

Date April 20, 2023
To Town of Cumberland Planning Board
From Carla Nixon, Town Planner
Subject **Site Plan Amendment – Solar Field Installation - LGC - 221 US Route 1**

1. REQUEST/PROJECT DESCRIPTION:

The applicant is LGC Clinical Diagnostics of 37 Birch St. Milford, MA 01757. The application is for a project located 221 U.S. Route 1, Cumberland, Maine as shown on Tax Assessor's Map R02 Lot 10 A in the Office Commercial North (OC- North) zoning district.

The parcel, 7.78 acres in size, is in the shape of a rectangle extending from south to north along Route 1. The southern end of the property is currently developed with a two story, 30,000 sf commercial building. This project involves the installation of a ½ acre solar array within 1.57 acre perimeter fencing. The project will undergo Planning Board review as an amendment to an approved site plan.

There are no changes proposed to the existing buildings, parking, entrance, signage or lighting.

SMRT Architects and Engineers prepared the application. Dan Diffin, P.E., Sevee and Maher Engineers, reviewed the plan for conformance with town ordinances. Ken Costello, RLA of SMRT will represent the applicant at the planning board meeting.

This project is subject to review under the provisions of Chapter 229-6 and the Route 1 Design Standards.

2. PROJECT HISTORY:

- Planning Board Major Site Plan Review Approval: May 16, 2012.
- Major Staff Site Plan Amendment Review: May 9, 2022, for building expansion.

3. OUTSIDE AGENCY APPROVALS:

- U.S. Army Corp of Engineers Tier 1 NRPA: Status: Found to be exempt under the 480-Q exemption.
- Amendment to existing Maine DEP Stormwater Permit. Status: Approved.

4. REQUESTED WAIVERS:

1. Route 1 Development Setback to 25" to significantly reduce wetland impacts.

Town Engineer's Comment:

Section 600 – Wavier Provision

1. Waiver Request 1 –Reduce the Route 1 Buffer from 75-feet to 25-feet – SME recommends the Applicant provide additional information on the screening and buffering along the US Route One boundary before the Board grants this waiver request.

Planner's comment: The town engineer has raised questions about the proposed buffering plan. Abutters have also expressed concerns, as has the Lands and Conservation Commission.

5. TOWN ENGINEER'S REVIEW: Dan Diffin, P.E., Sevee and Maher Engineers.

PROJECT DESCRIPTION

The applicant proposes to construct 0.5 -acre 423-kW solar array within 1.57 acres perimeter fencing and a 16-foot-wide gravel access drive from Powell Road. The array will be served by Overhead utility to a single pole in the north of array then underground utility to the transformer and array and utility connections from US Route One. The 423-kW solar array will provide 100% of the power to the existing building.

This project is being reviewed as Site Plan Review as outlined in Chapter 229, Sections 8 to 10 - Site Plan Review of the Town of Cumberland Ordinances, most recently amended and adopted on October 13, 2020.

Chapter 229: Site Plan Review

SME has reviewed the applicable sections of Chapter 229 and has provided comments for those sections not found to be addressed by the Application. The remaining sections have been reviewed and found to comply with Chapter 229 requirements.

Section 229-8.A. -Financial capacity

2. Please provide evidence of proof of adequate funds to complete this project.

Section 229.10.B - Vehicular Traffic, Parking and Loading Requirements

3. Please provide evaluation of emergency vehicle and Fire Truck access path in and out of this portion of the site.

Section 229.10.C Stormwater management and erosion control

4. Please provide calculations and stormwater plans to demonstrate that there will be no increase in peak flows from the property during the 2-, 10- and 25-year storms.
5. In the MDEP Water Quality Volume Calculations, Impervious Area /Developed Area Treatment table, the site impervious area of SC-24 is 2,355 sf and does not include the total access road impervious area of 3,113 sf. Please update this table with the total impervious area of the access road and confirm the required amount of treatment is provided.

Section 229.10.I Buffering and Landscaping

6. SME recommends the Applicant provide additional information on the buffering and screening along all sides of the project boundary to determine if adequate screening is proposed. Below are specific comments for each project boundary:
 - a. US Route One Buffer - The panels are 6-feet tall and the chain link fence with privacy slats along US Route One is also proposed to be 6-feet tall. Since the site sits below the elevation of US Route One by approximately 4-feet, it is likely that the views from a car or pedestrian level will look over the top of the proposed fence and down into the array. Please confirm that the fence will fully screen the array, or that the plantings will grow to a height to screen the array.
 - b. Powell Road Property – There is no screening of views along the Powell Road property line. The proposed agricultural fencing will not screen the array. Please provide additional information that demonstrates compliance with this section of the ordinance.
 - c. Eastern Property Line – There is existing vegetation along the property boundary with the abutting residential use. Please provide additional details on if it is adequate to buffer the views of the solar development.

- d. Southern Array Extents – this area of the array should also be considered for enhanced screening and buffering as there does not appear to be adequate existing vegetation to screen views from traffic traveling north along US Route One.

Chapter 315: Zoning

SME has reviewed the applicable sections of Chapter 315 and found that the project complies with Chapter 315 requirements.

Route 1 Design Standards

SME has reviewed the applicable sections of Route 1 Design Standards and has provided comments for those sections not found to be addressed by the Application. The remaining sections have been reviewed and found to comply with Route 1 Design Guidelines requirements.

Section 600 – Waiver Provision

7. Waiver Request 1 –Reduce the Route 1 Buffer from 75-feet to 25-feet – SME recommends the Applicant provide additional information on the screening and buffering along the US Route One boundary before the Board grants this waiver request.

General Comments.

1. Site Plan – SP-1
 - a. There may be proposed plantings over the existing water lines. SME recommends having the water lines surveyed or field verify water line location to coordinate plant locations and avoid conflict with the water line.
2. Site Layout & Grading Plan – Sheet C-102:
 - a. The grading of the access road appears to include two 80-foot contours on the proposed access drive. Please confirm grading to provide positive slope and drainage across driveway.
 - b. The grades of the access drive do not direct flow to the Vegetative buffer that treats the stormwater from the gravel access drive. SME recommends the Applicant super elevate the access drive to direct the flow of stormwater off the drive and into the vegetative buffer.
3. Site Details – Sheet C-502
 - a. The Post Base detail may not be deep enough for be below frost. SME recommends the Applicant confirm that the Post Base is below frost.

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 area to be used for solar panels is currently an undeveloped meadow. It is relatively flat. The area has delineated wetlands and the solar panel will be located so as to minimize the impact to these wetland areas.

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

B. Traffic, Circulation and Parking

10.2.1 Traffic Access and Parking

Vehicular access to and from the development must be safe and convenient.

10.2.1.1 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.

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

10.2.1.3 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.

10.2.1.4 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.

10.2.1.5 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.

10.2.1.6 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.

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

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

- a. 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.
- b. No use which generates one hundred (100) 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.

10.2.2 Access way Location and Spacing

Access ways must meet the following standards:

10.2.2.1 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.

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

10.2.3 Internal Vehicular Circulation

The layout of the site must provide for the safe movement of passenger, service, and emergency vehicles through the site.

10.2.3.1 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.

10.2.3.2 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).

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

10.2.3.4 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.

10.2.4 Parking Layout and Design

Off street parking must conform to the following standards:

10.2.4.1 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.

10.2.4.2 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.

10.2.4.3 Parking stalls and aisle layout must conform to the following standards.

Parking Angle	Stall Width	Skew Width	Stall Depth	Aisle Width
90°	9'-0"		18'-0"	24'-0" 2-way
60°	8'-6"	10'-6"	18'-0"	16'-0" 1-way
45°	8'-6"	12'-9"	17'-6"	12'-0" 1-way
30°	8'-6"	17'-0"	17'-0"	12'-0" 1 way

10.2.4.4 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.

10.2.4.5 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.

10.2.4.6 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.

There are no proposed changes to the parking, entrance, or circulation plan. A gravel access drive will allow access to the array as needed for maintenance and repairs.

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

10.2.5 Building and Parking Placement

10.2.5.1 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.

10.2.5.2 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.

There are no proposed changes to the previously approved parking plan.

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

10.2.6 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.

There are no changes to the pedestrian circulation plan.

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

10.3 Stormwater Management and Erosion Control

10.3.1 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.

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

10.3.1.2 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.

10.3.1.3 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.

10.3.1.4 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.

10.3.1.5 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.

10.3.1.6 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.

10.3.1.7 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.

The stormwater management plan was prepared by SMRT engineers and an amended Stormwater law permit application is being reviewed by MDEP. Receipt of this permit is a condition of approval. The Town Engineer has made several comments regarding stormwater management that need to be addressed either before approval or as a condition of approval.

With the proposed condition(s) of approval and based on the above findings of fact, the Planning Board finds the standards of this section have been met.

10.3.2 Erosion Control

10.3.2.1 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.

10.3.2.2 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.

Erosion control measures have been described in the application and the plan has been reviewed and approved by the Town Engineer.

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

10.4 Water, Sewer, Utilities and Fire Protection

10.4.1 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.

10.4.2 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 on-site waste disposal, all such systems must conform to the Subsurface Wastewater Disposal Rules.

10.4.3 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.

10.4.4 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.

There are no changes to the above utilities or the fire protection plan.

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

10.5 Water Protection

10.5.1 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.

10.5.2 Water Quality

All aspects of the project must be designed so that:

10.5.2.1 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.

10.5.2.2 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.

The proposed project will not negatively impact water quality on or near the site.

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

10.5.3 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.

10.6 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 shown as being in Zone C (Area of Minimal Flooding) on FIRM Map 230162 0018C and Map 2301620016.

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

10.7 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 from the Maine Historic Preservation Commission was submitted for the original site plan review in 2012; it showed that the development would have no impact on historic or archaeological resources. An additional finding letter dated 12/22/22 stated no historic properties would be affected by the proposed project.

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

10.8 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.

There are no exterior lighting changes proposed.

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

10.9 Buffering and Landscaping

10.9.1 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.

10.9.2 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.

Landscaping to buffer the view of the proposed solar panels has been proposed. There are comments from abutters, the town engineer and the Cumberland Lands and Conservation Commission that need to be addressed prior to approval

Based on the above findings of fact, the Planning Board finds the standards of this section have not been met.

10.0 Noise

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

The solar panels will not create noise that would be a nuisance for neighboring properties.

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

10.11 Storage of Materials

10.11.1 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.

10.11.2 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.

10.11.3 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.

There are no proposed changes to the storage plans.

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

10.12 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.

- ***Technical Ability: The applicant has utilized SMRT and Owen Haskell to prepare the plan and supporting information.***
- ***Financial Capacity: The project will be self-funded.***

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

LIMITATION OF APPROVAL:

Construction of the improvements covered by any site plan approval must be substantially commenced within twelve (12) months of the date upon which the approval was granted. If construction has not been substantially commenced and substantially completed within the specified period, the approval shall be null and void. The applicant may request an extension of the approval deadline prior to expiration of the period. Such request must be in writing and must be made to the Planning Board. The Planning Board may grant up to two (2), six (6) month extensions to the periods 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 minimus changes as so determined by the Planning Board which do not affect approval standards, is subject to review and approval of the Planning Board prior to implementation.

Route 1 Design Standards: None of the proposed amendments change the previous findings (listed below) for the Route 1 Design Standards.

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: N/A

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: Yes

1.3 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: Yes

1.3.1 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: Yes

1.3.2 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: Yes.

1.3.3 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: N/A

1.4 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.

1.4.1 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: N/A

1.4.2 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: N/A

1.4.3 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: N/A

1.4.4 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

1.4.5 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).

FINDING: N/A

1.5 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: N/A

1.5.1 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: N/A

1.5.2 Landscaping

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: N/A

1.5.3 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: N/A

1.5.4 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: N/A

1.6 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: N/A

1.6.1 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: N/A

1.6.2 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: N/A

1.6.3 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: TBD

1.7 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: N/A

1.7.1 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: N/A

1.7.2 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: TBD

1.7.3 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: N/A

1.8 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.

1.8.1 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.

FINDING: TBD

1.8.2 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.

FINDING: TBD

1.8.3 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.

1.9 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: Yes

1.10 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: Compliant

1.10.1 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: N/A

1.10.2 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.

FINDING: Compliant

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, 100 and a half story Greek Revival "capess" 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

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.

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: N/A

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: N/A

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 100 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: N/A

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., cementitious 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: N/A

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: N/A

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: N/A

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: N/A

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: N/A

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: N/A

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: N/A

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: N/A

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: N/A

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: N/A

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: N/A

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: Yes

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 multi-tenant 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: N/A

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 cementitious 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 well-designed 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.

NOTE: There are no proposed changes to the existing permitted signage.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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 : Yes

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: Yes

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: Yes

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 100 watts and should not create glare or light trespass onto abutting properties.

FINDING: N/A

PROPOSED CONDITIONS OF APPROVAL:

1. ***A copy of the amended DEP Stormwater law permit shall be submitted to the Town Planner prior to the preconstruction conference.***



April 14, 2023

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

Subject: Peer Review for Site Plan Application Amendment
LGC Clinical Diagnostics – Solar Array
221 US Route 1, Cumberland, Maine

Dear Ms. Nixon:

SMRT has received the Sevee & Maher Engineers, Inc. (SME) third party review comments on the Major Site Plan Application Amendment for the proposed 423 kW solar array development off of U.S. Route 1 and Powell Road and Tuttle Road in Cumberland, Maine. The following are responses to comments received. These comments are to be utilized in conjunction with the revised plan set dated April 13, 2023.

Chapter 229: Site Plan Review

SME has reviewed the applicable sections of Chapter 229 and has provided comments for those sections not found to be addressed by the Application. The remaining sections have been reviewed and found to comply with Chapter 229 requirements.

Section 229-8.A. -Financial capacity

1. Please provide evidence of proof of adequate funds to complete this project.

Response: Company annual report was submitted as part of application and should be sufficient to prove capacity. This project is in line with the company's sustainability goals and a high profile project within the company. Project is privately funded and contract with contractor is in place.

Section 229.10.B - Vehicular Traffic, Parking and Loading Requirements

2. Please provide evaluation of emergency vehicle and Fire Truck access path in and out of this portion of the site.

Response: Gravel access drive can accommodate fire truck access. Plan of truck turning operations has been added to plan to confirm access. See sheet C-102.

Section 229.10.C Stormwater management and erosion control

3. Please provide calculations and stormwater plans to demonstrate that there will be no increase in peak flows from the property during the 2-, 10- and 25-year storms.

Response: Project Meets Maine DEP Chapter 500 standards. See attached DEP stormwater approval L-256-NJ-D-A, dated 3/29/2023.

4. In the MDEP Water Quality Volume Calculations, Impervious Area /Developed Area Treatment table, the site impervious area of SC-24 is 2,355 sf and does not include the total access road impervious area of 3,113 sf. Please update this table with the total impervious area of the access road and confirm the required amount of treatment is provided.

Response: MDEP Water Quality Volume Calculations table has been modified as requested. See attached. Required amount of treatment is provided.

Section 229.10.I Buffering and Landscaping

5. SME recommends the Applicant provide additional information on the buffering and screening along all sides of the project boundary to determine if adequate screening is proposed. Below are specific comments for each project boundary:

- a. US Route One Buffer - The panels are 6-feet tall and the chain link fence with privacy slats along US Route One is also proposed to be 6-feet tall. Since the site sits below the elevation of US Route One by approximately 4-feet, it is likely that the views from a car or pedestrian level will look over the top of the proposed fence and down into the array. Please confirm that the fence will fully screen the array, or that the plantings will grow to a height to screen the array.

Response: Rendered visualization has been developed to show view from Route 1. See enclosed rendering. Proposed planting and fencing are intended to screen proposed solar installation without impacting solar exposure to panels.

- b. Powell Road Property – There is no screening of views along the Powell Road property line. The proposed agricultural fencing will not screen the array. Please provide additional information that demonstrates compliance with this section of the ordinance.

Response: Existing vegetation along Powell Road to remain. The nearest solar panel to Powell Road is 94'+ from road edge. Existing vegetation is sufficient for breaking up view. See enclosed rendering.

- c. Eastern Property Line – There is existing vegetation along the property boundary with the abutting residential use. Please provide additional details on if it is adequate to buffer the views of the solar development.

Response: Existing mature trees are proposed to remain. The closest solar panel is 164' from eastern property line. Additional buffer not deemed necessary. See enclosed rendering.

- d. Southern Array Extents – this area of the array should also be considered for enhanced screening and buffering as there does not appear to be adequate existing vegetation to screen views from traffic traveling north along US Route One.

Response: Existing vegetation within Wetlands and stream buffer zone are proposed to remain at south and southwest corner of installation. Extents of wetlands limits inclusion of additional screening plants.

Chapter 315: Zoning

SME has reviewed the applicable sections of Chapter 315 and found that the project complies with Chapter 315 requirements.

Route 1 Design Standards

SME has reviewed the applicable sections of Route 1 Design Standards and has provided comments for those sections not found to be addressed by the Application. The remaining sections have been reviewed and found to comply with Route 1 Design Guidelines requirements.

Section 600 – Waiver Provision

6. **Waiver Request 1** –Reduce the Route 1 Buffer from 75-feet to 25-feet – SME recommends the Applicant provide additional information on the screening and buffering along the US Route One boundary before the Board grants this waiver request. Please see rendering of proposed fence and planting installation for screening purposes.

Response: See response to Item 229.10.I, 5.a comment above.

General Comments.

1. Site Plan – SP-1
 - a. There may be proposed plantings over the existing water lines. SME recommends having the water lines surveyed or field verify water line location to coordinate plant locations and avoid conflict with the water line.

Response: Proposed plantings are container grown shrubs in #3 pots which are 10” in depth. Proposed excavations for plant pits will be a maximum of 15” deep. Water line will be field located to allow for installation of fence posts as noted on sheet C-102. Note added to landscape plan to field coordinate plant locations as well.

2. Site Layout & Grading Plan – Sheet C-102:
 - a. The grading of the access road appears to include two 80-foot contours on the proposed access drive. Please confirm grading to provide positive slope and drainage across driveway.

Response: One contour was mislabeled. Plan has been corrected. See revised plan.

Ms. Carla Nixon, Town Planner
April 14, 2023

- b. The grades of the access drive do not direct flow to the Vegetative buffer that treats the stormwater from the gravel access drive. SME recommends the Applicant super elevate the access drive to direct the flow of stormwater off the drive and into the vegetative buffer.

Response: Grading has been modified to better direct sheet flow to vegetative buffer. It should be noted that entire site will be maintained in similar fashion as vegetative buffer, though not technically identified as vegetative buffer, will provide similar treatment. See revised plan.

3. Site Details – Sheet C-502

- a. The Post Base detail may not be deep enough for be below frost. SME recommends the Applicant confirm that the Post Base is below frost.

Response: Detail has been modified. See revised plan.

Sincerely,



Kenneth D. Costello, LEED AP
Principal/Maine Licensed Landscape Architect

SMRT Architects and Engineers | 75 Washington Ave | Portland, ME 04101
C 98-886-0683 | email: kcostello@smrtinc.com

Enclosure: Visualization renderings
Maine DEP approval dated 3/29/23
MDEP Water Quality Volume Calculations worksheet
Revised Plan Set dated 4/13/23



View from Route 1 – Visualization



View from Powell Road – Visualization



View from East - Visualization



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
17 STATE HOUSE STATION AUGUSTA, MAINE 04333-0017

DEPARTMENT ORDER

IN THE MATTER OF

LGC CLINICAL DIAGNOSTICS) STORMWATER MANAGEMENT LAW
Cumberland, Cumberland County)
SOLAR ARRAY) AMENDMENT
L-25656-NJ-D-A (approval)) FINDINGS OF FACT AND ORDER

Pursuant to the provisions of 38 M.R.S. § 420-D, and Chapters 500 and 502 (06-096 C.M.R. ch. 500 and 502, last amended August 12, 2015) of the Department's Regulations, the Department of Environmental Protection (Department) has considered the application of LGC CLINICAL DIAGNOSTICS (applicant) with the supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

1. PROJECT DESCRIPTION:

A. History: In Department Order #L-25656-NJ-A-N, dated May 22, 2012, the Department approved the construction of a stormwater management system consisting of an underdrained soil filter and pervious pavement for a two-story office building with a footprint of approximately 30,000 square feet, associated parking, and other improvements. The project resulted in approximately 2.5 acres of developed area, 1.5 acres of which is impervious area. The applicant also submitted a Permit-by-Rule notification form (PBR#53833) for activities adjacent to an unnamed stream. The project site is located on U.S. Route 1 in the Town of Cumberland.

In Department Order #L-25656-NJ-C-M, dated October 6, 2022, the Department approved an addition to an existing building which resulted in an additional 2,906 square feet of impervious area long with an associated sidewalk relocation and landscaping. As a result of the development, the total developed area on the parcel increased to 2.51 acres, 1.5 acres of which is impervious. The applicant also submitted a Permit-by-Rule notification form (PBR#74650) for activities adjacent to an unnamed stream. During the review of that application, the Department determined that a transfer was not required because no change of ownership had occurred based on information provided by the applicant related to a merger.

B. Summary: The applicant proposes to amend the stormwater management system to include the installation of a 1.63-acre, 423kW ground-mounted solar array. The proposed development will include solar panels, fencing, a transformer and pad, and a gravel drive on the northern half of the parcel. The development will result in an increase of impervious area of 0.07 acres. In total, the parcel will contain 2.51 acres of developed area, 1.57 acres of which is impervious area. The project is shown on a set of plans, the

first of which is titled “LGC Clinical Diagnostics, Inc. Solar Array Improvements,” prepared by SMRT Architects and Engineers, and dated December 22, 2022.

The applicant also submitted a Tier 1 application under the Natural Resources Protection Act for the disturbance of 2,944 square feet of freshwater wetlands, which is an exempt activity pursuant to the Natural Resources Protection Act (NRPA), 38 M.R.S. § 480-Q(17). Together with the 147 square feet of wetland associated with the development approved in Department Order #L-25656-NJ-A-N, cumulative wetland alteration for the site will total 3,091 square feet, which is also exempt from NRPA review. The Tier 1 application associated with the project was withdrawn on February 27, 2023.

In addition, the applicant submitted a Notice of Intent (NOI #76669) to comply with the standards and requirements of the Maine Construction General Permit, which was accepted by the Department on January 17, 2023.

C. Current Use of the Site: The parcel currently contains a two-story office building with associated parking and other improvements. The northern portion of the parcel consists of vacant fields with pockets of emergent wetlands located throughout.

2. STORMWATER STANDARDS:

The proposed project includes approximately 0.07 acres of new impervious area. In total, the site contains 2.51 acres of developed area, 1.57 acres of which is impervious area. It lies within the watershed of Broad Cove. The applicant submitted a stormwater management plan based on the Basic and General Standards contained in Department Rules, Chapter 500. The proposed stormwater management system for the new solar array consists of one meadow roadside buffer.

A. Basic Standards:

(1) Erosion and Sedimentation Control: The applicant submitted an Erosion and Sedimentation Control Plan that is based on the performance standards contained in Appendix A of Chapter 500 and the Best Management Practices outlined in the Maine Erosion and Sediment Control BMPs, which were developed by the Department. This plan and plan sheets containing erosion control details were reviewed by the Bureau of Land Resources (BLR).

Erosion control details will be included on the final construction plans and the erosion control narrative will be included in the project specifications to be provided to the construction contractor.

(2) Inspection and Maintenance: The applicant submitted a maintenance plan that addresses both short and long-term maintenance requirements. The maintenance plan is based on the standards contained in Appendix B of Chapter 500. This plan was reviewed by BLR. The applicant will be responsible for the maintenance of the stormwater management system.

(3) Housekeeping: The proposed project will comply with the performance standards outlined in Appendix C of Chapter 500.

Based on BLR's review of the erosion and sedimentation control plan and the maintenance plan, the Department finds that the proposed project meets the Basic Standards contained in Chapter 500(4)(B).

B. General Standards:

The applicant's stormwater management plan includes general treatment measures that will mitigate for the increased frequency and duration of channel erosive flows due to runoff from smaller storms, provide for effective treatment of pollutants in stormwater, and mitigate potential temperature impacts. This mitigation is being achieved by using Best Management Practices that will control runoff from no less than 95% of the impervious area and no less than 80% of the developed area.

The roadside meadow stormwater buffer will be protected from alteration through the execution of a deed restriction. The applicant proposes to use the deed restriction language contained in Appendix G of Chapter 500 and submitted a draft deed restriction that meets Department standards.

Prior to the start of construction, the location of the meadow buffer must be permanently marked on the ground. The applicant must execute and record all required deed restrictions, including the appropriate buffer deed restrictions, within 60 days of the date of this Order. The applicant must submit a copy of the recorded deed restriction, including the plot plan, to the BLR within 60 days of its recording.

The stormwater management system proposed by the applicant was reviewed by BLR. After a final review, BLR commented that the proposed stormwater management system is designed in accordance with the Chapter 500 General Standards.

Based on the stormwater system's design and BLR's review, the Department finds that the applicant has made adequate provision to ensure that the proposed project will meet the Chapter 500 Basic and General Standards.

The Department further finds that the proposed project will meet the Chapter 500 standards for easements and deed restrictions.

BASED on the above findings of fact, and subject to the conditions listed below, the Department makes the following conclusions pursuant to 38 M.R.S. § 420-D, and Chapters 500 and 502 of the Department's Regulations:

- A. The applicant has made adequate provision to ensure that the proposed project will meet the Chapter 500 Basic Standards for: (1) erosion and sediment control; (2) inspection and maintenance; (3) housekeeping; and (4) grading and construction activity.

- B. The applicant has made adequate provision to ensure that the proposed project will meet the Chapter 500 General Standards provided that the applicant meets the requirements outlined in Finding 2.
- C. The applicant has made adequate provision to ensure that the proposed project will meet the Chapter 500 standards for easements and deed restrictions.

THEREFORE, the Department APPROVES the above noted application of LGC CLINICAL DIAGNOSTICS to construct a stormwater management system as described above in Cumberland, Maine, SUBJECT TO THE FOLLOWING CONDITIONS, and all applicable standards and regulations:

- 1. The Standard Conditions of Approval, a copy attached.
- 2. In addition to any specific erosion control measures described in this order, the applicant shall take all necessary actions to ensure that its activities or those of its agents do not result in noticeable erosion of soils or fugitive dust emissions on the site during the construction and operation of the project covered by this approval.
- 3. Severability. The invalidity or unenforceability of any provision, or part thereof, of this License shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.
- 4. The applicant shall execute and record all required deed restrictions, including the appropriate buffer deed restrictions, within 60 days of the date of this Order. The applicant shall submit a copy of the recorded deed restriction, including the plot plan, to the BLR within 60 days of its recording.
- 5. Prior to the start of construction, the location of the meadow buffer shall be permanently marked on the ground.

THIS APPROVAL DOES NOT CONSTITUTE OR SUBSTITUTE FOR ANY OTHER REQUIRED STATE, FEDERAL OR LOCAL APPROVALS NOR DOES IT VERIFY COMPLIANCE WITH ANY APPLICABLE SHORELAND ZONING ORDINANCES.

DONE AND DATED IN AUGUSTA, MAINE, THIS 28th DAY OF MARCH 2023.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: 
For: Melanie Loyzim, Commissioner

PLEASE NOTE THE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES.

KF/L25656DA/ATS90464

FILED
March 29th, 2023
State of Maine
Board of Environmental Protection

STORMWATER STANDARD CONDITIONS

STRICT CONFORMANCE WITH THE STANDARD AND SPECIAL CONDITIONS OF THIS APPROVAL IS NECESSARY FOR THE PROJECT TO MEET THE STATUTORY CRITERIA FOR APPROVAL

Standard conditions of approval. Unless otherwise specifically stated in the approval, a department approval is subject to the following standard conditions pursuant to Chapter 500 Stormwater Management Law.

- (1) Approval of variations from plans. The granting of this approval is dependent upon and limited to the proposals and plans contained in the application and supporting documents submitted and affirmed to by the permittee. Any variation from these plans, proposals, and supporting documents must be reviewed and approved by the department prior to implementation. Any variation undertaken without approval of the department is in violation of 38 M.R.S. §420-D(8) and is subject to penalties under 38 M.R.S. §349.
- (2) Compliance with all terms and conditions of approval. The applicant shall submit all reports and information requested by the department demonstrating that the applicant has complied or will comply with all terms and conditions of this approval. All preconstruction terms and conditions must be met before construction begins.
- (3) Advertising. Advertising relating to matters included in this application may not refer to this approval unless it notes that the approval has been granted WITH CONDITIONS, and indicates where copies of those conditions may be obtained.
- (4) Transfer of project. Unless otherwise provided in this approval, the applicant may not sell, lease, assign, or otherwise transfer the project or any portion thereof without written approval by the department where the purpose or consequence of the transfer is to transfer any of the obligations of the developer as incorporated in this approval. Such approval may only be granted if the applicant or transferee demonstrates to the department that the transferee agrees to comply with conditions of this approval and the proposals and plans contained in the application and supporting documents submitted by the applicant. Approval of a transfer of the permit must be applied for no later than two weeks after any transfer of property subject to the license.
- (5) Time frame for approvals. If the construction or operation of the activity is not begun within four years, this approval shall lapse and the applicant shall reapply to the department for a new approval. The applicant may not begin construction or operation of the project until a new approval is granted. A reapplication for approval may include information submitted in the initial application by reference. This approval, if construction is begun within the four-year time frame, is valid for seven years. If construction is not completed within the seven-year time frame, the applicant must reapply for, and receive, approval prior to continuing construction.
- (6) Certification. Contracts must specify that "all work is to comply with the conditions of the Stormwater Permit." Work done by a contractor or subcontractor pursuant to this approval may not begin before the contractor and any subcontractors have been shown a copy of this approval with the conditions by the permittee, and the permittee and each contractor and subcontractor has certified, on a form provided by the department, that the approval and conditions have been received and read, and that the work will be carried out in accordance with the approval and conditions. Completed certification forms must be forwarded to the department.

- (7) Maintenance. The components of the stormwater management system must be adequately maintained to ensure that the system operates as designed, and as approved by the Department. If maintenance responsibility is to be transferred from the permittee to another entity, a transfer request must be filed with the Department which includes the name and contact information for the person or entity responsible for this maintenance. The form must be signed by the responsible person or agent of the responsible entity.
- (8) Recertification requirement. Within three months of the expiration of each five-year interval from the date of issuance of the permit, the permittee shall certify the following to the department.
 - (a) All areas of the project site have been inspected for areas of erosion, and appropriate steps have been taken to permanently stabilize these areas.
 - (b) All aspects of the stormwater control system are operating as approved, have been inspected for damage, wear, and malfunction, and appropriate steps have been taken to repair or replace the system, or portions of the system, as necessary.
 - (c) The stormwater maintenance plan for the site is being implemented as approved by the Department, and the maintenance log is being maintained.
 - (d) All proprietary systems have been maintained according to the manufacturer's recommendations. Where required by the Department, the permittee shall execute a 5-year maintenance contract with a qualified professional for the coming 5-year interval. The maintenance contract must include provisions for routine inspections, cleaning and general maintenance.
 - (e) The Department may waive some or all of these recertification requirements on a case-by-case basis for permittees subject to the Department's Multi-Sector General Permit ("MSGP") and/or Maine Pollutant Discharge Elimination System ("MEPDES") programs where it is demonstrated that these programs are providing stormwater control that is at least as effective as required pursuant to this Chapter.
- (9) Transfer of property subject to the license. If any portion of the property subject to the license containing areas of flow or areas that are flooded are transferred to a new property owner, restrictive covenants protecting these areas must be included in any deeds or leases, and recorded at the appropriate county registry of deeds. Also, in all transfers of such areas and areas containing parts of the stormwater management system, deed restrictions must be included making the property transfer subject to all applicable terms and conditions of the permit. These terms and conditions must be incorporated by specific and prominent reference to the permit in the deed. All transfers must include in the restrictions the requirement that any subsequent transfer must specifically include the same restrictions unless their removal or modification is approved by the Department. These restrictions must be written to be enforceable by the Department and must reference the permit number.
- (10) Severability. The invalidity or unenforceability of any provision, or part thereof, of this permit shall not affect the remainder of the provision or any other provisions. This permit shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.



DEP INFORMATION SHEET

Appealing a Department Licensing Decision

Dated: August 2021

Contact: (207) 314-1458

SUMMARY

This document provides information regarding a person's rights and obligations in filing an administrative or judicial appeal of a licensing decision made by the Department of Environmental Protection's (DEP) Commissioner.

Except as provided below, there are two methods available to an aggrieved person seeking to appeal a licensing decision made by the DEP Commissioner: (1) an administrative process before the Board of Environmental Protection (Board); or (2) a judicial process before Maine's Superior Court. An aggrieved person seeking review of a licensing decision over which the Board had original jurisdiction may seek judicial review in Maine's Superior Court.

A judicial appeal of final action by the Commissioner or the Board regarding an application for an expedited wind energy development ([35-A M.R.S. § 3451\(4\)](#)) or a general permit for an offshore wind energy demonstration project ([38 M.R.S. § 480-HH\(1\)](#)) or a general permit for a tidal energy demonstration project ([38 M.R.S. § 636-A](#)) must be taken to the Supreme Judicial Court sitting as the Law Court.

I. ADMINISTRATIVE APPEALS TO THE BOARD

LEGAL REFERENCES

A person filing an appeal with the Board should review Organization and Powers, [38 M.R.S. §§ 341-D\(4\)](#) and [346](#); the Maine Administrative Procedure Act, 5 M.R.S. § [11001](#); and the DEP's [Rule Concerning the Processing of Applications and Other Administrative Matters \(Chapter 2\)](#), 06-096 C.M.R. ch. 2.

DEADLINE TO SUBMIT AN APPEAL TO THE BOARD

Not more than 30 days following the filing of a license decision by the Commissioner with the Board, an aggrieved person may appeal to the Board for review of the Commissioner's decision. The filing of an appeal with the Board, in care of the Board Clerk, is complete when the Board receives the submission by the close of business on the due date (5:00 p.m. on the 30th calendar day from which the Commissioner's decision was filed with the Board, as determined by the received time stamp on the document or electronic mail). Appeals filed after 5:00 p.m. on the 30th calendar day from which the Commissioner's decision was filed with the Board will be dismissed as untimely, absent a showing of good cause.

HOW TO SUBMIT AN APPEAL TO THE BOARD

An appeal to the Board may be submitted via postal mail or electronic mail and must contain all signatures and required appeal contents. An electronic filing must contain the scanned original signature of the appellant(s). The appeal documents must be sent to the following address.

Chair, Board of Environmental Protection
c/o Board Clerk
17 State House Station
Augusta, ME 04333-0017
ruth.a.burke@maine.gov

The DEP may also request the submittal of the original signed paper appeal documents when the appeal is filed electronically. The risk of material not being received in a timely manner is on the sender, regardless of the method used.

At the time an appeal is filed with the Board, the appellant must send a copy of the appeal to: (1) the Commissioner of the DEP (Maine Department of Environmental Protection, 17 State House Station, Augusta, Maine 04333-0017); (2) the licensee; and if a hearing was held on the application, (3) any intervenors in that hearing proceeding. **Please contact the DEP at 207-287-7688 with questions or for contact information regarding a specific licensing decision.**

REQUIRED APPEAL CONTENTS

A complete appeal must contain the following information at the time the appeal is submitted.

1. *Aggrieved status.* The appeal must explain how the appellant has standing to bring the appeal. This requires an explanation of how the appellant may suffer a particularized injury as a result of the Commissioner's decision.
2. *The findings, conclusions, or conditions objected to or believed to be in error.* The appeal must identify the specific findings of fact, conclusions of law, license conditions, or other aspects of the written license decision or of the license review process that the appellant objects to or believes to be in error.
3. *The basis of the objections or challenge.* For the objections identified in Item #2, the appeal must state why the appellant believes that the license decision is incorrect and should be modified or reversed. If possible, the appeal should cite specific evidence in the record or specific licensing criteria that the appellant believes were not properly considered or fully addressed.
4. *The remedy sought.* This can range from reversal of the Commissioner's decision on the license to changes in specific license conditions.
5. *All the matters to be contested.* The Board will limit its consideration to those matters specifically raised in the written notice of appeal.
6. *Request for hearing.* If the appellant wishes the Board to hold a public hearing on the appeal, a request for hearing must be filed as part of the notice of appeal, and it must include an offer of proof regarding the testimony and other evidence that would be presented at the hearing. The offer of proof must consist of a statement of the substance of the evidence, its relevance to the issues on appeal, and whether any witnesses would testify. The Board will hear the arguments in favor of and in opposition to a hearing on the appeal and the presentations on the merits of an appeal at a regularly scheduled meeting. If the Board decides to hold a public hearing on an appeal, that hearing will then be scheduled for a later date.
7. *New or additional evidence to be offered.* If an appellant wants to provide evidence not previously provided to DEP staff during the DEP's review of the application, the request and the proposed supplemental evidence must be submitted with the appeal. The Board may allow new or additional evidence to be considered in an appeal only under limited circumstances. The proposed supplemental evidence must be relevant and material, and (a) the person seeking to add information to the record must show due diligence in bringing the evidence to the DEP's attention at the earliest possible time in the licensing process; or (b) the evidence itself must be newly discovered and therefore unable to have been presented earlier in the process. Requirements for supplemental evidence are set forth in [Chapter 2 § 24](#).

OTHER CONSIDERATIONS IN APPEALING A DECISION TO THE BOARD

1. *Be familiar with all relevant material in the DEP record.* A license application file is public information, subject to any applicable statutory exceptions, and is made accessible by the DEP. Upon request, the DEP will make application materials available to review and photocopy during normal working hours. There may be a charge for copies or copying services.

2. *Be familiar with the regulations and laws under which the application was processed, and the procedural rules governing the appeal.* DEP staff will provide this information upon request and answer general questions regarding the appeal process.
3. *The filing of an appeal does not operate as a stay to any decision.* If a license has been granted and it has been appealed, the license normally remains in effect pending the processing of the appeal. Unless a stay of the decision is requested and granted, a licensee may proceed with a project pending the outcome of an appeal, but the licensee runs the risk of the decision being reversed or modified as a result of the appeal.

WHAT TO EXPECT ONCE YOU FILE A TIMELY APPEAL WITH THE BOARD

The Board will acknowledge receipt of an appeal, and it will provide the name of the DEP project manager assigned to the specific appeal. The notice of appeal, any materials admitted by the Board as supplementary evidence, any materials admitted in response to the appeal, relevant excerpts from the DEP's administrative record for the application, and the DEP staff's recommendation, in the form of a proposed Board Order, will be provided to Board members. The appellant, the licensee, and parties of record are notified in advance of the date set for the Board's consideration of an appeal or request for a hearing. The appellant and the licensee will have an opportunity to address the Board at the Board meeting. The Board will decide whether to hold a hearing on appeal when one is requested before deciding the merits of the appeal. The Board's decision on appeal may be to affirm all or part, affirm with conditions, order a hearing to be held as expeditiously as possible, reverse all or part of the decision of the Commissioner, or remand the matter to the Commissioner for further proceedings. The Board will notify the appellant, the licensee, and parties of record of its decision on appeal.

II. JUDICIAL APPEALS

Maine law generally allows aggrieved persons to appeal final Commissioner or Board licensing decisions to Maine's Superior Court (see [38 M.R.S. § 346\(1\)](#); 06-096 C.M.R. ch. 2; [5 M.R.S. § 11001](#); and M.R. Civ. P. 80C). A party's appeal must be filed with the Superior Court within 30 days of receipt of notice of the Board's or the Commissioner's decision. For any other person, an appeal must be filed within 40 days of the date the decision was rendered. An appeal to court of a license decision regarding an expedited wind energy development, a general permit for an offshore wind energy demonstration project, or a general permit for a tidal energy demonstration project may only be taken directly to the Maine Supreme Judicial Court. See 38 M.R.S. § 346(4).

Maine's Administrative Procedure Act, DEP statutes governing a particular matter, and the Maine Rules of Civil Procedure must be consulted for the substantive and procedural details applicable to judicial appeals.

ADDITIONAL INFORMATION

If you have questions or need additional information on the appeal process, for administrative appeals contact the Board Clerk at 207-287-2811 or the Board Executive Analyst at 207-314-1458 bill.hinkel@maine.gov, or for judicial appeals contact the court clerk's office in which the appeal will be filed.

Note: This information sheet, in conjunction with a review of the statutory and regulatory provisions referred to herein, is provided to help a person to understand their rights and obligations in filing an administrative or judicial appeal. The DEP provides this information sheet for general guidance only; it is not intended for use as a legal reference. Maine law governs an appellant's rights.

**MDEP WATER QUALITY VOLUME CALCULATIONS
IMPERVIOUS AREA / DEVELOPED AREA
TREATMENT SUMMARY**

Area ID	Site Impervious (S.F.)	Site Landscaping (S.F.)	Site Developed (S.F.)	Receives Treatment (Yes/No)	Impervious Area Treated (S.F.)	Landscaped Area Treated (S.F.)	Developed Area Treated (S.F.)	TREATMENT BMP
SC-11	-	8,015	8,015	NO	-	-	-	UNTREATED
SC-21 (Drive/Land)	45,302	27,661	72,963	YES	45,302	27,661	72,963	UDP-1
SC-21 (Pavers)	15,700	-	15,700	YES	15,700	-	15,700	PAVERS
SC-22	-	8,276	8,276	NO	-	-	-	UNTREATED
SC-23	-	4,356	4,356	NO	-	-	-	UNTREATED
SC-24 (Grvl. Rd)	3,113	-	3,113	YES	2,335	-	2,335	VEGETATED BUFFER
SC-25	-	-	-	NO	-	-	-	UNDEVELOPED
SC-26	-	-	-	NO	-	-	-	UNDEVELOPED
	64,115	48,308	112,423		63,337	27,661	90,998	

TOTAL IMPERVIOUS AREA	64,115	TOTAL DEVELOPED AREA	112,423
TOTAL IMPERVIOUS AREA REQUIRING TREATMENT	60,909	TOTAL DEVELOPED AREA REQUIRING TREATMENT	89,939
TOTAL IMPERVIOUS AREA RECEIVING TREATMENT	63,337	TOTAL DEVELOPED AREA RECEIVING TREATMENT	90,998
% OF IMPERVIOUS AREA RECEIVING TREATMENT	98.79%	% OF DEVELOPED AREA RECEIVING TREATMENT	80.94%

Note: The Gravel Road (SC-24) impervious area has been reduced by 25% for calculation of required treatment area in compliance with Maine Chapter 500. Reduction totals 778 s.f.



April 18, 2023

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

Subject: Lands and Conservation Commission Review for Site Plan Application Amendment
LGC Clinical Diagnostics – Solar Array
221 US Route 1, Cumberland, Maine

Dear Ms. Nixon:

SMRT has received the Mike Schwindt's, Chairperson of Cumberland Lands and Conservation Commission, review comments on the Major Site Plan Application Amendment for the proposed 423 kW solar array development off of U.S. Route 1 and Powell Road and Tuttle Road in Cumberland, Maine. The following are responses to comments received. These comments are to be utilized in conjunction with the revised plan set dated April 13, 2023 (previously submitted under separate cover). Visualization renderings have been included at the end of this response letter to assist in understanding proposed conditions.

Comments:

Several years ago we worked with Maine DOT to replace a number of trees cut when I 295 was widened for a northbound safety lane. They planted a number of trees, budgeted at \$30,000 as I recall, so that eventually, as the trees grow, the traffic noise to the adjoining housing development would be muted. As part of that discussion, we considered the LGC property and the existing vegetation but, since the LGC vegetation was untouched, considered that portion settled. Subsequently, the property was sold and the solar field proposed.

Response: The existing trees along the east side of the LGC property are proposed to remain. Clearing of shrubs and standalone trees within the site and a small portion of trees on the south side of the site are proposed to be removed. Based in information from the USDA the use of vegetation as a noise buffer is not very efficient and "even with wide and dense vegetative buffers noise reduction above 3 to 5 dBA is not likely."

(source: <https://www.fs.usda.gov/nac/assets/documents/agroforestrynotes/an42w05.pdf>)

In reviewing the proposed plans to install the solar field we didn't see how high the solar panels would be above ground level but did note a requested setback waiver from 75 to 25 feet along Route 1. This obviously brings the fence closer to the highway. The proposal to install a 6-foot fence with privacy slats along Route 1 along with the planting of approximately 100 shrubs and flowers.

Response: The panels are angled approximately 35 degrees from the horizon to face south. Each row of panels are approximately 2'-4" above grade on the south end and are approximately 11'-0" at the north end. Each row of panels has the same dimension and will follow the existing topography.

We believe the viewshed along Route 1 would be better protected by requiring plants that would grow taller than either the solar panels or the 6-foot fence as well as have sufficient spread to also conceal the fence. In looking at the proposed plants, depending on the variety planted, some should grow to cover the fence, others, such as Queen Anne's Lace, most likely will not. Also, the plantings covered only a portion of Route 1; nothing was proposed along Powell except an agricultural fence. Again, the viewshed would be better served if the area along Powell were also covered with sufficient screening plants to cover the fence. The other benefit of taller and denser plantings would be to restore some of suppression of traffic noises to the nearby residential properties.

Response: The fencing and the plantings were selected to provide some screening from Route 1 though not tall enough to impact the western solar exposure. As noted above, the panels are sloped to face south with over half of the panel height below 6' above grade. Adding height to the fence or plantings will create undesired shade on the lower portion of the panels and reduce electrical output.

Plantings along Route 1 were installed where space was available without impacting the classified wetlands of special significance within the swale adjacent to Route 1.

Plantings were not proposed on the Powell Road side (north side) of the property as there are existing trees and shrubs on that side and the nearest panel is approximately 95' from the edge of pavement.

Also, if the setback waiver to 25 feet is granted, there should be sufficient space to plant additional shrubbery to further cover the fence and provide sound suppression.

Response: Please see responses above in regard to wetland impact avoidance, minimal noise suppression and limitations on height of new plantings.

Further, as with most plantings, over time plants die. LGC should be required to maintain the landscaping to provide the sound barrier and viewshed.

Response: Please note that proposed plantings are intended to be allowed to naturalize and augment the existing vegetation in and around the existing wetlands. Maintenance is limited to mowing only twice a year to maintain vegetation under and around panels.

Ms. Carla Nixon, Town Planner
April 18, 2023

A handwritten signature in blue ink, appearing to read "Kenneth D. Costello", with a long horizontal flourish extending to the right.

Kenneth D. Costello, LEED AP
Principal/Maine Licensed Landscape Architect

SMRT Architects and Engineers | 75 Washington Ave | Portland, ME 04101
C 98-886-0683 | email: kcostello@smrtinc.com

Enclosure: Visualization renderings



View from Route 1 – Visualization



View from Powell Road – Visualization



View from East - Visualization

From: Riva Krut <rivakrut@gmail.com>

Sent: Thursday, April 20, 2023 7:34 AM

To: Carla Nixon <Cnixon@cumberlandmaine.com>

Cc: Scott and Sarah Cass <cassfamily6@gmail.com>; Mike Schwindt <applewoodacres@hotmail.com>

Subject: proposed LGC Clinical solar array on Rte 1 and Powell - comments from Riva Krut

Dear Carla

Please can you pass on my comments to the Planning Board.

Dear members of the Planning Board:

Please can I request that you consider my comments below in regard to the proposed new solar array for Maine Standards They are supported by Scott Cass, also of Schooner Ridge, cc'ed here.

My concern as a nearby resident is about safety and visuals in a residential/ professional area like Rte 1 between Tuttle and Tyler.

1. Request to LGC Clinical in regard to the proposed plan to screen a new perimeter hurricane fence.
 1. Plant additional shrubs on Rte 1 in the proposed waiver that allows for a 25' setback - or does this need some additional land?
 2. Extend the shrubbery so that it visually blocks the solar array for the house to the south of Maine Standards and the one to the east across the road at #32 Powell (this request is also made from the homeowner at 32 Powell).
 3. Confirm that the new landscaping around the solar array is maintained to the same standards as their current landscaping at their building.
2. Request for information/ to see a visual image of the height of the proposed solar panels / how they will look for residents/ passing drivers, so we can understand it/ provide comment.
3. For people turning at Powell and Rte 1, request for confirmation that the panels do not create hazards (reflected light?) or block sightlines at the intersection. This is already an awkward turn because people turning in from Rte 1 (from both directions) swing wide to get around the acute angle.

Thank you and kind regards

Riva Krut

Riva Krut
103 Schooner Ridge, Cumberland Foreside, ME 04110
+1 914 755 4409

Planning Board-Application

LGC Clinical Diagnostics-Solar Array

221 US-1

Cumberland-Foreside, ME 04110



Submitted by:
SMRT Architects and Engineers
March 6, 2023
Project # 22168-00
smrtinc.com

**SITE PLAN REVIEW
Town of Cumberland**

**Appendix C
Planning Board Site Plan Review Application**

Applicant's name Todd Anderson, Sr. Vice President, Operations
Applicant's address LGC Clinical Diagnostics, 37 Birch St. Milford, MA 01757
Cell phone 508-789-4184 Home phone _____ Office phone 508-244-6412
Email Address Todd.Anderson@LGCGroup.com
Project address 221, US Route 1 Cumberland, Maine
Project name ReVision Solar Array-LGC Clinical Diagnostics
Describe project Solar Array and access drive installation
Number of employees Not Applicable
Days and hours of operation 24 hours, 7 days a week
Project review and notice fee \$2150 total (\$1500 for Peer Review Engineer)
Name of representative Ken Costello
Contact information: Cell: 978-886-0683 Office: 978-289-6034

What is the applicant's interest in the property?

Own X Lease _____ Purchase and sale agreement _____ (provide copy of document)
If you are not the owner, list owner's name, address and phone number _____

If you are not the owner, list owner's name, address and phone number _____

Boundary Survey

Submitted? Yes X No _____

Are there any deed restrictions or easements? Yes X No _____ If yes, provide information and show easement location on site plan.

Building Information

Are there existing buildings on the site? Yes X No _____ Number: 1

Will they be removed? Yes _____ No X (Note: A demolition permit is required 10 days prior to demolition.)

Will a new structure(s) be built on the site? Yes X No _____

Describe: Solar Panels

Number of new buildings N/A

Square footage .50 ac solar array within 1.57 ac perimeter fencing

Number of floor levels including basement N/A

Parking No new parking proposed for solar array installation
Number of existing parking spaces 92
Number of new parking spaces 0
Number of handicapped spaces 4
Will parking area be paved? Yes No Not Applicable

Entrance

Location: Powell Rd.
Width 16' Length 170'
Is it paved? Yes No X If not, do you plan to pave it?
Access road will be gravel
Where will snow storage for entrance and parking be located? Show on site plan.
Along southern edge of access road

Utilities

Water: Public water X Well (Show location on site plan.)
No changes to existing are proposed.
Sewer/septic: Public sewer X 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.
No changes to existing are proposed.
Electric: On site? Yes X No
Show location of existing and proposed utilities on the site plan and indicate if they are above
or below ground. See CP-101 for location of proposed transformer.

Signs

Number: No new signs proposed.
Size: N/A
Material: N/A
Submit sign design and completed sign application.
Will the sign be lighted? N/A Submit information on type and wattage of lights.
Show location of sign(s) on the site plan.

Natural Features

Show location of any of the following on the site plan:
River Stream X Wetland X Pond Lake Stone walls
Are there any other historic or natural features? No, see letter from MHPC
Maine DEP 480-Q exempt (see email), ACOE Tier 1 NRPA under review

Lighting

Will there be any exterior lights? Yes No X 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.
Trees cleared for shade management, See site plan for location.

Landscaping

Is there existing landscaping on the site? Yes No X 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.)

Yes, Landscaping is planned along Route 1 for screening.

Buffering

Show any existing or proposed buffering measures for adjacent properties, e.g., plantings, fences. See C-101 and LP-101 for landscaping and fencing location.

Erosion Control

Has an erosion and sedimentation control plan been submitted? Yes X No
See drawing C-101.

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.

See drawing C-102.

Fire Protection

No additional fire protection proposed.
Location of nearest hydrant 170' Sprinklers? Yes No X
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 No additional dumpsters proposed.

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.
See attached memo.

Financial Capacity

Please indicate how project will be financed. If obtaining a bank loan, provide a letter from the bank Self funded, not financed.

- Zoning district: OC-N
- Minimum lot size: 43,560sf
- Classification of proposed use: (18) Uses and building accessory to those above
- Parcel size: 339,068sf
- Frontage: 150'
- Setbacks: Front 25' Side 20' Rear 65'
- Board of Appeals Required? No
- Tax Map R02 Lot 10A Deed book _____ Deed page _____
- Floodplain map number 2301620016 C Designation Zone B, Zone C
- Vernal pool identified? 2301620018 C No vernal pools.
- Is parcel in a subdivision? No
- Outside agency permits required:
MDEP Tier 1 ^{Exempt} 480-Q MDEP Tier 2 _____ Army Corps of Engineers X
MDEP general construction (stormwater) permit (for disturbance of 1 acre or more)
- MDOT entrance permit No MDEP Storm Permit Amendment X
- MDOT traffic movement permit No
- Traffic study required No
- Hydrogeologic evaluation No
- Market study No
- Route 1 Design Guidelines? Yes-Waiver requested for setback reduction
- Route 100, VMU or TCD Design Standards? No

Applicant's signature 

Submission date: March 6, 2023

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:
<i>Example: Erosion Control</i>	<i>Plan Sheet E-1</i>	
General Information:		
Completed Site Plan Application Form	PAGE 1, PACKAGE	
Names and addresses of all consultants	PAGE 8, PACKAGE	
Narrative describing existing conditions and the proposed project	PAGE 10, PACKAGE	
Evidence of right, title or interest (deed, option, etc.)	PROPERTY CARD, PAGE 14, PACKAGE	
Names and Addresses of all property owners within 200 feet	PAGE 12, PACKAGE	
Boundaries of all contiguous property under control of owner	DRAWING SET SURVEY By Owen Haskell	
Tax map and lot numbers	DRAWING SET SURVEY By Owen Haskell	
Area of the parcel	DRAWING SET SURVEY By Owen Haskell	
FEMA Floodplain designation & map #	ZONE SEE MAP 23062 0016C AND MAP 230162 0018C, PAGE 19 AND	20 PACKAGE
Zoning classification	DRAWING SHEET SP-1	
Evidence of technical and financial capability to carry out the project	PAGE 21, PACKAGE. CERT. OF GOOD STANDING SELF FUNDED PROJECT	
Boundary survey	DRAWING SET SURVEY By Owen Haskell	
List of waiver requests on separate sheet with reason for request.	PAGE 22, PACKAGE	SETBACK WAIVER
Proposed solid waste disposal plan	N/A	
Existing Conditions Plan showing:		
Name, registration number and seal of person who prepared plan	ALL DRAWING PLANS	
North arrow, date, scale, legend	ALL DRAWING PLANS	
Area of the parcel	SEE SURVEY By Owen Haskell	
Setbacks and building envelope	DRAWING SHEETS SP-1, C-102	
Utilities, including sewer & water, culverts & drains, on-site sewage	DRAWING SHEETS SP-1, C-101, C-102 and Survey	
Location of any septic systems	N/A	
Location, names, widths of existing public or private streets ROW's	SEE SURVEY By Owen Haskell	

Location, dimension of ground floor elevation of all existing buildings	SEE SURVEY By Owen Haskell	
Location, dimension of existing driveways, parking, loading, walkways	SEE SURVEY By Owen Haskell	
Location of intersecting roads & driveways within 200 feet of the site	SEE SURVEY, SP-1, C-101, C-102	
Wetland areas	SEE SURVEY, SP-1, C-101, C-102	
Natural and historic features such as water bodies, stands of trees, streams, graveyards, stonewalls, floodplains	SEE SURVEY, SP-1, C-101, C-102, MHPC DETERMINED NO HISTORIC FEATURES ONSITE, SEE PAGE 27	
Direction of existing surface water drainage across the site & off site	SEE DRAWING SHEET C-101	
Location, front view, dimensions and lighting of existing signs	N/A	
Location and dimensions of existing easements & copies of documents	SEE SURVEY By Owen Haskell	
Location of nearest fire hydrant or water supply for fire protection	FH IN DRIVEWAY SEE SURVEY FH AT INTERSECTION OF POWELL & 88	
Proposed Development Site Plan showing:		
Name of development	SEE ALL DRAWING SHEETS	
Date	SEE ALL DRAWING SHEETS	
North arrow	SEE ALL DRAWING SHEETS	
Scale	SEE ALL DRAWING SHEETS	
Legend	SEE DRAWING SHEET GI001	
Landscape plan	SEE DRAWING SHEET LP-101	
Stormwater management	SEE DRAWING SHEET C-102	
Wetland delineation	SEE SURVEY, C-101, C-102	
Current & proposed stands of trees	SEE SURVEY, C-101, C-102	
Erosion control plan	SEE DRAWING SHEET C-101	
Landscape plan	SEE DRAWING SHEET LP-101	
Lighting/photometric plan	N/A	
Location and dimensions of all proposed buildings	N/A	
Location and size of utilities, including sewer, water, culverts and drains	SEE DRAWING SHEET C-102	
Location and dimension of proposed on-site septic system; test pit locations and nitrate plumes	N/A	
Location of wells on subject property and within 200' of the site	N/A	
Location, names and widths of existing and proposed streets and ROW's	SEE SURVEY, C-101, C-102	

Location and dimensions of all accessways and loading and unloading facilities	N/A	
Location and dimension of all existing and proposed pedestrian ways	SEE SURVEY, C-101 NO NEW PROPOSED	
Location, dimension and # of spaces of proposed parking areas, including handicapped spaces	N/A	
Total floor area and ground coverage of each proposed building and structure	SEE DRAWING SHEET C-102	
Proposed sign location and sign lighting	N/A	
Proposed lighting location and details	N/A	
Covenants and deed restrictions proposed	SEE DRAWING SHEET C-102	
Snow storage location	SEE DRAWING SHEET C-102	
Solid waste storage location and fencing/buffering	N/A	
Location of all fire protection	N/A	
Location of all temporary & permanent monuments	N/A	
Street plans and profiles	SEE DRWING C-501 FOR GRAVEL DRIVE SECTION	

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	PACKAGE PAGE 23	
Hydro geologic evaluation	PACKAGE PAGE 26	
Traffic Study	N/A	
Market Study	N/A	
Location of proposed recreation areas (parks, playgrounds, other public areas)	N/A	
Location and type of outdoor furniture and features such as benches, fountains.	N/A	

Memo

SMRT Architects and Engineers

877.700.7678

smrtinc.com

To	Town of Cumberland	Date	03/06/2023
From	SMRT Inc.	Project No.	22168
Subject	Technical Capacity	Project Name	ReVision Solar Array-LGC – Clinical Diagnostics

Technical Capacity

Owen Haskell, Inc. 390 US Route 1, Unit 10, Falmouth, ME. 04105. TEL. 207-774-0424

- Randy R. Loubier, Professional Land Surveyor,

SMRT Architects and Engineers, 75 Washington Ave., Portland ME, 04101, 1-877-700-7678

- Gretchen Prouty, PE, Civil Engineer
- Ken Costello, RLA, Landscape Architect
- Tharyn Nein-Large, RLA, Landscape Architect



LGC Clinical Diagnostics, Inc.

37 Birch St.

Milford, MA 01757

Tel: (508) 244 6400

April 12, 2022

To Whom it May Concern:

This letter serves to document that SMRT is authorized to act on behalf of LGC Clinical Diagnostics, Inc. for matters of site permitting related to LGC's new expansion to be built adjacent to LGC's existing facility at 221 US Route 1, Cumberland-Foreside.

Yours sincerely,

Todd Anderson
Senior Vice President
LGC Clinical Diagnostics, Inc.

Site Narrative

Existing Site

The project is located at 221 Route 1 in Cumberland-Foreside. The parcel is bound by Powell Road on the north and Tuttle Road on the south. It is a 7.78 acre parcel in the shape of a rectangle extending from south to north along Route 1. The parcel is identified on Tax Map R2 as Lot 10A, zoned Office Commercial (north) (OC-N) and is subject to the Route 1 Design standards. The parcel is encumbered with slope and drainage easements to the State Highway Commission.

The southern end of the property is currently developed with a two-story 30,000-sf commercial building, stormwater pond, and parking lot. A 2,900-sf building expansion is planned for construction in 2023. The northern half of the parcel is undeveloped. The parcel is bisected by an unnamed perennial stream that flows east across the parcel and continues until it terminates at Broad Cove. The undeveloped portion of the parcel is north of the stream and composed of trees, scrub, meadow, and 6 freshwater wetlands. Two of the freshwater wetlands have been identified as wetlands of special significance because they are within 25-ft of the unnamed stream. The parcel is not in the Shoreland Zone and the area of the parcel where the project is proposed has a minimal risk for flooding (Zone C) as identified on FEMA Flood Insurance Rate Maps 230162 0018 C and 230162 0016 C. The areas immediately adjacent to the unnamed stream are in Zone B.

The site is serviced by electric, municipal water, municipal sewer, and gas utilities. Private on-site stormwater management systems control drainage.

Pavements and site improvements are in good condition. Pavements consist of standard asphalt pavement in drives, underdrained porous asphalt pavement in parking spaces and concrete sidewalks.

Full Build-out Analysis Northern Section of Parcel

The full build-out of the northern section of the parcel includes the installation of a 0.50-acre solar array within 1.57 acres of perimeter fencing, 16' wide gravel access drive from Powell Road, and landscape screening along Route 1. Fencing along Route 1 will be a 6' high chain-link with privacy slats. The remainder of the perimeter fencing will be 6' high agricultural. A new transformer and pad will be installed to provide the electrical connection to the site, and a stormwater BMP will be installed to treat runoff from the gravel access drive.

The array will extend into existing wetlands. An updated topographic survey with current wetland boundaries was finished in October 2022. A waiver is requested to reduce the Route 1 development setback to 25' to significantly reduce wetland impacts. Stormwater management includes a vegetative buffer to treat runoff from the gravel drive. The array and perimeter fencing will be constructed outside the 75' stream setback and no impacts to the stream are anticipated.

Site Narrative, ReVision Solar Array Installation

The wooded/open space area effected by the proposed array will include the removal of some trees for shade management (See drawing C-101). All cleared areas will be maintained as meadow and mowing will be limited to twice per year.

Permitting

Town Permits

The Site was permitted in 2012 and received a Major Site Plan Approval on May 16, 2012. A Site Plan Amendment was approved May 9, 2022 for the building expansion.

The site changes associated with the proposed solar array will require permitting review by the Town. The project will need Planning Board approval due to the need for a waiver to reduce the Route 1 development setback, as noted during the pre-application meeting on October 18, 2022.

Other Permits

The site has an existing Maine DEP Stormwater Permit (L-25656-NJ-A-N) and site activities will require an amendment to the permit. Due to activities within existing wetlands a NRPA is also required. A Tier 1 NRPA and Stormwater Law Permit were submitted to Maine DEP and ACOE on December 22, 2022.

On February 8, 2023, the ACOE completed its preliminary review and notified the applicant that the project will require a ACOE permit, which is currently still under review.

On February 17, Maine DEP notified the applicant that the proposed work qualifies for a 480-Q exemption due to no removal of trees within 25' of the stream, no proposed impacts to the wetlands of special significance, and total wetland impact does not exceed 4300 sf (see email on page 29). The Stormwater amendment is currently still under review.

Abbutters within 200' of 221 US Route 1 Cumberland Foreside, ME

ID	Site Address	Owner Name	Co-Owner Name	Owner Address	Owner City	State	Zip
	14 TUTTLE RD	WHITE PINE, COMMUNITY CHURCH		94 CUMBERLAND RD	NORTH YARMOUTH	ME	4097
	40 POWELL ROAD	BENNETT JAMES L JR	BENNETT ROSANN O	40 POWELL ROAD	CUMB FORESIDE	ME	4110
	32 POWELL ROAD	GAMACHE JEROME J	TREMBLAY SARA B	32 POWELL ROAD	CUMBERLAND FSDE	ME	4110
	26 POWELL ROAD	PARSONS LISA J		26 POWELL ROAD	CUMBERLAND FSDE	ME	4110
	TUTTLE ROAD	TOWN OF CUMBERLAND		290 TUTTLE ROAD	CUMBERLAND CTR	ME	04021-9321
	224 FORESIDE RD	LONG BETTY J*		224 FORESIDE ROAD	CUMBERLAND FSDE	ME	4110
	228 FORESIDE RD	DAIGLE JEFFREY A		15 POWELL RD	CUMBERLAND FSDE	ME	4110
	263 US ROUTE ONE	LDS REALTY LLC		6 RIVERSIDE DRIVE	FALMOUTH	ME	4105
	25 POWELL ROAD	WHEELER HARVEY B	WHEELER ROXANNE J	25 POWELL ROAD	CUMBERLAND FSDE	ME	4110
	11 KINGS HIGHWAY	STROUT, BETH D		3003 TOWN LINE RD	CARRABASSETT VALLEY	ME	4947
	11 KINGS HIGHWAY	LEVESQUE, ROGER C	LEVESQUE, CAROLYN W	11A KINGS HIGHWAY	CUMBERLAND FSDE	ME	4110
	KINGS HIGHWAY	CHASE, DAVID A		875 PRINCES PT RD	YARMOUTH	ME	4096

LGC property



Property Information

Property ID 0R02 0010A0000
Location 221 US ROUTE ONE
Owner LGC NORTH AMERICA INC



MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT

Town of Cumberland, ME makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Geometry updated 6/10/2020
Data updated monthly (see property record card)

Print map scale is approximate.
Critical layout or measurement
activities should not be done using
this resource.

221 US ROUTE ONE

Location 221 US ROUTE ONE**Mblu** R02/ 10/A / /**Acct#****Owner** LGC NORTH AMERICA INC**Assessment** \$4,655,500**PID** 911**Building Count** 1

Current Value

Assessment			
Valuation Year	Improvements	Land	Total
2021	\$4,100,800	\$554,700	\$4,655,500

Owner of Record

Owner LGC NORTH AMERICA INC**Sale Price** \$6,000,000**Co-Owner****Certificate****Address** 221 US ROUTE 1
CUMBERLAND FSDE, ME 04110**Book & Page** 0000000/0**Sale Date** 11/10/2015**Instrument** 00

Ownership History

Ownership History					
Owner	Sale Price	Certificate	Book & Page	Instrument	Sale Date
LGC NORTH AMERICA INC	\$6,000,000		0000000/0	00	11/10/2015
MAINE STANDARDS COMPANY LLC	\$650,000		29794/0152	00	07/31/2012
BOUTON DALE C	\$97,000		13559/0348	00	01/22/1998
THE THOMPSON FAMILY LIMITED	\$0		12158/0308		

Building Information

Building 1 : Section 1

Year Built: 2013
Living Area: 11,362
Replacement Cost: \$1,537,939
Building Percent Good: 100
Replacement Cost
Less Depreciation: \$1,537,900

Building Attributes	
Field	Description
STYLE	Office Bldg
MODEL	Commercial
Grade	Prime+
Stories:	2
Occupancy	1.00
Exterior Wall 1	Vinyl Siding
Exterior Wall 2	Wood Shingle
Roof Structure	Steel Frm/Truss
Roof Cover	Tar & Gravel
Interior Wall 1	Drywall/Sheet
Interior Wall 2	Cust Wd Panel
Interior Floor 1	Carpet
Interior Floor 2	Terrazzo Epoxy
Heating Fuel	Gas
Heating Type	Forced Air-Duc
AC Type	Central
Struct Class	
Bldg Use	PROF BLDG
Total Rooms	28
Total Bedrms	00
Total Baths	9
Usrflid 218	
Usrflid 219	
1st Floor Use:	
Heat/AC	HEAT/AC SPLIT
Frame Type	STEEL
Baths/Plumbing	EXTENSIVE
Ceiling/Wall	CEIL & WALLS
Rooms/Prtns	ABOVE AVERAGE
Wall Height	10.00
% Comn Wall	

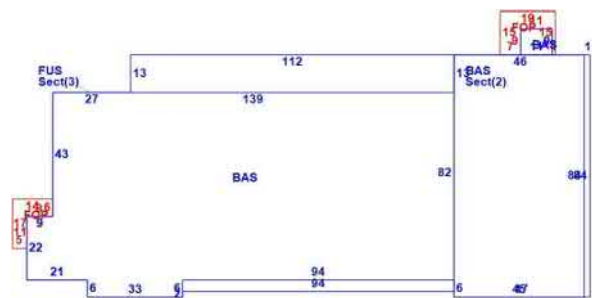
Building 1 : Section 2

Year Built: 2013
Living Area: 3,780
Replacement Cost: \$458,348
Building Percent Good: 100
Replacement Cost
Less Depreciation: \$458,300

Building Attributes : Section 2 of 3	
Field	Description

Building Photo

(http://images.vgsi.com/photos/CumberlandMEPhotos/0008IMG_0034_8250.JPG)

Building Layout

(ParcelSketch.ashx?pid=911&bid=911)

Building Sub-Areas (sq ft)			Legend
Code	Description	Gross Area	Living Area
BAS	First Floor	11,362	11,362
FOP	Porch, Open, Finished	325	0
		11,687	11,362

STYLE	Office Bldg
MODEL	Commercial
Grade	Good
Stories:	2
Occupancy	1.00
Exterior Wall 1	Clapboard
Exterior Wall 2	Wood Shingle
Roof Structure	Gable/Hip
Roof Cover	Asph/F Gls/Cmp
Interior Wall 1	Drywall/Sheet
Interior Wall 2	
Interior Floor 1	Carpet
Interior Floor 2	Inlaid Sht Gds
Heating Fuel	Gas
Heating Type	Forced Air-Duc
AC Type	Central
Struct Class	
Bldg Use	PROF BLDG
Total Rooms	2
Total Bedrms	00
Total Baths	2
Usrflld 218	
Usrflld 219	
1st Floor Use:	
Heat/AC	HEAT/AC SPLIT
Frame Type	STEEL
Baths/Plumbing	ABOVE AVERAGE
Ceiling/Wall	CEIL & WALLS
Rooms/Prtns	ABOVE AVERAGE
Wall Height	10.00
% Comn Wall	

Building 1 : Section 3

Year Built:	2013
Living Area:	13,379
Replacement Cost:	\$1,963,819
Building Percent Good:	100
Replacement Cost	
Less Depreciation:	\$1,963,800

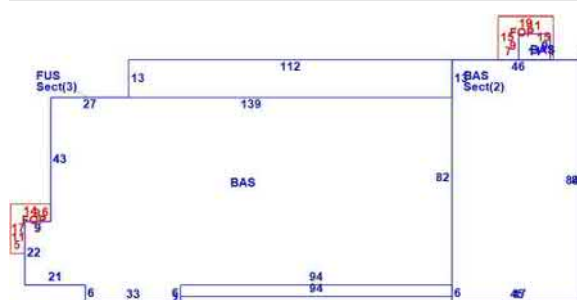
Building Attributes : Section 3 of 3	
Field	Description
STYLE	Office Bldg
MODEL	Commercial

Building Photo



(<http://images.vgsi.com/photos/CumberlandMEPhotos//default.jpg>)

Building Layout



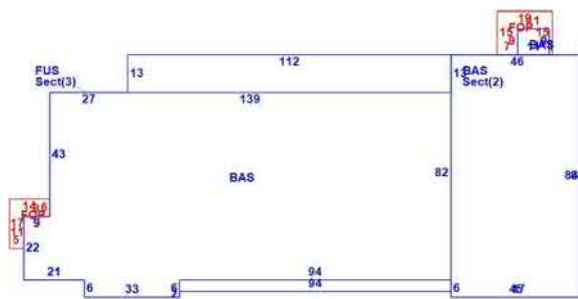
(ParcelSketch.ashx?pid=911&bid=911)

Building Sub-Areas (sq ft)			Legend
Code	Description	Gross Area	Living Area
BAS	First Floor	3,780	3,780
		3,780	3,780

Grade	Good+20
Stories:	2
Occupancy	1.00
Exterior Wall 1	Clapboard
Exterior Wall 2	Wood Shingle
Roof Structure	Gable/Hip
Roof Cover	Asph/F Gls/Cmp
Interior Wall 1	Drywall/Sheet
Interior Wall 2	
Interior Floor 1	Carpet
Interior Floor 2	Inlaid Sht Gds
Heating Fuel	Gas
Heating Type	Forced Air-Duc
AC Type	Central
Struct Class	
Bldg Use	PROF BLDG
Total Rooms	20
Total Bedrms	00
Total Baths	6
Usrflid 218	
Usrflid 219	
1st Floor Use:	
Heat/AC	HEAT/AC SPLIT
Frame Type	STEEL
Baths/Plumbing	ABOVE AVERAGE
Ceiling/Wall	CEIL & WALLS
Rooms/Prtns	ABOVE AVERAGE
Wall Height	10.00
% Comn Wall	

Building Photo

(<http://images.vgsi.com/photos/CumberlandMEPhotos/default.jpg>)

Building Layout

([ParcelSketch.ashx?pid=911&bid=911](#))

Building Sub-Areas (sq ft)			Legend
Code	Description	Gross Area	Living Area
FUS	Upper Story, Finished	13,379	13,379
		13,379	13,379

Extra Features

Extra Features				Legend
Code	Description	Size	Value	Bldg #
MSC72	PASS ELEV	2.00 UNIT	\$60,000	1
SPR2	WET/CONCEALED	28340.00 S.F.	\$31,200	1
GEN	GENERATOR	1.00 UNITS	\$5,000	1

Land**Land Use**

Use Code	3420
Description	PROF BLDG

Land Line Valuation

Size (Acres)	7.2
Frontage	0

Zone OC
Neighborhood 100
Alt Land Appr No
Category

Depth 0
Assessed Value \$554,700

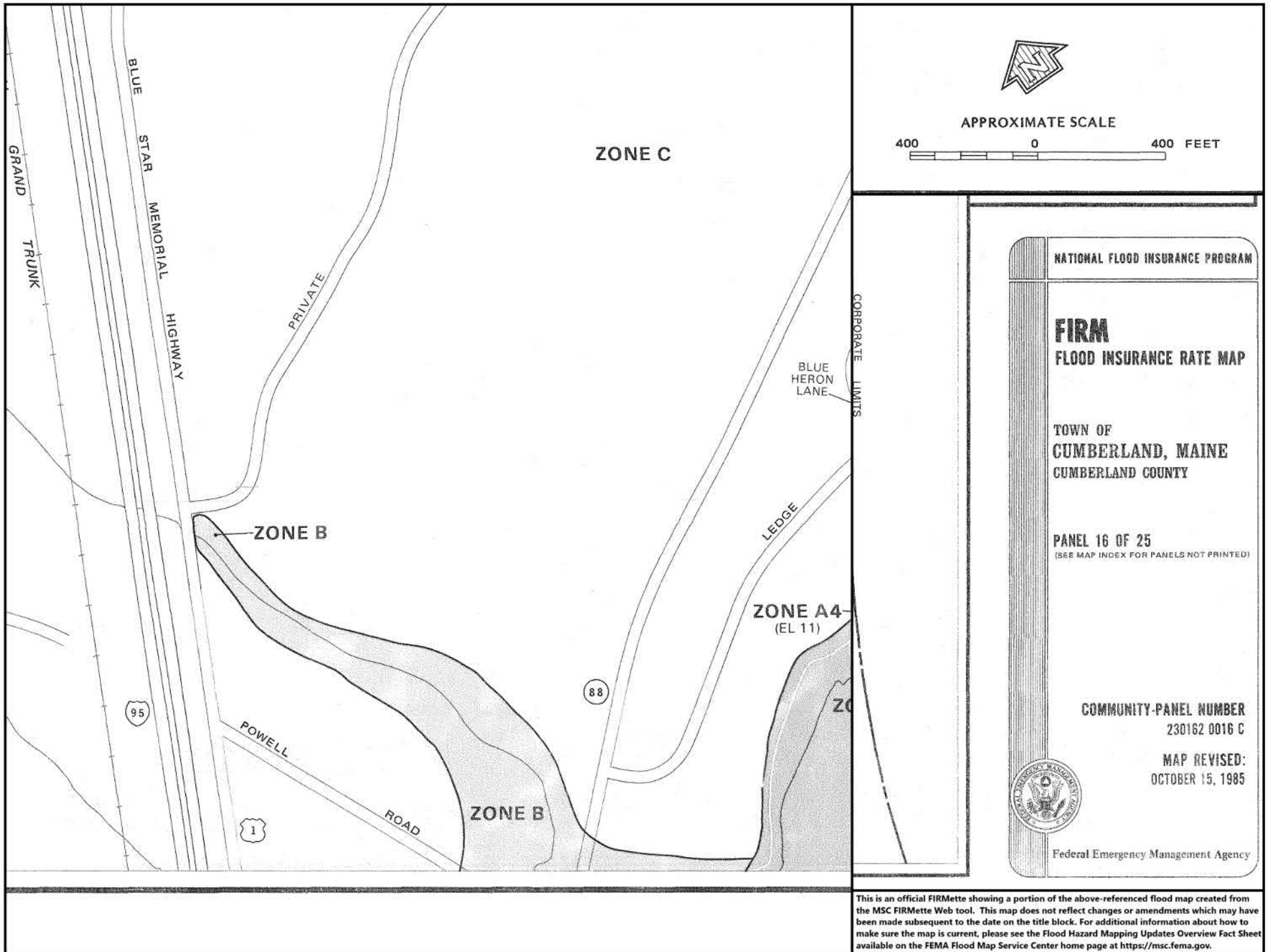
Outbuildings

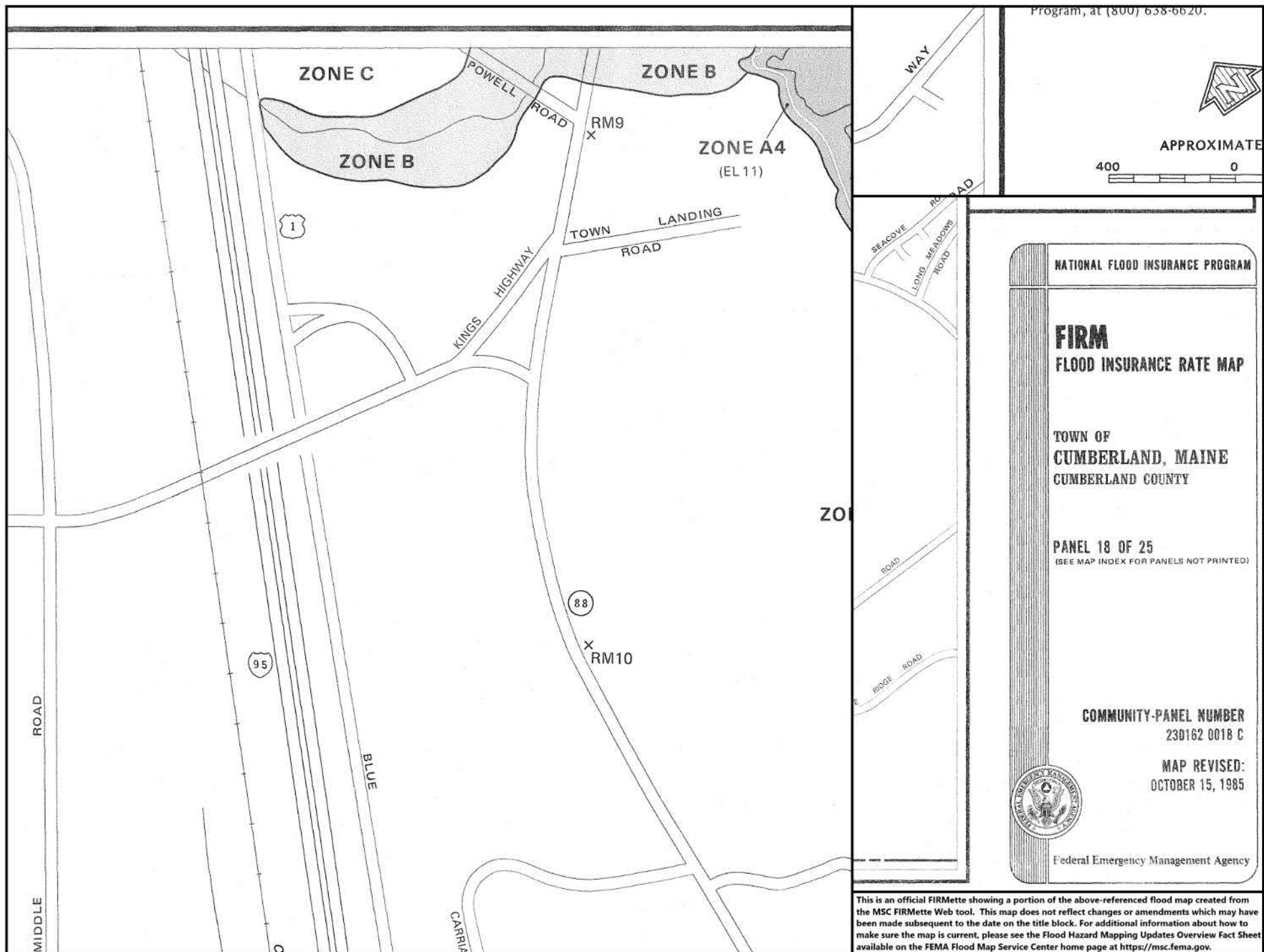
Outbuildings						<u>Legend</u>
Code	Description	Sub Code	Sub Description	Size	Value	Bldg #
PAV1	PAVING-ASPHALT			33000.00 S.F.	\$29,700	1
LT1	LIGHTS-IN W/PL			10.00 UNITS	\$6,900	1
SHD3	METAL			320.00 S.F.	\$8,000	1

Valuation History

Assessment			
Valuation Year	Improvements	Land	Total
2020	\$4,100,800	\$554,700	\$4,655,500
2019	\$4,100,800	\$554,700	\$4,655,500
2018	\$4,095,800	\$554,700	\$4,650,500

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MAINE

Department of the Secretary of State
Bureau of Corporations, Elections and Commissions

Corporate Name Search

Information Summary

[Subscriber activity report](#)

This record contains information from the CEC database and is accurate as of: Wed Nov 16 2022 10:55:02. Please print or save for your records.

Legal Name	Charter Number	Filing Type	Status
LGC CLINICAL DIAGNOSTICS, INC.	20220955 F	BUSINESS CORPORATION (FOREIGN)	GOOD STANDING

Filing Date	Expiration Date	Jurisdiction
04/25/2022	N/A	DELAWARE

Other Names (A=Assumed ; F=Former)

NONE

Clerk/Registered Agent

C T CORPORATION SYSTEM
128 STATE ST #3
AUGUSTA, ME 04330

[Back to previous screen](#)

[New Search](#)

Click on a link to obtain additional information.

List of Filings

[View list of filings](#)

Obtain additional information:

Certificate of Existence ([more info](#))

[Short Form without amendments \(\\$30.00\)](#)

You will need Adobe Acrobat version 3.0 or higher in order to view PDF files.
If you encounter problems, visit the [troubleshooting page](#).



List of Requested Waivers**Route 1 Development Setback**

A waiver is requested to reduce the Route 1 Development setback to 25' in order to significantly reduce wetland impacts. Moving the solar array to the west to prevent the solar array from impacting the Wetlands of Special Concern and reduce the impact to other wetlands onsite.

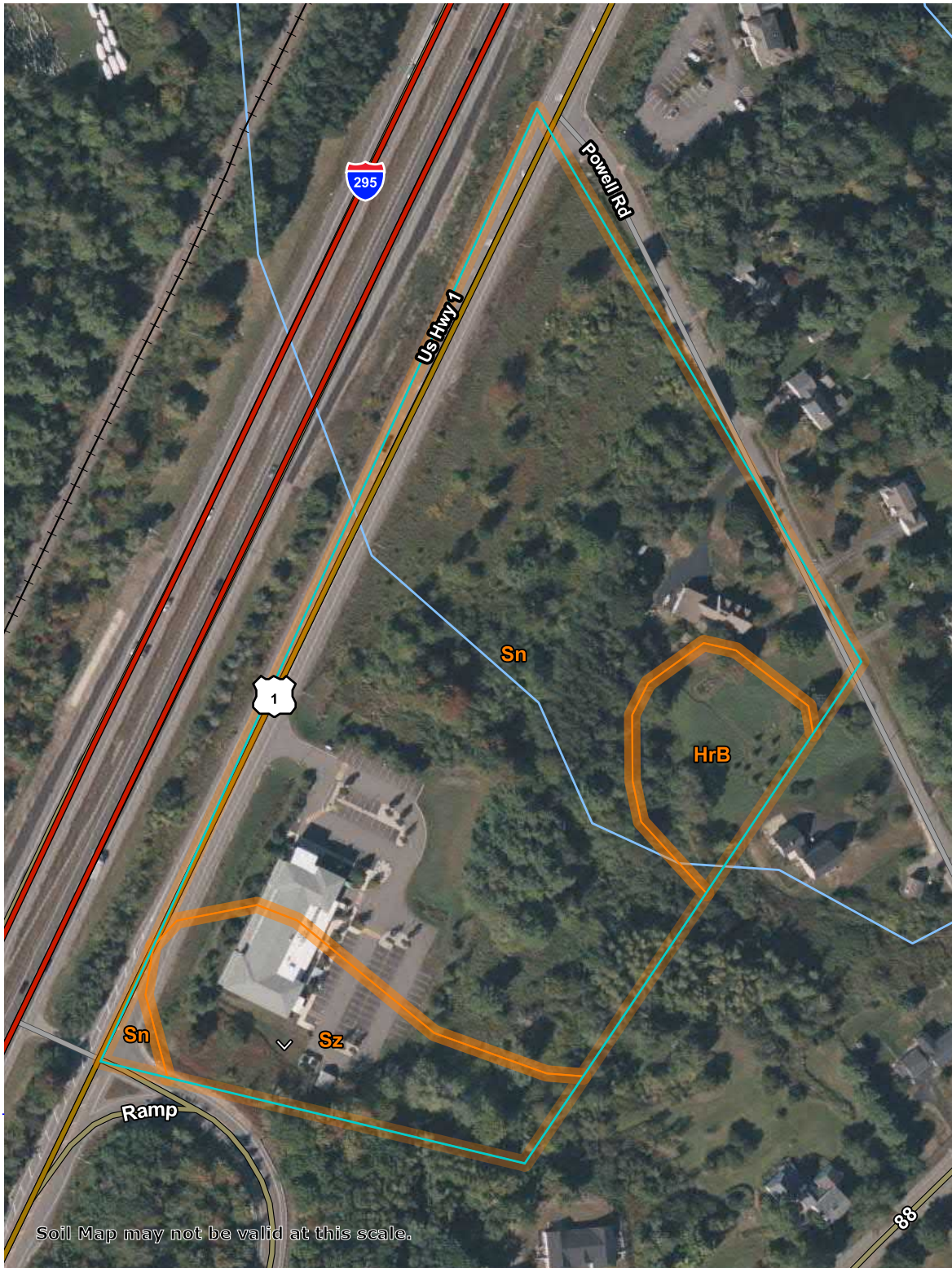
Soil Map—Cumberland County and Part of Oxford County, Maine
(LGC Clinical Diagnostics- Solar Array)

70° 12' 8" W

70° 11' 52" W

43° 46' 24" N

43° 46' 24" N



43° 46' 9" N

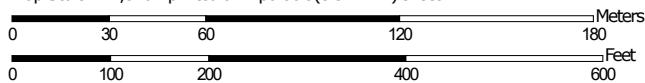
43° 46' 9" N

70° 12' 8" W

70° 11' 52" W



Map Scale: 1:2,340 if printed on A portrait (8.5" x 11") sheet.



Map projection: Web Mercator Corner coordinates: WGS84



Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey


11/23/2022
Page 1 of 3

23

Soil Map—Cumberland County and Part of Oxford County, Maine
(LGC Clinical Diagnostics- Solar Array)


MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Cumberland County and Part of Oxford County, Maine

Survey Area Data: Version 19, Aug 30, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 19, 2020—Sep 20, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
HrB	Lyman-Tunbridge complex, 0 to 8 percent slopes, rocky	1.0	7.2%
Sn	Scantic silt loam, 0 to 3 percent slopes	11.2	78.4%
Sz	Swanton fine sandy loam	2.1	14.4%
Totals for Area of Interest		14.2	100.0%

Cumberland County and Part of Oxford County, Maine

Sn—Scantic silt loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 2slv3

Elevation: 10 to 900 feet

Mean annual precipitation: 33 to 60 inches

Mean annual air temperature: 39 to 45 degrees F

Frost-free period: 90 to 160 days

Farmland classification: Not prime farmland

Map Unit Composition

Scantic and similar soils: 85 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Scantic

Setting

Landform: Marine terraces, river valleys

Landform position (three-dimensional): Talf

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Glaciomarine deposits

Typical profile

Ap - 0 to 9 inches: silt loam

Bg1 - 9 to 16 inches: silty clay loam

Bg2 - 16 to 29 inches: silty clay

Cg - 29 to 65 inches: silty clay

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Poorly drained

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)

Depth to water table: About 0 to 12 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Moderate (about 6.3 inches)

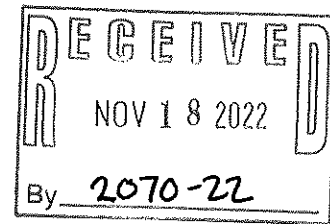
Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4w

Hydrologic Soil Group: D

Ecological site: F144BY304ME - Wet Clay Flat



November 18, 20220

Megan M. Rideout
Maine Historic Preservation Commission | 55 Capital Street | 65 State House Station
Augusta, Maine 04333-0065

Impact Determination for 221 Route , Cumberland-Foreside

Dear Ms. Rideout,

On behalf of the Applicant, LGC Clinical Diagnostics, we request a letter of impact determination from your agency for the proposed development located at 221 Route 1 Cumberland-Foreside, Maine (see attached locus plans). This request is being made in accordance with Corps requirements for permitting under the Natural Resources Protection Act as administered by the Maine Department of Environmental Protection. The property is bound by Powell Road on the north and Tuttle Road on the south and identified on Cumberland Tax Maps as Map R2, Lot- 10A. It is a 7.78 Acre parcel in the shape of a rectangle extending from south to north along Route 1.

The southern end of the property is currently developed with a two-story 30,000-sf commercial building, stormwater pond, and parking lot. A 2,900-sf building expansion is planned for construction in 2023. The northern portion of the lot remains undeveloped. Proposed development is of the northern portion of the lot and includes a solar array, fencing, electrical infrastructure, and gravel access road. Access to the northern end of the property will be from Powell Road.

The following pages contain images of the exterior of the existing building, and exteriors of the residential buildings adjacent to and across Powell Road from the site. Based on the date the original Site Development permit was issued (2012) the building appears to be less than 50 years old. Please review the provided information and let us know if you have any questions or require further information at this time.

Sincerely,

Gretchen K Prouty, P.E.
Civil Engineer

SMRT Architects and Engineers | 144 Fore Street | Portland, ME 04101
p 207.321.3863 | email: gprouty@smrtinc.com

Based on the information submitted, I have concluded that there will be no historic properties affected by the proposed undertaking, as defined by Section 106 of the National Historic Preservation Act. Consequently, pursuant to 36 CFR 800.4(d)(1), no further Section 106 consultation is required unless additional resources are discovered during project implementation pursuant to 36 CFR 800.13.

Kirk F. Mohnhey

Kirk F. Mohnhey, P.E.
State Historic Preservation Officer
Maine Historic Preservation Commission

12/22/22
Date

CC: LGC; SMRT

Attachments:

- Topographic Location Map
- Sample Solar Array Installation Drawing

Gretchen Prouty

From: Feero, Keegan <Keegan.Feero@maine.gov>
Sent: Friday, February 24, 2023 12:45 PM
To: Gretchen Prouty
Subject: RE: LGC Clinical Diagnostics Question

Follow Up Flag: Follow up
Flag Status: Completed

Great! I believe it would be best to withdraw your Tier 1 application since this part of the project appears to be exempt by our standards. However, do note that any future development which will impact wetlands on site may require a Tier 1 if the cumulative impacts become greater than 4,300 square feet. May I mark your Tier 1 application as withdrawn? The stormwater amendment will remain active and is still under review.

Thank you,
Keegan

Keegan Feero
Environmental Specialist
Department of Environmental Protection
keegan.feero@maine.gov
(207) 275-9674

From: Gretchen Prouty <GProuty@smrtinc.com>
Sent: Friday, February 17, 2023 1:09 PM
To: Feero, Keegan <Keegan.Feero@maine.gov>
Subject: RE: LGC Clinical Diagnostics Question

EXTERNAL: This email originated from outside of the State of Maine Mail System. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Keegan-

Yes no clearing is proposed within 25' of the stream. We are using the 75' stream buffer limit for our clearing limits. We have confirmed this is acceptable for shade management with the solar array vendor as well.

Thank-you,

Gretchen

From: Feero, Keegan <Keegan.Feero@maine.gov>
Sent: Friday, February 17, 2023 12:46 PM
To: Gretchen Prouty <GProuty@smrtinc.com>
Subject: LGC Clinical Diagnostics Question

Hi Gretchen,

In review of your Tier 1 application associated with the solar array in Cumberland for LGC Clinical Diagnostics, I believe this may actually fit under our 480-Q exemption. The clearing adjacent to the WOSS surrounding the stream would be

fine and still fit the exemption as long as no WOSS direct impacts are proposed, and the cumulative wetland impacts at the site are still below 4,300 square feet. Any clearing to be done within 75' of the stream, however, would require a PBR under Section 2. Could you please confirm there will be no clearing within the 25' foot buffer (WOSS) of the stream?

Thank you,
Keegan

Keegan Feero
Environmental Specialist
Department of Environmental Protection
keegan.feero@maine.gov
(207) 275-9674



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
17 STATE HOUSE STATION AUGUSTA, MAINE 04333-0017

DEPARTMENT ORDER

IN THE MATTER OF

LGC CLINICAL DIAGNOSTICS) STORMWATER MANAGEMENT LAW
Cumberland, Cumberland County)
SOLAR ARRAY) AMENDMENT
L-25656-NJ-D-A (approval)) FINDINGS OF FACT AND ORDER

Pursuant to the provisions of 38 M.R.S. § 420-D, and Chapters 500 and 502 (06-096 C.M.R. ch. 500 and 502, last amended August 12, 2015) of the Department's Regulations, the Department of Environmental Protection (Department) has considered the application of LGC CLINICAL DIAGNOSTICS (applicant) with the supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

1. PROJECT DESCRIPTION:

A. History: In Department Order #L-25656-NJ-A-N, dated May 22, 2012, the Department approved the construction of a stormwater management system consisting of an underdrained soil filter and pervious pavement for a two-story office building with a footprint of approximately 30,000 square feet, associated parking, and other improvements. The project resulted in approximately 2.5 acres of developed area, 1.5 acres of which is impervious area. The applicant also submitted a Permit-by-Rule notification form (PBR#53833) for activities adjacent to an unnamed stream. The project site is located on U.S. Route 1 in the Town of Cumberland.

In Department Order #L-25656-NJ-C-M, dated October 6, 2022, the Department approved an addition to an existing building which resulted in an additional 2,906 square feet of impervious area long with an associated sidewalk relocation and landscaping. As a result of the development, the total developed area on the parcel increased to 2.51 acres, 1.5 acres of which is impervious. The applicant also submitted a Permit-by-Rule notification form (PBR#74650) for activities adjacent to an unnamed stream. During the review of that application, the Department determined that a transfer was not required because no change of ownership had occurred based on information provided by the applicant related to a merger.

B. Summary: The applicant proposes to amend the stormwater management system to include the installation of a 1.63-acre, 423kW ground-mounted solar array. The proposed development will include solar panels, fencing, a transformer and pad, and a gravel drive on the northern half of the parcel. The development will result in an increase of impervious area of 0.07 acres. In total, the parcel will contain 2.51 acres of developed area, 1.57 acres of which is impervious area. The project is shown on a set of plans, the

first of which is titled “LGC Clinical Diagnostics, Inc. Solar Array Improvements,” prepared by SMRT Architects and Engineers, and dated December 22, 2022.

The applicant also submitted a Tier 1 application under the Natural Resources Protection Act for the disturbance of 2,944 square feet of freshwater wetlands, which is an exempt activity pursuant to the Natural Resources Protection Act (NRPA), 38 M.R.S. § 480-Q(17). Together with the 147 square feet of wetland associated with the development approved in Department Order #L-25656-NJ-A-N, cumulative wetland alteration for the site will total 3,091 square feet, which is also exempt from NRPA review. The Tier 1 application associated with the project was withdrawn on February 27, 2023.

In addition, the applicant submitted a Notice of Intent (NOI #76669) to comply with the standards and requirements of the Maine Construction General Permit, which was accepted by the Department on January 17, 2023.

C. Current Use of the Site: The parcel currently contains a two-story office building with associated parking and other improvements. The northern portion of the parcel consists of vacant fields with pockets of emergent wetlands located throughout.

2. STORMWATER STANDARDS:

The proposed project includes approximately 0.07 acres of new impervious area. In total, the site contains 2.51 acres of developed area, 1.57 acres of which is impervious area. It lies within the watershed of Broad Cove. The applicant submitted a stormwater management plan based on the Basic and General Standards contained in Department Rules, Chapter 500. The proposed stormwater management system for the new solar array consists of one meadow roadside buffer.

A. Basic Standards:

(1) Erosion and Sedimentation Control: The applicant submitted an Erosion and Sedimentation Control Plan that is based on the performance standards contained in Appendix A of Chapter 500 and the Best Management Practices outlined in the Maine Erosion and Sediment Control BMPs, which were developed by the Department. This plan and plan sheets containing erosion control details were reviewed by the Bureau of Land Resources (BLR).

Erosion control details will be included on the final construction plans and the erosion control narrative will be included in the project specifications to be provided to the construction contractor.

(2) Inspection and Maintenance: The applicant submitted a maintenance plan that addresses both short and long-term maintenance requirements. The maintenance plan is based on the standards contained in Appendix B of Chapter 500. This plan was reviewed by BLR. The applicant will be responsible for the maintenance of the stormwater management system.

(3) Housekeeping: The proposed project will comply with the performance standards outlined in Appendix C of Chapter 500.

Based on BLR's review of the erosion and sedimentation control plan and the maintenance plan, the Department finds that the proposed project meets the Basic Standards contained in Chapter 500(4)(B).

B. General Standards:

The applicant's stormwater management plan includes general treatment measures that will mitigate for the increased frequency and duration of channel erosive flows due to runoff from smaller storms, provide for effective treatment of pollutants in stormwater, and mitigate potential temperature impacts. This mitigation is being achieved by using Best Management Practices that will control runoff from no less than 95% of the impervious area and no less than 80% of the developed area.

The roadside meadow stormwater buffer will be protected from alteration through the execution of a deed restriction. The applicant proposes to use the deed restriction language contained in Appendix G of Chapter 500 and submitted a draft deed restriction that meets Department standards.

Prior to the start of construction, the location of the meadow buffer must be permanently marked on the ground. The applicant must execute and record all required deed restrictions, including the appropriate buffer deed restrictions, within 60 days of the date of this Order. The applicant must submit a copy of the recorded deed restriction, including the plot plan, to the BLR within 60 days of its recording.

The stormwater management system proposed by the applicant was reviewed by BLR. After a final review, BLR commented that the proposed stormwater management system is designed in accordance with the Chapter 500 General Standards.

Based on the stormwater system's design and BLR's review, the Department finds that the applicant has made adequate provision to ensure that the proposed project will meet the Chapter 500 Basic and General Standards.

The Department further finds that the proposed project will meet the Chapter 500 standards for easements and deed restrictions.

BASED on the above findings of fact, and subject to the conditions listed below, the Department makes the following conclusions pursuant to 38 M.R.S. § 420-D, and Chapters 500 and 502 of the Department's Regulations:

- A. The applicant has made adequate provision to ensure that the proposed project will meet the Chapter 500 Basic Standards for: (1) erosion and sediment control; (2) inspection and maintenance; (3) housekeeping; and (4) grading and construction activity.

- B. The applicant has made adequate provision to ensure that the proposed project will meet the Chapter 500 General Standards provided that the applicant meets the requirements outlined in Finding 2.
- C. The applicant has made adequate provision to ensure that the proposed project will meet the Chapter 500 standards for easements and deed restrictions.

THEREFORE, the Department APPROVES the above noted application of LGC CLINICAL DIAGNOSTICS to construct a stormwater management system as described above in Cumberland, Maine, SUBJECT TO THE FOLLOWING CONDITIONS, and all applicable standards and regulations:

- 1. The Standard Conditions of Approval, a copy attached.
- 2. In addition to any specific erosion control measures described in this order, the applicant shall take all necessary actions to ensure that its activities or those of its agents do not result in noticeable erosion of soils or fugitive dust emissions on the site during the construction and operation of the project covered by this approval.
- 3. Severability. The invalidity or unenforceability of any provision, or part thereof, of this License shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.
- 4. The applicant shall execute and record all required deed restrictions, including the appropriate buffer deed restrictions, within 60 days of the date of this Order. The applicant shall submit a copy of the recorded deed restriction, including the plot plan, to the BLR within 60 days of its recording.
- 5. Prior to the start of construction, the location of the meadow buffer shall be permanently marked on the ground.

THIS APPROVAL DOES NOT CONSTITUTE OR SUBSTITUTE FOR ANY OTHER REQUIRED STATE, FEDERAL OR LOCAL APPROVALS NOR DOES IT VERIFY COMPLIANCE WITH ANY APPLICABLE SHORELAND ZONING ORDINANCES.

DONE AND DATED IN AUGUSTA, MAINE, THIS 28th DAY OF MARCH 2023.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: 
For: Melanie Loyzim, Commissioner

PLEASE NOTE THE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES.

KF/L25656DA/ATS90464

FILED
March 29th, 2023
State of Maine
Board of Environmental Protection

STORMWATER STANDARD CONDITIONS

STRICT CONFORMANCE WITH THE STANDARD AND SPECIAL CONDITIONS OF THIS APPROVAL IS NECESSARY FOR THE PROJECT TO MEET THE STATUTORY CRITERIA FOR APPROVAL

Standard conditions of approval. Unless otherwise specifically stated in the approval, a department approval is subject to the following standard conditions pursuant to Chapter 500 Stormwater Management Law.

- (1) Approval of variations from plans. The granting of this approval is dependent upon and limited to the proposals and plans contained in the application and supporting documents submitted and affirmed to by the permittee. Any variation from these plans, proposals, and supporting documents must be reviewed and approved by the department prior to implementation. Any variation undertaken without approval of the department is in violation of 38 M.R.S. §420-D(8) and is subject to penalties under 38 M.R.S. §349.
- (2) Compliance with all terms and conditions of approval. The applicant shall submit all reports and information requested by the department demonstrating that the applicant has complied or will comply with all terms and conditions of this approval. All preconstruction terms and conditions must be met before construction begins.
- (3) Advertising. Advertising relating to matters included in this application may not refer to this approval unless it notes that the approval has been granted WITH CONDITIONS, and indicates where copies of those conditions may be obtained.
- (4) Transfer of project. Unless otherwise provided in this approval, the applicant may not sell, lease, assign, or otherwise transfer the project or any portion thereof without written approval by the department where the purpose or consequence of the transfer is to transfer any of the obligations of the developer as incorporated in this approval. Such approval may only be granted if the applicant or transferee demonstrates to the department that the transferee agrees to comply with conditions of this approval and the proposals and plans contained in the application and supporting documents submitted by the applicant. Approval of a transfer of the permit must be applied for no later than two weeks after any transfer of property subject to the license.
- (5) Time frame for approvals. If the construction or operation of the activity is not begun within four years, this approval shall lapse and the applicant shall reapply to the department for a new approval. The applicant may not begin construction or operation of the project until a new approval is granted. A reapplication for approval may include information submitted in the initial application by reference. This approval, if construction is begun within the four-year time frame, is valid for seven years. If construction is not completed within the seven-year time frame, the applicant must reapply for, and receive, approval prior to continuing construction.
- (6) Certification. Contracts must specify that "all work is to comply with the conditions of the Stormwater Permit." Work done by a contractor or subcontractor pursuant to this approval may not begin before the contractor and any subcontractors have been shown a copy of this approval with the conditions by the permittee, and the permittee and each contractor and subcontractor has certified, on a form provided by the department, that the approval and conditions have been received and read, and that the work will be carried out in accordance with the approval and conditions. Completed certification forms must be forwarded to the department.

- (7) Maintenance. The components of the stormwater management system must be adequately maintained to ensure that the system operates as designed, and as approved by the Department. If maintenance responsibility is to be transferred from the permittee to another entity, a transfer request must be filed with the Department which includes the name and contact information for the person or entity responsible for this maintenance. The form must be signed by the responsible person or agent of the responsible entity.
- (8) Recertification requirement. Within three months of the expiration of each five-year interval from the date of issuance of the permit, the permittee shall certify the following to the department.
 - (a) All areas of the project site have been inspected for areas of erosion, and appropriate steps have been taken to permanently stabilize these areas.
 - (b) All aspects of the stormwater control system are operating as approved, have been inspected for damage, wear, and malfunction, and appropriate steps have been taken to repair or replace the system, or portions of the system, as necessary.
 - (c) The stormwater maintenance plan for the site is being implemented as approved by the Department, and the maintenance log is being maintained.
 - (d) All proprietary systems have been maintained according to the manufacturer's recommendations. Where required by the Department, the permittee shall execute a 5-year maintenance contract with a qualified professional for the coming 5-year interval. The maintenance contract must include provisions for routine inspections, cleaning and general maintenance.
 - (e) The Department may waive some or all of these recertification requirements on a case-by-case basis for permittees subject to the Department's Multi-Sector General Permit ("MSGP") and/or Maine Pollutant Discharge Elimination System ("MEPDES") programs where it is demonstrated that these programs are providing stormwater control that is at least as effective as required pursuant to this Chapter.
- (9) Transfer of property subject to the license. If any portion of the property subject to the license containing areas of flow or areas that are flooded are transferred to a new property owner, restrictive covenants protecting these areas must be included in any deeds or leases, and recorded at the appropriate county registry of deeds. Also, in all transfers of such areas and areas containing parts of the stormwater management system, deed restrictions must be included making the property transfer subject to all applicable terms and conditions of the permit. These terms and conditions must be incorporated by specific and prominent reference to the permit in the deed. All transfers must include in the restrictions the requirement that any subsequent transfer must specifically include the same restrictions unless their removal or modification is approved by the Department. These restrictions must be written to be enforceable by the Department and must reference the permit number.
- (10) Severability. The invalidity or unenforceability of any provision, or part thereof, of this permit shall not affect the remainder of the provision or any other provisions. This permit shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.



DEP INFORMATION SHEET

Appealing a Department Licensing Decision

Dated: August 2021

Contact: (207) 314-1458

SUMMARY

This document provides information regarding a person's rights and obligations in filing an administrative or judicial appeal of a licensing decision made by the Department of Environmental Protection's (DEP) Commissioner.

Except as provided below, there are two methods available to an aggrieved person seeking to appeal a licensing decision made by the DEP Commissioner: (1) an administrative process before the Board of Environmental Protection (Board); or (2) a judicial process before Maine's Superior Court. An aggrieved person seeking review of a licensing decision over which the Board had original jurisdiction may seek judicial review in Maine's Superior Court.

A judicial appeal of final action by the Commissioner or the Board regarding an application for an expedited wind energy development ([35-A M.R.S. § 3451\(4\)](#)) or a general permit for an offshore wind energy demonstration project ([38 M.R.S. § 480-HH\(1\)](#)) or a general permit for a tidal energy demonstration project ([38 M.R.S. § 636-A](#)) must be taken to the Supreme Judicial Court sitting as the Law Court.

I. ADMINISTRATIVE APPEALS TO THE BOARD

LEGAL REFERENCES

A person filing an appeal with the Board should review Organization and Powers, [38 M.R.S. §§ 341-D\(4\)](#) and [346](#); the Maine Administrative Procedure Act, 5 M.R.S. § [11001](#); and the DEP's [Rule Concerning the Processing of Applications and Other Administrative Matters \(Chapter 2\)](#), 06-096 C.M.R. ch. 2.

DEADLINE TO SUBMIT AN APPEAL TO THE BOARD

Not more than 30 days following the filing of a license decision by the Commissioner with the Board, an aggrieved person may appeal to the Board for review of the Commissioner's decision. The filing of an appeal with the Board, in care of the Board Clerk, is complete when the Board receives the submission by the close of business on the due date (5:00 p.m. on the 30th calendar day from which the Commissioner's decision was filed with the Board, as determined by the received time stamp on the document or electronic mail). Appeals filed after 5:00 p.m. on the 30th calendar day from which the Commissioner's decision was filed with the Board will be dismissed as untimely, absent a showing of good cause.

HOW TO SUBMIT AN APPEAL TO THE BOARD

An appeal to the Board may be submitted via postal mail or electronic mail and must contain all signatures and required appeal contents. An electronic filing must contain the scanned original signature of the appellant(s). The appeal documents must be sent to the following address.

Chair, Board of Environmental Protection
c/o Board Clerk
17 State House Station
Augusta, ME 04333-0017
ruth.a.burke@maine.gov

The DEP may also request the submittal of the original signed paper appeal documents when the appeal is filed electronically. The risk of material not being received in a timely manner is on the sender, regardless of the method used.

At the time an appeal is filed with the Board, the appellant must send a copy of the appeal to: (1) the Commissioner of the DEP (Maine Department of Environmental Protection, 17 State House Station, Augusta, Maine 04333-0017); (2) the licensee; and if a hearing was held on the application, (3) any intervenors in that hearing proceeding. **Please contact the DEP at 207-287-7688 with questions or for contact information regarding a specific licensing decision.**

REQUIRED APPEAL CONTENTS

A complete appeal must contain the following information at the time the appeal is submitted.

1. *Aggrieved status.* The appeal must explain how the appellant has standing to bring the appeal. This requires an explanation of how the appellant may suffer a particularized injury as a result of the Commissioner's decision.
2. *The findings, conclusions, or conditions objected to or believed to be in error.* The appeal must identify the specific findings of fact, conclusions of law, license conditions, or other aspects of the written license decision or of the license review process that the appellant objects to or believes to be in error.
3. *The basis of the objections or challenge.* For the objections identified in Item #2, the appeal must state why the appellant believes that the license decision is incorrect and should be modified or reversed. If possible, the appeal should cite specific evidence in the record or specific licensing criteria that the appellant believes were not properly considered or fully addressed.
4. *The remedy sought.* This can range from reversal of the Commissioner's decision on the license to changes in specific license conditions.
5. *All the matters to be contested.* The Board will limit its consideration to those matters specifically raised in the written notice of appeal.
6. *Request for hearing.* If the appellant wishes the Board to hold a public hearing on the appeal, a request for hearing must be filed as part of the notice of appeal, and it must include an offer of proof regarding the testimony and other evidence that would be presented at the hearing. The offer of proof must consist of a statement of the substance of the evidence, its relevance to the issues on appeal, and whether any witnesses would testify. The Board will hear the arguments in favor of and in opposition to a hearing on the appeal and the presentations on the merits of an appeal at a regularly scheduled meeting. If the Board decides to hold a public hearing on an appeal, that hearing will then be scheduled for a later date.
7. *New or additional evidence to be offered.* If an appellant wants to provide evidence not previously provided to DEP staff during the DEP's review of the application, the request and the proposed supplemental evidence must be submitted with the appeal. The Board may allow new or additional evidence to be considered in an appeal only under limited circumstances. The proposed supplemental evidence must be relevant and material, and (a) the person seeking to add information to the record must show due diligence in bringing the evidence to the DEP's attention at the earliest possible time in the licensing process; or (b) the evidence itself must be newly discovered and therefore unable to have been presented earlier in the process. Requirements for supplemental evidence are set forth in [Chapter 2 § 24](#).

OTHER CONSIDERATIONS IN APPEALING A DECISION TO THE BOARD

1. *Be familiar with all relevant material in the DEP record.* A license application file is public information, subject to any applicable statutory exceptions, and is made accessible by the DEP. Upon request, the DEP will make application materials available to review and photocopy during normal working hours. There may be a charge for copies or copying services.

2. *Be familiar with the regulations and laws under which the application was processed, and the procedural rules governing the appeal.* DEP staff will provide this information upon request and answer general questions regarding the appeal process.
3. *The filing of an appeal does not operate as a stay to any decision.* If a license has been granted and it has been appealed, the license normally remains in effect pending the processing of the appeal. Unless a stay of the decision is requested and granted, a licensee may proceed with a project pending the outcome of an appeal, but the licensee runs the risk of the decision being reversed or modified as a result of the appeal.

WHAT TO EXPECT ONCE YOU FILE A TIMELY APPEAL WITH THE BOARD

The Board will acknowledge receipt of an appeal, and it will provide the name of the DEP project manager assigned to the specific appeal. The notice of appeal, any materials admitted by the Board as supplementary evidence, any materials admitted in response to the appeal, relevant excerpts from the DEP's administrative record for the application, and the DEP staff's recommendation, in the form of a proposed Board Order, will be provided to Board members. The appellant, the licensee, and parties of record are notified in advance of the date set for the Board's consideration of an appeal or request for a hearing. The appellant and the licensee will have an opportunity to address the Board at the Board meeting. The Board will decide whether to hold a hearing on appeal when one is requested before deciding the merits of the appeal. The Board's decision on appeal may be to affirm all or part, affirm with conditions, order a hearing to be held as expeditiously as possible, reverse all or part of the decision of the Commissioner, or remand the matter to the Commissioner for further proceedings. The Board will notify the appellant, the licensee, and parties of record of its decision on appeal.

II. JUDICIAL APPEALS

Maine law generally allows aggrieved persons to appeal final Commissioner or Board licensing decisions to Maine's Superior Court (see [38 M.R.S. § 346\(1\)](#); 06-096 C.M.R. ch. 2; [5 M.R.S. § 11001](#); and M.R. Civ. P. 80C). A party's appeal must be filed with the Superior Court within 30 days of receipt of notice of the Board's or the Commissioner's decision. For any other person, an appeal must be filed within 40 days of the date the decision was rendered. An appeal to court of a license decision regarding an expedited wind energy development, a general permit for an offshore wind energy demonstration project, or a general permit for a tidal energy demonstration project may only be taken directly to the Maine Supreme Judicial Court. See 38 M.R.S. § 346(4).

Maine's Administrative Procedure Act, DEP statutes governing a particular matter, and the Maine Rules of Civil Procedure must be consulted for the substantive and procedural details applicable to judicial appeals.

ADDITIONAL INFORMATION

If you have questions or need additional information on the appeal process, for administrative appeals contact the Board Clerk at 207-287-2811 or the Board Executive Analyst at 207-314-1458 bill.hinkel@maine.gov, or for judicial appeals contact the court clerk's office in which the appeal will be filed.

Note: This information sheet, in conjunction with a review of the statutory and regulatory provisions referred to herein, is provided to help a person to understand their rights and obligations in filing an administrative or judicial appeal. The DEP provides this information sheet for general guidance only; it is not intended for use as a legal reference. Maine law governs an appellant's rights.



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
NEW ENGLAND DISTRICT, CORPS OF ENGINEERS
696 VIRGINIA ROAD
CONCORD, MASSACHUSETTS 01742-2751

Regulatory Division
File No. NAE-2022-02899

April 4, 2023

Todd Anderson, VP
LGC Clinical Diagnostics
37 Birch Street
Milford, Massachusetts 01757

Dear Mr. Anderson:

We recently reviewed your proposal to retain and maintain approximately 147 SF of previously placed fill in freshwater wetland and place additional fill in approximately 2,797 SF of freshwater wetland off 221 U.S. Route 1 at Cumberland-Foreside, Maine in order to minimize wetland damage during the installation of a solar array (Lat/Lon 43.771941°N; -70.199990°W). This work is shown on the attached plans entitled "Project Location Map" in one sheet dated "December, 2022" "Wetland Impact Site Plan" in one sheet dated "22 December 2022".

On October 14, 2020, we issued General Permits that, subject to our discretion, eliminates the need for individual Department of the Army permits for certain work that is regulated in the State of Maine (www.nae.usace.army.mil/Missions/Regulatory/State-General-Permits/Maine-General-Permit). Your activity as proposed qualifies for self-verification under Maine General Permit 13, Land and Water-Based Renewable Energy Generation Facilities and Hydropower Projects. No further action is necessary from the Corps on this project.

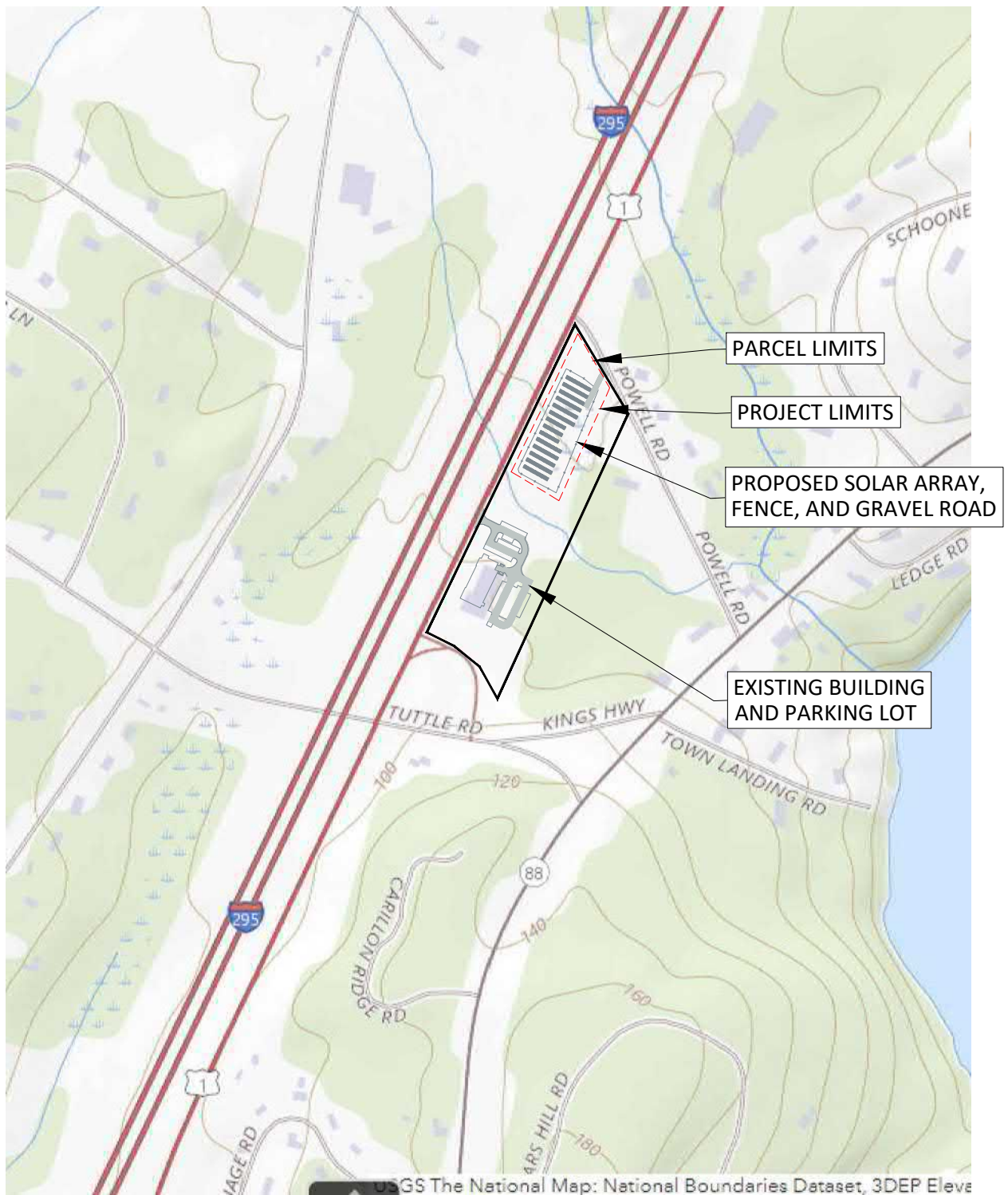
Please note that all work is subject to the terms and conditions contained in the general permit. Condition 45 provides for one year for completion of work that has commenced or is under contract to commence prior to the expiration of the general permit on October 25, 2025. You will need to apply for reauthorization for any work within Corps jurisdiction that is not completed by October 14, 2026.

No work may be started unless and until all other required local, State and Federal licenses and permits have been obtained. If any change in the plans or construction methods is found necessary, please contact us immediately to discuss modification of your permit. Any change must be approved before it is undertaken.

If you have any questions on this matter, please contact Colin Greenan of my staff at 978-318-8676 or colin.m.greenan@usace.army.mil at our Augusta, Maine Project Office.

Sincerely,

Frank J. Del Giudice
Chief, Permits & Enforcement Branch
Regulatory Division



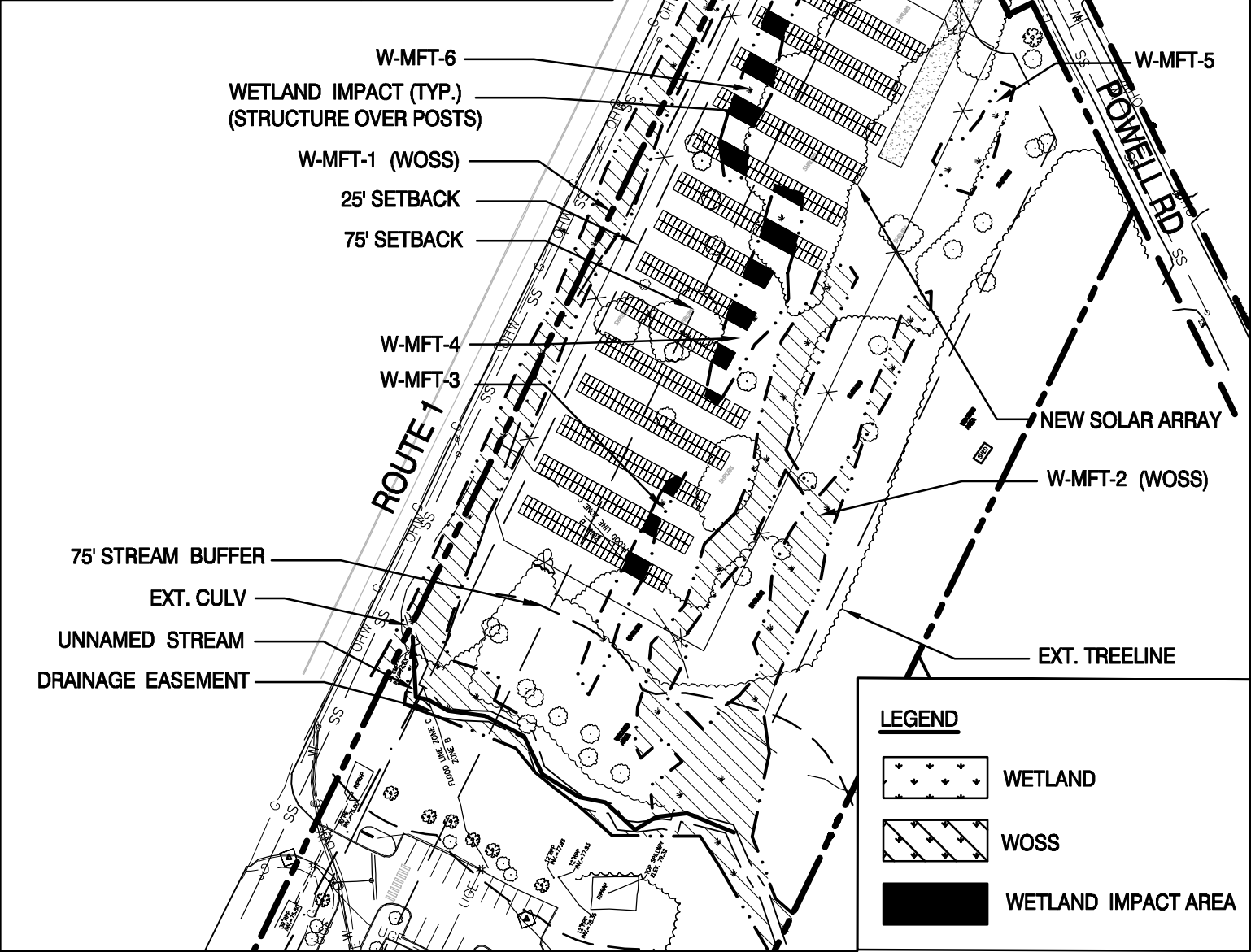
Project Location Map

LGC-Clinical Diagnostics Inc.-Solar Array

December, 2022



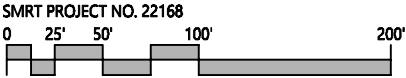
WETLAND IMPACT SUMMARY	
	AREA (SF)
FRESHWATER WETLAND	2,797
WETLAND OF SPECIAL SIGNIFICANCE (WOSS)	0
PREVIOUS IMPACT FOR EXISTING DEVELOPMENT 480-Q EXEMPT, MAY 2012)	147
TOTAL IMPACT ON PARCEL	2,944



Wetland Impact Site Plan

LGC Clinical Diagnostics - Solar Array

22 December 2022



LGC CLINICAL DIAGNOSTICS, INC.

SOLAR ARRAY IMPROVEMENTS

221 US ROUTE 1
CUMBERLAND FORESIDE, MAINE

APPLICANT INFORMATION

LGC DIAGNOSTICS, INC.
TODD ANDERSON, VICE PRESIDENT
221 US ROUTE 1
CUMBERLAND FORESIDE, MAINE
(508) 244-6400

DRAWING LIST

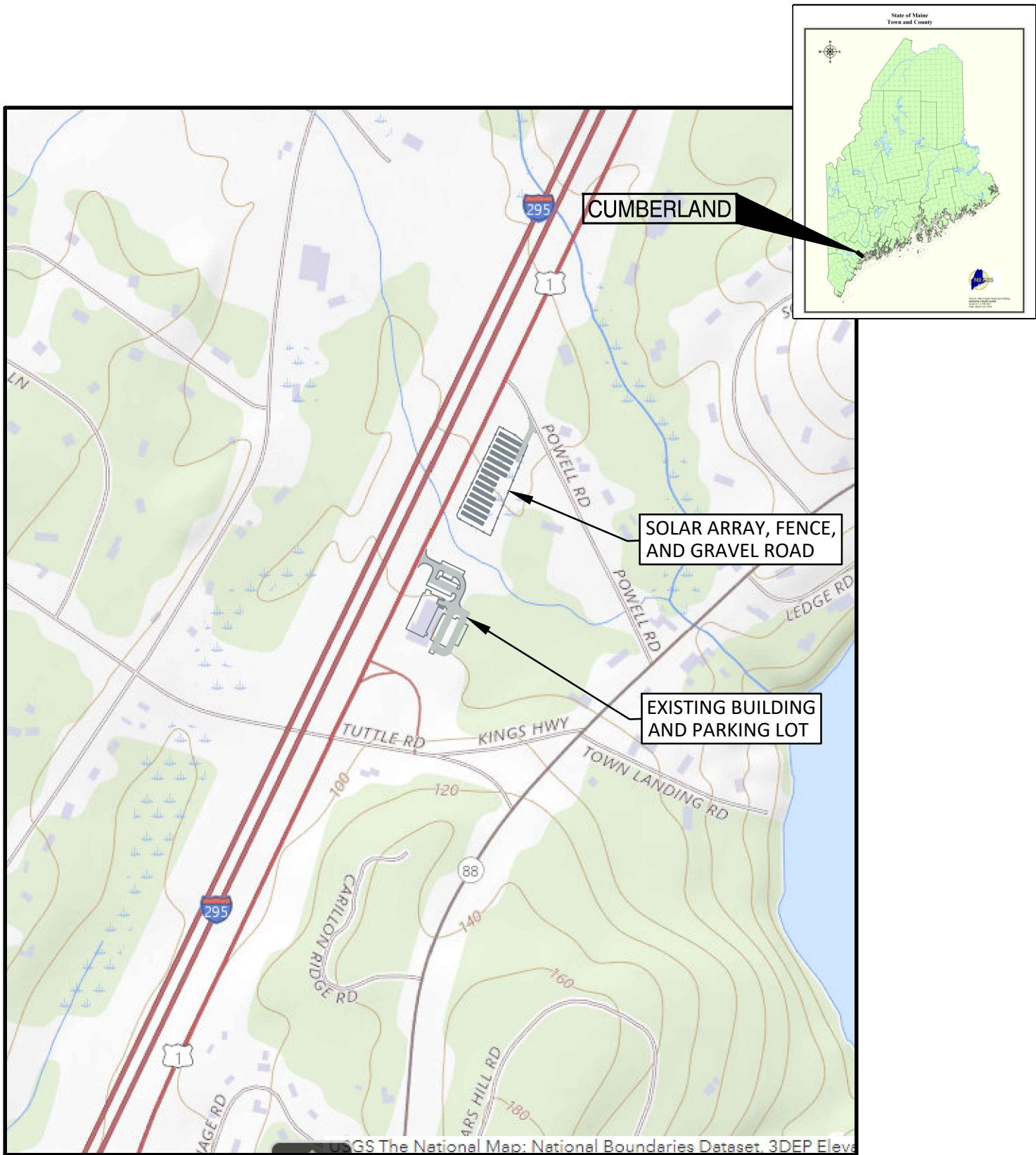
GI001 COVER SHEET
TOPOGRAPHIC SURVEY
SP-1 SITE PLAN
C-001 EROSION & SEDIMENT CONTROL NOTES
C-101 EROSION & SEDIMENT CONTROL & DEMOLITION PLAN
C-102 SITE LAYOUT & GRADING PLAN
C-501 SITE DETAILS
C-502 SITE DETAILS
LP-101 PLANTING PLAN, SCHEDULE & DETAILS

ISSUED FOR PERMITTING

03-06-23

APPROVED BY THE TOWN OF CUMBERLAND PLANNING BOARD

NAME _____ DATE _____
NAME _____ DATE _____
NAME _____ DATE _____
NAME _____ DATE _____
NAME _____ DATE _____



LOCUS

GENERAL LAYOUT NOTES:

- DO NOT SCALE THE DRAWINGS. ALL DIMENSIONS SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO CONSTRUCTION. ANY OMISSIONS IN DIMENSIONING SHALL BE REPORTED IMMEDIATELY TO THE ENGINEER FOR DECISION. ANY DISCREPANCIES BETWEEN DRAWINGS, DETAILS, NOTES, AND SPECIFICATIONS SHALL IMMEDIATELY BE REPORTED TO THE ENGINEER FOR FURTHER DIRECTION AND RESOLUTION BEFORE ANY ADDITIONAL WORK PROCEEDS.
- ALL ANGLES ARE 90 DEGREES UNLESS OTHERWISE NOTED.
- ALL PAVING, CURBS, AND STRUCTURES SHALL BE STAKED OUT BY THE CONTRACTOR AND APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION.
- ALL DIMENSIONS FROM BUILDING ARE TO FACE OF BUILDING FOUNDATION. ALL DIMENSIONS FROM CURBS ARE TO FACE OF CURB.
- PROVIDE A SMOOTH TRANSITION WHERE NEW WORK MEETS EXISTING WORK.
- CONTRACTOR SHALL NOTIFY DIG-SAFE (1-888-344-7233) AND LOCAL UTILITY COMPANIES TO VERIFY LOCATION OF ALL EXISTING UTILITIES PRIOR TO EXCAVATION.
- CONTRACTOR SHALL SECURE ALL NECESSARY PERMITS FOR WORK SHOWN ON THESE PLANS.
- ALL WORK SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL SAFETY REGULATIONS.
- EXISTING CONDITIONS AND TOPOGRAPHIC DATA ARE BASED UPON TOPOGRAPHIC SURVEY PROVIDED TO SMRT BY OWEN HASKELL, INC. AND DATED DECEMBER 6, 2022.

GRADING NOTES:

- SOIL DISTURBANCE IS TO BE KEPT TO A MINIMUM AND ALL DISTURBED AREAS SHALL BE STABILIZED (WITH PERMANENT OR TEMPORARY MEASURES) AS QUICKLY AS POSSIBLE.
- ALL DISTURBED AREAS NOT OTHERWISE TREATED SHALL BE LOAMED AND SEEDED (6" DEPTH).
- ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE MAINTAINED ON A REGULAR BASIS AND AS REQUIRED AFTER STORM EVENTS.
- GULLIES OR OTHERWISE ERODED AREAS IN SEEDED AREAS SHALL BE RESTORED AS SOON AS POSSIBLE FOLLOWING OBSERVATION, USING EROSION CONTROL MESH TO STABILIZE AS REQUIRED.
- ALL EMBANKMENTS AND OTHER FILL SECTIONS SHALL BE CONSTRUCTED USING GRANULAR BORROW - A MIXTURE OF SAND AND GRAVEL MEETING MDOT SPECIFICATION 703.19 GRANULAR BORROW (2014 EDITION), OR GRAVEL SUBBASE MATERIAL (MDOT 703.06, TYPE D).
- WHERE DEPTHS OF IMPORTED GRANULAR MATERIAL VARY IN ADJACENT SECTIONS, THE SUBGRADE TRANSITION SHALL BE TAPERED AT A MAXIMUM SLOPE OF 3:1 (HORIZ:VERT).

UTILITY NOTES:

- PROVIDE AND INSTALL MATERIALS NECESSARY TO COMPLETE UTILITY FEATURES AND DESIGN UNLESS OTHERWISE INDICATED.
- CONTRACTOR TO VERIFY EXISTING UTILITY CONNECTION POINTS PRIOR TO CONSTRUCTION AND INCLUDE ALL EXTRA WORK REQUIRED TO EXTEND UTILITIES AS REQUIRED.
- ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE AND HAVE BEEN DETERMINED BY SURFACE EVIDENCE AND/OR PREVIOUSLY GENERATED PLANS. NO GUARANTEE IS MADE THAT ALL UTILITIES ARE SHOWN OR WILL BE FOUND IN LOCATIONS INDICATED. THIS INFORMATION IS PROVIDED FOR REFERENCE AND THE CONTRACTOR SHALL VERIFY LOCATION OF ALL UTILITIES AND POINTS OF CONNECTION IN THE FIELD. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR AND RESTORATION OF ALL UTILITIES DISTURBED DURING CONSTRUCTION AT NO EXTRA EXPENSE TO THE OWNER.
- THE CONTRACTOR SHALL EXCAVATE TEST PITS AS NECESSARY TO VERIFY THE LOCATION, DEPTH AND SIZE OF EXISTING SERVICES. ANY DISCREPANCIES SHALL BE REPORTED IMMEDIATELY TO THE ENGINEER AND OWNER.

SITE LEGEND		
	EXISTING	PROPOSED
BOLLARD	○	●
BUILDING W/ DOOR	▲	▲
BUILDING CANOPY	▬	▬
CATCH BASIN	■	■
COMMUNICATIONS LINE-OH	— OHW —	— TC —
COMMUNICATIONS LINE-UG	— C —	— NTC —
CONCRETE PAD	■	■
CULVERT	▬	▬
CURB - FLUSH	▬	▬
CURB - SLOPED GRANITE	▬	▬
CURB - VERT GRANITE	▬	▬
DRAIN INLET	○	●
DRAIN MANHOLE	⊙	⊙
DRIP STRIP	▬	▬
ELECTRIC MANHOLE	⊙	■
ELECTRIC - OVERHEAD	▬	▬
ELECTRIC - UNDERGROUND	— E —	— NUGE —
ELEVATION BOT OF CURB	+BC	+BC
ELEVATION BOT OF STEP	+BS	+BS
ELEVATION TOP OF CURB	+TC	+TC
ELEVATION TOP OF STEP	+TS	+TS
ELEVATION - SPOT	+100.0	+100.0
FENCE - CHAINLINK	▬	▬
FIRE HYDRANT	⊙	⊙
FLAG POLE	⊙	⊙
FORCE MAIN PIPE	— SFM —	— NSF —
GAS & FUEL EQUIPMENT	■	■
GAS LINE	— G —	— NGAS —
GAS VALVE	⊙	⊙
GENERATOR ON CONC PAD	■	■
GUARDRAIL	▬	▬

SITE LEGEND		
	EXISTING	PROPOSED
GUARDRAIL	▬	▬
LANDMARK SIGN	▬	▬
LIGHT - BOLLARD	○	●
LIGHT POLE	⊙	⊙
LOW POINT ELEVATION	+LP	+LP
MAJOR CONTOUR	— 100 —	— 100 —
MINOR CONTOUR	— 100 —	— 102 —
PARKING AREA-BITUMINOUS	▬	▬
PAVEMENT STRIPING	▬	▬
PROPERTY LINE	▬	▬
PROPERTY LINE - ABUTTER	▬	▬
RETAINING WALL	▬	▬
RIPRAP	▬	▬
ROADWAY	▬	▬
SANITARY SEWER PIPE	— SS —	— NSS —
SANITARY SEWER MANHOLE	⊙	⊙
SETBACK	▬	▬
SIGN	▬	▬
SPRINKLER	⊙	⊙
STORM DRAIN PIPE	— SD —	— NSD —
TELEPHONE EQUIPMENT	▬	▬
TRANSFORMER ON CONC	▬	▬
UNDERDRAIN PIPE	— UD —	— UD —
UTILITY POLE	⊙	⊙
WALKWAY - BITUMINOUS	▬	▬
WALKWAY - BRICK/COBBLE	▬	▬
WALKWAY - CONCRETE	▬	▬
WATER GATE VALVE	⊙	⊙
WATER PIPE (DOMESTIC)	— W —	— NW —
WATER SHUTOFF	⊙	⊙
WETLAND BOUNDARY	▬	▬

NOTE:
THIS LEGEND IS FOR REFERENCE ONLY AND APPLIES ONLY TO THE CIVIL/SITE LAYOUT DRAWINGS. NOT ALL ITEMS SHOWN HEREIN MAY APPEAR ON THE DRAWINGS, OR BE INCORPORATED IN THE DESIGN.

SITE ABBREVIATIONS

ALT	ALTERNATE	FFE	FINISHED FLOOR ELEVATION	LP	LOW POINT	O.C.	ON CENTER	TO	TOP OF
BOC	BOTTOM OF CURB	GA	GAUGE	LT	LEFT	OD	OUTSIDE DIAMETER	TOC	TOP OF CURB
BOW	BOTTOM OF WALL	GALV	GALVANIZED	MAX.	MAXIMUM	R	RADIUS	TOW	TOP OF WALL
CIP	CAST-IN-PLACE	GC	GENERAL CONTRACTOR	MIN.	MINIMUM	RE:	REFER (TO)	TP	TEST PIT
CL	CENTER LINE	HC	HANDICAPPED	MISC.	MISCELLANEOUS	ROW	RIGHT-OF-WAY	TYP.	TYPICAL
CL	CONTRACT LIMITS LINE	HMA	HOT MIX ASPHALT	NSD	NEW STORM DRAIN (LINE)	RT	RIGHT	UG	UNDERGROUND
ECB	EXISTING CATCH BASIN	HP	HIGH POINT	NSS	NEW SANITARY SEWER (LINE)	S	SLOPE	W/	WITH
		ID	INSIDE DIAMETER	NW	NEW WATER (LINE)	T & B	TOP & BOTTOM	W/O	WITHOUT

0	ISSUED FOR PERMITTING	03-06-23
REV	DESCRIPTION	DATE

ISSUED FOR PERMITTING
03-06-23
CURRENT ISSUE STATUS:

TRUE NORTH:

SMRT Architects and Engineers
75 Washington Avenue, Suite 3A
Portland, Maine 04101
1.877.700.7678
www.smrtninc.com

LGC CLINICAL DIAGNOSTICS
SOLAR ARRAY IMPROVEMENTS

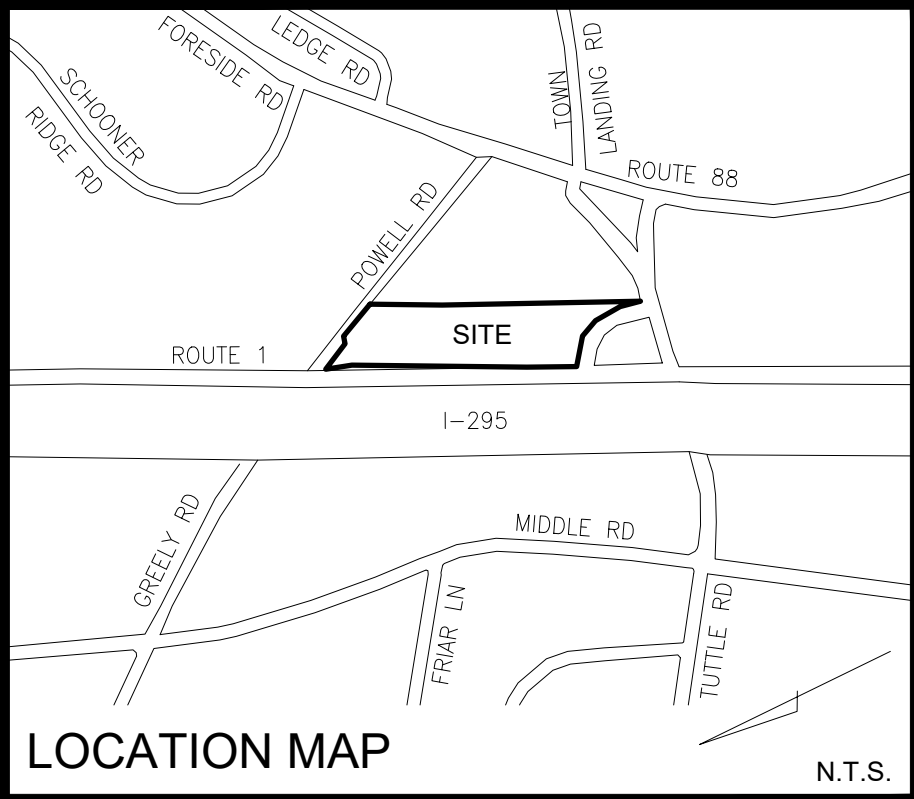
CUMBERLAND, MAINE
COVER SHEET

SHEET TITLE:
0 1/2" 1" 2" 3"

SCALE:
PROJECT MANAGER: KDC PROJECT NO: 22168
A/E OF RECORD: GKP
JOB CAPTAIN: XXX
DRAWN BY: WSM
SMRT FILE: GI001-22168 SHEET No. 1
©COPYRIGHT 2023 SMRT INC.

GI001

NOT FOR CONSTRUCTION

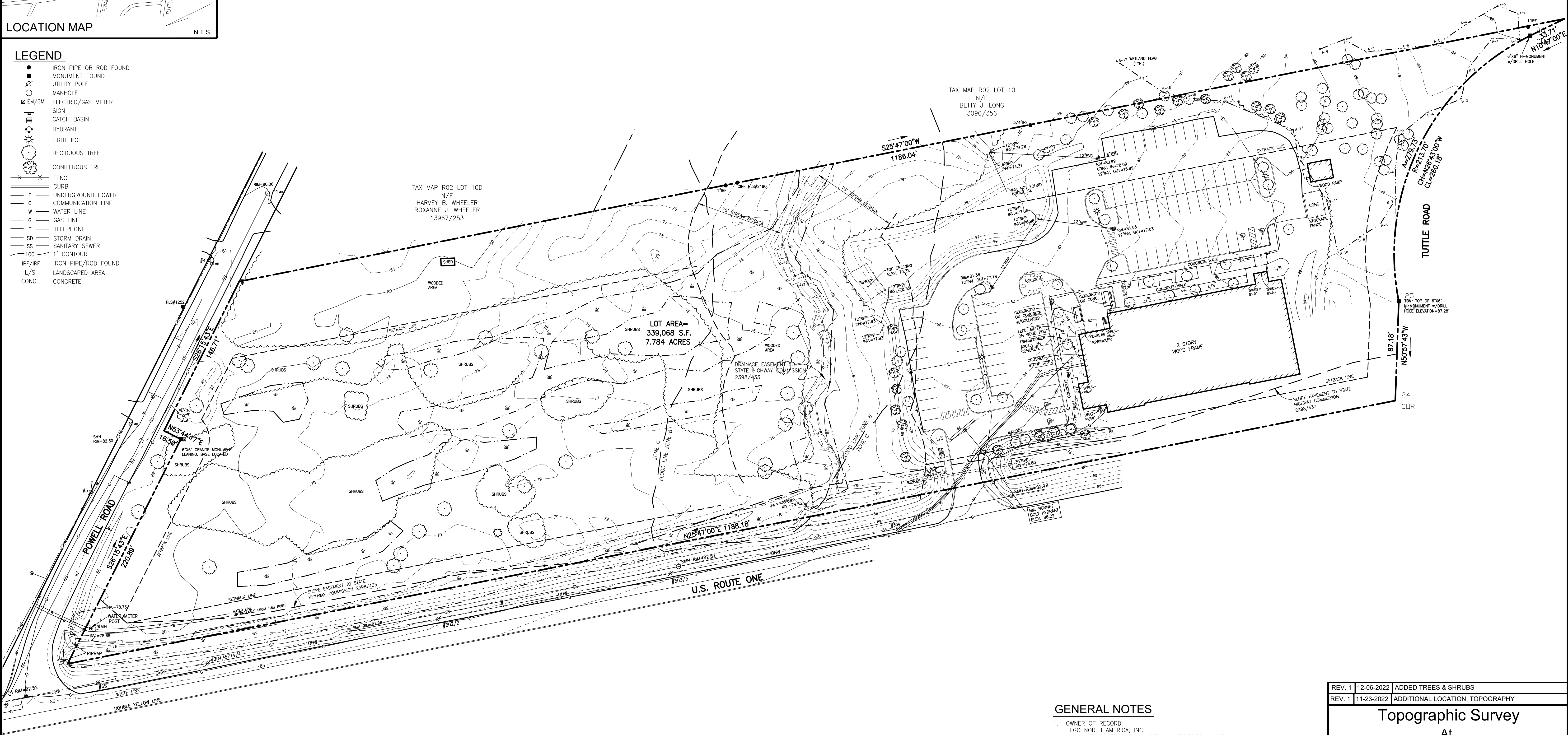


UTILITY NOTE

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEY HAS NOT PHYSICALLY LOCATION THE UNDERGROUND UTILITIES. CALL 1-888-DIGSAFE AT LEAST THREE BUSINESS DAYS BEFORE PERFORMING ANY CONSTRUCTION. DUE TO OSHA CONFINED SPACE REQUIREMENTS, ALL INVERTS AND PIPE SIZES MUST BE VERIFIED PRIOR TO ANY CONSTRUCTION.

LEGEND

- IRON PIPE OR ROD FOUND
- MONUMENT FOUND
- UTILITY POLE
- MANHOLE
- ELECTRIC/GAS METER
- SIGN
- CATCH BASIN
- HYDRANT
- LIGHT POLE
- DECIDUOUS TREE
- CONIFEROUS TREE
- FENCE
- CURB
- UNDERGROUND POWER
- COMMUNICATION LINE
- WATER LINE
- GAS LINE
- TELEPHONE
- STORM DRAIN
- SANITARY SEWER
- 1' CONTOUR
- IPF/IRF
- L/S
- CONC.



GENERAL NOTES


- OWNER OF RECORD: LGC NORTH AMERICA, INC. 221 U.S. ROUTE ONE, CUMBERLAND FORESIDE, MAINE TAX MAP R02 LOT 10A
 - ELEVATIONS ARE BASED ON PLAN REFERENCE 1, NAVD 88 DATUM.
 - BOUNDARY LINES TAKEN FROM PLAN REFERENCE 1 AND ASSOCIATED CAD FILES PROVIDE BY CLIENT.
 - ZONING: OFFICE COMMERCIAL NORTH DISTRICT (OC-N)
- MINIMUM FRONT SETBACK: 25 FT.
MINIMUM REAR SETBACK: 65 FT.
MINIMUM SIDE SETBACK: 20 FT.
- FOR ADDITIONAL ZONING INFORMATION PLEASE SEE THE TOWN OF CUMBERLAND CODE OF ORDINANCES.
- SEE WETLANDS REPORT FROM MARK CENCI & FLYCATCHER LLC.

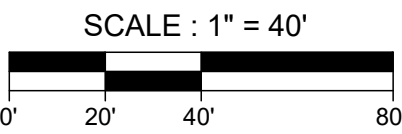
PLAN REFERENCES

- "GRADING AND UTILITY PLAN OF: MAINE STANDARD FACILITY, ROUTE ONE AND POWELL ROAD, CUMBERLAND, MAINE FOR: MAINE STANDARDS COMPANY 03/09/12 REV. 4/12/12" BY SEBAGO TECHINCS.

FLOOD ZONE NOTE

BY GRAPHIC PLOTTING ONLY, THIS PROPERTY IS IN ZONE C & ZONE B OF THE FLOOD INSURANCE RATE MAP 0018C, COMMUNITY PANEL NO. 2300162, WHICH BEARS AN EFFECTIVE DATE OF OCTOBER 15, 1985 AND IS PARTIALLY IN A SPECIAL FLOOD HAZARD AREA.

REV. 1	12-06-2022	ADDED TREES & SHRUBS
REV. 1	11-23-2022	ADDITIONAL LOCATION, TOPOGRAPHY
Topographic Survey At 221 U.S. Route One, Cumberland, Maine Made for SMRT, Inc. 75 Washington Ave., Ste. 31, Portland, Maine		
 OWEN HASKELL, INC. PROFESSIONAL LAND SURVEYORS		
390 US ROUTE 1, UNIT 10, FALMOUTH, ME 04105 TEL. 207-774-0424		
DRAWN BY: RS/JLW	DATE: FEB. 7, 2022	JOB NO. 2021-335 C
CHECKED BY: RRL	SCALE: 1" = 40'	DRWG. NO. 1



EROSION & SEDIMENTATION CONTROL NOTES:

TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES INCLUDE THE USE OF STABILIZED CONSTRUCTION ENTRANCE, SILTATION FENCE, HAY BALE BARRIERS, EROSION CONTROL BLANKET, AND TEMPORARY SEEDING AND MULCHING AS REQUIRED. PERMANENT DEVICES INCLUDE THE USE OF RIP RAP AT EXPOSED STORM DRAIN AND CULVERT INLETS AND OUTLETS AND PERMANENT VEGETATION.

A. GENERAL

- 1. IT IS ANTICIPATED THAT CONSTRUCTION MAY BEGIN AS SOON AS POSSIBLE FOLLOWING RECEIPT OF NECESSARY PERMITS.
- 2. ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE MAINE EROSION AND SEDIMENT CONTROL HANDBOOK FOR CONSTRUCTION: BEST MANAGEMENT PRACTICES PUBLISHED BY THE THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, (2016, OR AS CURRENTLY REVISED), OR U.S ENVIRONMENTAL PROTECTION AGENCY PUBLICATION 832/R-92-005 (SEPTEMBER, 1992, OR AS CURRENTLY REVISED) STORM WATER MANAGEMENT FOR CONSTRUCTION, CHAPTER 3, WHICHEVER IS MORE STRINGENT.
- 3. ANY ADDITIONAL EROSION AND SEDIMENTATION CONTROL DEEMED NECESSARY BY THE OWNER'S REPRESENTATIVE, DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP) PERSONNEL AND/OR MUNICIPAL OFFICIALS SHALL BE INSTALLED BY THE CONTRACTOR.
- 4. THE CONTRACTOR IS RESPONSIBLE FOR ALL FINES RESULTING FROM EROSION OR SEDIMENTATION FROM THE SITE TO SURROUNDING PROPERTIES, WATER BODIES, OR WETLANDS AS A RESULT OF THIS PROJECT.
- 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR/ REPLACEMENT/ MAINTENANCE OF ALL EROSION CONTROL MEASURES UNTIL ALL DISTURBED AREAS ARE STABILIZED TO THE SATISFACTION OF THE ABOVE PERSONNEL. DESCRIPTIONS OF ACCEPTABLE PERMANENT STABILIZATION FOR VARIOUS COVER TYPES FOLLOWS:
 - A. FOR SEEDED AREAS, PERMANENT STABILIZATION MEANS A 90% COVER OF THE DISTURBED AREA WITH MATURE, HEALTHY PLANTS WITH NO EVIDENCE OF WASHING OR RILLING OF THE TOPSOIL.
 - B. FOR SODDED AREAS, PERMANENT STABILIZATION MEANS THE COMPLETE BINDING OF THE SOD ROOTS INTO THE UNDERLYING SOIL WITH NO SLUMPING OF THE SOD OR DIE-OFF.
 - C. FOR MULCHED AREAS, PERMANENT MULCHING MEANS TOTAL COVERAGE OF THE EXPOSED AREA WITH AN APPROVED MULCH MATERIAL. EROSION CONTROL MIX MAY BE USED AS MULCH FOR PERMANENT STABILIZATION ACCORDING TO THE APPROVED APPLICATION RATES AND LIMITATIONS.
 - D. FOR AREAS STABILIZED WITH RIP RAP, PERMANENT STABILIZATION MEANS THAT SLOPES STABILIZED WITH RIP RAP HAVE AN APPROPRIATE BACKING OF A WELL-GRADED GRAVEL OR APPROVED GEOTEXTILE TO PREVENT SOIL MOVEMENT FROM BEHIND THE RIP RAP. STONE MUST BE SIZED APPROPRIATELY.
 - E. PAVED AREAS: FOR PAVED AREAS, PERMANENT STABILIZATION MEANS THE PLACEMENT OF THE COMPACTED GRAVEL SUBBASE IS COMPLETED.
 - F. FOR OPEN CHANNELS, PERMANENT STABILIZATION MEANS THE CHANNEL IS STABILIZED WITH MATURE VEGETATION AT LEAST THREE INCHES IN HEIGHT, WITH WELL-GRADED RIP RAP, OR WITH ANOTHER NON-EROSIVE LINING CAPABLE OF WITHSTANDING THE ANTICIPATED FLOW VELOCITIES AND FLOW DEPTHS WITHOUT RELIANCE ON CHECK DAMS TO SLOW FLOW. THERE MUST BE NO EVIDENCE OF SLUMPING OF THE LINING, UNDERCUTTING OF THE BANKS, OR DOWN CUTTING OF THE CHANNEL.

B. LAYDOWN YARDS

- 1. LAYDOWN YARDS SHALL BE SITED ON FLAT OR GENTLY SLOPING CONVEX AREAS THAT HAVE MODERATELY WELL-DRAINED SOILS OR BETTER TO PREVENT MUDDY WORKING SURFACES, RUTTING, SOIL EROSION, SEDIMENTATION, AND OTHER ENVIRONMENTAL AND OPERATIONAL PROBLEMS.
- 2. LAYDOWN YARDS SHALL NEVER BE LOCATED IN WETLANDS, AND ANY FILL MATERIAL FOR WETLAND CROSSING SHALL BE REMOVED AT CONCLUSION OF CONSTRUCTION, UNLESS APPROPRIATELY PERMITTED BY FEDERAL, STATE, AND LOCAL AGENCIES.

C. EROSION AND SEDIMENTATION CONTROL MEASURES

- 1. PRIOR TO THE BEGINNING OF CONSTRUCTION, THE STABILIZED CONSTRUCTION ENTRANCE AND TEMPORARY SILT FENCE SHALL BE INSTALLED AS SHOWN ON THE PLANS OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE. IT IS THE INTENT THAT SILT FENCE OR EROSION CONTROL MIX BERM BE INSTALLED DOWN GRADIENT OF ALL DISTURBED AREAS OF THE SITE. SILT FENCE SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS WILL BE MADE IMMEDIATELY. SEDIMENT DEPOSITS SHALL BE PERIODICALLY REMOVED FROM THE UPSTREAM SIDE OF THE SILT BARRIERS. THIS SEDIMENT WILL BE SPREAD AND STABILIZED IN AREAS OF THE SITE NOT SUBJECT TO EROSION. SILT FENCE OR EROSION CONTROL MIX BERM SHALL BE REPLACED AS NECESSARY TO PROVIDE PROPER FILTERING ACTION. IF THERE ARE SIGNS OF UNDERCUTTING AT THE CENTER OR THE EDGES, OR IMPOUNDING OF LARGE VOLUMES OF WATER BEHIND THEM, THEY WILL BE REPLACED WITH A TEMPORARY CRUSHED STONE CHECK DAM.
- 2. ALL CATCH BASINS, NEW OR EXISTING, THAT MAY RECEIVE RUNOFF FROM DISTURBED AREAS MUST BE PROTECTED DURING CONSTRUCTION.
- 3. REMOVAL OF SOD, TREES, BUSHES AND OTHER VEGETATION AND SOIL DISTURBANCE WILL BE KEPT TO A MINIMUM WHILE ALLOWING PROPER SITE DEVELOPMENT.
- 4. LESS THAN ONE ACRE SHALL BE EXPOSED AT ONE TIME DURING CONSTRUCTION.
- 5. GRUBBINGS AND ANY UNUSABLE TOPSOIL SHALL BE STRIPPED AND REMOVED FROM THE PROJECT SITE AND DISPOSED OF IN AN APPROVED MANNER.
- 6. ANY SUITABLE TOPSOIL WILL BE STRIPPED AND STOCKPILED FOR REUSE IN FINAL GRADING. TOPSOIL WILL BE STOCKPILED IN A MANNER SUCH THAT NATURAL DRAINAGE IS NOT OBSTRUCTED AND NO OFF-SITE SEDIMENT DAMAGE WILL RESULT. SEDIMENT BARRIERS SHALL BE INSTALLED DOWN-GRADIENT OF ALL SOIL STOCKPILES AND STORMWATER SHALL BE PREVENTED FROM RUNNING ONTO ALL STOCKPILES. IF A STOCKPILE IS NECESSARY, THE SIDE SLOPES OF THE TOPSOIL STOCKPILE WILL NOT EXCEED 2:1. TOPSOIL STOCKPILES WILL BE TEMPORARILY SEEDED WITH AROOSTOOK RYE, ANNUAL OR PERENNIAL RYE GRASS WITHIN 7 DAYS OF FORMATION, OR TEMPORARILY MULCHED IF SEEDING CANNOT BE DONE WITHIN THE RECOMMENDED SEEDING DATES.
- 7. TEMPORARY DIVERSION BERMS AND DRAINAGE SWALES SHALL BE CONSTRUCTED AS NECESSARY.
- 8. TEMPORARY STABILIZATION SHALL BE CONDUCTED WITHIN 7 DAYS OF INITIAL DISTURBANCE OF SOILS, PRIOR TO ANY RAIN EVENT, AND PRIOR TO ANY WORK SHUT DOWN LASTING MORE THAN ONE DAY. TEMPORARY STABILIZATION INCLUDES SEED, MULCH, OR OTHER NON-ERODABLE COVER.
- 9. TEMPORARY SEEDING SPECIFICATIONS: WHERE SEEDBED HAS BEEN COMPACTED BY CONSTRUCTION OPERATIONS, LOOSEN SOIL TO A DEPTH OF 2 INCHES BEFORE APPLYING FERTILIZER, LIME, AND SEED. APPLY LIMESTONE AT A RATE OF 3 TONS PER ACRE (138 LB. PER 1,000 SQUARE FEET) AND 10-10-10 (N-P2O5-K2O) FERTILIZER AT A RATE OF 800 LBS PER ACRE (13.8 LB. PER 1,000 SQUARE FEET). UNIFORMLY APPLY SEED AT THE RECOMMENDED SEEDING RATES AND DATES, APPLY HAY OR STRAW MULCH AT A RATE OF 2 TONS PER ACRES, AND ANCHOR AS NECESSARY.

RECOMMENDED TEMPORARY SEEDING DATES AND APPLICATION RATES ARE AS FOLLOWS:

AROOSTOOK RYE:
RECOMMENDED SEEDING DATES: 8/15 -10/1
APPLICATION RATE: 112 LBS/ACRE

ANNUAL RYE GRASS:
RECOMMENDED SEEDING DATES: 4/1 - 7/1
APPLICATION RATE: 40 LBS/ACRE

PERENNIAL RYE GRASS:
RECOMMENDED SEEDING DATES: 8/15 - 9/15
APPLICATION RATE: 40 LBS/ACRE

- 10. PERMANENT SEEDING SPECIFICATION: IF A LANDSCAPE PLAN HAS BEEN PREPARED FOR THE PROJECT, SOIL PREPARATION AND SEED SPECIFICATIONS OF THAT PLAN SHALL SUPERSEDE THESE GENERAL PERMANENT SEEDING REQUIREMENTS. IT IS RECOMMENDED THAT PERMANENT SEEDING BE COMPLETED BETWEEN APRIL 1 AND JUNE 15 OF EACH YEAR. LATE SEASON SEEDING MAY BE DONE BETWEEN AUGUST 15 AND SEPTEMBER 15. AREAS NOT SEEDED OR WHICH DO NOT OBTAIN A SATISFACTORY GROWTH BY OCTOBER 1 SHALL BE SEEDED WITH AROOSTOOK RYE MULCHED AT RATES PREVIOUSLY SPECIFIED. SEE WINTER CONDITIONS NOTES FOR SEEDING STABILIZATION AFTER NOVEMBER 1.

- B. APPLY TOPSOIL TO A MINIMUM DEPTH OF 4 INCHES. MIX TOPSOIL WITH THE SUBSOIL TO A MINIMUM DEPTH OF 6 INCHES.

- C. APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TESTS. IN LIEU OF SOIL TESTS, APPLY GROUND LIMESTONE AT A RATE OF 3 TONS PER ACRE (138 LB. PER 1,000 SQUARE FEET) AND GRANULAR, COMMERCIAL-GRADE, 10-10-10 (N-P2O5-K2O) FERTILIZER AT A RATE OF 800 LBS PER ACRE (18.4 LBS PER 1,000 SQUARE FEET).

- D. UNIFORMLY APPLY SEED MIXTURE AT THE RECOMMENDED SEEDING RATES AND DATES, APPLY HAY OR STRAW MULCH AT A RATE OF 2 TONS PER ACRES, AND ANCHOR AS NECESSARY.

- E. THE SEED MIXTURE FOR LAWN AND FILTRATION BASIN AREAS SHALL CONSIST OF SEEDS PROPORTIONED BY WEIGHT AS FOLLOWS:

30% CREEPING RED FESCUE
50% KENTUCKY BLUEGRASS
20% ITALIAN/PERENNIAL RYE GRASS

NOTE: SEED MIXTURE SHALL CONSIST OF AT LEAST TWO VARIETIES OF EACH TYPE OF GRASS. WHEN USED IN A FILTER BASIN, STORMWATER SHALL NOT BE DIRECTED TO THE BASIN UNTIL THE GRASS IS ESTABLISHED.

- 10. MULCH ALL AREAS SEEDED SO THAT SOIL IS NOT VISIBLE THROUGH THE MULCH REGARDLESS OF THE APPLICATION RATE.
- 11. DITCH LININGS, STONE CHECK DAMS, AND RIP RAP INLET AND OUTLET PROTECTION SHALL BE INSTALLED WITHIN 48 HOURS OF COMPLETING THE GRADING OF THAT SECTION OF DITCH OR INSTALLATION OF CULVERT.
- 12. RIP RAP REQUIRED AT CULVERTS AND STORM DRAIN INLETS AND OUTLETS SHALL CONSIST OF FIELD STONE OR ROUGH UNHEWN QUARRY STONE OF APPROXIMATELY RECTANGULAR SHAPE.
- 13. EROSION CONTROL BLANKET SHALL BE INSTALLED ON ALL PERMANENT SLOPES STEEPER THAN 15%, IN THE BASE OF DITCHES NOT OTHERWISE PROTECTED, AND ANY DISTURBED AREAS WITHIN 100 FEET OF A PROTECTED NATURAL RESOURCE (E.G. WETLANDS AND WATER BODIES). EROSION CONTROL BLANKET SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- 14. TEMPORARY CONTROL MEASURES, SUCH AS SILT FENCE, SHALL BE REMOVED WITHIN 30 DAYS AFTER PERMANENT STABILIZATION IS ATTAINED.
- 15. TEMPORARY EROSION CONTROL MIX BERM SHALL BE REMOVED BY SPREADING MATERIAL IN AREAS OF THE SITE NOT SUBJECT TO EROSION.
- 16. AREAS WITHIN 75 FEET OF A PROTECTED NATURAL RESOURCE MUST BE PROTECTED WITH A DOUBLE ROW OF SEDIMENT BARRIERS (SILT FENCE BACKED WITH HAY BALES OR EROSION CONTROL MIX).
- 17. IF DISTURBANCE ACTIVITIES TAKE PLACE BETWEEN 30 FEET AND 50 FEET OF ANY PROTECTED NATURAL RESOURCE, AND STORMWATER DISCHARGES THROUGH THE DISTURBED AREAS TOWARD THE PROTECTED NATURAL RESOURCE, PERIMETER EROSION CONTROLS MUST BE DOUBLED.
- 18. 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 WITHIN 7 DAYS.

D. WINTER CONDITIONS

- 2. "WINTER CONSTRUCTION" IS CONSTRUCTION ACTIVITY PERFORMED DURING THE PERIOD FROM NOVEMBER 1ST THROUGH APRIL 15TH. IF AREAS WITHIN THE CONSTRUCTION ACTIVITY ARE NOT STABILIZED WITH TEMPORARY OR PERMANENT MEASURES OUTLINED ABOVE BY NOVEMBER 15TH, THEN THE SITE MUST BE PROTECTED WITH ADDITIONAL STABILIZATION MEASURES THAT ARE SPECIFIC TO WINTER CONDITIONS. NO MORE THAN ONE ACRE OF THE SITE MAY BE WITHOUT STABILIZATION AT ONE TIME WITHOUT REGULAR INSPECTION; THE EXPOSED AREA SHALL BE LIMITED TO AREA THAT CAN BE MULCHED ON ONE DAY.
- 3. OVER-WINTER HAY MULCH SHALL BE APPLIED AT TWICE THE STANDARD TEMPORARY STABILIZATION RATE (150 POUNDS PER 1000 SF OR 3 TONS PER ACRE) AND SHOULD BE ANCHORED WITH NETTING (PEG AND TWINE) OR A TACKIFIER TO PREVENT MULCH DISPLACEMENT BEFORE FREEZING CONDITIONS. NO SOIL SHALL BE VISIBLE THROUGH THE MULCH. HAY MULCH MAY NOT BE APPLIED ON TOP OF SNOW. AT THE END OF EACH CONSTRUCTION DAY, AREAS THAT HAVE BEEN BROUGHT TO FINAL GRADE MUST BE STABILIZED.
- 4. AFTER NOVEMBER 1ST OR THE FIRST KILLING FROST FOR THE REGION AND BEFORE SNOW FALL, ALL EXPOSED AND DISTURBED AREAS NOT TO UNDERGO FURTHER DISTURBANCE ARE TO HAVE DORMANT SEEDING AND MULCH. THE DORMANT SEEDING METHOD: PREPARE THE SEEDBED, LIME AND FERTILIZE, APPLY THE SELECTED PERMANENT SEED MIXTURE AT DOUBLE THE REGULAR SEEDING RATE, AND MULCH AND ANCHOR. DORMANT SEEDINGS SHALL BE COVERED WITH OVERWINTER MULCH OR AN ANCHORED EROSION CONTROL BLANKET. DORMANT SEEDING REQUIRES INSPECTION AND RESEEDING AS NEEDED IN THE SPRING. ALL AREAS WHERE COVER IS INADEQUATE MUST BE IMMEDIATELY RESEEDED AND MULCHED AS SOON AS POSSIBLE.
- 5. TEMPORARY VEGETATION SHALL BE APPLIED BY OCTOBER 1ST WITH WINTER RYE AT 3 POUNDS PER 1000 SF AND MULCHED WITH ANCHORED HAY AT 75 POUNDS PER 1000 SF OR WITH EROSION CONTROL BLANKET. IF THE RYE FAILS TO GROW AT LEAST 3 INCHES AND HAVE 75 PERCENT COVERAGE BY NOVEMBER 1ST, THE AREA SHALL BE STABILIZED FOR OVER-WINTER PROTECTION.
- 6. ALL VEGETATED DITCH LINES THAT HAVE NOT BEEN STABILIZED BY NOVEMBER 1ST, OR WILL BE WORKED DURING THE WINTER CONSTRUCTION PERIOD, MUST BE STABILIZED WITH AN APPROPRIATE STONE LINING BACKED BY AN APPROPRIATE GRAVEL BED OR GEOTEXTILE UNLESS SPECIFICALLY RELEASED FROM THIS STANDARD BY THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION.
- 7. ALL GRASS-LINED DITCHES AND CHANNELS SHOULD BE CONSTRUCTED AND STABILIZED BY SEPTEMBER 1ST. IF A DITCH OR CHANNEL IS NOT SUFFICIENTLY GRASSSED OVER (75% COVER) BY NOVEMBER 15TH, THE DITCH SHALL BE LINED WITH STONE RIP RAP. THE DITCH SHALL BE OVER-EXCAVATED TO ACCOMMODATE THE THICKNESS OF THE RIP RAP.
- 8. MULCH NETTING MUST BE USED TO ANCHOR MULCH ON ALL SLOPES GREATER THAN 8 PERCENT UNLESS EROSION CONTROL BLANKETS OR EROSION CONTROL MIX IS USED ON THESE SLOPES. EROSION CONTROL MIX SHALL NOT BE USED ON SLOPES STEEPER THAN 1:1 OR IN AREAS OF FLOWING WATER. EROSION CONTROL BLANKETS SHALL BE USED ON SLOPES WHERE HAY WOULD BE DISTURBED BY WIND OR WATER. THE MATTING SHOULD BE INSTALLED, ANCHORED AND STAPLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. FULL CONTACT BETWEEN THE BLANKET AND THE SOIL IS CRITICAL FOR AN EFFECTIVE EROSION CONTROL COVER.

E. HOUSEKEEPING

- 1. SPILL PREVENTION. CONTROLS MUST BE USED TO PREVENT POLLUTANTS FROM CONSTRUCTION AND WASTE MATERIALS STORED ON-SITE, INCLUDING STORAGE PRACTICES TO MINIMIZE EXPOSURE OF THE MATERIALS TO STORM WATER, AND APPROPRIATE SPILL PREVENTION, CONTAINMENT, AND RESPONSE PLANNING AND IMPLEMENTATION.
- 2. GROUNDWATER PROTECTION. DURING CONSTRUCTION, LIQUID PETROLEUM PRODUCTS AND OTHER HAZARDOUS MATERIALS WITH THE POTENTIAL TO CONTAMINATE GROUNDWATER MAY NOT BE STORED OR HANDLED IN AREAS OF THE SITE DRAINING TO AN INFILTRATION AREA. AN INFILTRATION AREA IS ANY AREA OF THE SITE THAT BY DESIGN OR AS A RESULT OF SOILS, TOPOGRAPHY AND OTHER RELEVANT FACTORS, ACCUMULATES RUNOFF THAT INFILTRATES INTO THE SOIL. DIKES, BERMS, SLUMPS, AND OTHER FORMS OF SECONDARY CONTAINMENT THAT PREVENT DISCHARGE TO GROUNDWATER MAY BE USED TO ISOLATE PORTIONS OF THE SITE FOR THE PURPOSES OF STORAGE AND HANDLING OF THESE MATERIALS.
- 3. FUGITIVE SEDIMENT AND DUST. ACTIONS MUST BE TAKEN TO ENSURE THAT ACTIVITIES DO NOT RESULT IN NOTICEABLE EROSION OF SOILS OR FUGITIVE DUST EMISSIONS DURING OR AFTER CONSTRUCTION. OIL MAY NOT BE USED FOR DUST CONTROL.
- 4. DEBRIS AND OTHER MATERIAL. LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS EXPOSED TO STORM WATER, MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE.
- 5. COMPLY WITH THE REQUIREMENTS OF SECTION 01570, CONSTRUCTION WASTE MANAGEMENT, FOR REMOVAL AND DISPOSAL OF CONSTRUCTION DEBRIS AND WASTE.
- 6. TRENCH OR FOUNDATION DE-WATERING. THE COLLECTED WATER REMOVED FROM THE PONDED AREA, EITHER THROUGH GRAVITY OR PUMPING, MUST BE SPREAD THROUGH NATURAL WOODED BUFFERS OR REMOVED AREAS THAT ARE SPECIFICALLY DESIGNATED TO COLLECT THE MAXIMUM AMOUNT OF SEDIMENT POSSIBLE, LIKE A COFFER DAM SEDIMENTATION BASIN. AVOID ALLOWING THE WATER TO FLOW OVER DISTURBED AREAS OF THE SITE.

- 7. STREET SWEEPING. STREET SWEEPING SHALL BE COMPLETED ONCE A WEEK OR AS NEEDED TO REMOVE TRACKED MUD OR SEDIMENT PRIOR TO ANY FORECASTED RAINFALL EVENT.
- 8. PREVENT CONTAMINATION BY NON-STORMWATER DISCHARGES. AUTHORIZED NON-STORMWATER DISCHARGES ARE:
 - A. DISCHARGES FROM FIRE-FIGHTING ACTIVITY,
 - B. FIRE HYDRANT FLUSHINGS,
 - C. DUST CONTROL RUNOFF,
 - D. ROUTINE EXTERNAL BUILDING WASHDOWN, NOT INCLUDING SURFACE PAINT REMOVAL, THAT DOES NOT INVOLVE DETERGENTS,
 - E. PAVEMENT WASHWATER (WHERE SPILLS/LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE NOT OCCURRED, UNLESS ALL SPILLED MATERIAL HAS BEEN REMOVED) IF DETERGENTS ARE NOT USED,
 - F. UNCONTAMINATED AIR CONDITIONING OR COMPRESSOR CONDENSATE,
 - G. UNCONTAMINATED GROUNDWATER OR SPRING WATER,
 - H. FOUNDATION OF FOOTING DRAIN WATER WHERE FLOWS ARE NOT CONTAMINATED,
 - I. UNCONTAMINATED EXCAVATION DEWATERING,
 - J. POTABLE WATER SOURCES INCLUDING WATERLINE FLUSHINGS,
 - K. LANDSCAPE IRRIGATION.
- 9. NO DISCHARGE FROM THE FOLLOWING IS ALLOWED. UNAUTHORIZED NON-STORMWATER DISCHARGES ARE:
 - A. WASTEWATER FROM WASHOUT OR CLEANOUT OF CONCRETE, STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS, OR OTHER CONSTRUCTION MATERIALS,
 - B. FUELS, OILS, OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE,
 - C. SOAPS, SOLVENTS, OR DETERGENTS USED IN VEHICLE AND EQUIPMENT WASHING,
 - D. TOXIC OR HAZARDOUS SUBSTANCES FROM A SPILL OR OTHER RELEASE.

F. INSPECTION AND MAINTENANCE

- 1. INSPECT DISTURBED AND IMPERVIOUS AREAS, EROSION AND STORM WATER CONTROL MEASURES, AREAS USED FOR STORAGE THAT ARE EXPOSED TO PRECIPITATION, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE AT LEAST ONCE A WEEK AS WELL AS BEFORE AND WITHIN 24 HOURS AFTER A STORM EVENT (RAINFALL), AND PRIOR TO COMPLETION OF PERMANENT STABILIZATION. A PERSON WITH KNOWLEDGE OF EROSION AND STORM WATER CONTROLS, INCLUDING THE STANDARDS IN ANY DEP OR MUNICIPAL COMPANION DOCUMENTS, MUST CONDUCT THE INSPECTION. THIS PERSON MUST BE IDENTIFIED IN THE INSPECTION LOG. IF BEST MANAGEMENT PRACTICES (BMPS) NEED TO BE MODIFIED IF IF ADDITIONAL 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.
- 2. AN INSPECTION AND MAINTENANCE LOG MUST BE KEPT SUMMARIZING THE SCOPE OF THE INSPECTION, NAME AND QUALIFICATIONS OF THE PERSON PERFORMING THE INSPECTION, DATE, AND MAJOR OBSERVATIONS RELATING TO OPERATION OF EROSION AND SEDIMENTATION CONTROLS AND POLLUTION PREVENTION MEASURES. MAJOR OBSERVATIONS MUST INCLUDE: BMPS THAT NEED TO BE MAINTAINED, LOCATION(S) OF BMPS THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE FOR A PARTICULAR LOCATION, AND LOCATION(S) WHERE ADDITIONAL BMPS ARE NEEDED THAT DID NOT EXIST AT THE TIME OF THE INSPECTION. FOLLOW-UP TO CORRECT DEFICIENCIES OR ENHANCE CONTROLS MUST ALSO BE INDICATED IN THE LOG AND DATED, INCLUDING WHAT ACTION WAS TAKEN AND WHEN.
- 3. INSPECTIONS DURING CONSTRUCTION SHOULD BE PERFORMED AT LEAST ONCE PER WEEK AND AFTER EVERY RAINFALL EVENT.
- 4. AFTER CONSTRUCTION, INSPECTIONS ARE REQUIRED TO BE PERFORMED BY AN INDIVIDUAL WITH KNOWLEDGE OF STORMWATER TREATMENT STRUCTURES, INCLUDING INSTALLED BMPS AND THE STANDARD AND CONDITIONS OF GOVERNING PERMITS.
- 5. SNOW STORAGE IS PROHIBITED IN STORMWATER BMP SYSTEMS AND WETLANDS.

G. CONSTRUCTION SCHEDULE & SEQUENCE

- 1. INSTALL TEMPORARY EROSION CONTROL MEASURES IN THE VICINITY OF THE CONSTRUCTION AREA, INCLUDING A STABILIZED CONSTRUCTION ENTRANCE AT LOCATIONS DEEMED NECESSARY BY THE OWNER'S REPRESENTATIVE, SEDIMENT BARRIERS, AND SILT FENCE. NOTE: TEMPORARY EROSION CONTROL MEASURES FOR WINTER CONDITIONS SHALL BE IMPLEMENTED.
- 2. GRUB THE SITE, STOCKPILE REUSABLE MATERIAL, AND DISPOSE OF UNUSABLE AND/OR SURPLUS MATERIAL. INSTALL UNDERGROUND UTILITIES AND BUILD DRIVE AND PARKING TO GRADE.
- 3. CONSTRUCT GRAVEL ROAD AND INSTALL CULVERT.
- 4. CONSTRUCT SOLAR ARRAY.
- 5. INSTALL PERIMETER FENCING.
- 6. PLACE LOAM, SEED, AND MULCH.
- 7. FOLLOWING PERMANENT STABILIZATION OF THE SITE, REMOVE TEMPORARY EROSION CONTROL MEASURES.
- 8. INSTALL PLANTINGS.

0	ISSUED FOR PERMITTING	3-06-23
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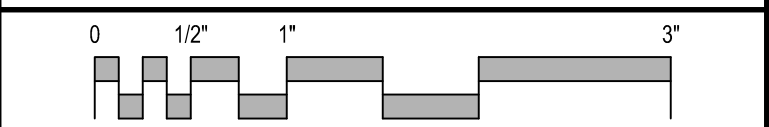
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LGC CLINICAL DIAGNOSTICS
SOLAR ARRAY IMPROVEMENTS

CUMBERLAND, MAINE

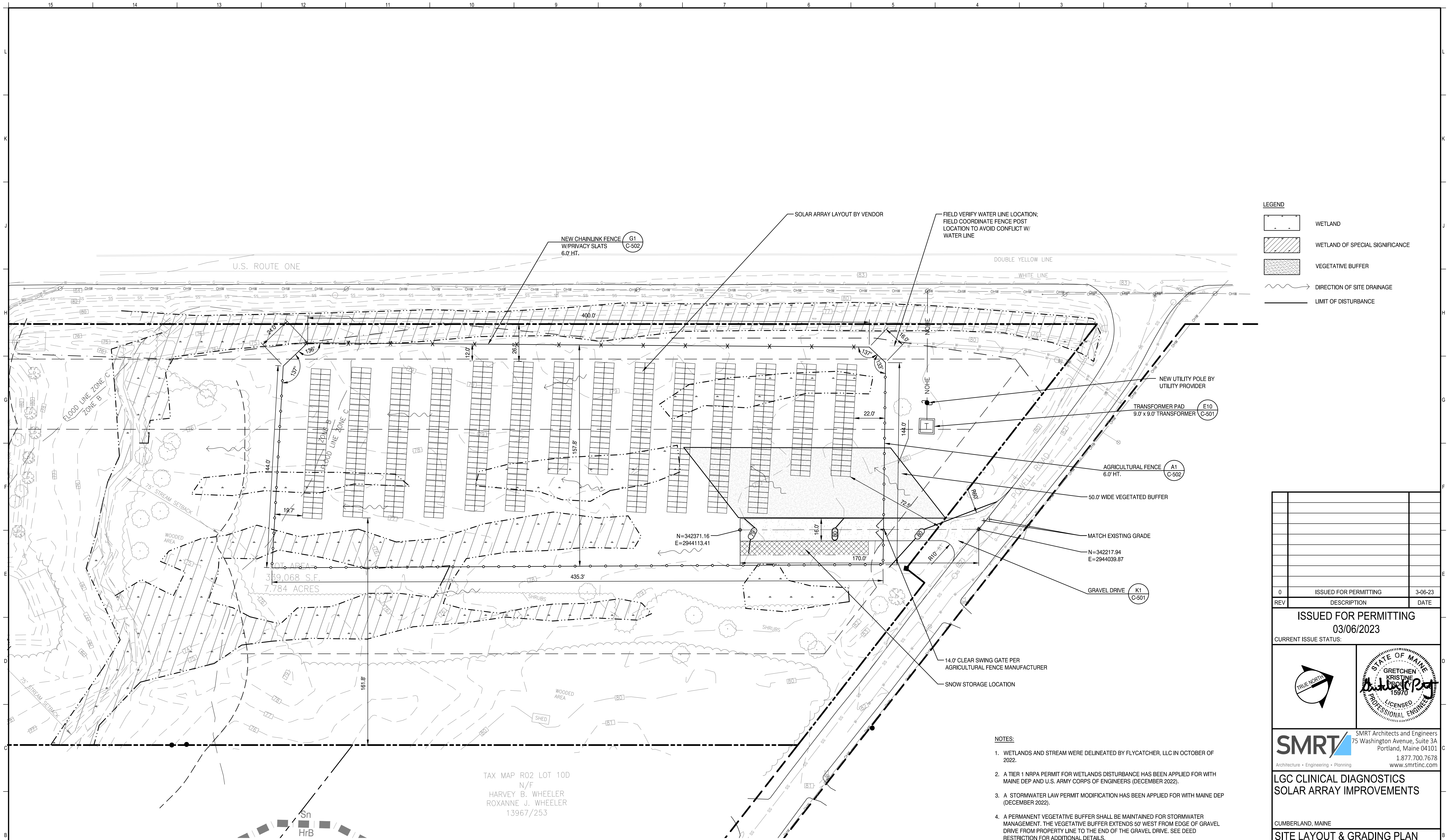
EROSION & SEDIMENT
CONTROL NOTES

SHEET TITLE:



SCALE:	
PROJECT MANAGER: KDC	PROJECT NO: 22168
A/E OF RECORD: GKP	
JOB CAPTAIN: XXX	
DRAWN BY: WSM	
SMRT FILE: C-001-22168	SHEET No. C-001

NOT FOR CONSTRUCTION



LEGEND

- WETLAND
- WETLAND OF SPECIAL SIGNIFICANCE
- VEGETATIVE BUFFER
- DIRECTION OF SITE DRAINAGE
- LIMIT OF DISTURBANCE

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LGC CLINICAL DIAGNOSTICS
SOLAR ARRAY IMPROVEMENTS

CUMBERLAND, MAINE
SITE LAYOUT & GRADING PLAN

SHEET TITLE:

0 15' 30' 60' 90'

SCALE: 1" = 30'

PROJECT MANAGER:	KDC	PROJECT NO.:	22168
A/E OF RECORD:	KDC	JOB CAPTAIN:	XXX
DRAWN BY:	WSM		
SMRT FILE:	C-102-21094	SHEET No.	C-102

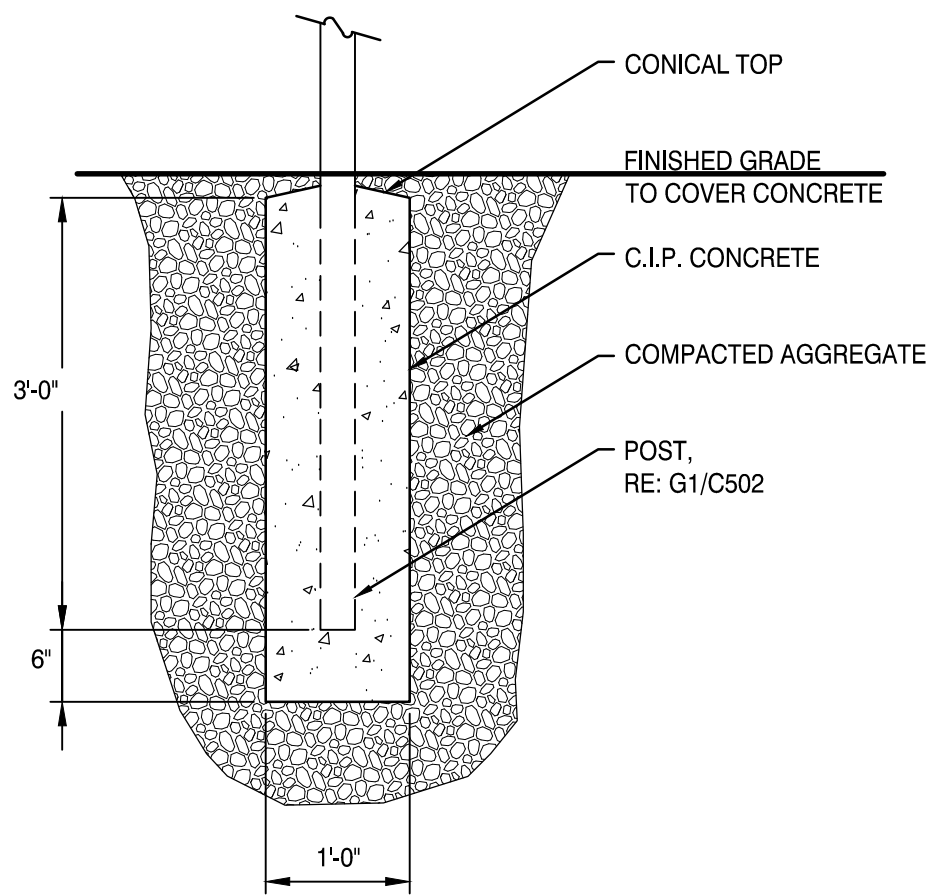
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ZONING TABLE (ZONED OC-N WITH ROUTE 1 DESIGN GUIDELINES)			
ORDINANCE	REQUIRED	EXISTING CONDITION	PROVIDED
MINIMUM LOT AREA	43,560 SQ.FT.	339,068 SQ FT. (MAP-LOT: R02 - 10A)	NO CHANGE
MAXIMUM IMPERVIOUS COVERAGE	N/A	13% (43,213 ± SQ.FT.)	13.5% (45,853± SQ.FT.)
MINIMUM FRONT YARD SETBACK	25'	N/A	26' ± (TO ARRAY)
RT. 1 BUFFER SET BACK	75'	N/A	26' ± (TO ARRAY) WAIVER REQD.
MINIMUM SIDE YARD SETBACK	20'	N/A	72' ±(TO ARRAY)
MINIMUM REAR YARD SETBACK	65'	N/A	161' ± (TO ARRAY)
MAXIMUM BUILDING HEIGHT	N/A	N/A	N/A

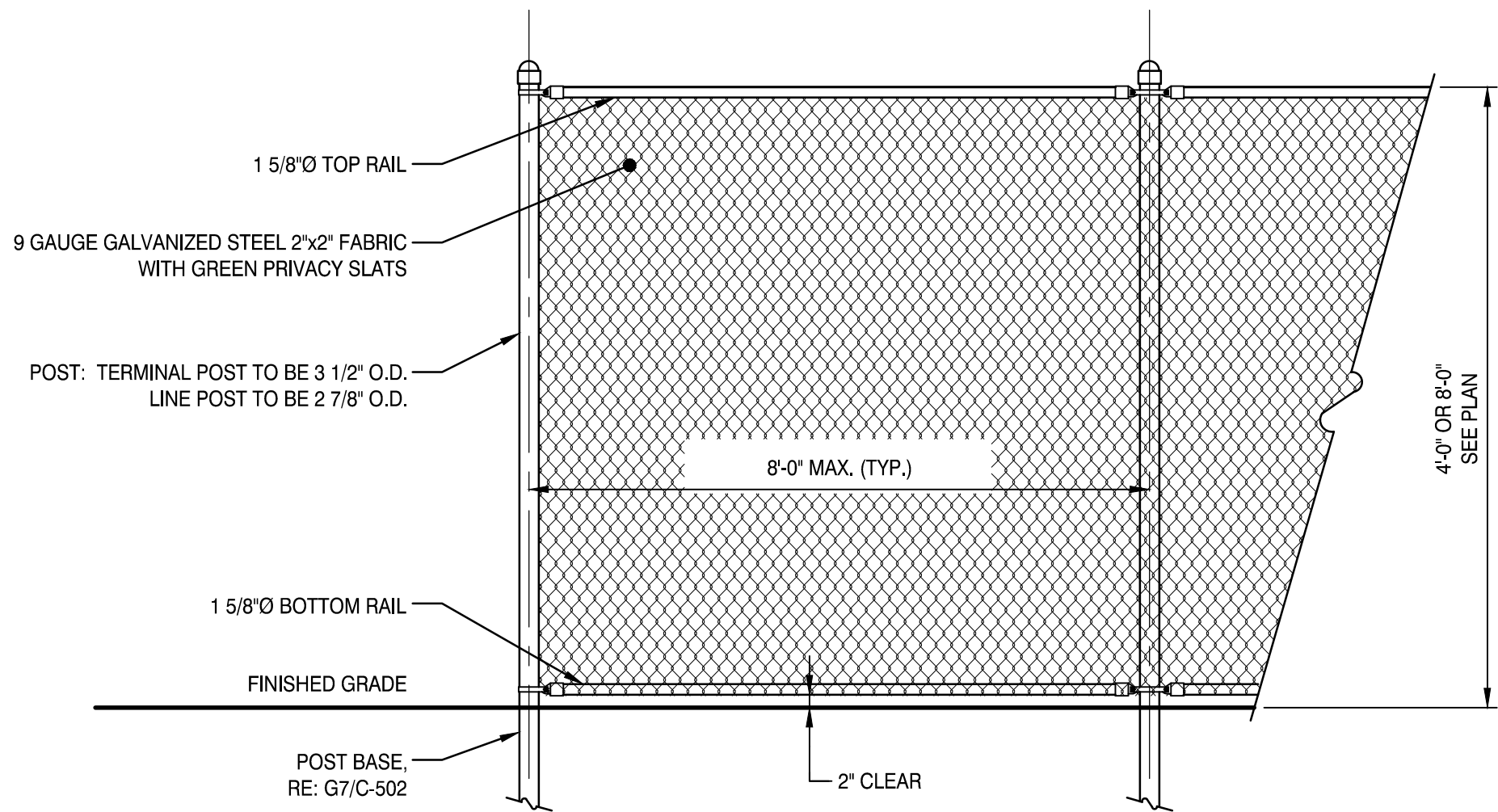
SOLAR ARRAY INFORMATION

- SIZE: 423KW. WILL PROVIDE 100% OF POWER TO EXISTING BUILDING
- AREA WITHIN FENCE: 1.57 AC
- AREA OF PANEL COVERAGE: .50 AC

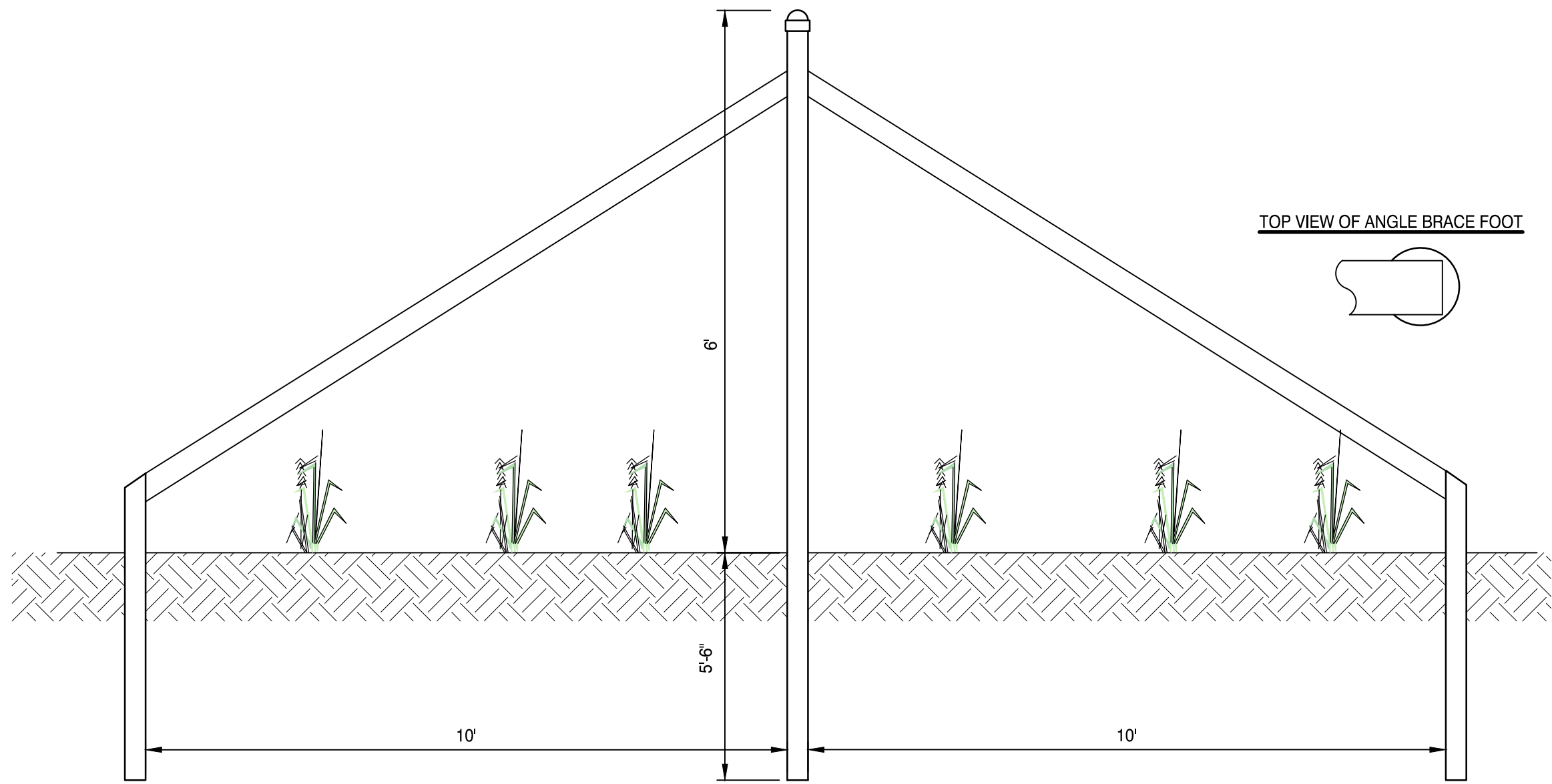
- NOTES:**
- WETLANDS AND STREAM WERE DELINEATED BY FLYCATCHER, LLC IN OCTOBER OF 2022.
 - A TIER 1 NRPA PERMIT FOR WETLANDS DISTURBANCE HAS BEEN APPLIED FOR WITH MAINE DEP AND U.S. ARMY CORPS OF ENGINEERS (DECEMBER 2022).
 - A STORMWATER LAW PERMIT MODIFICATION HAS BEEN APPLIED FOR WITH MAINE DEP (DECEMBER 2022).
 - A PERMANENT VEGETATIVE BUFFER SHALL BE MAINTAINED FOR STORMWATER MANAGEMENT. THE VEGETATIVE BUFFER EXTENDS 50' WEST FROM EDGE OF GRAVEL DRIVE FROM PROPERTY LINE TO THE END OF THE GRAVEL DRIVE. SEE DEED RESTRICTION FOR ADDITIONAL DETAILS.
 - MINIMIZE DISTURBANCE IN AREA DESIGNATED AS VEGETATED BUFFER TO THE MAXIMUM EXTENT POSSIBLE.
 - MEADOW CONDITIONS WILL BE MAINTAINED WITHIN THE VEGETATIVE BUFFER. SOLAR ARRAY, AND AT MAXIMUM 15.0' OUTSIDE FENCING (EXCEPT ON WEST SIDE). SOLAR PANELS ARE CONSIDERED SELF-TREATING IF MEADOW IS MAINTAINED AND AREA IS NOT MOWED MORE THAN TWICE PER YEAR.
 - NEAREST FIRE HYDRANT LOCATED IN DRIVEWAY ON SOUTHERN HALF OF PARCEL.



POST BASE
NOT TO SCALE (G7)



CHAIN LINK FENCE
NOT TO SCALE (G1)



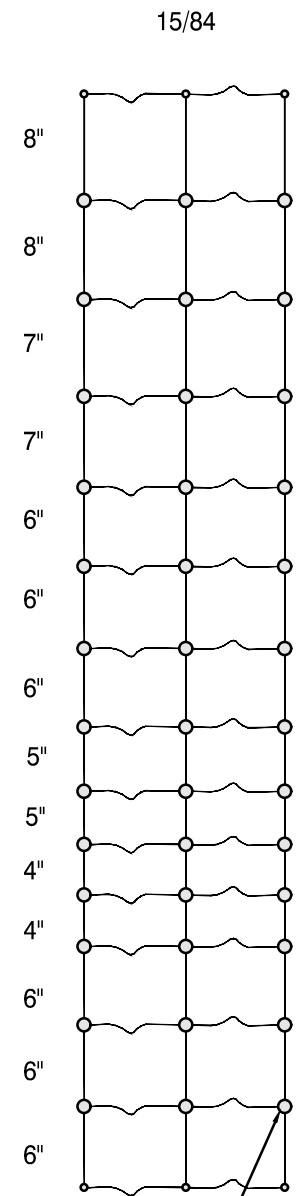
FENCE COMPONENT
BRACE POSTS (1 PER BRACE)
ANGLE BRACE FOOT (2 PER BRACE)
ANGLE BRACE (2 PER BRACE)

MATERIAL NEEDED PER COMPONENT
16" x 2 7/8" GALVANIZED SCHEDULE 40 PIPE
16" x 2 7/8" GALVANIZED SCHEDULE 40 PIPE
14" x 2 3/8" GALVANIZED SCHEDULE 40 PIPE

TOTAL AMOUNT OF MATERIAL TO BUILD BRACE
1 PIECE OF 16" x 2 7/8" GALVANIZED SCHEDULE 40 PIPE
2 PIECES OF 6" x 2 7/8" GALVANIZED SCHEDULE 40 PIPE
2 PIECES OF 14" x 2 3/8" GALVANIZED SCHEDULE 40 PIPE

ADDITIONAL MATERIALS NEEDED
OIL BASED ENAMEL PAINT (RUST-INHIBITING COATING PER MANUFACTURES RECOMMENDATION)
METAL PRIMER PAINT

PIPE LINE BRACE ASSEMBLY
(NOT TO SCALE)



FIXED KNOT, TYP.



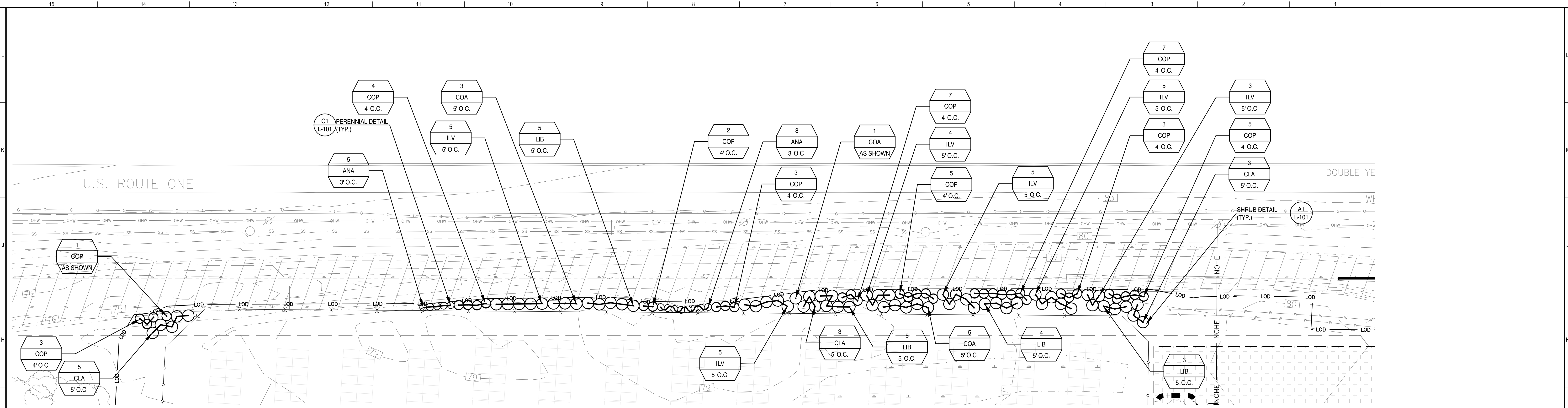
NOTES:

- FENCE MESH SHALL BE BEKAERT PART #646445, 15/84-6 OR APPROVED EQUAL.
 - HEIGHT: 6'
 - MESH SPACING: 6" X 6"
 - WIRE GAUGE: 12.5 GAUGE
- POSTS:
 - SCH. 40 2 7/8" GALVANIZED STEEL PIPE SHALL BE USED AT ALL CORNER AND BRACING POSTS AS WELL AS AT TOP OF ALL HIPS AND BOTTOM OF ALL DIPS.
 - ALL POSTS SHALL BE 2.5" SCHEDULE 40.
 - POSTS/T-POSTS SHALL BE SET A MAXIMUM OF 20' O.C. AND AT EVERY CHANGE IN GRADE.
 - ALL POSTS SHALL BE PLUMB IN ALL DIRECTIONS.
 - LINE POSTS MAY BE HAMMER-DRIVEN. IF HAMMER-DRIVEN, POSTS END MUST BE CUT TO FINAL HEIGHT AFTER DRIVING IS COMPLETE. CUT ENDS ARE TO BE CUT SQUARE AND FREE OF BENDS, MUSHROOMING, AND BURRS. CUT ENDS TO BE TREATED AS PER NOTE #4.
- INLINE BRACE ASSEMBLY SHALL BE INSTALLED AS REQUIRED PER MANUFACTUER.
- ANY CHIPS IN THE GALVANIZED FINISH DUE TO SITE INSTALLATION SHOULD BE MINIMIZED AND REPAIRED WITH INDUSTRIAL GRADE PAINT. ALL CUT ENDS ARE TO BE FINISHED WITH INDUSTRIAL GRADE PAINT-ON GALVANIZED FINISH.
- INSTALL PER MANUFACTURERS RECOMMENDATIONS.

AGRICULTURAL FENCE
NOT TO SCALE (A1)

0	ISSUED FOR PERMITTING	3-06-23
REV	DESCRIPTION	DATE
ISSUED FOR PERMITTING 3-06-23		
CURRENT ISSUE STATUS:		
TRUE NORTH:		
SMRT Architecture • Engineering • Planning		SMRT Architects and Engineers 75 Washington Avenue, Suite 3A Portland, Maine 04101 1.877.700.7678 www.smrtinc.com
LGC CLINICAL DIAGNOSTICS SOLAR ARRAY IMPROVEMENTS		
CUMBERLAND, MAINE		
SITE DETAILS		
SHEET TITLE:		
SCALE: AS SHOWN		
PROJECT MANAGER:	KDC	PROJECT NO: 22168
A/E OF RECORD:	GKP	
JOB CAPTAIN:	XXX	
DRAWN BY:	WSM	
SMRT FILE:	C-502-22168	SHEET No. C-502

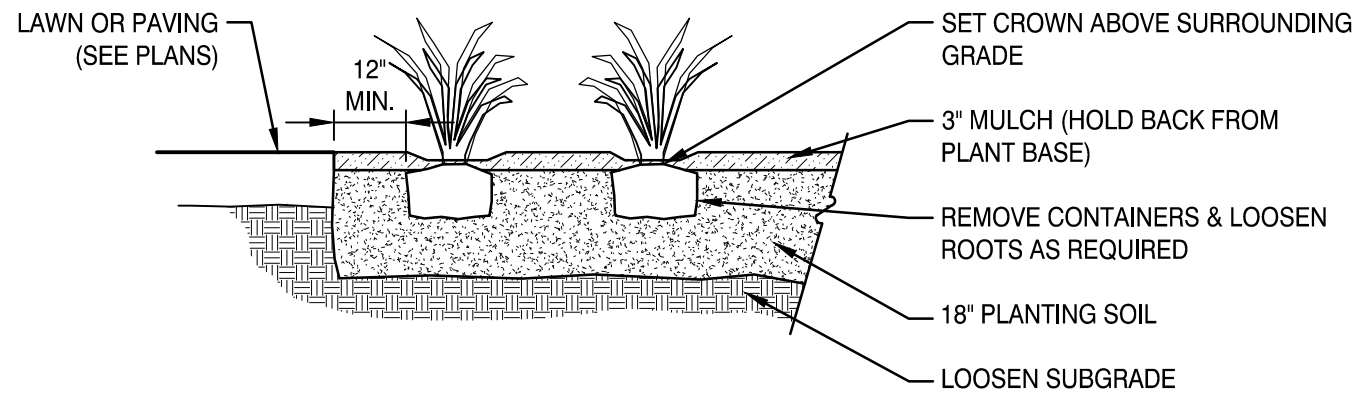
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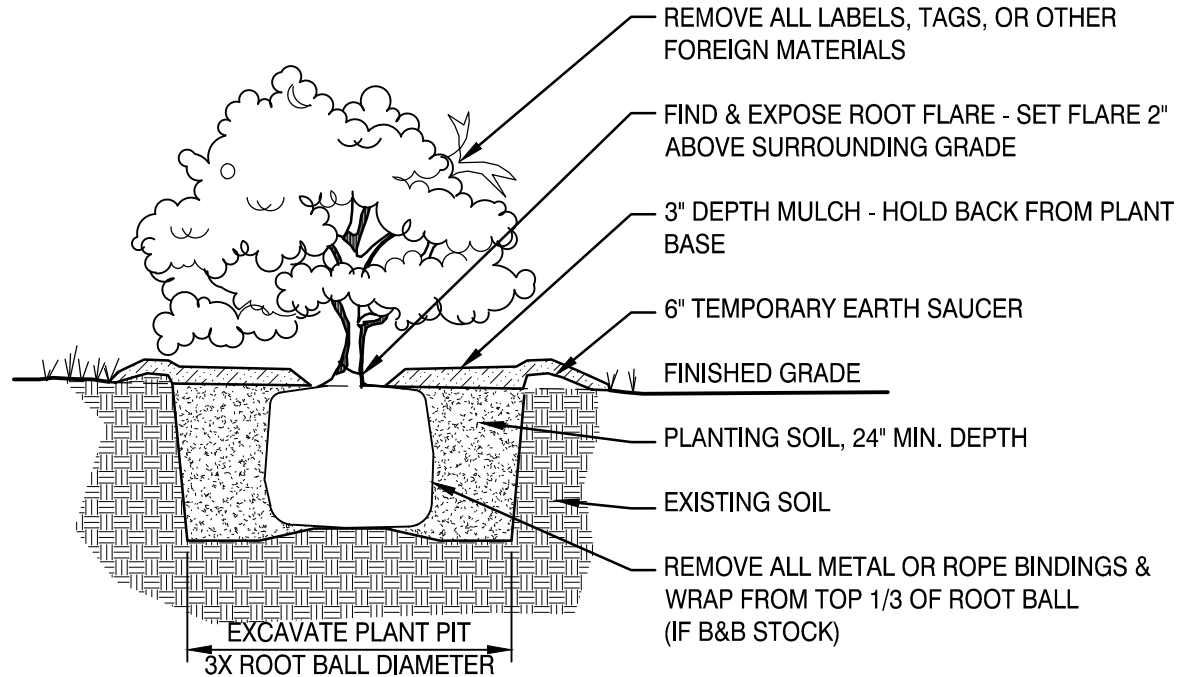
PLANTING PLAN (G1)
1" = 20'

MARK	SCIENTIFIC NAME / COMMON NAME	SIZE CAL	SIZE HT	ROOT	REMARKS
SHRUBS					
CLA	Clethra alnifolia / Sweet Pepperbush	#3	3'	Cont.	3 - 4 Canes
COP	Comptonia peregrina / Sweet Fern	#3	3'	Cont.	3 - 4 Canes
COA	Cornus amomum / Silky Dogwood	#3	3'	Cont.	3 - 4 Canes
ILV	Ilex verticillata / Winterberry	#3	3'	Cont.	3 - 4 Canes
LIB	Lindera benzoin / Spice Bush	#3	3'	Cont.	3 - 4 Canes
PERENNIALS					
ANA	Aster novae-angliae / New England Aster	#1	-	Cont.	

PLANT SCHEDULE (E1)
N.T.S.



PERENNIAL DETAIL (C1)
N.T.S.



NOTES:

1. SHRUB TO BE SET PLUMB.

SHRUB DETAILS (A1)
N.T.S.

0

ISSUED FOR PERMITTING

3-06-23

REV

DESCRIPTION

DATE

ISSUED FOR PERMITTING

3-06-23

CURRENT ISSUE STATUS:

TRUE NORTH

THARYN S. NEIN-LARGE

No. 9287

STATE OF MAINE

SMRT

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LGC CLINICAL DIAGNOSTICS

SOLAR ARRAY IMPROVEMENTS

CUMBERLAND, MAINE

PLANTING PLAN, SCHEDULE & DETAILS

SHEET TITLE:

0

10'

1'

2'

60'

SCALE: AS SHOWN

PROJECT MANAGER: KDC

PROJECT NO: 22168

A/E OF RECORD: TNL

JOB CAPTAIN: XXX

DRAWN BY: TNL

SMRT FILE: L-101-22168

SHEET No.

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L-101

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