PLANNING BOARD MEETING AGENDA

Thursday June 4, 2020
Burgess Meeting Room, Berwick Town Hall
6:30 p.m.

Call to Order

Pledge of Allegiance

Introduction of Board Members

Public Comment

Approval of Minutes

1. May 21, 2020

Public Hearing

- Site Plan Review. Adult Use Marijuana Cultivation Facility. 11 Pond Road (R70-16) RC/I Zone. CAF Realty of Maine.
- Site Plan Amendment. Commercial Storage. 387 School Street (R54-4) R2 Zone. PK Storage, LLC.

Old Business

- Site Plan Review. Adult Use Marijuana Cultivation Facility. 11 Pond Road (R70-16) RC/I Zone. CAF Realty of Maine.
- Site Plan Review. Solar Array (Essential Services & Construction over 3,000 ft^2). 193 Route 236 (R66 6-A) R3 Zone. Berwick Solar, LLC.
- Site Plan Amendment. Commercial Storage. 387 School Street (R54-4) R2 Zone. PK Storage, LLC.

Findings of Fact Review

- Wright Homesteading

Public Comment
Informational Items
Adjournment

PLANNING BOARD MEETING MINUTES

Thursday May 21, 2020
Zoom Virtual Meeting
6:30 p.m.

Call to Order

Pledge of Allegiance

Introduction of Board Members

Dave Andreesen; Sean Winston; Frank Underwood; David Ross-Lyons
Regular Member Absent: *Michael LaRue; Nichole Fecteau*
Alternate Member Absent:
Staff Members Present: *Lee Jay Feldman, Director of Planning; James Bellissimo, Planner; Jenifer McCabe, Code Enforcement Officer*

Public Comment

Approval of Minutes

2. May 7, 2020

Motion: Sean Winston motioned to approve the minutes as presented.
Second: David Ross-Lyons

VOTED – 4-0 in favor

Motion Passed

In favor: Dave Andreesen; Sean Winston; Frank Underwood; David Ross-Lyons
Opposed: None
Abstain: None

Public Hearing

2. Site Plan Review. Solar Array (Essential Services & Construction over 3,000 ft^2). 193 Route 236 (R66 6-A) R2 Zone. Berwick Solar, LLC.

David Dagan of 189 Route 236 introduced himself as an abutter to the project. Mr. Dagan expressed concern about their well being contaminated by the elements in the solar array.

Mr. Dagan said it will also be an eye sore and it will impact the beauty in the area. Debra Dagan said her main concern is if one of the solar panels gets damaged, it could contaminate their well.

Margaret Wilson-Dagan of 15 Pigtail Lane introduced herself as an abutter to the project. Ms. Dagan's concern is that they are going to see the array from their house. Ms. Dagan asked where the fence will be placed.

Old Business

2. Site Plan Review. Solar Array (Essential Services & Construction over 3,000 ft^2). 193 Route 236 (R66 6-A) R2 Zone. Berwick Solar, LLC.

James Bellissimo said since last meeting, staff requested a decommissioning plan. The applicants said the expected life cycle of the array is 30-50 years. Mr. Bellissimo said what happens if it is 20 years? Mr. Bellissimo said it appeared the main concern of the abutters is the risk of contamination. The applicants said their panels would be certified and Mr. Bellissimo said this certification should be submitted as part of their application.

There was a discussion on how to ensure the decommissioning plan is followed when it was time. Lee Jay Feldman recommended not going with a bond or letter of credit due to the need to renew the letter or hold funds for an extended period of time.

Mr. Bellissimo clarified the issue with the decommission plan is forty years from now, will there be an issue of who is the owner and who is responsible? Zac Gordon of Berwick Solar, LLC said the land will continued to be owned by Les Bodwell of LRB Leasing. Mr. Gordon said the panels will have value and will not be forgotten.

Jay Conroy of Berwick Solar, LLC said the panels are made of solid material. Mr. Conroy said the panels are certified nonhazardous. Mr. Conroy said there is a very unlikely possibly that the panels pose an environmental risk and if the panels are damaged, they will be repaired within 72 hours or sooner in case of an emergency. The system is monitored. Mr. Conroy said the rating comes from UL and Mr. Feldman said this agency is a known entity.

Mr. Andreesen asked about the fencing. Gil Paquette of VHB, engineer of the project, said there will be a chain link fence seven feet in height. Mr. Paquette said the screening will be outside the fence. The screening will be six or seven species of evergreens and the heights will be seven feet at installation.

David Ross-Lyons asked about maintenance. Mr. Conroy said the maintenance is minimal.

Frank Underwood asked if there was a risk for the inverters leaking. Mr. Paquette said the old inverters used to have PCBs in them and now they have a mineral oil. Mr. Underwood asked if a lien could be placed against the property. Mr. Feldman said there

would be no reason to do so on day one. Mr. Underwood asked if decommissioning was part of the lease agreement. James Bellissimo suggested when the farm reaches 10% of production ability, that would start the clock on a decommission plan and if it was not followed then it would be subject to land use violations. Mr. Gordon requested that the proposed condition would apply to after year 30.

There was an extended discussion on landscaping. Lee Jay Feldman suggested the landscaping be planted in a way so it looks natural and not just a row of planted trees.

Mr. Underwood asked about a fill permit, Mr. Bellissimo said it will be permitted at the local level. Mr. Underwood asked about seeing soils on a map and asked about access to the lot.

Les Bodwell said lot 6A will merge into lot 6 if the project is approved.

New Business

3. Subdivision Amendment. Final Plan. Lot Line Adjustment. 565 Portland Street (R72 9-2) RC/I Zone. Route 4 Self Storage, LLC.

Mr. Bellissimo said the first order of business is a lot line adjustment to a previously approved subdivision plan. Neil Rapoza, engineer for Route 4 Self Storage, LLC said the adjustment is to address a setback violation. There was a question raised about the new septic for an abutting property (569 Portland Street). Lee Jay Feldman said the new septic on the abutting property will not be impacted by the lot line adjustment.

Motion: Frank Underwood motioned to find the application complete.
Second: David Ross-Lyons

VOTED – 5-0 in favor
Motion Passed

In favor: Dave Andreesen; Sean Winston; Frank Underwood; David Ross-Lyons
Opposed: None
Abstain: None

4. Site Plan Review. Expansion of Self-Storage Facility. 565 Portland Street (R72 9-2) RC/I Zone. Route 4 Self Storage, LLC.

Mr. Bellissimo read his memo to the Board. The expansion requires a DEP site location permit. The applicant requested a waiver on landscaping.

Neil Rapoza said the stormwater systems are designed to make the best use of limited space on the site to treat the water. Mr. Rapoza said the storm filters will need to be checked annually as prescribed by the DEP permit.

Mr. Underwood asked about the Site Plan procedure and if the ordinance should ask for responses to the letters sent to Town Departments.

Motion: Sean Winston motioned to grant the waiver for the landscape plan.
Second: Frank Underwood

VOTED – 3-1 in favor

Motion Passed

In favor: Dave Andreesen; Sean Winston; Frank Underwood
Opposed: None
Abstain: David Ross-Lyons

Site Walk Scheduled for July 16th 5PM and Public Hearing 6:30PM

5. Conditional Use Application. Sawmill. 96 Cemetery Road (R37 15-A) R2 Zone. Thomas Wright.

Mr. Bellissimo read his memo to the Board. Tom Wright of 96 Cemetery Road requested to operate his 36-horsepower sawmill. Because the sawmill is over 30 horsepower it requests a Conditional Use through Planning Board. The Berwick Land Use Ordinance sets a limit of 60 decibels in a residential zone, however maintenance on property is exempted and the primary use for the sawmill is maintenance of his and his family's abutting properties.

Mr. Wright explained he operated an 8-horsepower bandsaw mill and then bought his 36 horsepower saw mill as he was informed by the Town at the time of purchase the limit was 40 horsepower. Mr. Wright operated the sawmill for two years and then stopped using it for a period of time, he discovered the limit was 30 so that is why is seeking a Conditional Use permit.

Motion: Frank Underwood motioned to approve the waiver of the external plumbing submittal requirement.
Second: David Ross-Lyons

VOTED – 4-0 in favor
Motion Passed

In favor: Dave Andreesen; Sean Winston; Frank Underwood; David Ross-Lyons
Opposed: None
Abstain: None

Motion: Sean Winston motioned to grant the waiver for LID requirement.
Second: David Ross-Lyons

VOTED – 4-0 in favor
Motion Passed

In favor: Dave Andreesen; Sean Winston; Frank Underwood; David Ross-Lyons
Opposed: None
Abstain: None

Motion: David Ross-Lyons motioned to find the application complete.
Second: Frank Underwood

VOTED – 4-0 in favor
Motion Passed

In favor: Dave Andreesen; Sean Winston; Frank Underwood; David Ross-Lyons
Opposed: None
Abstain: None

Motion: David Ross-Lyons motioned to approve the Findings of Fact.
Second: Sean Winston

VOTED – 4-0 in favor
Motion Passed

In favor: Dave Andreesen; Sean Winston; Frank Underwood; David Ross-Lyons
Opposed: None
Abstain: None

Motion: Sean Winston motioned to approve the application.
Second: David Ross-Lyons

VOTED – 4-0 in favor
Motion Passed

In favor: Dave Andreesen; Sean Winston; Frank Underwood; David Ross-Lyons
Opposed: None
Abstain: None

Public Comment

Informational Items

Adjournment

Motion: David Ross-Lyons motioned to adjourn.
Second: Sean Winston

VOTED – 4-0 in favor

Motion Passed

In favor: Dave Andreesen; Sean Winston; Frank Underwood; David Ross-Lyons
Opposed: None
Abstain: None

Minutes prepared by Berwick Planner James Bellissimo, for consideration at the next Berwick Planning Board meeting.

Signed as Approved by the Board:

_____ _____

TO: Town Of Berwick May 18, 2020

ATTN: Planning Board

SUBJECT: 11 Pond Road, Marijuana Production Development

Dear Board Members:

I offer this letter as a follow up to my original Letter of April 13, 2020. I have never had any response whatsoever from that letter although the planning board required that the applicant was to have replied.

I believe there are many issues still unresolved and perhaps some that are not yet addressed.

1. The subject property lies directly above the South Berwick/Berwick aquafer which runs through the Links at Outlook Golf Course, under Dunn's Farm and supplies private wells for Berwick properties on Circuit Road, Perry's Way and Pond Road. Both the golf course and farm are required the have periodic testing of their soil for contaminants by the Maine DEP. This raises the question of what chemicals, fertilizers and other materials will be put in the soil which could have a health consequence in the areas drinking water.
2. According the Maine statues on marijuana, it states the "with the exception of testing laboratories, all Maine marijuana license applicants must be residents of the state. Furthermore, if a business is owned by a corporate entity, all officers, directors, and general partners must be residents. Moreover, a majority of shares must be owned by the residents." We do realize that the applicant is not operating the marijuana facility and wonder if that is a technical way for an out of state applicant to participate in the marijuana business in Maine while being a legal resident elsewhere. We would ask what business and profit relationship exists between the growers and the owner of the facility which may circumvent the intent of the law. We ask that the Planning Board look into this arrangement since we have heard that the applicant has mentioned to a third party how enormously profitable this venture will be for them. So perhaps there is ownership involved.
3. There has been much made by the applicant of the septic easement for the property owned by McDonald/Leveille. There are developer plans to build a pipe over the easement and a willingness to 'repair' any damages made thereto. I would think our Town attorney needs to look into whether that can be done without the permission of the easement holder (McDonald/Leveille). It is also not at all clear that a road of any sort is permitted over a residential septic system. We believe not.
4. The representatives for the applicant have mentioned they plan to use a "state of the art" odor mitigation system using activated charcoal filters. These types of systems are

not state of the art and in fact yesterday's technology. Most of the best systems now utilize highly efficient scrubber systems along with a negative pressure environment. Negative pressure environments have two components to stop odor/gas emissions. First, there is a lock space that is an outer door. Second, once the outer door closes an inner door can open and when opened, all air is pulled into the facility rather than allowing it to escape into the outside air. We need to do a deep investigation to determine that our quiet residential neighborhood is without noxious emissions from this facility.

5. When the Town of Berwick voted to allow marijuana facilities in commercial zones on Route 4 and 9, we are sure that the voters had no idea that this left neighborhoods that are not zoned commercial (but zoned RCI) open to marijuana facilities for production and growing on a mass level like this. Every resident of this town we have talked to had no idea that facilities without frontage on either of these roads was still open (through a zoning type unaccounted for in the public question) for marijuana. This WAS NOT the intention or understanding of the voters. I urge this question to be put in front of the voters rather than the Planning Board to resolve.
6. A significant issue is the diminished property values for residents in favor of an out of state business venture. Also the cost and exposure for security and fire issues (the Sweet Dirt fire last year in Eliot). The added truck and vehicle traffic in a quiet area. Lighting and fencing that is not in keeping with the neighborhood.
7. The proposed building is planned to be built virtually a few feet off the McDonald/Leveille property line. This changes that property from a quiet pastoral scene into no rear view at all. Setbacks have to be extremely different for residential housing and commercial facilities.
8. Wetlands in this area of town are an issue and many of us have had DEP tell us what we could and could not develop or cover exposed wetlands. This property has significant wetlands. DEP must weigh in.

In summary, there are more and more questions relative to the project and to allow this to move forward is doing a gross disservice to existing residents and taxpayers over an out of state venture. Residents must be considered over outside developers.

CC: James Bellissimo, Town Planner

Stephen Eldridge, Town Manager

Paul & Deborah Amatucci

12 Perry's Way

Berwick, ME 03901

South Berwick Water District
80 Berwick Road
South Berwick, ME 03908

May 26, 2020
RE: Proposed Marijuana Growing Facility on Pond Road

Berwick Planning Board
11 Sullivan Street
Berwick, ME 03901

Planning Board Members,

The South Berwick Water District would like you to consider placing conditions on the proposed Marijuana Growing Facility that is being proposed for Pond Road. This proposed facility is going to be constructed in the recharge area of our Junction Road water source and intends to drill a well, in the same aquifer, for their water use. The Water District wants to ensure this use will not impact our water source and feels this can be accomplished if the following conditions are met:

- The South Berwick Water District be furnished with a detailed well drillers log for the new well.
- A five-day pump test be performed on the well with well drawdown readings taken hourly until the well stabilizes. The Pump Test will be coordinated with the South Berwick Water District so the well drawdowns at Junction Road can be monitored to check for interference.
- The Facility may not irrigate their plants if the new well has an adverse effect on our Junction Road water source.
- The Facility be mandated to install a water meter to monitor the water usage from the well and allow the South Berwick Water District to periodically read the water meter to verify usage.
- Secondary Containment for all pesticides or chemicals to be stored on site. The Facility would also supply Safety Data Sheets to the South Berwick Water District for all chemicals and pesticides on a yearly basis.

The South Berwick Water District asks the Berwick Planning Board for your help in protecting our water source.

Regards,

John Leach
Superintendent

RE: 11 Pond Road site plan

To Whom It May Concern:

As the property owners of 2 Pond Road Berwick, Amanda Gauthier and I, Benjamin Gauthier, vehemently oppose the project proposed on 11 Pond Road.

Please read our following comments and concerns.

1. A project of this size and scope is no small matter; it is therefore concerning that, as abutting property owners, we were not informed of this project until we recieved a letter notifying us of the zoom meeting. Had there been no covid-19 outbreak would we even have been extended that courtesy? Never mind the fact that after communicating with the town planner via email we were never provided with the zoom meeting information so we could attend; we had to seek this information out from fellow abutters only to wait for almost two hours in a blank screen waiting room before it closed without us ever being allowed in. Surely, with such "technincal difficulties", in order to fairly assess the potential impact of such a project on our neighborhood we must wait until all the abutters are able to make their opinions heard.
2. This is a neighborhood first and foremost, not a business park. Allowing such a vast business to be built will negatively impact all of the abutters home values. Will the business owners or town be compensating properties affected? Surely our whole road and not just the abutting property owners will be affected negatively.
3. Being as this is a neighborhood, we are trying to raise two young children, ages 5 and 11 months as of writing, across from the proposed site. When we bought this property we did so because it was on a quiet road without much traffic. There is no possible way a business of such scope, either during the construction phase or when it is operating, will not increase traffic and, therefore, decrease our children's safety. According to Berwick Land Use Ordinance 8.25.5 B "prior to granting approval, the planning and/or code enforcement department shall recieve a written statement from the Berwick Chief of Police or designee that security measures are acceptable and also consistant with State requirements." We have seen no such statement.
4. Americans have always displayed a "not in my backyard" sentiment, there is even an acronym for it "NIMBY". This seems to be taken to a whole new level for the owners of 13 Pond Road, as the building and fences for the proposed construction will be quite litterally directly up against their property line. This is in no way acceptable for them, and surely the planning board members would not allow this to happen to their own residences and families, so they must duly act according so as to not allow this to happen to fellow community members.
5. As previously stated in letters from other abutters, this property does not have frontage on routes 9 or 4, and is not zoned properly for the type of business they want to build on it; for these two reasons alone we feel the project should be shut down immediately as it does not comply with Berwick Land Use Ordinance 8.25.3.
6. The builders have provided pages and pages of site map drawings and the like, but we have not seen how this will in any way benefit our neighborhood and town in general.
7. In addition, Berwick Land Use Ordinance 8.25.3 states that marijuana production facilites cannot be within 1000 feet of any school "as measured from the nearest property line of the land used for the school to the nearest portion of the proposed business's building, via straight line measurement." We do not belive the provided plans comply with this ordinance in relation to the Montessori School on route 4.

Given the totality of the negative impacts this project will have on our home values, safety of our families, security of our neighborhood, the viability of attracting other young families to live in this neighborhood, along with the unknown ecological impact, combined with the fact that by legal guidelines; such a business should not exist, we must strongly urge the town to stop the project immediately, and to take no further steps to allow this business or another of its size in a neighborhood of familes.

Sincerely,
Ben and Amanda Gauthier
2 Pond Road

May 7, 2020

Town of Berwick
Planning Board
11 Sullivan Street
Berwick, ME 03901

Re: 11 Pond Road Marijuana Production Proposal

To Whom It May Concern:

As a follow-up to the Public Hearing of April 16, 2020, we wanted to inquire on when responses would be received on the questions posed in letters by the following residents: Jerry and Alyson Graybill; Heidi Leveille and Marlene McDonald; Paul and Deborah Amatucci; and Ben Gauthier. We would like sufficient time to review prior to the next Public Hearing. We appreciate your and the applicant's time on this matter.

We also have additional questions for the Planning Board.

1. Does the gravel driveway meet the legal access definition as defined in the Land Use Ordinance on page 10? Please provide supporting evidence that the proposed entrance meets the above requirements.

Frontage: The dimension between the two sidelines of a lot, measured along the property line that borders upon whatever way serves as legal access to the lot. The following ways shall constitute legal access to a lot: (a) a way accepted by or established as belonging to the Town, the County, or the State; (b) a way shown on an approved subdivision plan; or (c) an unaccepted street existing prior to the original enactment of the Town's Subdivision Regulations provided it is shown on a plat recorded in the registry of deeds prior to such enactment and is deemed adequate as a street by the Planning Board as evidenced by its endorsement on the subdivision plan. Where a lot is situated on a curve of a street or on a corner of two streets, the measurement of frontage may include the entire length of the property line along such street or streets.

2. The Drawing C2 shows that the entrance to the proposed project is owned by Northeast Credit Union. In reviewing the easement between Northeast Credit Union and the applicant, it reads "… ***Said easement may be used on foot or for vehicles (excluding oil trucks or other vehicles carrying any potentially hazardous materials – except for oil trucks delivering residential heating oil to grantee's residence). The Grantor shall maintain liability insurance in favor of the Grantee …."***

Does this easement prohibit vehicles of the marijuana facility from traveling on this "road"? Does it prohibit vehicles carrying the marijuana waste from using this "road"? Is Northeast Credit Union aware of the change in use of the road?

3. Does the project meet the 1,000 feet setback requirement of the ordinance? Please provide evidence that it does.

Adult Use & Marijuana Production Facilities and Dispensaries cannot be within 1,000 feet of: Any school – as measured from the nearest property line of the land used for the school to the nearest portion of the proposed business's building, via straight line measurement.

In reviewing Drawing C2 of the application, it does not show the starting point that is used to measure the 1,000 feet distance from Childlight Montessori School to the proposed building(s). What is the applicant using as a starting point? Based on research using Google Earth and comparing it to Drawing C2, it does not appear that the 1,000' requirement is met if the starting point is located at the property line. Please see attached Google Earth Screen Shot showing the distance. At the site walk on May 7, 2020 the engineer provided a diagram that showed a revised 1,000' radius. The revision reduced the original distance from 1,050' to approximately 1,009' per the engineer's comments.

Due to this discrepancy, we respectfully ask that a third party verify the distance from the Childlight Montessori School and Kind Farms to ensure compliance. Our review using the scale on the revised diagram does not show the 1,000' setback is met.

Figure 1: From School property boundary

Figure 2: From School parking lot to new building area

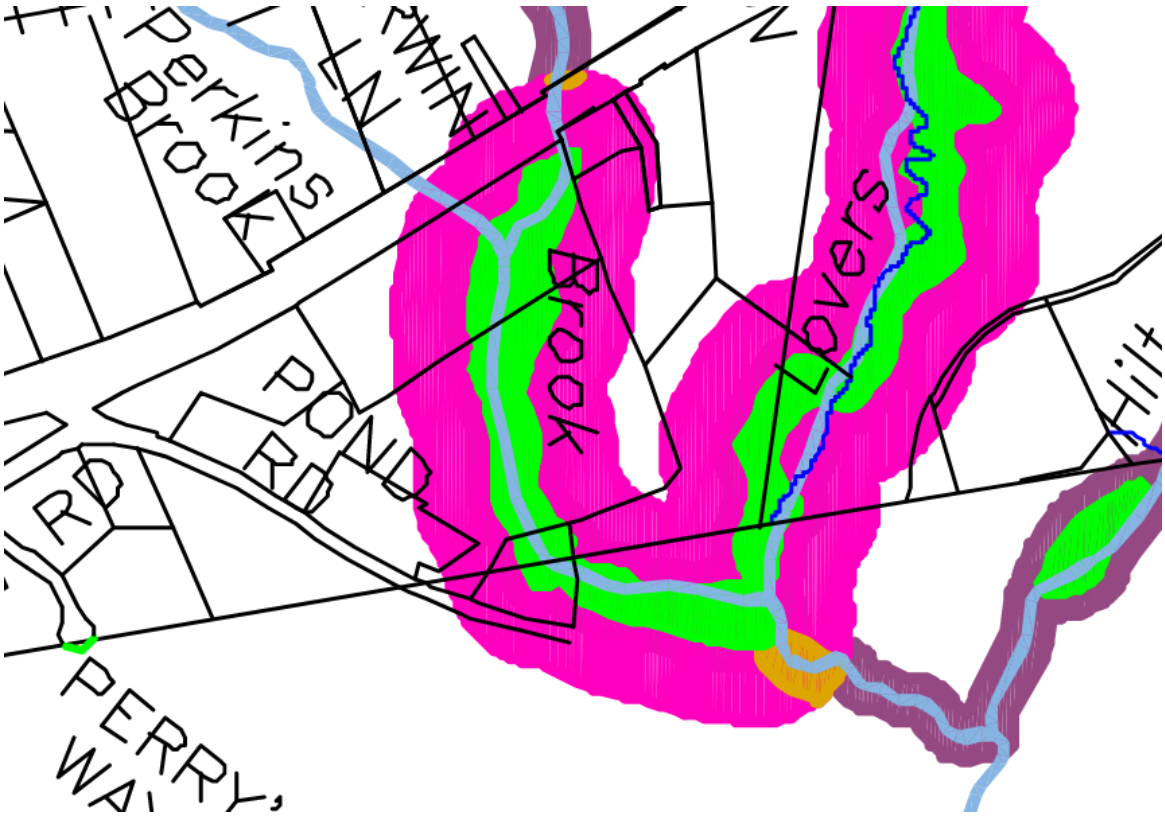
4. As a follow-up to Heidi Leveille's letter and the discussion at the Public Hearing, have the issues raised about the sewer easements been resolved? Does the easement allow for a road to be constructed over the sewage pipes of 13 Pond Road? Also, is it permissible for the applicant to run his sewer and electrical feed through the existing easements for 13 Pond Rd?

5. Does this project need sub-division review since the proposed project involves constructing 4 buildings within 5 years, making a total of 5 buildings on the lot.

Subdivision: The division of a tract or parcel of land into three or more lots within any five-year period, that begins after September 23, 1971. This definition applies whether the division is accomplished by sale, lease, development, buildings or otherwise. The term "subdivision" also includes the division of a new structure or structures on a tract or parcel of land into three or more dwelling units within a five-year period, the construction or placement of three or more dwelling units on a single tract or parcel

of land and the division of an existing structure or structures previously used for commercial or industrial use into three or more dwelling units within a five-year period.

6. Are the proposed buildings located outside of the 250' buffer zone? The application states that only construction for the storm water treatment systems is within the 250' buffer. Is this permitted? We've included the Town's Shoreline map because this gives the impression that some or all of the buildings could be within the buffer zone. Please confirm that the project is in compliance with the shoreline zoning.



I (Jerry) am well aware of the drainage issues in the field area where they are planning to build the new facility. For over 20 years I cut hay in this field and dealt with the wetness, poor drainage and getting stuck on many occasions. The previous owner shared that due to the poor drainage the septic and pumping system for the house at 13 Pond Road and the septic for 11 Pond Road had to be located at higher elevations as shown on the drawings.

We would like to see better mark ups on the drawings depicting the 250' shoreline setback requirements.

8. Has the State of Maine and/or the Maine Department of Environmental Protection (DEP) been contacted as they were highly involved in the Outlook Golf Course construction and other new construction projects due to the wetland restrictions for this area?

What evaluation has been done to analyze the impact on the aquifer which is the water source for the Town of South Berwick? Has the town of South Berwick been notified and provided the opportunity for comment?

Based on the nature of this project, its close proximity to wetlands, the amount of area being disturbed for the project and the possibility of run off into the wetlands or the ground water, we researched information on the DEP website which led us to ask the above questions.

9. We would like to echo Mr. Underwood's comments made at the Public Hearing on April 16, 2020 on fire safety and the berm. Since South Berwick Fire and Police Departments respond to incidents in our neighborhood due its location, we support the recommendation that South Berwick be consulted on this project.

Have the Town Manager and the Fire and Police Departments of the towns of Berwick and South Berwick been contacted? We respectfully request to receive a copy of their response prior to the Public Hearing.

10. We would like to respectfully request that the planning board consider that an independent peer review be conducted on the applicant's plans.

Thank you in advance for your time on our questions. Thank you to James, the planning board members, the applicant Dave Ayers, Mike Sievert, Stacey Bellabona and the two gentleman who will run the marijuana production facility for answering our questions during the site walks.

As compared to other marijuana production facilities, the location of the project is atypical due to its proximity to residential homes. Consequently, we are questioning aspects of the project to ensure it follows all legal guidelines, protects the wetlands and the rights of the neighbors.

Respectfully,

Alyson and Jerry Graybill
10 Pond Road
Berwick, ME 03901
207-384-2912
603-502-2467/ 603-520-2641

cc: Stephen Eldridge, Berwick Town Manager
Perry Ellsworth, South Berwick Town Manager
James Bellissimo, Berwick Town Planner

CHILDLIGHT
Montessori School
and the
Kathryn M. Lafley Humanities Center
A Non-Profit Facility

Town of Berwick
Planning Board
11 Sullivan Street
Berwick, ME 03901
Re: Pond Road Site Plan 5/5/20

To Whom It May Concern:

I am writing on the behalf of ChildLight Montessori School. We are a non-profit preschool and Kindergarten located at 395 Portland Street, Berwick, ME. I serve as the Head of School. Despite being currently closed due to the COVID-19 pandemic, we are happy to be celebrating our 25th year of serving the children and families of the Berwicks and the surrounding areas, and we look forward to returning to school this fall!

I am writing to you today regarding the proposed marijuana production facility that I have recently been made aware of by concerned neighbors. Our school is located right up Route 4 from the proposed facility.

I have read the letters that you have received from Alyson and Jerry Graybill, Paul and Deborah Amatucci, Heidi Leveille and Marlene McDonald and feel that the concerns and questions they have presented are valid, and at the very least should cause the Planning Board process to be slowed down and that additional consideration should be given to these residents. I would like to add to the list the concerns that we as a school have with this proposal.

It is my understanding that Maine law stipulates that any marijuana production facility needs to be at least 1000' from any school entrance. I am not sure of the exact distance but would like to be assured that the proposed facility is following these guidelines.

My other strong concern is the odor. My son attends a CrossFit gym in North Berwick that is located next to a marijuana production facility. Even with the filtration in place, there is an overpowering smell. He is in the building next door and will come out smelling like marijuana. We have all driven by the facilities on Route 9 and can smell them on the road as we drive by.

This leads me to be greatly concerned that the small children on our playground will be smelling the odor and that parents dropping off and picking up their children will be affected. We depend on word of mouth and the powerful impact of a positive experience by potential families visiting our school to secure enrollment for each year. I am worried that having the strong smell of marijuana on or near our property could impact our business.

I understand that if a business meets the set rules, they have the right to proceed with their endeavor. However, I also understand that it is the role of the Planning Committee to make sure the set rules are being followed, AND to consider the impact a proposed facility/business will have on its neighbors and the community. Please consider if you were the neighbor of this proposed facility or if your child was attending a preschool across the road, is this an appropriate location for this facility as currently proposed?

Thank you for your time and consideration. Please add me, as the representative for ChildLight Montessori School, to your list of people notified of any meetings, amendments, or decisions regarding this matter.

Respectfully,

Laura Eves
Head of School
ChildLight Montessori School
395 Portland Street
Berwick, ME 03901
laura.childlight@gmaill.com
207-384-0153 (during COVID-19 closure, please call 207-432-5929)

MJS ENGINEERING, P.C.
CIVIL • STRUCTURAL • ENVIRONMENTAL

5 Railroad Street • P.O. Box 359
Newmarket, NH 03857
Phone: (603) 659-4979
Email: mjs@mjs-engineering.com

May 27, 2020

Mr. James Bellissimo
Berwick Community Dev. And Planning
11 Sullivan St.
Berwick, ME 03901

Re: CAF Realty Trust application for Marijuana grow facility 11 Pond Road Berwick, ME

Dear James,

Pursuant to your request, this letter serves as a combined response to all of the letters. I am responding to the April 12 letter from Alyson and Jerry Graybill as it covered the most topics and adding in responses to the other specific letters as noted, that differ from the Graybill letter to cover all questions.

The following is a list of the general questions with a response numbered the same as the original letter: (Graybill April 12)

1. Land Use Ordinance, abutter references section 8.25.3 questioning if the facility is allowed in this zone.
   - *This section is a reference to properties in the R3 zone. The medical marijuana and medical marijuana production facilities are only allowed in the R3 zone on properties with frontage on Route 4&9. This is only stating medical facilities and on in the R3 zone. This property is in the RC/I zone and adult use marijuana production facilities are allowed in this zone as shown in the Land Use Ordinance, table of uses under Commercial.*
2. What are the June Marijuana Amendments list on website and what impact to this project.
   - *These amendments have no impact to this application and the application meets these requirements.*
3. Disagree that the project will "preserve and enhance the landscape and the design is compatible with the neighborhood".
   - *The reason for this statement is because everything proposed for this facility is allowed in the zone. The access driveway, fencing and landscaping is compatible with the surrounding properties and is not different from other properties, and the structure is a barn, which is compatible with at least two other properties that are visible from this property, which have existing barns. The proximity of the barn to*

the neighbors' residential house meets and exceeds the setbacks in the RC/I zone. The new structure is being built to resemble an agricultural barn and not an industrial building.

4. What impact will this facility have on water quality of neighbors' wells? How will the impervious surface and vehicles traffic impact the groundwater? Will chemicals from the production process enter the groundwater? Will any of the waste seep into the groundwater? Is the existing well sufficient, and what testing has been completed to date? Is it true for all four buildings?
    - *We do not believe this facility will have an impact on water quality of the neighbors' wells. The setback distances to all wells meet or exceed the protective well radius for the intended use. In addition, the facility at maximum operation will use about 200 gallons per day (gpd) for irrigation. This is roughly equivalent to a 2-bedroom house.*
    - *All runoff from the impervious surfacest5 will be collected and treated in the stormwater treatment system meeting the local requirements.*
    - *There are no chemicals from the process, directly entering the groundwater. The two processes at the facility include, removing impurities from the groundwater entering the facility using reverse osmosis and using fertilizer which is drip irrigated to the plants. The two waste streams, impurities from the groundwater and the irrigation water that is not absorbed in the soil, is very small and is collected and stored in a holding tank. The holding tank will be pumped on a regular basis.*
    - *A new well is proposed for the facility, and due to the minimal use and based on the existing well use we believe the new well will be adequate for the intended use.*
5. How often will truck deliveries occur?
    - *Trucks will deliver approximately only two to four times per month. The delivery vehicles are either a van or 16' box truck.*
6. Odor and rights of neighbors if facility generates strong odor?
    - *The facility will have charcoal filters and will not discharge to the exterior with exhaust fans. The air will be recirculated through the charcoal filters.*
7. Drying/curing room use, how many harvests occur per year?
    - *This is proprietary information based on the operators methods, however as stated directly above, the odor will be mitigated and monitored.*
8. How much noise from exhausts fans?
    - *There are no exhaust fans proposed for the facility, see response to #6.*
9. How much lighting, security concerns, question adequacy of fence?
    - *The lighting will be minimal and only be for security purposes. The lighting will be directed downward to minimize glare. A security plan has been submitted and fencing is being proposed to minimize access. There will also be a locked gate with a keypad at the access road so no one without the code can have access. The intent is to review the security plan with the police and meet their requirements.*
10. Does this proposal meet the 1000' setback stated in section 8.25.3 of the Land Use Ordinance.

- *Yes, the proposal meets the 1000' setback and the setback radius are shown on the plans. In addition, the licensed land surveyor has located the property boundary of the Montessori School and provided an additional plan showing the setbacks.*

11. Reference to section 8.25.6 LUO, questing the size of cultivation if products are sold on site.
    - *This site will have no retail sales therefore the cultivation size is not limited. This also means there will be no customers at the site. There is no future plan to sell retail at this site. If that was proposed it would have to be notified an approved by the planning board.*
12. Have there been amendments to the proposal since submission.
    - *The only amendments are more information has been submitted on the look of the building and the design of the landscape features.*
13. Did the PB members get to walk the site? Questions about meeting process?
    - *The planning board members did not attend the site walk, however it was filmed. Also, there is a site walk schedule for May 5th and 6th so that all members and the public can attend and maintain social distancing.*
14. Questions of property values of abutting properties?
    - *Although this appears not for the Board's review -- In response to the concern regarding property values, the data chart below suggests otherwise. Below is data as it relates to Green Tuck Farms (a cultivation and extraction facility opened in 2016 – followed by a store front in 2019) located in North Berwick. These are annual stats in North Berwick going back to 2014*:

North Berwick Residential Sales Stats					
	# of closings	**Average Sales Price**	**Median Sales Price**	**Low**	**High**
2014	49	$187,000	$190,000	$35,000	$413,000
2015	62	$184,000	$185,000	$35,000	$412,000
2016	57	$231,000	$224,000	$50,000	$460,000
2017	91	$233,000	$230,000	$46,000	$499,000
2018	73	$254,000	$260,000	$51,000	$670,000
2019	81	$272,000	$258,000	$54,000	$660,000
YTD 2020	24	$302,000	$300,000	$195,000	$480,000

15. Safety concerns.
    - *This question was asked in #9, and we refer to the answers there and the security plan that has been submitted. The application intends to work with the police department to meet their requirements to secure the facility and protect the neighborhood. This facility is set up with minimal access into the building. There is only one entry door with access to the outside the other doors are only emergency*

access from the interior to the exterior. In addition, this facility will have no retail at the site so customers will not be coming to the site.

(Letter from Paul and Deborah Amatucci April 13)

1. Residential neighborhood question?
   - *Unfortunately this area is zoned RC/I and this use is allowed. The owner is building the buildings to resemble the agricultural setting and not metal industrial buildings.*
2. *This question was addressed in number one in the first response section.*
3. Question of commercial setback from residential properties?
   - *This proposal exceeds the setback requirements from property lines and we are proposing the screening buffer.*
4. This question has been addressed in #9 above.
5. This question has been addressed in #9 above.
6. Question of signage and the impact of attention being drawn to the facility on property values.
   - There will be no signage for this facility. The idea is not to draw attention to the facility, as it will have no retail component. There will be no reason for the public to go to this facility except for the minimal deliveries.
7. This question is addressed above #14.
8. Question about operations and how the Town will monitor the process of the operators. Who checks the background of operators? Responsibility of owners and growers?
   - *The project will be approved with conditions and all conditions will need to be met to begin and continue operations. The town is only approving one building and requiring the applicant/owner to return to the planning board for additional building expansion, so this will be the check on the facility. The owners/operators are required to apply and be granted a license to operate the facility and this is the process of background checking the owners/operators.*
9. Question the odor issue and regulation of odor?
   - *The applicant is required to mitigate the odors and will be held to that requirement by the permit. A mitigation system is being put in place and if it does not mitigate the odors it will need to be upgraded or fixed to complete that task.*

(email from Ben Gauthier May3)

1. *Additional site walks are scheduled and the meeting is scheduled for June.*
2. T*his was addressed in several of the answers above, but to reiterate it is allowed in this zone, which is RC/I.*
3. *There will be increased traffic for a short time during construction as for the operation the traffic increase in negligible as stated in #5 above first section.*
4. *The proposal meets or exceeds all the setbacks in the zone.*
5. *Addressed above in #1 (first section).*
6. *Addressed above in #3&4 (first section)*

7. *This is not true and is addressed above in the responses and on the plans.*

If you require additional information or have any questions or comments, please call (603) 659-4979 x302.

Sincerely,

Michael J. Sievert PE
President

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2020-05-27 05:49 am

GENERAL NOTES:

1. OWNER OF RECORD:
   CAF REALTY OF MAINE, LLC
   279 MERRY HILL ROAD
   BARRINGTON, NH 03825
   Y.C.R.D. BK 18108, PG 837
2. LOT AREA: 17.9 ACRES
3. REFERENCE PLANS:
   A. "FINAL PLAN ROBERGE SUBDIVISION" DATED MAY 4, 2006, LAST REVISED NOVEMBER 20, 2007, SURVEYED BY ROARING ROOK CONSULTANTS AND RECORDED IN THE YORK COUNTY REGISTRY OF DEEDS PLAN BOOK 330 PAGE 11.
   B. "LOT LINE ADJUSTMENT PLAN MAP 70, LOT 16C" DATED OCTOBER 17, 2008, SURVEYED BY ROARING BROOK CONSULTANTS AND RECORDED IN YCRD PLAN BOOK 333 PAGE 4.
5. IMPERVIOUS SURFACE RATIO FOR SUBJECT LOT:
   EXISTING = 2.9% (22,501 S.F.)
   PROPOSED = 5.0% (39,033 S.F.)
6. ALL OUTSIDE CONSTRUCTION RELATED ACTIVITY FOR THE DEVELOPMENT OF THIS SITE IS RESTRICTED TO THE HOURS OF 7:00 A.M. TO 5:00 P.M. MONDAY THROUGH FRIDAY AND 8:00 A.M. TO 3:00 P.M. SATURDAY.
7. ALL EXTERIOR LIGHTING MUST BE FULLY SHIELDED AND NOT PROJECT GLARE TOWARD ANY ABUTTING PROPERTIES.
8. ACCESS INTO THE SITE FOR FIRE APPARATUS SHALL BE MAINTAINED AT ALL TIMES DURING THE CONSTRUCTION PROCESS.
9. BEARINGS SHOWN HEREON REFER TO GRID NORTH AND ARE BASED ON THE MAINE COORDINATESYSTEM, NAD 83 AS DETERMINED BY GPS SURVEY OBSERVATIONS. ELEVATIONS ARE BASED ON NAVD88 VERTICAL DATUM.
10. SNOW SHALL BE CLEARED FROM ALL ACCESS AND PARKING AREAS TO MAINTAIN SAFE ACCESS..
11. THE GENERAL CONTRACTOR IS RESPONSIBLE TO VERIFY ALL DIMENSIONS, ELEVATIONS AND CONDITIONS AT THE SITE. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD BEFORE PROCEEDING WITH THE AFFECTED PART OF THE WORK. THIS INCLUDES DISCREPANCIES BETWEEN THESE PLANS AND ANY OTHER PLANS OR CONTRACT DOCUMENTS.

SITE DATA BLOCK

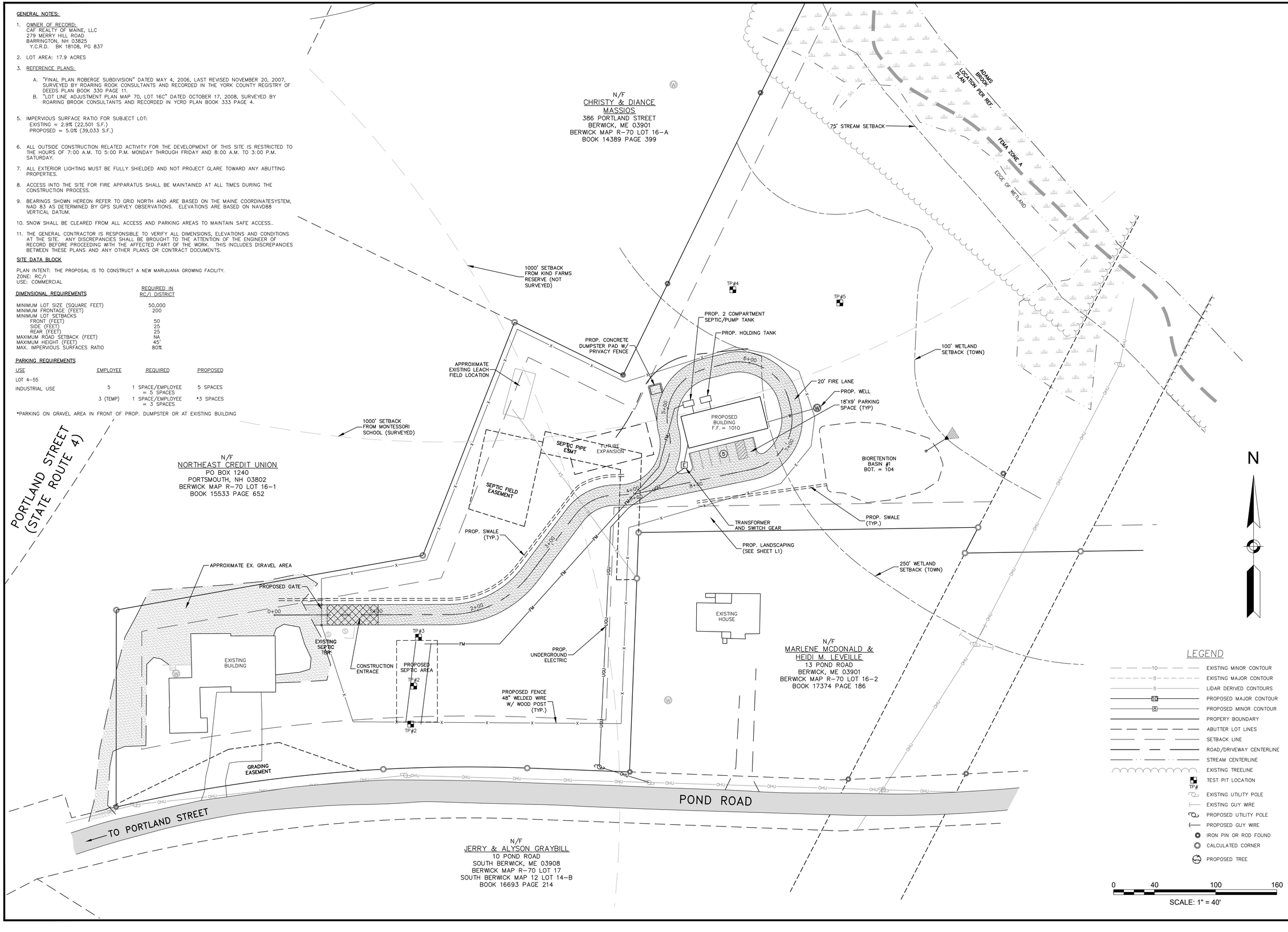
PLAN INTENT: THE PROPOSAL IS TO CONSTRUCT A NEW MARIJUANA GROWING FACILITY.
ZONE: RC/I
USE: COMMERCIAL

DIMENSIONAL REQUIREMENTS	REQUIRED IN RC/I DISTRICT
MINIMUM LOT SIZE (SQUARE FEET)	50,000
MINIMUM FRONTAGE (FEET)	200
MINIMUM LOT SETBACKS	
FRONT (FEET)	50
SIDE (FEET)	25
REAR (FEET)	25
MAXIMUM ROAD SETBACK (FEET)	NA
MAXIMUM HEIGHT (FEET)	45'
MAX. IMPERVIOUS SURFACES RATIO	80%

PARKING REQUIREMENTS

USE	EMPLOYEE	REQUIRED	PROPOSED
LOT 4-55			
INDUSTRIAL USE	5	1 SPACE/EMPLOYEE = 5 SPACES	5 SPACES
	3 (TEMP)	1 SPACE/EMPLOYEE = 3 SPACES	*3 SPACES

*PARKING ON GRAVEL AREA IN FRONT OF PROP. DUMPSTER OR AT EXISTING BUILDING



NO.	DATE
1.	5/27/20 MCS
2.	5/20/20 MCS
	2/5/20 MCS

REVISIONS

INITIAL SUBMISSION TO THE TOWN OF BERWICK
UPDATED WETLAND AND SCHOOL SETBACKS
REVISED SITE LAYOUT

STATE OF MAINE * LICENSED PROFESSIONAL ENGINEER * MICHAEL J. SIEVERT 8191

DATE: 1/16/20
SCALE: 1" = 40'
DESIGNED BY: MCS
DRAWN BY: MCS
APPROVED BY: MJS
FILE: 19066 civilf.dwg

SITE PLAN
prepared for
CAF REALTY MAINE
TAX MAP R-70, LOT 16
11 POND ROAD BERWICK, ME

MJS ENGINEERING, P.C.
CIVIL • STRUCTURAL • ENVIRONMENTAL
5 Railroad St., P.O. Box 359
Kennebunk, ME 04043
Phone: (603) 969-6673 FAX: (603) 659-4627
E-MAIL: MJS@MJS-ENGINEERING.COM

JOB: 19-066

C1

GRADING, DRAINAGE, UTILITY & EROSION CONTROL NOTES

1. ALL EROSION AND SEDIMENTATION CONTROL STRUCTURES SHALL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE VEGETATION IS ESTABLISHED AND THE GROUND SURFACE IS STABILIZED. EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE MONITORED BY THE APPLICANT ON A PERIODIC BASIS DURING CONSTRUCTION AND ANY DEFICIENCIES SHALL BE CORRECTED AS SOON AS POSSIBLE.
2. REFER TO CONSTRUCTION AND SEQUENCING AND EROSION CONTROL NOTES ON SHEET D1.
3. ALL DRIVEWAY AND PARKING AREA WORK SHALL BE IN ACCORDANCE WITH MEDOT FOR SELECT MATERIALS.
4. ALL DISTURBED AREAS NOT PAVED OR OTHERWISE TREATED SHALL RECEIVE 4" OF LOAM, SEED AND MULCH AS SPECIFIED IN THE NOTES ON SHEET D1.
5. COMPACTION REQUIREMENTS:

LOCATION:	MINIMUM COMPACTION*
BELOW PAVED OR CONCRETE AREAS	95%
TRENCH BEDDING MATERIAL AND SAND BLANKET BACKFILL	95%
BELOW LOAM AND SEED AREAS	90%

*ALL PERCENTAGES OF COMPACTION SHALL BE OF THE MAXIMUM PROCTOR DENSITY.

6. EROSION CONTROL DEVICES SHALL BE INSPECTED AFTER EACH RAIN STORM OF 0.25 INCHES OR GREATER. DAMAGED EROSION CONTROL DEVICES SHALL BE REPAIRED/MODIFIED AS NECESSARY.
7. ALL TEMPORARY LOAM STOCKPILES SHALL RECEIVE TEMPORARY EROSION CONTROL MEASURES.
8. CARE SHALL BE TAKEN WHEN CONSTRUCTING THE DRIVEWAY OVER THE EXISTING FORCE MAIN. THE FORCE MAIN SHALL HAVE ADEQUATE PROTECTION FROM FROST, MINIMUM 4' OF COVER TO SURFACE OR PROPERLY PROTECTED WITH INSULATION AS SHOWN IN THE STANDARD TRENCH DETAIL ON SHEET D3.

UTILITIES NOTE:
ALL ELECTRIC, GAS, TELEPHONE, WATER, SEWER AND DRAIN SERVICES ARE SHOWN IN SCHEMATIC FASHION. THEIR LOCATIONS ARE NOT PRECISE OR NECESSARILY ACCURATE. NO WORK WHATSOEVER SHALL BE UNDERTAKEN ON THIS SITE USING THIS PLAN TO LOCATE THE ABOVE SERVICES. CONSULT WITH THE PROPER AUTHORITIES CONCERNED WITH THE SUBJECT SERVICE LOCATION FOR INFORMATION REGARDING SUCH. CALL DIG-SAFE: 1-888-DIG-SAFE (1-888-344-7233)

N/F
CHRISTY & DIANCE MASSIOS
386 PORTLAND STREET
BERWICK, ME 03901
BERWICK MAP R-70 LOT 16-A
BOOK 14389 PAGE 399

N/F
NORTHEAST CREDIT UNION
PO BOX 1240
PORTSMOUTH, NH 03802
BERWICK MAP R-70 LOT 16-1
BOOK 15533 PAGE 652

N/F
MARLENE MCDONALD & HEIDI M. LEVEILLE
13 POND ROAD
BERWICK, ME 03901
BERWICK MAP R-70 LOT 16-2
BOOK 17374 PAGE 186

N/F
JERRY & ALYSON GRAYBILL
10 POND ROAD
SOUTH BERWICK, ME 03908
BERWICK MAP R-70 LOT 17
SOUTH BERWICK MAP 12 LOT 14-B
BOOK 16693 PAGE 214

PORTLAND STREET (STATE ROUTE 4)
POND ROAD
TO PORTLAND STREET
ADAMS BROOK
LOCATION PER REF.
FEMA ZONE A
EDGE OF WETLAND
75' STREAM SETBACK
100' WETLAND SETBACK (TOWN)
250' WETLAND SETBACK (TOWN)
1000' SETBACK FROM KIND FARMS RESERVE (NOT SURVEYED)
1050' BUFFER FROM MARIJUANA RELATED BUSINESS
1050' BUFFER FROM CHILDLIGHT MONTESSORI SCHOOL
1000' SETBACK FROM MONTESSORI SCHOOL (SURVEYED)
APPROXIMATE EXISTING LEACH FIELD LOCATION
PROP. CONCRETE DUMPSTER PAD W/ PRIVACY FENCE
PROP. 2 COMPARTMENT SEPTIC/PUMP TANK
PROP. HOLDING TANK
PROPOSED BUILDING F.F. = 1010
20' FIRE LANE
PROP. WELL
PROP. TOP OF BERM ELEV. = 107.32
PROP. OUTLET #1 SEE RIPRAP DETAIL FOR DIMENSIONS
BIORETENTION BASIN #1 BOT. = 104
SEPTIC PIPE ESMT
FUTURE EXPANSION
SEPTIC FIELD EASEMENT
PROP. SWALE (TYP.)
PROP. 15" CPP INV. IN = 108.02
PROP. 15" CPP INV. OUT = 107.17
TRANSFORMER AND SWITCH GEAR
EXISTING FORCE MAIN SEE NOTE
PROPOSED 20' WIDE GRAVEL DRIVEWAY
PROP. UNDERGROUND ELECTRIC
PROPOSED FENCE 48" WELDED WIRE W/ WOOD POST (TYP.)
APPROXIMATE EX. GRAVEL AREA
PROPOSED GATE
EXISTING SEPTIC TBR
CONSTRUCTION ENTRANCE
PROPOSED SEPTIC AREA
EXISTING BUILDING
EXISTING HOUSE
GRADING EASEMENT
TP#1
TP#2
TP#3
TP#4
TP#5
N63° 57' 41"E 118.33
N28° 02' 19"E 100.00
N26° 02' 19"E 647.68
N28° 02' 19"E 208.60
N21° 28' 15"E 248.23
N79° 53' 42"E 305.19
N00° 04' 25"E 193.18
S63° 57' 41"W 332.96
S89° 08' 07"W 113.41
N27° 16' 48"E 28.35
S02° 10' 44"W 45.06
S02° 10' 44"W 189.97
N87° 49' 16"W 100.41
L=140.99, R=1534.08
L=265.34, R=1534.08
R=50.00
R=110.34
R=109.46

LEGEND

- EXISTING MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- LIDAR DERIVED CONTOURS
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- PROPERY BOUNDARY
- ABUTTER LOT LINES
- SETBACK LINE
- ROAD/DRIVEWAY CENTERLINE
- STREAM CENTERLINE
- EXISTING TREELINE
- TEST PIT LOCATION (TP#)
- EXISTING UTILITY POLE
- EXISTING GUY WIRE
- PROPOSED UTILITY POLE
- PROPOSED GUY WIRE
- IRON PIN OR ROD FOUND
- CALCULATED CORNER
- PROPOSED TREE

0 40 100 160
SCALE: 1" = 40'

N

NO.	REVISIONS	DATE	INT.
1.	REVISED SITE LAYOUT	5/27/20	MCS
2.	REVISED BERM FOR BARN SCREENING	4/8/20	MCS
	INITIAL SUBMISSION TO THE TOWN OF BERWICK	2/5/20	MCS

STATE OF MAINE * PROFESSIONAL ENGINEER * MICHAEL J. SIEVERT 8191 LICENSED

DATE: 1/16/20
SCALE: 1" = 40'
DESIGNED BY: MCS
DRAWN BY: MCS
APPROVED BY: MJS
FILE: 19066 civil.dwg

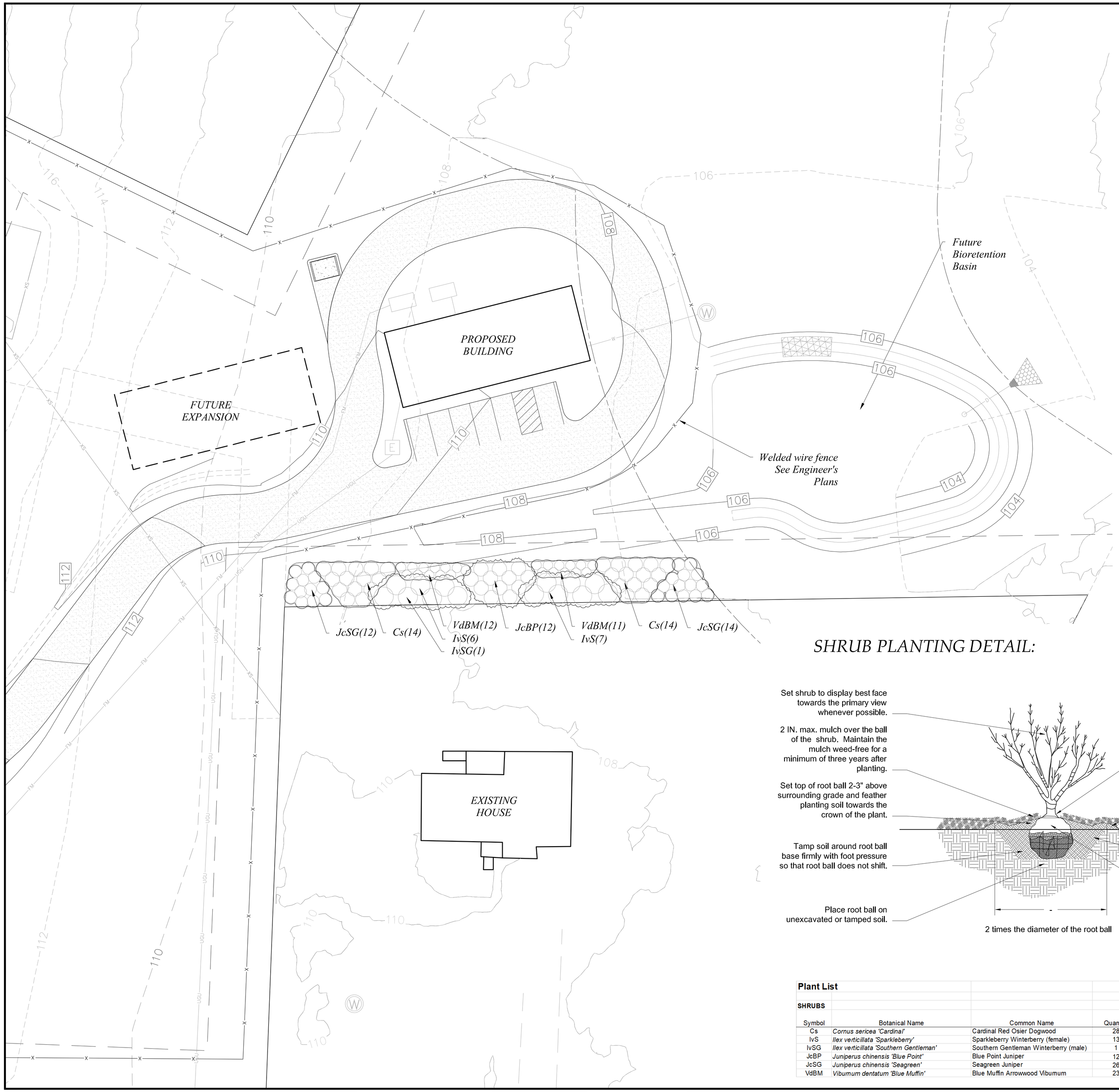
GRADING, DRAINAGE, AND UTILITIES PLAN

prepared for
CAF REALTY MAINE
TAX MAP R-70, LOT 16
11 POND ROAD BERWICK, ME

MJS ENGINEERING, P.C.
CIVIL • STRUCTURAL • ENVIRONMENTAL
5 RAILROAD ST., P.O. BOX 359
NEWMARKET, NH 03857
PHONE: (603) 659-6560 FAX: (603) 659-4627
E-MAIL: MJS@MJS-ENGINEERING.COM

JOB: 19-066

C2



LANDSCAPE NOTES:

1. Design is based on drawings by MJS Engineering, P.C. dated May 27, 2020, and may require adjustment due to actual field conditions.
2. The contractor shall follow best management practices during construction and shall take all means necessary to stabilize and protect the site from erosion.
3. Erosion Control shall be in place prior to construction.
4. Erosion Control to consist of Hay Bales and Erosion Control Fabric shall be staked in place between the work and Water bodies, Wetlands and/or drainage ways prior to any construction.
5. The Contractor shall verify layout and grades and inform the Landscape Architect or Client's Representative of any discrepancies or changes in layout and/or grade relationships prior to construction.
6. It is the contractor's responsibility to verify drawings provided are to the correct scale prior to any bid, estimate or installation. A graphic scale bar has been provided on each sheet for this purpose. If it is determined that the scale of the drawing is incorrect, the landscape architect will provide a set of drawings at the correct scale, at the request of the contractor.
7. Trees to Remain within the construction zone shall be protected from damage for the duration of the project by snow fence or other suitable means of protection to be approved by Landscape Architect or Client's Representative. Snow fence shall be located at the drip line at a minimum and shall include any and all surface roots. Do not fill or mulch on the trunk flare. Do not disturb roots. In order to protect the integrity of the roots, branches, trunk and bark of the tree(s) no vehicles or construction equipment shall drive or park in or on the area within the drip line(s) of the tree(s). Do not store any refuse or construction materials or portalets within the tree protection area.
8. This plan is for review purposes only, NOT for Construction. Construction Documents will be provided upon request.
9. Location, support, protection, and restoration of all existing utilities and appurtenances shall be the responsibility of the Contractor.
10. The Contractor shall verify exact location and elevation of all utilities with the respective utility owners prior to construction. Call DIGSAFE at 1-888-344-7233.
11. The Contractor shall procure any required permits prior :o construction.
12. Prior to any landscape construction activities Contractor shall test all existing loam and loam from off-site intended to be used for lawns and plant beds using a thorough sampling throughout the supply. Soil testing shall indicate levels of pH, nitrates, macro and micro nutrients, texture, soluble salts, and organic matter. Contractor shall provide Landscape Architect with test results and recommendations from the testing facility along with soil amendment plans as necessary for the proposed plantings to thrive. All loam to be used on site shall be amended as approved by the Landscape Architect prior to placement.
13. Contractor shall notify landscape architect or owner's representative immediately if at any point during demolition or construction a site condition is discovered which may negatively impact the completed project. This includes, but is not limited to, unforeseen drainage problems, unknown subsurface conditions, and discrepancies between the plan and the site. If a contractor is aware of a potential issue, and does not bring it to the attention of the landscape architect or owner's representative immediately, they may be responsible for the labor and materials associated with correcting the problem.
14. The Contractor shall furnish and plant all plants shown on the drawings and listed thereon. All plants shall be nursery-grown under climatic conditions similar to those in the locality of the project. Plants shall conform to the botanical names and standards of size, culture, and quality for the highest grades and standards as adopted by the American Association of Nurserymen, Inc. in ANSI Z60.1 of the American Standard of Nursery Stock, American Standards Institute, Inc. 230 Southern Building, Washington, D.C. 20005.
15. A complete list of plants, including a schedule of sizes, quantities, and other requirements is shown on the drawings. In the event that quantity discrepancies or material omissions occur in the plant materials list, the planting plans shall govern.
16. All plants shall be legibly tagged with proper botanical name.
17. The Contractor shall guarantee all plants for not less than one year from time of acceptance.
18. Owner or Owner's Representative will inspect plants upon delivery for conformity to Specification requirements. Such approval shall not affect the right of inspection and rejection during or after the progress of the work. The Owner reserves the right to inspect and/or select all trees at the place of growth and reserves the right to approve a representative sample of each type of shrub, herbaceous perennial, annual, and ground cover at the place of growth. Such sample will serve as a minimum standard for all plants of the same species used in this work.
19. No substitutions of plants may be made without prior aporoval of the Owner or the Owner's Representative for any reason.
20. All landscaping shall be provided with either of the following
    a. An underground sprinkling system
    b. An outside hose attachment within 150 feet
21. If an automatic irrigation system is installed, all irrigation valve boxes shall be located within planting bed areas.
22. The contractor is responsible for all plant material from the time their work commences until final acceptance. This includes but is not limited to maintaining all plants in good condition, the security of the plant material once delivered to the site, and watering of plants. Plants shall be appropriately watered prior to, during and after planting. It is the contractor's responsibility to provide water from off site, should it not be available on site.
23. All disturbed areas will be dressed with 6" of topsoil and planted as noted on the plans or seeded except plant beds. Plant beds shall be prepared to a depth of 12" with 75% loam and 25% compost.
24. Trees, ground cover, and shrub beds shall be mulched to a depth of 2" with one-year-old, well-composted, shredded native bark not longer than 4" in length and ½" in width, free of woodchips and sawdust. Mulch for ferns and herbaceous perennials shall be no longer than 1" in length. Trees in lawn areas shall be mulched in a 5' diameter min. saucer. Color of mulch shall be black.
25. Drip strip shall extend to 6" beyond roof overhang and shall be edged with 3/16" thick metal edger.
26. In no case shall mulch touch the stem of a plant nor shall mulch ever be more than 3" thick total (including previously applied mulch) over the root ball of any plant.
27. Secondary lateral branches of deciduous trees overhanging vehicular and pedestrian travel ways shall be pruned up to a height of 6' to allow clear and safe passage of vehicles and pedestrians under tree canopy.
28. Snow shall be stored a minimum of 5' from shrubs and trunks of trees.
29. Landscape Architect is not responsible for the means and methods of the contractor.

SHRUB PLANTING DETAIL:

Plant List

SHRUBS

Symbol	Botanical Name	Common Name	Quantity	Size	Comments
Cs	*Cornus sericea 'Cardinal'*	Cardinal Red Osier Dogwood	28	5 gal.	
IvS	*Ilex verticillata 'Sparkleberry'*	Sparkleberry Winterberry (female)	13	3-4'	B&B
IvSG	*Ilex verticillata 'Southern Gentleman'*	Southern Gentleman Winterberry (male)	1	3-4'	B&B
JcBP	*Juniperus chinensis 'Blue Point'*	Blue Point Juniper	12	6-7'	B&B
JcSG	*Juniperus chinensis 'Seagreen'*	Seagreen Juniper	26	2-2.5'	B&B
VdBM	*Viburnum dentatum 'Blue Muffin'*	Blue Muffin Arrowwood Viburnum	23	5 gal.	

0 5 10 20 40

N

woodburn &company
LANDSCAPE ARCHITECTURE
103 Kent Place Newmarket, New Hampshire Phone: 603.659.5949

NO.	REVISIONS	DATE	INT.
2.	PER REVISED SITE PLAN	5/27/20	LF
1.	PER REVISED SITE PLAN – BERM	4/9/20	LF
0.	INITIAL SUBMISSION TO THE TOWN OF BERWICK	3/13/20	LF

DATE: 3/13/20
SCALE: 1" = 20'
DESIGNED BY: WL & LF
DRAWN BY: LF
APPROVED BY: RW
FILE:

LANDSCAPE PLAN

prepared for
CAF REALTY MAINE
TAX MAP R-70, LOT 16
11 POND ROAD BERWICK, ME

MJS ENGINEERING, P.C.
CIVIL • STRUCTURAL • ENVIRONMENTAL
5 Railroad St., P.O. Box 359
Newmarket, NH 03857
Phone: (603) 659-4972 FAX: (603) 659-4627
E-MAIL: MJS@MJS-ENGINEERING.COM

JOB: 19-066

L1

CONSTRUCTION SEQUENCING AND EROSION CONTROL NOTES:

AREA OF DISTURBANCE/STABILIZATION

A. THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION, BUT IN NO CASE SHALL THE AREA OF UNSTABILIZED SOIL EXCEED 5 ACRES AT ANY ONE TIME BEFORE THE AREA IS STABILIZED.
B. AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
   1. IN AREAS TO BE PAVED, BASE COURSE GRAVELS MEETING THE GRADATION REQUIREMENTS OF NHDOT STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION, 2006, ITEM NO. 304.1 OR 304.2 HAVE BEEN INSTALLED;
   2. IN AREAS NOT TO BE PAVED
      2.A. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
      2.B. A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED;
      2.C. EROSION CONTROL BLANKETS HAVE BEEN INSTALLED IN ACCORDANCE WITH ENV-WQ 1506.03.
C. DISTURBED AREAS SHALL BE TEMPORARILY STABILIZED WITHIN 45 DAYS AND PERMANENTLY STABILIZED NO LATER THAN 3 DAYS AFTER FINAL GRADING.

EROSION CONTROL PRACTICES:

A. INSTALLATION:
   1. INSTALL ALL EROSION CONTROLS AS SHOWN ON THE GRADING PLAN, TYPICAL DETAILS, AND IN CONFORMANCE WITH THE EROSION AND SEDIMENT CONTROL NOTES ON THIS PAGE. MANUFACTURER'S SPECIFICATIONS SHALL BE FOLLOWED.
B. INSPECTION:
   1. INSPECT ALL EROSION CONTROLS WEEKLY AND AFTER EVERY RAIN EVENT OF 0.5 INCHES OR GREATER UNLESS OTHERWISE NOTED.
   2. TEMPORARY STABILIZATION PRACTICES SHALL BE INSPECTED ONCE PER WEEK DURING CONSTRUCTION UNTIL EXPOSED SURFACES ARE STABILIZED.
   3. ANY SIGNS OF RILL OR GULLY EROSION SHALL BE IMMEDIATELY REPAIRED.
C. MAINTENANCE:
   1. MAINTAIN EROSION CONTROLS PER THE TYPICAL DETAILS AND IN CONFORMANCE WITH THE EROSION AND SEDIMENT CONTROL NOTES ON THIS PAGE.
D. REMOVAL
   1. ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED ONCE 85% VEGETATIVE COVER HAS BEEN ESTABLISHED.
   2. AFTER REMOVAL, ALL DISTURBED AREAS SHALL BE REGRADED, FERTILIZED, AND RESEEDED. MONITOR TO ENSURE VEGETATIVE GROWTH IS ESTABLISHED AND REPAIR AS NEEDED UNTIL MINIMUM OF 85% VEGETATIVE COVER IS ESTABLISHED.

COLD WEATHER SITE STABILIZATION

A. TO ADEQUATELY PROTECT WATER QUALITY DURING COLD WEATHER AND DURING SPRING RUNOFF, THE ADDITIONAL STABILIZATION TECHNIQUES SPECIFIED IN THIS SECTION SHALL BE EMPLOYED DURING THE PERIOD FROM OCTOBER 15 THROUGH MAY 1.
B. SUBJECT TO (C), BELOW, THE AREA OF EXPOSED, UNSTABILIZED SOIL SHALL BE:
   1. LIMITED TO ONE ACRE; AND
   2. PROTECTED AGAINST EROSION BY THE METHODS DESCRIBED IN THIS SECTION PRIOR TO ANY THAW OR SPRING MELT EVENT.
C. THE ALLOWABLE AREA OF EXPOSED SOIL MAY BE INCREASED IF A WINTER CONSTRUCTION PLAN IS DEVELOPED BY A QUALIFIED ENGINEER OR A CPESC SPECIALIST AND SUBMITTED TO THE DEPARTMENT FOR APPROVAL AS A REQUEST TO WAIVE THE ONE-ACRE LIMIT.
D. SUBJECT TO (F) AND (G), BELOW, ALL PROPOSED VEGETATED AREAS HAVING A SLOPE OF LESS THAN 15% THAT DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15, OR THAT ARE DISTURBED AFTER OCTOBER 15, SHALL BE SEEDED AND COVERED WITH 3 TO 4 TONS OF HAY OR STRAW MULCH PER ACRE SECURED WITH ANCHORED NETTING OR TACKIFIER OR WITH AT LEAST 2 INCHES OF EROSION CONTROL MIX MEETING THE CRITERIA OF ENV-WQ 1506.05(B).
E. SUBJECT TO (F) AND (G), BELOW, ALL PROPOSED VEGETATED AREAS HAVING A SLOPE OF 15% OR GREATER THAT DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15, OR THAT ARE DISTURBED AFTER OCTOBER 15, SHALL BE SEEDED AND COVERED WITH A PROPERLY INSTALLED AND ANCHORED EROSION CONTROL BLANKET OR WITH AT LEAST 4 INCHES OF EROSION CONTROL MIX MEETING THE CRITERIA OF ENV-WQ 1506.05(B).
F. ANCHORED HAY MULCH OR EROSION CONTROL MIX THAT MEETS THE CRITERIA OF ENV-WQ 1506.05(B) SHALL NOT BE INSTALLED OVER SNOW GREATER THAN ONE INCH IN DEPTH.
G. EROSION CONTROL BLANKETS SHALL NOT BE INSTALLED OVER SNOW GREATER THAN ONE INCH IN DEPTH OR ON FROZEN GROUND.
H. ALL PROPOSED STABILIZATION IN ACCORDANCE WITH (D) OR (E), ABOVE, SHALL BE COMPLETED WITHIN A DAY OF ESTABLISHING THE GRADE THAT IS FINAL OR THAT OTHERWISE WILL EXIST FOR MORE THAN 5 DAYS.
I. ALL DITCHES OR SWALES THAT DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15, OR THAT ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS, AS DETERMINED BY THE OWNER'S ENGINEERING CONSULTANT.
J. AFTER OCTOBER 15, INCOMPLETE ROAD OR PARKING AREAS WHERE ACTIVE CONSTRUCTION OF THE ROAD OR PARKING AREA HAS STOPPED FOR THE WINTER SEASON SHALL BE PROTECTED WITH A MINIMUM 3-INCH LAYER OF BASE COURSE GRAVELS MEETING THE GRADATION REQUIREMENTS OF NHDOT STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION, 2016, TABLE 304-1, ITEM NO. 304.1, 304.2, OR 304.3, AVAILABLE AS NOTED IN APPENDIX B.

TEMPORARY VEGETATION

A. SITE PREPARATION
   1. INSTALL EROSION AND SEDIMENT CONTROL MEASURES AS SPECIFIED ABOVE.
   2. ENSURE RUNOFF IS DIVERTED FROM SEEDED AREA.
   3. ON SLOPES OF 4:1 OR STEEPER, CREATE HORIZONTAL GROOVES PERPENDICULAR TO THE DIRECTION OF THE SLOPE TO CATCH SEED AND REDUCE RUNOFF.
B. SEED BED PREPARATION
   1. REMOVE STONES AND TRASH FROM AREA TO BE SEEDED.
   2. COMPACTED SOIL SHALL BE LOOSENED TO A DEPTH OF 2 INCHES BEFORE APPLYING FERTILIZER, LIME, AND SEED.
   3. APPLY FERTILIZER AT A RATE OF 600 LBS PER ACRE OF 10-10-10. APPLY LIMESTONE (EQUIVALENT TO 50 PERCENT CALCIUM PLUS MAGNESIUM OXIDE) AT A RATE OF 3 TONS PER ACRE.
C. SEEDING
   1. SEED PER THE FOLLOWING RECOMMENDATIONS

SEASON	APPLICATION DATE	MIXTURE TYPE	QUANTITY (lb./Ac.)
EARLY SPRING	NO LATER THAN 5/15	OATS	80
LATE SPRING/ FALL	4/1 TO 6/1 & 8/15 TO 9/15	PERENNIAL RYE	30
EARLY SPRING/ FALL	4/1 TO 5/15 & 8/15 TO 9/15	ANNUAL RYE	40
FALL	8/15 TO 9/15	WINTER RYE	112

   2. APPLY SEED UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL, CULTIPACKER TYPE SEEDER OR HYDROSEEDER (SLURRY INCLUDING SEED AND FERTILIZER). NORMAL SEEDING DEPTH IS FROM ¼ TO ½ INCH. HYDROSEEDING THAT INCLUDES MULCH MAY BE LEFT ON SOIL SURFACE. SEEDING RATES MUST BE INCREASED 10% WHEN HYDROSEEDING.
   3. TEMPORARY SEEDING SHALL OCCUR PRIOR TO SEPTEMBER 15TH IN THE YEAR IN WHICH THE AREA BEING SEEDED WAS DISTURBED.
   4. AREAS SEEDED BETWEEN MAY 15TH AND AUGUST 15TH SHALL BE COVERED WITH HAY OR STRAW MULCH MEETING THE FOLLOWING CRITERIA:
      4.A. HAY AND STRAW MULCHES SHALL BE ANCHORED WITH MULCH NETTING OR TACKIFIER SO THAT THEY ARE NOT BLOWN AWAY BY WIND OR WASHED AWAY BY FLOWING WATER;
      4.B. MULCH MATERIALS SHALL BE SELECTED BASED UPON SOILS, SLOPE, FLOW CONDITIONS, AND TIME OF YEAR;
      4.C. HAY OR STRAW MULCH SHALL BE APPLIED AT A RATE OF 1.5 TO 2 TONS PER ACRE, EQUIVALENT TO 70 TO 90 POUNDS PER 1,000 SQUARE FEET;
   5. IF VEGETATED GROWTH COVERING AT LEAST 85% OF THE DISTURBED AREA IS NOT ACHIEVED PRIOR TO OCTOBER 15TH, ONE OR MORE ADDITIONAL EROSION CONTROL METHODS SHALL BE IMPLEMENTED.
D. MAINTENANCE
   1. TEMPORARY SEEDING SHOULD BE INSPECTED WEEKLY AND AFTER ANY RAINFALL EXCEEDING ½ INCH IN 24 HOURS ON ACTIVE CONSTRUCTION SITES. TEMPORARY SEEDING SHOULD ALSO BE INSPECTED JUST PRIOR TO SEPTEMBER 15, TO ASCERTAIN WHETHER ADDITIONAL SEEDING IS REQUIRED TO PROVIDE STABILIZATION OVER THE WINTER PERIOD.
   2. BASED ON INSPECTION, AREAS SHOULD BE RESEEDED TO ACHIEVE FULL STABILIZATION OF EXPOSED SOILS. IF IT IS TOO LATE IN THE PLANTING SEASON TO APPLY ADDITIONAL SEED, THEN OTHER TEMPORARY STABILIZATION MEASURES SHOULD BE IMPLEMENTED.
   3. AT A MINIMUM, 85% OF THE SOIL SURFACE SHOULD BE COVERED BY VEGETATION.
   4. IF ANY EVIDENCE OF EROSION OR SEDIMENTATION IS APPARENT, REPAIRS SHOULD BE MADE AND AREAS SHOULD BE RESEEDED, WITH OTHER TEMPORARY MEASURES (E.G., MULCH) USED TO PROVIDE EROSION PROTECTION DURING THE PERIOD OF VEGETATION ESTABLISHMENT.

PERMANENT VEGETATION

A. SITE PREPARATION
   1. REFER TO SITE PREPARATION FOR TEMPORARY SEEDING.
B. SEED BED PREPARATION
   1. REFER TO SEED BED PREPARATION FOR TEMPORARY SEEDING IN CONJUNCTION WITH THESE NOTES.
   2. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRING TOOTH HARROW OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLY UNIFORM, FINE SEEDBED IS PREPARED. ALL BUT CLAY OR SILTY SOILS AND COARSE SANDS SHOULD BE ROLLED TO FIRM THE SEEDBED WHEREVER FEASIBLE.
   3. REMOVE FROM THE SURFACE ALL STONES 2 INCHES OR LARGER IN ANY DIMENSION. REMOVE ALL OTHER DEBRIS, SUCH AS WIRE, CABLE, TREE ROOTS, CONCRETE, CLODS, LUMPS, TRASH OR OTHER UNSUITABLE MATERIAL.
   4. INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED; THE AREA MUST BE TILLED AND FIRMED AS ABOVE.
   5. WHERE THE SOIL HAS BEEN COMPACTED BY CONSTRUCTION OPERATIONS, LOOSEN SOIL TO A DEPTH OF 2 INCHES BEFORE APPLYING FERTILIZER, LIME AND SEED.
   6. APPLY FERTILIZER AT A RATE OF 600 LBS PER ACRE OF 10-10-10. APPLY LIMESTONE (EQUIVALENT TO 50 PERCENT CALCIUM PLUS MAGNESIUM OXIDE) AT A RATE OF 3 TONS PER ACRE.
C. SEEDING
   1. UNLESS OTHERWISE NOTED, GRASS SEED MIXTURE 'C' SHALL BE APPLIED AT THE SPECIFIED RATE AS NOTED IN THE 'SEED MIXTURES FOR PERMANENT VEGETATION' TABLE.
   2. APPLY SEED UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL, CULTIPACKER TYPE SEEDER OR HYDROSEEDER (SLURRY INCLUDING SEED AND FERTILIZER). NORMAL SEEDING DEPTH IS FROM ¼ TO ½ INCH. HYDROSEEDING THAT INCLUDES MULCH MAY BE LEFT ON SOIL SURFACE. SEEDING OPERATIONS SHOULD BE ON THE CONTOUR.
   3. WHERE FEASIBLE, EXCEPT WHERE EITHER A CULTIPACKER TYPE SEEDER OR HYDROSEEDER IS USED, THE SEEDBED SHOULD BE FIRMED FOLLOWING SEEDING OPERATIONS WITH A ROLLER, OR LIGHT DRAG.
   4. WHEN HYDROSEEDING (HYDRAULIC APPLICATION), PREPARE THE SEEDBED AS SPECIFIED ABOVE OR BY HAND RAKING TO LOOSEN AND SMOOTH THE SOIL AND TO REMOVE SURFACE STONES LARGER THAN 2 INCHES IN DIAMETER.
   5. SLOPES MUST BE NO STEEPER THAN 2 TO 1.
   6. LIME AND FERTILIZER MAY BE APPLIED SIMULTANEOUSLY WITH THE SEED. THE USE OF FIBER MULCH ON CRITICAL AREAS IS NOT RECOMMENDED (UNLESS IT IS USED TO HOLD STRAW OR HAY). BETTER PROTECTION IS GAINED BY USING STRAW MULCH AND HOLDING IT WITH ADHESIVE MATERIALS OR 500 POUNDS PER ACRE OF WOOD FIBER MULCH.
   7. SEEDING RATES MUST BE INCREASED 10% WHEN HYDROSEEDING.
   8. TEMPORARY SEEDING SHALL OCCUR PRIOR TO SEPTEMBER 15TH IN THE YEAR IN WHICH THE AREA BEING SEEDED WAS DISTURBED.
   9. AREAS SEEDED BETWEEN MAY 15TH AND AUGUST 15TH SHALL BE COVERED WITH HAY OR STRAW MULCH MEETING THE FOLLOWING CRITERIA:
      9.A. HAY AND STRAW MULCHES SHALL BE ANCHORED WITH MULCH NETTING OR TACKIFIER SO THAT THEY ARE NOT BLOWN AWAY BY WIND OR WASHED AWAY BY FLOWING WATER;
      9.A. MULCH MATERIALS SHALL BE SELECTED BASED UPON SOILS, SLOPE, FLOW CONDITIONS, AND TIME OF YEAR;
      9.B. HAY OR STRAW MULCH SHALL BE APPLIED AT A RATE OF 1.5 TO 2 TONS PER ACRE, EQUIVALENT TO 70 TO 90 POUNDS PER 1,000 SQUARE FEET;
   10. IF VEGETATED GROWTH COVERING AT LEAST 85% OF THE DISTURBED AREA IS NOT ACHIEVED PRIOR TO OCTOBER 15TH, ONE OR MORE ADDITIONAL EROSION CONTROL METHODS SHALL BE IMPLEMENTED.
D. MAINTENANCE
   1. PERMANENTLY SEEDED AREAS SHOULD BE INSPECTED MONTHLY.
   2. MOW SEEDED AREAS AS NECESSARY.
   3. BASED ON INSPECTION, AREAS SHOULD BE REPAIRED AND/OR RESEEDED TO ENSURE 85% OF THE SOIL SURFACE IS COVERED BY VEGETATION.

MULCHING & EROSION CONTROL MATTING

A. GENERAL
   1. APPLY PRIOR TO A STORM EVENT. CLOSELY MONITOR THE WEATHER TO HAVE ADEQUATE WARNING OF SIGNIFICANT STORMS.
   2. MULCHING WITHIN A SPECIFIED TIME PERIOD FROM ORIGINAL SOIL EXPOSURE
      2.A. WITHIN 100 FEET OF WETLANDS THE TIME PERIOD SHOULD BE NO GREATER THAN 7 DAYS.
      2.B. IN OTHER AREAS IT SHALL BE NO GREATER THAN 14 DAYS.
   3. MULCH MATERIALS SHALL BE SELECTED BASED UPON SOILS, FLOW CONDITIONS, AND TIME OF YEAR.
B. TEMPORARY MULCHING
   1. HAY OR STRAW MULCHES
      1.A. ORGANIC MULCHES INCLUDING HAY AND STRAW SHALL BE AIR-DRIED, FREE OF UNDESIRABLE SEEDS AND COARSE MATERIALS.
      1.B. APPLICATION RATE SHALL BE 2 BALES/1,000 SF (70-90 POUNDS) OR 1.5-2.0 TONS/ACRE TO COVER 75-90% OF THE GROUND.
      1.C. ANCHORING SHALL BE ONE OF THE FOLLOWING
         1.C.1. NETTING SHALL BE JUTE, WOOD FIBER, OR BIODEGRADABLE PLASTIC NETTING INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
         1.C.2. TACKIFIER: APPLY POLYMER OR ORGANIC TACKIFIER TO ANCHOR HAY OR STRAW MULCH. APPLY PER MANUFACTURER'S SPECIFICATIONS. TYPICAL APPLICATION RATES ARE 40-60 LBS/ACRE FOR POLYMER MATERIAL AND 80-120 LBS/ACRE FOR ORGANIC LIQUID.
      1.D. WINTER APPLICATION: APPLY TO A DEPTH OF 4 INCHES OR DOUBLE THE ABOVE LISTED APPLICATION RATE. NOTE THAT IF SEEDING IS NECESSARY, MULCH WILL NEED TO BE REMOVED AND THE AREA SEEDED AND MULCHED IN THE SPRING.
      1.E. MAINTENANCE
         1.E.1. INSPECT PERIODICALLY AND AFTER RAIN STORMS FOR RILLS OR DISPLACEMENT OF MULCH. REPAIR AS NECESSARY. CONTINUE INSPECTIONS UNTIL 85% VEGETATIVE COVER IS ESTABLISHED.
   2. EROSION CONTROL BLANKET OR MATTING
      2.A. REFER TO PLANS FOR TYPICAL EROSION CONTROL MATTING DETAIL. INSTALL PER MANUFACTURERS SPECIFICATIONS.
      2.B. APPLICATION AND TIMING
         2.B.1. DURING THE GROWING SEASON (APRIL 15 – SEPTEMBER 15) USE ON THE BASE OF GRASSED WATERWAYS, STEEP SLOPES (15% OR GREATER), ANY DISTURBED SOIL WITHIN 100 FEET OF LAKES, STREAMS, AND WETLANDS.
         2.B.2. DURING THE LATE FALL AND WINTER (SEPTEMBER 15 – APRIL 15) IN ADDITION TO THOSE LISTED ABOVE USE ON SIDE SLOPES OF GRASSED WATERWAYS AND MODERATE SLOPES (GREATER THAN 8%).
   3. MAINTENANCE
      3.A. INSPECT PERIODICALLY AND BEFORE AND AFTER STORM EVENTS TO ENSURE CONTACT WITH THE SOIL UNTIL 85% VEGETATIVE COVER IS ESTABLISHED. REPAIR AND RESTAPLE AS NECESSARY.
C. PERMANENT MULCHING
   1. WOOD CHIPS OR GROUND BARK
      1.A. APPLY TO A THICKNESS OF 2 TO 6 INCHES. APPLICATION RATES ARE 10-20 TONS/ACRE OR 460-920 POUNDS/1,000 SF.
      1.B. MAINTENANCE: INSPECT ANNUALLY AND AFTER RAIN EVENTS OF 2.5 INCHES OR MORE IN A 24 HOUR PERIOD. REPAIR/REPLACE AS NECESSARY.
   2. EROSION CONTROL MIX
      2.A. SHALL BE PLACED AT A THICKNESS OF 2 INCHES OR MORE FOR MULCHING.
      2.B. COMPOSITION OF THE MIX SHALL BE AS FOLLOWS:
         2.B.1. ORGANIC MATTER CONTENT SHALL BE BETWEEN 25-65% DRY WEIGHT BASIS.
         2.B.2. PARTICLE SIZE BY WEIGHT SHOULD BE 100% PASSING THE 3" SCREEN, 90-100% PASSING THE 1" SCREEN, 70-100% PASSING THE 0.75 INCH SCREEN, AND 30-75% PASSING THE 0.25 INCH SCREEN.
         2.B.3. THE ORGANIC PORTION SHALL BE ELONGATED AND FIBROUS SUCH AS FROM SHREDDED BARK, STUMP GRINDINGS, COMPOSTED BARK, OR EQUIVALENT MANUFACTURED PRODUCTS. IT SHALL NOT CONTAIN WOOD AND BARK CHIPS, GROUND CONSTRUCTION DEBRIS, OR REPROCESSED WOOD PRODUCTS.
         2.B.4. THE MIX SHALL NOT CONTAIN SILTS, CLAYS, OR FINE SANDS.
         2.B.5. SOLUBLE SALTS CONTENT SHALL BE < 4.0MMHOS/CM AND A pH OF 5.0-8.0.
      2.C. PLACEMENT OF BERM
         2.C.1. PLACE BERM ALONG A LEVEL CONTOUR. BERM MUST BE A MINIMUM OF 12" HIGH ON THE UPHILL SIDE AND 2 FEET WIDE. UPSLOPE AREA MUST HAVE A SLOPE OF LESS THAN 5%.
      2.D. MAINTENANCE: INSPECT PERIODICALLY AND AUGMENT AS NEEDED TO MAINTAIN INITIAL THICKNESS. REPLACE IF NO LONGER FUNCTIONING AS INTENDED.

SOIL STOCKPILES

A. GENERAL
1. STOCKPILES MUST BE LOCATED 50 FEET FROM DITCHES AND CULVERT INLETS.
B. PROTECTION OF STOCKPILES
1. PROTECT SOIL AND AGGREGATE STOCKPILES WITH TEMPORARY PERIMETER SEDIMENT BARRIER SUCH AS SILT FENCE OR SILT SOCK.
2. COVER ACTIVE STOCKPILES WITH ANCHORED PROTECTIVE COVERING PRIOR TO EXPECTED STORM EVENTS.
3. INACTIVE STOCKPILES SHALL BE COVERED WITH ANCHORED TARPS OR TEMPORARILY SEEDED AND MULCHED PER THE TEMPORARY VEGETATION AND MULCHING NOTES ON THIS PAGE.
4. STOCKPILES THAT ARE A SOURCE OF DUST SHALL BE COVERED.

DUST CONTROL

A. DUST SHALL BE CONTROLLED ON SITE DURING CONSTRUCTION BY IMPLEMENTING THE FOLLOWING DUST CONTROL MEASURES
1. MULCHING AND VEGETATIVE COVER TO REDUCE DUST.
2. MECHANICAL SWEEPERS AND FINE WATER SPRAYS.
3. COVER SURFACES WITH CRUSHED STONE OR COARSE GRAVEL.

SEED MIXTURE SELECTION BASED ON SOIL TYPE

USE	SEEDING MIXTURE	SOIL DRAINAGE: DROUGHTY	WELL DRAINED	MODERATELY WELL DRAINED
STEEP CUTS AND FILLS, BORROW AND DISPOSAL AREAS	A B C D	FAIR POOR POOR FAIR	GOOD GOOD GOOD EXCELLENT	GOOD FAIR EXCELLENT EXCELLENT
WATERWAYS, EMERGENCY SPILLWAYS, AND OTHER CHANNELS WITH FLOWING WATER.	A C	GOOD GOOD	GOOD EXCELLENT	GOOD EXCELLENT
LIGHTLY USED PARKING LOTS, ODD AREAS, UNUSED LANDS, AND LOW INTENSITY USE RECREATION SITES.	A B C	GOOD GOOD GOOD	GOOD GOOD EXCELLENT	GOOD FAIR EXCELLENT
PLAY AREAS AND ATHLETIC FIELDS. (TOPSOIL IS ESSENTIAL FOR GOOD TURF.)	E F	FAIR FAIR	EXCELLENT EXCELLENT	EXCELLENT EXCELLENT

NOTE: POORLY DRAINED SOILS ARE NOT DESIRABLE FOR USE AS PLAYING AREAS AND ATHLETIC FIELDS.

SEED MIXTURES FOR PERMANENT VEGETATION

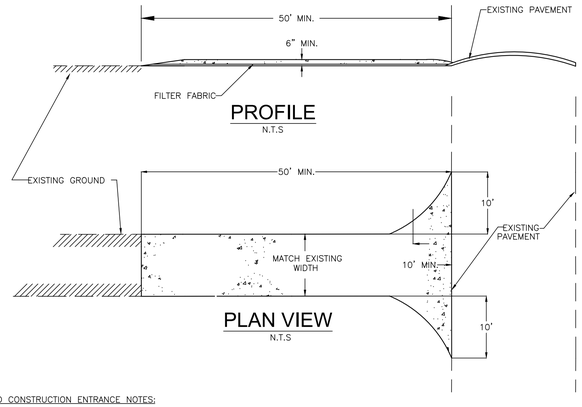
MIXTURE	SPECIES	POUNDS PER ACRE	POUNDS PER 1,000 SF
A	TALL FESCUE CREEPING RED FESCUE REDTOP *TOTAL*	20 20 2 *42*	0.45 0.45 0.05 *0.95*
B	TALL FESCUE CREEPING RED FESCUE CROWN VETCH OR FLATPEA *TOTAL*	15 10 15 – 30 *40 OR 55*	0.35 0.25 0.35 – 0.75 *0.95 OR 1.35*
C	TALL FESCUE CREEPING RED FESCUE BIRDSFOOT TREFOIL *TOTAL*	20 20 8 *48*	0.45 0.45 0.20 *1.10*
D	TALL FESCUE FLATPEA *TOTAL*	20 30 *50*	0.45 0.75 *1.20*
E	CREPPING RED FESCUE KENTUCKY BLUEGRASS *TOTAL*	50 50 *100*	1.15 1.15 *2.30*
F	TALL FESCUE	*150*	*3.60*

CONSTRUCTION SEQUENCING:

1. SCHEDULE A PRE-CONSTRUCTION MEETING WITH TOWN OFFICIALS, OWNER, AND CONTRACTORS IF REQUIRED BY THE CONDITIONS OF APPROVAL PRIOR TO BEGINNING CONSTRUCTION.
2. CONTACT DIG-SAFE, INDIVIDUAL UTILITIES, AND CITY DEPARTMENTS TO GET ALL UTILITIES MARKED PRIOR TO START OF CONSTRUCTION.
3. INSTALL AND STABILIZE ALL TEMPORARY AND PERMANENT SEDIMENT AND EROSION CONTROLS.
   A. SEDIMENT AND EROSION CONTROLS SHALL BE INSTALLED PRIOR TO EARTH MOVING OPERATIONS.
4. CLEAR/GRUB ONLY WITHIN THE LIMITS OF GRADING AS SHOWN ON THE PLANS. REMOVE ORGANICS ONLY FROM THOSE AREAS THAT CAN BE WORKED AND STABILIZED WITHIN 45 DAYS OF REMOVAL.
5. TOTAL SITE DISTURBANCE DEPICTED ON THESE PLANS IS 13,600 SF.
   A. REFER TO VEGETATION AND EROSION CONTROL NOTES ON THIS PLAN DURING CONSTRUCTION.
6. STOCKPILES
   A. STOCKPILE LOAM FOR RE-USE AS NEEDED.
   B. TEMPORARILY STABILIZE LOAM STOCKPILES WITH:
      1. WINTER RYE GRASS- PRIOR TO SEPTEMBER 15TH
      2. MULCH- FROM SEPTEMBER 15TH TO MAY 1ST
7. CONSTRUCT AND STABILIZE ALL TEMPORARY AND PERMANENT SEDIMENT AND EROSION CONTROLS. CONSTRUCT SWALES AND STABILIZE. ADD A TEMPORARY SEDIMENT BASIN DURING CONSTRUCTION.
   A. THESE SHALL BE INSTALLED BEFORE ANY MAJOR EARTH MOVING OPERATIONS.
8. THE BIORETENTION SYSTEM ALLOWS INFILTRATION OF RUNOFF. DO NOT CONSTRUCT THE BIORETENTION SYSTEM UNTIL ALL UPSLOPE AREAS ARE STABILIZED. UNSTABILIZED AREAS THAT DRAIN TO THE BIORETENTION SYSTEM WILL DECREASE THE INFILTRATION CAPACITY OF THE UNDERLYING SOILS.
9. DRIVEWAY AND PARKING CONSTRUCTION
   A. CUTS AND FILLS:
      1. CONSTRUCT IN LOCATIONS AND TO GRADES AS SHOWN ON THE PLANS.
      2. FILLS:
         A. PLACE MAXIMUM 12" LIFTS AND COMPACT TO 95% MAXIMUM DRY DENSITY.
         B. ALL MATERIAL BASED ON PROCTOR TEST SHALL BE FREE OF DELETERIOUS MATERIALS SUCH AS LOAM, STUMPS, BRUSH, AND ROCKS LARGER THAN 3/4 THE DEPTH OF THE LIFT BEING PLACED.
      3. LOAM AND SEED SLOPES WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
   C. BASE MATERIALS: BANK RUN AND CRUSHED GRAVEL SHALL BE PLACED IN 4" LIFTS AND COMPACTED TO 95% MAXIMUM DRY DENSITY TO THE DEPTHS SPECIFIED IN THE PARKING LOTS CROSS-SECTION DETAILS.
   D. STABILIZE ALL PAVED GRAVEL AREAS WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
11. CONSTRUCT BIORETENTION SYSTEM AFTER UP SLOPE AREAS ARE STABILIZED.
12. INSPECT, MAINTAIN, AND IF NECESSARY, REPAIR ALL EROSION AND SEDIMENT CONTROL MEASURES AS STATED IN EROSION CONTROL NOTES ON THIS SHEET.
13. REMOVE ALL TEMPORARY EROSION CONTROL MEASURES ONCE INITIAL GROWTH IS ESTABLISHED.

ADDITIONAL NOTES:

1. NO FUEL SHALL BE STORED ON SITE DURING CONSTRUCTION.
2. DURING CONSTRUCTION DUST SHALL BE PREVENTED FROM BECOMING A SAFETY OR HEALTH HAZARD BY THE IMPLEMENTATION OF ACCEPTED CONTROL METHODS SUCH AS WATERING.
3. ALL CONSTRUCTION MATERIALS THAT ARE SPILLED OR DEPOSITED ON THE PUBLIC ROADWAYS SHALL BE REMOVED BY THE CONTRACTOR.
4. DO NOT BEGIN CONSTRUCTION UNTIL ALL LOCAL, STATE, AND FEDERAL PERMITS HAVE BEEN APPLIED FOR AND RECEIVED.
5. THE GENERAL CONTRACTOR IS RESPONSIBLE TO VERIFY ALL DIMENSIONS, ELEVATIONS AND CONDITIONS AT THE SITE. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGN ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PART OF THE WORK.
6. NO CONSTRUCTION VEHICLES SHALL USE MAIN ST. ENTRANCE



STABILIZED CONSTRUCTION ENTRANCE NOTES:

1. GRADE AND COMPACT ACCESS ROAD ENTRANCE AS NECESSARY. PLACE FILTER FABRIC (MIRAFI 140N OR EQUAL) AND PLACE 6" OF 3" STONE TO MATCH SLOPE OF EXISTING ROAD.
2. PROVIDE NECESSARY SWALES OR DIVERSIONS TO MINIMIZE DIRECT FLOW OF WATER ONTO STONE AREA.
3. CONSTRUCTION ENTRANCE SHALL BE MAINTAINED AS NECESSARY TO REMOVE SILT FROM TIRES PRIOR TO ENTERING PUBLIC ROADS. A SMALL SWALE SHALL BE CONSTRUCTED ON THE DOWN GRADIENT SIDE TO TRAP ANY SILT WASHED FROM THE STONE ENTRANCE.

STABILIZED CONSTRUCTION ENTRANCE DETAIL

N.T.S

NO.	DATE	REVISIONS
INT.	2/5/20 MCS	INITIAL SUBMISSION TO THE TOWN OF BERWICK

STATE OF MAINE * LICENSED PROFESSIONAL ENGINEER * MICHAEL J. SIEVERT 8191

DATE: 2/4/20
SCALE: AS SHOWN
DESIGNED BY: MCS
DRAWN BY: MCS
APPROVED BY: MJS

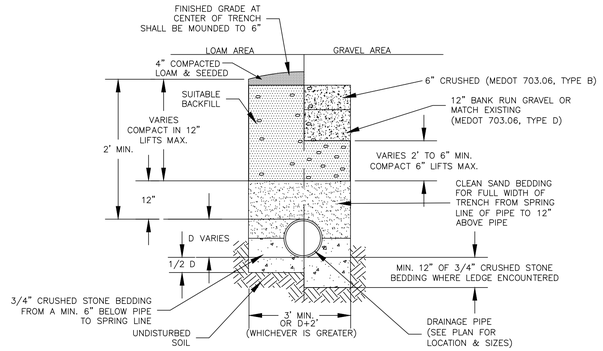
FILE: 19066 detla.dwg

CONSTRUCTION DETAILS
prepared for
CAF REALTY MAINE
POND ROAD
BERWICK, ME

MJS ENGINEERING, P.C.
CIVIL • STRUCTURAL • ENVIRONMENTAL
5 RAILROAD ST., P.O. Box 359
KENNEBUNK, ME 04043
PHONE: (603) 969-4472, FAX: (603) 659-4627
E-MAIL: M.SIEVERT@MJSENGINEERING.COM

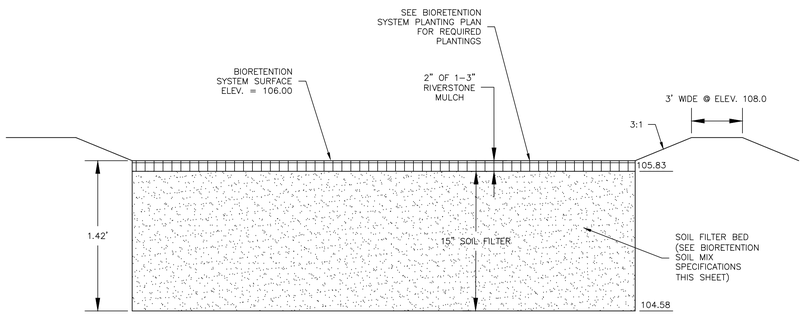
JOB: 19-066

D1



STANDARD DRAINAGE PIPE TRENCH

N.T.S



BIORETENTION SYSTEM CROSS SECTION

N.T.S

CONSTRUCTION NOTES:

1. DO NOT PLACE BIORETENTION SYSTEM INTO SERVICE UNTIL THE BMP HAS BEEN PLANTED AND ITS CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.
2. TO PREVENT DEGRADATION OF INFILTRATION FUNCTION: DO NOT DISCHARGE SEDIMENT-LADEN WATERS FROM CONSTRUCTION ACTIVITIES (RUNOFF, WATER FROM EXCAVATIONS) TO THE BIORETENTION SYSTEM DURING ANY STAGE OF CONSTRUCTION. DO NOT TRAFFIC EXPOSED SOIL SURFACE WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE, PERFORM EXCAVATIONS WITH EQUIPMENT POSITIONED OUTSIDE THE LIMITS OF THE INFILTRATION COMPONENTS OF THE SYSTEM.
3. CLEAR AND GRUB THE AREA WHERE THE BIORETENTION SYSTEM IS TO BE LOCATED. STOCKPILE LOAM FOR REUSE LATER.
4. THE FOUNDATION AREA SHALL BE SCARIFIED PRIOR TO PLACING FILL. ALL UNSUITABLE MATERIAL UNDER THE BERM SHALL BE REMOVED AND REPLACED WITH SUITABLE FOUNDATION MATERIAL.
5. THE BERM SHALL BE CONSTRUCTED BEGINNING FROM THE LOWEST POINT UNIFORMLY ALONG ITS ENTIRE LENGTH. PLACE MATERIALS IN MAXIMUM 12" LOOSE LIFTS COMPACTED TO 95% MAXIMUM MODIFIED PROCTOR DENSITY. EMBANKMENT SOIL SHALL HAVE NO ORGANIC MATTER OR FROZEN MATERIAL AND NO STONES LARGER THAN 2/3 OF THE MAXIMUM LOOSE LIFT THICKNESS. STONES AROUND ANY STRUCTURES AND/OR CONDUITS SHALL NOT EXCEED 3 INCHES. EMBANKMENT FILL MATERIAL SHALL HAVE THE FOLLOWING GRADATION:

SIEVE SIZE:	% PASSING:
#4	80-90
#40	50-80
#100	30-45
#200	15-30

6. ALL PIPE TO PIPE CONNECTIONS SHALL BE WATER-TIGHT.
7. ALL DISTURBED AREAS NOT OTHERWISE LANDSCAPED SHALL RECEIVE FOUR INCHES OF LOAM AND SEED.

GENERAL MAINTENANCE:

1. THE BIORETENTION BASIN SHALL BE INSPECTED TWICE EACH YEAR WITH PREVENTATIVE MAINTENANCE PROVIDED.
2. SYSTEMS SHALL BE INSPECTED ANNUALLY AND FOLLOWING ANY RAINFALL EVENT EXCEEDING 2.5 INCHES IN A 24 HOUR PERIOD, WITH MAINTENANCE OR REHABILITATION CONDUCTED AS WARRANTED BY SUCH INSPECTION.
3. TRASH AND DEBRIS SHOULD BE REMOVED AT EACH INSPECTION.
4. AT LEAST ONCE ANNUALLY, SYSTEM SHOULD BE INSPECTED FOR DRAWDOWN TIME. IF BIORETENTION SYSTEM DOES NOT DRAIN WITHIN 72-HOURS FOLLOWING A RAINFALL EVENT, THEN A QUALIFIED PROFESSIONAL SHOULD ASSESS THE CONDITION OF THE FACILITY TO DETERMINE MEASURES REQUIRED TO RESTORE FILTRATION FUNCTION OR INFILTRATION FUNCTION (AS APPLICABLE), INCLUDING BUT NOT LIMITED TO REMOVAL OF ACCUMULATED SEDIMENTS OR RECONSTRUCTION OF THE FILTER MEDIA.
5. VEGETATION SHOULD BE INSPECTED AT LEAST ANNUALLY, AND MAINTAINED IN HEALTHY CONDITION, INCLUDING PRUNING, REMOVAL AND REPLACEMENT OF DEAD OR DISEASED VEGETATION, AND REMOVAL OF INVASIVE SPECIES.

PLANTING REQUIREMENTS

1. THE BIORETENTION BASIN AND SEDIMENT FOREBAY BERM, BOTTOM AND INTERIOR SIDE SLOPES SHALL BE PLANTED WITH A 50:50 MIX OF NEW ENGLAND EROSION CONTROL/RESTORATION MIX FOR DETENTION BASINS AND MOIST SITES AND NEW ENGLAND CONSERVATION/WILDLIFE MIX AT 1,500 SF/LB AVAILABLE FROM:

   NEW ENGLAND WETLAND PLANTS. INC.
   820 WEST AMHERST STREET
   AMHERST, MA 01002

BIORETENTION SYSTEM GENERAL NOTES:

1. BIORETENTION SYSTEM FILTER SOIL MIX SHALL MEET THE FOLLOWING REQUIREMENTS OF FILTER MEDIA OPTION A OR OPTION B.

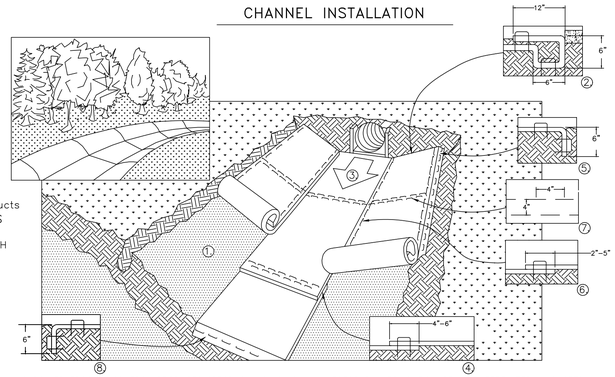
BIORETENTION SYSTEM SOIL MIX SPECIFICATIONS			
		GRADATION OF MATERIAL	
COMPONENT MATERIAL	PERCENT OF MIXTURE BY VOLUME	SIEVE NO.	% BY WEIGHT PASSING STANDARD SIEVE
FILTER MEDIA OPTION A			
ASTM C-33 CONCRETE SAND	50 TO 55		
LOAMY SAND TOPSOIL, WITH FINES AS INDICATED	20 TO 30	200	15 TO 25
MODERATELY FINE SHREDDED BARK OR WOOD FIBER MULCH, WITH FINES AS INDICATED	20 TO 30	200	< 5
FILTER MEDIA OPTION B			
MODERATELY FINE SHREDDED BARK OR WOOD FIBER MULCH, WITH FINES AS INDICATED	20 TO 30	200	< 5
LOAMY COARSE SAND	70 TO 80	10	85 TO 100
		20	70 TO 100
		60	15 TO 40
		200	8 TO 15

CHANNEL INSTALLATION

NORTH AMERICAN GREEN

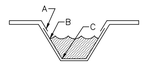
EROSION CONTROL Products
Guaranteed SOLUTIONS

14649 HIGHWAY 41 NORTH
EVANSVILLE, IN 47725
800-772-2040
www.nagreen.com



1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP's), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE RECP's IN A 6" (15 CM) DEEP X 6" (15 CM) WIDE TRENCH WITH APPROXIMATELY 12" (30 CM) OF RECP's EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP's WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30 CM) PORTION OF RECP's BACK OVER SEED AND COMPACTED SOIL. SECURE RECP's OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30 CM) ACROSS THE WIDTH OF THE RECP's.
3. ROLL CENTER RECP's IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. RECP's WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECP's MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM®, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. PLACE CONSECUTIVE RECP's END OVER END (SHINGLE STYLE) WITH A 4" - 6" (10 CM -15 CM) OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" (10 CM) APART AND 4" (10 CM) ON CENTER TO SECURE RECP's.
5. FULL LENGTH EDGE OF RECP's AT TOP OF SIDE SLOPES MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN A 6" (15 CM) DEEP X 6" (15 CM) WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
6. ADJACENT RECP's MUST BE OVERLAPPED APPROXIMATELY 2" - 5" (5 CM -12.5 CM) (DEPENDING ON RECP's TYPE) AND STAPLED.
7. IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT (9 M - 12 M) INTERVALS. USE A DOUBLE ROW OF STAPLES STAGGERED 4" (10 CM) APART AND 4" (10 CM) ON CENTER OVER ENTIRE WIDTH OF THE CHANNEL.
8. THE TERMINAL END OF THE RECP's MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN A 6" (15 CM) DEEP X 6" (15 CM) WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.

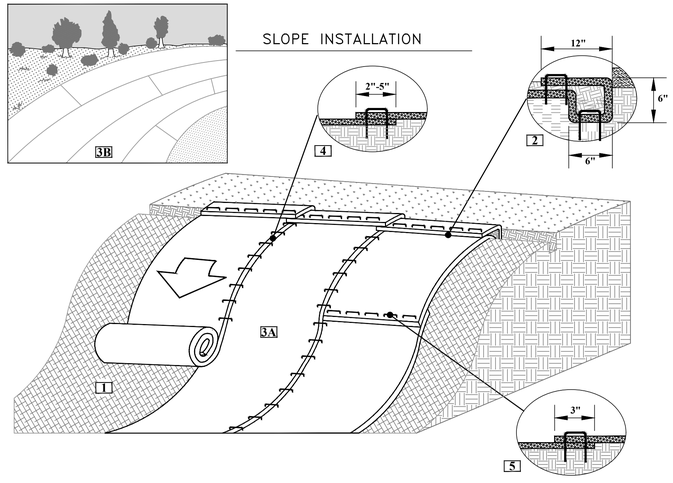
NOTE:
* IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 CM) MAY BE NECESSARY TO PROPERLY ANCHOR THE RECP's.



CRITICAL POINTS
A. OVERLAPS AND SEAMS
B. PROJECTED WATER LINE
C. CHANNEL BOTTOM/SIDE SLOPE VERTICES

NOTE:
* HORIZONTAL STAPLE SPACING SHOULD BE ALTERED IF NECESSARY TO ALLOW STAPLES TO SECURE THE CRITICAL POINTS ALONG THE CHANNEL SURFACE.

** IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 cm) MAY BE REQUIRED.

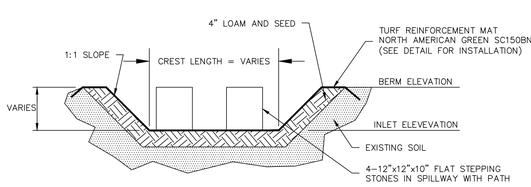


1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECPS), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECPS IN A 6"(15CM) DEEP X 6"(15CM) WIDE TRENCH WITH APPROXIMATELY 12" (30CM) OF RECPS EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECPS WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO THE COMPACTED SOIL AND FOLD THE REMAINING 12"(30CM) PORTION OF RECPS BACK OVER THE SEED AND COMPACTED SOIL. SECURE RECPS OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12"(30CM) APART ACROSS THE WIDTH OF THE RECPS.
3. ROLL THE RECPS (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE. RECPS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECPS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE.
4. THE EDGES OF PARALLEL RECPS MUST BE STAPLED WITH APPROXIMATELY 2" - 5" (5-12.5CM) OVERLAP DEPENDING ON THE RECPS TYPE.
5. CONSECUTIVE RECPS SPLICED DOWN THE SLOPE MUST BE END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3"(7.5CM) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12"(30CM) APART ACROSS ENTIRE RECPS WIDTH.

NOTES:
1. BIORETENTION SYSTEM SPILLWAYS TO BE LINED WITH NORTH AMERICAN GREEN SC150BN EROSION CONTROL BLANKET OR APPROVED EQUAL.
2. FOR SALES CONTACT:
   EJ PRESCOTT, INC.
   210 SHEEP DAVIS RD.
   CONCORD, NH
   603-224-9545

TYPICAL TURF REINFORCEMENT MATTING DETAIL

N.T.S



NOTES: CREST BREADTH IS WIDTH OF BERM AT SPILLWAY.

NOTE: SPILLWAY TO BE CONSTRUCTED TO THE DIMENSIONS AND SPECIFICATIONS SHOWN.

SPILLWAY DIMENSION TABLE

LOCATION	CREST ELEV.	BERM ELEV.	LENGTH*	WIDTH*
SPILLWAY #1 - SEDIMENT FOREBAY	107.5	108.1	25'	6'

*REFER TO DETAIL ABOVE FOR LOCATION OF WIDTH AND LENGTH

BIORETENTION SYSTEM SPILLWAY CROSS SECTION

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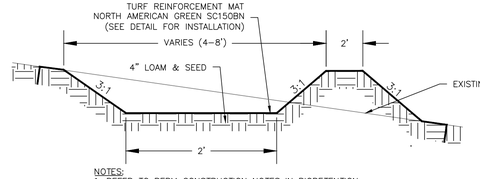
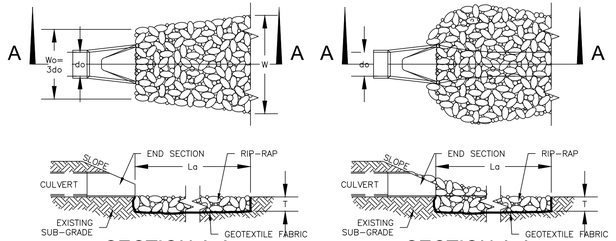


NOTES:
1. REFER TO BERM CONSTRUCTION NOTES IN BIORETENTION SYSTEM DETAIL FOR BERM CONSTRUCTION REQUIREMENTS.
2. THE SWALE SHALL BE MOWED WITH THE REST OF THE SITES LAWN AREAS TO PROMOTE HEALTHY GROWTH AND PREVENT THE ENCROACHMENT OF WEEDS AND WOODY VEGETATION. DO NOT MOW GRASS IN SWALE TOO SHORT. THIS WILL REDUCE THE SWALES FILTERING ABILITY.
3. THE SWALE SHOULD BE FERTILIZED ON AN AS NECESSARY BASIS, TO KEEP THE GRASS HEALTHY.
4. REFER TO THE STORMWATER MANAGEMENT PLAN FOR ADDITIONAL INSPECTION AND MAINTENANCE REQUIREMENTS.

VEGETATED SWALE DETAIL

N.T.S



SECTION A-A

(PIPE OUTLET TO FLAT AREA NO WELL DEFINED CHANNEL)

SECTION A-A

(PIPE OUTLET TO WELL DEFINED CHANNEL)

RIP-RAP GRADATION

6" RIP RAP

% OF WEIGHT SMALLER THAN THE GIVEN SIZE	SIZE OF STONE (INCHES)		
100	9	TO	12
85	7.8	TO	10.8
50	6	TO	9
15	1.8	TO	3

APRON DIMENSION TABLE

PIPE OUTLET	Wo	W	La	T	d50
# 1	18"	7'	1.3'	18"	6"

CONSTRUCTION SPECIFICATIONS:

1. PREPARE THE SUB-GRADE FOR THE FILTER MATERIAL, GEOTEXTILE FABRIC, AND RIP-RAP TO THE GRADES SHOWN ON THE PLANS.
2. MINIMUM 6" SAND/GRAVEL BEDDING OR GEOTEXTILE FABRIC REQUIRED UNDER ALL ROCK RIP-RAP.
3. THE ROCK OR GRAVEL USED FOR FILTER OR RIP-RAP SHALL CONFORM TO THE SPECIFIED GRADATION.
4. GEOTEXTILE FABRICS SHALL BE PROTECTED FROM PUNCTURE OR TEARING DURING THE PLACEMENT OF ROCK RIP-RAP. DAMAGED AREAS IN THE FABRIC SHALL BE REPAIRED BY PLACING A PIECE OF FABRIC OVER THE DAMAGED AREA OR BY COMPLETE REPLACEMENT OF THE FABRIC. ALL OVERLAPS REQUIRED FOR REPAIRS OR JOINING TWO (2) PIECES OF FABRIC SHALL BE A MINIMUM OF 12 INCHES.
5. STONE FOR THE RIP-RAP MAY BE PLACED BY EQUIPMENT AND SHALL BE CONSTRUCTED TO THE FULL LAYER THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO PREVENT SEGREGATION OF THE STONE SIZES.

MAINTENANCE NOTES:

1. OUTLETS SHALL BE INSPECTED AND CLEANED ANNUALLY AND AFTER ANY MAJOR STORM EVENT. ANY EROSION OR DAMAGE TO THE RIP-RAP SHALL BE REPAIRED IMMEDIATELY.
2. THE CHANNEL IMMEDIATELY DOWNSTREAM FROM THE OUTLET SHOULD BE CHECKED TO SEE THAT NO EROSION IS OCCURRING.
3. THE DOWNSTREAM CHANNEL SHOULD BE KEPT CLEAR OF OBSTRUCTIONS SUCH AS FALLEN TREES, DEBRIS, AND SEDIMENT THAT COULD CHANGE FLOW PATTERNS AND/OR TAILWATER DEPTHS ON THE PIPES. REPAIRS MUST BE CARRIED OUT IMMEDIATELY TO AVOID ADDITIONAL DAMAGE TO THE OUTLET PROTECTION APRON.

PIPE OUTLET PROTECTION DETAIL

NOT TO SCALE

NO.	DATE	INT.
INITIAL SUBMISSION TO THE TOWN OF BERWICK	2/5/20	MCS

REVISIONS

DATE: 2/4/20
SCALE: AS SHOWN
DESIGNED BY: MCS
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STATE OF MAINE * PROFESSIONAL ENGINEER * MICHAEL J. SIEVERT 8191 LICENSED

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5 RAILROAD ST., P.O. BOX 359
NEW GLOUCESTER, ME 04260
PHONE: (603) 969-6071, FAX: (603) 659-4627
E-MAIL: MJS@MJS-ENGINEERING.COM

CONSTRUCTION DETAILS
prepared for
CAF REALTY MAINE
POND ROAD
BERWICK, ME

JOB: 19-066

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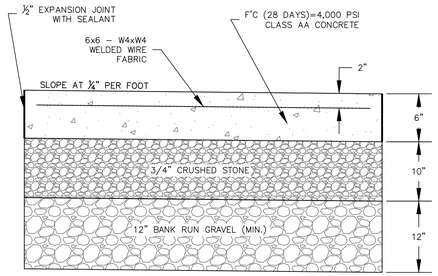
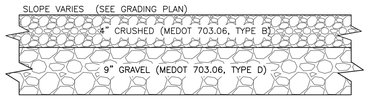


DUMPSTER PAD CROSS SECTION

N.T.S

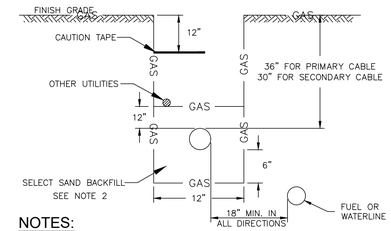
NOTES:
1. CONCRETE PADS TO BE 10' WIDE X 20' LONG, EXCEPT THAT 10' X 7' SHALL BE ALLOWED IF THE HEAVY DUTY PAVEMENT ALTERNATIVE IS USED.
2. CONCRETE STRENGTH FOR SLAB SHALL BE 4000 PSI AT 28 DAYS.
3. REFER TO PLAN FOR LOCATIONS OF DUMPSTER PAD.



NOTES:
1. DELETERIOUS MATERIALS ENCOUNTERED BELOW PARKING AREA SHALL BE COMPLETELY REMOVED.
2. COMPACT SUBGRADE TO 95% MAX. DRY DENSITY.

GRAVEL DRIVEWAY/PARKING CROSS SECTION

N.T.S.

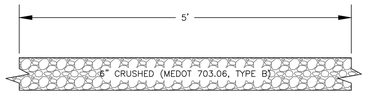


NOTES:

1. CONSTRUCTION TO BE IN ACCORDANCE WITH PSNH CONSTRUCTION STANDARDS FOR NEW ELECTRICAL SERVICE WORK BY CONTRACTORS, MOST RECENT EDITION.
2. SELECT SAND BACKFILL SHALL CONSIST OF A FINE GRANULAR MATERIAL OF WHICH 100% SHALL PASS THROUGH A 1/4" SIEVE. EXCEPT NATURALLY OCCURING SMOOTH ROUND PEBBLES NO GREATER THAN 3/8" IN DIAMETER ARE PERMITTED AS LONG AS THEIR TOTAL VOLUME PER CUBIC FOOT OF SAND DOES NOT EXCEED 1%. THE SAND SHALL BE COMPLETELY FREE OF FROZEN LUMPS, ROCKS, STONES, DEBRIS AND RUBBISH. BACKFILL SHALL BE THOROUGHLY COMPACTED IN 6" LIFTS.
3. CONDUIT SIZES TO BE 5" 3-PHASE PRIMARY AND 4" 3-PHASE SECONDARY. ALL CONDUIT SIZES TO BE VERIFIED BY PSNH.
4. ALL CONDUIT INSTALLATIONS MUST CONFORM TO THE CURRENT EDITION OF THE NATIONAL ELECTRIC SAFETY CODE, STATE AND LOCAL CODES AND ORDINANCES, AND WHERE APPLICABLE THE NATIONAL ELECTRIC CODE.

TELEPHONE & ELECTRIC TRENCH

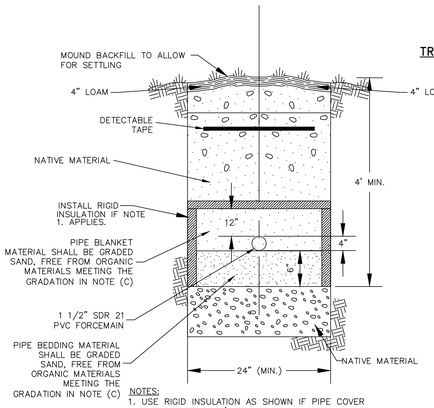
N.T.S



NOTES:
1. DELETERIOUS MATERIALS ENCOUNTERED BELOW PARKING AREA SHALL BE COMPLETELY REMOVED.
2. COMPACT SUBGRADE TO 95% MAX. DRY DENSITY.

GRAVEL WALKWAY CROSS SECTION

N.T.S.



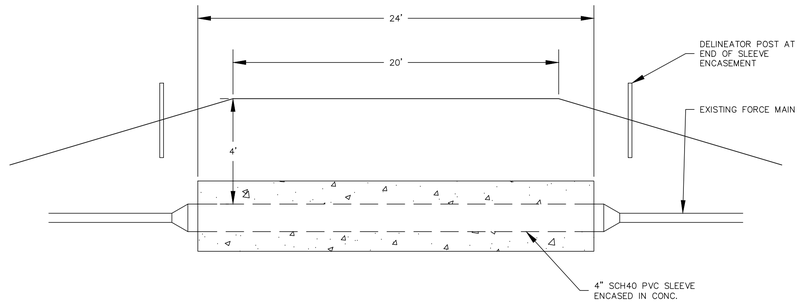
NOTES:
1. USE RIGID INSULATION AS SHOWN IF PIPE COVER IS LESS THAN 4'.

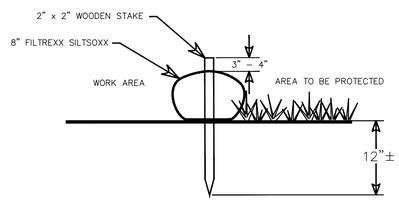
SEWER FORCEMAIN TRENCH

N.T.S

TRENCH CONSTRUCTION

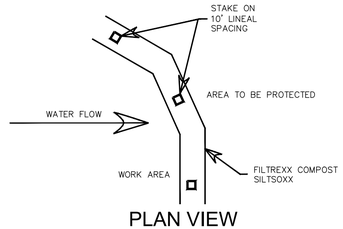
(A) TRENCH DIMENSIONS SHALL BE AS FOLLOWS:
(1) FOR SEWER PIPE LESS THAN 15" IN DIAMETER, THE ALLOWABLE TRENCH WIDTH AT A PLANE 12 INCHES ABOVE THE PIPE SHALL BE NO MORE THAN 36".
(B) PIPE TRENCH BEDDING MATERIAL AND FILL MATERIAL FOR EXCAVATION BELOW GRADE SHALL BE SCREENED GRAVEL OR CRUSHED STONE TO ASTM C33-03 STONE SIZE NO. 67.
(C) THE PIPE SAND BLANKET MATERIAL SHALL BE GRADED SAND, FREE FROM ORGANIC MATERIALS, GRADED SUCH THAT 100% PASSES THROUGH A 1/2 INCH SIEVE AND A MAXIMUM OF 15% PASSES THROUGH A #200 SIEVE.
(E) PIPE BEDDING MATERIAL SHALL EXTEND FROM A HORIZONTAL PLANE THROUGH THE PIPE AXIS TO 6 INCHES BELOW THE BOTTOM OF THE OUTSIDE SURFACE OF THE PIPE.
(F) PIPE SAND MATERIAL SHALL COVER THE PIPE A MINIMUM OF 12 INCHES ABOVE THE CROWN OF THE OUTSIDE SURFACE.
(G) COMPACTION SHALL BE IN 12 INCH LAYERS FOR BEDDING AND BLANKET MATERIALS.
(H) BACKFILL MATERIALS SHALL BE COMPACTED IN 3-FOOT LAYERS TO THE GROUND SURFACE EXCEPT FOR ROAD CONSTRUCTION (OR OTHER PAVED AREAS) WHERE THE FINAL 3 FEET SHALL BE COMPACTED IN 12-INCH LAYERS TO THE ROAD BASE SURFACE.
(I) TRENCH BACKFILL MATERIAL IN ROADWAY LOCATIONS SHALL BE NATURAL MATERIALS EXCAVATED FROM THE TRENCH DURING CONSTRUCTION, EXCLUDING: DEBRIS, PIECES OF PAVEMENT, ORGANIC MATTER, TOP SOIL, ALL WET OR SOFT MUCK, PEAT OR CLAY, ALL EXCAVATED LEDGE MATERIAL, AND ALL ROCKS OVER SIX INCHES IN LARGEST DIMENSION, OR ANY MATERIAL WHICH AS DETERMINED BY THE ENGINEER, WILL NOT PROVIDE SUFFICENT SUPPORT OR MAINTAIN THE COMPLETED CONSTRUCTION IN A STABLE CONDITION.
(J) TRENCH BACKFILL AT CROSS-COUNTRY LOCATIONS SHALL BE AS DESCRIBED IN (I) ABOVE, EXCEPT THAT TOP SOIL, LOAM, MUCK OR PEAT, MAY BE USED PROVIDED THE COMPLETED CONSTRUCTION WILL BE STABLE, AND PROVIDED THAT ACCESS TO THE SEWER FOR MAINTENANCE AND RECONSTRUCTION IS PRESERVED.
(K) BACKFILL SHALL BE MOUNDED 6 INCHES ABOVE ORIGINAL GROUND AT CROSS-COUNTRY LOCATIONS.
(L) PRECAUTIONS SHALL BE TAKEN TO AVOID GROUNDWATER POOLING AT THE SURFACE BY PROVIDING DRAINAGE TO A SUITABLE OUTLET AT CATCH BASINS OR RUNOFF SWALES.





PROFILE

N.T.S



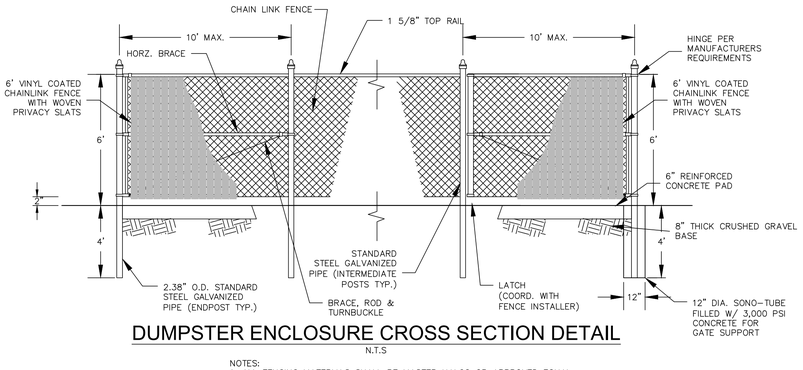
PLAN VIEW

N.T.S

NOTES:
1. ALL MATERIAL TO MEET FILTREXX SPECIFICATIONS.
2. USE CERTIFIEC FILTREX FILTERMEDIA.
3. COMPOST MATERIAL TO BE DISPERSED ON SITE UPSLOPE FROM PROTECTED AREA.

SILTSOXX DETAIL

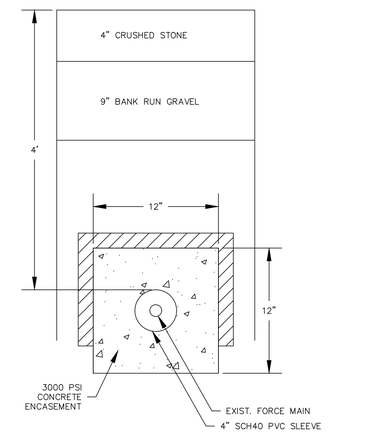
N.T.S.



DUMPSTER ENCLOSURE CROSS SECTION DETAIL

N.T.S

NOTES:
1. ALL FENCING MATERIALS SHALL BE MASTER HALCO OR APPROVED EQUAL.
2. FENCING TO BE PERMAFUSED II COMMERCIAL COLOR CHAIN-LINK FENCE SYSTEM WITH PRIVACY SLATS.
3. FENCING SUPPLY: GC/AAA FENCES, INC. (OR EQUAL) (603) 742-0833
4. FOLLOW MANUFACTURERS INSTRUCTIONS FOR INSTALLATION.



NOTE:
1. IF PIPE DOES NOT HAVE 4' OF COVER THEN INSTALL 2" RIGID INSULATION. VERTICAL INSULATION SHALL EXTEND TO MIN. 4' BELOW GRADE.

FORCE MAIN ENCASEMENT DETAIL

N.T.S.

NO.	DESCRIPTION	DATE
1.	UPDATED FORCE MAIN ENCASEMENT DETAIL	5/27/20 MCS
	INITIAL SUBMISSION TO THE TOWN OF BERWICK	2/5/20 MCS

REVISIONS

STATE OF MAINE * PROFESSIONAL ENGINEER * MICHAEL J. SIEVERT 8191 LICENSED

DATE: 2/4/20
SCALE: AS SHOWN
DESIGNED BY: MCS
DRAWN BY: MCS
APPROVED BY: MJS
FILE: 19066 detla.dwg

CONSTRUCTION DETAILS
prepared for
CAF REALTY MAINE
POND ROAD
BERWICK, ME

MJS ENGINEERING, P.C.
CIVIL • STRUCTURAL • ENVIRONMENTAL
5 RAILROAD ST., P.O. Box 359
NEWMARKET, NH 03857
PHONE: (603) 659-4627
E-MAIL: MJS@MJS-ENGINEERING.COM

JOB: 19-066

D3

Town of Berwick Planning Board
Conditional Use Findings of Fact
Applicant: CAF Realty
11 Pond Road (Tax Map R-070, Lot 16)
June 4, 2020

CAF Realty applied for a Site Plan & Conditional Use for an Adult Use Marijuana Productions Facility and first appeared on the Planning Board agenda for March 5th, 2020. A piece of the lot is in South Berwick, the Town was notified of the project on February 19, 2020 via e-mail. A detailed odor control and security plan was submitted. The applicant does have standing to apply according to Section 8.25 the property is in the RC/I Zone.

The applicant initially indicated they would complete the project in multiple phases with four buildings at completion. Upon further review it was determined part of the proposal was in the Limited Residential District where the use is not allowed. As a result, the applicant submitted a new plan showing two buildings.

A landscape plan was submitted with a plant list as follows:

Plant List

SHRUBS

Symbol	Botanical Name	Common Name	Quantity	Size
Cs	*Cornus sericea 'Cardinal'*	Cardinal Red Osier Dogwood	28	5 gal.
IvS	*Ilex verticillata 'Sparkleberry'*	Sparkleberry Winterberry (female)	13	3-4'
IvSG	*Ilex verticillata 'Southern Gentleman'*	Southern Gentleman Winterberry (male)	1	3-4'
JcBP	*Juniperus chinensis 'Blue Point'*	Blue Point Juniper	12	6-7'
JcSG	*Juniperus chinensis 'Seagreen'*	Seagreen Juniper	26	2-2.5'
VdBM	*Viburnum dentatum 'Blue Muffin'*	Blue Muffin Arrowwood Viburnum	23	5 gal.

The South Berwick Water District Superintendent requested the following conditions

- The South Berwick Water District be furnished with a detailed well drillers log for the new well.
- A five-day pump test be performed on the well with well drawdown readings taken hourly until the well stabilizes. The Pump Test will be coordinated with the South Berwick Water District so the well drawdowns at Junction Road can be monitored to check for interference.
- The Facility may not irrigate their plants if the new well has an adverse effect on our Junction Road water source.
- The Facility be mandated to install a water meter to monitor the water usage from the well and allow the South Berwick Water District to periodically read the water meter to verify usage.
- Secondary Containment for all pesticides or chemicals to be stored on site. The Facility would also supply Safety Data Sheets to the South Berwick Water District for all chemicals and pesticides on a yearly basis.

The follow concerns have been raised by the neighborhood:

Concern	Staff Comments	Recommendation
Residency	The growers are from Lebanon as I understand it. This is a moot point unfortunately the State has recently suddenly dropped residency requirements due to legal issues with the mandate.	**This concern is resolved.**
Frontage 8.25.3	The language only applies to R3 – amended November 2018. To clear up the question on whether folks were confused when voting for it. The Adult Use vote was in June of 2019.	**This concern is resolved.**
Property Values	There is no direct language for property values. There is no way to make a distinction if it was a marijuana use or any other allowed commercial use that went in the exact location.	**This concern is resolved.**
Legal Access	The legal access comes from Pond Road.	**This concern is resolved.**
Subdivision Review	The definition of a subdivision pertains to lots or dwelling units and not individual buildings. Also, now only two buildings are proposed.	**This concern is resolved.**
Wetland Buffer Zone	The buildings have been moved out of the buffer zone and project scaled back from 4 buildings to 2 to fit in all the setbacks and buffers.	**This concern is resolved.**
Negative Easement	This relates to the neighboring credit union and not allowing competition. There is a separate hazardous waste agreement with the applicant's lender.	**This concern is resolved.**
Odor Control	The applicant said air will be pulled through HVAC system and will be carbon filtered prior to exhausting.	**Ensure the building is also equipped with negative pressure (vacuum).**
1,000-foot setback	The setback from the school has been provided with a stamped survey. The setback from Kind Farms is from the property line but is not surveyed.	**The estimate seems OK considering there would be an additional 50' to the building. Planning Board could consider requesting a survey to Kind**

		Farms.
Septic easement	The easement is over two areas where neither the leech field nor pipe are.	**This won't be an issue for the first building but may be an issue for the expansion. If not resolved I would suggest a condition for the applicant to come back for the second building when the easement is resolved.**
Driveway & Basin within buffer zone	There are no identified issues with the driveway. The basin could be a question for DEP or 3rd party review	**Planning Board may consider a second opinion on the basin.**
Driving over the septic pipe	This issue is primarily a civil issue. I see nothing that would restrict the applicant from building a road over the pipe. The applicant said they would put a sleeve over the pipe to protect it, I assume this would require Ms. McDonald's permission to do so.	**Planning Board may consider a second opinion on the pipe with or without the sleeving.**
Public Safety	Both Fire & Police for both Towns have been notified. South Berwick has been aware of this project since Feb. 19th	**Chief Plante's concerns are listed under Finding 10.**

Findings of Fact

1. Conformance with the Comprehensive Plan: *All proposed conditional uses and site plans shall conform to the Comprehensive Plan of the Town of Berwick and with the provisions of all pertinent federal, state and local codes, ordinances, and regulations.*

   The Berwick Comprehensive Plan states the purpose of the Rural Commercial/Industrial District is to "provide for more Town tax base and employment." The project conforms/does not conform to all pertinent codes, ordinances and regulations.

2. Preserve and enhance the landscape: *The landscape shall be preserved in its natural state insofar as practicable by minimizing tree removal, disturbance of soil, retaining existing vegetation during construction. After construction is complete, landscape shall be designed and planted that will define, soften or screen the appearance of off street parking areas from the right of way and abutting properties and/or structures in order to enhance the physical design of the building(s) or site, and to minimize the encroachment of the proposed use on the neighboring land uses.*

   No trees are proposed to be removed during construction. The applicant has proposed a landscape buffer to screen the buildings from the neighboring property.

Relationship of the proposed buildings to the environment: *Proposed structures shall be related harmoniously to the terrain and to the existing buildings in the vicinity which have a visual relationship to the proposed buildings. Special attention shall be paid to the bulk, location and height of the building(s) and such natural features such as slope, soil type and drainage ways.*

The building is proposed to look like a large barn. This structure fits in with the neighborhood.

3. Vehicular access: *The proposed site layout shall provide for safe access and egress from public and private roads by providing adequate location, numbers and controls of access points including site distances, turning lanes, traffic signalization when required by existing and projected traffic flow on municipal road systems.*

   The site layout provides for safe access and egress to pond Road. Trucks will pick up products approximately two to four times per month. There will be five full time employees and eight during harvesting. This will be the extent of the traffic during operations.

4. Parking and circulation: *The layout and design of all vehicular and pedestrian circulation, including walkways, interior drives, and parking areas shall provide for safe general interior circulation, separation of pedestrian and vehicular traffic, service traffic, loading areas, and arrangements and use of parking areas.*

   Two-way traffic is proposed for the interior of the site. Parking is proposed to go in front of the first building. Access is provided around the proposed building and access to the front and right side of the proposed expansion comes from the interior road.

5. Surface water drainage: *Adequate provision shall be made for surface drainage so that removal of surface waters will not adversely affect neighboring properties, downstream conditions, soil erosion or the public storm drainage system. Whenever possible, on-site absorption of unpolluted run-off waters shall be utilized to permit groundwater recharge on the site.*

   A bioretention basin with a swale heading to the basin is proposed for surface water. A swale is proposed along the proposed new interior road.

6. Existing utilities**:** *The development shall not impose an unreasonable burden on sewers, sanitary and storm drains, water lines or other public utilities.*

   Concerns with South Berwick's water quality and water availability have been raised by the District Superintendent.

7. Advertising features: *The size, location, design, lighting and materials of all exterior signs and outdoor advertising structures or features shall not detract from the design of proposed buildings and structures and the surrounding properties.*

   No signage has been proposed for the project.

8. Special features of the development: *Exposed storage areas, exposed machinery installation, service areas, truck loading areas, utility buildings and similar structures shall have sufficient setback and screening to provide an audio/visual buffer to minimize their adverse impact on other land uses within the development area and surrounding properties.*

Not Applicable

9. Exterior lighting: *All exterior lighting shall be designed to minimize adverse impact on neighboring properties.*

   Lighting is proposed to be mounted to the building and have a shield to direct the light downward.

10. Emergency vehicle access**:** *Provisions shall be made for providing and maintaining convenient and safe emergency vehicle access to all buildings and structures.*

    The Berwick Fire Chief said the driveway from Pond Road needs to be widened at least to 20 feet to allow fire apparatus movement in and off the property.

11. Municipal services: *The development will not have an unreasonable adverse impact on the municipal services including municipal road systems, fire department, police department, solid waste program, sewer treatment plant, school, open spaces, recreational programs and facilities, and other municipal service and facilities.*

    Concerns with South Berwick's water quality and water availability have been raised by the District Superintendent.

12. Will not result in water or air pollution**:** *In making this determination, it shall at a minimum consider: The elevation of the land above sea level and its relationship to the floodplains, the nature of soils and subsoils and their ability to adequately support waste disposal; the slope of the land and its attest on effluents; and the applicable state and local health and water resources regulations*

    A holding tank is proposed to capture wastewater.

13. Has sufficient water available for the reasonable foreseeable needs of the development *(this is usually considered to be ten years approximately).*

    This standard has been met.

Will not cause an unreasonable burden on an existing water supply, *if a municipal or community* water supply is to be utilized.

This standard is not applicable, the water supply comes from a well.

14. Will not cause soil erosion or reduction in the capacity of the land to hold water *so that dangerous or unhealthy conditions may result.*

    No soil erosion issues have been identified.

15. Will provide for adequate sewerage waste disposal.

    A new septic system has been designed and included with the application.

16. Will not have adverse effects on the scenic or natural beauty of the area, aesthetics, or rare and irreplaceable natural areas.

Planning Board Finding _____

17. Whenever situated in whole or in part within 250 feet of any pond, lake or river, will not adversely affect the quality of such body of water or affect the shoreline of such body of water, based on the standards outlined in Section 9.8.I.1.j.

    The bioretention basin is proposed to be constructed within the 250' wetland buffer. Part of the interior driveway is also within the 250' buffer. No adverse effects have been identified.

18. Low Impact Design: *Each applicant is required to submit a statement to the Planning Board documenting proposed Low Impact Design (LID) for the site, which will help to reduce storm water volumes and help to enhance storm water quality. LID includes, but is not limited to, green roofs, rain gardens, tree wells, infiltration basins and permeable pavement.*

    A bioretention basin and swales are proposed as part of the LID improvements on the project.

I, David Andreesen, certify that I am Chair of the Planning Board of the Town of Berwick, Maine, a Planning Board established pursuant to Maine State Statute (30-A § 4401) and I further certify that this decision was _____ by the Planning Board at its meeting of _____

No waivers were requested

Findings of Fact _____

Conditions of Approval

1. All wastewater from marijuana production shall be captured in a holding tank.

2. The South Berwick Water District shall be furnished with a detailed well drillers log for the new well.

3. A five-day pump test be performed on the well with well drawdown readings taken hourly until the well stabilizes. The Pump Test will be coordinated with the South Berwick Water District so the well drawdowns at Junction Road can be monitored to check for interference. The Facility may not irrigate their plants if the new well has an adverse effect on the Junction Road water source.

Application _____

_____ _____

David Andreesen, Planning Board Chair Date

To: Zac Gordon, Jay Conroy

Date: May 29, 2020
Project #: 55301.00

From: Evan Miller

Re: Berwick Solar Revised Planting Plan

Mr. Gordon and Mr. Conroy,

Per your request VHB is writing to outline the Planting Plan revisions that have been provided for the proposed Solar Project located at 193 Route 236 Berwick, Maine 03901.

VHB has been actively involved in the Solar Market throughout New England. We have worked in all the New England States and provided Site Permitting and Landscape Architectural Services on a variety of projects. Our Landscape Architecture team has established a tested plant palette that we have effectively used as screening on a variety of projects. Though each palette adjusts slightly based on region and climate, the palette provides the necessary buffering while still allowing the required hours of sunlight to effectively charge the solar panels.

The VHB Landscape Architecture team utilized a region-specific effective screening plant palette for our preliminary submittal for the Berwick Solar Project. A variety of evergreen trees were grouped along the property line between the solar field and the adjacent homeowners. After a site visit was conducted, the Landscape Team received a request to naturalize the proposed planting buffer and provide more depth of coverage.

VHB has prepared an updated Landscape Plan which achieves the following goals:

1. In order to naturalize the proposed buffer, the single line of evergreen trees has been adjusted to provide a variety of layers of plantings
2. Overstory canopy deciduous oaks, understory flowering redbuds and service berries and evergreen inkberry shrubs have been added to the plant palette.
3. This new plant palette will provide screening at multiple scales and at a variety of tiers
4. The diversity of plant material will enhance seasonal interest
5. New plants were selected for this palette to improve natural habitat.
6. Newly proposed plantings were specified at sizes that would provide immediate impact.

VHB had included a graphic depiction of the proposed buffer showing the variety of plantings, its naturalized quality and the depth of screening it provides. The VHB Landscape Architecture team believes that the changes depicted in the graphic and outlined above will effectively meet the request made during the site visit.

Evan M. Miller

Planting Screen
Berwick Solar, LLC

May 29, 2020

Quercus rubra / Red Oak

Abies fraseri / Fraser Fir

Juniperus virginiana / Hillspire Juniper

Picea glauca / Black Hills Spruce

Picea pungens / Colorado Spruce

Thuja occidentalis / Emerald Arborvitae

Amelanchier canadensis / Shadblow Serviceberry

Cercis canadensis / Eastern Redbud

PLANT SCHEDULE

DECIDUOUS TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE
QR	4	Quercus rubra	Red Oak	2 1/2 - 3" CAL.

EVERGREEN TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE
AF2	14	Abies fraseri	Fraser Fir	7 - 8` HT.
JC2	30	Juniperus virginiana `Cupressifolia`	Hillspire Juniper	5 - 6` HT.
PD	33	Picea glauca `Densata`	Black Hills Spruce	7 - 8` HT.
PF2	15	Picea pungens `Fat Albert`	Colorado Spruce	7 - 8` HT.
TE2	54	Thuja occidentalis `Emerald`	Emerald Arborvitae	5 - 6` HT.

FLOWERING TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE
AC2	9	Amelanchier canadensis	Shadblow Serviceberry - multi-stem	8 - 10` HT.
CC	16	Cercis canadensis	Eastern Redbud	8 - 10` HT.

SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	SIZE
IGD	74	Ilex glabra `Densa`	Densa Inkberry	2 - 3` HT.

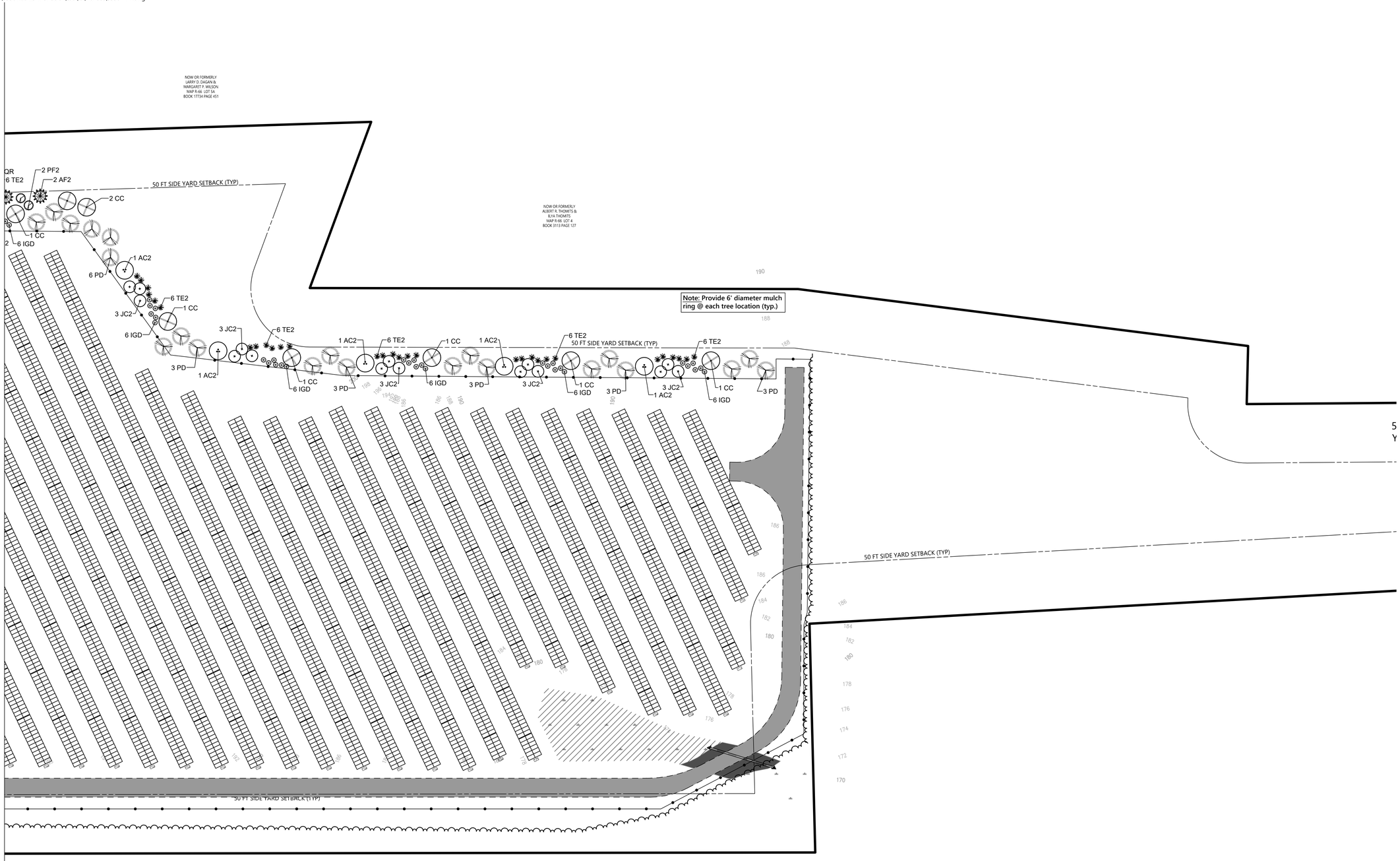
Ilex glabra ‘Densa’ / Densa Inkberry

Berwick Solar – Plant Palette

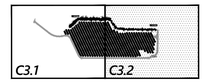
Berwick, ME

Berwick Solar – Approximate View of Screen at Installation

Berwick, ME



vhb.com
vhb
500 Southborough Drive
Suite 105B
South Portland, ME 04106
207.889.3150



Key

Not To Scale

0 20 40 80 Feet

PLANT SCHEDULE

DECIDUOUS TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE
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IGD	74	Ilex glabra `Densa`	Densa Inkberry	2 - 3` HT.

Berwick Solar, LLC

193 Route 236
Berwick, Maine 03901

No.	Revision	Date	Appvd.

Designed by TL
Checked by CG
Issued for
Permitting
Date
February 24, 2020

Not Approved for Construction

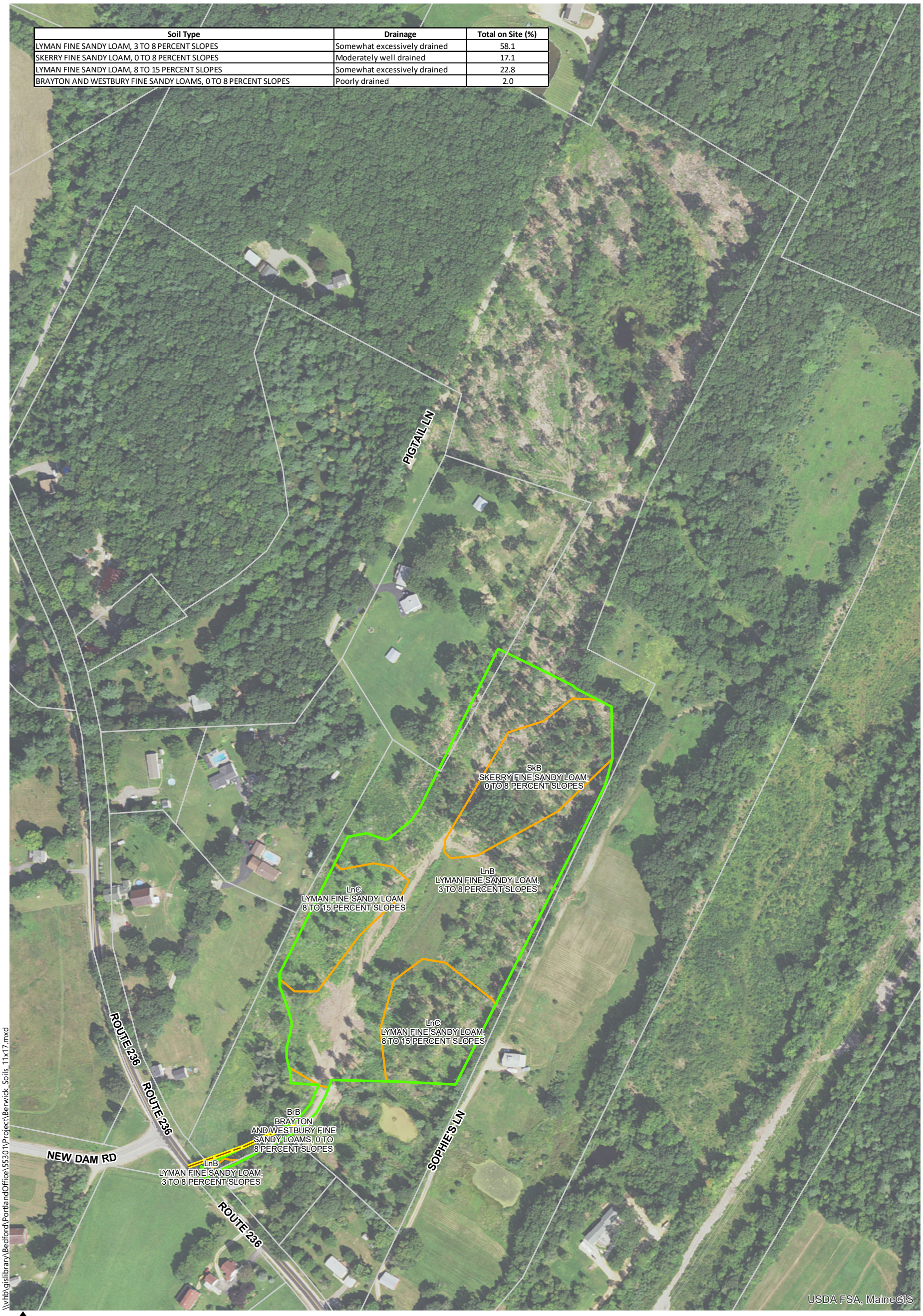
Drawing Title
Landscape Plan

Drawing Number
L-2

Sheet 8 of 6

Project Number
55301.00

Soil Type	Drainage	Total on Site (%)
LYMAN FINE SANDY LOAM, 3 TO 8 PERCENT SLOPES	Somewhat excessively drained	58.1
SKERRY FINE SANDY LOAM, 0 TO 8 PERCENT SLOPES	Moderately well drained	17.1
LYMAN FINE SANDY LOAM, 8 TO 15 PERCENT SLOPES	Somewhat excessively drained	22.8
BRAYTON AND WESTBURY FINE SANDY LOAMS, 0 TO 8 PERCENT SLOPES	Poorly drained	2.0



\\vhb\gislibrary\Bedford\PortlandOffice\55301\Project\Berwick_Soils_11x17.mxd

0 125 250 500 Feet

Legend

- Site Access Road
- Site Boundary
- NRCS Soils Boundary
- Parcel Boundary

Berwick Solar Site

Berwick, Maine

USDA NRCS Soil Survey Map

Source: VHB, ESRI, MEGIS

Solar Panel Certifications

Jinko Eagle JKM395M-72HL-V or an equivalently certified alternative

Table of Contents

EAGLE
MODULES

THE MOST DEPENDABLE SOLAR BRAND

EAGLE 72HM G2

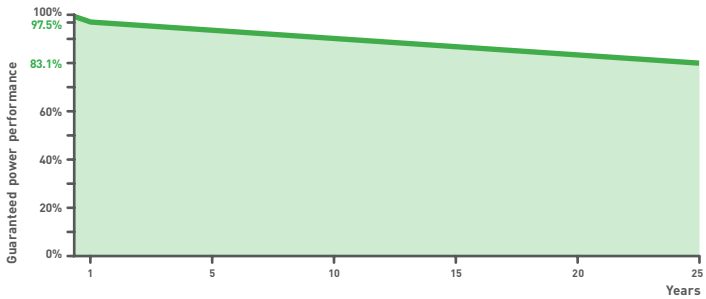
390-410 WATT • HALF CELL MONO PERC MODULE

Positive power tolerance of 0~+3%

- NYSE-listed since 2010, Bloomberg Tier 1 manufacturer
- Best-selling module globally for last 4 years
- Top performance in the strictest 3rd party labs
- 99.9% on-time delivery to the installer
- Automated manufacturing utilizing artificial intelligence
- Vertically integrated, tight controls on quality
- Premium solar panel factories in USA and Malaysia

LINEAR PERFORMANCE WARRANTY

25-Year Performance Warranty



Nomenclature:
JKM410M - 72HL-V

Code	Cell	Code	Cell	Code	Certification
null	Full	null	Normal	null	1000V
H	Half	L	Diamond	V	1500V

- ISO9001:2008 Quality Standards
- ISO14001:2004 Environmental Standards
- IEC61215, IEC61730 certified products
- OHSAS18001 Occupational Health & Safety Standards
- UL1703 certified products

KEY FEATURES

Diamond Half Cell Technology
World-record breaking efficient mono PERC half cut solar cells deliver high power in a small footprint.

Designed for Long Life
Uses the same DuPont protective film as the Space Station, Mars Lander, and jetliners. 25-year warranty.

Shade Tolerant
Twin array design allows continued performance even with shading by trees or debris.

Power Boost in Cloudy Conditions
A special film diffuses light, boosting performance even with shading by trees or debris.

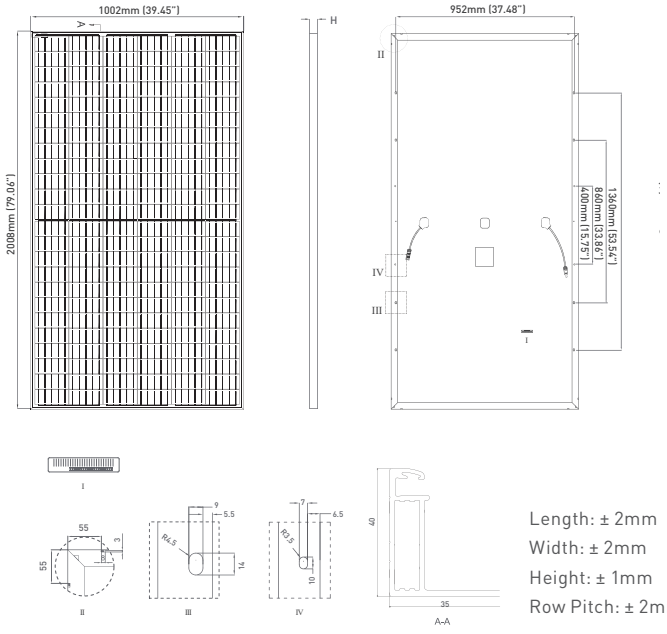
Protected Against All Environments
Certified to withstand humidity, heat, rain, marine environments, wind, hailstorms, and packed snow.

BUILDING YOUR TRUST IN SOLAR. JINKOSOLAR.US

Jinko Solar

ENGINEERING DRAWINGS

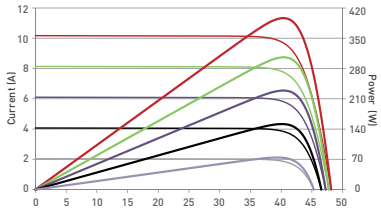
Front Side Back



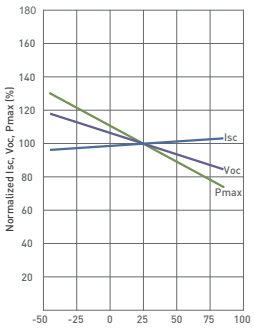
Length: ± 2mm
Width: ± 2mm
Height: ± 1mm
Row Pitch: ± 2mm

ELECTRICAL PERFORMANCE & TEMPERATURE DEPENDENCE

Current-Voltage & Power-Voltage Curves (410W)



Temperature Dependence of Isc, Voc, Pmax



MECHANICAL CHARACTERISTICS

Cells	Mono PERC Diamond Cell (158.75x158.75mm)
No. of Half Cells	144 (6×24)
Dimensions	2008×1002×40mm (79.06×39.45×1.57in)
Weight	22.5kg (49.6lbs)
Front Glass	3.2mm, Anti-Reflection Coating High Transmission, Low Iron, Tempered Glass
Frame	Anodized Aluminum Alloy
Junction Box	IP67 Rated
Output Cables	12 AWG, 1400mm (55.12in) or Customized Length
Fire Type	Type 1
Pressure Rating	5400Pa (Snow) & 2400Pa (Wind)

TEMPERATURE CHARACTERISTICS

Temperature Coefficients of Pmax	-0.35%/°C
Temperature Coefficients of Voc	-0.29%/°C
Temperature Coefficients of Isc	0.048%/°C
Nominal Operating Cell Temperature (NOCT)	45±2°C

MAXIMUM RATINGS

Operating Temperature (°C)	-40°C~+85°C
Maximum System Voltage	1500VDC (UL and IEC)
Maximum Series Fuse Rating	20A

PACKAGING CONFIGURATION

(Two pallets = One stack)

27pcs/pallet, 54pcs/stack, 594pcs/40'HQ Container

ELECTRICAL CHARACTERISTICS

Module Type	JKM390M-72HL-V		JKM395M-72HL-V		JKM400M-72HL-V		JKM405M-72HL-V		JKM410M-72HL-V	
	STC	NOCT	STC	NOCT	STC	NOCT	SCT	NOCT	SCT	NOCT
Maximum Power (Pmax)	390Wp	294Wp	395Wp	298Wp	400Wp	302Wp	405Wp	306Wp	410Wp	310Wp
Maximum Power Voltage (Vmp)	41.1V	39.1V	41.4V	39.3V	41.7V	39.6V	42.0V	39.8V	42.3V	40.0V
Maximum Power Current (Imp)	9.49A	7.54A	9.55A	7.60A	9.60A	7.66A	9.65A	7.72A	9.69A	7.76A
Open-circuit Voltage (Voc)	49.3V	48.0V	49.5V	48.2V	49.8V	48.5V	50.1V	48.7V	50.4V	48.9V
Short-circuit Current (Isc)	10.12A	8.02A	10.23A	8.09A	10.36A	8.16A	10.48A	8.22A	10.60A	8.26A
Module Efficiency STC (%)	19.38%		19.63%		19.88%		20.13%		20.38%	

***STC:** Irradiance 1000W/m² Cell Temperature 25°C AM = 1.5
NOCT: Irradiance 800W/m² Ambient Temperature 20°C AM = 1.5 Wind Speed 1m/s

*Power measurement tolerance: ±3%

The company reserves the final right for explanation on any of the information presented hereby. JKM390-410M-72HL-V-A3-US

Material Safety Data Sheet

Report No.: BL-SZ18B0041-F02

Sample Name: PV Modules

Date: 2018-11-14

prepared for

Jinko Solar Co., Ltd.
No.1 Jinko Road, Shangrao Economic Development Zone

prepared by

Shenzhen BALUN Technology Co., Ltd.
Block B, FL1, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, 518055, P.R. China
Tel: +86-755-6685 0100
Fax: +86-755-61824271

1. Chemical Product and Company Identification

Product Identification

Product model: JKMxxxM-72-V & JKMxxxM-72（xxx=370,375,380,385,390）

JKMxxxM-72H-V & JKMxxxM-72H（xxx=380,385,390,395,400）

Remark: xxx means the rating of product, i.e.: 380 means 380W.

Rating: For details see above.

Weight: Approx. 22.5 Kg

Manufacturer

Jinko Solar Co., Ltd.
No.1 Jinko Road, Shangrao Economic Development Zone

Emergency Telephone Number

Emergency Telephone: 86-21-51833159
Fax: 86-21-51833159
E-mail: eddy.hu@jinkosolar.com

2. Composition Information

Material Item	Chemical Composition	%	CAS Number
Frame	Aluminum	11.95	7429-90-5
	Alumina	0.25	1344-28-1
	Manganese	0.30	7439-96-5
Cell	Silicon	2.00	7440-21-3
	Phosphorus	0.15	7723-14-0
	Boron	0.15	7440-42-8
	Silicon nitride	0.15	12033-60-2
	Silver	0.33	7440-22-4
	Aluminum	0.20	7429-90-5
Junction-Box	Polyphenylene oxide (PPO)	0.12	--
	Tin	0.09	7440-31-5
	Copper	0.09	7440-50-8
	Polyethylene (PE)	0.33	9002-88-4
	Polycarbonate (PC)	0.20	25037-45-0
Glass	Tin	0.20	7440-31-5
	Tempered glass	70.32	--
Silica Gel	Silicon substrate	0.85	7440-21-3
	Silane coupling agent	0.15	78-10-4
Bus bar	Copper	0.90	7440-50-8
	Tin	0.05	7440-31-5
	Isopropyl alcohol	0.05	67-63-0
Back Sheet	Polyvinylidene Fluoride (PVDF)	0.26	24937-79-9
	Polyethylene terephthalate (PET)	2.66	25038-59-9
	Polyethylene (PE)	0.36	9002-88-4
Laminate material	Ethylene Vinyl Acetate (EVA)	6.09	24937-78-8
Other	--	1.8	--

3. Hazards Identification

Fatalness:

Basically non-toxic for itself. But exposure to the ingredients contained or their ingredients products could be dangerous.

Invasion route: Skin touch: There will be no dangerous during normal use.

Eye touch: There will be no dangerous during normal use.

Inhalation: There will be no dangerous during normal use.

Ingestion: Ingestion of internal chemical materials may cause mouth, throat and intestinal buns irritation and damage. Get medical aid.

Health hazards:

For internal components, chemical materials are stored in a hermetically sealed shell, during normal use, there is no physical danger of ignition or explosion and chemical danger of hazardous materials leakage.

Environment hazards:

Ingredients contained or their ingredients products could be harmful to environment.

Burn & Burst danger:

If heated strongly by the surrounding fire, acrid gas and flammable gas may be emitted and may case explode dangerous.

4. First Aid Measures

The cell is not hazard with eye and skin contact under normal circumstance. In case of the enclosure is damaged, the cell can not be used and touched. It is safety except that the cell is damaged by fire or rupture. The leakage of internal hazardous substance and formation of hazardous substance would occur, take the following measures if contact with the cell.

Skin touch:

If there is any unwell reaction, wash thoroughly with soap & water, flush with plenty of water. If irritation persists, seek medical advice.

Eyes touch:

There will be no dangerous during normal use. If touched under abnormal circumstances, Rinse immediately with plenty of water for at least 15 mins. Contact a doctor if symptoms persist.

Inhalation:

There will be no dangerous during normal use. If there is any unwell reaction, Remove from exposure site to fresh air. Keep at rest. Obtain medical attention.

Ingestion:

Rinse mouth out with water. Seek medical advice immediately.

5. Fire Fighting Measures

Danger characteristic:

Meet high fever, flame, there may cause explode danger

Extinguishing Media:

Use dry graphite, sandy soil as appropriate for materials in surrounding fire.

Fire-Fighting:

The staff must wear the clothes which can deference the fire and toxic gas. Put out the fire in the upwind direction. Avoid using direct streams of water or foam on molten burning material as it may scatter and spread the fire.

Recommended: N/A

Special measures: N/A

Extinguishing procedures: N/A

6. Accidental Release Measures

Personal precautions:

If the cell is released, remove personnel from area until fumes dissipate. Provide maximum ventilation to clear out hazardous gases. The preferred response is to leave the area and allow the vapors to dissipate. Avoid skin and eyes contact or inhalation of vapors. Remove spilled liquid with absorbent and incinerated. If leakage of the cell happens, liquid could be absorbed with sand, earth or other inert substance and contaminated area should be ventilated meantime.

Environment precautions:

Make a limitation for burning and throwing into garbage. Do not flush into surface water.

Cleaning up methods: N.A

7. Handling and Storage

Precautions in handling:

Do not expose the cell to excessive physical shocked or vibration. Short-circuiting should be avoided. Prolonged short circuits may damage the cell.

Storage conditions:

Store in a well-ventilated area away from incompatible substances. Don't place the cell near heating equipment, nor expose to direct sunlight for long periods. Elevated temperatures can result in shortened cell life and degrade performance.

8. Exposure Controls/Personal Protection

Respiratory protection:

No necessary under normal use. Protect hand with chemical resistant rubber gloves. If cell is burning, leave the area immediately.

Hand protection:

None under normal use. In case of rupture, use PVC, neoprene or nitrile gloves of 15miles (0.015 inch) or thicker.

Eye protection:

None required under normal conditions. Use approved chemical work safety goggles or face shield, if handling a rupture cell.

Skin protection:

No necessary under normal use. Use rubber apron and protective working in case of handling of a rupture cell.

Other protective equipment:

Chemical resistance clothing is recommended along with eye wash station and safety shower should be available. Work hygienic practices: Use good chemical hygiene practice. Wash hands after use and before drinking, eating or smoking. Wash hands thoroughly after cleaning-up component spill caused by leaking cell. No eating, drinking, or smoking in cell storage area.

9. Physical and Chemical Properties

Physical State:

The sample is not single chemical material; there are no specific physical and chemical properties

Color: The sample is composed of several components, there is no specific color.

Odor: N.A

Boiling point: N.A

Melting point: N.A

10. Stability and Reactivity

Stability: Stable during normal operation conditions.

Conditions/materials to avoid:

Incompatible with water, moisture, strong oxidizing agents, reducing agents, acids and bases.

Hazardous decomposition or byproducts:

None under normal operating conditions. Carbon dioxide and hydrogen fluoride gas may be generated during combustion of cell.

Ventilation requirements: Well-ventilated area away from incompatible substances

11. Toxicological Information

Not applicable under normal conditions of use.

12. Ecological Information

Degradability: N.A

Precautions: Not available

13. Disposal Considerations

Nature of waste: Hazardous Waste

Waste disposal methods:

a. Disposal of the cell should be performed by permitted, professional disposal firms knowledgeable in federal, state or local requirements of hazardous waste treatment and hazardous waste transportation.

b. Incineration should never be performed by cell used. The batteries contained recyclable materials. Recycling options available in your local area should be considered when disposing of this product, through licensed waste carrier.

c. The cell should have their terminal insulated in order to prevent short circuits during transportation to the disposal site.

Note: Consult your local or region authorities, disposal maybe subject to national, state, or local laws.

14. Transport Information

These products are considered non-dangerous goods by the international Civil Aviation Organization (ICAO) and the International Air Transport Association (IATA).
Separate these product when shipping to prevent short-circuiting. They should be packed in strong packaging for support during transport.

Transport Fashion: By air, by sea, by railway, by road.

15. Regulatory Information

Law information

《Dangerous Goods Regulation》
《Recommendations on the Transport of Dangerous Goods Model Regulations》
《International Maritime Dangerous Goods》
《Technical Instructions for the Safe Transport of Dangerous Goods》
《Classification and code of dangerous goods》
OSHA Hazard Communication Standard Status
Toxic Substances Control Act (TSCA) Status
SARA Title III
RCRA
U.S. Federal Regulations
European/International Regulations
In accordance with all Federal, State and Local laws.

16. Other Information

The above information is based on the data of which we are aware and is believed to be correct as of the data hereof. Since this information may be applied under conditions beyond our control and with which may be unfamiliar and since data made available subsequent to the data hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.

Checked by: Nov. 14. 2018

Approved by: Nov. 14. 2018

CERTIFICATE OF COMPLIANCE

Certificate Number	20180717-E362479
Report Reference	E362479-20151010
Issue Date	2018-JULY-17
Issued to:	JINKO SOLAR CO LTD NO 1 JINKO RD SHANGRAO ECONOMIC DEVELOPMENT ZONE, SHANGRAO JIANGXI 334100 CHINA
This is to certify that representative samples of	PHOTOVOLTAIC MODULES AND PANELS WITH SYSTEM VOLTAGE RATINGS OVER 600 VOLTS Please see addendum page
	Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.
Standard(s) for Safety:	UL 1703, Standard for Safety for Flat-Plate Photovoltaic Modules and Panels ULC/ORD-C1703:2018, Flat-Plate Photovoltaic Modules and Panels
Additional Information:	See the UL Online Certifications Directory at www.ul.com/database for additional information

Only those products bearing the UL Certification Mark should be considered as being covered by UL's Certification and Follow-Up Service.

Look for the UL Certification Mark on the product.

Bruce Mahrenholz, Director North American Certification Program

UL LLC

CERTIFICATE OF COMPLIANCE

Certificate Number	20180717-E362479
Report Reference	E362479-20151010
Issue Date	2018-JULY-17

This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements.

Photovoltaic (Solar) Modules,

Models:

JKM250P-72-V, JKM255P-72-V, JKM260P-72-V, JKM265P-72-V, JKM270P-72-V, JKM275P-72-V, JKM280P-72-V, JKM285P-72-V, JKM290P-72-V, JKM295P-72-V, JKM300P-72-V, JKM305P-72-V, JKM310P-72-V, JKM315P-72-V, JKM320P-72-V, JKM325P-72-V, JKM330P-72-V, JKM335P-72-V, JKM340P-72-V, JKM345P-72-V, JKM350P-72-V, JKM355P-72-V, JKM360P-72-V.

JKM200P-60-V, JKM205P-60-V, JKM210P-60-V, JKM215P-60-V, JKM220P-60-V, JKM225P-60-V, JKM230P-60-V, JKM235P-60-V, JKM240P-60-V, JKM245P-60-V, JKM250P-60-V, JKM255P-60-V, JKM260P-60-V, JKM265P-60-V, JKM270P-60-V, JKM275P-60-V, JKM280P-60-V, JKM285P-60-V, JKM290P-60-V, JKM295P-60-V, JKM300P-60-V.

JKM250PP-72-V, JKM255PP-72-V, JKM260PP-72-V, JKM265PP-72-V, JKM270PP-72-V, JKM275PP-72-V, JKM280PP-72-V, JKM285PP-72-V, JKM290PP-72-V, JKM295PP-72-V, JKM300PP-72-V, JKM305PP-72-V, JKM310PP-72-V, JKM315PP-72-V, JKM320PP-72-V, JKM325PP-72-V, JKM330PP-72-V, JKM335PP-72-V, JKM340PP-72-V JKM345PP-72-V, JKM350PP-72-V, JKM355PP-72-V, JKM360PP-72-V, JKM365PP-72-V, JKM370PP-72-V.

JKM250PP-72-WV, JKM255PP-72-WV, JKM260PP-72-WV, JKM265PP-72-WV, JKM270PP-72-WV, JKM275PP-72-WV, JKM280PP-72-WV, JKM285PP-72-WV, JKM290PP-72-WV, JKM295PP-72-WV, JKM300PP-72-WV, JKM305PP-72-WV, JKM310PP-72-WV, JKM315PP-72-WV, JKM320PP-72-WV, JKM325PP-72-WV, JKM330PP-72-WV, JKM335PP-72-WV, JKM340PP-72-WV JKM345PP-72-WV, JKM350PP-72-WV, JKM355PP-72-WV, JKM360PP-72-WV.

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Bruce Mahrenholz, Director North American Certification Program

UL LLC

CERTIFICATE OF COMPLIANCE

Certificate Number	20180717-E362479
Report Reference	E362479-20151010
Issue Date	2018-JULY-17

JKM250PP-72-V(Plus), JKM255PP-72-V(Plus), JKM260PP-72-V(Plus), JKM265PP-72-V(Plus), JKM270PP-72-V(Plus), JKM275PP-72-V(Plus), JKM280PP-72-V(Plus), JKM285PP-72-V(Plus),JKM290PP-72-V(Plus), JKM295PP-72-V(Plus), JKM300PP-72-V(Plus), JKM305PP-72-V(Plus),JKM310PP-72-V(Plus), JKM315PP-72-V(Plus), JKM320PP-72-V(Plus), JKM325PP-72-V(Plus), JKM330PP-72-V(Plus), JKM335PP-72-V(Plus), JKM340PP-72-V(Plus), JKM345PP-72-V(Plus), JKM350PP-72-V(Plus), JKM355PP-72-V(Plus), JKM360PP-72-V(Plus).

JKM200PP-60-V(Plus), JKM205PP-60-V(Plus), JKM210PP-60-V(Plus), JKM215PP-60-V(Plus), JKM220PP-60-V(Plus), JKM225PP-60-V(Plus), JKM230PP-60-V(Plus), JKM235PP-60-V(Plus), JKM240PP-60-V(Plus), JKM245PP-60-V(Plus), JKM250PP-60-V(Plus), JKM255PP-60-V(Plus), JKM260PP-60-V(Plus), JKM265PP-60-V(Plus), JKM270PP-60-V(Plus), JKM275PP-60-V(Plus), JKM280PP-60-V(Plus), JKM285PP-60-V(Plus), JKM290PP-60-V(Plus), JKM295PP-60-V(Plus), JKM300PP-60-V(Plus).

JKM250M-72-V, JKM255M-72-V, JKM260M-72-V, JKM265M-72-V, JKM270M-72-V, JKM275M-72-V, JKM280M-72-V, JKM285M-72-V, JKM290M-72-V, JKM295M-72-V, JKM300M-72-V, JKM305M-72-V, JKM310M-72-V, JKM315M-72-V, JKM320M-72-V, JKM325M-72-V, JKM330M-72-V, JKM335M-72-V, JKM340M-72-V, JKM345M-72-V, JKM350M-72-V, JKM355M-72-V, JKM360M-72-V, JKM365M-72-V, JKM370M-72-V, JKM375M-72-V, JKM380M-72-V, JKM385M-72-V, @ JKM390M-72-V, @ JKM395M-72-V, @ JKM400M-72-V.

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JKM200M-60-WV, JKM205M-60-WV, JKM210M-60-WV, JKM215M-60-WV, JKM220M-60-WV, JKM225M-60-WV, JKM230M-60-WV, JKM235M-60-WV, JKM240M-60-WV, JKM245M-60-WV, JKM250M-60-WV, JKM255M-60-WV, JKM260M-60-WV, JKM265M-60-WV, JKM270M-60-WV, JKM275M-60-WV, JKM280M-60-WV, JKM285M-60-WV, JKM290M-60-WV, JKM295M-60-WV, JKM300M-60-WV, JKM305M-60-WV, JKM310M-60-WV, JKM315M-60-WV, JKM320M-60-WV, @ JKM325M-60-WV, @ JKM330M-60-WV.

Bruce Mahrenholz, Director North American Certification Program

UL LLC

CERTIFICATE OF COMPLIANCE

Certificate Number	20180717-E362479
Report Reference	E362479-20151010
Issue Date	2018-JULY-17

JKM250PP-72B-V, JKM255PP-72B-V, JKM260PP-72B-V, JKM265PP-72B-V, JKM270PP-72B-V, JKM275PP-72B-V, JKM280PP-72B-V, JKM285PP-72B-V, JKM290PP-72B-V, JKM295PP-72B-V, JKM300PP-72B-V, JKM305PP-72B-V, JKM310PP-72B-V, JKM315PP-72B-V, JKM320PP-72B-V, JKM325PP-72B-V, JKM330PP-72B-V, JKM335PP-72B-V, JKM340PP-72B-V, JKM345PP-72B-V, JKM350PP-72B-V, JKM355PP-72B-V, JKM360PP-72B-V.

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JKM200M-60B-V, JKM205M-60B-V, JKM210M-60B-V, JKM215M-60B-V, JKM220M-60B-V, JKM225M-60B-V, JKM230M-60B-V, JKM235M-60B-V, JKM240M-60B-V, JKM245M-60B-V, JKM250M-60B-V, JKM255M-60B-V, JKM260M-60B-V, JKM265M-60B-V, JKM270M-60B-V, JKM275M-60B-V, JKM280M-60B-V, JKM285M-60B-V, JKM290M-60B-V, JKM295M-60B-V, JKM300M-60B-V, JKM305M-60B-V, JKM310M-60B-V, JKM315M-60B-V, JKM320M-60B-V, @ JKM325M-60B-V, @ JKM330M-60B-V.

JKM250PP-72-J4V, JKM255PP-72-J4V, JKM260PP-72-J4V, JKM265PP-72-J4V, JKM270PP-72-J4V, JKM275PP-72-J4V, JKM280PP-72-J4V, JKM285PP-72-J4V, JKM290PP-72-J4V, JKM295PP-72-J4V, JKM300PP-72-J4V, JKM305PP-72-J4V, JKM310PP-72- J4V, JKM315PP-72-J4V, JKM320PP-72-J4V, JKM325PP-72-J4V, JKM330PP-72-J4V, JKM335PP-72-J4V, JKM340PP-72-J4V JKM345PP-72-J4V, JKM350PP-72-J4V, JKM355PP-72-J4V, JKM360PP-72-J4V.

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Bruce Mahrenholz, Director North American Certification Program

UL LLC

CERTIFICATE OF COMPLIANCE

Certificate Number	20180717-E362479
Report Reference	E362479-20151010
Issue Date	2018-JULY-17

JKM250PP-72H-V, JKM255PP-72H-V, JKM260PP-72H-V, JKM265PP-72H-V, JKM270PP-72H-V, JKM275PP-72H-V, JKM280PP-72H-V, JKM285PP-72H-V, JKM290PP-72H-V, JKM295PP-72H-V, JKM300PP-72H-V, JKM305PP-72H-V, JKM310PP-72H-V, JKM315PP-72H-V, JKM320PP-72H-V, JKM325PP-72H-V, JKM330PP-72H-V, JKM335PP-72H-V, JKM340PP-72H-V, JKM345PP-72H-V, JKM350PP-72H-V, JKM355PP-72H-V, JKM360PP-72H-V, JKM365PP-72H-V, JKM370PP-72H-V.

JKM250PP-72HB-V, JKM255PP-72HB-V, JKM260PP-72HB-V, JKM265PP-72HB-V, JKM270PP-72HB-V, JKM275PP-72HB-V, JKM280PP-72HB-V, JKM285PP-72HB-V, JKM290PP-72HB-V, JKM295PP-72HB-V, JKM300PP-72HB-V, JKM305PP-72HB-V, JKM310PP-72HB-V, JKM315PP-72HB-V, JKM320PP-72HB-V, JKM325PP-72HB-V, JKM330PP-72HB-V, JKM335PP-72HB-V, JKM340PP-72HB-V, JKM345PP-72HB-V, JKM350PP-72HB-V, JKM355PP-72HB-V, JKM360PP-72HB-V, JKM365PP-72HB-V, JKM370PP-72HB-V.

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JKM200PP-60H-V, JKM205PP-60H-V, JKM210PP-60H-V, JKM215PP-60H-V, JKM220PP-60H-V, JKM225PP-60H-V, JKM230PP-60H-V, JKM235PP-60H-V, JKM240PP-60H-V, JKM245PP-60H-V, JKM250PP-60H-V, JKM255PP-60H-V, JKM260PP-60H-V, JKM265PP-60H-V, JKM270PP-60H-V, JKM275PP-60H-V, JKM280PP-60H-V, JKM285PP-60H-V, JKM290PP-60H-V, JKM295PP-60H-V, JKM300PP-60H-V, JKM305PP-60H-V, JKM310PP-60H-V.

JKM200PP-60HB-V, JKM205PP-60HB-V, JKM210PP-60HB-V, JKM215PP-60HB-V, JKM220PP-60HB-V, JKM225PP-60HB-V, JKM230PP-60HB-V, JKM235PP-60HB-V, JKM240PP-60HB-V, JKM245PP-60HB-V, JKM250PP-60HB-V, JKM255PP-60HB-V, JKM260PP-60HB-V, JKM265PP-60HB-V, JKM270PP-60HB-V, JKM275PP-60HB-V, JKM280PP-60HB-V, JKM285PP-60HB-V, JKM290PP-60HB-V, JKM295PP-60HB-V, JKM300PP-60HB-V, JKM305PP-60HB-V, JKM310PP-60HB-V.

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Bruce Mahrenholz, Director North American Certification Program

UL LLC

CERTIFICATE OF COMPLIANCE

Certificate Number	20180717-E362479
Report Reference	E362479-20151010
Issue Date	2018-JULY-17

JKM250M-72H-V, JKM255M-72H-V, JKM260M-72H-V, JKM265M-72H-V, JKM270M-72H-V, JKM275M-72H-V, JKM280M-72H-V, JKM285M-72H-V, JKM290M-72H-V, JKM295M-72H-V, JKM300M-72H-V, JKM305M-72H-V, JKM310M-72H-V, JKM315M-72H-V, JKM320M-72H-V, JKM325M-72H-V, JKM330M-72H-V, JKM335M-72H-V, JKM340M-72H-V, JKM345M-72H-V, JKM350M-72H-V, JKM355M-72H-V, JKM360M-72H-V, JKM365M-72H-V, JKM370M-72H-V, JKM375M-72H-V, JKM380M-72H-V, JKM385M-72H-V, @ JKM390M-72H-V, @ JKM395M-72H-V, @ JKM400M-72H-V.

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JKM200M-60H-V, JKM205M-60H-V, JKM210M-60H-V, JKM215M-60H-V, JKM220M-60H-V, JKM225M-60H-V, JKM230M-60H-V, JKM235M-60H-V, JKM240M-60H-V, JKM245M-60H-V, JKM250M-60H-V, JKM255M-60H-V, JKM260M-60H-V, JKM265M-60H-V, JKM270M-60H-V, JKM275M-60H-V, JKM280M-60H-V, JKM285M-60H-V, JKM290M-60H-V, JKM295M-60H-V, JKM300M-60H-V, JKM305M-60H-V, JKM310M-60H-V, JKM315M-60H-V, JKM320M-60H-V, @ JKM325M-60H-V, @ JKM330M-60H-V.

JKM200M-60HB-V, JKM205M-60HB-V, JKM210M-60HB-V, JKM215M-60HB-V, JKM220M-60HB-V, JKM225M-60HB-V, JKM230M-60HB-V, JKM235M-60HB-V, JKM240M-60HB-V, JKM245M-60HB-V, JKM250M-60HB-V, JKM255M-60HB-V, JKM260M-60HB-V, JKM265M-60HB-V, JKM270M-60HB-V, JKM275M-60HB-V, JKM280M-60HB-V, JKM285M-60HB-V, JKM290M-60HB-V, JKM295M-60HB-V, JKM300M-60HB-V, JKM305M-60HB-V, JKM310M-60HB-V, JKM315M-60HB-V, JKM320M-60HB-V, @ JKM325M-60HB-V, @ JKM330M-60HB-V.

JKM300M-60BL-V, JKM305M-60BL-V, JKM310M-60BL-V, JKM315M-60BL-V, JKM320M-60BL-V, @ JKM325M-60BL-V, @ JKM330M-60BL-V

JKM300M-60L-V, JKM305M-60L-V, JKM310M-60L-V, JKM315M-60L-V, JKM320M-60L-V, @ JKM325M-60L-V, @ JKM330M-60L-V

JKM300M-60HL-V, JKM305M-60HL-V, JKM310M-60HL-V, JKM315M-60HL-V, JKM320M-60HL-V, @ JKM325M-60HL-V, @ JKM330M-60HL-V

Bruce Mahrenholz, Director North American Certification Program

UL LLC

CERTIFICATE OF COMPLIANCE

Certificate Number	20180717-E362479
Report Reference	E362479-20151010
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JKM300M-60HBL-V, JKM305M-60HBL-V, JKM310M-60HBL-V, JKM315M-60HBL-V, JKM320M-60HBL-V, @ JKM325M-60HBL-V, @ JKM330M-60HBL-V

JKM370M-72L-V, JKM375M-72L-V, JKM380M-72L-V, JKM385M-72L-V, @ JKM390M-72L-V, @ JKM395M-72L-V, @ JKM400M-72L-V.

JKM370M-72HL-V, JKM375M-72HL-V, JKM380M-72HL-V, JKM385M-72HL-V, @ JKM390M-72HL-V, @ JKM395M-72HL-V, @ JKM400M-72HL-V.

Note:

These products were evaluated in accordance to:

USL – Evaluated to the requirements of the Standard for Safety for Flat-Plate Photovoltaic Modules and Panels, UL 1703.

CNL – Additionally evaluated to the Canadian Other Recognized Document, Flat-Plate Photovoltaic Modules and Panels, ULC/ORD-C1703-01

@: These models are only for big cells with cell dimension 158.75 by 158.75 mm or 158.75 by 79.375 mm.

Bruce Mahrenholz, Director North American Certification Program

UL LLC

Zertifikat *Certificate*

TÜVRheinland®

Zertifikat Nr. *Certificate No.*
PV 50416412

Blatt *Sheet*
0001

Ihr Zeichen *Client Reference*	**Unser Zeichen** *Our Reference*	**Ausstellungsdatum**	*Date of Issue*
L.L.F	01-LYM-50173415 001	17.09.2018	*(day/mo/yr)*

Genehmigungsinhaber *License Holder*
Jinko Solar Co., Ltd.
No. 1 Jinko Road
Shangrao Economic Development Zone
Jiangxi Province 334100
P. R. China

Fertigungsstätte *Manufacturing Plant*
Refer to latest revision
of the annex list of factories

Prüfzeichen *Test Mark*

TÜVRheinland® CERTIFIED
IEC 61215
IEC 61730
Regular Production Surveillance
www.tuv.com
ID 1419061546

Geprüft nach *Tested acc. to*
IEC 61215-1:2016
IEC 61215-1-1:2016
IEC 61215-2:2016
IEC 61730-1:2016
IEC 61730-2:2016

Zertifiziertes Produkt (Geräteidentifikation)
Certified Product ***(Product Identification)***

Lizenzentgelte - Einheit
License Fee - Unit

PV Module

Type Designation:
With 6" mono c-Si cells:
JKMxxxM-72-V; JKMxxxM-72(Plus)-V; JKMxxxM-72L-V;
JKMSxxxM-72-V; JKMSxxxM-72-V-J
(xxx=335-385, in steps of 5, 72 cells)
JKMxxxM-60-V; JKMxxxM-60(Plus)-V; JKMxxxM-60L-V;
JKMSxxxM-60-V; JKMSxxxM-60-V-J
(xxx=270-320, in steps of 5, 60 cells)
With 6" mono half-cut c-Si cells:
JKMxxxM-72H-V; JKMxxxM-72HL-V
(xxx=335-385, in steps of 5, 144 cells)
JKMxxxM-60H-V; JKMxxxM-60HL-V
(xxx=270-320, in steps of 5, 120 cells)
With 6" poly c-Si cells:
JKMxxxPP-72-V; JKMxxxPP-72(Plus)-V; JKMSxxxPP-72-V;
JKMSxxxPP-72-V-J (xxx=320-355, in steps of 5, 72 cells)
JKMxxxPP-60-V; JKMxxxPP-60(Plus)-V; JKMSxxxPP-60-V;
JKMSxxxPP-60-V-J (xxx=260-290, in steps of 5, 60 cells)

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Continued on Page 2

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Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde.
Das Produkt entspricht den o.g. Anforderungen, die Herstellung wird überwacht.
This certificate is based on our Testing and Certification Regulation. The product fulfills above mentioned requirements, the production is subject to surveillance.

TÜV Rheinland LGA Products GmbH TÜVRheinland® Zertifizierungsstelle

Zertifizierungsstelle

Dipl.-Ing. (TU) G. Reimann

TÜV Rheinland LGA Products GmbH, Tillystraße 2, 90431 Nürnberg
Tel.: +49 221 806-1371 e-mail: cert-validity@de.tuv.com
Fax: +49 221 806-3935 http://www.tuv.com/safety

Zertifikat *Certificate*

TÜVRheinland®

Zertifikat Nr. *Certificate No.*
PV 50416412

Blatt *Sheet*
0002

Ihr Zeichen *Client Reference*	Unser Zeichen *Our Reference*	Ausstellungsdatum	*Date of Issue*
L.L.F	01-LYM-50173415 001	17.09.2018	*(day/mo/yr)*

Genehmigungsinhaber *License Holder*
Jinko Solar Co., Ltd.
No. 1 Jinko Road
Shangrao Economic Development Zone
Jiangxi Province 334100
P. R. China

Fertigungsstätte *Manufacturing Plant*
Refer to latest revision
of the annex list of factories

Prüfzeichen *Test Mark*

TÜVRheinland® CERTIFIED
IEC 61215
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www.tuv.com
ID 1419061546

Geprüft nach *Tested acc. to*
IEC 61215-1:2016
IEC 61215-1-1:2016
IEC 61215-2:2016
IEC 61730-1:2016
IEC 61730-2:2016

Zertifiziertes Produkt (Geräteidentifikation)
Certified Product (Product Identification)

Lizenzentgelte - Einheit
License Fee - Unit

PV Module

Continuation of Page 1 — 4

With 6" poly half-cut c-Si cells:
JKMxxxPP-72H-V (xxx=330-380, in steps of 5, 144 cells)
JKMxxxPP-60H-V (xxx=260-315, in steps of 5, 120 cells)

Remarks:
Class II acc. to IEC 61140
Max. System Voltage: up to 1500 VDC (Voc at STC)
Fire Rating: Class C
Design Load/ Safety Factors: 3600 / 1.5 (downward)
1600 / 1.5 (upward)

Conditions:
The product test is voluntarily according to technical regulations. Any change of the design, materials, components or processing may require the repetition of some of the qualification tests in order to retain type approval.
This certificate is valid until 16 September 2023.

4

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde.
Das Produkt entspricht den o.g. Anforderungen, die Herstellung wird überwacht.
This certificate is based on our Testing and Certification Regulation. The product fulfills above mentioned requirements, the production is subject to surveillance.

TÜV Rheinland LGA Products GmbH TÜVRheinland® Zertifizierungsstelle

Zertifizierungsstelle

Dipl.-Ing. (TU) G. Reimann

TÜV Rheinland LGA Products GmbH, Tillystraße 2, 90431 Nürnberg
Tel.: +49 221 806-1371 e-mail: cert-validity@de.tuv.com
Fax: +49 221 806-3935 http://www.tuv.com/safety

Zertifikat *Certificate*

TÜVRheinland®

Zertifikat Nr. *Certificate No.*
PV 50416412

Blatt *Sheet*
0003

Ihr Zeichen *Client Reference*	**Unser Zeichen** *Our Reference*	**Ausstellungsdatum**	*Date of Issue*
L.L.F	01-LYM-50173415 003	28.01.2019	*(day/mo/yr)*

Genehmigungsinhaber *License Holder*
Jinko Solar Co., Ltd.
No. 1 Jinko Road
Shangrao Economic Development Zone
Jiangxi Province 334100
P. R. China

Fertigungsstätte *Manufacturing Plant*
Refer to latest revision
of the annex list of factories

Prüfzeichen *Test Mark*

TÜVRheinland® CERTIFIED
IEC 61215
IEC 61730
Regular Production Surveillance
www.tuv.com
ID 1419061546

Geprüft nach *Tested acc. to*
IEC 61215-1:2016
IEC 61215-1-1:2016
IEC 61215-2:2016
IEC 61730-1:2016
IEC 61730-2:2016

Zertifiziertes Produkt (Geräteidentifikation)
Certified Product (Product Identification)

Lizenzentgelte - Einheit
License Fee - Unit

PV Module

Same as Page 1-2

4

In addition:
Type Designation:
JKMxxxM-72-V; JKMxxxM-72(Plus)-V; JKMxxxM-72L-V;
JKMSxxxM-72-V; JKMSxxxM-72-V-J
(xxx=390-410, in steps of 5, 72 cells)
JKMxxxM-60-V; JKMxxxM-60(Plus)-V; JKMxxxM-60L-V;
JKMSxxxM-60-V; JKMSxxxM-60-V-J
(xxx=325-340, in steps of 5, 60 cells)
JKMxxxM-72H-V; JKMxxxM-72HL-V
(xxx=390-410, in steps of 5, 144 cells)
JKMxxxM-60H-V; JKMxxxM-60HL-V
(xxx=325-340, in steps of 5, 120 cells)

4

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde.
Das Produkt entspricht den o.g. Anforderungen, die Herstellung wird überwacht.
This certificate is based on our Testing and Certification Regulation. The product fulfills above mentioned requirements, the production is subject to surveillance.

Zertifizierungsstelle

TÜV Rheinland LGA Products GmbH Zertifizierungsstelle TÜV Rheinland®

Dipl.-Ing. D. Löffler

TÜV Rheinland LGA Products GmbH, Tillystraße 2, 90431 Nürnberg
Tel.: +49 221 806-1371 e-mail: cert-validity@de.tuv.com
Fax: +49 221 806-3935 http://www.tuv.com/safety

Anlage Fertigungsstättenliste /Attachment List of Factories

TÜVRheinland®

PV 50416412 0001

Anlagenrevision / Annex revision 1

1 Zhejiang Jinko Solar Co., Ltd.
Yuan Xi Road
Technical Functional Zone
Yuan Hua Town
Haining, Zhejiang 314416
P. R. China

2 Jinko Solar Co., Ltd.
No. 1 Jinko Road
Shangrao Economic Development Zone
Jiangxi Province 334100
P. R. China

3 JINKO SOLAR TECHNOLOGY SDN. BHD.
2481,Tingkat Perusahaan 4
Kawasan Perusahaan Bebas Perai
13600 Perai, Penang
Malaysia

4 Zhejiang Jinko Solar Co., Ltd.
No.35 Haishi Road,
Jianshan New District, Haining City,
Zhejiang Province. 314415
P. R. China

5 JINKO SOLAR TECHNOLOGY
SDN. BHD.(P2)
2522, Lorong Perusahaan 4
Kawasan Perusahaan Bebas Perai,
Phase 1
13600 Perai, Penang
Malaysia

6 JINKO SOLAR TECHNOLOGY SDN. BHD.(P3)
Lot 10085, Plot C & D
Jalan Perusahaan, Mukim 1
13600 Seberang Perai Tengah, Penang
Malaysia

7 Yuhuan Jinkosolar Co., Ltd
At the intersection of Shanghai Road
and Taizhou Road in the third issue of
Yuhuan economic development Zone,
Zhejiang province 317600
P. R. China

8 Jiangsu Jinko Day Sheng Solar Co.,Ltd.
No. 228, Yuesheng North Road,
Fanshui Town,Industrial
concentration area,Baoying County,
Yangzhou Jiangsu Province 225819
P. R. China

TÜVRheinland®

9 Jinko Solar Co.,Ltd.(fifth factory)
NO.1 YingBin Road,
Shangrao Economic Development Zone,
Jiangxi Province 334100
P. R. China

10 Jinko Solar Technology Sdn. Bhd. (P5)
Plot 538 Tingkat Perusahaan 4B,
Perai Free Trade Zone
13600 Perai, Penang
Malaysia

11 Jinko Solar Technology Sdn. Bhd. (P6)
2480, Tingkat Perusahaan Enam,
Perai Free Trade Zone,
13600 Perai, Penang
Malaysia

Dieser Anhang ersetzt den Vorgänger vom/
This annex replaces the previous annex dated

Datum / Date 17.09.2018

Zertifizierungsstelle
/ Certification Body

TÜV Rheinland LGA Products GmbH
TÜV Rheinland®
Zertifizierungsstelle

Dipl.-Ing. (TU) G. Reimann

Town of Berwick Planning Board
Conditional Use Findings of Fact
Applicant: Berwick Solar LLC
Off Route 236 (Tax Map R-066, Lot 6A)
June 4, 2020

Berwick Solar, LLC proposed to install a 12.58-acre solar array in the Rural Residential (R3) Zone. The Use is defined as Essential Services which is allowed by right in the zone. The project is reviewed as a Site Plan Review due to the addition of more than 3,000 square feet of impervious surface. There will be no building, well, or septic system constructed on the site A chain link fence will be constructed around the solar array. Once the array is constructed employees will service the site for routine mowing or equipment service. The applicant indicated the inverters will generate a small hum during the day and produce no sound in the nighttime.

The applicant requested waivers for soil, traffic management and stormwater management and has provided an explanation in their application for each waiver request. The Berwick Planning Board voted the application complete by vote of 4-1 at the May 7, 2020 Planning Board meeting.

For the May 21st Planning Board meeting, the applicant submitted letters from IFW, MNAP and approvals from DEP and Army Corps.

One letter was sent in by an abutter. Three abutters spoke during the Public Hearing and raised concerns that the farm will have an adverse visual impact and that the panels posed an environmental contamination hazard. The applicant said the panels are made of solid material. The applicant, Planning Board and staff discussed at length how to implement the decommissioning plan and requested that the landscaping plan be amended to include different types and locations of plantings.

For the June 4th Planning Board meeting, the applicants submitted an updated decommissioning plan, certifications of safety on the proposed solar panels, a soil map, a new landscaping plan with both images and a written narrative to provide a natural appearing buffer.

Findings of Fact

1. Conformance with the Comprehensive Plan: *All proposed conditional uses and site plans shall conform to the Comprehensive Plan of the Town of Berwick and with the provisions of all pertinent federal, state and local codes, ordinances, and regulations.*

   The 2004 Comprehensive Plan has a policy under Energy and Communication which states "Allow private citizens to develop innovative energy facilities..." The classified Land Use is Essential Services as found in the definitions which is allowed by right in the Berwick Land Use Ordinance.

2. Preserve and enhance the landscape: *The landscape shall be preserved in its natural state insofar as practicable by minimizing tree removal, disturbance of soil, retaining existing vegetation during construction. After construction is complete, landscape shall be designed and planted that will define, soften or screen the appearance of off street parking areas from the right of way and abutting properties and/or structures in order to enhance the physical design of the building(s) or site, and to minimize the encroachment of the proposed use on the neighboring land uses.*

Wooded areas are proposed to remain around the perimeter of the e project. The applicant has submitted a Landscape plan prepared by a Landscape Architect. The Planning Board has asked the plan be redesigned to incorporate a more natural design to the added buffer so the neighbors are not looking at an added buffer but a natural appearing buffer.

Relationship of the proposed buildings to the environment: *Proposed structures shall be related harmoniously to the terrain and to the existing buildings in the vicinity which have a visual relationship to the proposed buildings. Special attention shall be paid to the bulk, location and height of the building(s) and such natural features such as slope, soil type and drainage ways.*

The only structures built are the solar panels and supporting materials to support the use. There are no proposed buildings.

3. Vehicular access: *The proposed site layout shall provide for safe access and egress from public and private roads by providing adequate location, numbers and controls of access points including site distances, turning lanes, traffic signalization when required by existing and projected traffic flow on municipal road systems.*

   A new entrance road will be constructed off of Route 236 with a driveway permit from the Maine DoT. The access road will be 16' wide.

4. Parking and circulation: *The layout and design of all vehicular and pedestrian circulation, including walkways, interior drives, and parking areas shall provide for safe general interior circulation, separation of pedestrian and vehicular traffic, service traffic, loading areas, and arrangements and use of parking areas.*

   The Project will not require permanent parking spaces for construction or operation. During construction, most construction personnel will park at the temporary laydown area. Some parking will occur within the Project development area where construction activities are occurring, including for equipment delivery, loading, and unloading; these areas will be spread out through the Project. After construction, the site will generally be unmanned, except for mowing and maintenance.

5. Surface water drainage: *Adequate provision shall be made for surface drainage so that removal of surface waters will not adversely affect neighboring properties, downstream conditions, soil erosion or the public storm drainage system. Whenever possible, on-site absorption of unpolluted run-off waters shall be utilized to permit groundwater recharge on the site.*

   Solar arrays are generally considered permeable because the space between the arrays. Areas disturbed adjacent to the access roads will be permanently stabilized through seeding and the majority of the site will be maintained as meadow

6. Existing utilities**:** *The development shall not impose an unreasonable burden on sewers, sanitary and storm drains, water lines or other public utilities.*

   There are no utilities required to serve the site. The only impacted utility is the power grid and this facility is generating power to the grid not draining the system.

7. Advertising features: *The size, location, design, lighting and materials of all exterior signs and outdoor advertising structures or features shall not detract from the design of proposed buildings and structures and the surrounding properties.*

Signage will be limited to that which is required to promote public safety around the facility, including access warnings. All signage will be required to meet the zoning ordinance standards for signage.

8. Special features of the development: *Exposed storage areas, exposed machinery installation, service areas, truck loading areas, utility buildings and similar structures shall have sufficient setback and screening to provide an audio/visual buffer to minimize their adverse impact on other land uses within the development area and surrounding properties.*

   Not Applicable

9. Exterior lighting: *All exterior lighting shall be designed to minimize adverse impact on neighboring properties.*

   No lighting has been proposed.

10. Emergency vehicle access**:** *Provisions shall be made for providing and maintaining convenient and safe emergency vehicle access to all buildings and structures.*

The Project will include construction of a gated entrance road from Route 236. The Town fire department will have access to the Project gate keys through Knox boxes. A 16-foot buffer will be maintained between arrays and the perimeter fencing to accommodate vehicles, primarily pickup trucks or other passenger vehicles, in the event of an emergency.

11. Municipal services: *The development will not have an unreasonable adverse impact on the municipal services including municipal road systems, fire department, police department, solid waste program, sewer treatment plant, school, open spaces, recreational programs and facilities, and other municipal service and facilities.*

    No adverse impacts on municipal services have been identified.

12. Will not result in water or air pollution**:** *In making this determination, it shall at a minimum consider: The elevation of the land above sea level and its relationship to the floodplains, the nature of soils and subsoils and their ability to adequately support waste disposal; the slope of the land and its attest on effluents; and the applicable state and local health and water resources regulations.*

    The applicant has stated the solar panels are made of non-hazardous materials and are solid state in design.

13. Has sufficient water available for the reasonable foreseeable needs of the development *(this is usually considered to be ten years approximately).*

    This standard has been met.

Will not cause an unreasonable burden on an existing water supply, *if a municipal or community* water supply is to be utilized.

This standard is not applicable, the water supply comes from a well.

14. Will not cause soil erosion or reduction in the capacity of the land to hold water *so that dangerous or unhealthy conditions may result.*

    Areas disturbed adjacent to the access roads will be permanently stabilized through seeding and the majority of the site will be maintained as meadow

15. Will provide for adequate sewerage waste disposal.

    Not Applicable

16. Will not have adverse effects on the scenic or natural beauty of the area, aesthetics, or rare and irreplaceable natural areas.

    The Project site is not located in an area that has been identified as having significant habitat or aesthetic value within the comprehensive plan or Beginning with Habitat mapping. The developer has adequate financial and technical capacity to meet the above stated standards.

17. Whenever situated in whole or in part within 250 feet of any pond, lake or river, will not adversely affect the quality of such body of water or affect the shoreline of such body of water, based on the standards outlined in Section 9.8.I.1.j.

    This standard does not apply because the site is not located within 250 feet any type of water body.

18. Low Impact Design: *Each applicant is required to submit a statement to the Planning Board documenting proposed Low Impact Design (LID) for the site, which will help to reduce storm water volumes and help to enhance storm water quality. LID includes, but is not limited to, green roofs, rain gardens, tree wells, infiltration basins and permeable pavement.*

    Disturbance of soils (grading, removal of soil, and importation of gravel materials) will be minimized to the greatest extent practicable. Site layout was developed to target areas that are conducive to solar array installation; however, some localized grading may be necessary to ensure array areas are in accordance with the tolerances of array racking equipment (approximately 15% or less) and to accommodate safe construction and operations.

    The roadways will be constructed with gravel, rather than pavement. Following construction, the remainder of the Project area will be revegetated and maintained as meadow or low-lying brush and scrub. No other Low Impact Design options are proposed at this time.

I, David Andreesen, certify that I am Chair of the Planning Board of the Town of Berwick, Maine, a Planning Board established pursuant to Maine State Statute (30-A § 4401) and I further certify that this decision was approved by the Planning Board at its meeting of June 4th, 2020

Waivers Approved

9.8.2.b.iv – On site soils investigation report by licensed evaluator.

9.8.2.c.vi – Stormwater management plan in accordance with Article 7.17.

Findings of Fact Approved on June 4th, 2020

Conditions of Approval

1. Berwick Solar, LLC shall submit the energy production of the solar farm within six months from the startup of energy production of the solar farm for the purposes of establishing a baseline energy production level.

2. Starting June 1 2050, if the solar farm produces 10% or less energy production of the baseline level, the property owner shall implement and finish the decommissioning plan within one year.

Application approved June 4, 2020

_____ _____

David Andreesen, Planning Board Chair Date

Neil Rapoza

From: Langlois, Lucien [Lucien.Langlois@maine.gov]
Sent: Wednesday, May 20, 2020 9:26 AM
To: Neil Rapoza
Subject: RE: Permit By Rule - PK Storage, LLC

Hi Neil,

This email can constitute as official written confirmation about the wetland jurisdiction at the PK Storage project in Berwick. If I can provide anymore information please feel free to contact me.

The proposed project abuts a freshwater wetland. The project does not propose direct or indirect impacts to the wetlands. When determining if a freshwater wetland has a 75 foot setback the Department has the following language:

B. Freshwater wetlands consisting of or containing:

(1) Under normal circumstances, at least 20,000 square feet of aquatic vegetation, emergent marsh vegetation or open water, except for artificial ponds or impoundments; or

(2) Peatlands dominated by shrubs, sedges and sphagnum moss.

Looking at this language in the Natural Resources Protection Act, the intent was to place a higher value on open water type wetlands due to their functions. Based on the language of "consisting of or containing" that means that instead of looking at the wetland characteristics directly on-site you need to look at the entire wetland complex including what may be off the project site or parcel. Due to the language there may be cases where you have an open water wetland that is surrounded by forested wetlands and the 75 foot setback would start at the wetland edge which is the forested wetland edge. With the case of PK Storage, the wetlands off the site can be characterized by using aerial imagery, elevation data and the National Wetland Inventory (NWI) Maps. The NWI maps are just interpretations from aerial photos. The accuracy of the NWI wetland information, especially wetland sizes and locations, can be a factor of the time of year when photographs were taken, the density of tree canopies, and other obstacles to photo-interpretation. They therefore should not be used as the sole source of information when accurate wetland information is critical. The NWI maps show that the forested wetlands directly adjacent to the project site may be connected to wetlands that extends all the way north west to Beaver Dam Pond. The distance from the on-site wetlands to the Beaver Dam Pond is around 1 mile. My determination is that Beaver Dam Pond and the wetlands surrounding it are considered a different wetland complex from the wetlands on the project site. The PK Storage site was previously permitted by DEP in 2017 and the wetland determination back then is the same as today.

Lucien Langlois
Environmental Specialist III, Land Bureau
Maine Department of Environmental Protection
312 Canco Road, Portland, ME 04103
(207) 215-4550

***Please note**: Effective Monday, April 6, the DEP Land Bureau will only be receiving applications filed by email. Instructions will be available at: https://www.maine.gov/dep/coronavirus.html#land. DEP's offices located in Augusta, Presque Isle, Bangor and Portland continue to be closed to the public until further notice in order to minimize the potential for virus exposure.

From: Neil Rapoza <neil@civcon.com>
Sent: Thursday, May 14, 2020 1:29 PM
To: Langlois, Lucien <Lucien.Langlois@maine.gov>
Subject: RE: Permit By Rule - PK Storage, LLC

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.

Hi Lucien,

Sorry to hound you, I'm sure you have enough to do! A planning board member is looking for written confirmation that the project is not considered associated with an emergent wetland and does not require the NRPA permit. We are not back in front of the Board until June 4th, so not a big rush. Thanks, talk to you soon!

Neil

CIVIL CONSULTANTS
Neil J. Rapoza, PE
Civil / Structural
Sr. Project Engineer

293 Main Street
South Berwick, ME 03908
Cell 603.973.9231
Ph 207.384.2550
Fax 207.384.2112

From: Langlois, Lucien [mailto:Lucien.Langlois@maine.gov]
Sent: Monday, April 27, 2020 11:27 AM
To: code@berwickmaine.org
Cc: Neil Rapoza
Subject: Permit By Rule - PK Storage, LLC

Good Morning,

Attached please find an approved Stormwater Permit By Rule (PBR #69811 NOI #69812) for PK Storage, LLC. Please contact me with any questions.

Regards,

Lucien Langlois
Environmental Specialist III, Land Bureau
Maine Department of Environmental Protection
312 Canco Road, Portland, ME 04103
(207) 215-4550
https://www.maine.gov/dep/coronavirus.html#land

Town of Berwick Planning Board
Conditional Use Findings of Fact
Applicant: PK Storage, LLC
387 School Street (Tax Map R-054, Lot 4)
June 4, 2020

PK Storage requested an expansion and amendment to their previously approved Site Plan. The proposed expansion will add 2,700 ft^2 in self-storage units and 5,143 ft^2 of pavement for access to the units. The expansion added to the existing totals to 43,513 ft^2 of impervious surface and requires a Permit by Rule with DEP but does not require a full stormwater permit. The lot coverage will be 10% which is below the zone limit of 10%. Proposed erosion control measures include: riprap trenches, silt fencing and berms. These improvements are submitted as part of the Low Impact Design statement.

The number of employees (1), hours of operation (8a-5p) and access (24 hours) remains the same. Letters to Department Heads have been included in the application as required by Site Plan approval. This lot was granted a variance of 2.5' for the frontage requirement on November 1, 2017 with no additional conditions.

At the May 7th meeting the Planning Board raised concern about a potential existing lighting violation on the property. The representative of the applicant said the issue will be addressed.

The application was found complete by vote of 5-0.

For the June 4th meeting the applicant submitted clarification from the DEP. Lucien Langlois of the DEP said the project does not directly or indirectly impact the wetlands. Mr. Langlois said the wetland determination from the previous permit in 2017 remains the same.

Findings of Fact

1. Conformance with the Comprehensive Plan: *All proposed conditional uses and site plans shall conform to the Comprehensive Plan of the Town of Berwick and with the provisions of all pertinent federal, state and local codes, ordinances, and regulations.*

   The application conforms to the Comprehensive Plan because it is permitting an appropriate commercial use within the R3 Zone.

2. Preserve and enhance the landscape: *The landscape shall be preserved in its natural state insofar as practicable by minimizing tree removal, disturbance of soil, retaining existing vegetation during construction. After construction is complete, landscape shall be designed and planted that will define, soften or screen the appearance of off street parking areas from the right of way and abutting properties and/or structures in order to enhance the physical design of the building(s) or site, and to minimize the encroachment of the proposed use on the neighboring land uses.*

No trees are proposed to be removed. This standard is being met insofar as it can since the site is already built.

3. Relationship of the proposed buildings to the environment: *Proposed structures shall be related harmoniously to the terrain and to the existing buildings in the vicinity which have a visual relationship to the proposed buildings. Special attention shall be paid to the bulk, location and height of the building(s) and such natural features such as slope, soil type and drainage ways.*

   The proposed buildings will relate to the already approved facilities approved in 2017.

4. Vehicular access: *The proposed site layout shall provide for safe access and egress from public and private roads by providing adequate location, numbers and controls of access points including site distances, turning lanes, traffic signalization when required by existing and projected traffic flow on municipal road systems.*

   The traffic circulation areas between the buildings and parking areas are accessed directly from the street and provide adequate sight distance onto the public way.

5. Parking and circulation: *The layout and design of all vehicular and pedestrian circulation, including walkways, interior drives, and parking areas shall provide for safe general interior circulation, separation of pedestrian and vehicular traffic, service traffic, loading areas, and arrangements and use of parking areas.*

   Parking and circulation as shown on the plan is adequate to allow for vehicles to back out, travel between buildings and turn. Pedestrians will emerge from vehicles that will be parked near the pertinent storage unit.

6. Surface water drainage: *Adequate provision shall be made for surface drainage so that removal of surface waters will not adversely affect neighboring properties, downstream conditions, soil erosion or the public storm drainage system. Whenever possible, on-site absorption of unpolluted run-off waters shall be utilized to permit groundwater recharge on the site.*

   This standard has been met as the development area is proposed to slope away from the street towards the back of the lot, with a stormwater system proposed at the back corner of the development area, to handle stormwater on-site.

7. Existing utilities**:** *The development shall not impose an unreasonable burden on sewers, sanitary and storm drains, water lines or other public utilities.*

   This standard has been met since the only public utility proposed for use is electricity.

8. Advertising features: *The size, location, design, lighting and materials of all exterior signs and outdoor advertising structures or features shall not detract from the design of proposed buildings and structures and the surrounding properties.*

   No signage has been proposed with this application. Any proposed signage shall meet the sign ordinance standards found in section 7.12 of the zoning ordinance.

9. Special features of the development: *Exposed storage areas, exposed machinery installation, service areas, truck loading areas, utility buildings and similar structures shall have sufficient setback and*

screening to provide an audio/visual buffer to minimize their adverse impact on other land uses within the development area and surrounding properties.

Not Applicable

10. Exterior lighting: *All exterior lighting shall be designed to minimize adverse impact on neighboring properties.*

    No additional lighting is proposed

11. Emergency vehicle access**:** *Provisions shall be made for providing and maintaining convenient and safe emergency vehicle access to all buildings and structures.*

    The expansion has been reviewed by the Berwick Fire Chief and the plan was amended to address the Fire Department's access needs.

12. Municipal services: *The development will not have an unreasonable adverse impact on the municipal services including municipal road systems, fire department, police department, solid waste program, sewer treatment plant, school, open spaces, recreational programs and facilities, and other municipal service and facilities.*

    No adverse impacts on municipal services have been identified.

13. Will not result in water or air pollution**:** *In making this determination, it shall at a minimum consider: The elevation of the land above sea level and its relationship to the floodplains, the nature of soils and subsoils and their ability to adequately support waste disposal; the slope of the land and its attest on effluents; and the applicable state and local health and water resources regulations.*

    This standard has been met as the Applicant will have a septic system for use by employees only.

14. Has sufficient water available for the reasonable foreseeable needs of the development *(this is usually considered to be ten years approximately).*

    This standard has been met. The use is not residential and involves the use of a private well.

15. Will not cause an unreasonable burden on an existing water supply, *if a municipal or community* water supply is to be utilized.

    This standard is not applicable.

16. Will not cause soil erosion or reduction in the capacity of the land to hold water *so that dangerous or unhealthy conditions may result.*

    This standard has been met - the plans show the silt fence for erosion control and a DEP permit is required.

17. Will provide for adequate sewerage waste disposal.

    This standard has been met by the use of an onsite septic disposal system

18. Will not have adverse effects on the scenic or natural beauty of the area, aesthetics, or rare and irreplaceable natural areas.

    The building expansion will be placed behind an existing building and will not have an adverse effect on the aesthetics of the area.

19. The developer has adequate financial and technical capacity to meet the above stated standards.

    The above standards will not add a significant financial or technical burden so the developer will have adequate capacity to meet the above standards.

20. Whenever situated in whole or in part within 250 feet of any pond, lake or river, will not adversely affect the quality of such body of water or affect the shoreline of such body of water, based on the standards outlined in Section 9.8.I.1.j.

    This standard does not apply because the site is not located within 250 feet any type of water body.

21. Low Impact Design: *Each applicant is required to submit a statement to the Planning Board documenting proposed Low Impact Design (LID) for the site, which will help to reduce storm water volumes and help to enhance storm water quality. LID includes, but is not limited to, green roofs, rain gardens, tree wells, infiltration basins and permeable pavement.*

    As part of the DEP PBR, the applicant proposed riprap trenches, silt fencing, a vegetative swale and erosion control berms.

I, David Andreesen, certify that I am Chair of the Planning Board of the Town of Berwick, Maine, a Planning Board established pursuant to Maine State Statute (30-A § 4401) and I further certify that this decision was approved by the Planning Board at its meeting of June 4, 2020

Waivers Approved

Soils Investigation (9.8.F.2.b.v)

Landscape Plan (9.8.F.2.b.vii)

Financial capacity (9.8.F.2.c.vii)

Findings of Fact Approved on June 4, 2020

No Conditions of Approval Proposed

Application Approved ____

_____ _____

David Andreesen, Planning Board Chair Date