

Town of Arundel, Maine

Site Plan Review Application

APPLICANT INFORMATION

1. **Project Name:** JJWZ LLC
2. **Owner Name:** JJWZ LLC
Mail Address: 128 Log Cabin Road
Town, State, ZIP Code Arundel, Maine, 04046
Telephone #: (207) 468-9866
Email: bob@robertzukebuilders.com
3. **Applicant Name** (if different): _____
Mail Address: _____
Town, State, ZIP Code _____
Telephone #: _____
Email: _____
4. **Authorized Agent** (person(s) who will be responsible for all communication with the Planning Board):
Name: Paul P. Gadbois
Mail Address: P.O. Box 327
Town, State, ZIP Code Saco, Maine, 04072
Telephone #: (207) 283-3980
Email: pgadbois53@gmail.com
5. **Design Consultants** (Architect, Surveyor, Engineer, Planner)
Name: Same as Agent
Mail Address: _____
Town, State, ZIP Code _____
Telephone #: _____
Email: _____

GENERAL INFORMATION

6. **Project Location:** 30 Log Cabin Road
Arundel Tax Map 39 Lot 40A
7. **Land Use District(s)** (TC) Townhouse Corner District
(consult Land Use Map and Shoreland Zoning Map)
8. Is the application for the establishment of a new business? Yes No If yes, complete the attached business registration form.

SITE INFORMATION

9. Please describe the existing use of the property to be developed and neighboring properties.
The property currently contains a duplex.

Please describe the proposed use of the property.

The owner is in contractor trade business and is proposing to bring fill onto the property in preparation for future construction of a commercial building to store building materials and construction equipment.

10. Total Acreage of Site: 1.81 Acres Proposed Development Area: 20,067 SF
Proposed Road/driveway Length: N/A Area of parking lot N/A
Total Impervious Area: 16,875 SF

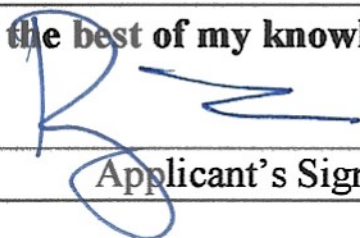
11. Proposed Infrastructure Improvements (List Facility Type & Public/Private Ownership)
Sewer: N/A Water: N/A
Road: N/A Utilities: N/A

12. Application Fee: \$500 Plenary Site Plan Application
 \$250 for revisions; plus applicable Review Fee: \$250 Administrative Site Plan Application
Application fee is doubled if work has started or business has been established prior to application

13. Waiver Requests? (Submit in writing) Yes No

14. Please complete the attached Conditional Use Checklist to assure your application and site plan are complete.

To the best of my knowledge, all of the above stated information is true and correct.


Applicant's Signature

2/7/2023
Date

Town of Arundel Site Plan Review Application Checklist

Project Name JJWZ LLC 30 Log Cabin Road

This checklist has been prepared to assist applicants develop their applications. It should be used as a guide. The checklist does not substitute for following the requirements of Section 10.5.2 of the Arundel Land Use Ordinance. The Town Planner will also be using the checklist to make sure your application is complete. Indicate in the first and third columns if the information has been submitted or if you request it to be waived. If you feel the information is not applicable to your project please indicate so in the second column.

| SITE PLAN REQUIREMENTS | Submitted by Applicant | Does Not Apply | Applicant Requests to be Waived | Received by Town Planner | Comments |
|---|------------------------|----------------|---------------------------------|--------------------------|----------|
| 1. Property Boundary Survey signed & sealed by a Maine Licensed Land Surveyor, showing bearings and distances of the subject property boundary(s), and containing North arrow, graphic scale, acreage, property corners, date of survey, and location of adjacent lots and owner's names. | Yes | | | | |
| 2. Proposed Site Plan , drawn at a scale not to exceed one inch equals forty feet (1" = 40') or at a scale otherwise required by the Town Planner and showing both existing conditions and proposed improvements on the site; sealed by a Professional Engineer, Landscape Architect, or a Surveyor licensed in the State of Maine, and containing the following information: | Yes | | | | |
| • Existing & proposed lot setback lines. | Yes | | | | |
| • Existing & proposed rights of way, easements & other legal restrictions | N/A | | | | |
| • Topographic survey showing existing and proposed site and building elevations at a contour interval of no more than two (2) feet, location and elevation of all existing and proposed structures, site features and site improvements. | Yes | | | | |
| • Information Block containing location, address, Map-Lot number(s) of the subject property, as recorded in the Town Assessor's Office, name and address of the applicant(s), and owner(s) if different; | Yes | | | | |
| • Approval Block providing space for the signatures of Planning Board members or the Staff Review Committee | Yes | | | | |
| • Location of all on-site streams, watercourses, wetlands, waterbodies, drainage facilities and structures, 100-year floodplains, roads, driveways, parking lots, | Yes | | | | |
| • Delineation of all existing and proposed public and private easements on or directly adjacent to the property; | N/A | | | | |
| • Location, dimensions, and layout of all existing and proposed built elements, including buildings and structures, parking areas, driveways, curbing, Town/State roads, sidewalks, fences, walls, steps, piers and docks, patios, swimming pools, and signage | Yes | | | | |
| • Location of existing site features located on the property, including but not limited to existing streams, wetlands, drainage swales, tree lines, identification and location of specimen trees greater than eight inches (8") caliper, location of existing rock outcrops, and boundary of 100-year Flood Zone as defined by the FEMA Flood Insurance Rate Map for the Town of Arundel | Yes | | | | |
| | Submitted | Does | Applicant | Received | |

| SITE PLAN REQUIREMENTS | by Applicant | Not Apply | Requests to be Waived | by Town Planner | Comments |
|---|--------------|-----------|-----------------------|-----------------|---|
| <ul style="list-style-type: none"> Location of existing and proposed utilities including overhead telephone poles and/or underground cables, public water lines, gate valves, fire hydrants, dumpsters or waste receptacles, private septic systems and water supply wells. | Yes | | | | |
| <ul style="list-style-type: none"> Location, layout, and dimensions of all existing and proposed drainage facilities, accompanied by detailed drainage calculations signed and sealed by an Professional Engineer licensed in the State of Maine; | Yes | | | | The site drains to a large wetland located on the existing parcel and other land of applicant |
| <ul style="list-style-type: none"> Identification and location of all on-site soils derived from a medium intensity soil survey. The Planning Board or Staff Review Committee may at their discretion, require a high-intensity soil survey sealed by a Maine Licensed Soil Scientist. | Yes | | | | |
| <ul style="list-style-type: none"> Site Data Summary detailing the total area of all existing and proposed site improvements, the amount of impervious surface, lot area, lot coverage, street frontage, building area, wetlands area, and stream areas, and compliance with the space and bulk requirements of the governing zoning district. | Yes | | | | |
| <ul style="list-style-type: none"> The existing zone in which the property is located. In the event the property is divided by a zone line, the line shall be delineated and labeled on the Site Plan; | Yes | | | | |
| <ul style="list-style-type: none"> Sight distances delineated for all driveway and street openings and all easements required to maintain such sight distances in perpetuity shall also be delineated on the plan; | Yes | | | | |
| <ul style="list-style-type: none"> Location, type, size of incineration devices noise sources such as machinery. | N/A | | | | |
| <ul style="list-style-type: none"> Location and inventory of outdoor materials storage | N/A | | | | |
| <ul style="list-style-type: none"> Existing and proposed fire protection and fire suppression resources including location, size, flow rates and, capacity construction details and specifications, of cisterns, dry hydrants, wet hydrants, fire ponds, booster pumps, building fire department connections, external sprinkler system cisterns | N/A | | | | No building is proposed at this time. The applicant will need to apply for an amendment to the site plan. |
| <p>3. Detail Sheet showing construction details of proposed streets, drives, roads, sidewalks, retaining walls, lighting fixtures, fences, and all similar proposed site improvements.</p> | Yes | | | | |
| <p>4. Outdoor Lighting Plan <i>consisting of:</i></p> | N/A | | | | |
| <ul style="list-style-type: none"> The location of all existing and proposed exterior lighting fixtures. | | | | | |
| <ul style="list-style-type: none"> Specifications for all proposed lighting fixtures | | | | | |
| <ul style="list-style-type: none"> Proposed mounting height of all exterior lighting fixtures | | | | | |
| <ul style="list-style-type: none"> Analyses and illuminance level diagrams. | | | | | |
| <ul style="list-style-type: none"> Drawings of all relevant building elevations showing fixtures, portions of walls to be illuminated, illuminance levels, and the aiming points for remote light fixtures. | | | | | |

| SITE PLAN REQUIREMENTS | Submitted by Applicant | Does Not Apply | Applicant Requests to be Waived | Received by Town Planner | Comments |
|---|------------------------|----------------|---------------------------------|--------------------------|----------------------|
| 5. Landscape Plan showing location, layout, and quantity of all ornamental plant material and ground cover to be installed on the site. Plan should include s of all proposed plant material and ground cover and including: | Yes | | | | |
| • Planting Schedule indicating plant species, variety, common name quantity, size and installation specifications; | | | | | None proposed |
| • Planting details for shrubs and trees | | | | | None Proposed |
| 6. Building Plans of all proposed structure(s) including interior layout, side, and front elevations drawn to a scale of not less than 1/4 inch to 1 foot. | N/A | | | | Permit for fill only |
| 7. Schematic elevation of proposed signs , drawn to a scale of not less than 3/4 inches to 1 foot, and illustrating sign layout, lettering, graphics and logos, materials, color, and proposed illumination. | N/A | | | | None proposed |
| 8. Detailed Cost Estimates of all proposed site improvements including quantity and unit costs of materials and 10% contingencies. | Yes | | | | |

| WRITTEN SUBMISSION REQUIREMENTS | Submitted by Applicant | Does Not Apply | Applicant Requests to be Waived | Received by Town Planner | Comments |
|---|------------------------|----------------|---------------------------------|--------------------------|---|
| 1. Complete Site Plan Review Application Form (10 copies) | Yes | | | | |
| 2. Plenary or Administrative Site Plan application fee and Peer Review fee | Yes | | | | |
| 3. Name, mailing addresses, and Map/Lot number of all abutters within 200 feet of the subject property printed on Avery 5160 labels | Yes | | | | |
| 4. Evidence of applicant's right, title or interest (deed, lease agreement, purchase & sale, or letter of authorization) in the property and any deed restrictions or easements on the property | Yes | | | | |
| 5. On-site soil investigation report by a Licensed Site Evaluator. | N/A | | | | No additional septic. |
| 6. Copies of final Association Covenants and Condominium documents, rights-of-ways, utility, construction, and sight distance easements, Road Maintenance Agreements and other pertinent legal documents. | N/A | | | | |
| 7. Stormwater Drainage Calculations, prepared and sealed by a Maine licensed civil engineer. | | | Yes | | Drains to a large wetland and onto other land of applicant. |
| 8. Digital copy of the entire application package in an Adobe PDF format, including maps and drawings | Yes | | | | |
| 9. Other Studies: | | | | | |
| • Traffic Impact study, prepared and sealed by a Maine licensed Traffic Engineer. | N/A | | | | |
| • Groundwater Study: Analyzing the individual and cumulative impacts of the proposed project upon existing groundwater quality. | N/A | | | | |

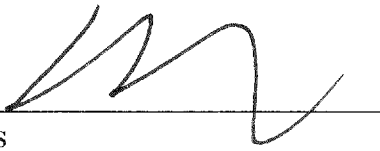
| WRITTEN SUBMISSION REQUIREMENTS | Submitted by Applicant | Does Not Apply | Applicant Requests to be Waived | Received by Town Planner | Comments |
|--|------------------------|----------------|---------------------------------|--------------------------|--|
| <ul style="list-style-type: none"> Market Study: Prepared by a qualified market research firm, and indicating the potential feasibility and projected success of a proposed use. | N/A | | | | |
| <ul style="list-style-type: none"> Fiscal Impact Assessment: Analyzing the projected fiscal impacts to the municipal service delivery system | N/A | | | | |
| 10. Written copies of all required state and federal approvals. Relevant state and federal laws include, but are not limited to Stormwater, Site Location, Natural Resources Protection Act, and Sec. 404 Clean Water Act (federal), and MDOT permits for road and driveway openings on Route 1 and Route 111. | Yes | | | | A wetland fill permit application has been filed with the ACE. |
| 11. Letter of Compliance from the Arundel Fire Chief | N/A | | | | No building is proposed. |
| 12. Letter of Compliance from the Arundel Public Works Director (only if accessed from Town road) | Yes | | | | Spoke with Director and he will respond |
| 13. Other information required by the Planning Board or Staff Review Committee | | | | | |

WARRANTY DEED

KNOW ALL MEN BY THESE PRESENTS that **JOYCE E. CARMICHAEL**, whose mailing address is 30 Log Cabin Road, Arundel, ME 04046, for consideration paid, hereby grants to **JJWZ, LLC**, a Maine Limited Liability Company, whose mailing address is 128 Log Cabin Road, Arundel, ME 04046, with WARRANTY COVENANTS, the premises situated in the Town of Arundel, County of York and State of Maine, bounded and described as follows:

*SEE EXHIBIT "A" ATTACHED HERETO
AND INCORPORATED HEREIN BY REFERENCE.*

IN WITNESS WHEREOF, the said **JOYCE E. CARMICHAEL** has set her hand and seal this 1st day of September, 2022.

Witness 


JOYCE E. CARMICHAEL

STATE OF MAINE
YORK, ss.

September 1, 2022

Then personally appeared the above-named **JOYCE E. CARMICHAEL** and acknowledged the foregoing instrument to be her free act and deed.

Before me, 
Notary Public/Attorney-at-Law

STEPHEN Y. HODSDON
Maine Notary Public
Commission Expires
JANUARY 29, 2027

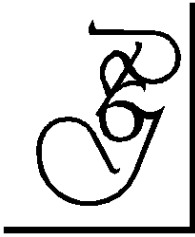
Maine R.E. Transfer Tax Paid

EXHIBIT A

A certain lot or parcel of land, together with the buildings thereon, situated in the Town of Arundel, County of York, State of Maine, bounded and described as follows:

Beginning at an iron pipe driven into the ground on the westerly side of Log Cabin Road at the Southeasterly corner of land formerly of Robert Brown, now or formerly of Sabaka; thence, South 3° - 47' East by said Road 247.50 feet to an iron pipe driven into the ground and remaining land of now or formerly of Wiltshire Management Corporation; thence North 81° - 58' West by said remaining land of Wiltshire Management Corporation 363.56 feet to other land now or formerly of said Wiltshire Management Corporation; thence North 1° - 40' East, by said land now or formerly of Wiltshire Management Corporation 206.05 feet to land now or formerly of said Robert Brown and partly by said land now or formerly of Sabaka 337.81 feet to the point of beginning. Containing 78,842 square feet or 1.81 acres. The within bearings refer to the 1972 magnetic meridian.

Being the same premises conveyed from Jeffrey V. Stevens to Joyce E. Carmichael by Warranty Deed dated April 26, 1996 and recorded in the York County Registry of Deeds in Book, 7805, Page 349.



PAUL P. GADBOIS PE, PLS

Civil Engineering, Surveying, Land Planning
Structural Engineering, DEP Permitting

P.O. Box 327
Saco, ME 04072
Phone & Fax (207) 283-3980
Email: pgadbois53@gmail.com

Town of Arundel
Lee Jay Feldman, Planner
257 Limerick Road
Arundel, Maine 04046

February 1, 2023

Re: JJWZ LLC, 30 Log Cabin Road, Tax Map 39, Lot 40A.

Dear Mr. Feldman,

The owner / applicant JJWZ LLC wishes to bring in fill onto the property in preparation for construction of a future building to be used for storage of construction materials and equipment.

The owner / applicant is aware that a new site plan application will be required once building plans have been developed for the site.

The property currently has an existing two family and is serviced by underground utilities, drilled well and septic.

The project proposes to fill 4,252 square feet of wetlands. The project requires an Army Corp Wetland Permit. The permit application was filed on January 30th, 2023.

Coppi Environmental, LLC performed the wetland delineation. (See attached report).

The project is not located within a FEMA flood zone. The soils on site are Naumburg sand ranging in slope from 0 – 3%.

The project requires site plan review since the site grading is in excess of 100 cubic yards of material which is not associated with an approved building construction project.

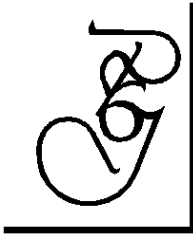
Cost Estimate per applicant:

- Install Erosion Control Devices= \$1,500.00
- 2,000 cubic yards at \$ 10.00 per cubic yard = \$ 20,000.00
- Erosion Control Mix on Slopes for Stabilization = \$ 3,000.00
- Labor and equipment = \$ 5,000.00
- Total estimate \$ 29,500.00

If you have any questions, or need any additional information, please let me know.

Very truly yours,

Paul P. Gadbois, P.E., P.L.S.



PAUL P. GADBOIS PE, PLS

Civil Engineering, Surveying, Land Planning
Structural Engineering, DEP Permitting

P.O. Box 327
Saco, ME 04072
Phone & Fax (207) 283-3980
Email: pgadbois@maine.rr.com

February 1, 2023

Town of Arundel
Lee Jay Feldman, Planner
257 Limerick Road
Arundel, Maine 04046

Re: JJWZ LLC 30 Log Cabin Road, Tax Map 39, Lot 40A.

Dear Mr. Feldman,

Enclosed please find the stormwater calculations for the above referenced project. The project will create 12,002 square feet of new impervious area. The project does not need to submit a Notice of Intent to comply with the Maine General Construction Permit since it will disturb less than 1 acres.

The site is located at the most upper end of the watershed and drains in a westerly direction to a large wetland area located partially on site and other lands owned by the applicant. Only a very small portion of the wetland was used to predict the impact to downstream properties.

We have analyzed the pre and post conditions using HydroCad Model by assuming that the flows draining to the 1.84-acre wetland located on land owned by the applicant wetland has no outlet.

The quantity peak flow summary is shown below for each development condition. We have shown results for the 2, 10, and 25-year events.

| FLOODING RESULTS | | | | | |
|------------------|-------------|-------|--------------|-------|-----------|
| | Pre Pond 2P | | Post Pond 6P | | ELEV DIFF |
| Storm | C.F.S. | ELEV | C.F.S. | ELEV | |
| 2-yr | 1.78 | 35.60 | 2.07 | 35.62 | .02 |
| 10-yr | 3.93 | 35.71 | 4.20 | 35.74 | .03 |
| 25-yr | 5.87 | 35.81 | 6.05 | 35.84 | .03 |

In conclusion, I certify that increasing the volume and rate will not aggravate conditions downstream or upstream for this project.

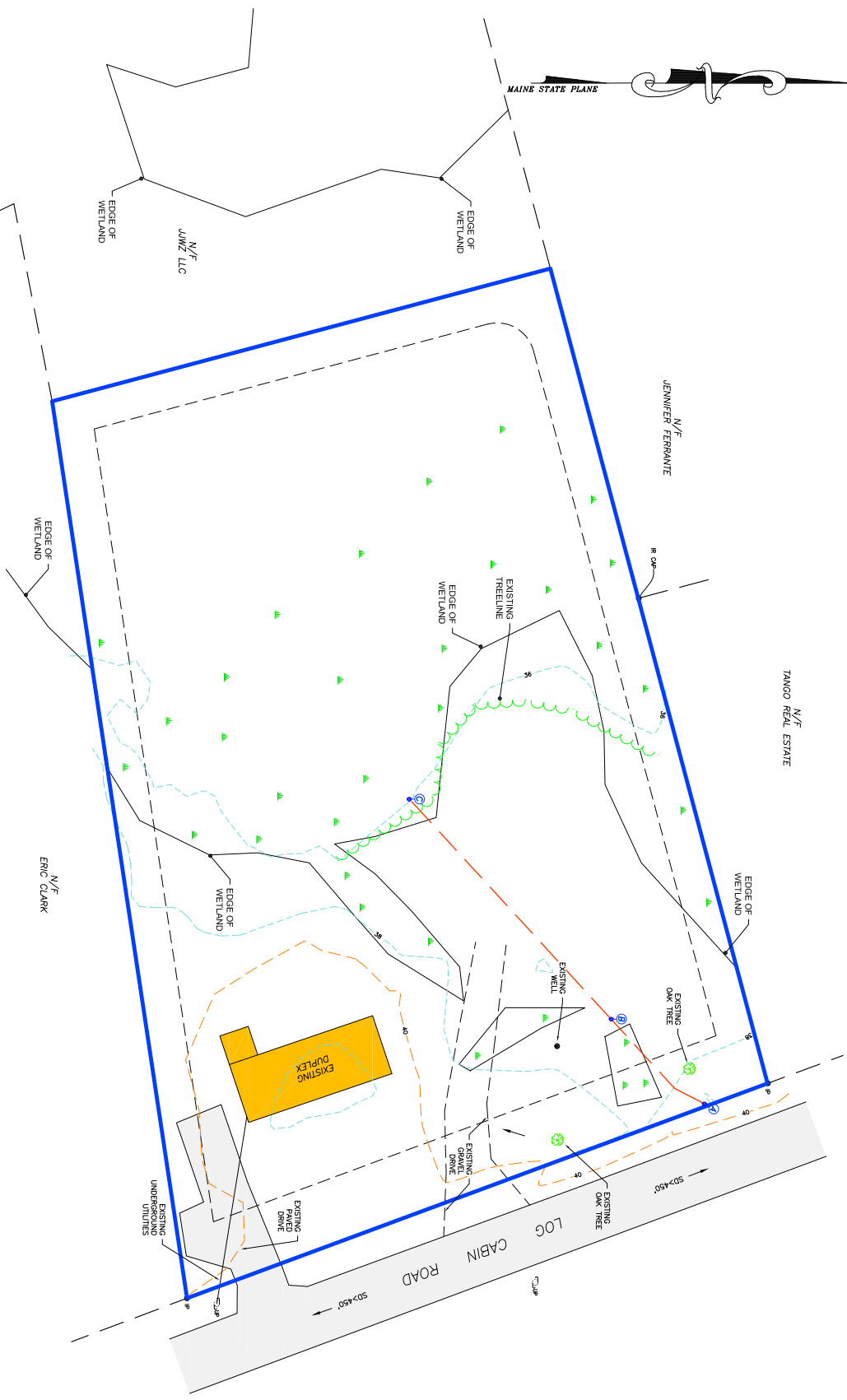
Very truly yours,

Paul P. Gadbois, P.E., P.L.S.



- STORMWATER LEGEND**
- HYDROLOGIC SUBAREA
 - HYDROLOGIC REACH
 - TO FLOW PATH
 - REACH
 - WATERSHED BOUNDARY

| | EXISTING | PROPOSED | TOTAL | ZM/P |
|----------------------|----------|-----------|-----------|--------|
| BUILDINGS/DECK/STEPS | 1,619 SF | 0 SF | 1,619 SF | |
| PAVEMENT / GRANUL | 3,254 SF | 12,002 SF | 15,256 SF | |
| TOTAL | 4,873 SF | 12,002 SF | 16,875 SF | 21.40% |



I HEREBY CERTIFY THAT THE INFORMATION SHOWN ON THIS PLAN IS CORRECT TO THE BEST OF MY KNOWLEDGE.

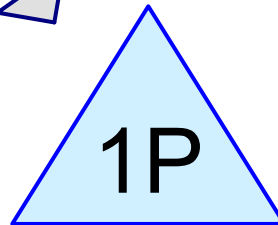
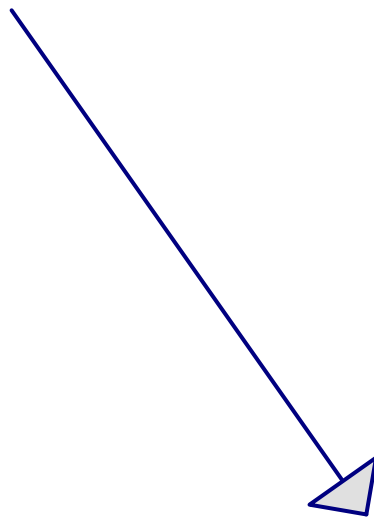
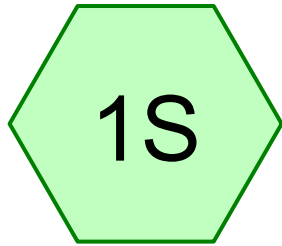


PAUL P. GADBOIS
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 LAND PLANNING
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 (207) 283-3980

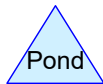
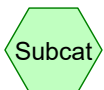
PRE DEVELOPMENT
 JJWZ LLC
 30 LOG CABIN ROAD
 ARUNDEL, MAINE

RECORD OWNER
 JJWZ, LLC
 128 LOG CABIN ROAD
 ARUNDEL, MAINE

| DRAWN: P.P.G. | CHECKED: P.P.G. | SCALE: 1" = 20' | FIELD BOOK: | DATE: 02-01-2023 | JOB NO. 1836 | SHEET 1 OF 2 |
|---------------|-----------------|-----------------|-------------|------------------|--------------|--------------|
| REVISIONS: | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |



No Culverts



Summary for Subcatchment 1S:

Runoff = 1.78 cfs @ 12.16 hrs, Volume= 0.144 af, Depth> 0.95"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2 YEAR Rainfall=3.30"

| Area (sf) | CN | Description |
|-----------|----|-------------------------------|
| 42,970 | 70 | Woods, Good, HSG C |
| * 3,254 | 98 | Existing Pavement and Gravel |
| * 1,619 | 98 | Existing Building |
| 31,000 | 74 | >75% Grass cover, Good, HSG C |
| 78,843 | 73 | Weighted Average |
| 73,970 | | 93.82% Pervious Area |
| 4,873 | | 6.18% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|----------|---------------|---------------|-------------------|----------------|--|
| 8.3 | 50 | 0.0210 | 0.10 | | Sheet Flow, A-B Grass: Dense n= 0.240 P2= 3.00" |
| 2.3 | 118 | 0.0150 | 0.86 | | Shallow Concentrated Flow, B-C Short Grass Pasture Kv= 7.0 fps |
| 10.6 | 168 | Total | | | |

Summary for Pond 1P: No Culverts

Inflow Area = 1.810 ac, 6.18% Impervious, Inflow Depth > 0.95" for 2 YEAR event
 Inflow = 1.78 cfs @ 12.16 hrs, Volume= 0.144 af
 Outflow = 0.00 cfs @ 1.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 1.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 35.60' @ 20.00 hrs Surf.Area= 55,771 sf Storage= 6,252 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
 Center-of-Mass det. time= (not calculated: no outflow)

| Volume | Invert | Avail.Storage | Storage Description |
|------------------|-------------------|------------------------|---|
| #1 | 35.50' | 32,500 cf | Custom Stage Data (Prismatic) Listed below |
| Elevation (feet) | Surf.Area (sq-ft) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
| 35.50 | 50,000 | 0 | 0 |
| 36.00 | 80,000 | 32,500 | 32,500 |

Summary for Subcatchment 1S:

Runoff = 3.93 cfs @ 12.16 hrs, Volume= 0.307 af, Depth> 2.03"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10 YEAR Rainfall=4.90"

| Area (sf) | CN | Description |
|-----------|----|-------------------------------|
| 42,970 | 70 | Woods, Good, HSG C |
| * 3,254 | 98 | Existing Pavement and Gravel |
| * 1,619 | 98 | Existing Building |
| 31,000 | 74 | >75% Grass cover, Good, HSG C |
| 78,843 | 73 | Weighted Average |
| 73,970 | | 93.82% Pervious Area |
| 4,873 | | 6.18% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|----------|---------------|---------------|-------------------|----------------|--|
| 8.3 | 50 | 0.0210 | 0.10 | | Sheet Flow, A-B Grass: Dense n= 0.240 P2= 3.00" |
| 2.3 | 118 | 0.0150 | 0.86 | | Shallow Concentrated Flow, B-C Short Grass Pasture Kv= 7.0 fps |
| 10.6 | 168 | Total | | | |

Summary for Pond 1P: No Culverts

Inflow Area = 1.810 ac, 6.18% Impervious, Inflow Depth > 2.03" for 10 YEAR event
Inflow = 3.93 cfs @ 12.16 hrs, Volume= 0.307 af
Outflow = 0.00 cfs @ 1.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 1.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 35.71' @ 20.00 hrs Surf.Area= 62,321 sf Storage= 13,347 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

| Volume | Invert | Avail.Storage | Storage Description |
|------------------|-------------------|------------------------|---|
| #1 | 35.50' | 32,500 cf | Custom Stage Data (Prismatic) Listed below |
| Elevation (feet) | Surf.Area (sq-ft) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
| 35.50 | 50,000 | 0 | 0 |
| 36.00 | 80,000 | 32,500 | 32,500 |

Summary for Subcatchment 1S:

Runoff = 5.87 cfs @ 12.15 hrs, Volume= 0.456 af, Depth> 3.02"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 YEAR Rainfall=6.20"

| Area (sf) | CN | Description |
|-----------|----|-------------------------------|
| 42,970 | 70 | Woods, Good, HSG C |
| * 3,254 | 98 | Existing Pavement and Gravel |
| * 1,619 | 98 | Existing Building |
| 31,000 | 74 | >75% Grass cover, Good, HSG C |
| 78,843 | 73 | Weighted Average |
| 73,970 | | 93.82% Pervious Area |
| 4,873 | | 6.18% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|----------|---------------|---------------|-------------------|----------------|--|
| 8.3 | 50 | 0.0210 | 0.10 | | Sheet Flow, A-B Grass: Dense n= 0.240 P2= 3.00" |
| 2.3 | 118 | 0.0150 | 0.86 | | Shallow Concentrated Flow, B-C Short Grass Pasture Kv= 7.0 fps |
| 10.6 | 168 | Total | | | |

Summary for Pond 1P: No Culverts

Inflow Area = 1.810 ac, 6.18% Impervious, Inflow Depth > 3.02" for 25 YEAR event

Inflow = 5.87 cfs @ 12.15 hrs, Volume= 0.456 af

Outflow = 0.00 cfs @ 1.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 1.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 35.81' @ 20.00 hrs Surf.Area= 68,330 sf Storage= 19,858 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)

Center-of-Mass det. time= (not calculated: no outflow)

| Volume | Invert | Avail.Storage | Storage Description |
|------------------|-------------------|------------------------|---|
| #1 | 35.50' | 32,500 cf | Custom Stage Data (Prismatic) Listed below |
| Elevation (feet) | Surf.Area (sq-ft) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
| 35.50 | 50,000 | 0 | 0 |
| 36.00 | 80,000 | 32,500 | 32,500 |

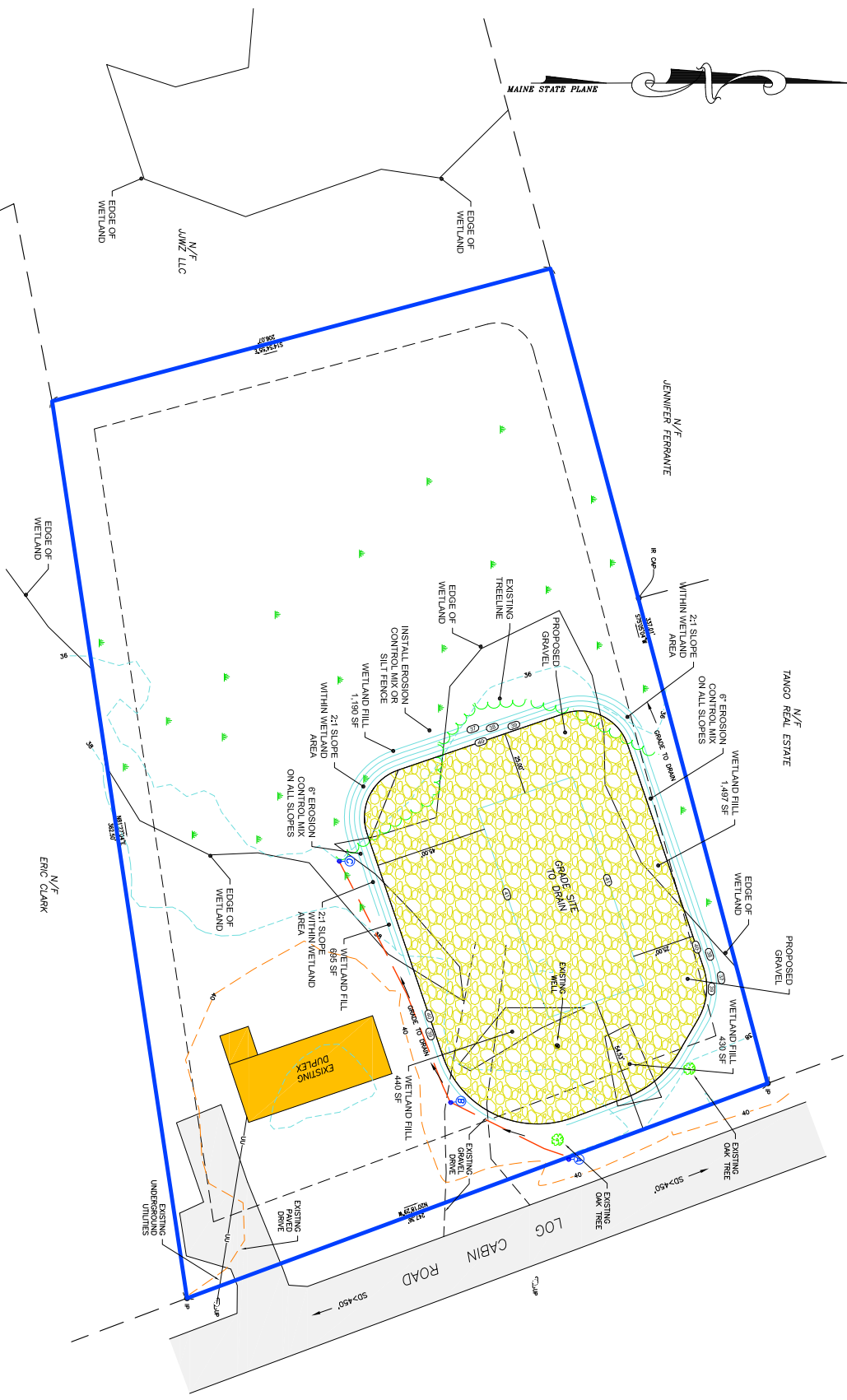
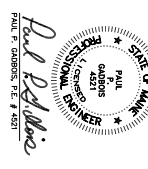


- STORMWATER LEGEND**
- HYDROCAD POND
 - HYDROCAD SUBAREA
 - HYDROCAD REACH
 - TC FLOW PATH
 - REACH
 - WATERSHED BOUNDARY



| | EXISTING | PROPOSED | TOTAL | ZIWP |
|----------------------|----------|-----------|-----------|--------|
| BUILDINGS/DECK/STEPS | 1,619 SF | -0- SF | 1,619 SF | |
| PAVED/GRVEL | 3,264 SF | 12,002 SF | 15,266 SF | |
| TOTAL | 4,873 SF | 12,002 SF | 16,875 SF | 21.40% |

I HEREBY CERTIFY THAT THE INFORMATION SHOWN ON THIS PLAN IS CORRECT TO THE BEST OF MY KNOWLEDGE.

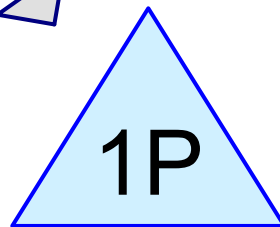
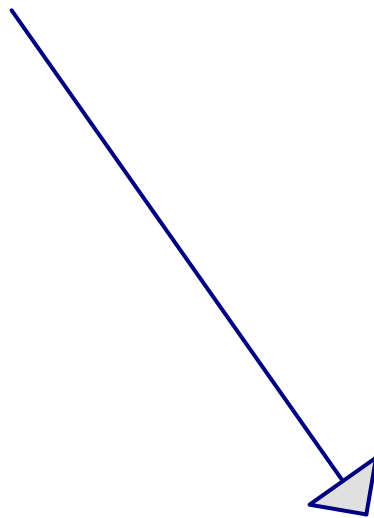
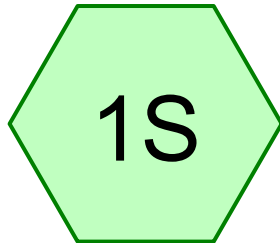


PAUL P. GADBOIS
ENGINEERING SURVEYING
LAND PLANNING
P.O. BOX 327, SACO, MAINE 04072
(207) 283-3980

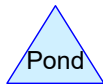
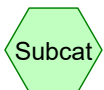
POST DEVELOPMENT
JWZ LLC
30 LOG CABIN ROAD
ARUNDEL, MAINE

RECORD OWNER
JWZ, LLC
128 LOG CABIN ROAD
ARUNDEL, MAINE

| DRAWN: | P.P.G. | REVISIONS: | |
|-------------|------------|------------|--|
| CHECKED: | P.P.G. | | |
| SCALE: | 1" = 20' | | |
| FIELD BOOK: | | | |
| DATE: | 02-01-2023 | | |
| JOB NO.: | 1636 | | |
| SHEET: | 2 OF 2 | | |



No Culverts



Summary for Subcatchment 1S:

Runoff = 2.07 cfs @ 12.20 hrs, Volume= 0.177 af, Depth> 1.18"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2 YEAR Rainfall=3.30"

| Area (sf) | CN | Description |
|-----------|----|-------------------------------|
| 42,970 | 70 | Woods, Good, HSG C |
| * 3,254 | 98 | Existing Pavement and Gravel |
| * 1,619 | 98 | Existing Building |
| 18,998 | 74 | >75% Grass cover, Good, HSG C |
| * 12,002 | 98 | New Gravel |
| 78,843 | 77 | Weighted Average |
| 61,968 | | 78.60% Pervious Area |
| 16,875 | | 21.40% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|----------|---------------|---------------|-------------------|----------------|--|
| 11.2 | 50 | 0.0100 | 0.07 | | Sheet Flow, A-B Grass: Dense n= 0.240 P2= 3.00" |
| 2.3 | 131 | 0.0190 | 0.96 | | Shallow Concentrated Flow, B-C Short Grass Pasture Kv= 7.0 fps |
| 13.5 | 181 | Total | | | |

Summary for Pond 1P: No Culverts

Inflow Area = 1.810 ac, 21.40% Impervious, Inflow Depth > 1.18" for 2 YEAR event

Inflow = 2.07 cfs @ 12.20 hrs, Volume= 0.177 af

Outflow = 0.00 cfs @ 1.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 1.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 35.62' @ 20.00 hrs Surf.Area= 57,129 sf Storage= 7,723 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)

Center-of-Mass det. time= (not calculated: no outflow)

| Volume | Invert | Avail.Storage | Storage Description |
|------------------|-------------------|------------------------|---|
| #1 | 35.50' | 32,500 cf | Custom Stage Data (Prismatic) Listed below |
| Elevation (feet) | Surf.Area (sq-ft) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
| 35.50 | 50,000 | 0 | 0 |
| 36.00 | 80,000 | 32,500 | 32,500 |

Summary for Subcatchment 1S:

Runoff = 4.20 cfs @ 12.19 hrs, Volume= 0.355 af, Depth> 2.36"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10 YEAR Rainfall=4.90"

| Area (sf) | CN | Description |
|-----------|----|-------------------------------|
| 42,970 | 70 | Woods, Good, HSG C |
| * 3,254 | 98 | Existing Pavement and Gravel |
| * 1,619 | 98 | Existing Building |
| 18,998 | 74 | >75% Grass cover, Good, HSG C |
| * 12,002 | 98 | New Gravel |
| 78,843 | 77 | Weighted Average |
| 61,968 | | 78.60% Pervious Area |
| 16,875 | | 21.40% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|----------|---------------|---------------|-------------------|----------------|--|
| 11.2 | 50 | 0.0100 | 0.07 | | Sheet Flow, A-B Grass: Dense n= 0.240 P2= 3.00" |
| 2.3 | 131 | 0.0190 | 0.96 | | Shallow Concentrated Flow, B-C Short Grass Pasture Kv= 7.0 fps |
| 13.5 | 181 | Total | | | |

Summary for Pond 1P: No Culverts

Inflow Area = 1.810 ac, 21.40% Impervious, Inflow Depth > 2.36" for 10 YEAR event
 Inflow = 4.20 cfs @ 12.19 hrs, Volume= 0.355 af
 Outflow = 0.00 cfs @ 1.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 1.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 35.74' @ 20.00 hrs Surf.Area= 64,278 sf Storage= 15,468 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
 Center-of-Mass det. time= (not calculated: no outflow)

| Volume | Invert | Avail.Storage | Storage Description |
|------------------|-------------------|------------------------|---|
| #1 | 35.50' | 32,500 cf | Custom Stage Data (Prismatic) Listed below |
| Elevation (feet) | Surf.Area (sq-ft) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
| 35.50 | 50,000 | 0 | 0 |
| 36.00 | 80,000 | 32,500 | 32,500 |

Summary for Subcatchment 1S:

Runoff = 6.05 cfs @ 12.19 hrs, Volume= 0.514 af, Depth> 3.41"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 YEAR Rainfall=6.20"

| Area (sf) | CN | Description |
|-----------|----|-------------------------------|
| 42,970 | 70 | Woods, Good, HSG C |
| * 3,254 | 98 | Existing Pavement and Gravel |
| * 1,619 | 98 | Existing Building |
| 18,998 | 74 | >75% Grass cover, Good, HSG C |
| * 12,002 | 98 | New Gravel |
| 78,843 | 77 | Weighted Average |
| 61,968 | | 78.60% Pervious Area |
| 16,875 | | 21.40% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|----------|---------------|---------------|-------------------|----------------|--|
| 11.2 | 50 | 0.0100 | 0.07 | | Sheet Flow, A-B Grass: Dense n= 0.240 P2= 3.00" |
| 2.3 | 131 | 0.0190 | 0.96 | | Shallow Concentrated Flow, B-C Short Grass Pasture Kv= 7.0 fps |
| 13.5 | 181 | Total | | | |

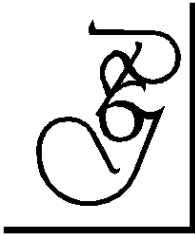
Summary for Pond 1P: No Culverts

Inflow Area = 1.810 ac, 21.40% Impervious, Inflow Depth > 3.41" for 25 YEAR event
 Inflow = 6.05 cfs @ 12.19 hrs, Volume= 0.514 af
 Outflow = 0.00 cfs @ 1.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 1.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 35.84' @ 20.00 hrs Surf.Area= 70,658 sf Storage= 22,379 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
 Center-of-Mass det. time= (not calculated: no outflow)

| Volume | Invert | Avail.Storage | Storage Description |
|------------------|-------------------|------------------------|---|
| #1 | 35.50' | 32,500 cf | Custom Stage Data (Prismatic) Listed below |
| Elevation (feet) | Surf.Area (sq-ft) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
| 35.50 | 50,000 | 0 | 0 |
| 36.00 | 80,000 | 32,500 | 32,500 |



PAUL P. GADBOIS PE, PLS

Civil Engineering, Surveying, Land Planning
Structural Engineering, DEP Permitting

P.O. Box 327
Saco, ME 04072
Phone & Fax (207) 283-3980
Email: pgadbois53@gmail.com

January 28, 2023

US Army Corps of Engineers
442 Civic Center Drive
Augusta, ME 04330

RE: JJWZ LLC
30 log Cabin Road
Arundel, Maine
Tax Map 39, Lot 40A

Dear Staff,

Our client owns 1.8 acres located off Log Cabin Road in Arundel. (See attached Delorme Map) The site currently has an existing duplex, and the owner wishes to construct a 3,520 square foot building and associated gravel access. The project proposes to fill 4,252 square feet of wetlands.

The owner has contracted with my company to provide a site plan for the project, I informed him that the Army Corps of Engineers requires a Self-Verification Notification Form to be submitted.

Coppi Environmental, LLC performed the wetland delineation, and a copy of his report is attached.

The total amount of wetland fill proposed for this development is 4,252 square feet. (See attached site plan)

AVOIDANCE & MINIMIZATION

The project proposes to minimize the wetland fill by using a 2:1 slope with 6" of erosion control mix within the wetland crossing.

If you have any questions, please do not hesitate to contact me.

Very truly yours,

Paul P. Gadbois, P.E., P.L.S.



Section VI: Self-Verification Notification Form
(for all tidal and non-tidal projects in Maine subject to Corps jurisdiction)

**US Army Corps
of Engineers**®
New England District

At least two weeks before work commences, complete all fields (write “none” if applicable) below or use the fillable form found at www.nae.usace.army.mil/Missions/Regulatory/State-General-Permits/Maine-General-Permit/ The two-week lead time is not required for emergency situations. **Send this form, an Official Species List, and project plans to the following email address: cenae-r-me@usace.army.mil**

Maine Project Office
U.S. Army Corps of Engineers
442 Civic Center Drive, Suite 350
Augusta, Maine 04330

State Permit #: _____
Date of State Permit: _____
State Project Manager: _____

Permittee: _____
Address, City, State, Zip: _____
Email, Phone: _____

Agent: _____
Address, City, State, Zip: _____
Email, Phone: _____

Contractor: _____
Address, City, State, Zip: _____
Email, Phone: _____

Project Name: _____
Address, City, State, Zip: _____
Lat °N, Long °W: _____ Tax Map/Lot: _____
Waterway Name: _____
Description of Work: _____

Proposed Starting Date: _____ Proposed Finish Date: _____

Area of wetland impact (SF): Permanent: _____ Temporary: _____
Area of waterway impact (SF): Permanent: _____ Temporary: _____

Work will be done under the following Section V General Permits (circle all that apply):
I. Inland Waters and wetlands: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
II. Navigable Waters: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23

Have MHPC and all five federally-recognized tribes in Maine been notified of the proposed work? _____ Yes _____ No

Your signature below, as permittee, indicates that you accept and agree to comply with the terms, eligibility criteria, and general conditions for Self-Verification under the Maine General Permit.

Permittee Signature: _____ Date: _____



Coppi Environmental, LLC

Wetland & Soil Services, Consulting & Permitting

PO BOX 226 Hollis Center, ME 04042
207.756.3245 cjc1829@gmail.com

January 25, 2023

Mr. Robert Zuke
Robert Zuke Builders
128 Log Cabin Road
Arundel, ME 04043

RE: Wetland Delineation, 30 Log Cabin Road, Arundel.

Dear Bob:

On July 20, 2022, I completed a wetland delineation at the above-mentioned property. The property contains forested wetland and a few individual, minor wetland areas by Log Cabin Road. The wetlands were flagged in blue and labeled alphanumerically and GPS located using a Trimble Geo 7x Hand Held unit. Attached with this report is a wetland delineation plan illustrating the location and extent of wetlands on this property. No vernal pools were observed near the project area.

Wetlands are a protected natural resource and as such, are regulated by the Maine DEP (Natural Resources Protection Act) and by the Army Corps of Engineers (Clean Water Act). Proposed impacts to the wetlands, such as filling, will require permits from those regulatory authorities.

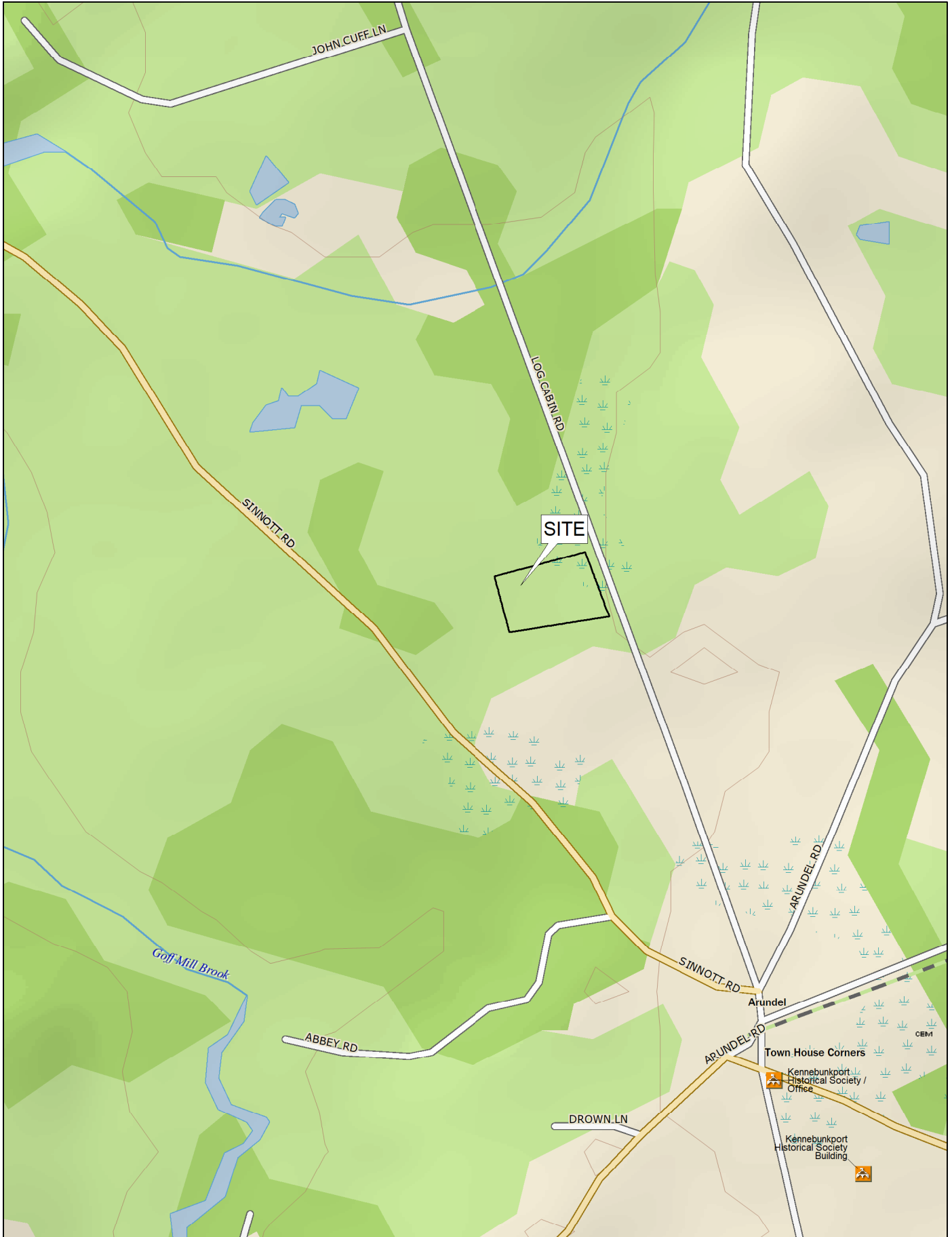
Based on my site observations and analysis of wetland maps (NWI-National Wetland Inventory) and Arundel's Shoreland Zoning map, the property wetlands are eligible for the normal Tier permit process by DEP. Only a Corps wetland permit would be necessary if the impact is less than 4,300 SF. If the impact exceeds this exempt amount by DEP, a Tier 1 permit would be necessary in addition to the Corps permit. The property does NOT contain shoreland zone protected wetlands according to their Zoning Map (2017).

The conceptual plan that illustrates a proposed 64 by 32 building and driveway results in approximately 2,160 SF of wetland impact, and therefore, will require a Army Corps SVP (Self-Verification) permit.

Please contact me by phone at 756-3245 or by email at cjc1829@gmail.com with any follow-up questions regarding a project at this location.

Sincerely,

Christopher J. Coppi LSS, LSE, CWS





United States Department of the Interior



FISH AND WILDLIFE SERVICE
Maine Ecological Services Field Office
P. O. Box A
East Orland, ME 04431
Phone: (207) 469-7300 Fax: (207) 902-1588

In Reply Refer To:
Project Code: 2023-0039147
Project Name: JJWZ 30 Log Cabin Road

January 29, 2023

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see <https://www.fws.gov/birds/policies-and-regulations.php>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see <https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Maine Ecological Services Field Office

P. O. Box A

East Orland, ME 04431

(207) 469-7300

Project Summary

Project Code: 2023-0039147

Project Name: JJWZ 30 Log Cabin Road

Project Type: Residential Construction

Project Description: Construct a 3,520 square foot building along with the access required to load and unload vehicles to several overhead doors.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@43.38572925,-70.48003905657839,14z>



Counties: York County, Maine

Endangered Species Act Species

There is a total of 2 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

| NAME | STATUS |
|--|------------|
| Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045 | Endangered |

Insects

| NAME | STATUS |
|--|-----------|
| Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743 | Candidate |

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

IPaC User Contact Information

Agency: Paul Gadbois Engineering

Name: Paul Gadbois

Address: P.O. Box 327

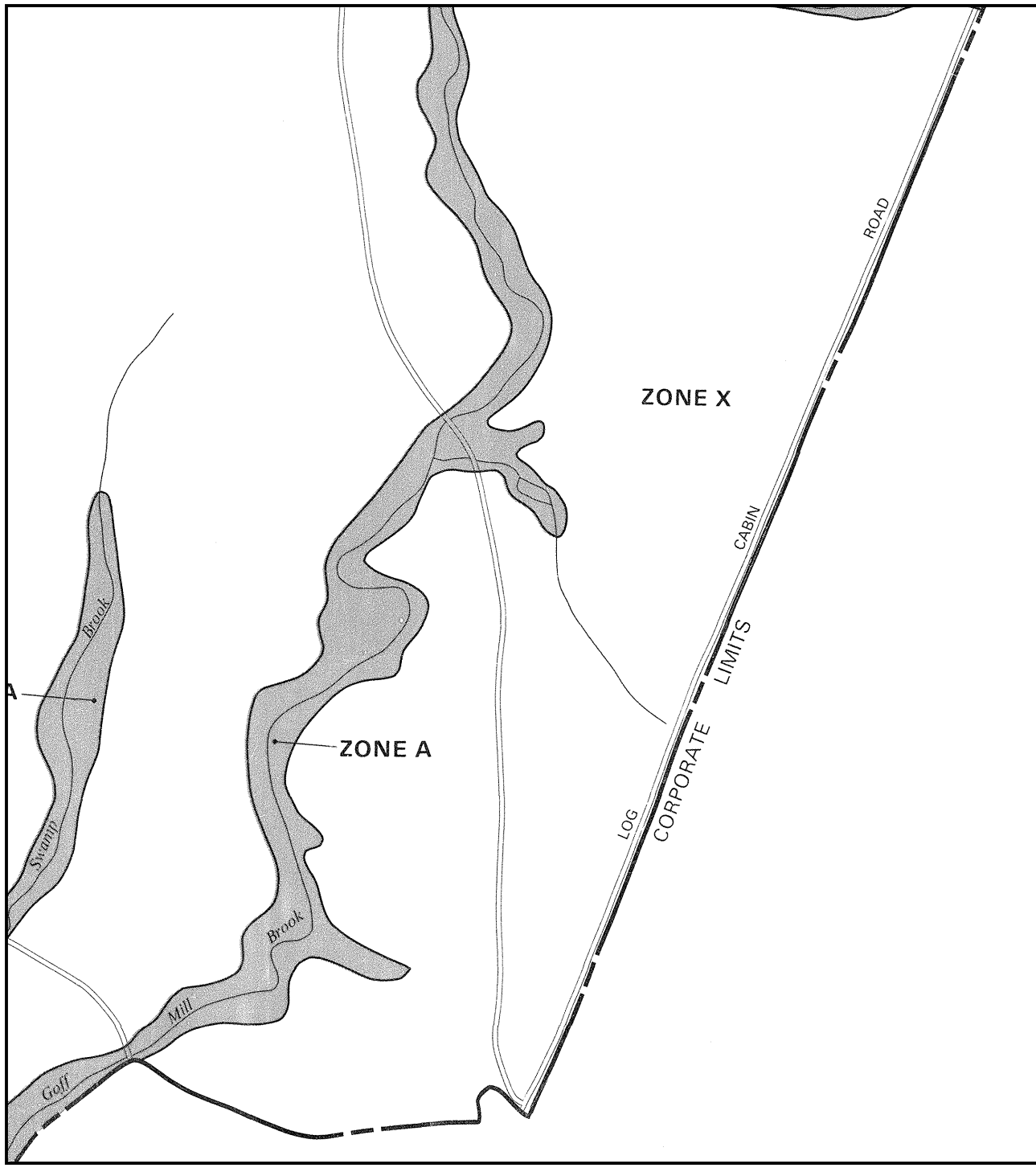
City: Saco

State: ME

Zip: 04072

Email: pgadbois53@gmail.com

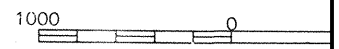
Phone: 2072833980



insurance agent or call the National Flood Insurance



APPROXIMATE SCALE



NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

TOWN OF
ARUNDEL, MAINE
YORK COUNTY

PANEL 10 OF 10
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER
230192 0010 C

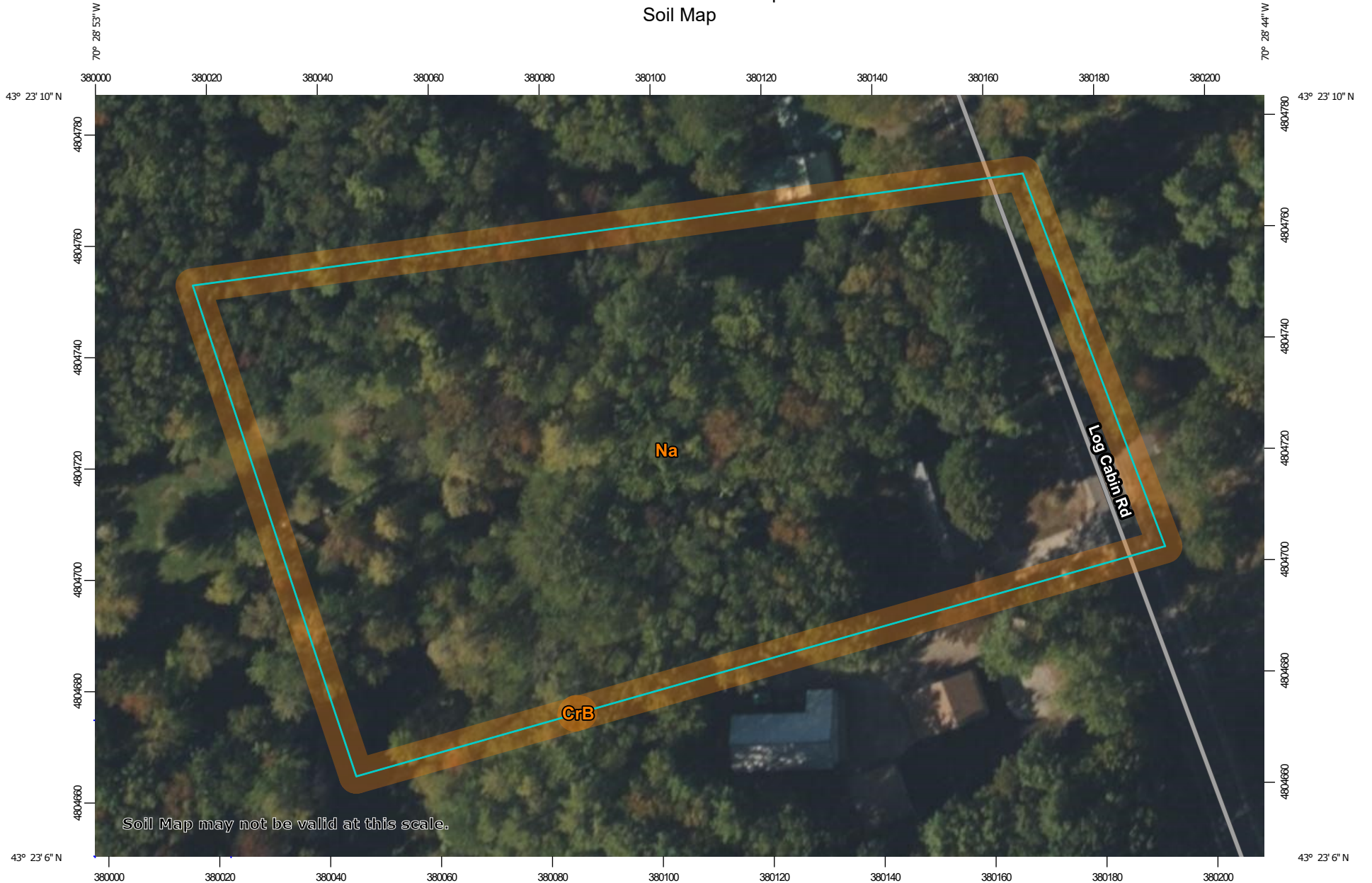
MAP REVISED:
JUNE 4, 1996



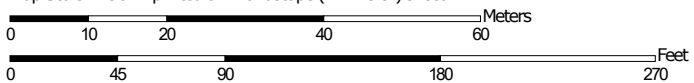
Federal Emergency Management Agency

This is an official FIRMette showing a portion of the above-referenced flood map created from the MSC FIRMette Web tool. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For additional information about how to make sure the map is current, please see the Flood Hazard Mapping Updates Overview Fact Sheet available on the FEMA Flood Map Service Center home page at <https://msc.fema.gov>.

Custom Soil Resource Report Soil Map



Map Scale: 1:964 if printed on A landscape (11" x 8.5") sheet.




Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 19N WGS84



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)




















Soils







 Soil Map Unit Polygons

 Soil Map Unit Lines


 Soil Map Unit Points

Special Point Features






-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features


Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

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

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

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

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

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

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

Soil Survey Area: York County, Maine
 Survey Area Data: Version 21, Aug 30, 2022

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

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

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

Na—Naumburg sand

Map Unit Setting

National map unit symbol: 9k67
Elevation: 200 to 1,800 feet
Mean annual precipitation: 34 to 50 inches
Mean annual air temperature: 41 to 45 degrees F
Frost-free period: 90 to 130 days
Farmland classification: Not prime farmland

Map Unit Composition

Naumburg and similar soils: 85 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Naumburg

Setting

Landform: Outwash plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Sandy glaciofluvial deposits derived from granite and gneiss

Typical profile

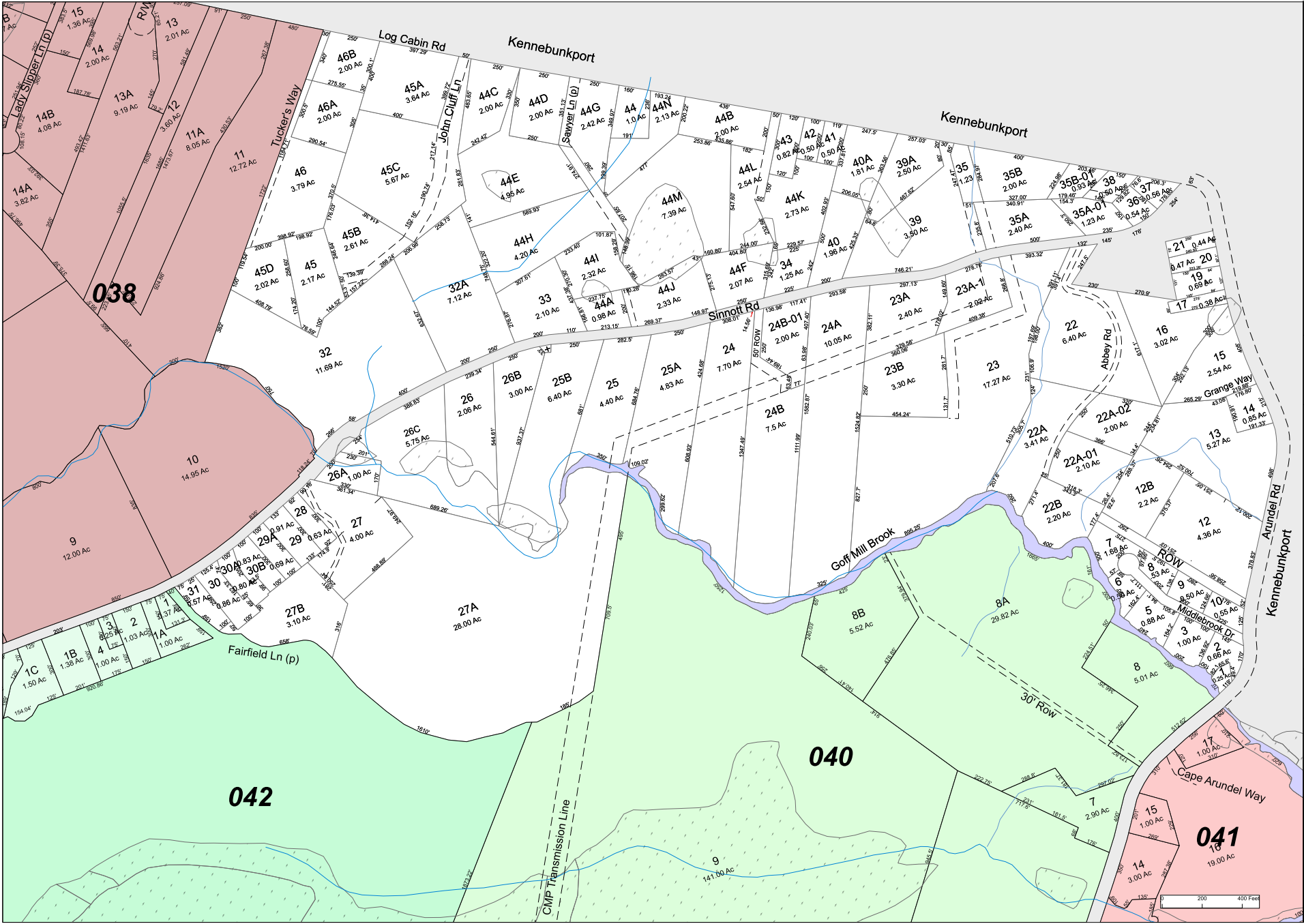
Oa - 0 to 2 inches: highly decomposed plant material
H1 - 2 to 9 inches: sand
H2 - 9 to 32 inches: sand
H3 - 32 to 65 inches: sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(1.42 to 6.00 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: A/D
Hydric soil rating: Yes



PROPERTY MAPS
TOWN OF ARUNDEL MAINE



James H. Thomas
GIS Solutions of Maine
Cumberland, Maine
jht@maine.r.com

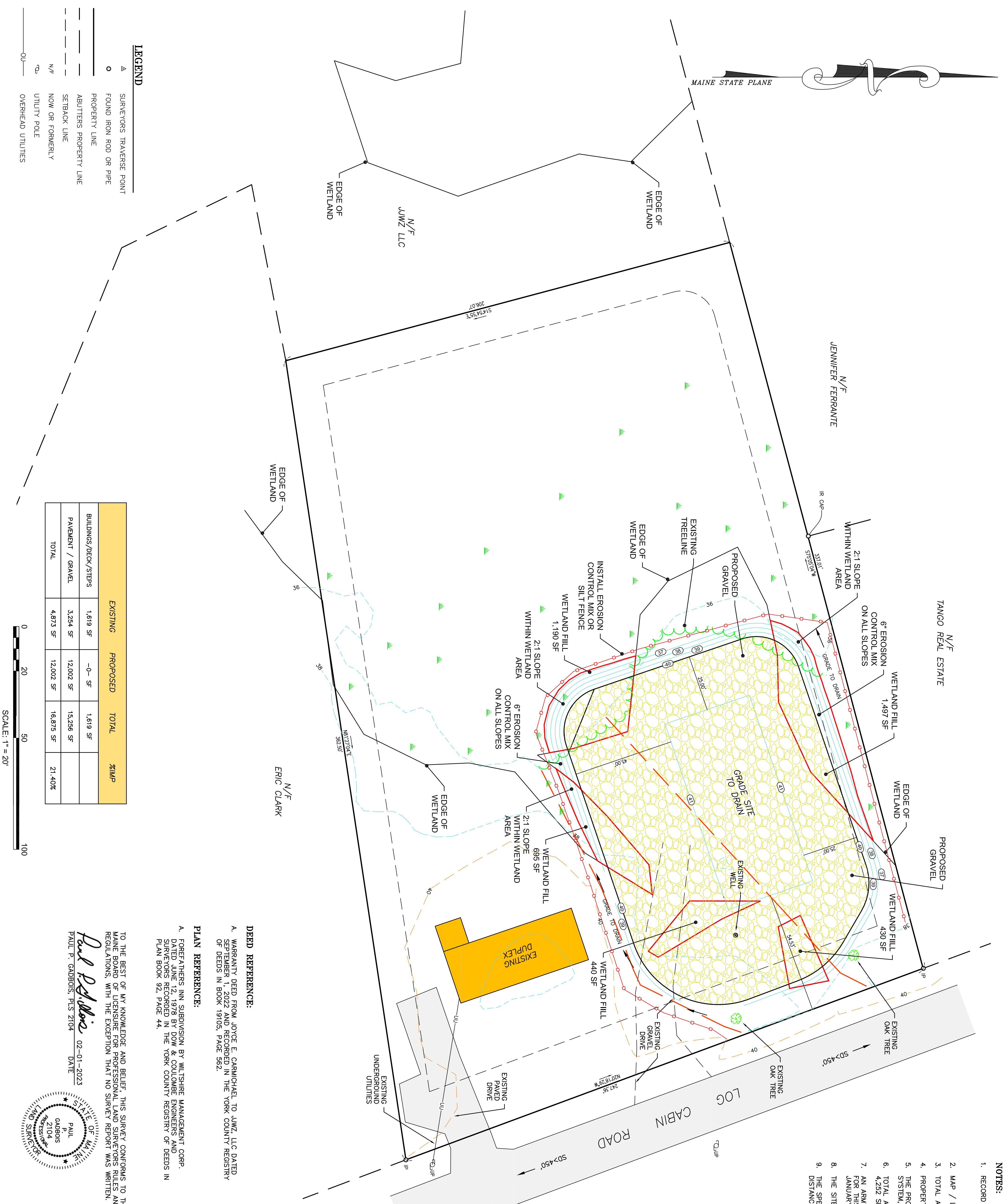
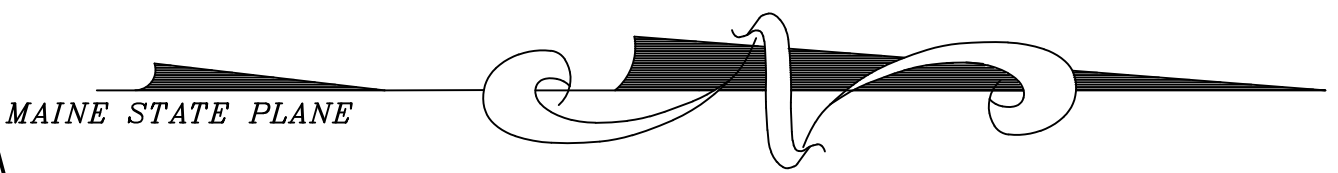
These maps are intended to be used for the purpose of property GIS Solutions of Maine used for conveyances Revised to April 1st

Scale: 1 Inch = 200

- Easement
- Water body
- Holes
- Right of Way
- Roads
- Stream
- Subdiv Map
- Boundary Map
- Boundary Map
- Boundary Map
- Boundary Map

2021

MAP: 039



LEGEND

- ▲ SURVEYORS TRAVERSE POINT
- FOUND IRON ROD OR PIPE
- PROPERTY LINE
- - - ABUTTERS PROPERTY LINE
- - - SETBACK LINE
- NOW OR FORMERLY UTILITY POLE
- OVERHEAD UTILITIES

| | EXISTING | PROPOSED | TOTAL | %IMP |
|----------------------|----------|-----------|-----------|--------|
| BUILDINGS/DECK/STEPS | 1,619 SF | -0- SF | 1,619 SF | |
| PAVEMENT / GRAVEL | 3,254 SF | 12,002 SF | 15,256 SF | |
| TOTAL | 4,873 SF | 12,002 SF | 16,875 SF | 21.40% |



NOTES:

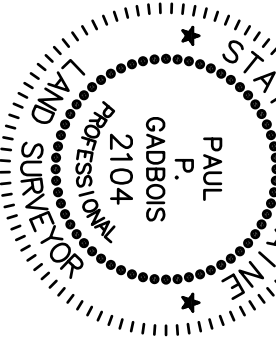
1. RECORD OWNER: JJWZ, LLC
128 LOG CABIN ROAD
ARUNDEL, MAINE
2. MAP / LOT: 039 / 40A
3. TOTAL AREA OF PROPERTY 1.81 ACRES. PER PLAN REFERENCE.
4. PROPERTY IS LOCATED IN THE TOWNHOUSE CORNER DISTRICT ZONE.
5. THE PROJECT HORIZONTAL DATUM: MAINE STATE PLANE COORDINATE SYSTEM, MAINE WEST ZONE.
6. TOTAL AMOUNT OF WETLAND FILL PROPOSED FOR THIS PROJECT IS 4,252 SF. SEE REPORT BY CHRIS COPPI ENVIRONMENTAL, LLC.
7. AN ARMY CORP. OF ENGINEERS WETLAND FILL PERMIT IS REQUIRED FOR THIS PROJECT. THE PERMIT APPLICATION WAS SUBMITTED ON JANUARY 30TH, 2023.
8. THE SITE IS NOT LOCATED WITHIN A FEMA FLOOD ZONE.
9. THE SPEED LIMIT ON LOG CABIN ROAD IS 45 MPH AND THE SITE DISTANCE IN BOTH DIRECTIONS IS GREATER THAN 450 FEET.

DEED REFERENCE:
 A. WARRANTY DEED FROM JOYCE E. CARMICHAEL TO JJWZ, LLC DATED SEPTEMBER 14, 2022 AND RECORDED IN THE YORK COUNTY REGISTRY OF DEEDS IN BOOK 19103, PAGE 582.

PLAN REFERENCE:
 A. FOREFATHERS INN SUBDIVISION BY WILTSHIRE MANAGEMENT CORP. DATED JUNE 12, 1978 BY DOW & COULOMBE ENGINEERS AND SURVEYORS RECORDED IN THE YORK COUNTY REGISTRY OF DEEDS IN PLAN BOOK 92, PAGE 44.

TO THE BEST OF MY KNOWLEDGE AND BELIEF, THIS SURVEY CONFORMS TO THE MAINE BOARD OF LICENSURE FOR PROFESSIONAL LAND SURVEYORS RULES AND REGULATIONS, WITH THE EXCEPTION THAT NO SURVEY REPORT WAS WRITTEN.

Paul P. Gadbois
 PAUL P. GADBOIS, PLS 2104 DATE 02-01-2023



(7C) TOWNHOUSE CORNER DISTRICT

SPACE AND BULK REGULATIONS

| | |
|-------------------------|------------|
| MIN. LOT AREA | 1 ACRE N/D |
| MIN. AREA PER FAMILY | 1 ACRE |
| MIN. LOT FRONTAGE | 100 FEET |
| MIN. LOT WIDTH | 100 FEET |
| MAX. BUILDING FOOTPRINT | 8000 SF |
| MAX. BUILDING HEIGHT | 35 FEET |
| MIN. FRONT YARD SETBACK | 25 FEET |
| MIN. SIDE YARD SETBACK | 15 FEET |
| MIN. REAR YARD SETBACK | 15 FEET |

APPROVED BY THE TOWN OF ARUNDEL STAFF REVIEW COMMITTEE

DATE _____

| | |
|------------------|------------|
| DRAWN: P.P.G. | REVISIONS: |
| CHECKED: P.P.G. | |
| SCALE: 1" = 20' | |
| FIELD BOOK: | |
| DATE: 02-01-2023 | |
| JOB NO. 1836 | |
| SHEET 1 OF 2 | |

RECORD OWNER
 JJWZ, LLC
 128 LOG CABIN ROAD
 ARUNDEL, MAINE

SITE PLAN
 JJWZ LLC
 30 LOG CABIN ROAD
 ARUNDEL, MAINE

PAUL P. GADBOIS
 ENGINEERING SURVEYING
 LAND PLANNING
 P.O. BOX 327, SACO, MAINE 04072
 (207) 283-3980

