TOWN OF SWANZEY

620 OLD HOMESTEAD HIGHWAY
P.O. BOX 10009
SWANZEY, NH 03446-0009
TOWN HALL (603) 352-7411 FAX (603) 355-8099
WWW.SWANZEYNH.GOV

Swanzey Planning Board Meeting Agenda

March 28, 2024
6:00 PM

The regular meeting of the Swanzey Planning Board will be held on Thursday, March 28, 2024 at 6:00 p.m. at Whitcomb Hall, 17 Main Street, Swanzey. The public may also access the meeting via Zoom by going to www.zoom.us, using the Zoom App, or by calling (929) 205-6099 and entering Meeting ID number 235 370 4380. More information on public access to the meeting is available on the Town's website at: www.swanzeynh.gov.

1) Call to Order

2) Approval of Minutes

   A. March 14, 2024

3) Applications and Public Hearings

   A. PB #24-003 Site Plan Review Application (Continued): Horizons Engineering, on behalf of Nucar Nissan of Keene, requests a Site Plan Review for construction of a new flex space building and associated site improvements for their dealership at 544 Monadnock Highway. The subject property is currently shown at Tax Map 222, Lot 34 in the Business District. Upon a finding that the application meets the submission requirements, the Board will vote to accept the application as complete, and a public hearing may follow immediately or will be scheduled for a time and date certain.

   B. Site Plan Review Regulations Changes (Public Hearing Required): The Planning Board will have a Public Hearing to discuss the changing of Site Plan Review Regulations. Proposed changes are planned for Section VII: Site Plan Review Procedures, Article 7: Conditional Approval.

Other business as may be required

1) Preliminary Site Review Meeting: Jake Checani
2) Adjournment

Town of Swanzey, New Hampshire
Swanzey Planning Board
Meeting Minutes – March 14, 2024
Whitcomb Hall, Main Street, Swanzey, NH

Note: Draft Minutes are subject to review, correction and approval by the Board. Review and approval of Minutes generally takes place at the next regularly scheduled meeting of the Board.

CALL TO ORDER:
The meeting of the Swanzey Planning Board was called to order at 6:00 p.m. by Chair Scott Self. The meeting was held at Whitcomb Hall and via Zoom software for the public. Members present: Scott Self, Brandon Self, Michael York, Mark Scalera, Richard Lane, Victoria Ames, Alternate Steve Malone, and Board of Selectmen Representative Sylvester Karasinski. Also present was Assistant Town Planner Stephon Mehu, Recording Secretary Beverly Bernard, and Garrett Ranney with FACT TV. The Chair called the roll and read the agenda for the evening. A quorum was present.

Absent:
Alternate Bryan Verdegaal, Alternate Michael Scungio

Others Present:
John Noonan from Fieldstone Lane Use Consultants, Will Davis with Horizons Engineering, Code Enforcement Officer Mike Jasmin, Nissan of Keene owner Shawn Hanlon, Residents Joseph and Peg Antosiewicz, Executive Manager Nissan of Keene Tony Percoco.

PUBLIC ACCESS: The public access to the meeting online via www.zoom.us,using the Zoom App on a cell phone or tablet or laptop or using a landline by calling (929) 205-6099 and entering Meeting ID number 235 370 4380.

Regional Impact: The members considered whether any items on the agenda could be construed as having potential for regional impact. **Motion** was made by York that there is no item on the agenda which can be construed to have potential for regional impact. There was a second by Lane with no further discussion. All were in favor. ***Motion passed.***

MINUTES:

- The meeting Minutes of February 22, 2024 were considered. **Motion** was made by B. Self to approve the meeting Minutes of February 22. 2024. There was a second by York with no further discussion. All were in favor. ***Motion passed.***

APPLICATIONS AND PUBLIC HEARING(S)
PB #24-002 Site Plan Review Application (Public Hearing Required)
Fieldstone Land Consultants, on behalf of Legacy, LLC, requests a Site Plan Review for the first phase of expansion of their mixed-use, commercial/industrial development and associated site improvements at 67 California Street. The subject property is currently shown at Tax Map 108, Lot 6 in the Commercial/Industrial and Rural/Agricultural Districts. Upon a finding that the application meets the submission requirements, the Board will vote to accept the application as complete, and a public hearing may follow immediately or will be scheduled for a time and date certain.

The Board considered the completeness of the application. John Noonan led the discussion on completeness. The Chair noted the septic designer notification has been received and the engineer concludes that the septic system is fine. Noonan reviewed the checklist with the Board, showing the plans addressing each of the items on the checklist. He noted proposed changes make no changes to existing access to public streets. And he noted there are no deed restrictions. Ames pointed out the property extends beyond the proposed changes. The Chair said there is no proposed use for that portion of the property and therefore the proposal does not need to show it.

> **Motion** was made by Lane that the application of Fieldstone Land Consultants, on behalf of TC Legacy, LLC, for a Site Plan Review for the first phase of expansion of their mixed-use, commercial/industrial development and associated site improvements at 67 California Street is complete and ready for public hearing. There was a second to the motion by B. Self and no further discussion. All were in favor. ***Motion passed.***

Public Hearing opened at 6:15 pm

Discussion: Noonan noted approximately 20 acres for this multi-tenant site. The existing businesses will remain on site. Noonan noted the proposed building will be a metal garage with a gravel parking lot. Phase 2 will include a 5-unit contractor bay facility. He said phase 2 would follow in one to two years. Noonan said they are looking for approval for both phases. He noted a grass swale for drainage into an infiltration basin and the size of the basin is based on both phases. Noonan noted check dams and a riprap emergency spillway. Utility plans will have septic connection for proposed garage. Overhead wires to power the building and propane for heat. He noted a proposed septic and well for phase 2 building. Noonan said Tom Forest design is for the phase 2 building. Noonan spoke about the lighting plan. Lighting will shine downward and not impact neighbors. Five trees are planned and the trees already in place will remain in place. He showed erosion control and construction details.

Ames asked about the chain link fence remaining. Noonan said it remains. Malone asked about what improvements would occur at first. Noonan responded that drainage, parking, and the garage building will be done at phase 1. The Chair said it is better to see all phases at the same time. Ames noted there is no zoning ordinance designation for contractor bays. The Chair said once the building is there, if a tenant wishes to utilize the space, that tenant must return to the Planning Board for review. Lane asked for septic plans for phase 2. The Chair said we know where it will go based on the plan. Noonan said a copy of the plans will be made available. Karasinski asked about concern for fire protection. Jasmin said the Fire Department has no concerns. Noonan said the existing leach field and tanks are shown on the plan. They will not be changed. The Chair asked for labeling for these on the plans and Noonan agreed to do so.

Storage in the parking area was discussed. Noonan said there are self storage containers; they already exist on the site. The Chair said the storage cannot take up the parking area and Noonan confirmed it will not. Noonan noted there are no liquid gases on site.

There are no waivers requested.

Ames asked about fire access and a concern about traffic circulation around the buildings. Noonan said the driveway is 25 feet wide. The Chair said the Fire Department will need to sign off on the plans.

Public Hearing closed at 6:36 pm

The Chair asked members about other concerns. Lane asked if the Board needs a timeframe for phase 2. Substantial progress was discussed. The Chair said we don't put a time limit to finish the project, only as to when they must start the project.

> **Motion** was made by York to approve the site plan presented by Fieldstone Land Consultants, on behalf of TC Legacy for the first phase of expansion of their mixed-use, commercial/industrial development and associated site improvements at 67 California Street and shown at Tax Map 108, Lot 6 in the Commercial/Industrial and Rural/Agricultural Districts. There was a second to the motion by B. Self and no further discussion. All were in favor. ***Motion passed.***

PB #24-003 Site Plan Review Application (Public Hearing Required)
Horizons Engineering, on behalf of Nucar Nissan of Keene, requests a Site Plan Review for construction of a new flex space building and associated site improvements for their dealership at 544 Monadnock Highway. The subject property is currently shown at Tax Map 222, Lot 34 in the Business District. Upon a finding that the application meets the submission requirements, the Board will vote to accept the application as complete, and a public hearing may follow immediately or will be scheduled for a time and date certain.

The Board considered the completeness of the application. The application was presented by Will Davis. Davis reviewed the checklist with the Board and showed the items on the plans. Davis noted no change to existing access. He referred to proposed tank relocation for the septic and they will need to provide that information prior to going to New Hampshire Department of Environmental Services (DES). He noted there are no easements or restrictions on the property.

Discussion continued regarding the landscape plan. Ames asked about fencing. Mehu said there is landscaping on the property. Ames said she doesn't agree on the reasoning for doubling the size of the building. She said given the nature of the use it would be nice to have landscaping at the front of the building.

Davis noted a waiver is needed for the landscaping.

> **Motion** was made by B. Self to waive the requirement for a landscape plan. There was a second by York. Ames asked about fencing being included in the landscape plan. All were in favor. ***Motion passed.***

> **Motion** was made by B. Self that the application of Horizons Engineering, on behalf of Nucar Nissan of Keene, for a Site Plan Review for construction of a new flex space building and associated site improvements for their dealership at 544 Monadnock Highway is complete and ready for public hearing. There was a second to the motion by Lane and no further discussion. All were in favor. ***Motion passed***.

Public Hearing opened at 6:57 pm

Discussion: Davis reviewed the existing conditions on the property. The existing building is 12,090 sq feet. He spoke about the drainage pattern. He showed the proposed additional building of 9,600 sq feet. This will allow for mechanical lifts space. He said there are existing floor drains and they will be continued in the new building with holding tank and this is registered with DES and pumped regularly. He spoke about a slight pitch of the roof, and he spoke about the drainage setup including catch basins. The building will displace some parking. He showed new parking. He said there is excessive parking on the site. They are not increasing pole lighting. The additional lighting on the building will be downlighting.

Mr. Antosiewicz said he and his wife live across the street and the poles are very high. He said the rear lights stay on all night long. Mr. Antosiewicz said the rear pole lights are shining toward the road. Davis said they will consider shielding and the Chair said a condition of the original approval was to have the lights be off at a certain time. Mr. Antosiewicz asked about sufficient room for trucks to go around the building. Davis said he wasn't asked to look at that. Tony Percoco said trucks will head in and back up and go out the same way they came in.

Davis showed a rendering of the exterior and the floor plans. He showed doors for vehicle access. There are two doors to go from new building to old building and they are fire doors. Davis showed elevation views.

Malone asked about when the car carriers usually deliver, what time do they usually arrive. Hanlon said any point of time during the day. Malone asked if they would arrive at 2 am. Hanlon said not normally. Mr. Antosiewicz said they do arrive at night sometimes.

Davis continued noting the mechanics bay will include wash bays for washing with a hose. Jasmin said drainage will be such that the retention pond needs to be in good shape. He said he is a bit concerned about resizing the pond to absorb sufficient water flow that will be impacted by the presence of the new building. Davis needs to locate the original design for the storm water pond. Davis said the plan is not to increase run-off.

The Chair said the lighting needs to be researched as originally approved and the size of the retention pond. The Chair asked if Davis could do the research in two weeks. Davis asked for specifics as to what he needs to provide, and the Chair said to certify that the existing retention pond can handle existing conditions and new conditions.

The Chair suggested continuing the public hearing to 28th of March. He also asked Jasmin to provide Davis with approved provisions for lighting.

> **Motion** was made by York to continue the application of Horizons Engineering, on behalf of Nucar Nissan of Keene, for a Site Plan Review for construction of a new flex space building and associated site improvements for their dealership at 544 Monadnock Highway for property currently shown at Tax Map 222, Lot 34 in the Business District to March 28, 2024. There was a second by Scalera and no further discussion. All were in favor. ***Motion passed.***

PB #24-004 Site Plan Review Application (Public Hearing Required)
Fieldstone Land Consultants, on behalf of Asher Construction, LLC, requests a Site Plan Review for the construction of a contractor bay facility at 0 Safford Drive. The subject property is shown at Tax Map 209,

Lot 4 and located in the Industrial Park District. Upon a finding by the Board that the application meets the submission requirements, the Board will vote to accept the application as complete. A public hearing may follow immediately; if not, a public hearing will be scheduled for a time and date certain.

The Board considered the completeness of the application. John Noonan conducted the presentation. He reviewed the checklist with the Board, showing the items on the plans. He noted the site drains from east to west. They will be connecting to existing sewer and municipal water. There are no deed restrictions for this property. Noonan provided an elevation plan for the project and the floor plan. He noted the plan is for two five-unit buildings and one six-unit building.

> **Motion** was made by B. Self that the application of Fieldstone Land Consultants, on behalf of Asher Construction, LLC, for a Site Plan Review the construction of a contractor bay facility at 0 Safford Drive on property shown at Tax Map 209, Lot 4 and located in the Industrial Park District is complete and ready for public hearing. There was a second to the motion by York and no further discussion. All were in favor. ***Motion passed.***

Public Hearing opened at 7:41 pm

Discussion: Noonan spoke about the existing conditions on Safford Drive and said the subject lot is at the end of the road near to the Fairgrounds. He said the lot is about 6.88 acres. Mehu said it is about 5.51 acres on the tax map. The Chair noted the survey is more accurate than the tax map and the tax map needs to be updated. Noonan noted the lot was a staging area for the building of Safford Drive. There are wetlands toward the north. There are no wetland impacts. Storm water will drain to the south to a retention pond. He spoke about utilities and how Safford drive was designed for development. They may use electric heat pumps versus propane. Lighting plan shows proposed wall packs along the front, facing down. Landscaping plan, trees will remain. There is a buffer of woods and will plant one tree and four shrubs near the entrance.

The Chair asked for questions from the members. The Chair said there has to be a spot on the plan to indicate propane tanks even if not going to use them. Scalera said there is concern about water coming off hill and feeding Wilson Pond with contaminants. Noonan said they are using catch basins to capture storm water and direct that flow to a retention pond. He said contaminants should fall out of solution in the pond. He said the goal is to not add additional water to the flow of the site. Noonan also showed area for snow storage. The Chair said it looks like the catch basins are level and he doesn't understand how flow would happen. Noonan said the pipes go downhill at the south end of the property and he said that he has seen this design work at other sites. The Chair asked for lighting added between two five-unit buildings at end where there is American Disability Act (ADA) access. The Chair also asked about sufficient room for a tractor trailer on the site. Noonan said it is too tight for a tractor trailer. Box trucks will be able to turn around. Jasmin said the Fire Department is okay with the design. The Chair noted any tenant will need to come to the Planning Board and the Board will not approve anyone needing tractor trailer deliveries direct to site.

Public Hearing closed at 8:03 pm

> **Motion** was made by B. Self to approve the site plan presented by Fieldstone Land Consultants, on behalf of Asher Construction, LLC, for the construction of a contractor bay facility at 0 Safford Drive

on property shown at Tax Map 209, Lot 4, and located in the Industrial Park District. There was a second to the motion by York and no further discussion. All were in favor. ***Motion passed.***

DISCUSSION AND OTHER BUSINESS

Exparte Communication

The Chair spoke about what is correct to discuss between members. He stressed opinions may not be discussed. Facts and technical information may be mentioned, but questions and discussion must be saved for the meetings.

Election of Officers

Motion was made by Ames to name Scott Self as Chair and Richard Lane as Vice Chair. There was a second by Krasinski, and all were in favor. ***Motion passed.***

Proposed Notice of Decisions Document

Draft generic letter was proposed. The Chair read the draft letter out loud. The Chair noted Administrative Conditions versus Compliance Hearing conditions. After brief discussion the members consensus was to eliminate "Upon submission and review of the previous items, the Site Plan becomes effective by written endorsement of the plat, signed, and dated by the Chairman of the Planning Board."

Malone asked what "substantial" means. The Chair said that wording comes from the RSAs. The Chair said the Board decides what is considered as "substantial" and takes it case by case.

Alternates

Attendance by Alternates was discussed. The Chair suggested a letter be sent to those Alternates who have not appeared at a meeting in some time to confirm interest in continuing as Alternates for the Planning Board. Mehu said he would create a draft letter.

Other

There was a brief discussion about the amount of time needed between date of applicants' Planning Board submissions to the date of their assigned meeting.

ADJOURNMENT

Motion to adjourn was made by Lane. There was a second to the motion by B. Self with no further discussion. All were in favor by roll call. ***Motion passed.*** Adjournment occurred at 8:36 p.m.

Next Meeting: March 28, 2024

Respectfully Submitted,

Beverly Bernard, Recording Secretary

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Memorandum – Office of Land Use

TO:	Planning Board
FROM:	Stephon Mehu, Assistant Town Planner
DATE:	March 5, 2024
RE:	Planning Board #24-003 – Nucar Nissan of Keene SPR – 544 Monadnock Highway (Tax Map 222 Lot 34)

Summary:

Horizons Engineering, on behalf of Nucar Nissan of Keene, requests Site Plan Review for construction of an attached service building at the property located at 544 Monadnock Highway. The subject property is currently shown at Tax Map 222, Lot 34 in the Business District.

Development overview:

The subject property is approximately 6.25 acres in size and is located on the eastern side of Route 12. The subject property has 474.9 feet of frontage on Monadnock Highway. Two curb cuts exist on the property and the existing structure is 12,190 square feet in size.

The applicant is proposing an addition to the dealership facilities, to serve as a reconditioning and maintenance building. The newly proposed space will be located southeast of the existing, main building.

An existing well is located northwest of the existing structure and a water line from the main building will provide water for the newly proposed building.

Applicable Ordinances and Regulations:

General

Landscaping

A waiver has been requested for the Landscaping Plan.

Signage

There is no proposed signage at this time. Future signage will require permitting prior to installation.

Building Height

The maximum allowable building height for all Districts is 45 feet.

Business District

Setbacks
The following provides the required setbacks for the proposed buildings and structures. All setbacks are met by the proposal. At least thirty (30) feet shall remain intact from the right-of-way line of Route 12. The Business District requires at least fifty (50) feet from the boundary line of any abutting residential dwelling and at least twenty (20) feet from any other boundary. Any abutting residential dwelling shall be screened by a fence, hedge, berm, vegetative planting, or other screening material.

Minimum Lot Area/Width/Frontage/Undeveloped Area
The table below provides the required minimum lot area, width, frontage, and undeveloped land area (including setback, buffer zones, wetlands, and area for storm water detention) in the Commercial/Industrial Zone. All minimums are met by the proposal.

Business Zone	Required Minimum
Lot Area	1 acre
Width (at building line)	N/A
Frontage	125 feet
Undeveloped Land Area	N/A

Drainage
Drainage design for construction within the Business District shall allow for no net increase in volume or velocity of surface water leaving the District. A storm water mitigation plan was not included in the submission.

Site Plan Review Regulations:

The Site Plan Review Regulations require the Planning Board to evaluate a proposed development from several perspectives, including parking and loading, access and traffic flow, lighting, landscaping/screening, storm water management, utilities, and architectural design. Staff has reviewed the submitted plans and provided the following feedback.

A. Design of Development

The subject property illustrates a topography indicative of surface water flowing to the west, towards Monadnock Highway and Map 222 Lot 33. Submitted plans identify 3 (three) catch basins, one being situated to the west corner of the lot, approximately twenty feet to the neighboring wetland. The additional catch basins have one located north of the existing building and the other located northeast of the existing building. No proposed drainage plan has been provided.

B. Off-street and Loading Requirements

Off-street loading and/or unloading space must be provided, including off-street areas for maneuvering of vehicles/deliveries and must not take place on a public street. This activity is monitored and enforced by the Town, especially with concern for traffic along Route 12 and dealership employees.

Landscape in Parking Areas:

No introduction of new, impervious surface is planned for this project and results in no necessity for additional vegetation. The applicant has requested a waiver for the Landscape Plan.

C. Street Access/Traffic Patterns

The existing two curb cuts on Monadnock Highway have been reviewed by Public Works and DOT previously and there are no concerns at this time in response to no evidence of increased traffic to the site. Approximate daily vehicle movements on and off the site include 35 (thirty-five) employees and 50 (fifty) customers.

D. Illumination/Lighting

A lighting plan and specifications for the selected lights are provided. Proposed lighting includes 7 (seven) wall mounted lights spread along the existing structure and proposed addition. Plans show the wall mounted lights are full cutoff. The site plans show 4 (four) light poles and 6 (six) exterior building lights on the existing infrastructure. None of the existing lighting is shown to be in well enough proximity of residences to affect residents.

The development plan set includes a photometric plan showing the expected footcandle readings from the proposed lighting on the addition and existing structure. There is no light spill to abutting properties indicated within said plan. The plan indicates that lighting will be downcast.

The Conservation Commission has expressed no concerns.

E. Water Supply and Sewage Disposal Systems

There is one existing well on the northwest side of the lot, approximately 17 feet from where the paved surface terminates; water supplied to the existing structure will likely tie into the proposed addition. The property owner shall be responsible for any facilities and or appurtenances required for potable water service/fire protection.

There is an existing septic system on the property that is to be replaced with a new 1,000 (one thousand) gallon, H-20 load-rated septic tank, to be placed in vicinity of existing tank, to serve entirety of site.

F. Underground Fuel Storage Tanks

There are no proposed underground fuel storage tanks indicated on the plans. An existing oil tank is located at the rear of the existing building to the northeast and is to remain.

G. Storm Water Drainage

The increase in the peak flow of surface runoff as a result of the development is not permitted to pass beyond the property lines. No grading and drainage plan is present.

Storm water from the proposed buildings and parking area is directed to existing catch basins on the site, however, a storm water chamber infiltration system was not identified.

The Conservation Commission made commentary in support of ensuring storm water management at the site does not spread contamination to the neighboring wetlands.

H. Handicapped Persons

There are 4 (four) parking spots identified on the plans as reserved for handicapped persons.

I. New Utilities and/or Transmission lines

Plans indicate that overhead utilities feed the existing structure; the addition will like have power fed from the existing structure or draw power from a utility pole located along Monadnock Highway.

J. Architectural Plans

Floor plans, a building rendering, door access, windows, elevations, and building materials are included in submission and attached.

Architectural plans are attached (Attachment C).

Legal Notices and Department Head Review:

Notice of the public hearing was mailed to abutting property owners on March 4th. The notice was posted in three public places on March 5th and on the Town's website on March 1st and notice was published in the Keene Sentinel on March 2nd.

Department Heads were notified of the application on March 1st. Comments include that of the North Swanzey Water & Fire Precinct, the Sewer Commission, the Conservation Commission, and the Department of Public Works (shown below).

Staff Comments:

1. Horn and strobe fire protection system on proposed buildings
2. Identification of bulk fuel storage and capacities on plans
3. Details regarding destination and use of contents of holding tanks for addition
4. Distribution and management plan for storm water
5. Labeling of scale of site plan pages required
6. All local permits as required

Attachments:

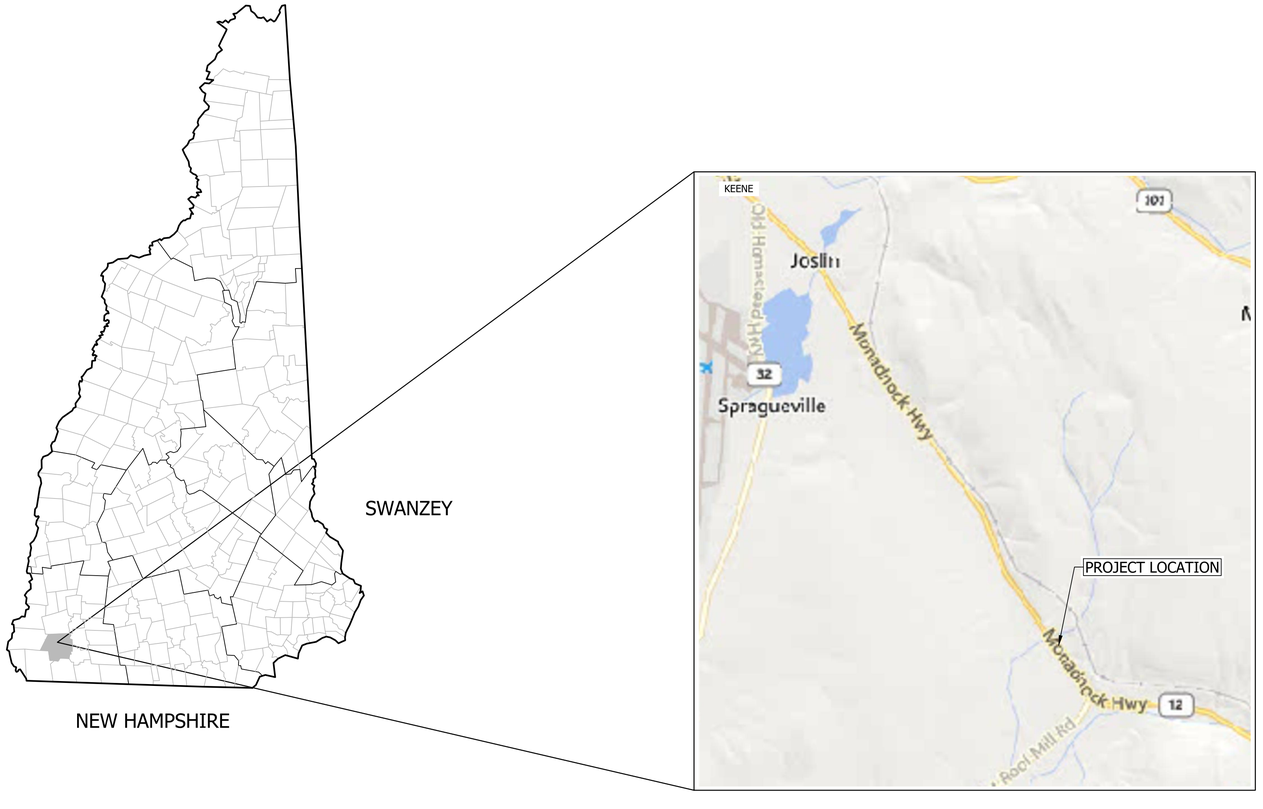
a. Letter from Applicant
b. Site Plan Review Application
c. Site Plans
d. Building Plans
e. Letter from Applicant

NUCAR NISSAN OF KEENE

SITE IMPROVEMENTS

SWANZEY, NEW HAMPSHIRE

MARCH 2024



LOCATION PLAN

SCALE: 1" = 2000'

OWNER:

NUCAR ATTN: SHAWN HANLON
544 MONADNOCK HIGHWAY
SWANZEY, NH 03446
(603) 738-8601

ENGINEER:

horizons Engineering

176 NEWPORT ROAD, SUITE 8
NEW LONDON, NH 03257
(603) 877-0116

ARCHITECT:

SYVERSEN RIGOSU ARCHITECTS (SRA)
SIX CHELSEA PLACE
CLIFTON PARK, NY 12065
(518) 348-1151

SURVEYOR:

DAVID MANN, LLS
3 GREENBRIAR ROAD
KEENE, NH 03431

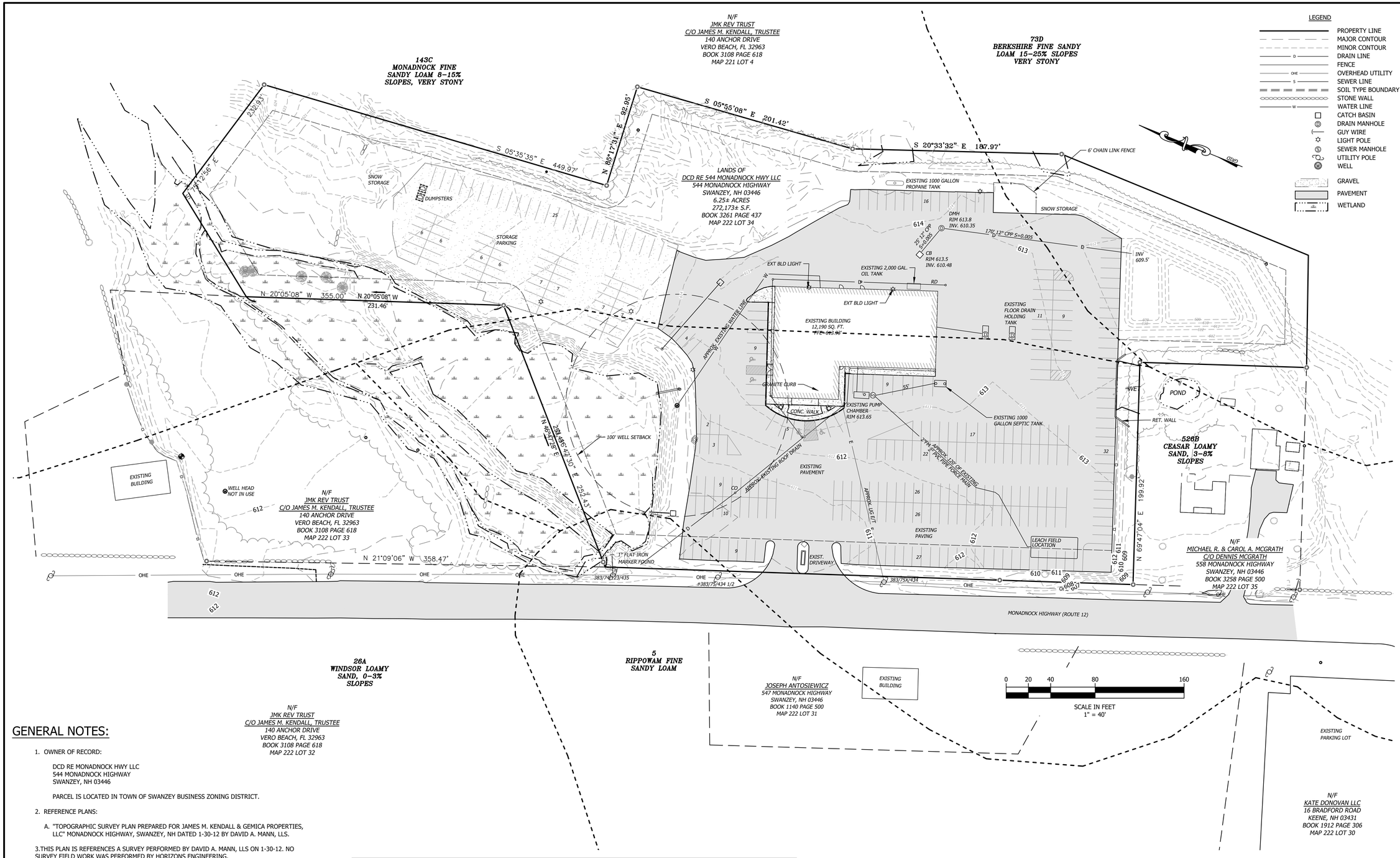
APPROVED BY THE SWANZEY, N.H. PLANNING BOARD

DATE _____

(CHAIR) _____

SHEET LIST

DATE OF PRINT
MARCH 14 2024
HORIZONS ENGINEERING



GENERAL NOTES:

1. OWNER OF RECORD:

   DCD RE MONADNOCK HWY LLC
   544 MONADNOCK HIGHWAY
   SWANZEY, NH 03446

   PARCEL IS LOCATED IN TOWN OF SWANZEY BUSINESS ZONING DISTRICT.

2. REFERENCE PLANS:

   A. "TOPOGRAPHIC SURVEY PLAN PREPARED FOR JAMES M. KENDALL & GEMICA PROPERTIES, LLC" MONADNOCK HIGHWAY, SWANZEY, NH DATED 1-30-12 BY DAVID A. MANN, LLS.

3. THIS PLAN IS REFERENCES A SURVEY PERFORMED BY DAVID A. MANN, LLS ON 1-30-12. NO SURVEY FIELD WORK WAS PERFORMED BY HORIZONS ENGINEERING.

3. LOCATION OF UTILITIES IS BASED ON SURVEY AND PLANS OF RECORD. LOCATIONS ARE APPROXIMATE. CONTRACTOR TO VERIFY LOCATIONS OF ALL UTILITIES PRIOR TO EXCAVATION.

4. CONTRACTOR TO NOTIFY "DIG SAFE" AT 1-888-344-7233 A MIN. OF 72 HOURS PRIOR TO THE START OF EXCAVATION.

5. THIS PROPERTY IS NOT LOCATED WITHIN THE 100 YEAR FLOODPLAIN FOR THE TOWN OF SWANZEY.

6. CAR CARRIERS SHALL NOT REMAIN ON SITE OVERNIGHT.

7. NO DISPLAY VEHICLES SHALL BE PARKED IN THE ENTRYWAY OR GRASSED AREAS ADJACENT TO ENTRY OR HIGHWAY.

8. CAR CARRIERS SHALL NOT OFF LOAD ON ROUTE 12.

LOT COVERAGE SUMMARY

	PERMITTED	PRE-CONSTRUCTION	POST-CONSTRUCTION
TOTAL LOT AREA	-	272,173 SF	272,173 SF
BUILDING AREA	-	12,190 SF (4.5%)	21,790 SF (8.0%)
GRAVEL/PAVED PARKING AREA	-	123,653 SF (45.4%)	113,734 SF (41.8%)
CONCRETE SIDEWALK AREA	-	2,162 SF (0.8%)	2,481 SF (0.9)
TOTAL LOT COVERAGE	-	138,005 SF (50.7%)	138,005 SF (50.7%)

PARKING SUMMARY

	REQUIRED	PRE-CONSTRUCTION	POST-CONSTRUCTION
REQUIRED PARKING-RETAIL, MOTOR VEHICLE SALES = 1 SPACE/500 SQ FT GROSS FLOOR AREA	PRE = 12,190 SF/500 SF = 25 SPACES POST = 21,790 SF/500 SF = 44 SPACES	63 PARKING SPACES (4 ADA INC.)	55 PARKING SPACES (4 ADA INC.)
DISPLAY PARKING	-	254 DISPLAY PARKING SPACES	254 DISPLAY PARKING SPACES
STORAGE PARKING	-	77 STORAGE PARKING SPACES	77 STORAGE PARKING SPACES
TOTAL PARKING PROVIDED		394 TOTAL PARKING SPACES	386 TOTAL PARKING SPACES

FOR REVIEW
NOT FOR CONSTRUCTION

DATE OF PRINT
MARCH 14 2024
HORIZONS ENGINEERING

NO.	DATE	REVISION DESCRIPTION	ENG DWG

horizons Engineering
Civil and Structural Engineering
Land Surveying and Environmental Consulting
MAINE • NEW HAMPSHIRE • VERMONT
www.horizonsengineering.com

NUCAR NISSAN OF KEENE

SITE IMPROVEMENTS

SWANZEY, NEW HAMPSHIRE

EXISTING CONDITIONS

PROJECT #: 240120	DRAWN BY: DMW	ARCHIVE #: H___	SHEET C1.01
DATE: MARCH 2024	ENGIN'D BY: WTD	CHECK'D BY: WTD	

LANDS OF
DCD RE 544 MONADNOCK HWY LLC
544 MONADNOCK HIGHWAY
SWANZEY, NH 03446
6.25± ACRES
272,173± S.F.
BOOK 3261 PAGE 437
MAP 222 LOT 34

SEDIMENT FENCE (SEE DETAIL)

NEW 4" WHITE PAVEMENT MARKING FOR PARKING (TYP)

6" PVC INV. IN=610.55
CORE EXISTING STRUCTURE AND PROVIDE RUBBER BOOT CONNECTION

EXISTING OIL TANK TO REMAIN

EXISTING 2,000 GAL. OIL TANK

EXISTING 1000 GALLON PROPANE TANK

6' CHAIN LINK FENCE

DMH
RIM 613.8
INV. 610.35

170' 12" CPP S=0.005

12" CPP S=0.005

CB
RIM 613.5
INV. 610.48

INV 609.5'

EXISTING GRAVEL

EXISTING PAVING

EXT BLD LIGHT

COORDINATE WITH PLUMBING ENGINEER FOR SIZE AND LOCATIONS OF NEW FLOOR TRENCH DRAINS

EXISTING BUILDING
12,190 SQ. FT.
FFE=613.93'

EXISTING CONCRETE TO REMAIN

NEW EXT BLD LIGHT (TYP)

EXISTING SEWER SERVICE TO REMAIN

GRANITE CURB

EXISTING PUMP CHAMBER
RIM 613.65
TO REMAIN

CONC. WALK

APPROX. EXISTING WATER LINE

100' WELL SETBACK

4" SDR 35 IN 6" SDR 35 PIPE SLEEVE; INSULATE WITH 2" RIGID FOAM; INV. AT EXISTING H20 4' ID CONC MH=609.00

EXISTING SIDEWALKS AND LANDSCAPE ISLANDS TO REMAIN

APPROX. EXISTING ROOF DRAIN

EXISTING PAVEMENT

NEW CONCRETE ENTRY PADS (TYP); TO BE DETAILED AND COORDINATED WITH STRUCTURAL

51.61'

APPROX. LIGHT

1" FLAT IRON MARKER FOUND

383/74/123/435

#383/75/434 1/2

GRID

PROPOSED BUILDING ADDITION
9,600 SQ. FT.
FFE=613.93

GUTTER DOWNSPOUT(S)

EXISTING FLOOR DRAIN HOLDING TANK

CONNECT NEW CAR WASH BAY DRAINAGE TO HOLDING TANK

NEW ROOF GUTTER

PAVEMENT SAWCUT LIMITS (SEE DETAILS)

PROPOSED FLOOR TRENCH DRAIN HOLDING TANK (SEE DETAIL)

EXISTING 1000 GALLON SEPTIC TANK TO BE REMOVED

4" SDR 35 PVC PIPE IN 6" SDR 35 PIPE SLEEVE; INSULATE WITH 2" RIGID FOAM; INV. AT FDN=611.0, LENGTH=11.0'

LENGTH=52.4'

EXISTING SEPTIC TANK TO REMOVED AND REPLACED WITH NEW 1000 GAL H-20 LOAD-RATED SEPTIC TANK. INSTALLED 10' MIN. OFF PROPOSED ADDITION, RISERS TO FINISH GRADE;
4" SDR 35 PVC INV IN=610.75
4" SDR 35 PVC INV OUT=610.50

APPROX. 120 OF EXISTING 3' BOULDER RETAINING WALL TO REMAIN

LEACH FIELD LOCATION TO REMAIN

24.30'

WET

POND

RET. WALL

SNOW STORAGE

31.85'

10.00'

20.00'

25.80'

80.10'

120.00'

613.93

613.33

383/75X/434

MONADNOCK HIGHWAY (ROUTE 12)

N/F
MICHAEL R. & CAROL A. MCGRATH
C/O DENNIS MCGRATH
558 MONADNOCK HIGHWAY
SWANZEY, NH 03446
BOOK 3258 PAGE 500
MAP 222 LOT 35

LEGEND

- PROPERTY LINE
- MAJOR CONTOUR
- MINOR CONTOUR
- DRAIN LINE
- FENCE
- OVERHEAD UTILITY
- SEWER LINE
- SOIL TYPE BOUNDARY
- STONE WALL
- WATER LINE
- CATCH BASIN
- DRAIN MANHOLE
- GUY WIRE
- LIGHT POLE
- SEWER MANHOLE
- UTILITY POLE
- WELL
- CONCRETE
- GRAVEL
- PAVEMENT
- WETLAND
- PROPOSED BUILDING

0 10 20 40 80
SCALE IN FEET
1" = 20'

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DATE OF PRINT
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WILLIAM T. DAVIS No. 11918 LICENSED PROFESSIONAL ENGINEER STATE OF NEW HAMPSHIRE

NUCAR NISSAN OF KEENE
SITE IMPROVEMENTS
SWANZEY, NEW HAMPSHIRE
PROPOSED SITE PLAN

PROJECT #: 240120	DRAWN BY: DMW/CEW	ARCHIVE #: H-___	SHEET C2.01
DATE: MARCH 2024	ENGIN'D BY: CEW	CHECK'D BY: WTD	

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SEEDING RECOMMENDATIONS

1. GRADING AND SHAPING

A. SLOPES SHALL NOT BE STEEPER THAN 2:1; 3:1 SLOPES OR FLATTER ARE PREFERRED. WHERE MOWING WILL BE DONE, 3:1 SLOPES OR FLATTER ARE RECOMMENDED.

2. SEEDBED PREPARATION

A. SURFACE AND SEEPAGE WATER SHOULD BE DRAINED OR DIVERTED FROM THE SITE TO PREVENT DROWNING OR WINTER KILLING OF THE PLANTS.

B. STONES LARGER THAN 4 INCHES AND TRASH SHOULD BE REMOVED BECAUSE THEY INTERFERE WITH SEEDING AND FUTURE MAINTENANCE OF THE AREA. WHERE FEASIBLE, THE SOIL SHOULD BE AMENDED WITH ORGANIC MATTER AND TILLED TO A DEPTH OF ABOUT 4 INCHES TO PREPARE A SEEDBED AND MIX FERTILIZER AND LIME THOROUGHLY INTO THE SOIL. THE SEEDBED SHOULD BE LEFT IN A REASONABLY FIRM AND SMOOTH CONDITION. THE LAST TILLAGE OPERATION SHOULD BE PERFORMED ACROSS THE SLOPE WHEREVER PRACTICAL.

3. ESTABLISHING VEGETATION

A. LIME AND FERTILIZER SHOULD BE APPLIED PRIOR TO OR AT THE TIME OF SEEDING AND INCORPORATED INTO THE SOIL. KINDS AND AMOUNTS OF LIME AND FERTILIZER SHOULD BE BASED ON AN EVALUATION OF SOIL TESTS. WHEN A SOIL TEST IS NOT AVAILABLE, THE FOLLOWING MINIMUM AMOUNTS SHOULD BE APPLIED:

-AGRICULTURAL LIMESTONE, 2 TONS PER ACRE OR 100 LBS. PER 1,000 SQ. FT.
-NITROGEN (N), 50 LBS., PER ACRE OR 1.1 LBS. PER 1,000 SQ. FT.
-PHOSPHATE (P_2O_5), 100 LBS. PER ACRE OR 2.2 LBS. PER 1,000 SQ. FT.
-POTASH (K_2O), 100 LBS. PER ACRE OR 2.2 LBS. PER 1,000 SQ. FT.

(NOTE: THIS IS THE EQUIVALENT OF 500 LBS. PER ACRE OF 10-20-20 FERTILIZER OR 1,000 LBS. PER ACRE OF 5-10-10).

B. SEED SHOULD BE SPREAD UNIFORMLY BY THE METHOD MOST APPROPRIATE FOR THE SITE. METHODS INCLUDE BROADCASTING, DRILLING, AND HYDROSEEDING. WHERE BROADCASTING IS USED, COVER SEED WITH .25 INCH OF SOIL OR LESS, BY CULTIPACKING OR RAKING.

C. SEEDING GUIDE:

USE	SEEDING MIXTURE (SEE 3D)	SOIL TYPE: DROUGHTY	WELL DRAINED	MOD. WELL DRAINED	POORLY DRAINED
STEEP CUTS AND FILLS, BORROW AND DISPOSAL AREAS	A	FAIR	GOOD	GOOD	FAIR
	B	POOR	GOOD	FAIR	FAIR
	C	FAIR	EXCELLENT	EXCELLENT	POOR
WATERWAYS, EMERGENCY SPILLWAYS, AND OTHER CHANNELS WITH FLOWING WATER	A	GOOD	GOOD	GOOD	FAIR
LIGHTLY USED PARKING LOTS, ODD AREAS, UNUSED LANDS, AND LOW INTENSITY USE RECREATION SITES	A	GOOD	GOOD	GOOD	FAIR
	B	GOOD	GOOD	FAIR	POOR

D. SEEDING RATES:

MIXTURE	POUNDS PER ACRE	POUNDS PER 1,000 SQ. FT.
A TALL FESCUE	20	0.45
CREEPING RED FESCUE	20	0.45
REDTOP	2	0.05
TOTAL:	42	0.95
B TALL FESCUE	15	0.35
CREEPING RED FESCUE	10	0.25
CROWN VETCH **OR**	15 **OR**	0.35 **OR**
FLATPEA	30	0.75
TOTAL:	40 **OR** 55	0.95 **OR** 1.35
C TALL FESCUE	20	0.45
FLATPEA	30	0.75
TOTAL:	50	1.20

E. WHEN SEEDED AREAS ARE MULCHED, PLANTINGS MAY BE MADE FROM EARLY SPRING TO SEPTEMBER 15. WHEN SEEDED AREAS ARE NOT MULCHED, PLANTINGS SHOULD BE MADE FROM EARLY SPRING TO MAY 20 OR FROM AUGUST 10 TO SEPTEMBER 1.

F. TEMPORARY SEEDING RATES:

SPECIES	POUNDS PER ACRE	POUNDS PER 1,000 SQ. FT.	REMARKS
WINTER RYE	112	2.5	BEST FOR FALL SEEDING. SEED FROM AUGUST TO SEPTEMBER 5TH FOR BEST COVER. SEED TO A DEPTH OF 1 INCH.
OATS	80	2.0	BEST FOR SPRING SEEDING. SEED NO LATER THAN MAY 15TH FOR SUMMER PROTECTION. SEED TO A DEPTH OF 1 INCH.
ANNUAL RYEGRASS	40	1.0	GROWS QUICKLY, BUT IS OF SHORT DURATION. USE WHERE APPEARANCES ARE NOT IMPORTANT. SEED EARLY SPRING AND/OR BETWEEN AUGUST 15TH AND SEPTEMBER 15TH. COVER SEED WITH NO MORE THAN 0.25 INCH OF SOIL.
PERENNIAL RYEGRASS	30	0.7	GOOD COVER WHICH IS LONGER LASTING THAN ANNUAL RYEGRASS. SEED BETWEEN APRIL 1ST AND JUNE 1ST AND/OR BETWEEN AUGUST 15TH AND SEPTEMBER 15TH. MULCHING WILL ALLOW SEEDING THROUGHOUT THE GROWING SEASON. SEED TO A DEPTH OF APPROXIMATELY 0.5 INCH.

4. MULCH

A. HAY, STRAW, OR OTHER MULCH, WHEN NEEDED, SHOULD BE APPLIED IMMEDIATELY AFTER SEEDING.

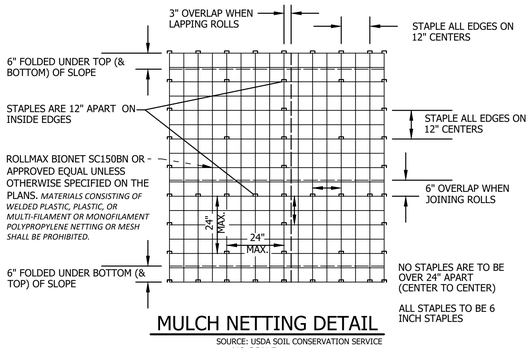
B. MULCH WILL BE HELD IN PLACE USING APPROPRIATE TECHNIQUES FROM THE BEST MANAGEMENT PRACTICE FOR MULCHING.

5. MAINTENANCE TO ESTABLISH A STAND

A. PLANTED AREAS SHOULD BE PROTECTED FROM DAMAGE BY FIRE, GRAZING, TRAFFIC, AND DENSE WEED GROWTH.

B. FERTILIZATION NEEDS SHOULD BE DETERMINED BY ON SITE INSPECTIONS. SUPPLEMENTAL FERTILIZER IS USUALLY THE KEY TO FULLY COMPLETE THE ESTABLISHMENT OF THE STAND BECAUSE MOST PERENNIALS TAKE 2 TO 3 YEARS TO BECOME ESTABLISHED.

C. IN WATERWAYS, CHANNELS, OR SWALES WHERE UNIFORM FLOW CONDITIONS ARE ANTICIPATED, OCCASIONAL MOWING MAY BE NECESSARY TO CONTROL GROWTH OF WOODY VEGETATION.



MULCH NETTING DETAIL

SOURCE: USDA SOIL CONSERVATION SERVICE
NO SCALE

EROSION CONTROL GENERAL NOTES

A. KEEP SITE MODIFICATION TO A MINIMUM

1. CONSIDER FITTING THE BUILDINGS AND STREETS TO THE NATURAL TOPOGRAPHY. THIS REDUCES THE NEED FOR CUTS AND FILLS. AVOID EXTENSIVE GRADING THAT WOULD ALTER DRAINAGE PATTERNS OR CREATE VERY STEEP SLOPES.
2. EXPOSE AREAS OF BARE SOIL TO EROSIVE ELEMENTS FOR THE SHORTEST TIME POSSIBLE.
3. SAVE AND PROTECT DESIRABLE EXISTING VEGETATION WHERE POSSIBLE. ERECT BARRIERS TO PREVENT DAMAGE FROM CONSTRUCTION EQUIPMENT.
4. LIMIT THE GRADES OF SLOPES SO VEGETATION CAN BE EASILY ESTABLISHED AND MAINTAINED.
5. AVOID SUBSTANTIAL INCREASE IN RUNOFF LEAVING THE SITE.

B. MINIMIZE POLLUTION OF WATER DURING CONSTRUCTION ACTIVITIES

1. STOCKPILE TOPSOIL REMOVED FROM CONSTRUCTION AREA AND SPREAD OVER ANY DISTURBED AREAS PRIOR TO REVEGETATION. TOPSOIL STOCKPILES MUST BE PROTECTED FROM EROSION.
2. PROTECT BARE SOIL AREAS EXPOSED BY GRADING ACTIVITIES WITH TEMPORARY VEGETATION OR MULCHES.
3. USE SEDIMENT BASINS TO TRAP DEBRIS AND SEDIMENT WHICH WILL PREVENT THESE MATERIALS FROM MOVING OFF SITE.
4. USE DIVERSIONS TO DIRECT WATER AROUND THE CONSTRUCTION AREA AND AWAY FROM EROSION PRONE AREAS TO POINTS OF SAFE DISPOSAL.
5. USE TEMPORARY CULVERTS OR BRIDGES WHEN CROSSING STREAMS WITH EQUIPMENT.
6. PLACE CONSTRUCTION FACILITIES, MATERIALS, AND EQUIPMENT STORAGE AND MAINTENANCE AREAS AWAY FROM DRAINAGE WAYS.

C. PROTECT AREA AFTER CONSTRUCTION.

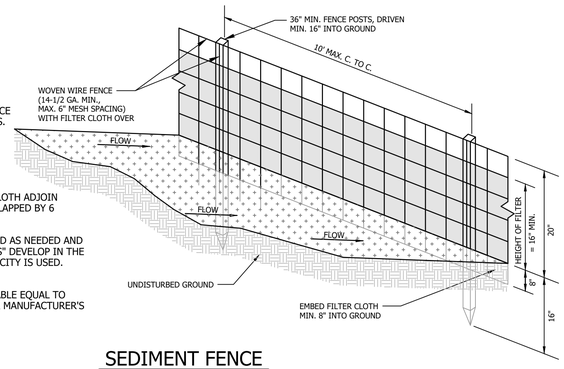
1. ESTABLISH GRASS OR OTHER SUITABLE VEGETATION ON ALL DISTURBED AREAS. SELECT SPECIES ADAPTED TO THE SITE CONDITIONS AND THE FUTURE USE OF THE AREA. FINAL GRADES SHALL BE SEEDED WITHIN 72 HOURS. STABILIZATION SHALL BE DEFINED AS 85% VEGETATIVE COVER.
2. MAINTAIN VEGETATED AREAS USING PROPER VEGETATIVE 'BEST MANAGEMENT PRACTICES' DURING THE CONSTRUCTION PERIOD.
3. MAINTAIN NEEDED STRUCTURAL 'BEST MANAGEMENT PRACTICES' AND REMOVE SEDIMENT FROM DETENTION PONDS AND SEDIMENT BASINS AS NEEDED.
4. DETERMINE RESPONSIBILITY FOR LONG TERM MAINTENANCE OF PERMANENT 'BEST MANAGEMENT PRACTICES'.
5. IF CONSTRUCTION IS ANTICIPATED DURING WINTER MONTHS, REFER TO 'COLD WEATHER SITE STABILIZATION REQUIREMENTS'.

D. INVASIVE SPECIES AND FUGITIVE DUST

1. THE PROJECT SHALL NOT CONTRIBUTE TO THE SPREAD OF INVASIVE SPECIES. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EVALUATE WORK AREAS FOR THE PRESENCE OF INVASIVE SPECIES, AND IF FOUND SHALL TAKE NECESSARY MEASURES TO PREVENT THEIR SPREAD IN ACCORDANCE WITH RSA 430:51-57 AND AGR 3800. THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO PREVENT THE INTRODUCTION OF INVASIVE SPECIES BY INSPECTING AND CLEANING ALL EQUIPMENT ARRIVING ON SITE.
2. FUGITIVE DUST SHALL BE CONTROLLED IN ACCORDANCE WITH ENV-A 1000.

CONSTRUCTION NOTES FOR SEDIMENT FENCE

1. WOVEN WIRE FENCE, IF REQUIRED, TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP, MID SECTION, AND BOTTOM.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6 INCHES, FOLDED AND STAPLED.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SEDIMENT FENCE, OR 50% OF CAPACITY IS USED.
5. 12" DIAMETER FILTREXX SILTSOXX SHALL BE CONSIDERED AN ACCEPTABLE EQUAL TO SEDIMENT FENCE IF INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.



SEDIMENT FENCE

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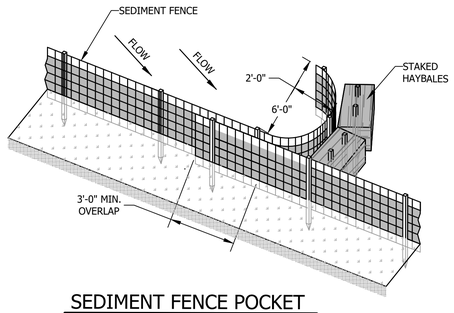


SEDIMENT FENCE POCKET

NO SCALE

COLD WEATHER SITE STABILIZATION REQUIREMENTS

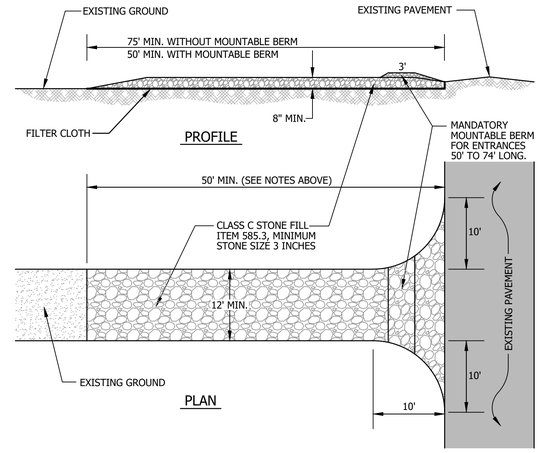
TO ADEQUATELY PROTECT WATER QUALITY DURING COLD WEATHER AND DURING SPRING RUNOFF, THE FOLLOWING ADDITIONAL STABILIZATION TECHNIQUES SHALL BE EMPLOYED DURING THE PERIOD FROM OCTOBER 15 THROUGH MAY 1:

1. THE AREA OF EXPOSED, UNSTABILIZED SOIL SHALL BE LIMITED TO 1 ACRE AND SHALL BE PROTECTED AGAINST EROSION BY THE METHODS DESCRIBED IN THIS SECTION PRIOR TO ANY THAW OR SPRING MELT EVENT. THE ALLOWABLE AREA OF EXPOSED SOIL MAY BE INCREASED IF A WINTER CONSTRUCTION PLAN, DEVELOPED BY A QUALIFIED ENGINEER OR A CPESC SPECIALIST, IS REVIEWED AND APPROVED BY NHDES.
2. ALL PROPOSED VEGETATED AREAS HAVING A SLOPE OF LESS THAN 15% WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH 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 2 INCHES OF EROSION CONTROL MIX MEETING THE CRITERIA OF ENV-WQ 1506.05(D) THROUGH (H).
3. ALL PROPOSED VEGETATED AREAS HAVING A SLOPE OF GREATER THAN 15% WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE SEEDED AND COVERED WITH PROPERLY INSTALLED AND ANCHORED EROSION CONTROL MATTING OR WITH A MINIMUM 4 INCH THICKNESS OF EROSION CONTROL MIX MEETING THE CRITERIA OF ENV-WQ 1506.05(D) THROUGH (H).
4. INSTALLATION OF ANCHORED HAY MULCH OR EROSION CONTROL MIX, MEETING THE CRITERIA OF ENV-WQ 1506.05(D) THROUGH (H), SHALL NOT OCCUR OVER SNOW OF GREATER THAN 1 INCH IN DEPTH.
5. INSTALLATION OF EROSION CONTROL MATTING SHALL NOT OCCUR OVER SNOW OF GREATER THAN ONE INCH IN DEPTH OR ON FROZEN GROUND.
6. ALL PROPOSED STABILIZATION IN ACCORDANCE WITH NOTES 2 OR 3 ABOVE, SHALL BE COMPLETED WITHIN 1 DAY OF ESTABLISHING THE GRADE THAT IS FINAL OR THAT OTHERWISE WILL EXIST FOR MORE THAN 5 DAYS.
7. ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH 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.
8. 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, ITEM NO. 304.1 OR 304.2.

CONSTRUCTION SEQUENCE

1. PREPARE AN EROSION CONTROL PLAN OR A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS.
2. INSTALL CONSTRUCTION ENTRANCE, SEE DETAIL.
3. CUT AND CLEAR TREES WITHIN THE CLEARING LIMITS.
4. INSTALL SEDIMENT FENCES, ROCK CHECK DAMS, AND OTHER APPROPRIATE EROSION CONTROL MEASURES AT LOCATIONS SHOWN ON THE PLANS AND AS NEEDED.
5. GRUB SITE WITHIN GRADING LIMITS.
6. STRIP AND STOCKPILE TOPSOIL AND INSTALL EROSION CONTROL MEASURES.
7. INSTALL/ADJUST SEDIMENT FENCE, CHECK DAMS, AND HAYBALES, AS REQUIRED.
8. CONSTRUCT PERMANENT STORMWATER CONTROLS AS SOON AS PRACTICAL. DO NOT DIRECT STORMWATER TOWARD TREATMENT BASINS, PONDS, SWALES, DITCHES AND LEVEL SPREADERS UNTIL THEY HAVE BEEN STABILIZED.
9. PROCEED WITH WORK, LIMITING THE DURATION OF DISTURBANCE. THE MAXIMUM OF UNCOVERED DISTURBED EARTH AT ANY ONE TIME IS FIVE ACRES. THE MAXIMUM LENGTH OF TIME THAT DISTURBED EARTH MAY BE LEFT UNSTABILIZED IS 45 DAYS.
10. BEGIN SEEDING AND MULCHING IMMEDIATELY AFTER GRADING. ALL DISTURBED AREAS SHALL BE STABILIZED WITH APPROVED METHODS WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.

    AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
    A) BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED;
    B) A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
    C) A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED; OR
    D) EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
11. INSPECT ALL EROSION CONTROL MEASURES ON A DAILY BASIS AND AFTER EVERY 0.5 INCHES OF PRECIPITATION. MAINTAIN SEDIMENT FENCE, SEDIMENT TRAPS, HAY BALES, ETC., AS NECESSARY.
12. PAVE ROADWAYS AND/OR PARKING AREAS.
13. PLACE TOPSOIL, SEED AND MULCH.
14. COMPLETE ALL REMAINING PERMANENT EROSION CONTROL STRUCTURES.
15. MONITOR THE SITE AND MAINTAIN STRUCTURES AS NEEDED UNTIL FULL VEGETATION IS ESTABLISHED.



STABILIZED CONSTRUCTION ENTRANCE

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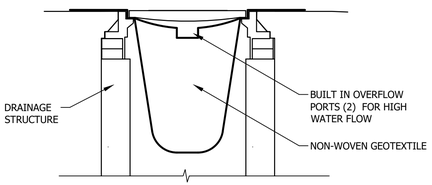

CATCH BASIN PROTECTION INSERT TYPE

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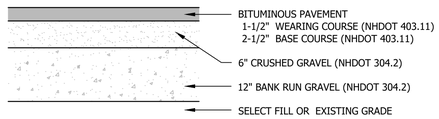
NUCAR NISSAN OF KEENE
SITE IMPROVEMENTS
SWANZEY, NEW HAMPSHIRE

EROSION CONTROL NOTES & DETAILS

PROJECT #: 240120	DRAWN BY: CEW	ARCHIVE #: H-___	SHEET C3.01
DATE: MARCH 2024	ENGIN'D BY: CEW	CHECK'D BY: WTD	



TYPICAL PAVEMENT SECTION

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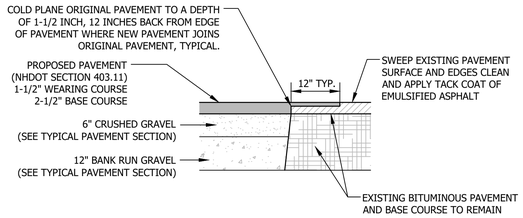

PAVEMENT JOINING DETAIL

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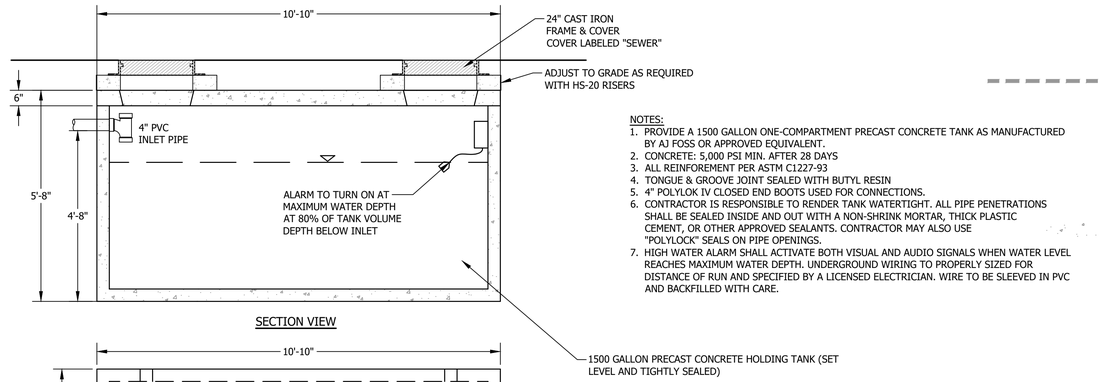

SECTION VIEW

TOP VIEW

NOTES:
1. PROVIDE A 1500 GALLON ONE-COMPARTMENT PRECAST CONCRETE TANK AS MANUFACTURED BY A1 FOSS OR APPROVED EQUIVALENT.
2. CONCRETE: 5,000 PSI MIN. AFTER 28 DAYS
3. ALL REINFOREMENT PER ASTM C1227-93
4. TONGUE & GROOVE JOINT SEALED WITH BUTYL RESIN
5. 4" POLYLOK IV CLOSED END BOOTS USED FOR CONNECTIONS.
6. CONTRACTOR IS RESPONSIBLE TO RENDER TANK WATERTIGHT. ALL PIPE PENETRATIONS SHALL BE SEALED INSIDE AND OUT WITH A NON-SHRINK MORTAR, THICK PLASTIC CEMENT, OR OTHER APPROVED SEALANTS. CONTRACTOR MAY ALSO USE "POLYLOCK" SEALS ON PIPE OPENINGS.
7. HIGH WATER ALARM SHALL ACTIVATE BOTH VISUAL AND AUDIO SIGNALS WHEN WATER LEVEL REACHES MAXIMUM WATER DEPTH. UNDERGROUND WIRING TO PROPERLY SIZED FOR DISTANCE OF RUN AND SPECIFIED BY A LICENSED ELECTRICIAN. WIRE TO BE SLEEVED IN PVC AND BACKFILLED WITH CARE.

1500 GALLON HOLDING TANK DETAIL

NOT TO SCALE

TYPICAL CONCRETE SIDEWALK SECTION

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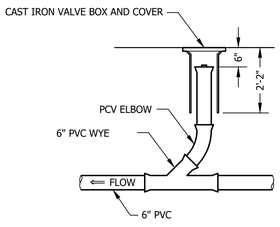

ROOF DRAIN CLEANOUT DETAIL

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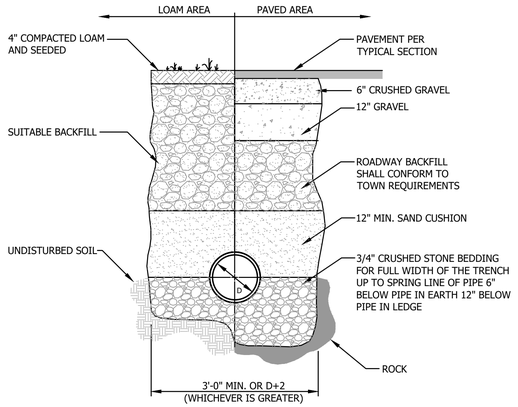

TYPICAL DRAINAGE TRENCH DETAIL

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STATE OF NEW HAMPSHIRE
WILLIAM T. DAVIS No. 11918 LICENSED PROFESSIONAL ENGINEER

NUCAR NISSAN OF KEENE
SITE IMPROVEMENTS
SWANZEY, NEW HAMPSHIRE
DETAILS

PROJECT #: 240120	DRAWN BY: CEW	ARCHIVE #: H-___	SHEET C3.02
DATE: MARCH 2024	ENGIN'D BY: CEW	CHECK'D BY: WTD	

REVISED RENDERING 03.11.2024

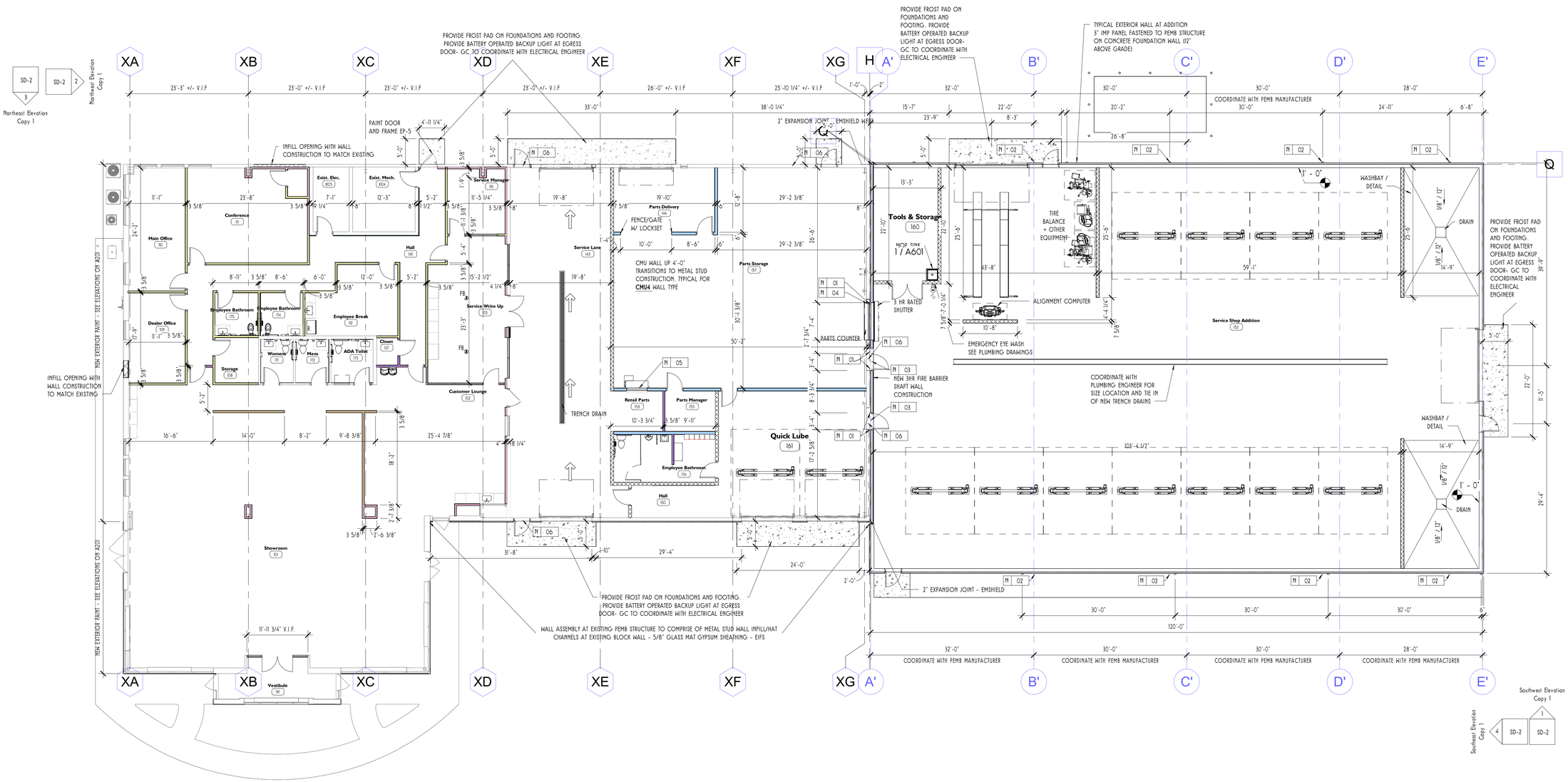
DCD - Nucar - Keene of Nissan, NH

DCD

02.20.2024

SD-3

sra
SYVERTSEN RIGOSU
architects
Six Chelsea Place
Clifton Park NY 12065
T: 518.348.1151
www.SArch3D.com



NOTE: NEW EXTERIOR PAINT AT ALL EXISTING EXTERIOR WALLS

1 First Floor Plan
1" = 10'-0"

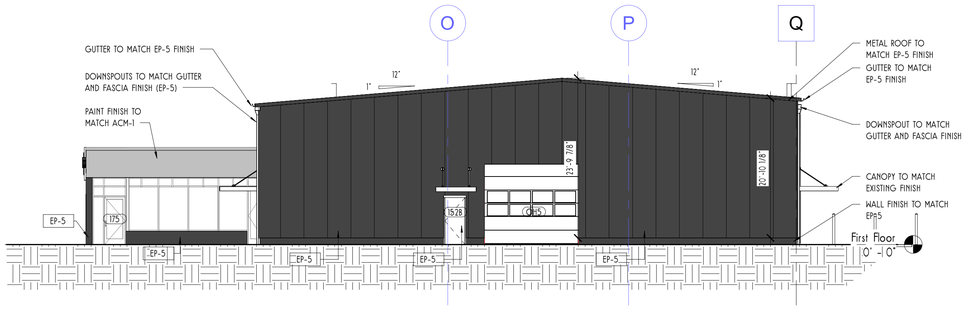
DCD - Nucar - Keene of Nissan, NH

DCD

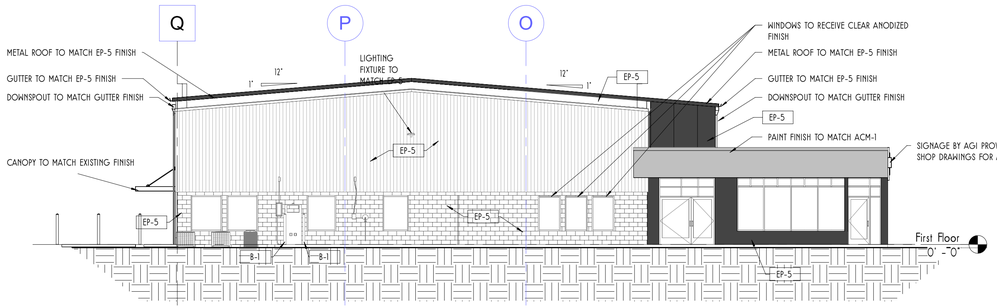
02.20.2024

SD-9

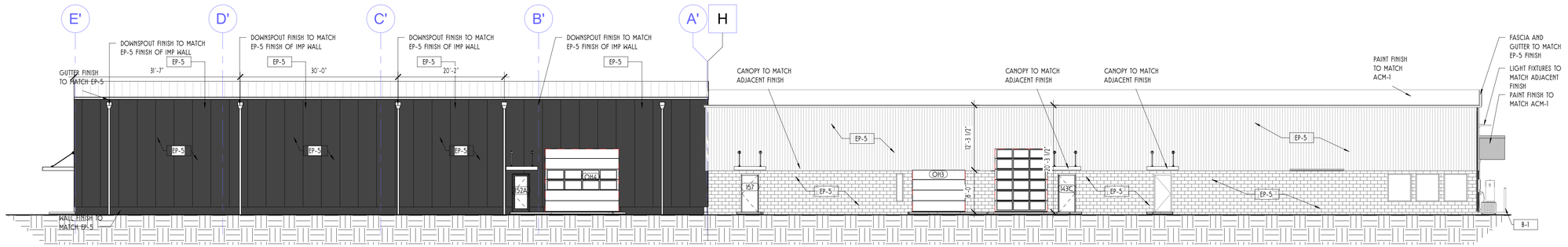
sra
SYVERTSEN RIGOSU
architects
Six Chelsea Place
Clifton Park NY 12065
T: 518.348.1151
www.SArch3D.com



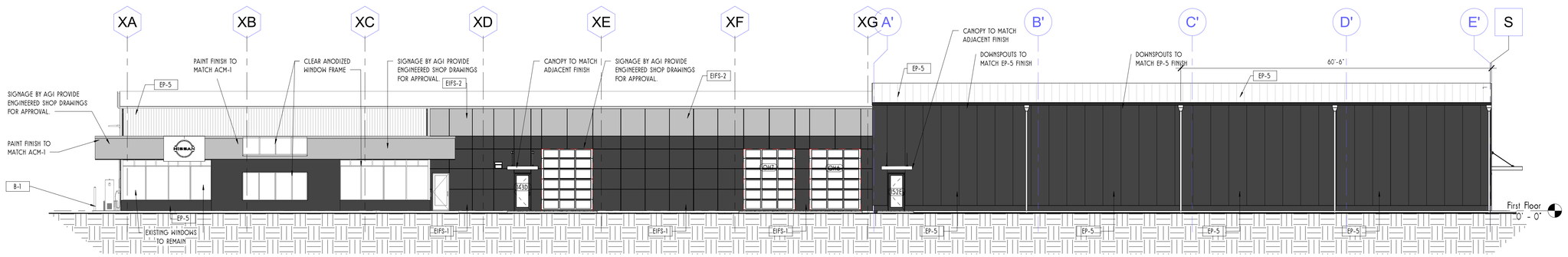
4 Southeast Elevation Copy 1
3/32" = 1'-0"



2 Northwest Elevation Copy 1
3/32" = 1'-0"



3 Northeast Elevation Copy 1
3/32" = 1'-0"



1 Southwest Elevation Copy 1
3/32" = 1'-0"

DCD - Nucar - Keene of Nissan, NH

DCD

02.20.2024

SD-2

SYVERTSEN RIGOSU architects
Six Chelsea Place
Clifton Park NY 12065
T: 518.348.1151
www.Sarch3D.com

176 Newport Road – Suite 8, New London, NH 03257 • Ph 603-877-0116 • Fax 603-444-1343 • www.horizonsengineering.com

February 21, 2024

Town of Swanzey Planning Board
620 Old Homestead Highway, P.O. Box 10009
Swanzey, NH 03446-0009

Re: **Nucar Nissan of Keene – Building Addition & Site Improvements (Map 222, Lot 34)**
Site Plan Review – 544 Monadnock Highway, Swanzey NH

Dear Planning Board Members,

On behalf of our client, Nucar Nissan of Keene, we are pleased to provide the enclosed Application for Site Plan Review. The proposed project includes an addition and renovation to the existing Nissan dealership building located at 544 Monadnock Highway in Swanzey, NH. The proposed building addition is 9,600 sq ft, and requires a new holding tank for floor drains, revisions to the existing septic system to accommodate the building addition, grading and drainage modifications, and parking and circulation layout adjustments. The following documents are included:

- Application form
- Abutter and consultant notification list
- Town of Swanzey tax map exhibit
- NRCS soils map
- Plans (2 sets 24" x 36"), including architectural drawings by SRA

Four (4) paper copies of the application and supporting materials have been included. Additionally, one digital (PDF) copy of all the application materials will be emailed to planner@swanzeynh.gov.

Within this application, we respectfully request a waiver for a Landscape Plan, Item 13 on the Checklist of Required Exhibits and Data. The planned building addition is located within the limits of the existing paved parking areas on Site. No new impervious areas are included in the project and, as such, no proposed landscaping has been included within the scope. We look forward to discussing this project in March. Please feel free to reach out with any questions.

Respectfully,

Will Davis, PE, LEED AP
Vice President

SWANZEY PLANNING BOARD
P. O. Box 10009
Swanzey, NH 03446
Email: planner@swanzeynh.gov

SITE PLAN REVIEW APPLICATION FORM AND CHECKLIST

Date Received_____ By_____

APPLICATION PROCEDURE

1. This form and all required information must be filed with the Planning Office at least 21 days prior to the date at which it will be submitted to the Planning Board. Unless otherwise noticed, the Planning Board meets on the second and fourth Thursdays of every month.

2. Four (4) paper copies of the application shall be submitted, in addition to an electronic submittal in Portable Document Format (*pdf), either by email or on a CD or flash drive.

3. All projects must comply with the Town's Zoning Ordinance and other applicable regulations before being considered by the Planning Board. Any necessary approvals from the Zoning Board of Adjustment must be received prior to application to the Planning Board.

4. Included herein is the checklist of plat requirements that are part of a completed application. Please check the documentation that has been submitted, or items for which waivers are being requested. All requests for waivers must be submitted in writing at the time of application, and include the justification for the request.

5. Within 30 days after filing, or the next meeting for which notice can be given, the application will be placed on the Planning Board's agenda. At this meeting the Board will vote to accept or not accept the application as complete. Following a vote to accept, the Board will either move into public hearing or schedule a public hearing for a time and date certain. The Board will vote to approve or disapprove the application no later than 65 days from the vote of acceptance.

6. The required public notices and certified mailings are prepared and sent by the Planning Office. The applicant is responsible for all fees associated with filing and notification.

7. Within five (5) business days of the vote to approve or disapprove the application, the applicant will receive a written Notice of Decision. In the event of disapproval, the notice will include the reasons for the decision and state what corrective action needs to be taken by the applicant.

1. Name and address of owner(s) of record:
   DCD RE 544 MONADNOCK HWY LLC
   544 MONADNOCK HIGHWAY, SWANZEY, NH 03446
   Preferred Telephone: (603) 738-8601 Email: shawn@nucar.com
2. Name and address of applicant (if different):
   NUCAR NISSAN OF KEENE
   544 MONADNOCK HIGHWAY, SWANZEY, NH 03446
   Preferred Telephone: _____ Email: _____
3. Name and address of surveyor or other professional whose name and seal appear on the plat:
   ENGINEER- HORIZONS ENGINEERING, NEW LONDON, NH 03257
   ARCHITECT- SYVERSEN RIGOSU ARCHITECTS (SRA), CLIFTON PARK, NY 12065
   Preferred Telephone: _____ Email: _____
4. Street Address of Proposed Project: 544 MONADNOCK HIGHWAY, SWANZEY, NH 03446
5. Zoning District(s): BUSINESS Tax Map# 222 Lot#(s) 34
6. Proposed Permitted Use (Per Zoning): CAR DEALERSHIP
7. Project Name: NUCAR NISSAN OF KEENE - SITE IMPROVEMENTS
8. Area of Lot in Square Feet and Acres: 272,390 SF - 6.25 ACRES
9. Traffic Volume on Adjacent Major Streets: 2022 AADT: 9269 ON NH RT 12 (MONADNOCK HWY) SOURCE: NHDOT TRAFFIC DATA, LOCATION ID:02287001
10. Projected Number of Vehicle Movements On and Off the Property Per Day: 35 EMPLOYEES & 50-CUSTOMERS = 85
11. Gross Floor Area of Existing Buildings (Square Feet): 12,190 SF
12. Gross Floor Area of Additions (Square Feet): 9,600 SF
13. Gross Floor Area of New Buildings (Square Feet): N/A
14. Total Number of Employees: 35 EMPLOYEES - 50 CUSTOMERS
15. Hours of Operation: MONDAY-FRIDAY 8AM-7PM, SATURDAY 8AM-5PM, CLOSED SUNDAY

The following items must be submitted with the application:

1. Attach a separate sheet listing Town of Swanzey Tax Map and Lot #, name and mailing address of all abutters, including those across a street, brook or stream; any professional whose name and stamp appears on the plat; and any holders of conservation preservation, or agricultural preservation restrictions. Abutter names should be those of current owners as recorded in the tax records five (5) days prior to the submission of the application.
2. A completed checklist (see attached).
3. Payment of all applicable fees. Applicants will be billed prior to the hearing. The application will not be considered by the Planning Board until such time as all fees are paid. Please refer to the Swanzey Site Plan Review Regulations for the complete list of applicable fees.

The following affidavits must be signed and dated:

The Applicant and/or owner or agent certifies that this application is correctly completed with all required attachments and requirements and that any additional costs for engineering or professional services incurred by the Planning Board or the Town of Swanzey in the final review process of the property shall be borne by the Applicant and/or owner.

02/21/2024 _____
Date

_____
Signature

I hereby authorize the Swanzey Planning Board and its agents to access my land for the purpose of reviewing the proposed site plan, performing road inspections and any other inspections deemed necessary by the Board or its agents, to ensure conformance of the on-site improvements with the approved plan and all Town of Swanzey ordinances and regulations.

02/21/2024 _____
Date

_____
Signature

I hereby authorize **WILL DAVIS, HORIZONS ENGINEERING** to act as my agent and represent me before the Swanzey Planning Board.

Signed (Owner): _____ Date: 02/21/2024

Signed (Agent): _____ Date: **2/15/2024**

FEE SCHEDULE

1. Filing Fee (See Attached Fee Schedule): $_____
2. Public Notice Fee: Current rates for Keene Sentinel. $_____
3. Certified Mail: Current rate for mail. $_____

Total Application Filing Fees: $_____

FOR PLANNING BOARD USE ONLY

Comments:

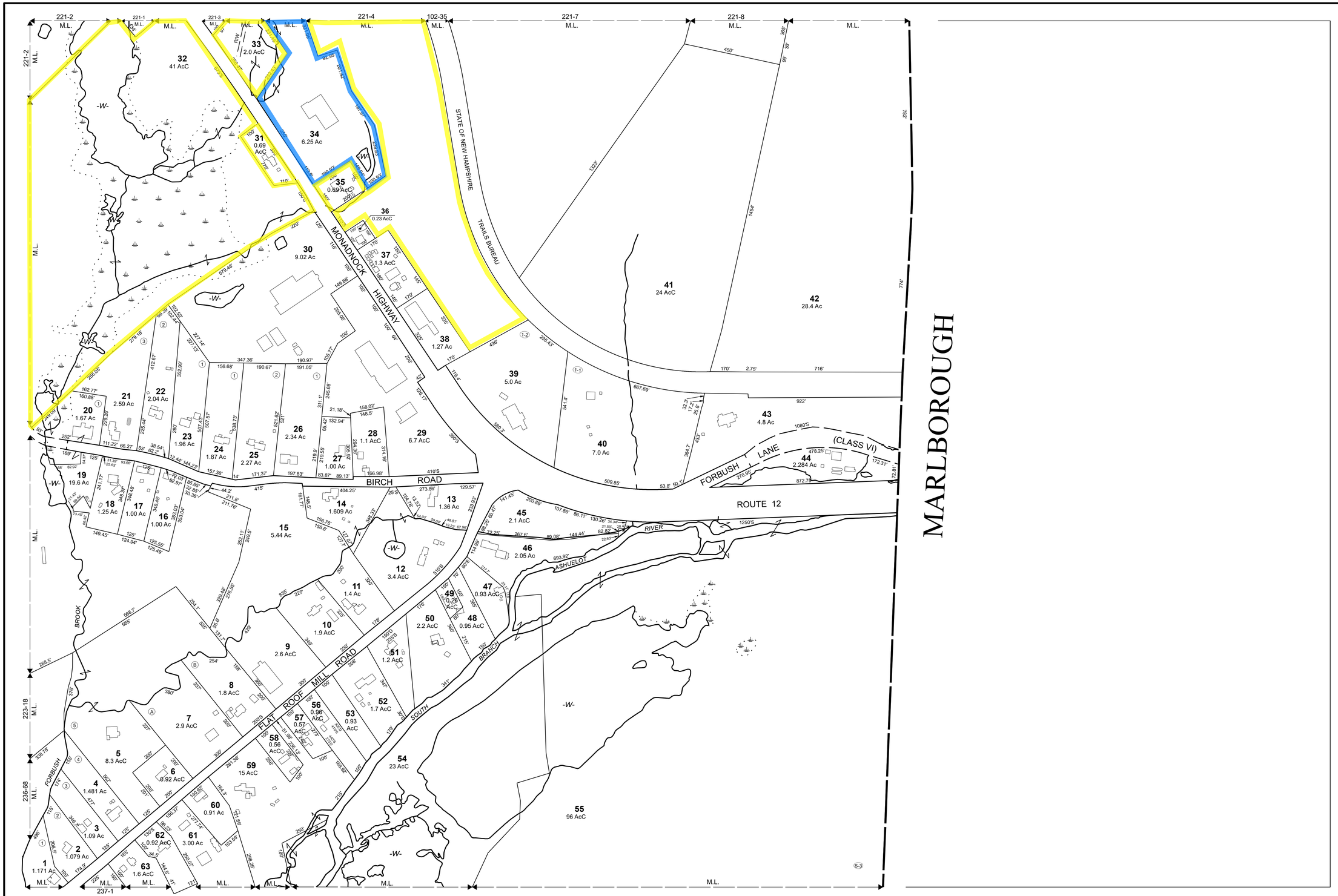
The above application was ☐ approved ☐ denied by the Swanzey Planning Board.

Date: _____

PLAT SUBMISSION CHECKLIST

Please note that this checklist is for administrative efficiency. Please refer to the Swanzey Site Plan Review Regulations to ensure that all requirements are being met.

Item #	Submission Requirement:	Submitted		
		Yes	No	Waiver
1.	Name and address of owner.	X		
2.	Tax map and lot number.	X		
3.	North arrow, written and graphic scale of 1" = 30'.	X		
4.	Name and address of plat preparer.	X		
5.	Vicinity sketch.	X		
6.	Names and addresses of all abutting landowners.	X		
7.	Physical features and uses of land within 200 feet of the site.	X		
8.	Perimeter boundary lines and the lot area is square feet and acres.	X		
9.	The shape, size, height, location and use of existing structures on the site, and those that are proposed.	X		
10.	Location, name and widths of any existing and proposed roads on the property.	X		
11.	Identification of access from the site to public streets, sight distances from the access points, curb cuts and proposed changes (if any) to existing streets.	X		
12.	Location and number of parking and loading spaces.	X		
13.	Landscape Plan.	N/A		
14.	Location, type and nature of all existing and proposed lighting.	X		
15.	Natural features such as waterbodies, ledge outcropping, wetlands, etc.	X		
16.	Existing and proposed grades and topographic contours at 5-foot intervals.	X		
17.	The size and accurate location of all existing and proposed water mains, culverts, fire hydrants and fire ponds.	X		
18.	Means of providing water supply.	X		
19.	Surface drainage patterns.	X		
20.	Copy of certification by a licensed septic designer that the existing system is sufficient for existing and proposed use.	X		
21.	Location and type of proposed sewage disposal system.	X		
22.	Location of existing and proposed on-site well showing 75-foot radius.	X		
23.	Soil survey data from Cheshire County Soil Survey.	X		
24.	Location of any existing or proposed easements, deed restrictions and/or covenants.	X		
25.	Architectural Plans.	X		



THIS MAP IS FOR ASSESSMENT PURPOSES. IT IS NOT VALID FOR LEGAL DESCRIPTION OR CONVEYANCE.

THE HORIZONTAL DATUM IS THE NEW HAMPSHIRE STATE PLANE COORDINATE SYSTEM, NAD 83.

PHOTOGRAPHY DATE: APRIL 2021

COMPLETION DATE: DECEMBER 31, 2023

PRODUCED IN 2023 BY

CAI Technologies
Precision Mapping. Geospatial Solutions.
11 Pleasant Street, Littleton, NH 03561
800.322.4540 - www.cai-tech.com

LEGEND

AREA SURVEYED ..... Ac
AREA CALCULATED ..... AcC
RECORD DIMENSION ..... 100'
SCALED DIMENSION ..... 100'S
MATCH LINE ..... M.L.
WATER ..... -W-
BUILDING
EXEMPT PROPERTY ..... (E)
SUBDIVISION LOT NO. ..... (2)
RIGHT OF WAY/ACCESS ..... ROW
COMMON OWNERSHIP
WETLANDS

SCALE: 1" = 200'

FEET 200 100 0 200 400 600

METERS 50 25 0 50 100 150

REVISED TO: APRIL 1, 2023

PROPERTY MAPS

SWANZEY

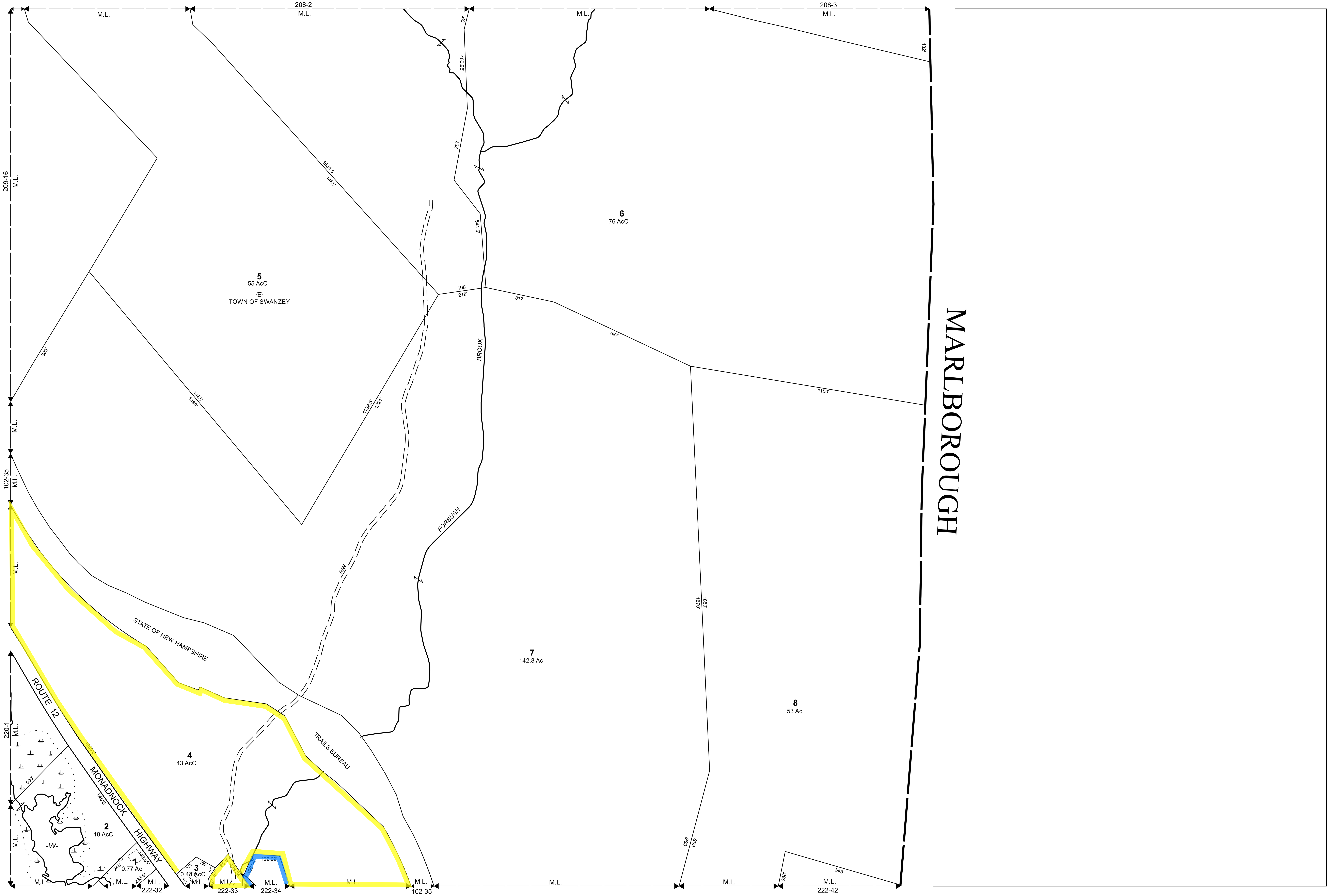
NEW HAMPSHIRE

INDEX DIAGRAM

220	221	
223	222	
236	237	

GN

MAP NO. 222



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LEGEND

AREA SURVEYED	Ac
AREA CALCULATED	AcC
RECORD DIMENSION	100'
SCALED DIMENSION	100'S
MATCH LINE	M.L.
WATER	-W-
BUILDING	
EXEMPT PROPERTY	E
SUBDIVISION LOT NO.	2
RIGHT OF WAY/ACCESS	R/W
COMMON OWNERSHIP	
WETLANDS	

SCALE: 1" = 200'

FEET 200 100 0 200 400 600
METERS 50 25 0 50 100 150

REVISED TO: APRIL 1, 2023

PROPERTY MAPS

SWANZEY

NEW HAMPSHIRE

INDEX DIAGRAM

105 106 209 208 220 221 223 222 GN N

MAP NO.

221

176 Newport Road – Suite 8, New London, NH 03257 • Ph 603-877-0116 • Fax 603-444-1343 • www.horizonsengineering.com

Abutter / Consultant List

Owner

Tax Map 222 Lot 34
DCD RE 544 Monadnock Highway
544 Monadnock Highway
Swanzey, NH 03446

Abutter(s)

Tax Map 222 Lot 31
Joseph Antosiewicz
547 Monadnock Highway
Swanzey, NH 03446

Tax Map 222 Lot 32
JMK Rev. Trust
c/o James M. Kendall, Trustee
140 Anchor Drive
Vero Beach, FL 32963

Tax Map 222 Lot 33
JMK Rev. Trust
c/o James M. Kendall, Trustee
140 Anchor Drive
Vero Beach, FL 32963

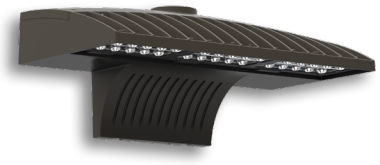
Tax Map 222 Lot 35
Michael R. & Carol A. McGrath
c/o Dennis McGrath
558 Monadnock Highway
Swanzey, NH 03446

Tax Map 221 Lot 4
JMK Rev. Trust
c/o James M. Kendall, Trustee
140 Anchor Drive
Vero Beach, FL 32963

Consultants

Civil Engineer/Surveyor
Horizons Engineering, Inc.
176 Newport Road, Suite 8
New London, NH 03257

Architect
Syversen Rigosu Architects (SRA)
Six Chelsea Place
Clifton Park, NY 12065



d-series

D-Series Size 2
LED Wall Luminaire

Catalog Number

Notes

Type

Hit the Tab key or mouse over the page to see all interactive elements.

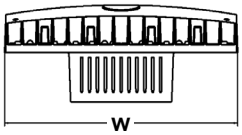
Specifications

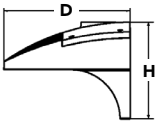
Luminaire

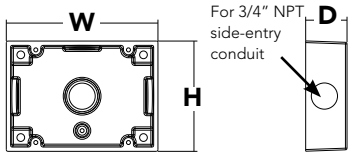
Width:	18-1/2" (47.0 cm)	**Weight:**	21 lbs (9.5 kg)
Depth:	10" (25.4 cm)		
Height:	7-5/8" (19.4 cm)		

Back Box (BBW)

Width:	5-1/2" (14.0 cm)	**BBW Weight:**	1 lbs (0.5 kg)
Depth:	1-1/2" (3.8 cm)		
Height:	4" (10.2 cm)		







A+ Capable options indicated by this color background.

A+ Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and system-level interoperability.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is A+ Certified when ordered with DTL® controls marked by a shaded background. DTL DLL equipped luminaires meet the A+ specification for luminaire to photocontrol interoperability1
- This luminaire is part of an A+ Certified solution for ROAM® or XPoint™ Wireless control networks, providing out-of-the-box control compatibility with simple commissioning, when ordered with drivers and control options marked by a shaded background[1]

To learn more about A+, visit www.acuitybrands.com/aplus.

1. See ordering tree for details.
2. A+ Certified Solutions for ROAM require the order of one ROAM node per luminaire. Sold Separately: Link to Roam; Link to DTL DLL

Ordering Information

EXAMPLE: DSXW2 LED 30C 700 40K T3M MVOLT DDBTXD

DSXW2 LED							
Series	**LEDs**	**Drive Current**	**Color temperature**	**Distribution**	**Voltage**	**Mounting**	**Control Options**
DSXW2 LED	20C 20 LEDs (two engines) 30C 30 LEDs (three engines)	350 350 mA 530 530 mA 700 700 mA 1000 1000 mA[1] (1 A)	30K 3000 K 40K 4000 K 50K 5000 K AMBPC Amber phosphor converted[2]	T2S Type II Short T2M Type II Medium T3S Type III Short T3M Type III Medium T4M Type IV Medium TFTM Forward Throw Medium	MVOLT[3] 120[4] 208[4] 240[4] 277[4] 347[4,5] 480[4,5]	**Shipped included** (blank) Surface mounting bracket **Shipped separately**[6] BBW Surface-mounted back box (for conduit entry)	**Shipped installed** PE Photoelectric cell, button type[7] PER NEMA twist-lock receptacle only (control ordered separate)[8] PER5 Five-wire receptacle only (control ordered separate)[8,9] PER7 Seven-wire receptacle only (control ordered separate)[8,9] DMG 0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately) PIR 180° motion/ambient light sensor,<15' mtg ht[10,11] PIRH 180° motion/ambient light sensor, 15-30' mtg ht[10,11] PIR1FC3V Motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 1fc[11,12] PIRH1FC3V Motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 1fc[11,12]

Other Options			Finish *(required)*					
Shipped installed		**Shipped separately**[13]	DDBXD	Dark bronze	DSSXD	Sandstone	DWHGXD	Textured white
SF	Single fuse (120, 277, 347V)[3]	BSW Bird-deterrent spikes	DBLXD	Black	DDBTXD	Textured dark bronze	DSSTXD	Textured sandstone
DF	Double fuse (208, 240, 480V)[3]	VG Vandal guard	DNAXD	Natural aluminum	DBLBXD	Textured black		
HS	House-side shield[4]		DWHXD	White	DNATXD	Textured natural aluminum		
SPD	Separate surge protection[13]							

One Lithonia Way • Conyers, Georgia 30012 • Phone: 1-800-705-SERV (7378) • www.lithonia.com

Ordering Information

Accessories

Ordered and shipped separately.

DLL127F 1.5 JU	Photocell - SSL twist-lock (120-277V) [14]
DLL347F 1.5 CUL JU	Photocell - SSL twist-lock (347V) [14]
DLL480F 1.5 CUL JU	Photocell - SSL twist-lock (480V) [14]
DSHORT SBK U	Shorting cap (Included when ordering PER, PER5 or PER7) [14]
DSXWHS U	House-side shield (one per light engine)
DSXWBSW U	Bird-deterrent spikes
DSXW2VG U	Vandal guard accessory
DSXW2BBW DDBXD U	Back box accessory (specify finish)

For more control options, visit DTL and ROAM online.

NOTES

1 1000mA is not available with AMBPC.
2 AMBPC is not available with 1000mA.
3 MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
4 Single fuse (SF) requires 120, 277 or 347 voltage option. Double fuse (DF) requires 208, 240 or 480 voltage option.
5 Available with 30 LED/700mA options only (DSXW2 LED 30C 700). DMG option not available.
6 Also available as a separate accessory; see Accessories information.
7 Photocontrol (PE) requires 120, 208, 240, 277 or 347 voltage option. Not available with motion/ambient light sensors (PIR or PIRH).
8 Photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Shorting Cap included.
9 If ROAM® node required, it must be ordered and shipped as a separate line item from Acuity Brands Controls. Shorting Cap included.
10 Reference Motion Sensor table on page 3.
11 Reference PER Table on page 3 for functionality.
12 PIR and PIR1FC3V specify the SensorSwitch SBGR-10-ODP control; PIRH and PIRH1FC3V specify the SensorSwitch SBGR-6-ODP control; see Motion Sensor Guide for details. Dimming driver standard. Not available with PER5 or PER7. Separate on/off required.
13 See the electrical section on page 2 for more details.
14 Requires luminaire to be specified with PER option. Ordered and shipped as a separate line item. See PER Table.

Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08.

LEDs	Drive Current (mA)	System Watts	Dist. Type	30K					40K					50K				
				Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
20C (20 LEDs)	350 mA	25W	T2S	2,783	1	0	1	111	2,989	1	0	1	120	3,008	1	0	1	120
			T2M	2,709	1	0	1	108	2,908	1	0	1	116	2,926	1	0	1	117
			T3S	2,748	1	0	1	110	2,951	1	0	1	118	2,969	1	0	1	119
			T3M	2,793	1	0	1	112	2,999	1	0	1	120	3,018	1	0	1	121
			T4M	2,756	1	0	1	110	2,959	1	0	1	118	2,977	1	0	1	119
			TFTM	2,753	1	0	1	110	2,956	1	0	1	118	2,975	1	0	1	119
	530 mA	36W	T2S	4,030	1	0	1	112	4,327	1	0	1	120	4,354	1	0	1	121
			T2M	3,920	1	0	1	109	4,210	1	0	1	117	4,236	1	0	1	118
			T3S	3,978	1	0	1	111	4,272	1	0	1	119	4,299	1	0	1	119
			T3M	4,044	1	0	2	112	4,343	1	0	2	121	4,370	1	0	2	121
			T4M	3,990	1	0	1	111	4,284	1	0	1	119	4,310	1	0	1	120
			TFTM	3,987	1	0	1	111	4,281	1	0	1	119	4,308	1	0	1	120
	700 mA	47W	T2S	5,130	1	0	1	109	5,509	1	0	1	117	5,544	1	0	1	118
			T2M	4,991	1	0	2	106	5,360	1	0	2	114	5,393	1	0	2	115
			T3S	5,066	1	0	1	108	5,440	1	0	1	116	5,474	1	0	1	116
			T3M	5,148	1	0	2	110	5,529	1	0	2	118	5,563	1	0	2	118
			T4M	5,080	1	0	2	108	5,455	1	0	2	116	5,488	1	0	2	117
			TFTM	5,075	1	0	2	108	5,450	1	0	2	116	5,484	1	0	2	117
	1000 mA	73W	T2S	7,147	2	0	2	98	7,675	2	0	2	105	7,723	1	0	1	104
			T2M	6,954	2	0	2	95	7,467	2	0	2	102	7,514	2	0	2	103
			T3S	7,057	1	0	2	97	7,579	1	0	2	104	7,627	1	0	2	104
			T3M	7,172	2	0	3	98	7,702	2	0	3	106	7,751	2	0	3	106
			T4M	7,076	1	0	2	97	7,599	1	0	2	104	7,646	1	0	2	105
			TFTM	7,071	1	0	2	97	7,594	1	0	2	104	7,641	1	0	2	105
30C (30 LEDs)	350 mA	36W	T2S	4,160	1	0	1	116	4,467	1	0	1	124	4,494	1	0	1	125
			T2M	4,048	1	0	1	112	4,346	1	0	2	121	4,373	1	0	2	121
			T3S	4,108	1	0	1	114	4,411	1	0	1	123	4,438	1	0	1	123
			T3M	4,174	1	0	2	116	4,483	1	0	2	125	4,510	1	0	2	125
			T4M	4,119	1	0	1	114	4,423	1	0	2	123	4,450	1	0	2	124
			TFTM	4,115	1	0	1	114	4,419	1	0	1	123	4,446	1	0	1	124
	530 mA	54W	T2S	6,001	1	0	1	111	6,444	1	0	1	119	6,484	1	0	1	120
			T2M	5,838	1	0	2	108	6,270	2	0	2	116	6,308	2	0	2	117
			T3S	5,926	1	0	2	110	6,364	1	0	2	118	6,403	1	0	2	119
			T3M	6,023	1	0	2	112	6,467	1	0	2	120	6,507	1	0	2	121
			T4M	5,942	1	0	2	110	6,380	1	0	2	118	6,420	1	0	2	119
			TFTM	5,937	1	0	2	110	6,376	1	0	2	118	6,415	1	0	2	119
	700 mA	71W	T2S	7,403	2	0	2	104	8,170	2	0	2	115	8,221	2	0	2	116
			T2M	7,609	2	0	2	107	7,949	2	0	2	112	7,998	2	0	2	113
			T3S	7,513	1	0	2	106	8,068	1	0	2	114	8,118	1	0	2	114
			T3M	7,635	2	0	3	108	8,199	2	0	3	115	8,250	2	0	3	116
			T4M	7,534	1	0	2	106	8,089	1	0	2	114	8,140	1	0	2	115
			TFTM	7,527	1	0	2	106	8,082	2	0	2	114	8,134	2	0	2	115
	1000 mA	109W	T2S	10,468	2	0	2	96	11,241	2	0	2	103	11,311	2	0	2	104
			T2M	10,184	2	0	3	93	10,936	2	0	3	100	11,005	2	0	3	101
			T3S	10,335	2	0	2	95	11,099	2	0	2	102	11,169	2	0	2	102
			T3M	10,505	2	0	3	96	11,280	2	0	3	103	11,351	2	0	3	104
			T4M	10,365	2	0	2	95	11,129	2	0	2	102	11,198	2	0	2	103
			TFTM	10,356	2	0	2	95	11,121	2	0	3	102	11,190	2	0	3	103

Note:
Available with phosphor-converted amber LED's (nomenclature AMBPC). These LED's produce light with 97+% >530 nm.
Output can be calculated by applying a 0.7 factor to 4000 K lumen values and photometric files.

Performance Data

Lumen Ambient Temperature (LAT) Multipliers

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

Ambient		Lumen Multiplier
0°C	32°F	1.02
10°C	50°F	1.01
20°C	68°F	1.00
25°C	**77°F**	**1.00**
30°C	86°F	1.00
40°C	104°F	0.98

Electrical Load

			Current (A)					
LEDs	Drive Current (mA)	System Watts	120V	208V	240V	277V	347V	480V
20C	350	25 W	0.23	0.13	0.12	0.10	-	-
	530	36 W	0.33	0.19	0.17	0.14	-	-
	700	47 W	0.44	0.25	0.22	0.19	-	-
	1000	74 W	0.68	0.39	0.34	0.29	-	-
30C	350	36 W	0.33	0.19	0.17	0.14	-	-
	530	54 W	0.50	0.29	0.25	0.22	-	-
	700	71 W	0.66	0.38	0.33	0.28	0.23	0.16
	1000	109 W	1.01	0.58	0.50	0.44	-	-

Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the **DSXW2 LED 30C 1000** platform in a **25°C ambient**, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	0	25,000	50,000	100,000
Lumen Maintenance Factor	1.0	0.95	0.92	0.87

Motion Sensor Default Settings

Option	Dimmed State	High Level (when triggered)	Photocell Operation	Dwell Time	Ramp-up Time	Ramp-down Time
PIR or PIRH	3V (37%) Output	10V (100%) Output	Enabled @ 5FC	5 min	3 sec	5 min
*PIR1FC3V or PIRH1FC3V	3V (37%) Output	10V (100%) Output	Enabled @ 1FC	5 min	3 sec	5 min

*For use when motion sensor is used as dusk to dawn control

PER Table

Control	PER (3 wire)	PER5 (5 wire)		PER7 (7 wire)		
			Wire 4/Wire5		Wire 4/Wire5	Wire 6/Wire7
Photocontrol Only (On/Off)	✓	⚠	Wired to dimming leads on driver	⚠	Wired to dimming leads on driver	Wires Capped inside fixture
ROAM	⊘	✓	Wired to dimming leads on driver	⚠	Wired to dimming leads on driver	Wires Capped inside fixture
ROAM with Motion	⊘	⚠	Wired to dimming leads on driver	⚠	Wired to dimming leads on driver	Wires Capped inside fixture
Futureproof*	⊘	⚠	Wired to dimming leads on driver	✓	Wired to dimming leads on driver	Wires Capped inside fixture
Futureproof* with Motion	⊘	⚠	Wired to dimming leads on driver	✓	Wired to dimming leads on driver	Wires Capped inside fixture

✓ Recommended

⊘ Will not work

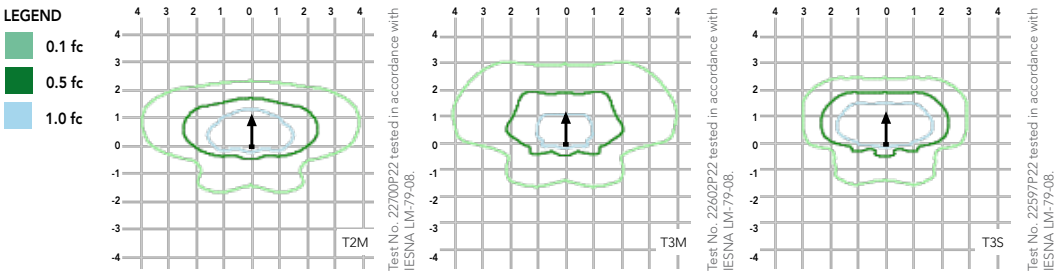
⚠ Alternate

*Futureproof means: Ability to change controls in the future.

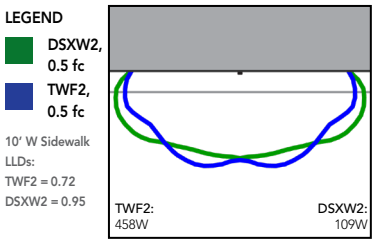
Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's D-Series Wall Size 2 homepage.

Isofootcandle plots for the DSXW2 LED 30C 1000 40K. Distances are in units of mounting height (25').



Distribution overlay comparison to 400W metal halide.



DSXW2 LED 30C 40K 1000 T2M, TWF2 400M Pulse, 25' Mounting Ht

FEATURES & SPECIFICATIONS

INTENDED USE
The energy savings, long life and easy-to-install design of the D-Series Wall Size 2 make it the smart choice for building-mounted doorway and pathway illumination for nearly any facility.

CONSTRUCTION
Two-piece die-cast aluminum housing has integral heat sink fins to optimize thermal management through conductive and convective cooling. Modular design allows for ease of maintenance. The LED driver is mounted to the door to thermally isolate it from the light engines for low operating temperature and long life. Housing is completely sealed against moisture and environmental contaminants (IP65).

FINISH
Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling. Available in textured and non-textured finishes.

OPTICS
Precision-molded proprietary acrylic lenses provide multiple photometric distributions tailored specifically to building mounted applications. Light engines are available in 3000 K (70 min. CRI), 4000 K (70 min. CRI) or 5000 K (70 min. CRI) configurations.

ELECTRICAL
Light engine(s) consist of 10 high-efficacy LEDs mounted to a metal-core circuit board to maximize heat dissipation and promote long life (L87/100,000 hrs at 25°C). Class 1 electronic drivers have a power factor >90%, THD <20%, and a minimum 2.5KV surge rating. When ordering the SPD option, a separate surge protection device is installed within the luminaire which meets a minimum Category C Low (per ANSI/IEEE C62.41.2).

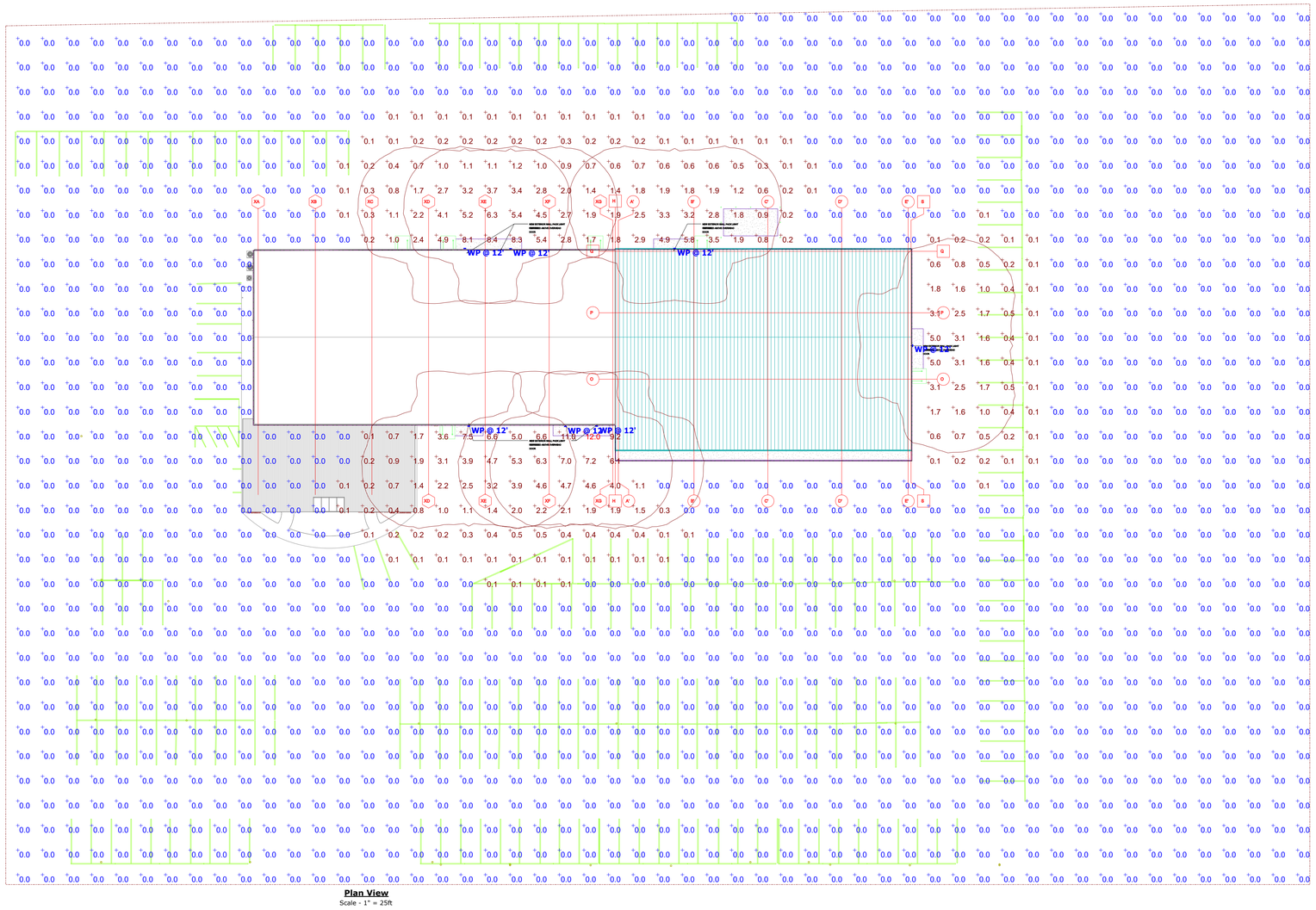
INSTALLATION
Included universal mounting bracket attaches securely to any 4" round or square outlet box for quick and easy installation. Luminaire has a slotted gasket wireway and attaches to the mounting bracket via corrosion-resistant screws.

LISTINGS
CSA certified to U.S. and Canadian standards. Rated for -40°C minimum ambient.

BUY AMERICAN ACT
This product is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT regulations. Please refer to www.acuitybrands.com/resources/buy-american for additional information.

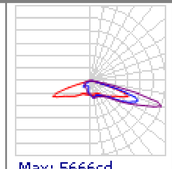
WARRANTY
Five-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at www.acuitybrands.com/support/warranty/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.



Plan View
Scale - 1" = 25ft

Schedule

Symbol	Label	Image	QTY	Manufacturer	Catalog	Description	Number Lamps	Lamp Output	LLF	Input Power	Polar Plot
	WP		7	Lithonia Lighting	DSXW2 LED 30C 700 40K T4M MVOLT	DSXW2 LED WITH 3 LIGHT ENGINES, 30 LED's, 700mA DRIVER, 4000K LED, TYPE 4 MEDIUM OPTIC	1	8089	0.9	71	 Max: 5666cd

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Calc Zone #1	+	0.2 fc	12.0 fc	0.0 fc	N/A	N/A

Designer

Date
02/21/2024
Scale
Not to Scale
Drawing No.

Summary

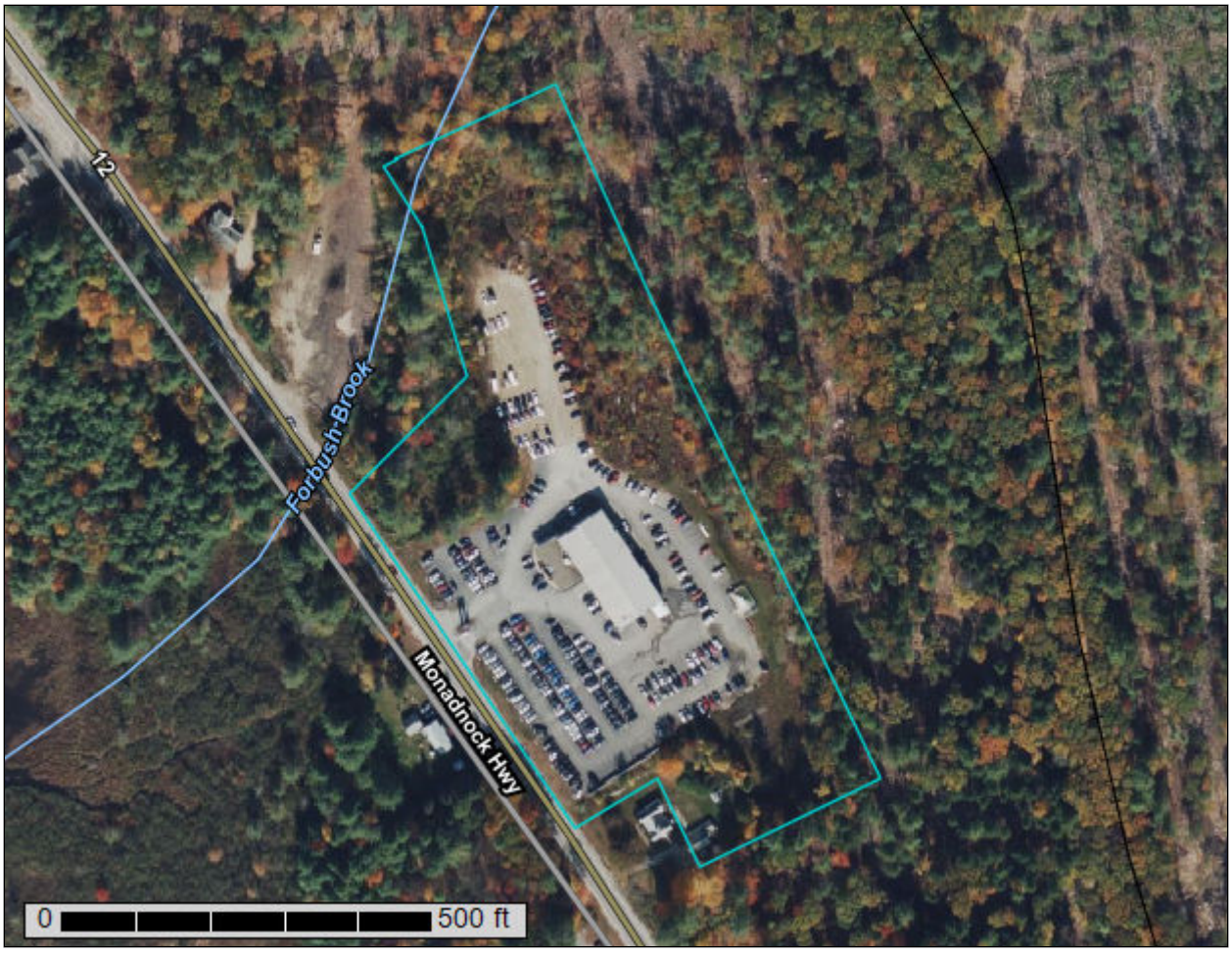
United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Cheshire County, New Hampshire



February 21, 2024

Custom Soil Resource Report
Soil Map

Map Scale: 1:1,880 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 25 50 100 150

Feet: 0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
5	Rippowam fine sandy loam	0.1	0.9%
26A	Windsor loamy sand, 0 to 3 percent slopes	0.0	0.1%
73D	Berkshire fine sandy loam, 15 to 25 percent slopes, very stony	1.5	16.9%
143C	Monadnock fine sandy loam, 8 to 15 percent slopes, very stony	4.4	51.4%
526B	Caesar loamy sand, 3 to 8 percent slopes	2.6	30.7%
Totals for Area of Interest		**8.6**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it

was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Cheshire County, New Hampshire

5—Rippowam fine sandy loam

Map Unit Setting

National map unit symbol: 9d0w
Elevation: 200 to 1,380 feet
Mean annual precipitation: 44 to 48 inches
Mean annual air temperature: 45 to 46 degrees F
Frost-free period: 140 to 150 days
Farmland classification: Farmland of local importance

Map Unit Composition

Rippowam and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Rippowam

Setting

Landform: Flood plains
Parent material: Sandy and/or coarse-loamy alluvium derived from granite, gneiss or schist

Typical profile

H1 - 0 to 9 inches: fine sandy loam
H2 - 9 to 30 inches: fine sandy loam
H3 - 30 to 60 inches: stratified loamy fine sand to very gravelly coarse sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 6.00 in/hr)
Depth to water table: About 0 to 18 inches
Frequency of flooding: Frequent
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 6.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: A/D
Ecological site: F144BY110ME - Broad Floodplain Riparian Complex, F144BY120ME - Small Floodplain Riparian Complex (reserved)
Hydric soil rating: Yes

Minor Components

Pootatuck

Percent of map unit: 4 percent
Hydric soil rating: No

Occum

Percent of map unit: 3 percent
Hydric soil rating: No

Saco

Percent of map unit: 3 percent
Landform: Flood plains
Hydric soil rating: Yes

26A—Windsor loamy sand, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 2svkg
Elevation: 0 to 990 feet
Mean annual precipitation: 36 to 71 inches
Mean annual air temperature: 39 to 55 degrees F
Frost-free period: 140 to 240 days
Farmland classification: Farmland of local importance

Map Unit Composition

Windsor, loamy sand, and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Windsor, Loamy Sand

Setting

Landform: Dunes, deltas, outwash terraces, outwash plains
Landform position (three-dimensional): Tread, riser
Down-slope shape: Convex, linear
Across-slope shape: Convex, linear
Parent material: Loose sandy glaciofluvial deposits derived from granite and/or loose sandy glaciofluvial deposits derived from schist and/or loose sandy glaciofluvial deposits derived from gneiss

Typical profile

O - 0 to 1 inches: moderately decomposed plant material
A - 1 to 3 inches: loamy sand
Bw - 3 to 25 inches: loamy sand
C - 25 to 65 inches: sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to very high (1.42 to 99.90 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None

Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 3.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2s
Hydrologic Soil Group: A
Ecological site: F144AY022MA - Dry Outwash
Hydric soil rating: No

Minor Components

Deerfield, loamy sand

Percent of map unit: 10 percent
Landform: Outwash plains, terraces, deltas
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Tread, talf
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Hinckley, loamy sand

Percent of map unit: 5 percent
Landform: Outwash plains, eskers, kames, deltas
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Head slope, nose slope, crest, side slope, rise
Down-slope shape: Convex
Across-slope shape: Linear, convex
Hydric soil rating: No

73D—Berkshire fine sandy loam, 15 to 25 percent slopes, very stony

Map Unit Setting

National map unit symbol: 2wllx
Elevation: 460 to 1,840 feet
Mean annual precipitation: 31 to 95 inches
Mean annual air temperature: 27 to 55 degrees F
Frost-free period: 90 to 160 days
Farmland classification: Not prime farmland

Map Unit Composition

Berkshire, very stony, and similar soils: 88 percent
Minor components: 12 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Berkshire, Very Stony

Setting

Landform: Hills, mountains

Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Mountainflank, nose slope, side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy supraglacial meltout till derived from phyllite and/or loamy supraglacial meltout till derived from granite and gneiss and/or loamy supraglacial meltout till derived from mica schist

Typical profile

Oi - 0 to 2 inches: slightly decomposed plant material
A - 2 to 4 inches: fine sandy loam
E - 4 to 5 inches: fine sandy loam
Bs1 - 5 to 7 inches: fine sandy loam
Bs2 - 7 to 13 inches: fine sandy loam
Bs3 - 13 to 21 inches: fine sandy loam
BC1 - 21 to 28 inches: fine sandy loam
BC2 - 28 to 33 inches: fine sandy loam
C - 33 to 65 inches: fine sandy loam

Properties and qualities

Slope: 15 to 25 percent
Surface area covered with cobbles, stones or boulders: 1.1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.14 to 14.17 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 10.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: B
Ecological site: F144BY501ME - Loamy Slope (Northern Hardwoods)
Hydric soil rating: No

Minor Components

Peru, very stony

Percent of map unit: 5 percent
Landform: Mountains, hills
Landform position (two-dimensional): Backslope, footslope
Landform position (three-dimensional): Mountainflank, nose slope, side slope
Microfeatures of landform position: Open depressions, open depressions
Down-slope shape: Convex, concave
Across-slope shape: Convex, concave
Hydric soil rating: No

Lyman, very stony

Percent of map unit: 4 percent
Landform: Hills, mountains
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Mountainflank, nose slope, side slope
Microfeatures of landform position: Rises, rises

Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Lyme, very stony

Percent of map unit: 2 percent
Landform: Hills, mountains
Landform position (two-dimensional): Footslope, toeslope
Landform position (three-dimensional): Mountainflank, nose slope, side slope
Microfeatures of landform position: Closed depressions, open depressions, closed depressions, open depressions
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

Marlow, very stony

Percent of map unit: 1 percent
Landform: Mountains, hills
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Mountainflank, nose slope, side slope
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

143C—Monadnock fine sandy loam, 8 to 15 percent slopes, very stony

Map Unit Setting

National map unit symbol: 2wlm7
Elevation: 360 to 1,670 feet
Mean annual precipitation: 31 to 95 inches
Mean annual air temperature: 27 to 55 degrees F
Frost-free period: 90 to 150 days
Farmland classification: Farmland of local importance

Map Unit Composition

Monadnock, very stony, and similar soils: 79 percent
Minor components: 21 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Monadnock, Very Stony

Setting

Landform: Hills, mountains
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Mountainbase, mountainflank, interfluve, nose slope, side slope
Down-slope shape: Convex
Across-slope shape: Convex

Parent material: Loamy supraglacial meltout till derived from phyllite and/or granite and gneiss and/or mica schist over sandy and gravelly supraglacial meltout till derived from phyllite and/or granite and gneiss and/or mica schist

Typical profile

Oe - 0 to 3 inches: moderately decomposed plant material
E - 3 to 8 inches: fine sandy loam
Bs1 - 8 to 10 inches: fine sandy loam
Bs2 - 10 to 12 inches: fine sandy loam
Bs3 - 12 to 22 inches: gravelly fine sandy loam
BC - 22 to 25 inches: gravelly fine sandy loam
2C1 - 25 to 45 inches: gravelly loamy sand
2C2 - 45 to 65 inches: gravelly loamy sand

Properties and qualities

Slope: 8 to 15 percent
Surface area covered with cobbles, stones or boulders: 1.1 percent
Depth to restrictive feature: 18 to 36 inches to strongly contrasting textural stratification
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.14 to 14.03 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 4.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: B
Ecological site: F144BY505ME - Loamy over Sandy
Hydric soil rating: No

Minor Components

Becket, very stony

Percent of map unit: 11 percent
Landform: Hills, mountains
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Mountainbase, mountainflank, interfluve, nose slope, side slope
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Skerry, very stony

Percent of map unit: 5 percent
Landform: Mountains, hills
Landform position (two-dimensional): Backslope, footslope
Landform position (three-dimensional): Mountainbase, mountainflank, interfluve, nose slope, side slope
Microfeatures of landform position: Closed depressions, closed depressions, open depressions, open depressions
Down-slope shape: Convex, concave
Across-slope shape: Linear, concave

Hydric soil rating: No

Tunbridge, very stony

Percent of map unit: 4 percent
Landform: Hills, mountains
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Mountainbase, mountainflank, interfluve, nose slope, side slope
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Lyme, very stony

Percent of map unit: 1 percent
Landform: Mountains, hills
Landform position (two-dimensional): Footslope, toeslope
Landform position (three-dimensional): Mountainbase, mountainflank, interfluve, nose slope, side slope
Microfeatures of landform position: Closed depressions, open depressions, closed depressions, open depressions
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

526B—Caesar loamy sand, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 9d13
Elevation: 150 to 1,200 feet
Mean annual precipitation: 30 to 50 inches
Mean annual air temperature: 37 to 46 degrees F
Frost-free period: 90 to 160 days
Farmland classification: Farmland of local importance

Map Unit Composition

Caesar and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Caesar

Setting

Parent material: Outwash

Typical profile

H1 - 0 to 5 inches: loamy sand
H2 - 5 to 18 inches: loamy sand
H3 - 18 to 60 inches: coarse sand

Properties and qualities

Slope: 3 to 8 percent

Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Very high (20.00 to 99.90 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 2.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4s
Hydrologic Soil Group: A
Ecological site: F144BY601ME - Dry Sand
Hydric soil rating: No

Minor Components

Windsor

Percent of map unit: 5 percent
Hydric soil rating: No

Croghan

Percent of map unit: 5 percent
Hydric soil rating: No