

Parking Area and Change of Use Application
for
Inhabitants of Cranberry Isle

15 Mansell Lane

TOWN OF SOUTHWEST HARBOR, MAINE
October 5th, 2023



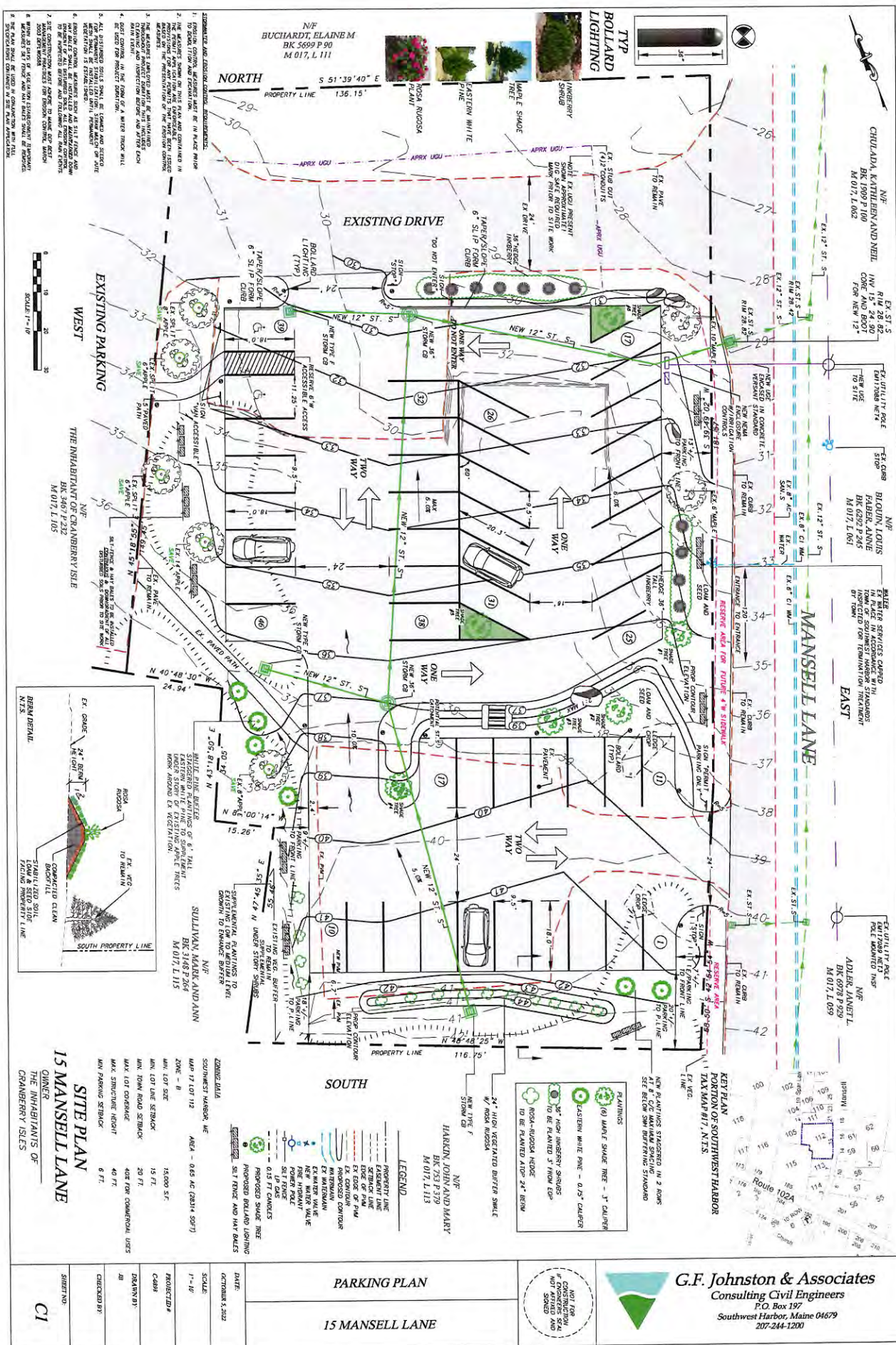
Owner:

Inhabitants of Cranberry Isle
P.O. Box 56
Islesford, ME 04646

Engineer



G.F. Johnston & Associates
Consulting Civil Engineers
12 Apple Lane, Unit #3
Southwest Harbor, Maine
www.gfjcivilconsult.com



VRB1/VRB2/VRB3/VRB4/VSB1/VSB2

Vandal Resistant Bollards

FEATURES

- VRB1, VRB3 and VSB1 horizontal louvers provide 360° of down-lighting with total lamp source cutoff above 90° horizontal
- VRB2 and VRB4 horizontal louvers provide 210° of cutoff down-lighting and vertical louvers provide 150° of non-cutoff accent lighting
- VSB2 horizontal louvers provide 270° of cutoff down-lighting and vertical louvers provide 90° of non-cutoff accent lighting
- Designed for lighting walkways, entrances, courtyards, and landscaped areas where fixtures are viewable from all directions
- Battery back-up, emergency battery pack and houseside shield options



VRB1 VRB2 VRB3 VRB4 VSB1 VSB2



LOW LEVEL

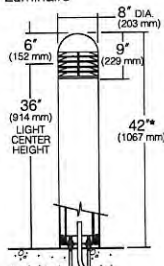
ORDERING INFORMATION (Example)

VRB1		10L2K		BL		HS	
FIXTURE		ELECTRICAL MODULE		LUMINAIRE FINISH		OPTIONS	
VRB1 Domed Round, 360° downlighting		LED		BL Black		EM Battery Back-up	
VRB2 Domed Round, 210° downlighting, 150° accent lighting		Source		DB Dark Bronze			
VRB3 Flat Round, 360° downlighting		Color Temperature		LG Light Gray			
VRB4 Flat Round, 210° downlighting, 150° accent lighting		Voltages		TT Titanium			
VSB1 Square, 360° downlighting		10L IES Type 1 LED		PS Platinum Silver			
VSB2 Square, 210° downlighting, 150° accent lighting		15L IES Type 3 LED		WH White			
		20L IES Type 5 LED		CC Custom Color*			
				*Consult representative			

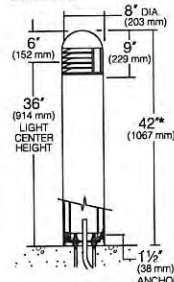
VANDAL RESISTANT BOLLARD

Maximum weight: 30 lb

VRB1 - Single Function Luminaire



VRB2 - Dual Function Luminaire



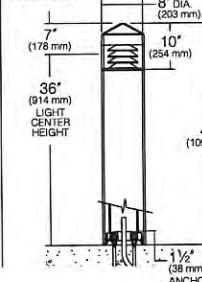
BASE PLAN VRB ALUMINUM SHAFT

*30" or 36" OVERALL HEIGHT AVAILABLE - CONTACT KIM REPRESENTATIVE (27 1/2" ABSOLUTE MINIMUM)

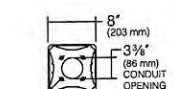
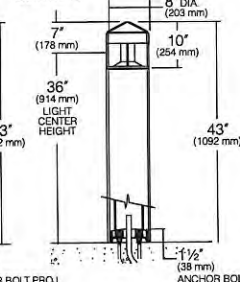
VANDAL RESISTANT SQUARE BOLLARD

Maximum weight: 35 lb

VSB1 - Single Function Luminaire

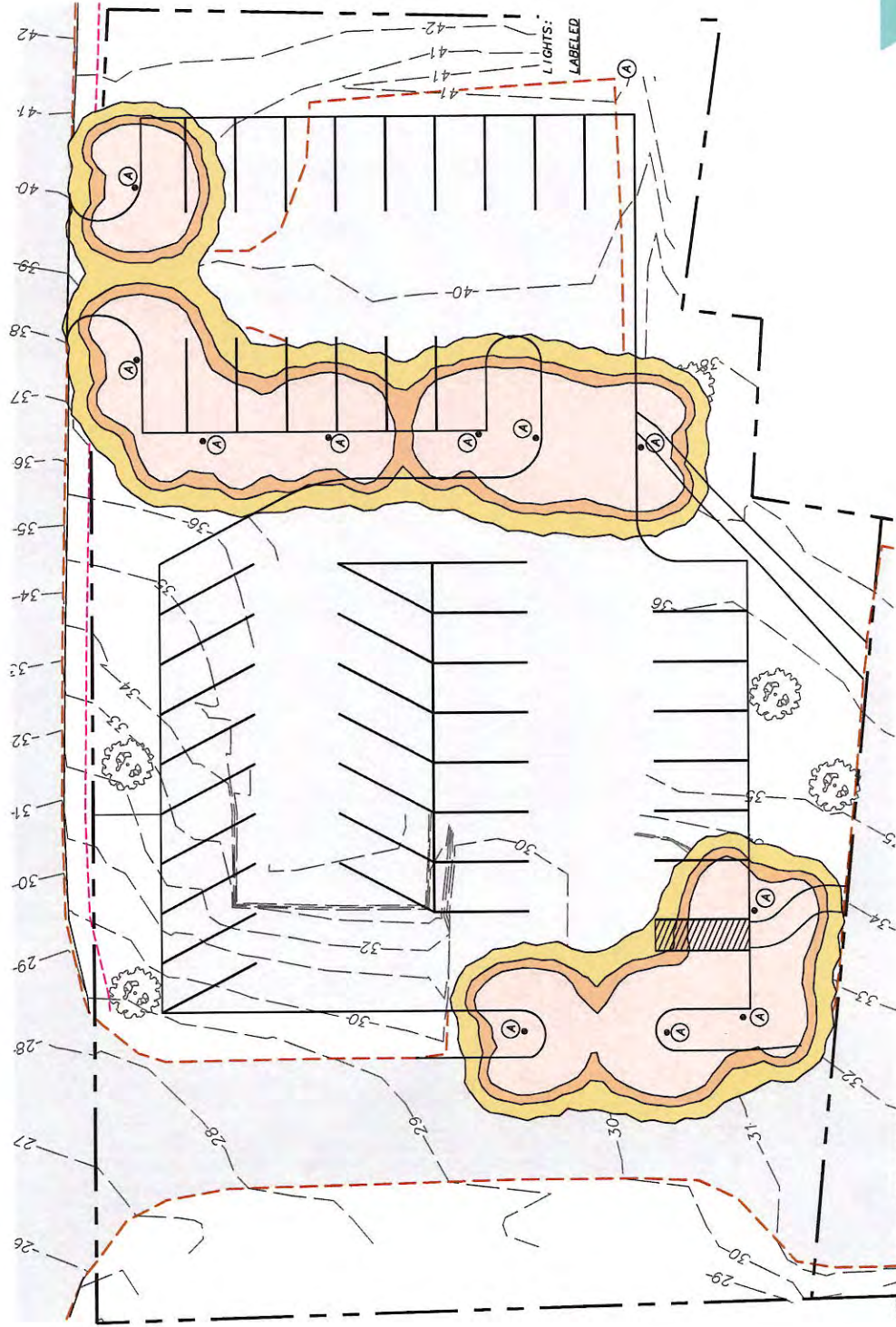


VSB2 - Dual Function Luminaire



BASE PLAN VSB ALUMINUM SHAFT

*30" or 36" OVERALL HEIGHT AVAILABLE - CONTACT KIM REPRESENTATIVE (27 1/2" ABSOLUTE MINIMUM)



- LEGEND**
- 1.0 FC < X < 5.0 FC
 - 0.5 FC < X < 1.0 FC
 - 0.25 FC < X < 0.5 FC
 - ⊗ LIGHT FIXTURE



LIGHT
BOLLARD
KIM VANDAL-RESISTANT
ROUND BOLLARDS

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**LIGHTING PLAN
FOR 15 MANSELL LANE**

NOTE:
LIGHTING PHOTOMETRICS BASED ON PROPOSED
LAYOUT. PHOTOMETRIC INTERFERENCE OF THE FIXTURES.
PHOTOMETRIC PLAN WAS CREATED UTILIZING
CANDLERS, .IES FILES AND VISUAL (TM)
SOFTWARE 2020.

SITE PLAN REQUIREMENTS

The Applicant shall submit a project key plan and site plan. Plans for new buildings and/or structures are also required. Eight (8) copies of plans sized 8 1/2' x 11' Or 11' x 17' shall be submitted with site review application. A **Key Map** must show the entire project; its relationship to surrounding properties; and names of the property owners. A **Site Plan**, drawn to scale not less than one (1) inch equals forty (40) feet, or a scale acceptable to the CEO or Planning Board, shall include the following as applicable.

OK N/A

- ☒ ☐ Scale, north arrow and names of abutting property owners.
- ☒ ☐ Dimensions and area of each lot.
- ☒ ☐ Location of any wells on the lot or within 100' of property lines.
- ☐ ☒ Name and location of any abutting water body, streams, brooks and wetlands. NONE ONSITE
- ☒ ☐ Areas to be cleared and areas of any cut, fill, grading or other earth moving activity.
- ☒ ☐ Size, shape and location of existing and proposed buildings and /or structures including dumpsters, piers, docks. Include setbacks from lot lines, rights of way, water bodies.
- ☒ ☐ Outdoor lighting, signs: Existing and proposed locations
- ☒ ☐ Sewer and water facilities: Existing and proposed.
- ☒ ☐ Location and layout of parking areas with existing and proposed parking spaces (including commercial vehicle parking). Legal non-conforming parking spaces to be noted.
- ☒ ☐ Location of existing or proposed roads/driveways with setback from nearest lot line.
- ☒ ☐ Name/location of existing or proposed right of way and easements on the site or abutting the property.
- ☒ ☐ Existing grades and any proposed changes in grades.
- ☒ ☐ Soil erosion and sedimentation control plan.
- ☐ ☒ Freshwater wetlands or hydric soils.
- ☒ ☐ Plans for proposed structures must include access and dimensions, elevation plan showing height of building and all floor plans.
- ☒ ☐ Buffering/Landscaping plan as described in Section VI.A. (Applicable to non-residential permit request).
 Impact Level: Level 1, Low ☐ Level 2, Medium ☐ Level 3, High ☐ DETERMINED BY BOARD



Inhabitants of Cranberry Isle 15 Mansell Lane Parking Area

Project Description

The existing 0.65 acre site historically contained a business use with parking. The building was removed in 2022. The property presently remains vacant. The proposal is to create a parking area for the residents of Cranberry Isle. The parking area is designed to use existing curb cuts as two way entrances. Internally there are one way loops to facilitate movement. The current program is for this area to be used for long term resident parking. Implementation of that plan and separating existing permit holders to this lot will be an ongoing process of management. The parking area will be paved, striped and landscaped. The only planned lighting is for pedestrian notification of limits by using dark sky compliant ground bollards. There are no pole mounted or flood lights proposed. Black bollards with low voltage LED lighting will be used to visually alert cars and pedestrians to limits and location of footpaths are shown on the site plan.

Buffering

East

The parking area is setback 12 feet from Mansell Lane. Along Mansell Lane the large maples are being retained. In addition, along Mansell Lane a low 36" Inkberry shrub will be installed between parking spaces and the Maples to remain. There will be a small break in this shrub line on the downhill side to facilitate snow removal.

West

The parking area is set back at minimum 8 feet to the west property line. The plan shows that there are several apple trees on the west side of the parcel are to remain. In backdrop of the apple trees a staggered buffer of 6 foot white pines are planned to supplement the understory of the existing apple trees.

South

The parking area is setback 18 feet from the south line. It is planned to leave the existing vegetation along this line (see photo exhibit). Within the 18' it is planned to include directly next to the parking area a 5 foot wide 24" tall berm planted with a continuous rosa-rugosa hedge line. The south line combines three elements of buffering, preserving existing, a topographical barrier of the berm and planted buffer on top of the berm for screening.

North

The north end of the lot abuts the existing entrance to the current Cranberry parking. To screen vehicles and limit light trespass a 36" tall Inkberry shrub is planned along the green



space separating the existing entrance from the new parking. This is as much for screening as it also will visually separate the entrance from the parking. This buffer will provide a divide of green space when viewed in from the public way.

The buffering will be maintained by existing lot management staff. It is planned to have extensive irrigation to foster plant survival. The existing water service onsite will be extended to a meter in a valve box with irrigation controls in a NEMA rated enclosure.



Mansell Lane
Cranberry Isle Parking Area
Land Use Ordinance
Performance Standards Narrative

Buffering

The plan includes methods of both screening with topography and planting on all four sides of the proposed project. The preservation of existing growth with supplemented understory plantings are shown on the attached site plan. In addition the LUO requires a minimum of 1 new shade tree for each 8 parking spaces. There are 6-3" caliper red maples planned within the 46 space parking area, exceeding the minimum requirement of the LUO. The site plan and narrative in the project description contains further details on the buffering installation and maintenance.

Driveway and Driveway Opening Standards

The minimum driveway opening for non-residential sites is 18'. The proposed entrances using existing curb cuts are 24' wide. This is to provide adequate space for perpendicular parked vehicles to back out. The internal one way is allowed to be 10' wide per the LUO, however the site plan uses 16' wide. All of the driveways being used exist and are greater than the required 6 feet from a side property line. The curb cuts that exist on this lot are 110 feet apart, exceeding the minimum 100 foot clearance required by the LUO.

Erosion and Sedimentation Control

The plan shows temporary measures such as silt fence and haybales to be employed. Attached to the application are specifications which will be adhered to. The specifications and measures on the plan become enforceable provisions for any decision which may be made based on the information presented as part of the application. The site is sloped such that parking areas will flow over vegetated areas to reduce sediment transport. The storm basins on the site will contain sumps for grit removal. The low end of the site contains a curb line to slow water and direct to the planned inlets before exiting the site. The final site contains permanently stabilized soil by either hardscape paving or rooted vegetation.

Exterior Lighting

The lighting specifications and photometrics plan demonstrate that no light is greater than 0.1 FC at the property line. In fact the lighting is not intended to light the parking areas, cars have headlights and this would be excessive to flood the area. Rather low voltage LED Bollards will be used for pedestrian directive and vehicular limit.



Fill and Excavation

All side slopes are vegetated with 12 months of the activity and no slopes are greater than 2:1. Landscape boulders will be used in corners and downslopes to provide natural elements that also can facilitate grade changes. These are shown on the proposed site plan.

Fire Protection Standards

The parking area is none of the listed facilities in the LUO that require Fire Marshal Approval. In addition, the Office of State Fire Marshal (OSFM) does not review parking unless associated with a structure requiring review. Not applicable.

Flood Hazard Standard

The maps exhibit shows that the subject site is not within any FEMA designated Flood Hazard Development Zone.

Handicapped Access Standards

The LUO Standard simply states that places of public congregation require approval of the OSFM. This standard from the LUO does not specifically apply. However, ADA requirements for parking areas are 1 per 25 spaces. The site plan demonstrates that 2 spaces for the 46 spaces planned meet ADA Standards.

Heavy Commercial or Industrial Pollutants

The parking area is not by definition of the LUO heavy commercial. However, the specifications for sedimentation control include provisions for a water truck to control dust during construction.

Noise Standards

The Ordinance qualifies some pattern noises and volume as objectional. The standard states

- "1. No noise which is objectionable due to volume, intermittence, beat frequency or shrillness shall be transmitted outside the lot where it originates with the exception of time signals, vessels, and warning devices and noise necessarily involved in the construction or demolition of buildings and other structures.*
- 2. The Planning Board reserves the right to determine if noise from a proposed project or an expansion of a use will be "objectionable". A majority vote of the Board is required for this determination.*

The standard requires that the Board would have to find that parking of a vehicle meets those specific objectional standards. A vehicle with modern emissions control and operated responsibly does not seem to qualify for the standard. To address this standard the site as proposed is surrounded by vegetation and supplemented with berms, trees, and hedges to disrupt noise transmission such as a car door shutting, or vehicle ignition.



Parking and Loading Design Standards

The spaces provided are at least the required 9'-6" wide by 18' deep. The isle widths shown on the plan meets the LUO requirements. Perpendicular spaces use 24' isle width and the east sixty degree parking spaces have a 16' isle width. The plan provides for internal circulation to spaces but also back to the entrance should a spaces not be available. This prevents the need for backing in the parking area or public way. In addition the planting along the main entrances has been kept low, in a hedge to allow one to see the availability of spaces before having to enter the parking areas. The visual ques facilitate circulation to these spaces or others available onsite. The parking areas in all cases are setback greater than 6 feet from the property line. The closest it becomes is 8 feet. Mostly the areas are greater than 20 feet to side lot lines. The parking area includes at least 6 shade trees scattered within the parking area to meet the 1/8 space ratio included in the LUO. The existing entrances to be used are 110 feet apart, exceeding the LUO required 100 foot distance between entrances.

Road Standards

No new roads are proposed. The accesses being used are existing driveway. The existing entrance on the north end of the site may qualify as a private road. The standard requires a minimum of 20 feet wide traveled way for non-industrial vehicles. The existing entrance is 24' wide exceeding the minimum standard.

Sewage Disposal

No new sewage disposal is requested as part of the application.

Signage

The plan shows traffic control signage such as "one way", "Reserved Handicap" and "Stop" will be required within the planned parking area. Traffic and public safety signs are exempt from the LUO. There are no other signs requested as part of the application.

Soil Standard

The Hancock County Soil survey attached shows the site contains moderately well drained Lyman Tunbridge soils. The National Wetland Inventory Maps shows the site does not contain any hydric soils. The soils that are on the site are appropriate for the proposed use evidenced by the successful and stable parking areas already in place from the prior business. This conclusion is also supported by the existence of similar parking on the same soils directly adjacent to the subject site.

Stormwater Runoff Standards

The site previously contained a business and parking those areas are impervious surfaces. The proposed parking has similar impervious characteristics as roof tops. The runoff curve number for pavement and rooftops according to the Soil Conservation Service SCS is $C_n =$



98. There is a small increase in impervious area with additional paving from what prior existed. This runoff is direct through the landscaped areas, the collected by a series of catch basins onsite. Infiltration is promoted by directing flow to landscape areas prior to collection. The storm basins proposed collect all run into a closed system before leaving the site. The low end of the site is planned with a sloped slip form concrete curb. This measure assures a hard point to direct flows to the lowest basins before leaving the site. The site will collect all runoff from the new parking and connect to the existing 15" storm drain system on Mansell Lane. Appropriate measures of grading, buffering and collection of the runoff has been considered in the design of the project.

Stream Standards

There are no streams adjacent to the site and no vegetation plan for removal within a stream setback.

Vibration Standard

The parking area in operation does not generate vibration meeting the requirement of regulation in accordance with the SWH LUO.

Water Quality Standard

The project is not discharging pollutants. None of the activities indicated in the LUO are part of the proposal which would impact natural protected resources. No permits from MDEP for Natural Resource Protection Act is required as there are no protected resources on or adjacent to the site. Adequate provisions in stormwater management and erosion control are to be employed to mitigate sediment transport offsite.

Water Supply Standard

The project will use Town water with a meter and backflow preventer for an irrigation system. The irrigation system will ensure grow in period for establishment of roots of landscaping is successful. Ongoing watering in the investment of the buffers will be provided by Town water. Configuration of the system connection will be coordinated with the Water district at the time of construction.

Standards for Special Activities

The standards for parking areas are covered under Section VI of the performance standards. None of the special activities described in Section VII of the LUO are part of the proposed project.



Wetlands

-  Estuarine and Marine Deepwater
-  Estuarine and Marine Wetland

-  Freshwater Emergent Wetland
-  Freshwater Forested/Shrub Wetland
-  Freshwater Pond

-  Lake
-  Other
-  Riverine



SCALE: 1" = 200'

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**PROJECT: TOWN OF CRANBERRY ISLES
NATIONAL WETLANDS INVENTORY EXHIBIT
SOUTHWEST HARBOR, MAINE**



LuC	Lyman-Tunbridge complex, 0 to 15 percent slopes, very stony
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TuB	Tunbridge-Lyman complex, 3 to 8 percent slopes, rocky
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SCALE: 1" = 100'

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PROJECT: TOWN OF CRANBERRY ISLES
USDA SOILS EXHIBIT
SOUTHWEST HARBOR, MAINE





Stormwater Control and Erosions Control Specifications
Project: Town of Cranberry Isles Parking Area

Erosion Control Plan

The specifications for erosion control for the Town of Cranberry Isles Parking Area project located in Southwest Harbor are part of the contract documents. All specifications for protection of erosion will be made part of the owner's contract with the contractor. The installation of the components will comply with the standards listed below.

1. Where possible, existing vegetation & trees are proposed to remain as part of the construction. Revegetation of stabilized areas will occur as required.
2. Ground mats will be utilized during equipment movement to minimize damage to the existing lawn turf when required.
3. Equipment to be staged in stabilized areas on-site as coordinated with the property manager.
4. No cleaning of equipment will be made onsite.
5. Equipment operating above surficial tree roots will use wood chips to protect tree roots from damage during construction.
6. Equipment will use a limited number of access ways to the project that are planned to be repaved.
7. Any temporary erosion control used will be removed once the project area is stabilized and the vegetation is established.

Stormwater Control Measures:

The following are the stormwater management measures that are to be undertaken during the project duration. Best management practices (BMP's) outlined by the Maine DEP shall be utilized during all phases of the project. All measures, not limited to the items below, are to be installed and maintained in accordance to the "Maine DEP Erosion Control & Sediment Control Best Management Practices – October 2016" (BMP's) or as amended, until all areas are permanently stabilized. Successful implementation along with regular upkeep of the following measures is of prime emphasis to the development of this project.

1. **Sedimentation Barriers** - Such as silt fence & hay bales or erosion control logs shall be installed continuous and downgradient of all disturbed soils and are to be maintained for the duration of the project. Sedimentation barriers require periodic inspection
2. **Dust Control Measures** - Utilization of sprinkled water to reduce emission of airborne particulates (dust) from the project site.



3. **Mulching of Disturbed Soils** – Temporary mulching of disturbed soils shall be necessary until permanent stabilization occurs. Final landscaping in areas to be vegetated shall be coordinated.
4. **Vegetated Downslopes & Forested Buffers** – Downslopes are to be loamed & seeded to ensure permanent stabilization. Areas of fill have been minimized to ensure significant forested buffer to remain.
5. **Cleaning of Equipment** – All cleaning of equipment is to be done off-site in an appropriate manner.
6. **Stockpile of Material** – Should any stockpiling of material occur on-site material is to be stored on a stabilized surface & erosion control measures noted in this application are to be utilized and maintained for the duration of the material storage.
7. **Wooded Buffers** – These areas are to mitigate flow velocities and improve infiltration from culverts and other sheet flow areas. They shall remain native in vegetation.



SOIL EROSION SEDIMENTATION SPECIFICATIONS

This erosion control plan has been prepared for the Town of Cranberry Isles Parking Area project in the town of Southwest Harbor. These specifications shall be used in conjunction with the Stormwater Management and Erosion Control plan prepared for the site. These shall become part of the contract documents as paid for and inspected performance standards.

These specifications, as part of this application make them enforceable provisions of any permits granted for the project.

A. General

1. All work and measures will be as per the "Maine Erosion and Sediment Control BMP's October 2016", or as amended.
2. The attached specifications shall be employed.

B. Prior to Construction

1. Prior to any soil disturbance, silt fence will be installed down-slope of the area to be disturbed.

C. During Construction

1. Exposed soil surfaces shall be treated immediately if they are to remain ungraded more than 30 days or if they are at final grades.
2. Drainage ways, either designed or incidental, shall have filter barriers installed.
3. All work and materials necessary to minimize sediment loss from the site shall be provided.
4. All erosion control measures shall be inspected and repaired after every rainfall and at least daily during prolonged rainfall.

D. Post Construction

1. Erosion control measures shall be maintained until permanent soil stabilization has been achieved.

SOIL PROTECTION AND EROSION CONTROL

Part 1 - GENERAL

1.1 Description of Work:

- A. Provide and maintain devices to control erosion, siltation, sedimentation and dust that occurs during construction operations. Undertake every reasonable precaution and do whatever is necessary to avoid erosion of soil and to prevent silting of wetland areas and drainage ditches.



- B. Provide measures to control dust caused whether on or off the Project site.
- C. Deficiencies in erosion control measures indicated by failures or erosion shall be immediately corrected by providing additional measures or different techniques to correct the situation and prevent subsequent erosion.
- D. Exposure of soils on embankments, excavations, and graded areas shall be kept as short as possible. Initiate seeding and other erosion control practices as soon as reasonably possible.
- E. Install erosion control measures in any ditch, swale or channel before water is allowed to flow in the waterway.
- F. Mechanized equipment will not be permitted in water courses.

1.2 Quality Assurance:

- A. Conform to all requirements of applicable Federal, State and local permits and to the recommendations of the Maine Erosion and Sediment Control BMPs (see Part B below) whether the measures are specifically noted herein, or not.
- B. Standards: "Maine Erosion and Sediment Control BMP's October 2016", or as amended. Hereinafter called Erosion Control Handbook.

PART 2- PRODUCTS

2.1 MATERIALS: Use the following materials to implement and construct erosion control measures.

- A. Siltation Fence: Mirafi Environfence, Amoco 1380 Silt Stop, or approved equal.
- B. Mulch: Type and use as specified by the Erosion Control Handbook
 - 1. Long fibered hay or straw in dry condition and which are relatively free of weeds and foreign matter detrimental to plant life.
 - 2. Mulch netting: Plastic or nylon mesh netting with approximate openings of 1/4" to 1".
- C. Temporary Erosion Control Matting: Type and use as specified by the Erosion Control Handbook.
 - 1. Rolled matting blanket consisting of excelsior wood fiber, jute, straw, or paper bound with a weave of twisted craft paper, cotton cord or plastic mesh.
 - 2. Provide staples for fastening matting to the ground. Staples shall be fabricated in a "U" shape from 11 gauge or heavier stiff galvanized steel wire, 6 to 12 inches in length and 1 to 2 inches across.
- D. Permanent Seeding: Cut and fill slopes and disturbed areas will be stabilized as follows:



1. Four inches of loam will be spread over disturbed areas and smoothed to a uniform surface.
 2. In lieu of tests, agricultural limestone will be spread at the rate of three tons per acre. 10-20-20 fertilizer will follow at the rate of 800 lbs. per acre. These two soil additives will be incorporated into the soil prior to seeding.
 3. Following seed bed preparation, back slopes will be seeded to a mixture of 83% creeping red fescue, and 17% rye grass. Seeding rate is 3 lbs. per 1,000 square feet. Lawn quality sod may be substituted for seed.
 4. Hay mulch at the rate of 90 lbs. per 1,000 square feet of a hydro-application of asphalt, wood, or paper fiber will be applied following seeding. A suitable binder such as curason or Terrtack will be used on hay mulch for wind control.
 5. If final seeding of the disturbed areas is not completed by September 15th of the year of the construction, then on that date these areas will be graded and a cover crop of rye at the rate of 112 lbs/acre or 3 lbs/1,000 sq. ft. The rye seeding will be preceded by an application of 3 tons of lime and 800 lbs. of 10-20-20 fertilizer or its equivalent. If the rye seeding cannot be completed by October 15th, then on that date, hay mulch will be applied at the rate of 150 lbs per 1,000 square feet.
- E. Hay Bales: Rectangular shaped bales of hay or straw weighting at least 40 pounds per bale; free from noxious weed seeds and rough or woody materials.
- F. Filter Fabric: Provide Mirafi 140N woven textile or equal.

PART 3 - EXECUTION

3.1 Construction:

A. Silt Fence:

1. Install silt fence prior to any earthwork including grubbing.
2. Install parallel to contours where possible, prior to site clearing and grading activities.
3. Bury lower edge of fabric below ground surface to prevent underflow, as noted in the Erosion Control Handbook.
4. Curve ends of fence uphill to prevent flow around ends.
5. Inspect frequently; repair or replace any damaged sections.
6. Remove fence only when adequate grass catch has been established.

B. Mulch:

- 1 Undertake after each area has been properly prepared.



2. When seed for erosion control is sown prior to placing the mulch, place mulch on the seeded areas within 48 hours after seeding.
3. Blowing chopped mulch will be permitted.
4. Hay mulch should cover the ground enough to shade it, but the mulch should not be so thick that a person standing cannot see the ground through the mulch.
5. Remove matted mulch or bunches.

C. Temporary Erosion Control Matting (where necessary):

1. Surface Preparation:

- a. Conform to grades for slopes and ditches shown of the drawings.
- b. Finish to a smooth and even condition with all debris, roots, stones, and lumps raked out and removed.
- c. Loosen soil surface to permit bedding of the matting.
- d. Unless otherwise directed, apply seed prior to placement.

2. Installation:

- a. Place strips lengthwise in the direction of the flow of water.
- b. Where strips are laid parallel or meet as in a tee, overlap at least 4 inches.
- c. Overlap ends at least 6 inches in a shingle fashion.
- d. The up-slope end of each strip of the matting shall be turned down and buried to a depth of not less than 6 inches with the soil firmly tamped against it.
- e. Build check slots at right angles to the direction of the flow of water. Space so that one check slot or one end occurs within each 50 feet of slope length. Construct by placing a tight fold of the matting at least 6 inches vertically into the ground, and tamp the same as up-slope ends.
- f. Bury edges of matting around the edges of the catch basins and other structures.
- g. When ordered, additional seed shall be spread over matting, particularly at those locations disturbed by building the slots. Matting shall then be pressed onto the ground with a light lawn roller or by other satisfactory means.
- h. Drive staples vertically into the ground flush with the surface.
- i. On slopes flatter than 4:1, space staples not more than 3 feet and one row, alternately spaced, down the center.



j. On grades 4:1 or steeper, place in the same three rows, but spaced 2 feet apart.

k. On all overlapping or butting edges, double the number of staples, with the spacing halved; all ends of the matting and all required check slots shall likewise have staples spaced every foot.

D. Permanent Seeding:

1. Seed with appropriate seeds and application rates as noted in Section 2.01D.
2. Mulch areas where seeding has been applied. Do not mulch seeded areas where matting will be immediately installed.

E. Topsoil Storage:

1. Topsoil which is stockpiled, on the site for use in loam applications shall be placed out of natural drainages, in piles not more than 8 feet in height, which have side slopes of 2:1 to 1.5:1.
2. A trench (depth as required) shall be constructed around the base of the pile to prevent eroding soil from washing into drainages.

F. Hay Bales:

1. Install as directed by Erosion Control Handbook, and stake with required stakes.

G. Dust Control: Utilize the application of sprinkled water to reduce the emission of airborne soil particulates from the Project site.

H. Temporary Berms: Construct temporary barriers along the toe of embankments using side drains as necessary.

J. Other Temporary Measures:

1. Type and use shall be as specified in the Erosion Control Handbook.

K. Winter Stabilization Notes

1. At this time it is not expected that significant soil disturbance will occur during Winter months or periods of heavy icing. If construction is performed during these times the following construction practices will be followed.

- a. All disturbed areas not stabilized with stone or other measures will have an approved erosion control matting installed and be dormant seeded.
- b. Installation of rip rap slopes will be completed each day. No graded slopes which have not been stabilized will be left overnight.



- c. No frozen soil material or material containing significant snow or ice will be used for fill material.
- d. All material stockpiles will have silt fence and/or hay bales installed down gradient of piles.
- e. Follow general erosion control notes described previously wherever possible and as conditions permit.

3.2 Maintenance

- A. Inspect erosion control practices immediately after each rainfall and at least daily during prolonged rainfall or snowmelt for damage. Provide maintenance and make appropriate repairs or replacement.
- B. Remove silt from silt fence when it has reached one foot above grade or prior to expected heavy runoff or siltation.
- C. Repair matting if any staples become loosened or raised, or if any matting becomes loose, torn, or undermined, make satisfactory repairs immediately.

3.3 Removal of Temporary Erosion Control:

- A. Remove temporary materials and devices when permanent soil stabilization has been achieved.
- B. Level and grade to the extent required to present a slightly appearance and to prevent any obstruction of the flow of water or any other interference with the operation of or access to the permanent works.
- C. Remove unsuitable materials from site and dispose of in a lawful manner.

All stormwater structures, swales, drainage pipes and filters shall be inspected before any rainstorm approaching 1", in the fall and in the spring. Filter basin shall not be used for snow removal storage. Salt will inhibit their ability to filter runoff.



Section 4.2.2.8
C. EROSION CONTROL MAINTENANCE & INSPECTION CHECKLIST

EROSION AND SEDIMENT CONTROL MEASURES AND ACTIVITY	INSPECTION FREQUENCY		
	Weekly	Before and After a Storm	After Construction
SEDIMENT BARRIERS			
Sediment barriers are installed prior to soil disturbances	X	X	
Silt fences are keyed in and tight	X	X	
Barriers are repaired and replaced as necessary	X	X	
Barriers are removed when the site is stabilized - Silt fence should be cut at the ground surface			X
TEMPORARY STABILIZATION			
Areas are stabilized if idle for 14 days or more	X	X	
Daily stabilization within 100 ft of a natural resource	X	X	
MULCH			
Seed and mulch within 7 days of final grading. Ground is not visible	X	X	
Erosion control mix is 4-6 inch thick	X	X	
Erosion control blankets or hay mulch are anchored	X	X	
VEGETATION			
Vegetation provides 90% soil cover	X		X
Loam or soil amendment were provided	X		X
New seeded areas are mulched and protected from vehicle, foot traffic and runoff	X	X	X
Areas that will remain unworked for more than 1 year are vegetated with grass	X		
SLOPES AND EMBANKMENTS			
Final graded slopes and embankments are stabilized	X	X	X
Diversions are provided for areas with rill erosion	X	X	X
Areas steeper than 2:1 are riprapped	X		
Stones are angular, durable and various in size	X		
Riprap is underlain with a gravel layer or filter fabric	X		
STORMWATER CHANNELS AND CULVERTS			
Ditches and swales are permanently stabilized—channels that will be riprapped have been over-excavated	X	X	X
Ditches are clear of obstructions, accumulated sediments or debris	X	X	X
Ditch lining/bottoms are free of erosion	X	X	X
Check dams are spaced correctly to slow flow velocity	X		
Underlying filter fabric or gravel is not visible	X	X	X
Culvert aprons and plunge pools are sized for expected flows volume and velocity	X		
Stones are angular, durable and various in size	X		
Culverts are sized to avoid upgradient flooding	X	X	
Culvert protection extends to the maximum flow elevation within the ditch	X	X	X
Culvert is embedded, not hanging	X	X	X



CATCH BASIN SYSTEMS			
Catch basins are built properly	X		
Accumulated sediments and debris are removed from sump, grate and collection area		X	X
Floating debris and floating oils are removed from trap			X
ROADWAYS AND PARKING SURFACES			
The gravel pad at the construction entrance is clear from sediments	X	X	
Roads are crowned		X	X
Cross drainage (culvert) is provided	X		
False ditches (from winter sand) are graded		X	X
BUFFERS			
Buffers are free of erosion or concentrated flows		X	X
The downgradient of spreaders and turnouts is stable		X	X
Level spreaders are on the contour			X
The number of spreaders and ditch turnouts is adequate for flow distribution		X	X
Any sediment accumulation is removed from within spreader or turnouts		X	X
STORMWATER BASINS AND TRAPS			
Embankments are free of settlement, slope erosion, internal piping, and downstream swamping		X	X
All flow control structure or orifices are operational and clear of debris or sediments		X	X
Any pre-treatment structure that collects sediment or hydrocarbons is clean or maintained		X	X
Vegetated filters and infiltration basins have adequate grass growth			X
Any impoundment or forebay is free of sediment		X	X
WINTER CONSTRUCTION (November 1st - April 15th)			
Final graded areas are mulched daily at twice the normal rate with hay, and anchor (not on snow)	Daily		
A double row of sediment barrier is provided for all areas within 100 ft of a sensitive resource (use erosion control mix on frozen ground)	Daily		
Newly constructed ditches are rippedraped	Daily		
Slopes greater than 8% are covered with an erosion control blanket or a 4-inch layer of erosion control mix	Daily		
HOUSEKEEPING PUNCH LIST			
All disturbed areas are permanently stabilized, and plantings are established (grass seeds have germinated with 90% vegetative cover)			X
All trash, sediments, debris or any solid waste have been removed from stormwater channels, catch basins, detention structures, discharge points, etc.			X
All ESC devices have been removed: (silt fence and posts, diversions and sediment structures, etc.)			X
All deliverables (certifications, survey information, as-built plans, reports, notice of termination (NOT), etc.) in accordance with all permit requirements have been submitted to town, Maine DEP, association, owner, etc.			X



CONSTRUCTION INSPECTION FORM FOR EROSION AND SEDIMENT CONTROL						
General Information:						
Site Name:		Date:		Inspected by:		
Owner:						
Retained 3Pt:		Last Rain Date:		Amount:		
Reason for Inspection:		Weekly	Winter	Final	Rain Event	Complaint
Description of disturbed area:						
Photos:						
		YES/NO/NA	COMMENTS			
1. Is an Erosion and Sediment Control Plan available?						
ESC plan on-site and followed						
Other:						
2. Are all erosion control practices installed properly, maintained and functioning?						
Disturbed areas stable						
Concentrated flow inlet/outlet protection						
All areas at final grade						
Disturbed dormant areas stabilized						
Access roads and parking						
Hillsides and stockpiles						
Other:						
3. Are all sedimentation control practices installed properly, maintained and functioning?						
Construction entrance						
Sedimentation basins/traps/diversions						
Perimeter controls						
Check dams						
Other:						
4. Is maintenance of ESC measures, construction activities and housekeeping kept-up?						
Sedimentation/erosion in ditches						
Tracked Sediment or dust at exits						
Hazardous material storage and spill control practices						
Waste management (concrete, hazardous material, etc.)						
Other:						
5. Violation, Corrective Actions, Recommendations						
Sediment discharged from site?						
Corrective action required?						
Site compliant with all permits?						
Notice of violation or stop work order issued?						
Comments/Corrective Actions (complete corrective actions before the next rain event and within 7 day)						