHS ORIENTED AT RIGHT ANGLES TO EACH OTHER AND SPACED EQUIDISTANT FROM THE SHOT. THE SHOT AND SEISMOGRAPHS SHOULD BE ORIENTED TO PROVIDE DATA PARALLEL AND PERPENDICULAR TO THE GENERAL BEDROCK TREND AT THE SITE.





2.THE REPORT SUBMITTED TO THE TOWN ENGINEER MUST INCLUDE AS A MINIMUM A LIST OF THE HOMES AND OTHER BUILDINGS INSPECTED AND INDICATE THE TYPE OF INSPECTION.

c.NAMES, SIGNATURE, AND SOCIAL SECURITY NUMBER OF BLASTER.

d. TYPE OF MATERIAL BLASTED. e.NUMBER AND SPACING OF HOLES AND DEPTH OF BURDEN OR STEMMING. f. DIAMETER AND DEPTH OF HOLES.

- TYPE OF EXPLOSIVES USED.
 TOTAL AMOUNT OF EXPLOSIVES USED.
 MAXIMUM AMOUNT OF EXPLOSIVES USED PER DELAY PERIOD OF 8 MILLISECONDS OR GREATER.
 MAXIMUM NUMBER OF HOLES PER DELAY PERIOD OF 8 MILLISECONDS OR GREATER. METHOD OF FIRING AND TYPE OF CIRCUIT. I. DIRECTION AND DISTANCE IN FEET TO THE NEAREST DWELLING, PUBLIC BUILDING, SCHOOL, C COMMERCIAL OR INSTITUTIONAL BUILDING NEITHER OWNED NOR CONTROLLED BY THE DEVELO m.WEATHER CONDITIONS, INCLUDING FACTORS SUCH AS WIND DIRECTION AND CLOUD COVER.
- n. HEIGHT OR LENGTH OF STEMMING.
- AMOUNT OF MATS OR OTHER PROTECTION USED.
 TYPE OF DETONATORS USED AND DELAY PERIODS USED.
 THE EXACT LOCATION OF EACH SEISMOGRAPH AND THE DISTANCE OF EACH SEISMOGRAPH F BLAST.
- r. SEISMOGRAPHIC READINGS. s. NAME AND SIGNATURE OF THE PERSON OPERATING EACH SEISMOGRAPH. t. NAMES OF THE PERSON AND THE FIRM ANALYZING THE SEISMOGRAPHIC DATA.



PE

		1. 05-05-21 SUBMITTED TO	TOWN OF CUMBERLAND	CYN
CHURCH UR OPER.	PROGRESS PRINT THIS PLAN IS ISSUED FOR REVIEW AND INFORMATION PURPOSES ONLY. THIS PLAN IS SUBJECT TO CHANGE AND IS NOT FOR PRICING OR CONSTRUCTION. PRICING BASED ON THIS PLAN IS NOT BINDING	TITLE: BLA	STING PLAN	
FROM THE		PROJECT: COMMERCI U.S. ROUTE	IAL/OFFICE BUILDINGS 1, CUMBERLAND, MA	S INE
	UNLESS SIGNED BY BOTH CONTRACTOR AND OWNER.	PREPARED FOR: LAKESIDE CONCRETE CU 590 COUNTY ROAD,	TTING & ABATEMENT P SUITE 2, WESTBROOK	ROFESSIONALS , ME 04092
GRAPHIC SCALE ° ⁵⁰ 100 200	CURTIS		SITELI 119 PURINTON ROJ BRUNSWICK, MA 207.725.12 PLANNERS • LAND SU	NES AD, SUITE A INE 04011 200 RVEYORS
(IN FEET)	PR 9779	FIELD WK: MC &CR	SCALE: 1" = 100'	SHEET:
1 inch = 100 ft.	- K CICENSED	DRN BY: NCR	JOB #: 4306	C
ISSUED FOR:	CHAR THE	CH'D BY: CYN	MAP/LOT: R01/11-3	
RMITTING REVIEW	05-05-21	DATE: 03/08/21	FILE: 4306-SITE	









THIS PLAN IS ISSUED FOR REVIEW AND INFORMATION	1. 05-05-21 SUBMITTED TO	O TOWN OF CUMBERLAND	CYN
PURPOSES ONLY. THIS PLAN IS SUBJECT TO CHANGE AND IS NOT FOR PRICING OR CONSTRUCTION. PRICING BASED ON THIS	TITLE: STORM	IWATER DETAIL	S
PLAN IS NOT BINDING UNLESS SIGNED BY BOTH CONTRACTOR AND OWNER.	PROJECT: COMMER(CIAL/OFFICE BUILDING	6
ISSUED EOD.	U.S. ROUTE	E 1, CUMBERLAND, MA	INE
PERMITTING	owner: LAKESIDE CONCRETE C	UTTING & ABATEMENT P	ROFESSIONALS
	590 COUNTY ROAD,	SUITE 2, WESTBROOK	, ME 04092
CURTIS		SITELI 119 PURINTON ROL BRUNSWICK, MA 207.725.12 PLANNERS • LAND SU	NES AD, SUITE A INE 04011 200 RVEYORS
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LICENSED	DRN BY: NCR	JOB #: 4306	
2 C Mart File	CH'D BY: CYN	MAP/LOT: R01/11-3	$ \cup 0 $

05-05-21 DATE: 03/08/21

FILE: 4306-COV-DET

EROSION AND SEDIMENTATION NOTES: 1. CONTRACTOR SHALL REFER TO THE FOLLOWING REFERENCES FOR THE DESIGN AND INSTALLATION OF TEMPORARY AND PERMANENT EROSION AND SEDIMENTATION CONTROL PRACTICES: • 2016 REVISION TO THE 2003 MAINE EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES MANUAL FOR DESIGNERS AND ENGINEERS	 D. WHERE TEMPORARY SEEDING IS THE PREVIOUSLY NOTED SEEDIN E. FERTILIZING, SEEDING AND MUL F. ALTERNATIVE HAY MULCH SHA MACHINERY ALONE WILL NOT S
• 2014 REVISION TO THE 2003 MAINE EROSION AND SEDIMENT CONTROL FIELD GUIDE FOR CONTRACTORS <u>GENERAL EROSION AND SEDIMENTATION CONTROL PRACTICES:</u> EROSION/SEDIMENT CONTROL DEVICES:	5. FOLLOWING FINAL SEEDING, THE RESEEDING WILL BE CARRIED OUT BY EXISTING CATCH IS INADEQUATE.
THE FOLLOWING EROSION SEDIMENTATION CONTROL DEVICES ARE PROPOSED FOR CONSTRUCTION ON THIS PROJECT. INSTALL THESE DEVICES AS INDICATED ON THE PLANS.	MONITORING SCHEDULE: THE CONTRACTOR IS RESPONSIBLE F
1. SEDIMENT BARRIER: PRIOR TO THE START OF CONSTRUCTION, SILT SOXX OR APPROVED EQUAL WILL BE INSTALLED ALONG THE DOWN GRADING EDGES OF DISTURBED AREAS TO TRAP RUNOFF BORNE SEDIMENTS UNTIL THE SITE IS STABILIZED. THE STANDARD FOR STABILIZED IS 90% COVERAGE OF SEEDED AREAS. IN AREAS WHERE STORMWATER DISCHARGES THE SEDIMENT BARRIER WILL BE REINFORCED WITH HAY BALES TO HELP MAINTAIN THE INTEGRITY OF THE SEDIMENT BARRIER AND TO PROVIDE ADDITIONAL TREATMENT.	MEASURES WILL BE APPLIED AS NEED INSPECTION WILL BE MADE OF ALL E
2. HAY BALES: HAY BALES TO BE PLACED IN LOW FLOW DRAINAGE SWALES AND PATHS TO TRAP SEDIMENTS AND REDUCE RUNOFF VELOCITIES. DO NOT PLACE HAY BALES IN FLOWING WATER OR STREAMS.	OR IMMEDIATELY FOLLOWING ANY SIG WHEN IT REACHES A DEPTH OF 6" A BARRIERS PROVE TO BE INEFFECTIVE
3. RIPRAP: PROVIDE RIPRAP IN AREAS WHERE CULVERTS DISCHARGE OR AS SHOWN ON THE PLANS. 4. LOAM, SEED, & MULCH: ALL DISTURBED AREAS, WHICH ARE NOT OTHERWISE TREATED, SHALL RECEIVE PERMANENT	2. VISUALLY INSPECT RIPRAP ONCE SEDIMENT TRAPPED BEHIND THESE D DISTRIBUTE REMOVED SEDIMENT OFF-
SEEDING AND MULCH TO STABILIZE THE DISTURBED AREAS. THE DISTURBED AREAS WILL BE REVEGETATED WITHIN 5 DAYS OF FINAL GRADING. SEEDING REQUIREMENTS ARE PROVIDED AT THE END OF THIS SPECIFICATION. 5. STRAW AND HAY MULCH: USED TO COVER DENUDED AREAS UNTIL PERMANENT SEED OR EROSION CONTROL MEASURES	3. REVEGETATION OF DISTURBED AR AREA MIX" AND INSPECTED ON A WE EXPOSED AREAS WILL BE RESEEDED
ARE IN PLACE. MULCH BY ITSELF CAN BE USED ON SLOPES LESS THAN 15% IN SUMMER AND 8% IN WINTER. JUTE MESH IS TO BE USED OVER MULCH ONLY.	RIPRAP FOR SLOPES IN EXCESS OF A
6. IN LIEU OF MULCH, USE ERUSION CONTROL BLANKET (EQUAL TO NORTH AMERICAN GREEN SCISO) TO STABILIZE AREAS OF CONCENTRATED FLOW AND DRAINAGE WAYS. 7. STABILIZED CONSTRUCTION ENTRANCE: PRIOR TO THE START OF CONSTRUCTION. A STABILIZED CONSTRUCTION ENTRANCE	FROM THE MAINE DEPARTMENT OF E
WILL BE INSTALLED AND UTILIZED FOR CONTRACTOR ACCESS. TRACKED MUD OR SEDIMENT SHALL BE REMOVED PRIOR TO THE NEXT STORM EVENT.	STORED ON SITE TO ENTER STORMW/ TO STORMWATER. THE SITE CONTRAC CONTAINMENT, AND RESPONSE PLANI
TEMPORARY EROSION/SEDIMENTATION CONTROL MEASURES: PROVIDE THE FOLLOWING TEMPORARY EROSION/SEDIMENTATION CONTROL MEASURES PROIR TO THE START OF CONSTRUCTION OF THE DEVELOPMENT:	NOTE: ANY SPILL OR RELEASE OF T SPILLS, CALL 1-800-482-0777 WHI CALL 1-800-452-4664 WHICH IS A AT : HTTP://WWW.MAINE.GOV/DEP/S
 SEDIMENT BARRIER ALONG THE DOWNGRADIENT SIDE OF THE PARKING AREAS AND OF ALL FILL SECTIONS. THE SEDIMENT BARRIER SHALL BE INSTALLED PRIOR TO THE START OF THE CONSTRUCTION AND WILL REMAIN IN PLACE UNTIL THE SITE IS 90% REVEGETATED. HAY BALES PLACED AT KEY LOCATIONS TO SUPPLEMENT THE SEDIMENT BARRIER. 	2. GROUNDWATER PROTECTION. DURIN WITH THE POTENTIAL TO CONTAMINAT TO AN INFILTRATION AREA. AN "INFIL SOILS. TOPOGRAPHY AND OTHER BEL
3. PROTECT TEMPORARY STOCKPILES OF STUMPS, GRUBBINGS, OR COMMON EXCAVATION AS FOLLOWS: A. SOIL STOCKPILE SIDE SLOPES SHALL NOT EXCEED 2:1.	BERMS, SUMPS, AND OTHER FORMS USED TO ISOLATE PORTIONS OF THE PROJECT PROPOSING INFILTRATION O
 B. AVOID PLACING TEMPORARY STOCKPILES IN AREAS WITH SLOPES OVER 10 PERCENT, OR NEAR DRAINAGE SWALES. C. STABILIZE STOCKPILES WITHIN 7 DAYS BY TEMPORARILY SEEDING WITH A HYDROSEED METHOD CONTAINING AN EMULSIFIED MULCH TACKIFIER OR BY COVERING THE STOCKPILE WITH MULCH. D. SURROUND STOCKPILE SOIL WITH SEDIMENT BARRIER AT BASE OF PILE. E. STORMWATER SHOULD BE PREVENTED FROM RUNNING ONTO STOCKPILES. 	DISCHARGE OF STORMWATER TO THE ORDER TO PREVENT THE ACCUMULAT DESTABILIZATION.
4. ALL DENUDED AREAS WHICH HAVE BEEN ROUGH GRADED AND ARE NOT LOCATED WITHIN THE BUILDING PAD, OR PARKING AND DRIVEWAY SUBBASE AREA SHALL RECEIVE MULCH WITHIN 7 DAYS AFTER CESSATION THE CONSTRUCTION	NOTE: LACK OF APPROPRIATE POLLI THE GROUNDWATER QUALITY STANDA
ACTIVITIES. STABILIZE ANY EXPOSED SOIL WITH MULCH, OR OTHER NON-ERODIBLE COVER. IN THE EVENT THE CONTRACTOR COMPLETES FINAL GRADING AND INSTALLATION OF LOAM AND SOD WITHIN THE TIME PERIODS PRESENTED ABOVE, INSTALLATION OF MULCH AND NETTING, WHERE APPLICABLE, IS NOT REQUIRED.	EROSION OF SOILS OR FUGITIVE DUST CONTROL, BUT OTHER WATER ADDITIV SHALL BE INSTALLED AT THE END OF SEDIMENT. IF OFF-SITE TRACKING OC
5. IF WORK IS CONDUCTED BETWEEN OCTOBER 15 AND APRIL 15, ALL DENUDED AREAS ARE TO BE COVERED WITH HAY MULCH, APPLIED AT TWICE THE NORMAL APPLICATION RATE, AND ANCHORED WITH FABRIC NETTING. THE PERIOD BETWEEN FINAL GRADING AND MULCHING SHALL BE REDUCED TO A 7 DAY MAXIMUM.	WEEK AND PRIOR TO SIGNIFICANT ST PROBLEMS, SHOULD WET DOWN UNPA ADDITIVE TO SUPPRESS FUGITIVE SEE
6. TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED ONCE THE SITE HAS BEEN STABILIZED OR IN AREAS WHERE PERMANENT EROSION CONTROL MEASURES HAVE BEEN INSTALLED.	4. DEBRIS AND OTHER MATERIALS. M MATERIALS, TRASH, FERTILIZERS, PES PRECIPITATION AND STORMWATER RU
7. WHENEVER PRACTICABLE, NO DISTORBANCE ACTIVITIES SHOULD TAKE PLACE WITHIN SUFFET OF ANY WEILAND. IF DISTURBANCE ACTIVITIES TAKE PLACE BETWEEN 30 FEET AND 50 FEET OF ANY WEILAND, AND STORMWATER DISCHARGES THROUGH THE DISTURBED AREAS TOWARD THE WETLAND, PERIMETER EROSION CONTROLS MUST BE DOUBLED. IF DISTURBANCE ACTIVITIES TAKE PLACE LESS THAN 30 FEET FROM ANY PROTECTED NATURAL RESOURCE, AND STORMWATER DISCHARGES THROUGH THE DISTURBED AREAS TOWARD THE PROTECTED NATURAL RESOURCE, PERIMETER EROSION CONTROLS MUST BE DOUBLED AND DISTURBED AREAS MUST BE TEMPORARILY OR PERMANENTLY STABILIZED WITHIN 7 DAYS.	5. EXCAVATION DE-WATERING. EXCAN COFFER DAMS, PONDS, AND OTHER MOST CASES THE COLLECTED WATER COLLECTED WATER REMOVED FROM T NATURAL WOODED BUFFERS OR REMOVED OF SEDIMENT POSSIBLE LIKE A COE
8. AREAS WITHIN 75 FT OF A WETLAND WILL BE STABILIZED WITHIN 48 HOURS OF INITIAL DISTURBANCE OF THE SOIL OR PRIOR TO ANY STORM EVENT, WHICHEVER COMES FIRST.	AREAS OF THE SITE. EQUIVALENT ME
9. ALL AREAS WITHIN 75 FEET OF A WETLAND MUST BE PROTECTED WITH A DOUBLE ROW OF SEDIMENT BARRIERS DURING WINTER CONSTRUCTION (NOVEMBER 1 THROUGH APRIL 15).	FROM THE PONDED AREA, EITHER TH DESIGNED TO COLLECT THE MAXIMUM DIRT BAG, OR SEDIMENTATION BASIN
10. TEMPORARY SEDIMENT BASINS MAY BE INSTALLED DOWNGRADIENT OF THE DISTURBED AREAS. THESE BASINS MUST BE DESIGNED TO PROVIDE STORAGE FOR EITHER THE CALCULATED RUNOFF FROM A 2-YEAR, 24-HOUR STORM OR PROVIDE FOR 3,600 CUBIC FEET OF CAPACITY PER ACRE DRAINING TO THE BASIN. OUTLET STRUCTURES MUST DISCHARGE WATER FROM THE SURFACE OF THE BASIN WHENEVER POSSIBLE. EROSION CONTROLS AND VELOCITY DISSIPATION DEVICES MUST BE USED IF THE DISCHARGING WATERS ARE LIKELY TO CREATE EROSION. ACCUMULATED SEDIMENT MUST BE REMOVED AS NEEDED FROM THE BASIN TO MAINTAIN AT LEAST ½ OF THE DESIGN CAPACITY OF THE BASIN.	REPRESENTATIVE FOR APPROVAL. 6. AUTHORIZED NON-STORMWATER D WHERE ALLOWED NON-STORMWATER ENSURE THE IMPLEMENTATION OF AP COMPONENT(S) OF THE DISCHARGE.
11. EXCAVATION AND EARTHWORK SHALL BE COMPLETED SUCH THAT NO MORE THAN 1 ACRE OF THE SITE IS WITHOUT STABILIZATION AT ANY ONE TIME. AT ANY TIME, THE DENUDED AREA WILL NOT EXCEED THAT WHICH CAN BE MULCHED IN ONE DAY.	 (a) DISCHARGES FROM FIREFIGHTING (b) FIRE HYDRANT FLUSHINGS (c) VEHICLE WASHWATER IF DETERG
PERMANENT EROSION CONTROL MEASURES: THE FOLLOWING PERMANENT CONTROL MEASURES ARE REQUIRED BY THIS EROSION/SEDIMENTATION CONTROL PLAN:	(d) DUST CONTROL RUNOFF IN ACC (e) ROUTINE EXTERNAL BUILDING W
1. ALL AREAS DISTURBED DURING CONSTRUCTION, BUT NOT SUBJECT TO OTHER RESTORATION (PAVING, RIPRAP, ETC.), WILL BE LOAMED, LIMED, FERTILIZED AND SEEDED. NATIVE TOPSOIL SHALL BE STOCKPILED AND REUSED FOR FINAL RESTORATION WHEN IT IS OF SUFFICIENT QUALITY.	(f) PAVEMENT WASHWATER (WHERE ALL SPILLED MATERIAL HAD BE (g) UNCONTAMINATED AIR CONDITIO
2. SLOPES GREATER THAN 2:1 WILL RECEIVE RIPRAP. (NONE ANTICIPATED)	 (i) UNCONTAMINATED GROUNDWATE (i) FOUNDATION OR FOOTER DRAIN (j) UNCONTAMINATED EXCAVATION (ii) DOTADLE WATER COURCES INCL
THE FOLLOWING GENERAL PRACTICES WILL BE USED TO PREVENT EROSION AS SOON AS AN AREA IS READY TO UNDERGO FINAL GRADING.	 (k) POTABLE WATER SOURCES INCL (I) LANDSCAPE IRRIGATION. 7. UNAUTHORIZED NON-STORMWATER
1. A MINIMUM OF 6" OF LOAM WILL BE SPREAD OVER DISTURBED AREAS AND GRADED TO A UNIFORM DEPTH AND NATURAL APPEARANCE, OR STONE WILL BE PLACED ON SLOPES TO STABILIZE SURFACES.	AUTHORIZE A DISCHARGE THAT IS MI COMPLIANCE WITH APPENDIX C (6). FOLLOWING:
2. IF FINAL GRADING IS REACHED DURING THE NORMAL GROWING SEASON (4/15 TO 9/15), PERMANENT SEEDING WILL BE DONE AS SPECIFIED BELOW. PRIOR TO SEEDING, LIMESTONE SHALL BE APPLIED AT A RATE OF 138 LBS/1000 SQ. FT. AND 10:20:20 FERTILIZER AT A RATE OF 18.4 LBS/1000 SQ.FT WILL BE APPLIED. BROADCAST SEEDING AT THE FOLLOWING RATES:	 (a) WASTEWATER FROM THE WASHO COMPOUNDS OR OTHER CONSTR (b) FUELS, OILS OR OTHER POLLUT (c) SOAPS SOLVENTS OR DETERCI
LAWNS SHALL BE: ALLEN, STERLING & LATHROP 'TUFFTURF', 70% DIAMOND TALL FESCUE, 20% PLEASURE OLUS PERENNIAL RYEGRASS, 10% BARON KENTUCKY BLUEGRASS. SEEDING RATE SHALL BE 7–LBS./1,000 SQ. FT.	(d) TOXIC OR HAZARDOUS SUBSTA
SWALES SHALL BE: WILDFLOWER MEADOW: (SEED) FESTUCA OVINA SHEEP FESCUE; SOW AT A RATE OF 12 OZ. PER 1,000 SQFT. TRIFOLIUM REPENS WHITE CLOVER; SOW AT A RATE OF ½ OZ.PER 1,000 SQFT. (FLOWERS) ACHILLEA MILLEFOLIUM YARROW, AQUILEGEA CANADENSIS COLUMBINE, ASCLEPIAS TUBEROSE BUTTERFLY MILKWEED, ASTER NOVAE-ANGLIAE NEW-ENGLAND ASTER, BAPTISIA AUSTRALIS WILD INDIGO, BOLTONIA ASTEROIDS FALSE ASTER, CHRYSANTHEMUM LEUCANTHEMUM OXEYE DAISY, DIGITALIS PURPUREA FOXGLOVE, ECHINACEA PURPUREA PURPLE CONEFLOWER, LUPINUS	CONSTRUCTION PHASE: THE FOLLOWING GENERAL PRACTICES 1. INSTALL STABILIZED CONSTRUCTION
PEREINNIS LUPINE, MUNARDA FISTULUSA BERGAMUT, PAPAVER ORIENTALE ORIENTAL POPY, RUDBECKIA HIRTA BLACK-EYED SUSAN, SALVIA OFFICINALIS SAGE; SOW AT A RATE OF 1/3 OZ. EACH PER 1,000 SQFT. OR 4 OZ. PER 1,000 SQFT. IN COMBINATION	2. UNLY THOSE AREAS NECESSARY 3. PRIOR TO THE START OF CONTOUR AT OR HIGT SET OF THE
3. AN AREA SHALL BE MULCHED IMMEDIATELY AFTER IS HAS BEEN SEEDED. MULCHING SHALL CONSIST OF HAY MULCH, HYDRO-MULCH, JUTE NET OVER MULCH, PRE-MANUFACTURED EROSION MATS OR ANY SUITABLE SUBSTITUTE DEEMED ACCEPTABLE BY THE DESIGNER. A. HAY MULCH SHALL BE APPLIED AT THE RATE OF 2 TONS PER ACRE. HAY MULCH SHALL BE SECURED BY EITHER:	4. CLEAR AND GRUB WORK SITE AS
(NOTE: SOIL SHALL NOT BE VISIBLE) I. BEING DRIVEN OVER BY TRACKED CONSTRUCTION EQUIPMENT ON GRADES OF 5% AND LESS. II. BLANKETED BY TACKED PHOTODEGRADABLE/BIODEGRADABLE NETTING, OR WITH SPRAY, ON GRADES GREATER THAN 5%. III. SEE NOTE 6, GENERAL NOTES, AND NOTE 8, WINTER CONSTRUCTION. B. HYDRO-MULCH SHALL CONSIST OF A MIXTURE OF EITHER ASPHALT, WOOD FIBER OR PAPER FIBER AND WATER	5. STORMWATER MANAGEMENT SYST TO THESE SYSTEMS. NO STORMWATER STABILIZED. TEMPORARY INFILTRATION FROM THE SITE DURING CONSTRUCTION
SPRAYED OVER A SEEDED AREA. HYDRO-MULCH SHALL NOT BE USED BETWEEN 9/15 AND 4/15. 4. CONSTRUCTION SHALL BE PLANNED TO ELIMINATE THE NEED FOR SEEDING BETWEEN SEPTEMBER 15 AND APRIL 15. SHOULD SEEDING BE NECESSARY BETWEEN SEPTEMBER 15 AND APRIL 15 THE FOLLOWING PROCEDURE SHALL BE FOLLOWED.	6. DISTURBED AREAS WILL BE PERI WITHIN 30 DAYS OF THE INITIAL DIS WILL BE SAVED FOR LATER USE WHI TO AN APPROVED LOCATION.
ALSO REFER TO NOTE 9 OF WINTER CONSTRUCTION. A. ONLY UNFROZEN LOAM SHALL BE USED. B. LOAMING, SEEDING AND MULCHING WILL NOT BE DONE OVER SNOW OR ICE COVER. IF SNOW EXISTS. IT MUST BE	7. AT A MINIMUM, THE EROSION C FOLLOWING ANY SIGNIFICANT RAINFA

REMOVED PRIOR TO PLACEMENT OF SEED.

PREVIOUSLY NOTED AREAS.

C. WHERE PERMANENT SEEDING IS NECESSARY, ANNUAL WINTER RYE (1.2 LBS/1000 SQ.FT) SHALL BE ADDED TO THE

NG RATE CHING SHALL BE APPLIED TO LOAM THE DAY THE LOAM IS SPREAD BY MACHINERY. ALL BE SECURED WITH PHOTODEGRADABLE/BIODEGRADABLE NETTING. TRACKING BY UFFICE

SITE WILL BE INSPECTED EVERY 30 DAYS UNTIL 85% COVER HAS BEEN ESTABLISHED. THE CONTRACTOR WITHIN 10 DAYS OF NOTIFICATION BY THE ENGINEER THAT THE

OR INSTALLING, MONITORING, MAINTAINING, REPAIRING, REPLACING AND REMOVING ALL N CONTROLS OR APPOINTING A QUALIFIED SUBCONTRACTOR TO DO SO. MAINTENANCE DED DURING THE ENTIRE CONSTRUCTION CYCLE. AFTER EACH RAINFALL, A VISUAL ROSION AND SEDIMENTATION CONTROLS AS FOLLOWS:

BARRIER, AND STONE CHECK DAMS SHALL BE INSPECTED AND REPAIRED ONCE A WEEK NIFICANT RAINFALL. SEDIMENT TRAPPED BEHIND THESE BARRIERS SHALL BE EXCAVATED ND REDISTRIBUTED TO AREAS UNDERGOING FINAL GRADING. SHOULD THE HAY BALE THE CONTRACTOR SHALL INSTALL SEDIMENT BARRIER BEHIND THE HAY BALES.

A WEEK OR AFTER EACH SIGNIFICANT RAINFALL AND REPAIR AS NEEDED. REMOVE EVICES ONCE IT ATTAINS A DEPTH EQUAL TO 1/2 THE HEIGHT OF THE DAM OR RISER. -SITE OR TO AN AREA UNDERGOING FINAL GRADING.

REAS WITHIN 25' OF DRAINAGE-COURSE/STREAM WILL BE SEEDED WITH THE "MEADOW EEKLY BASIS OR AFTER EACH SIGNIFICANT RAINFALL AND RESEEDED AS NEEDED. AS NEEDED UNTIL THE AREA HAS OBTAINED 100% GROWTH RATE. PROVIDE PERMANENT 3:1 AND WITHIN 25' OF DRAINAGE COURSE.

INVIRONMENTAL PROTECTION, CHAPTER 500, APPENDIX C.

IST BE USED TO PREVENT POLLUTANTS FROM CONSTRUCTION AND WASTE MATERIALS ATER, WHICH INCLUDES STORAGE PRACTICES TO MINIMIZE EXPOSURE OF THE MATERIALS TOR MUST DEVELOP, AND IMPLEMENT AS NECESSARY, APPROPRIATE SPILL PREVENTION, NING MEASURES.

TOXIC OR HAZARDOUS SUBSTANCES MUST BE REPORTED TO THE DEPARTMENT. FOR OIL CH IS AVAILABLE 24 HOURS A DAY. FOR SPILLS OF TOXIC OR HAZARDOUS MATERIAL VAILABLE 24 HOURS A DAY. FOR MORE INFORMATION, VISIT THE DEPARTMENT'S WEBSITE SPILLS/EMERGSPILLRESP/

NG CONSTRUCTION, LIQUID PETROLEUM PRODUCTS AND OTHER HAZARDOUS MATERIALS TE GROUNDWATER MAY NOT BE STORED OR HANDLED IN AREAS OF THE SITE DRAINING TRATION AREA" IS ANY AREA OF THE SITE THAT BY DESIGN OR AS A RESULT OF LEVANT FACTORS ACCUMULATES RUNOFF THAT INFILTRATES INTO THE SOIL. DIKES, OF SECONDARY CONTAINMENT THAT PREVENT DISCHARGE TO GROUNDWATER MAY BE SITE FOR THE PURPOSES OF STORAGE AND HANDLING OF THESE MATERIALS. ANY STORMWATER MUST PROVIDE ADEQUATE PRE-TREATMENT OF STORMWATER PRIOR TO INFILTRATION AREA. OR PROVIDE FOR TREATMENT WITHIN THE INFILTRATION AREA, IN TION OF FINES, REDUCTION IN INFILTRATION RATE, AND CONSEQUENT FLOODING AND

UTANT REMOVAL BEST MANAGEMENT PRACTICES (BMPS) MAY RESULT IN VIOLATIONS OF ARD ESTABLISHED BY 38 M.R.S.A. 465-C(1).

CTIONS MUST BE TAKEN TO ENSURE THAT ACTIVITIES DO NOT RESULT IN NOTICEABLE T EMISSIONS DURING OR AFTER CONSTRUCTION. OIL MAY NOT BE USED FOR DUST VES MAY BE CONSIDERED AS NEEDED. A STABILIZED CONSTRUCTION ENTRANCE (SCE) THE EXIST PAVED ACCESS TO THE SITE TO MINIMIZE TRACKING OF MUD AND CURS, PUBLIC ROADS SHOULD BE SWEPT IMMEDIATELY AND NO LESS THAN ONCE A ORM EVENTS. OPERATIONS DURING DRY MONTHS, THAT EXPERIENCE FUGITIVE DUST AVED ACCESS ROADS ONCE A WEEK OR MORE FREQUENTLY AS NEEDED WITH A WATER DIMENT AND DUST.

IINIMIZE THE EXPOSURE OF CONSTRUCTION DEBRIS, BUILDING AND LANDSCAPING STICIDES, HERBICIDES, DETERGENTS, SANITARY WASTE AND OTHER MATERIALS TO INOFF. THESE MATERIALS MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE.

VATION DE-WATERING IS THE REMOVAL OF WATER FROM TRENCHES, FOUNDATIONS, AREAS WITHIN THE CONSTRUCTION AREA THAT RETAIN WATER AFTER EXCAVATION. IN IS HEAVILY SILTED AND HINDERS CORRECT AND SAFE CONSTRUCTION PRACTICES. THE HE PONDED AREA, EITHER THROUGH GRAVITY OR PUMPING, MUST BE SPREAD THROUGH OVED TO AREAS THAT ARE SPECIFICALLY DESIGNED TO COLLECT THE MAXIMUM AMOUNT ERDAM SEDIMENTATION BASIN. AVOID ALLOWING THE WATER TO FLOW OVER DISTURBED ASURES MAY BE TAKEN IF APPROVED BY THE DEPARTMENT.

ATED FOR THIS PROJECT. SHOULD IT BE NECESSARY, THE COLLECTED WATER REMOVED ROUGH GRAVITY OR PUMPING, MUST BE REMOVED TO AREAS THAT ARE SPECIFICALLY AMOUNT OF SEDIMENT POSSIBLE, LIKE A SEDIMENT TRAP (SEE DETAIL THIS SHEET), A DEWATERING DISCHARGE PLAN SHALL BE SUBMITTED TO THE OWNER'S

ISCHARGES. IDENTIFY AND PREVENT CONTAMINATION BY NON-STORMWATER DISCHARGES. DISCHARGES EXIST, THEY MUST BE IDENTIFIED AND STEPS SHOULD BE TAKEN TO PROPRIATE POLLUTION PREVENTION MEASURES FOR THE NON-STORMWATER AUTHORIZED NON-STORMWATER DISCHARGES ARE:

NG ACTIVITY;

GENTS ARE NOT USED AND WASHING IS LIMITED TO THE EXTERIOR OF VEHICLES (ENGINE, SSION WASHING IS PROHIBITED); CORDANCE WITH PERMIT CONDITIONS AND CHAPTER 500 APPENDIX (C)(3);

VASHDOWN, NOT INCLUDING SURFACE PAINT REMOVAL, THAT DOES NOT INVOLVE

SPILLS/LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE NOT OCCURRED, UNLESS EEN REMOVED) IF DETERGENTS ARE NOT USED;

ONING OR COMPRESSOR CONDENSATE; TER OR SPRING WATER;

N-WATER WHERE FLOWS ARE NOT CONTAMINATED; DEWATERING (SEE REQUIREMENTS IN APPENDIX C(5));

LUDING WATERLINE FLUSHINGS; AND

DISCHARGES. THE DEPARTMENT'S APPROVAL UNDER CHAPTER 500 DOES NOT IXED WITH A SOURCE OF NON STORMWATER, OTHER THAN THOSE DISCHARGES IN SPECIFICALLY, THE DEPARTMENT'S APPROVAL DOES NOT AUTHORIZE DISCHARGES OF THE

OUT OR CLEANOUT OF CONCRETE, STUCCO, PAINT, FORM RELEASE OILS, CURING RUCTION MATERIALS; TANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE; GENTS USED IN VEHICLE AND EQUIPMENT WASHING; AND NCES FROM A SPILL OR OTHER RELEASE.

WILL BE USED TO PREVENT EROSION DURING CONSTRUCTION OF THIS PROJECT. ON ENTRANCE AND MAINTAIN UNTIL SITE IS PAVED.

FOR CONSTRUCTION WILL BE DISTURBED.

INSTRUCTION, SEDIMENT BARRIER WILL BE INSTALLED ACROSS THE SLOPE(S), ON THE LIMITS OF CLEARING OR GRUBBING, AND/OR JUST ABOVE ANY ADJACENT TRAVELLED CTION-RELATED EROSION.

NEEDED TO EXECUTE PLANS USING CAUTION NOT TO OVER EXPOSE THE SITE.

TEM WILL BE INSTALLED PRIOR TO CONSTRUCTION OF SITE ELEMENTS THAT DISCHARGE R SHALL BE DIRECTED TO THE BIORETENTION FILTERS UNTIL THE SITE IS COMPLETELY N BASINS SHALL BE INSTALLED TO COLLECT ANY INFILTRATE ANY STORMWATER RUNOFF ON AND PRIOR TO STABILIZATION.

MANENTLY STABILIZED WITHIN 15 DAYS OF FINAL GRADING, OR TEMPORARILY STABILIZED STURBANCES OF SOILS. DISTURBED AREAS WILL BE STABILIZED BEFORE STORMS. LOAM ERE POSSIBLE. EXCESS SOIL MATERIALS WILL BE USED AS FILL OR REMOVED FROM SITE

CONTROL MEASURES SHALL BE REVIEWED AND REPAIRED ONCE A WEEK OR IMMEDIATELY ALL OR SNOWMELT. SEDIMENT TRAPPED BEHIND THESE BARRIERS SHALL BE EXCAVATED WHEN IT REACHES A DEPTH OF 6 INCHES AND BE DISCARDED ON THE SITE. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED AS INDICATED ON THE DRAWINGS.

REQUIRED, ANNUAL WINTER RYE (2.6 LBS/1000 SQ. FT.) SHALL BE SOWN INSTEAD OF 8. LOAM, LIME, FERTILIZE, SEED, AND MULCH LANDSCAPED AND OTHER DISTURBED AREAS.

9. ONCE THE SITE IS STABILIZED AND A 90% CATCH OF VEGETATION HAS BEEN OBTAINED, REMOVE ALL TEMPORARY EROSION CONTROL MEASURES.

10. TOUCH UP LOAM AND SEED.

NOTE: ALL DENUDED AREAS NOT SUBJECT TO FINAL PAVING, RIPRAP OR GRAVEL SHALL BE REVEGETATED. **EROSION CONTROL DURING WINTER CONSTRUCTION:** 1. WINTER CONSTRUCTION PERIOD: NOVEMBER 1 THROUGH APRIL 15.

2. WINTER EXCAVATION AND EARTHWORK SHALL BE COMPLETED SUCH THAT NO MORE THAN ONE (1) ACRE OF THE SITE IS WITHOUT STABILIZATION AT ANY ONE TIME.

3. EXPOSED AREA SHALL BE LIMITED TO THOSE AREAS TO BE MULCHED IN ONE DAY. AT THE END OF EACH WORK WEEK NO AREAS MAY BE LEFT UNSTABILIZED OVER THE WEEKEND.

4. CONTINUATION OF EARTHWORK OPERATIONS ON ADDITIONAL AREAS SHALL NOT BEGIN UNTIL THE EXPOSED SOIL SURFACE ON THE AREA BEING WORKED HAS BEEN STABILIZED, SUCH THAT NO LARGER AREA OF THE SITE IS WITHOUT EROSION CONTROL PROTECTION AS LISTED IN ITEM 2 ABOVE.

5. AN AREA SHALL BE CONSIDERED TO HAVE BEEN STABILIZED WHEN EXPOSED SURFACES HAVE BEEN EITHER MULCHED WITH STRAW OR HAY AT A RATE OF 150 LB. PER 1000 S.F. (WITH OR WITHOUT SEEDING) OR DORMANT SEEDED, MULCHED AND ANCHORED SUCH THAT SOIL SURFACE IS NOT VISIBLE THROUGH THE MULCH. NOTE: AN AREA IS ALSO CONSIDERED STABLE IF SODDED, COVERED WITH GRAVEL (PARKING LOTS) OR STRUCTURAL SAND.

6. BETWEEN THE DATES OF OCTOBER 15 AND APRIL 1, LOAM OR SEED WILL NOT BE REQUIRED. DURING PERIODS OF ABOVE FREEZING TEMPERATURES THE SLOPES SHALL BE FINE GRADED AND EITHER PROTECTED WITH MULCH OR TEMPORARILY SEEDED AND MULCHED UNTIL SUCH TIME AS THE FINAL TREATMENT CAN BE APPLIED. IF THE DATE IS AFTER NOVEMBER 1 AND IF THE EXPOSED AREA HAS BEEN LOAMED, FINAL GRADED WITH A UNIFORM SURFACE, THEN THE AREA MAY BE DORMANT SEEDED AT A RATE OF 3 TIMES HIGHER THAN SPECIFIED FOR PERMANENT SEED AND THEN MULCHED. IF CONSTRUCTION CONTINUES DURING FREEZING WEATHER, ALL EXPOSED AREAS SHALL BE CONTINUOUSLY GRADED BEFORE FREEZING AND THE SURFACE TEMPORARILY PROTECTED FROM EROSION BY THE APPLICATION OF MULCH. SLOPES SHALL NOT BE LEFT UNEXPOSED OVER THE WINTER OR ANY OTHER EXTENDED TIME OF WORK SUSPENSION UNLESS TREATED IN THE ABOVE MANNER. UNTIL SUCH TIME AS WEATHER CONDITIONS ALLOW, DITCHES TO BE FINISHED WITH THE PERMANENT SURFACE TREATMENT, EROSION SHALL BE CONTROLLED BY THE INSTALLATION OF BALES OF HAY, SEDIMENT BARRIER OR STONE CHECK DAMS IN ACCORDANCE WITH THE STANDARD DETAILS SHOWN ON THE DESIGN DRAWINGS. NOTE: DORMANT SEEDING SHOULD NOT BE ATTEMPTED UNLESS SOIL TEMPERATURE REMAINS BELOW 50 DEGREES AND DAY TIME TEMPERATURES REMAIN IN THE 30'S. 7. MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL DRAINAGE WAYS. SLOPES GREATER THAN 3% FOR SLOPES

EXPOSED TO DIRECT WINDS AND FOR ALL OTHER SLOPES GREATER THAN 8%. VEGETATED DRAINAGE SWALES SHALL BE LINED WITH STRAW-COCONUT EROSION CONTROL BLANKET (NORTH AMERICAN GREEN SC150 OR APPROVED EQUAL).

8. BETWEEN THE DATES OF OCTOBER 15 TO NOVEMBER 1, WINTER RYE IS RECOMMENDED FOR STABILIZATION. AFTER NOVEMBER 1, WINTER RYE IS NOT EFFECTIVE. AROUND NOVEMBER 15 OR LATER, ONCE TEMPERATURES OF THE AIR AND SOIL PERMIT, DORMANT SEEDING IS EFFECTIVE.

9. IN THE EVENT OF SNOWFALL (FRESH OR CUMULATIVE) GREATER THAN 1 INCH DURING WINTER CONSTRUCTION PERIOD ALL SNOW SHALL BE REMOVED FROM THE AREAS OF SEEDING AND MULCHING PRIOR TO PLACEMENT. 10. ALL AREAS WITHIN 75 FEET OF A PROTECTED NATURAL RESOURCE MUST BE PROTECTED WITH A DOUBLE ROW OF SEDIMENT BARRIERS.

SITE INSPECTION AND MAINTENANCE:

WEEKLY INSPECTIONS, AS WELL AS ROUTINE INSPECTIONS FOLLOWING EACH RAINFALL, SNOWSTORM, OR THAWING, SHALL BE CONDUCTED BY THE GENERAL CONTRACTOR OF ALL TEMPORARY AND PERMANENT EROSION CONTROL DEVICES UNTIL FINAL ACCEPTANCE OF THE PROJECT (90% GRASS CATCH). RAINFALL OF 0.5 INCHES OR MORE OF RAIN IN 24 CONSECUTIVE HOURS SHALL TRIGGER AN INSPECTION. SNOWFALL OF 2 INCHES OR MORE SHALL TRIGGER AN INSPECTION. CORRECTIVE ACTION SHALL BE STARTED BY THE END OF THE NEXT WORK DAY AND COMPLETED WITHIN SEVEN (7) DAYS OR BEFORE THE NEXT STORM EVENT AS NOTED ABOVE. INSPECTIONS SHALL BE PERFORMED BY SOMEONE WITH KNOWLEDGE OF EROSION AND STORMWATER CONTROL INCLUDING THE STANDARDS AND CONDITIONS IN THE PERMIT ISSUED FOR THE PROJECT. THE SCOPE OF CONSTRUCTION INSPECTIONS INCLUDES DISTURBED AREAS AND IMPERVIOUS AREAS, MATERIAL STORAGE AREAS, AND VEHICLE ACCESS POINTS IN ADDITION TO ESC MEASURES. NECESSARY REPAIRS SHALL BE MADE TO CORRECT UNDERMINING OR DETERIORATION. FINAL ACCEPTANCE SHALL INCLUDE A SITE INSPECTION TO VERIFY THE STABILITY OF ALL DISTURBED AREAS AND SLOPES. UNTIL FINAL INSPECTION, ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL IMMEDIATELY BE CLEANED, AND REPAIRED BY THE GENERAL CONTRACTOR AS REQUIRED. DISPOSAL OF ALL TEMPORARY EROSION AND CONTROL DEVICES SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. RECORDS OF INSPECTIONS SHALL BE KEPT FOR THREE (3) YEARS

MAINTENANCE. IF BEST MANAGEMENT PRACTICES (BMPS) NEED TO BE REPAIRED, THE REPAIR WORK SHOULD BE INITIATED UPON DISCOVERY OF THE PROBLEM BUT NO LATER THAN THE END OF THE NEXT WORKDAY. IF ADDITIONAL BMPS OR SIGNIFICANT REPAIR OF BMPS ARE NECESSARY, IMPLEMENTATION MUST BE COMPLETED WITHIN 7 CALENDAR DAYS AND PRIOR TO ANY STORM EVENT (RAINFALL). ALL MEASURES MUST BE MAINTAINED IN EFFECTIVE OPERATING CONDITION UNTIL AREAS ARE PERMANENTLY STABILIZED.

DOCUMENTATION. KEEP A LOG (REPORT) SUMMARIZING THE INSPECTIONS AND ANY CORRECTIVE ACTION TAKEN. THE LOG MUST INCLUDE THE NAME(S) AND QUALIFICATIONS OF THE PERSON MAKING THE INSPECTIONS, THE DATE(S) OF THE ERATION AND MAINTENANCE (CONTROLS, MATERIALS STORAGE AREAS, AND VEHICLES ACCESS POINTS TO THE PARCEL, MAJOR OBSERVATIONS MUST INCLUDE BMPS THAT NEED MAINTENANCE, BMPS THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE FOR A PARTICULAR LOCATION, AND LOCATION(S) WHERE ADDITIONAL BMPS ARE NEEDED. FOR EACH BMP REQUIRING MAINTENANCE. BMP NEEDING REPLACEMENT, AND LOCATION NEEDING ADDITIONAL BMPS, NOTE IN THE LOG THE CORRECTIVE ACTION TAKEN AND WHEN IT WAS TAKEN.

THE LOG MUST BE MADE ACCESSIBLE TO DEPARTMENT STAFF AND A COPY MUST BE PROVIDED UPON REQUEST. THE PERMITTEE SHALL RETAIN A COPY OF THE LOG FOR A PERIOD OF AT LEAST THREE YEARS FROM THE COMPLETION OF PERMANENT STABILIZATION.

IT IS RECOMMENDED THAT THE OWNER HIRE THE SERVICES OF THE DESIGN ENGINEER TO PROVIDE COMPLIANCE INSPECTIONS (DURING ACTIVE CONSTRUCTION) RELATIVE TO IMPLEMENTATION OF THE STORMWATER AND EROSION CONTROL PLANS. SUCH INSPECTIONS SHOULD BE LIMITED TO ONCE A WEEK OR AS NECESSARY AND BE REPORTABLE TO THE OWNER, TOWN AND DEP

DURING WINTER CONSTRUCTION, THE EROSION CONTROL MEASURES SHALL BE INSPECTED AFTER EACH RAINFALL, SNOWSTORM, OR THAWING, AND A MINIMUM OF ONCE PER WEEK.

SHORT-TERM SEDIMENTATION MAINTENANCE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CLEAN OUT ALL SWALES AND STRUCTURES PRIOR TO TURNING PROJECT OVER.

3. LONG-TERM PROVISIONS FOR PERMANENT MAINTENANCE OF ALL EROSION AND SEDIMENTATION CONTROL DEVICES AFTER ACCEPTANCE OF THE PROJECT SHALL BE THE RESPONSIBILITY OF THE OWNER.

PROGRESS PRINT THIS PLAN IS ISSUED FOR REVIEW AND INFORMATION	1. 05-05-21 SUBMITTED TO	TOWN OF CUMBERLAND	CYN		
PURPOSES UNLY. THIS PLAN IS SUBJECT TO CHANGE AND IS NOT FOR PRICING OR CONSTRUCTION. PRICING BASED ON THIS	EROSION A	CONTROL DETA ND NOTES	AILS		
PLAN IS NOT BINDING JNLESS SIGNED BY BOTH CONTRACTOR AND OWNER.	PROJECT: COMMERCIAL/OFFICE BUILDINGS U.S. ROUTE 1, CUMBERLAND, MAINE				
PERMITTING	owner: LAKESIDE CONCRETE CU 590 COUNTY ROAD,	TTING & ABATEMENT P SUITE 2, WESTBROOK	ROFESSIONALS , ME 04092		
CURTIS	CIVIL ENGINEERS •	SITELI 119 PURINTON ROJ BRUNSWICK, MA 207.725.12 PLANNERS • LAND SU	AD, SUITE A INE 04011 200 RVEYORS		
NEOFELD アフロン 9779 広い	FIELD WK: MC &CR	SCALE: NTS	SHEET:		
LICENSED	DRN BY: NCR	JOB #: 4306			
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05-05-21	DATE: 03/08/21	FILE: 4306-COV-DET	_		



1:1 MAX. SLOPE ON SIDES OF PLANTING HOLE. ----TAMP SOIL AROUND ROOT BALL BASE FIRMLY WITH FOOT PRESSURE SO THAT ROOT BALL DOESN'T SHIFT. PLACE ROOT BALL ON UNEXCAVATED OR TAMPED SOIL. 1" WIDE ARBOR TIE POLYPROPYLENE WEBBING OR CHAINLOCK #4 PLANT TIE. LEAVE .5" CLEARANCE AROUND TRUNK.— (1.5" x 1.5") HARDWOOD STAKES OR (2" x 2") SOFTWOOD STAKES OR (2.5") DIAM. WOOD STAKES. SET THREE EQUAL SPACED STAKES. -ALL STAKES SHALL BE DRIVEN OUTSIDE THE EDGE OF THE ROOT BALL.

SYMBOL AXC AC PG PJM HS

PLANT LIST					
BOTANICAL NAME	COMMON NAME	QTY	SIZE		
ACER X FREEMANII 'CELZAM'	CELEBRATION MAPLE	25	2"CAL		
AMELANCHIER CANADENSIS	SERVICEBERRY	47	5—6'HEIGHT		
PICEA GLAUCA	WHITE SPRUCE	7	6-7' HEIGHT		
RHODODENDRON PJM	PJM RHODODENDRON	14	30" HT		
HEMEROCALLIS STELLA D'ORO	STELLA D'ORO DAYLILLY	32	1 GAL.		



1. MARK THE NORTH SIDE OF THE TREE IN THE NURSERY, AND ROTATE TREE TO FACE NORTH AT THE SITE WHEN EVER POSSIBLE. 2. WATER TWICE THOROUGHLY SUBSEQUENT TO PLANTING

TREE PLANTING DETAIL - B&B TREES IN ALL SOIL TYPES NOT TO SCALE





Label	QTY	Catalog Number	Description	Lum. Lumens	LLF	Wattage
А	5	SGI-20-4K7-FT	SLING SERIES WALLPACK	2,309	0.9	20
В	10	VP-L-80L-180-4K7-4W	LARGE VIPER	19,860	0.9	180
С	3	VP-S-24L-39-4K7-5QM	SMALL VIPER	4,500	0.9	39

Statistics						-	
	Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
	STAT ZONE #1	+	3.1 fc	6.2 fc	0.3 fc	20.7:1	10.3:1

	1. 05–05–21 SUBMITTED	TO TOWN OF CUMBERLAND	CYN
	TITLE:	GHTING PLAN	
	PROJECT: COMME U.S. ROU	RCIAL/OFFICE BUILDING TE 1, CUMBERLAND, M	GS AINE
	PREPARED FOR: LAKESIDE CONCRETE 590 COUNTY ROAL	CUTTING & ABATEMENT D, SUITE 2, WESTBROC	PROFESSIONALS DK, ME 04092
APHIC SCALE		SITEL 119 PURINTON R BRUNSWICK, M 207.725. PLANNERS • LAND S	OAD, SUITE A AINE 04011 1200 URVEYORS
(IN FEET)	9 FIELD WK: MC &CR	SCALE: 1" = 30'	SHEET:
inch = 30 ft. ζ_{CEN}	DRN BY: NCR	JOB #: 4306	
ISSUED FOR:	CH'D BY: CYN	MAP/LOT: R01/11-3	







	STORMWATER TREATMENT METHOD SIZING - GRASS UNDERDRAINED SOIL FILTER						
	(A) (B) (C) (D) (E) (F) (G)						
SUBCATCHMENT	IMPERVIOUS AREA (S.F.)	LANDSCAPED AREA (S.F.)	TREATMENT VOLUME (C.F.)	STORAGE PROVIDED (C.F.)	FILTER AREA REQUIRED (S.F.)	FILTER AREA PROVIDED (S.F.)	TREATMENT METHOD
	(FROM PLAN)	(FROM PLAN)	[(A) X 1"] + [B X 0.4]"		[(A) X 5%] + [(B) X 2%]		
11S	58,513	24,769	5,702	10,491	3,421	3,431	GUSF

TREATMENT PERCENTAGE TABLE							
	IMPERVIOUS AREA (S.F.) IMPERVIOUS (% OF TOTAL) DEVELOPED AREA DEVELOPED AREA (% OF TOTAL) STORMWATER TREATMENT METHOD						
TOTAL	60,609	100	95,753	100			
TREATED	58,513	96.5	76,931	80.3	GUSF		
UNTREATED	2,096	3.5	18,822	19.7	NONE		



		WATER	QUALITY PLAN	J
		PROJECT: COMMERCI U.S. ROUTE	AL/OFFICE BUILDINGS 1, CUMBERLAND, MA	S INE
		PREPARED FOR: LAKESIDE CONCRETE CU 590 COUNTY ROAD,	TTING & ABATEMENT P SUITE 2, WESTBROOK	ROFESSIONALS , ME 04092
GRAPHIC SCALE ⁰ ²⁵ ⁵⁰ ¹⁰⁰ ¹⁰⁰	CURTIS		SITELI 119 PURINTON ROA BRUNSWICK, MAI 207.725.12 PLANNERS • LAND SU	NES AD, SUITE A INE 04011 200 RVEYORS
(IN FEET $)1 inch = 50 ft$	9779 JU	FIELD WK: MC &CR	SCALE: 1" = 50'	SHEET:
1 mon – 00 10	C/CENSED K	DRN BY: NCR	JOB #: 4306	
ISSUED FOR:	Contra The	CH'D BY: CYN	MAP/LOT: R01/11-3	DIV
MITTING REVIEW	05-05-21	DATE: 03/08/21	FILE: 4306-SITE	

1. 05-05-21 SUBMITTED TO TOWN OF CUMBERLAND

CYN





= IMPERVIOUS AREA TREATED

= DEVELOPED AREA TREATED

LEGEND: