Site Plan Review Application

To the Town of Casco, Maine

Country Village Assisted Living Facility Expansion

960 Meadow Road
Casco, Maine

Applicant:
960 Meadow Road Holdings, LLC
960 Meadow Road
Casco, ME 04015

Prepared By:
DM Roma Consulting Engineers
PO Box 1116
Windham, ME 04062

DM ROMA

CONSULTING ENGINEERS

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TOWN OF CASCO

SITE PLAN REVIEW APPLICATION

COUNTRY VILLAGE ASSISTED LIVING FACILITY EXPANSION

960 MEADOW ROAD, CASCO, MAINE

SECTION 1

APPLICATION FORM & CHECKLIST

TOWN OF CASCO PLANNING BOARD
APPLICATION FORM

APPLICANT:

Name 960 MEADOW ROAD HOLDINGS, LLC

Address 960 MEADOW ROAD

CASCO, MAINE 04105

Email OWNER@COUNTRYVILLAGEAL.COM

Telephone Number – Home _____
PLEASE PROVIDE AT LEAST TWO NUMBERS Office 207-627-7111
Cell 207-880-9375

Interest in Property PROPERTY OWNER
(attach documentation) _____

Interest in abutting property, if any NONE

OWNER:

Name SAME AS APPLICANT

Address _____

PLEASE CHECK THE ADDRESS TO WHICH THE TOWN SHOULD DIRECT ALL CORRESPONDENCE.

TYPE OF PROSPECTIVE ACTIVITY:

_____ **Minor Subdivision Plan Review**
_____ **Major Subdivision Preliminary Plan Review**
_____ **Major Subdivision Final Plan Review**
X **Site Plan Review – List Type** BUILDING ENLARGEMENT IN VILLAGE DISTRICT
_____ **Other (specify)** _____

PROJECT ____ **Single Family** _____ **Multiplex** X **Other**

LOCATION
Street Address 960 MEADOW ROAD
Registry of Deeds Book 34762 **Page** 137
Assessor's Office Map 42 **Lot** 19

OTHER PROJECT INFORMATION

Size of Parcel (acres) 8.4 ACRES

Is Zoning Board of Appeals Approval required? ___ No x___ Yes
ALREADY APPROVED

Does the applicant intend to request any waivers of Subdivision or Zoning Ordinance provisions? x___ No ____ Yes.

If yes, list and give reasons why:

_____
_____
_____

FEES:

The current schedule of Town fees is attached or available online. ***Please note: If the Board requests consultation with the Town's lawyer, fees will be passed off to the applicant***.

MAPS:

Digital Map Files need to be provided at the time of Planning Board approval. If available, digital map files including level of detail typically occurring on our tax maps (such as base line work, boundary dimensions, lot #'s, areas, road names, etc…).

DEP NOTIFICATION:

1. If land development over 20 acres or 5 lots or more, the request requires DEP review.

2. DEP approval must be obtained *PRIOR* to final Planning Board approval.

OTHER:

1. Any WETLAND must be reviewed by the Army Corps of Engineers.

ABUTTOR NOTIFICATION:

1. Applicant ***MUST*** notify all landowners within 500' of the property by CERTIFIED MAIL RETURN RECEIPT REQUESTED.

2. Landowners **MUST BE NOTIFIED AT LEAST 10 CALENDAR DAYS PRIOR TO SCHEDULED MEETING.**

3. the list of landowners with ALL RECEIPTS MUST BE TURNED IN TO THE PLANNING BOARD SECRETARY NO LATER THAN SEVEN (7) DAYS PRIOR TO THE DATE OF THE MEETING.

The undersigned, being the applicant, owner or legally authorized representative, states that all information contained in this application is true and correct to the best of his/her knowledge and hereby does submit the information for review by the Town and in accordance with applicable ordinances, statutes and regulations of the Town, State, and Federal Government.

✸ **All materials to be considered by the Planning Board will be received no later than NOON on the due date for the specific Planning Board meeting. Any material or information received thereafter will not be heard by the Planning Board until a later meeting.**

PLEASE TAKE NOTE OF THE FOLLOWING PROVISION OF THE SUBDIVISION ORDINANCE:

§6.1.1 Within six (6) months of the Planning board's classification of the proposal as a Major Subdivision, the applicant shall submit an application for approval of a Preliminary Plan. The Preliminary Plan shall approximate the layout shown on the sketch plan plus any recommendations made by the Planning Board. Substantial redesign of the sketch plan or failure to meet the six (6) month deadline shall require resubmission of the sketch plan to the Planning Board.

05-26-2026

DATE

SIGNATURE OF APPLICANT/OWNER OR REPRESENTATIVE

APPLICANT'S NAME 960 MEADOW ROAD HOLDINGS, LLC **(Please print). DATE** 5-26-2026

CASCO SITE PLAN REVIEW SUBMISSIONS CHECKLIST

Unless expressly waived by the Planning Board, the following items are required for all applications for Site Plan Review.

***ALL items must be answered. If N/A, include explanation. If any items are left blank, the application will be deemed incomplete.**

		*Applicant (check complete)	Planning Board (date complete)
A.	**A fully executed and signed copy of the application for Site Plan Review.**	X	
B.	**Fifteen (15) copies of a site plan showing the following at a scale not to exceed 50' to the inch.**	X	
	1. Owner's name, address and signature.	X	
	2. Names and addresses of all abutters.	X	
	3. Sketch map showing general location of site within town.	X	
	4. Boundaries of contiguous properties under control of owner or applicant.	X	
	5. Bearing and distances of all property lines and source of this information.	X	
	6. Zoning classifications(s) and boundaries.	X	
	7. Soil types and locations.	X	
	8. The location of all building setbacks as required by zoning ordinance.	X	
	9. The location, size and character of all signs and exterior lighting.	X	
	10. The lot area of the parcel, street frontages, and zoning requirements for minimum lot.	X	
	11. The location of all existing and proposed buildings (including size and height), driveways, sidewalks, parking spaces, loading areas, open spaces, large trees, open drainage courses, signs and exterior lighting, utilities, services areas, easements and landscaping.	X	

12. The location of all buildings within 50 feet of the parcel to be developed and the location of intersecting roads or driveways within 200 feet of the parcel. X _____ _____

13. Existing and proposed topography of the site at 2-foot contour intervals if major changes to existing topography are being proposed. X _____ _____

C. A stormwater drainage plan showing:

1. The existing and proposed method of handling stormwater runoff. X _____ _____

2. **The direction of flow of runoff through use of arrows.** X _____ _____

3. **The location, elevation, and size of all catch basins, dry wells, drainage ditches, swales, retention basins, culverts and storm sewers.** X _____ _____

4. **Engineering calculations used to determine drainage requirements based on a 25-year storm frequency, if the project will significantly alter the existing drainage pattern due to such factors as the amount of new impervious surface (such as paving and building area) being proposed.** X _____ _____

D. A utility plan showing provisions for water supply and wastewater disposal, including a completed HHE 200 form completed by a licensed site evaluator or Maine Certified Soils Scientist, and the size and location of all test pits, piping, holding tanks, leachfields, etc. X _____ _____

E. A planting schedule keyed to the site plan and indicating the varieties of trees, shrubs and other plants to be planted on the site. X _____ _____

F. Building plans, properly scaled, showing all elevations, together with a schedule detailing the type, color and texture of all proposed principal buildings and structures and all accessory buildings and structures. X _____ _____

G. Copies of any proposed or existing easements, covenants, and deed restrictions. N/A - NONE KNOWN _____

H. Copies of all applicable State approvals and permits. PENDING STATE APPROVAL _____

I. Other information as requested by the Planning Board. Please note below.

SECTION 2

PROJECT NARRATIVE & SITE LOCATION MAP

Section 2 – Project Narrative

Zoning:	Village District (V)
Overlay Zone:	Stream Protection Shoreland Zone
Acreage:	8.39 acres
Tax Map/Lot:	Map 211 Block 9 Lot 1
Existing Use:	Assisted Living Facility – "Nursing Home"
Proposed Use:	Assisted Living Facility – "Nursing Home"

960 Meadow Road Holdings, LLC is proposing to expand the existing Country Village Assisted Living Facility at 960 Meadow Road in Casco, Maine.

Existing Conditions

The Country Village Assisted Living facility has been serving the Town of Casco and surrounding areas for over 25 years. The existing building, constructed in 1890, contains the resident's rooms, common space, offices and kitchen facilities. The property also contains paved parking, landscaping and lawn areas for the residents. The facility currently provides care for a maximum of 30 residents.

Proposed Development

Over the years there has been a sizable waiting list, but with only 30 beds, it is difficult to provide service to the area at its current size. To increase the facility's capacity, the applicant is proposing to construct a 5,115 square foot expansion of the existing building consisting of a 2,735 square foot single story footprint and 2,380 square foot two story footprint. The construction will provide an additional 15 beds totaling 45 beds through the facility. The building expansion will also include communal living space, kitchenette and additional medical rooms. The building will also include a warp around covered porch.

The site improvements will also include a new paver courtyard, ADA ramps and landscaping.

Parking Layout

With the incorporation of the new resident rooms, additional employees will be necessary. To accommodate the expanded facility, the existing substandard parking lot will also need to be reconstructed. The site design will utilize the existing driveway entrance onto Meadow Road, continuing into the new parking lot. The design incorporates one-way driveways with a combination of perpendicular and angle parking.

Based on parking requirement table within §*215-5.22-Off Street Parking* the required number of parking spaces for a Nursing Home use is 1 space per 3 bedrooms and 1 space per expected average employee occupancy. Since the facility will include 45 total resident beds and an anticipated maximum of 8 on-site employees, the minimum parking space requirements is 23 total spaces. The current design incorporates 25 total parking spaces. In addition, the design incorporates one (1) handicap accessible parking space as required by the Americans with Disabilities Act (ADA) regulations.

Traffic Generation

Estimates of vehicle trips for the existing and proposed of the facility were analyzed. In preparation of the estimates of vehicular trips generated by the site, the Institute of Transportation Engineers (ITE) Trip Generation handbook (10th edition) was reviewed. The most applicable use was "Assisted Living" (Land Use Code 254). Based on the ITE handbook, the "Assisted Living" use will generate approximately 0.48 vehicle trips per 1,000 square feet of Gross Floor Area during the peak hour.

Based on the Town of Casco Assessor's Data, the existing building contains approximately 18,400 square feet of gross interior floor area. When utilizing the ITE estimate, the existing facility generates approximately 9 vehicular trips during the PM peak hour.

The new building expansion will consist of approximately 7,495 square feet of gross interior floor area. The new expansion will generate an additional 4 new vehicular trips during the PM peak hour for a total vehicular trip estimate of 13 vehicular trips during the PM peak hour once construction is complete. We do not anticipate the additional vehicle trips to result in any offsite traffic congestion or create an unsafe condition of vehicles entering and exiting the facility.

As the facility will not generate more than 100 vehicle trips during the peak hour, a Maine Department of Transportation Traffic Movement Permit will not be required.

Utilities

The property is currently served by a private on-site drilled potable well and private subsurface wastewater disposal system. Utility information is further discussed in Section 6 Utilities of this submission.

Waiver Request

§215-5.22B – Min. 200 square feet per parking space

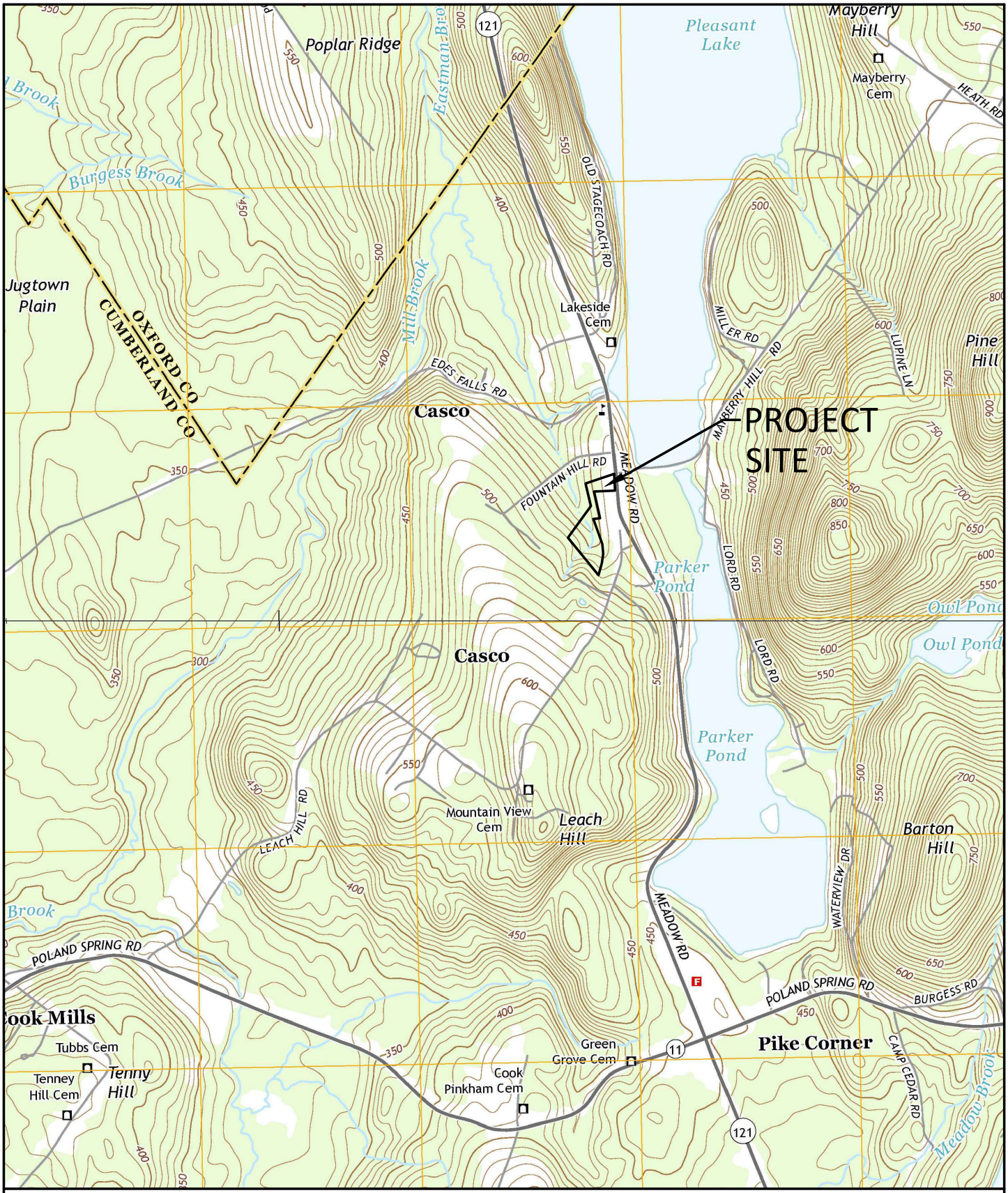
We are requesting a waiver to reduce the minimum parking space area from 200 square feet, or 10 foot wide by 20-foot-deep parking space, to 162 square feet consisting of a 9-foot wide by 18-foot-deep parking space for 7 of the 25 parking spaces. The primary reason for the design limitation for these spaces is to provide for space for a portion of the proposed underdrained filter basin to provide the necessary volume and treatment footprint for the tributary paved parking lot. Based on the location of the new engineered wastewater disposal system, the limit of the beds, primarily Wastewater Disposal Bed "B", need to be a minimum of 25 feet away from a stormwater soil filter, as long as the filter is lined with an impermeable liner. We looked at other options for the location of the wastewater bed and the connection to the pond, but decided it be was a better design to reduce the dimensions of the spaces in this area.

In addition, the reduction in these dimensions will reduce the amount of paved impervious surfaces, reducing the number of potential pollutants generated by the site. The remaining 18 parking spaces meet the standard.

Other Regulatory Approvals

Based on the proposed expansion and improvements to the parking lot, the project will generate approximately 17,425 square feet (0.40 acres) of new impervious area and approximately 2,040 square feet (0.05 acres) of new lawn area. Since the project will generate less than 20,000 square feet of new impervious area or 5 acres of new developed area within the watershed of a waterbody most at risk from development (Sebago Lake), the redevelopment will not require an individual Stormwater Permit from the Maine Department of Environmental Protection (MDEP). Since the project is generating more than one (1) acre of land disturbance, the project will require the submission of a Stormwater Permit by Rule to the MDEP. This permit will be prepared and submitted at the time of this submission. The stormwater management calculations are further clarified in the Stormwater Management Report included in Section 8 of this submission.

In addition, the project will not impact natural resources on the site, avoiding natural resources permitting from the MDEP and the US Army Corps of Engineers.



SITE LOCATION MAP

COUNTRY VILLAGE ASSISTED LIVING FACILITY
CASCO, MAINE

FOR RECORD OWNER:
960 MEADOW ROAD HOLDINGS, LLC
960 MEADOW ROAD
CASCO, MAINE 04015

USGS QUADRANGLES:
CASCO
NAPLES

SCALE: 1"=2,000'
DATE: 2-20-2026
JOB NUMBER: 19063

DM ROMA
CONSULTING ENGINEERS
P.O. BOX 1116
WINDHAM, ME 04062
(207) 310 - 0506

SECTION 3

RIGHT, TITLE OR INTEREST DOCUMENTS

Section 3 – Right, Title or Interest Documents

The facility is owned by 960 Meadow Road Holdings, LLC by deed from CVAL Property, LLC recorded in the Cumberland County Registry of Deeds Book 34792 Page 137 on April 9, 2018. A copy of the property deed has been included in this section for review.

MAINE REAL ESTATE TAX PAID

QUITCLAIM DEED WITH COVENANT

(Maine Statutory Short Form)

CVAL PROPERTY, LLC, a Maine limited liability company with a place of business in the Town of Casco, County of Cumberland and State of Maine, for good and valuable consideration, does hereby release to **960 MEADOW ROAD HOLDING, LLC**, a Maine limited liability company with a mailing address of 960 Meadow Road, Casco, ME 04015, with **QUITCLAIM COVENANT**, all of its right, title and interest in and to certain real estate with the improvements thereon, at or near Meadow Road in the Town of Casco, County of Cumberland and State of Maine, as more specifically set forth on **SCHEDULE A** attached hereto and incorporated herein by reference.

IN WITNESS WHEREOF, CVAL Property, LLC has hereunto caused this instrument to be executed by Gary Symonds, its thereunto duly authorized Member, this 6th day of April, 2018.

CVAL PROPERTY, LLC

Witness

By Gary Symonds
Its Member

STATE OF MAINE
CUMBERLAND, SS. April 6, 2016

Personally appeared before me the above named Gary Symonds, in his capacity as Member of CVAL Property, LLC, known to me (or satisfactorily proven) to be the person whose name is subscribed to the within instrument, and acknowledged the foregoing instrument to be his free act and deed in said capacity and the free act and deed of CVAL Property, LLC.

Before me,

Notary Public/Maine Attorney #4993
Printed Name: C. Jonathon Wood

SCHEDULE A

A certain lot or parcel of land with any buildings thereon, situated on the Westerly side of Meadow Road (Route 121) the Town of Casco, County of Cumberland and State of Maine, being a portion of Lot No. 20 and a small portion of Lot No. 21 in the Tenth Range of lots in said Town of Casco, bounded and described as follows:

Beginning on the westerly sideline of the Meadow Road at the southeasterly corner of land conveyed by Alvin R. Whitehurst, et al., to John G. Bielat, et al., by deed dated December 14, 1983 and recorded in said Registry of Deeds in Book 6352, Page 229; thence southerly by the Meadow Road four hundred fifty (450) feet, more or less, to the northeasterly corner of land conveyed by Richard Mayberry to the Inhabitants of School District No. 6 in Casco by deed dated April 21, 1876 recorded in said Registry of Deeds in Book 429, Page 461; thence Westerly by said School House lot one hundred thirty-two (132) feet, more or less, to the northwesterly corner thereof; thence southerly by said School House lot and by land conveyed by Gardner W. Cole to the Town of Casco by deed dated December 2, 1929 and recorded in said Registry of Deeds in Book 1337, Page 439, two hundred eight and five tenths (208.5) feet, more or less, to the northerly sideline of land conveyed by Raymond Thorne to the Town of Casco by deed dated August 9, 1966 and recorded in said Registry of Deeds in Book 2973, Page 619; thence westerly by said land of the Town of Casco two hundred fifty-six (256) feet, more or less, to the northwesterly corner thereof; thence southerly by said land of the Town of Casco and by land conveyed by Eva Marie Thurlow to William J. Jordan, et al., by deed dated October 12, 1978 and recorded in said Registry of Deeds in Book 4323, Page 141, three hundred eighty (380) feet, more or less, to the southwesterly corner thereof; thence easterly by said Jordan land ninety (90) feet, more or less, to the northwesterly corner of land formerly of Moors; thence southerly following the course of a stone wall by said Moors land and by land formerly of Houghton to the northerly corner of land formerly of Donald Hanscom; thence southwesterly by said Hanscom land to the northeasterly sideline of land conveyed by Philip G. Cole, et al., to Katherine Duntley by deed dated October 3, 1951 and recorded in said Registry of Deeds in Book 2074, Page 46; thence northwesterly by said Duntley land to the checkline between said Lots No. 20 and 21 in the Tenth Range of lots at a point six hundred (600) feet northeasterly thereon from the Range Line between the Ninth and Tenth Ranges; thence northeasterly by said checkline between Lots No. 20 and 21 to a point five hundred sixty-nine and twenty-five hundredths (569.25) southwesterly from the Meadow Road; thence North 0 38' 53" West by said Bielat land three hundred forty-three and thirty-nine hundredths (343.39) feet to an iron pipe; thence North 84° 15' 29" East by said Bielat land four hundred forty-eight and eight tenths (448.8) feet to the point of beginning. Said last two courses and distances are derived from a plan for John G. and Beth Ann Bielat made by Survey, Inc. dated November 1983 and recorded in said Registry of Deeds in Plan Book 140, Page 33.

This conveyance is made subject, however, to the rights and privileges conveyed by Gardner W. Cole to Central Maine Power Company by deed dated July 11, 1946 and recorded in said Registry of Deeds in Book 1832, Page 130.

Also excepting that certain lot or parcel of land conveyed to The Inhabitants of the Town of Casco, by deed of M.S. Hancock, Inc. dated December 6, 1985 and recorded in said Registry of Deeds in Book 7027, Page 172, and further subject to all conditions, restrictions and easements as contained in said Deed.

Also releasing all rights and easements reserved by M.S. Hancock, Inc. in the aforesaid deed to the Town of Casco in Book 7027, Page 172 and also conveying any right, title or interest the grantor herein, as successor in title to M.S. Hancock, Inc., may have acquired as to any well rights on the property conveyed by deed of Elizabeth Hancock to M.S. Hancock, Inc. dated December 30, 1985 and recorded in said Registry of Deeds in Book 7027, Page 170.

Received
Recorded Register of Deeds
Apr 09,2018 09:40:46A
Cumberland County
Nancy A. Lane

SECTION 4

ABUTTERS LIST (500 FEET)

ARSENAULT, GARRETT M & KA
912 MEADOW RD
CASCO, ME 04015

BAKER, LINDA M
58 FOUNTAIN HILL RD
CASCO, ME 04015

BRESSETTE, DAVID W
30 LEACH HILL RD
CASCO, ME 04015

BROOK, NICHOLAS F
60 LEACH HILL RD
CASCO, ME 04015

BURROWS, JUSTIN D & BREND
26 FIELDCREST DR
CASCO, ME 04015

CAMPBELL, DOUGLAS T JR &
906 MEADOW RD
CASCO, ME 04015

CARROLL, SHANNON
21 LEACH HILL RD
CASCO, ME 04015

CASCO LIBRARY
PO BOX 420
CASCO, ME 04015

CASCO VILLAGE CHURCH
PO BOX 367
CASCO, ME 04015

CORSON, TRAVIS L
988 MEADOW RD
CASCO, ME 04062

CRESSMAN, ROBERT K JR
13 FOUNTAIN HILL RD
CASCO, ME 04015

CRICONES, PAUL
PO BOX 1983
WINDHAM, ME 04062

DANIELS, REBECCA L
931 MEADOW RD
CASCO, ME 04015

ELIE, ROBBIE J & ODELIA
970 MEADOW RD
CASCO, ME 04015

ELLIOTT, BREEANNA
39 LEACH HILL RD
CASCO, ME 04015

ERICKSON FAMILY REVOCABLE
23 ROY ST
ENFIELD, CT 06082

FLANAGAN, MICHELLE R
14 SONNY MAINES RD
CASCO, ME 04015

GAGNON, THERESA
PO BOX 315
RAYMOND, ME 04071

HANCOCK, GEOFFREY F
36 QUAKER RIDGE RD
CASCO, ME 04015

HURLEY, MATTHEW N & KERRI
PO BOX 118
CASCO, ME 04015

JOHN R ERICKSON REVOCABLE
83 HUBLARD DR
VERNON, CT 06066

KAISER, ROBERT J JR
PO BOX 447
CASCO, ME 04015

KANE, ALAN R & SAMUEL
50 LEACH HILL RD
CASCO, ME 04015

LEWIS D WETZEL & MIRIAM S
983 MEADOW RD
CASCO, ME 04015

LIBBY, ILEA M
19 LEACH HILL RD
CASCO, ME 04015

LORENG, RYAN
27 FIELDCREST DR
CASCO, ME 04015

MAGIERA, ERIC & LISA
PO BOX 565
CASCO, ME 04015

MICHAUD, TREVOR
25 BONNIE WAY
CASCO, ME 04015

MITCH, PAUL & DEON
P O BOX 323
CASCO, ME 04015

MURRAY, NICHOLAS P
27 LEACH HILL RD
CASCO, ME 04015

NORTON, DAVID W
918 MEADOW ROAD
CASCO, ME 04015

PARMELEE, JEFFREY E & REN
48 FOUNTAIN HILL RD
CASCO, ME 04015

PAYTON, TIFFANY
69 LEACH HILL RD
CASCO, ME 04015

PERGL, WILLOW MARY
296 OCEAN ST
SOUTH PORTLAND, ME 04106

PERGL-CHOATE, JAYNE E
PO BOX 417
CASCO, ME 04015

RANKL, STEVEN & MARIA
139 ADDISON RD
GLASTONBURY, CT 06033

RAY, DEREK
15 BALL DR
RAYMOND, ME 04071

RICHARD C BURNELL LIVING
955 MEADOW RD
CASCO, ME 04015

RICHARDS, ANDREW II
15 LEACH HILL RD
CASCO, ME 04015

RIORDAN, FRANCIS J
26 FOUNTAIN HILL RD
CASCO, ME 04015

ROBERTS, HEATH A & ELIZAB
24 FIELDCREST DR
CASCO, ME 04015

RSLE, LLC
233 VARNEY HILL RD
WINDHAM, ME 04062

STRAIN, MARY
949 MEADOW RD
CASCO, ME 04015

THURLOW FAMILY TRUST
38 LEACH HILL RD
CASCO, ME 04015

TIDD, TREVOR B & EILEEN
975 MEADOW RD
CASCO, ME 04015

TOWN OF CASCO
(CASCO DAY PARK)
P O BOX 60
CASCO, ME 04015

TOWN OF CASCO
(COMMUNITY CENTER)
P O BOX 60
CASCO, ME 04015

TOWN OF CASCO
(PARKER POND-LILY PD LOT)
P O BOX 60
CASCO, ME 04015

TOWN OF CASCO
(VILLAGE GREEN)
P O BOX 60
CASCO, ME 04015

TOWN OF CASCO
635 MEADOW RD
CASCO, ME 04015

VILLAGE ENTERPRISES, LLC
73 SPICEBUSH DR
WELLS, ME 04090

WETMORE, DENNIS
PO BOX 26
CASCO, ME 04015

WYMAN, SIERRA OLDRISKA CA
923 MEADOW RD
CASCO, ME 04015

ZAHIBUL TRADERS, LLC
PO BOX 363
CASCO, ME 04015

SECTION 5

VARIANCE APPROVAL

Section 5 – Variance Approval

As part of the investigation into the feasibility of this project, we reviewed the Town of Casco Code of Ordinances. Included in this ordinance is §215-2 Definitions which defines several uses that are further referenced throughout the Zoning regulations. Based on the previously defined uses contained in the ordinance, and after working with the Code Enforcement Department on this decision, the closest land use to the assisted living facility use was a "Nursing Home", defined below.

NURSING HOME - An institution that provides nursing or convalescent care for consideration to chronic or convalescent patients, but does not provide hospital services such as an operating room or x-ray facilities, unless incidental to the delivery of nursing or convalescent care. Where a permitted use, nursing homes shall have a density no greater than the minimum lot size for the district plus 5,000 square feet of net residential area per bed.

As indicated in the definition, there are specific requirements for the number of allowable beds within a "Nursing Home" facility, based on the available net residential area. As defined in §215-5.19, certain land area is defined by the Town as unsuitable for development and are to be deducted from the overall gross land area, resulting in the net residential area. Included in this section is a copy of the net residential area definition for reference.

To determine the project site's net residential area, a land survey and natural resources delineation were prepared. There are several listed deductions in §215-5.19, but the applicable land area deductions for this property were related to steep slopes, wetlands and 15% approximation for parking. Based on these calculations, the 8.4-acre parcel's gross land area was reduced to approximately 3.6 acres of net residential area. A copy of the full calculations can be found on the Site Plans within the design plan set.

An analysis was performed to determine the required net residential area for the existing 30 beds. Based on the requirement identified in the "Nursing Home" definition, the property is required to provide 210,000 square feet (60,000 sf min. lot size + 5,000 sf/bed x 30 beds) or 4.8 acres. The resultant calculation indicates that the existing facility has insufficient net residential area for its current capacity, making the facility nonconforming to the requirements of the use.

In order for the facility to accommodate the increased demand as proposed, the property will require 285,000 square feet (60,000 sf min. lot size + 5,000 sf/bed x 45 beds) or 6.5 acres of net residential area. As the facility is currently nonconforming, the existing non-conformity will be increased by 50%. For the project to continue as proposed, a variance for an increase in a nonconforming nonresidential use over 25% was required from the Zoning Board of Appeals.

An application for a variance was submitted to the Zoning Board of Appeals on February 23, 2026. The request was then reviewed by the Zoning Board of Appeals during the April 13, 2026 meeting and was approved. The findings of the approval was then recorded in the Cumberland County

Registry of Deed Book 42215 Page 18. A copy of the recorded approval has been included in this section for reference.

§ 215-5.19. - Net residential area.

Net residential area shall pertain to and only be applied to land being subdivided, land subject to planned residential development subdivisions as defined by § 215-5.24B(1), (2) and (3) of this chapter, and land within the shoreland zone. See the definition of "net residential area" in Article 2 of this chapter.

A. The following land areas shall be considered unsuitable for development and 100% of these areas shall be deducted from the gross land area:
   (1) Land with sustained slopes of 25% or more.
   (2) Land that is cut off from the main parcel by a road, by existing land uses or where no means of access have been provided, so that the land is isolated and unavailable for building purposes or common uses.
   (3) Land situated below the normal high-water line of any water body or of any inland wetland.
   (4) Land within the 100-year floodplain as identified by federal Flood Boundary and Floodway Maps or Federal Flood Insurance Rate Maps.
   (5) Land where topsoil has been removed without a permit, or where topsoil removal has taken place without acceptable reclamation procedures.
   (6) Land within a Resource Protection Subdistrict.
   (7) Land which has been created by filling or draining a pond or wetland.
   (8) Land which is part of a right-of-way or easement, excluding gas pipeline or transmission line rights-of-way and easements but including rights-of-way and easements required for improvements to projects.
   (9) Land area consisting of unreclaimed gravel pits.
   (10) Land that has been clear-cut as defined.
   (11) Very poorly drained soils as measured from a high-intensity soils map (see Subsection E) prepared by a Maine certified soil scientist in accordance with the National Cooperative Soil Survey Classification. These soils include but are not limited to the following (previously used mesic soil names in parentheses):

Biddeford	Searsport (Scarboro)
Burnham	Sebago
Chocorua	Togus
Halsey	Vassalboro

Medomak (Saco)	Washburn
Ossipee	Washkish
Peacham (Whitman)	Whately
Rifle	

B. The following land areas shall be considered marginally suitable for development and 50% of these areas shall be deducted from the balance of Subsection A above:

(1) Poorly drained soils and somewhat poorly drained soils as measured from a high-intensity soils map (see Subsection E) prepared by a registered soil scientist in accordance with the National Cooperative Soil Survey Classification. These soils include but are not limited to the following (previously used mesic soil names in parentheses):

Atherton	Moosilauke (Walpole)
Aurelie	Naskeag
Brayton (Ridgebury)	Naumberg (Au Gres)
Cabot	Rounabout (Raynham)
Charles (Limerick)	Rumney
Colonel	Scantic
Easton	Swanton
Fredon	Swanville
Lamoine	Telos
Lyme (Leicester)	Westbury
Monarda	

C. Fifteen percent of the area remaining after subtracting Subsections A and B above from the gross land area shall be deducted as an allowance for roads and parking, whether or not the actual area devoted to roads is greater or less than 15%.

D. No building or structure shall be sited in areas treated as 100% deductions from the parcel's net residential area. Siting of structures in areas treated as 50% deductions shall be discouraged but permitted where the applicant/developer demonstrates that measures will be taken to minimize erosion, sedimentation, and seasonal wetness, that these areas are stable for the siting of structures, and that proposed subsurface waste disposal systems will comply with the Maine State Plumbing Code.

E. In cases where the requirement of a high-intensity soils map is waived, deductions for unsuitable soils shall be determined in the following manner:

(1) One hundred percent of land areas with a water table within six inches of the surface for three or more months a year shall be deducted. In making this determination, the Planning Board shall consult medium-intensity soils maps, perform site visits, consult experts and review other available information.

(2) If the applicant wishes to contest the Planning Board's determination of unsuitable soils on the site using the above method, the applicant may submit for the Board's consideration a high-intensity map prepared by a Maine certified soil scientist in accordance with the National Cooperative Soil Survey Classification.

[Added 3-9-1991 by Art. 150; Amended 6-12-2013 by Art. 28; 6-14-2017 by Art. 27; 1-18-2022 by Art. 5]

Doc#: 16513 Bk:42215 Pg: 18

CERTIFICATE OF ZONING VARIANCE APPROVAL

MAP 42 LOT 19

I, UEL GARDNER, THE DULY APPOINTED, QUALIFIED AND ACTING CHAIRMAN OF THE ZONING BOARD OF APPEALS FOR THE **TOWN OF CASCO**, CUMBERLAND COUNTY AND STATE OF MAINE, HEREBY CERTIFY THAT ON THE 13TH DAY OF APRIL, 2026, THE FOLLOWING VARIANCE WAS GRANTED PURSUANT TO THE PROVSIONS OF 30 M.R.S.A. §4353 AND THE TOWN OF CASCO'S ZONING ORDINANCE.

1. PROPERTY OWNER (NAME AND ADDRESS):

   960 MEADOW ROAD HOLDINGS, LLC
   960 MEADOW RD CASCO, ME 04015

2. PROPERTY:
   CUMBERLAND COUNTY REGISTRY BOOK 34762 PAGE 0137. (LAST RECORDED DEED IN THE CHAIN OF TITLE)

3. VARIANCE AND CONDITIONS OF VARIANCE:

   THE BOARD VOTED TO APPROVE THE VARIANCE REQUEST SUBMITTED BY 960 MEADOW ROAD HOLDINGS, LLC. 3-0 APPROVED

   ENCOURAGE THE PLANNING BOARD TO FURTHER SCRUTINIZE THE WASTEWATER AND STORMWATER RUNOFF ISSUES SO THAT IT DOES NOT NEGATIVELY IMPACT THE ABUTTERS

NOTE: Variance approval must commence within 12 months of date of approval and the exterior of the project completed within 18 months.

MAP 42 LOT 19

IN WITNESS WHEREOF HAVE HERETO SET MY HAND AND SEAL THIS 21st DAY OF April, 2026.

UEL GARDNER, ACTING CHAIR
BOARD OF APPEALS
TOWN OF CASCO

STATE OF MAINE, CUMBERLAND COUNTY: SS.

ON THIS 21st DAY OF April, 2026 THEN PERSONALLY APPEARED THE ABOVE NAMED Uel Gardner, TO BE HIS/HER FREE ACT AND DEED IN HIS/HER CAPACITY AS CHAIRMAN OF THE CASCO ZONING BOARD OF APPEALS.

MELISSA POREE NOTARY PUBLIC Comm. Exp. April 28, 2028 STATE OF MAINE

Melissa Poree

Pursuant to 30 M.R.S.A. §4353, this certificate must be recorded by the property owner in the Registry of Deeds within 90 days of the final approval of the variance, otherwise the variance will be invalid.

Certificate of Zoning Variance Approval
and
Notice of Decision from Casco Appeals Board

Date of Board of Appeals Meeting/Decision:

April 13, 2026

Date of Decision Issuance:

April 13, 2026

Owner:

960 Meadow Road Holdings LLC, represented by Mr. Craig Alaimo

Applicant Mailing Address:

DM ROMA Consulting Engineers
P.O. Box 1116
Windham, ME 04062

Parcel Identification:

960 Meadow Road

Tax Map 0042, **Lot** 0019

Deed Reference: CCRD Book 34,762 / Page 0137

Parcel Zoning Information:

Village and Shoreland (Stream Protection) Districts

Request:

Mr. Craig Alaimo, representing 960 Meadow Road Holdings LLC, is requesting a variance for the expansion of the existing Country Village Assisted Living facility located at 960 Meadow Road in Casco on Tax Map 0042, lot 0019

Finding:

The Board encouraged the Planning Board to scrutinize the stormwater and subsurface wastewater disposal system measures associated with the proposed expansion with the objective of not adversely affect abutting properties.

Conclusions:

Based on the information in the submitted application, review criteria and authority provided in Section 215-6.3, subsection (A) (2) (a) (1), and testimony provided at the Casco Appeals Board meeting on April 13, 2026, the Board determined the following:

(a.) That the land in question cannot yield a reasonable return unless a variance is granted.

The Board determined that this standard is met based on the information submitted with the application and testimony provided by the applicant at the April 13, 2026, meeting.

(b.) That the need for a variance is due to the unique circumstances of the property and not to the general conditions in the neighborhood.

In addition to the 200+ feet of road frontage on Meadow Road/State Route 121, the 8.39-acre parcel contains forested areas towards the west. The Board recognizes that the Zoning standard for Net Residential Area (NRA) is a Town standard, not a State requirement. Given these facts together with sufficient land area for the proposed expansion (without NRA deductions), the Board determined this standard is met.

(c.) That the granting of a variance will not alter the essential character of the locality.

There is well documented history that the facility is well administered and serves the community's needs. The plans to expand the facility have been developed to minimize the potential adverse impacts to abutting and neighboring properties. Based on this information and facts, the Board determined this standard is met.

(d.) That the hardship is not the result of action taken by the applicant or a prior owner.

The facility has been located and operating in the village for many decades and was initially established prior to zoning standards. The current owner acquired the property in 2018. The Board determined that this standard is met.

Decision: (3-0) Approved (Gardner, Hancock, Linnell)

The Casco Appeals Board voted to grant the requested variance to 960 Meadow Road Holdings, LLC to allow the requested expansion of the existing facility from 30 to 45 beds.

Notice:

Any party may make an appeal within forty-five (45) days of the vote on the original decision, to Superior Court from any order, relief, or denial in accordance with Maine Rules of Civil Procedure, Article 808.

This time period may be extended by the court upon motion for good cause shown. The hearing before the Superior Court must be without a jury.

Signature & stamp; Notary:

_____ Date 4/21/2026

Uel Gardner, Acting Chairman
Casco Appeals Board

Personally, appeared the above-named Uel Gardner and acknowledged the foregoing instrument to be of his free act and deed.

Melissa Poree Date 04/21/2026

My Commission Expires:

MELISSA POREE NOTARY PUBLIC STATE OF MAINE Comm. Exp. April 26, 2028

State of Maine

Cumberland County ss.

Received
Recorded Register of Deeds
Apr 29,2026 03:30:16P
Cumberland County
Jessica M. Spaulding

SECTION 6

UTILITIES

Section 6 - Utilities

Potable Water – The site is currently utilizing a drilled potable well. The well will be used by the new addition post construction. The water service will be run internally from the existing building. Based on the history of the well and its ability to yield water for the existing facility without running dry, even in drought conditions, we anticipate the new addition will have available water generated by the well. The applicant has been informed to monitor the condition of the existing pump more frequently than its current schedule due to the additional usage for the addition.

Fire Protection Water – The new addition will require the installation of a sprinkler system. The design of this system is currently being prepared and the final design will be provided to the code enforcement department at the time of building permit requests.

Wastewater Disposal – The existing facility is currently served by a subsurface wastewater disposal system located to the rear of the development. Incorporating the additional resident beds and increase in employees, the design flow was approximated to be 3,012 gallons per day.

During the initial design stages of the project, an investigation into the condition of the existing system was performed. The relatively large stone bed system was built in 2006 and has been determined to be in the process of failing due to its age and reduction in infiltration capacity. As part of this project, and taking into account the additional residents and employees, the wastewater disposal field will be reconstructed utilizing a more modern design than the existing. To further reduce the potential for any downstream pollutants, advanced wastewater treatment units, including nitrate removal, will be incorporated into the design, above and beyond what is in place now. We have been working with Main-Land Development Consultants and their Senior Environmental Scientist and Engineer on the updated design, necessary studies and field investigations. Since the wastewater design flow exceeds 2,000 gallons per day, the design of the system was classified as an Engineered Wastewater Disposal System. A system of this size requires the approval of not only the local code enforcement officer, but with the State of Maine Department of Health and Human Services. The application was submitted to the state on March 18, 2026 and received state approval on April 14, 2026. The design plan of the wastewater disposal system has been incorporated into the project plan set and a copy of the state Engineering Wastewater Disposal System approval has been included in Section 7 of the submission for reference.

Electrical and Communication Services – The proposed building expansion will utilize an existing overhead utility service connected to the existing building. We anticipate the service from the existing utility pole will need to be upgraded, but the final determination will be provided by Central Maine Power Company prior to construction.

SECTION 7

WASTEWATER DISPOSAL SYSTEM APPROVAL

Janet T. Mills
Governor

Sara Gagné-Holmes
Commissioner

Maine Department of Health and Human Services
Maine Center for Disease Control and Prevention
11 State House Station
286 Water Street
Augusta, Maine 04333-0011
Tel; (207) 287-8016; Fax (207) 287-2887
TTY: Dial 711 (Maine Relay)

April 14, 2026

Country Village Assisted Living
960 Meadow Road
Casco, ME 04015
Attention: Craig Alaimo

Subject: Approval, Engineered SWW system design, Country Village Assisted Living facility, 960 Meadow Road, Casco.

Dear Mr. Alaimo:

The Division of Environmental and Community Health has completed a review of a design for an engineered subsurface wastewater disposal system design, to serve this expanding assisted living facility. The HHE-200 Form dated March 20, 2026, was prepared by Scott Dixon, S.E. The system was designed by Main-Land Development Consultants, Inc., with plans signed and stamped by Scott Dixon, P.E.

Hereinafter, the term "design engineer" shall refer collectively to Main-Land Development Consultants, Inc., its staff, and its representatives unless otherwise specified; and the term "owner" shall refer collectively to Country Village Assisted Living facility, its staff, and its representatives unless otherwise specified.

Design Flow

The design flow is 3,012 gallons per day (gpd), based upon Table 5C of the Maine State Plumbing Code, Subsurface Wastewater Disposal Rules (Rules). The design flow of 3,012 gpd is approved with the notation that the suitability of the design flow is the responsibility of the design engineer.

Treatment Tank(s)

The design includes new 2,000-gallon and 1,000-gallon septic tanks and a new 1,500-gallon grease interceptor, two FujiClean CEN21 advanced treatment units, and a new duplex alternating pump station.

Disposal Areas

The proposed disposal field is comprised of four 16' x 48' beds of 24 concrete chambers (96 chambers total). The total treatment area for the four beds is 6,144 square feet. A 40% reduction in the leachfield area is achieved with the advanced treatment units.

Soils

The soils have been identified as 3 C per the Rules by Scott Dixon, S.E.

Mounding Analysis

The proposed system has been designed such that the calculated groundwater mounding will not result in a compromise of the separation specified in Table 5F of the Rules, according to the report dated March

13, 2026, by Scott Dixon, L.G.

Site Transmission Analysis

The proposed system design demonstrates that the native soil and/or fill material will have sufficient capacity to prevent wastewater from surfacing downgradient of the disposal field, according to the report dated March 13, 2026, by Scott Dixon, L.G.

Well Setback

The public well serving the facility is located 270 feet from the proposed disposal fields and is a subject of the variances approved on the HHE-204 form that is attached to this letter. The applicant shall verify that the Maine Drinking Water Program's regional inspector that the well is in good standing with the Maine Drinking Water Program. The designed disposal field is also just outside the source water protection area of the well serving the Casco Community Center (PWS ME 0092707).

Interagency Review

This project was reviewed by The Maine Department of Environmental Protection (MDEP) pursuant to the Site Memorandum of Understanding between DHHS and DEP, dated in May 2023. Review of the proposed on-site engineered subsurface wastewater disposal system included: (1) the geology of the project area and vicinity, (2) effects of the project on groundwater and surface water quality, and (3) public and private uses of groundwater and surface water resources in the project area and vicinity. The review found no reason to believe that normal operation of the proposed engineered subsurface wastewater disposal system will result in unreasonable adverse impact on the natural environment or other uses of groundwater and surface water, and provided that the system is properly constructed and maintained.

The DEP Geologist made specific recommendations concerning the laboratory testing of the FujiClean units which are incorporated in Finding #13.

Miscellaneous

The design requires first-time criteria variances in order to comply with the Rules.

The following variances are approved as part of this approval of the engineered system:

- A reduction in setback between the leachfield and the onsite public water supply well from 300 feet down to 270 feet.
- A reduction in setback between the leachfield and the major water course from 300 feet down to 250 feet.
- A reduction in setback between the leachfield and the property line from 20 feet down to 9 feet.
- A reduction in setback between a septic tank and the onsite public water supply well from 150 feet down to 75 feet. See finding #5.

The design engineer and the Division met and discussed the proposal on March 3, 2026, pursuant to Section 11.2.a of the Rules.

Findings

The system meets the Rules, unless otherwise noted. Therefore, the design is approved with the following conditions and comments:

1. The owner must retain the design engineer to oversee construction. The constructed system may not be used unless all pertinent requirements of the Rules have been met.

2. Construction must not commence until the owner has obtained the necessary plumbing permit from the Local Plumbing Inspector (LPI).

3. The design engineer must provide sufficient supervision to assure that the system is constructed as designed and in accordance with the code and other regulations. Attention must be given to site preparation, fill selection and placement, installation of pipes, mechanical and electrical systems. Access risers for all tanks must comply with Section 7(F) of the Rules.

4. The design engineer must provide the owner and this office with a brief report on the construction including any unexpected conditions encountered and any changes made to the approved drawings. The LPI must not issue the Certificate of Approval until the LPI has received the aforementioned report from the design engineer.

5. The design engineer must test all systems prior to acceptance by the owner. The testing must determine whether the components were correctly installed and whether they function as designed. This includes confirmation that flow dividing devices or configurations function as intended. All tanks must be tested according to Ch. 241, Section 7(H)(8).

6. The design engineer, with the concurrence of the LPI must determine when the site conditions are suitable for construction.

7. Construction must cease whenever the design engineer determines that the site conditions, or workmanship, or materials are unacceptable.

8. The owner and design engineer must inform the LPI of the proposed construction schedule and must also inform the LPI of the progress of construction. They must cooperate fully with the LPI in scheduling any inspections and providing any equipment necessary for the inspection.

9. The design engineer must provide the owner with an Operations and Maintenance Manual containing written recommendations for the operation and maintenance of the system including inspection and pumping schedules and record keeping procedures.

10. The owner must operate the system within the requirements of the Rules and the limitations of this design.

11. The owner must inform the LPI and the design engineer of any operational problem and/or malfunction.

12. The Local Plumbing Inspector must inspect the engineered disposal system in accordance with Section 11 Letter I of the Rules. In addition, the property owner must retain the design engineer to inspect the construction of the system. The inspection must be sufficient for the design engineer to determine that the system was installed as designed.

13. The design relies on the proper operation of two FujiClean CEN-21 advanced treatment units. The two FujiClean Advanced Treatment Units are to be installed and maintained by the appropriate professionals according to the manufacturer's recommendations. Inspections every six months of these units are to include laboratory analysis of the effluent for at least the various nitrogen species, BOD and TSS. As the design is utilizing a 40% reduction of the disposal area size, a wastewater strength of 52 mg/l or less is required (Table 5B). Both the Department Health and Human Services and the Department of

Environmental Protection must be notified within five business days if any effluent quality data fail to meet the treatment goals specified in this application. All records of the sampling and all effluent quality data must be maintained on site and must be provided to the Department of Health and Human Services, the Department of Environmental Protection, and the local LPI on demand. This requirement should be added to the Operations and Maintenance Manual for the System. The Division of Environmental and Community Health reserves the right to increase or decrease the frequency of this sampling. The owners may appeal to the Division for a reduced frequency of sampling after five years of laboratory data is gathered at comparable times of the year. A revised copy of the manual including the effluent sampling, data retention and notification requirements should be sent in PDF form to the Department and used by the maintenance staff.

14. This approval is only for the rules administered by this office, and it does not consider other federal, state or local regulations. The owner is responsible for compliance with any other pertinent regulations.

15. By accepting this approval and the associated plumbing permit, the owner agrees to comply fully with the conditions of approval and the Subsurface Wastewater Disposal Rules.

Based upon this approval of the design, the LPI may issue the permit required for an engineered system.

Because installation and owner maintenance have a significant effect on the working order of onsite sewage disposal systems, including their components, the Division makes no representation or guarantee as to the efficiency and/or operation of the system.

Should you have any questions, please feel free to contact me at (207) 592-2086, or by e-mail at alex.l.pugh@maine.gov.

Sincerely,

Alexander L. Pugh

Alexander L. Pugh
Senior Environmental Hydrogeologist
Division of Environmental and Community Health
Drinking Water Program

Electronic copies to:

John Weisemann, L.P.I.
Scott Dixon, P.E.
John Hopeck, ME DEP
Jeremy Haws, ME DWP

SUBSURFACE WASTEWATER DISPOSAL SYSTEM VARIANCE REQUEST: HHE-204

Maine CDC: Drinking Water Program,
Attn: SSWW Unit
286 Water Street, 3rd Floor
Augusta, ME 04330

This form must accompany an application (HHE-200 Form) for any subsurface wastewater disposal system which requires a variance to provisions of the Subsurface Wastewater Disposal Rules. The Local Plumbing Inspector must not issue a permit for the installation of a subsurface wastewater disposal system requiring a variance from the Department of Health and Human Services until approval has been received from the Department.

THIS FORM MUST BE SUBMITTED WITH THE HHE-200

GENERAL INFORMATION

Town/City/Plantation	Casco, Maine		System's Address	960 Meadow Rd.	
Owner's Name	Craig Alaimo	Phone	603-918-7807	Email	owner@countryvillageal.com
Property Owner's Address	960 Meadow Rd. Casco		State	ME	Zip Code 04015

The subsurface wastewater disposal system design for the subject requires:

☑ First Time System Variance ☐ Replacement System Variance With... ☐ Local Approval ☑ Local & State Approval

SPECIFIC VARIANCE REQUESTED (To be filled in by Site Evaluator) **SEE PAGE THREE**

SITE EVALUATOR

When a property is found to be unsuitable for subsurface wastewater disposal by a licensed Site Evaluator, the Evaluator shall so inform the property owner. If the property owner, after exploring all other alternatives, wishes to request a variance to the Rules, and the Evaluator in his professional opinion feels the variance request is justified and the site limitations can be overcome, he/she shall document the soil and site conditions on the Application. The Evaluator shall list the specific variances necessary plus describe below the proposed system design and function.

The Evaluator shall further describe how the specific site limitations are to be overcome and provide any other support documentation as required prior to consideration by the Department. Attach a separate sheet if necessary.

(1) Reduction in setback, leachfield to public water supply well - 300' down to 270'
(2) Reduction in setback, leachfield to major stream - 300' down to 250'
(3) Reduction in setback, leachfield to property line - 20' down to 9'
(4) Reduction in setback, Septic tank to well - 150' down to 75'

Reductions in setback are to be achieved through the use of 2 FujiClean CEN21 units, making runoff quality effluent entering the proposed new concrete chamber leachfield system.

I, Scott Dixon (Printed Name), S.E., certify that a variance to the Rules is necessary since a system cannot be installed which will completely satisfy all the Rules requirements. In my judgment, the proposed system design on the attached Application is the best alternative available; enhances the potential of this site for subsurface wastewater disposal; and that the system should function properly.

Signature of Site Evaluator — Date: 3/20/26

PROPERTY OWNER

I, Craig Alaimo (Printed Name), am the ☑ owner / ☐ agent for the owner of the subject property. I understand that the installation on the Application is not in total compliance with the Rules. Should the proposed system malfunction, I release all concerned provided they have performed their duties in a reasonable and proper manner, and I will promptly notify the Local Plumbing Inspector and make any corrections required by the Rules. By signing the variance request form, I acknowledge permission for representatives of the Department to enter onto the property to perform such duties as may be necessary to evaluate the variance request.

Signature of ☑ Owner or ☐ Agent for Owner — Date: 3-20-26

APPROVAL AT LOCAL LEVEL (ONLY)

The Local Plumbing Inspector shall review all variance requests prior to rendering a decision.

I, _____ (Printed Name), the undersigned, have visited the above property and find that the variance request submitted by the applicant does not conform with certain provisions of the subsurface wastewater disposal rules. The variance request submitted by the applicant is the best alternative for a subsurface wastewater disposal system on this property.

The proposed system (☐ does / ☐ does not) conflict with any provisions controlling subsurface wastewater disposal in the shoreland zone. Therefore, I (☐ do / ☐ do not) approve the request variance.

I (☐ will / ☐ will not) issue a permit for the system's installation as proposed by the application.

Signature of LPI	Date

APPROVAL REQUIRING REFERRAL TO THE DEPARTMENT

FOR LPI USE ONLY:

The local plumbing inspector shall review all variance requests prior to forwarding to the Division of Environmental Health

I, _____ (Printed Name), the undersigned, have visited the above property and find that the variance request submitted by the applicant does not conform with certain provisions of the subsurface wastewater disposal rules. The variance request submitted by the applicant is the best alternative for a subsurface wastewater disposal system on this property.

The proposed system (☐ does / ☐ does not) conflict with any provisions controlling subsurface wastewater disposal in the shoreland zone. Therefore, I (☐ do / ☐ do not) approve the request variance.

I (☐ will / ☐ will not) issue a permit for the system's installation as proposed by the application.

Signature of LPI	Date

FOR USE BY THE DEPARTMENT ONLY:

The Department has reviewed the variance(s) and ☑ does / ☐ does not give its approval. Any additional requirements, recommendations, or reasons for the Variance denial are given in the attached letter.

Alexandra L. Pugh	April 14, 2026
Signature of Department	Date

NOTES:

1. Variances for soil conditions may be approved at the local level if the total point assessment is at least the minimum allowed. (See Section 14(E)) in the Subsurface Wastewater Disposal Rules for LPI Authority.)
2. Variances for other than soil conditions or soil conditions beyond the limit of the LPI's authority are to be submitted to the Department for review. (See Section 14(F)) The LPI's signature is required on these variance requests prior to sending them to the Department

SOIL, SITE, AND ENGINEERING FACTORS FOR FIRST TIME SYSTEM VARIANCE ASSESSMENT WITH LIMITING SOIL DRAINAGE CONDITIONS (SEE Tables 14A- 14K).

	CHARACTERISTIC	POINT ASSESSMENT
Soil Profile		
Depth to Ground Water		
Terrain		
Size of Property		
Waterbody Setback		
Water Supply		
Type of Development		
Disposable Area Adjustment		
Vertical Separation Distance		
Additional Treatment		
	TOTAL POINT ASSESSMENT:	

Soils (From HHE-200)	Soil Profile	3	Soil Condition	C	Limiting Factors	Ground Water Table	18"	Restrictive Layer		Bedrock	

Site Features vs. disposal system components of various sizes	Disposal Fields (total design flow)			Septic Tanks and Holding Tanks (total design flow)			Disposal Fields	Septic Tanks
	Less than 1,000 gpd	1,000 to 1,999 gpd	Over 2,000 gpd	Less than 1,000 gpd	1,000 to 1,999 gpd	Over 2,000 gpd	To:	To:
Wells with water usage of under 2,000 or more gpd or public water supply wells	300 ft	300 ft	300 ft	150 ft	150 ft	150 ft	270'	75'*
Potable Supply Well	100 down to 60 ft	200 down to 100 ft	300 down to 150 ft	50 down to 25 ft [a]	100 down to 50 ft [a]	100 down to 50 ft		
Water supply line	10 ft	20 ft	25 ft	10 ft	10 ft	10 ft		
Water course, major [c]	100 down to 50 ft	200 down to 120 ft	300 down to 180 ft	100 down to 25 ft [a]	100 down to 50 ft	100 down to 50 ft	250'	
Water course, minor [c]	50 down to 25 ft	100 down to 50 ft	150 down to 75 ft	50 down to 25 ft	50 down to 25 ft	50 down to 25 ft		
Drainage ditches	25 down to 12 ft	50 down to 25 ft	75 down to 35 ft	25 down to 12 ft	25 down to 12 ft	25 down to 12 ft		
Slopes greater than 3:1	10 ft	18 ft	25 ft	N/A	N/A	N/A		
No full basement (e.g. slabs, columns, posts)	15 down to 7 ft	30 down to 15 ft	40 down to 20 ft	8 down to 5 ft	14 down to 7 ft	20 down to 10 ft		
Full basement (below grade foundation, frost wall)	20 down 10 ft	30 down to 15 ft	40 down to 20 ft	8 down to 5 ft	14 down to 7 ft	20 down 10 ft		
Property Lines	10 down to 5 ft [b]	18 down to 9 ft [b]	20 down to 10 ft [b]	10 down to 4 ft [b]	15 down to 7 ft [b]	20 down to 10 ft [b]	9'	
Burial sites or graveyard boundaries, measures from the down toe of the fill extension	25 ft	25 ft	25 ft	25ft	25 ft	25 ft		
Stormwater infiltration systems	100 down to 60 ft	200 down to 120 ft	300 down to 180 ft	100 down to 50 ft	100 down to 50 ft	100 down to 50 ft		
Wet-ponds, retention ponds, and detention basis (excavated below grade); Soil filters under-drained swales, under-drained outlets, and similar structures	50 down to 25 ft [d]	100 down to 50 ft [d]	150 down 75 ft [d]	50 down to 25 ft [d]	50 down to 25 ft [d]	50 down to 25 ft [d]		
Stormwater detention basins (basin bottom at, or above, pre-development grade)	25 down to 12 ft	50 down to 25 ft [d]	75 down to 35 ft [d]	25 down to 12 ft	25 down to 12 ft	25 down to 12 ft		

Additional Notes:

Please refer to note (e) below for use of table 9A in lieu of table 8B

* Existing septic tanks onsite are as close as 50', so this new tank setback of 75' represents an improvement on existing tank setback conditions

Notes:

[a] This distance may be reduced to 25 feet, if the septic or holding tank is tested in the LPI's presence and shown to be watertight pursuant to water tightness standards found in Section 7(H)(8) or of monolithic construction.
[b] Additional setbacks may be needed to prevent fill material extensions from encroaching onto abutting property.
[c] All ground disturbance or clearing of woody vegetation necessary for the installation of a subsurface wastewater disposal system that occurs within 100 feet of the normal high-water mark of a major or minor water body/course must comply with this rule pertaining to work adjacent to or within wetlands and water bodies (for more details, see Section 13).
[d] The reduced setback distance may be further reduced down to 12 feet if the stormwater structure has an impervious liner and the fill extensions do not encroach onto the stormwater structure.
[e] The above table comes from Table 9A for **replacement systems. First-time systems may use this form but should refer to Section 8.**

SECTION 8

STORMWATER MANAGEMENT REPORT

DM ROMA
CONSULTING ENGINEERS

STORMWATER MANAGEMENT REPORT

COUNTRY VILLAGE ASSISTED LIVING FACILITY EXPANSION
CASCO, MAINE

A. Narrative

960 Meadow Road Holdings, LLC, the applicant and landowner, is proposing to expand an existing assisted living facility on Meadow Road in Casco, Maine. The approximately 8.39-acre parcel is better identified as Block 9 Lot 1 on the Town of Casco Assessor's Map 211.

The applicant is proposing a 5,115 square foot expansion to accommodate additional resident beds and amenities. The development will also include improving the existing substandard parking lot for the building expansion. The building expansion will be served by the existing private well, a replacement subsurface wastewater disposal field.

B. Existing Conditions

The project site consists of the existing facility building, paved parking and driveway and landscaping. The property contains approximately 18,550 square feet (0.42 acres) of impervious surface and approximately 58,400 square feet (1.34 acres) of lawn and landscaping for a total existing developed area of approximately 76,950 square feet (1.77 acres). This is a small portion of the overall lot, which is primarily comprised of undeveloped woodland.

The area of the facility expansion is relatively flat (1% to 5%) with steeper areas to the west exceeding 3H:1V slope. The soils on the property were determined utilizing the Medium Intensity Soils Map for Cumberland County, Maine published by the Natural Resource Conservation Service. The soils boundaries with associated Hydrologic Soils Groups (HSG) designations are shown on the watershed maps and a Soils Map has been included as Attachment 1 of this report.

In general, the developed portion of the property drains from east to west. The flow that leaves the property is collected in an unnamed stream that continues northerly and crosses Fountain Hill Road. The stream continues beneath Edes Falls Road, eventually combining with Eastman Brook as Mill Brook. Mill Brook continues southerly and enters Crooked River. The river continues southerly through the Songo River to Sebago Lake. The streams are not identified by the Maine Department of Environmental Protection (MDEP) as Urban Impaired Streams, but Sebago Lake is considered a lake most at risk from new development as identified in Chapter 502.

C. Alterations to Land Cover

Based on the proposed redevelopment of the property, approximately 16,195 square feet (0.37 acre) of the existing impervious areas will remain or be maintained as part of the construction and approximately 2,355 square feet (0.05 acre) will be removed. In addition, there will be approximately 17,425 square feet (0.40 acre) of new impervious surface.

Since the fill slope on the downhill side of the new subsurface wastewater disposal field will be maintained as meadow, there will only be an increase in landscaped/lawn area of 2,040 square feet (0.05 acres) when compared to the existing land development. As a result of the project, the site will contain a total of 33,620 square feet (0.77 acres) of impervious surfaces, approximately 43,340 square feet (0.99 acres) of lawn and landscaping for a total site developed area of approximately 78,990 square feet (1.81 acres).

There project will generate approximately 74,940 square feet of land disturbance.

Since the existing impervious and developed area pre-dated 2005 and the revisions to Chapter 500, this area is considered "existing impervious area" and not included in determining thresholds for MDEP stormwater permitting. Since the project will create approximately 17,425 square feet of impervious surface and approximately 2,040 square feet of increased developed area, the project is not required to obtain to an individual Stormwater Permit. A Stormwater Permit by Rule will be required prior to construction for land disturbance over one acre.

The project is subject to the Town of Casco Site Plan review process. Since the property contains a perennial stream, the project is subject to the Performance Standards in Section 215-5.31 Stormwater quality and phosphorous control related to stormwater treatment. In addition, as identified in Section 215-7.4 Submission requirements, the proposed development is required to submit a stormwater drainage plan which includes standards for quantity control of runoff leaving the property. These standards will be addressed in this report.

D. Methodology and Modeling Assumptions

The proposed stormwater management system has been designed utilizing Best Management Practices to maintain existing drainage patterns while providing stormwater quality improvement measures. The goal of the storm drainage system design is to remove potential stormwater pollutants from runoff generated by the development while providing attenuation of the peak rates of runoff leaving the site. The method utilized to predict the surface water runoff rates in this analysis is a computer program entitled HydroCAD, which is based on the same methods that were originally developed by the U.S. Department of Agriculture (USDA), Natural Resources Conservation Service, and utilized in the TR-20 modeling program. Peak rates of runoff are forecasted based upon land use, hydrologic soil conditions, vegetative cover, contributing watershed area, time of concentration, rainfall data, storage volumes of detention basins and the hydraulic capacity of structures. The computer model predicts the amount of runoff as a function of time, with the ability to include the attenuation effect due to dams, lakes, large wetlands, floodplains, and constructed stormwater management basins. The input data for rainfalls with statistical recurrence frequencies of 10 years and 25 years was obtained from Appendix H of the MDEP, Chapter 500 Stormwater Management, last revised in 2015. The National Weather Service developed four synthetic storm types to simulate rainfall patterns around the country. For analysis in Cumberland County, Maine, the type III rainfall pattern with a 24-hour duration is appropriate.

E. Erosion and Sedimentation Control

The project is required by the Town and MDEP to provide permanent and temporary Erosion Control Best Management Practices. These methods are outlined in detail in the plan set.

F. Section 215-5.31 Stormwater quality and phosphorous control

This section of the Town of Casco zoning ordinance requires that any project site subject to Site Plan review and that contains a perennial stream is required to provide a stormwater plan addressing runoff treatment. To demonstrate adherence to this standard, we are proposing to utilize the standards included in MDEP Chapter 500 Stormwater Management. As the project is classified as a redevelopment project under the General Standards, the site's treatment requirement was determined utilizing the pollutant impact ranking system outlined in Chapter 500, Section 4.C.(2).(d). Table 2.

In the existing condition, the site consists of primarily vehicular driveways and parking utilized for parked vehicles for an extend period of time (over 2 hours). Based on Chapter 500, these land features are classified under Pollutant Rank 4. The pitched rooftop and remaining sidewalks and lawn areas are classified under Pollutant Rank 2. In the developed condition, the expanded parking will remain as Pollutant Rank 4 and expanded areas of Pollutant Rank 2 consisting of the majority of the building expansion and walkways. A portion of the expanded roof is essentially flat, which has a higher Pollutant Rank of 3. There will also be areas set aside for non-lawn landscaped areas in addition to a proposed stormwater treatment device, classified as Pollutant Rank 1.

When the pollutant ranks are applied to the associated areas, the existing pollutant impact ranking was determined to be 1.69 and the post developed condition pollutant impact ranking was determined to be 1.84, resulting in a "Ranked Impact Change Due to Redevelopment" of 0.15. Since the change is greater than 0 but less than 1, based on Chapter 500, Section 4.C.(2).(d). Table 3, 60% of the developed area is to be treated.

To meet the treatment standard, the stormwater infrastructure will incorporate a grassed underdrained filter basin and roof drip edges installed along the perimeter of the new building expansion. As a result of the proposed stormwater devices, treatment will be provided for 71% of the redeveloped portion of the site's developed area. The Stormwater Redevelopment Map is included in the plan set and the redevelopment calculations are included as Attachment 2 of this report.

Included as Attachment 3 of this report are the sizing calculations for the proposed underdrained filter basin. These calculations include:

- Storage Volume and Basin Floor surface area meeting *Chapter 7.1 Grassed Underdrained Soil Filter BMP* sizing criteria included in Volume III. BMP Technical Design Manual prepared by the MDEP.
- Spillway sizing calculations demonstrating one foot of freeboard to the top of berm during the 25-year storm event assuming failure of the other discharge devices.
- Hydrograph tables demonstrating the outlet controls to release the stormwater from the basin between 24 and 48 hours.
- Sizing calculations for the level spreaders located at the outfall of the discharge pipe from the basins meeting the sizing standards identified in *Section G(4) Level Spreaders* in Maine Erosion and Sediment Control Best Management Practices Manual for Designers and Engineers prepared by the MDEP.

The locations and construction detail of the proposed roof drip edges have been included within the construction details sheets and the sizing calculations to meet *Chapter 7.5 Roof Dripline Filters* sizing criteria included in Volume III. BMP Technical Design Manual prepared by the MDEP have been included as Attachment 4 of this report.

G. Flooding Standard

The project is required to meet the Town of Casco's Site Plan review criteria and standard for Surface water drainage requiring the project to maintain or reduce the peak rate of runoff leaving the property during the 25-year storm frequency. To maintain the existing flow rates, the site design will include a grassed underdrained filter basins integrated into the project's stormwater infrastructure. To demonstrate compliance with the Flooding Standard, two (2) study points were analyzed.

Study Point 1 ("SP1") represents where flow generated by the eastern portion of the site, including portions of Meadow Road, that drain westerly, crossing the southern property boundary. Flow from this study point is then conveyed back onto the property.

Study Point 2 ("SP2") represents flow that is generated by the remaining site development that drains westerly to the western property boundary. Runoff from this study point drains to the stream on the abutting property.

The results of the stormwater model incorporating the stormwater detention best management practices are summarized in Table 1:

Table 1 – Peak Rates of Stormwater Runoff		
Study Point	25-Year (cfs)	
	Pre	Post
SP-1	2.46	2.34
SP-2	14.87	14.07

As illustrated in Table 1, the proposed project's design, including the integration of the proposed BMPs, reduces the peak rates of runoff at all study points during the 25-year storm event.

The watershed maps showing pre-development and post-development drainage patterns are included in the plan set and the computations performed with the HydroCAD software program are included as Attachment 5 of this report.

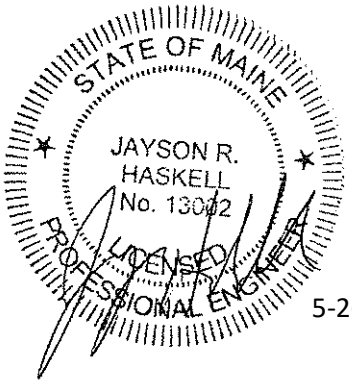
H. Maintenance of common facilities or property

The applicant will be responsible for the maintenance of the stormwater facilities. An Inspection, Maintenance and Housekeeping Plan for the project has been created and has been included as Attachment 6 of this report.

Prepared by:

DM ROMA CONSULTING ENGINEERS

Jayson R. Haskell P.E.
Southern Maine Regional Manager

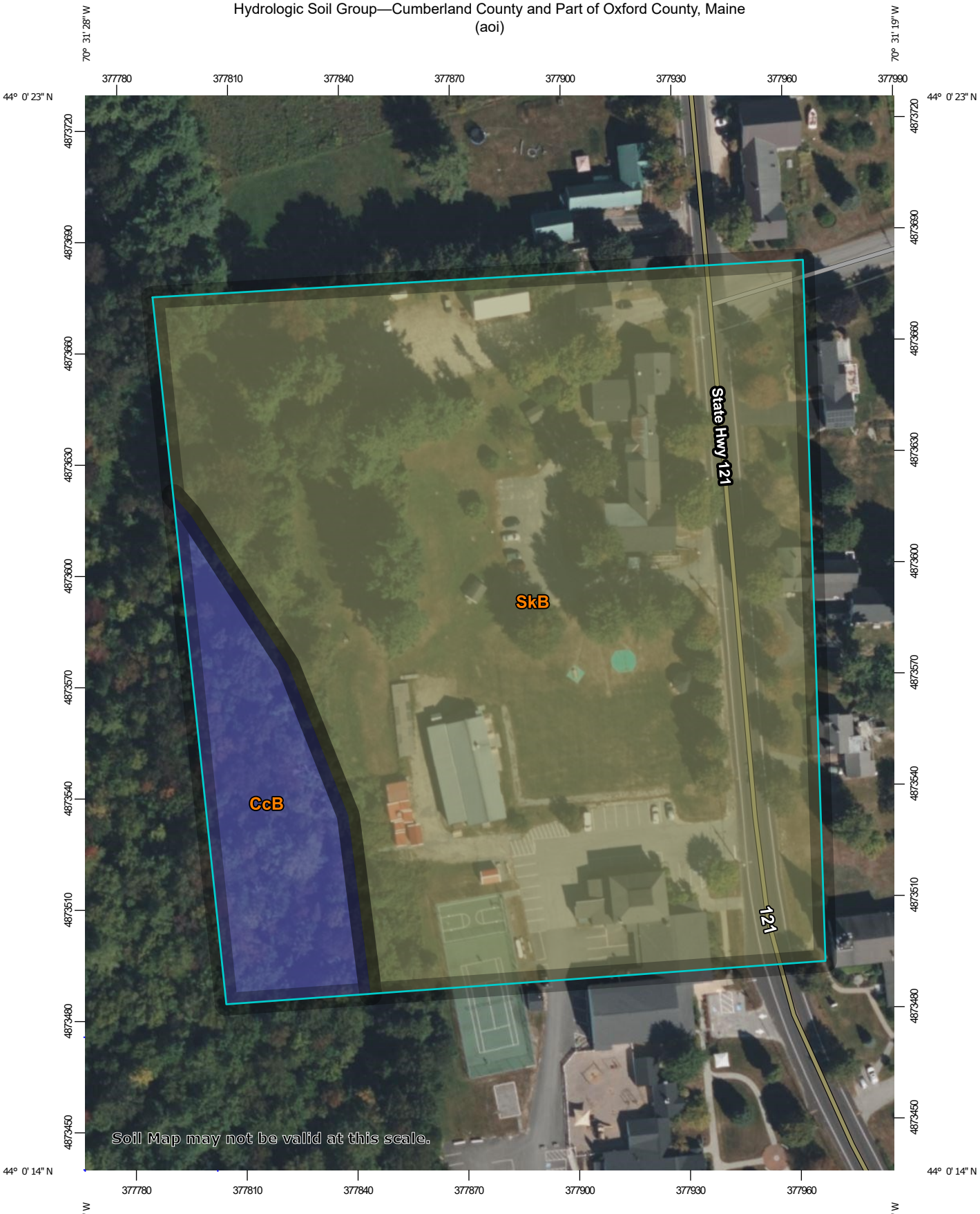


5-26-2026

ATTACHMENT 1

SOILS MAP

Hydrologic Soil Group—Cumberland County and Part of Oxford County, Maine
(aoi)



Map Scale: 1:1,410 if printed on A portrait (8.5" x 11") sheet.

N

Meters
0 20 40 80 120

Feet
0 50 100 200 300

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 Rating Polygons
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Lines
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Points
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Water Features
- Streams and Canals

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

Background
- Aerial Photography

MAP INFORMATION

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

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

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

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

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

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

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

Soil Survey Area: Cumberland County and Part of Oxford County, Maine
Survey Area Data: Version 22, Aug 29, 2025

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.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
CcB	Colonel fine sandy loam, 3 to 8 percent slopes	D	1.0	12.0%
SkB	Skerry fine sandy loam, 3 to 8 percent slopes	C/D	7.0	88.0%
Totals for Area of Interest			**8.0**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

ATTACHMENT 2

REDEVELOPMENT STANDARD CALCULATIONS

DM ROMA
CONSULTING ENGINEERS

Country Village Assisted Living Expansion
Calculated by: JRH
Printed 5/22/2026
Job #19063

REDEVELOPMENT STORMWATER TREATMENT CALCULATIONS

Existing Conditions

Land Use	Area (SF)	Area (Ac.)	Pollutant Rank	Existing Impact
High Use Parking Lots and Roads	0	0.00	5	0.00
Other Road and Medium Use Parking Lots	7,360	0.17	4	0.68
Other parking lots & driveways/Flat Roof	0	0.00	3	0.00
Other roof, bikeways, grass, walkways	51,485	1.18	2	2.36
Non-grass landscape/stormwater system	0	0.00	1	0.00
Undeveloped Area	19,560	0.45	0	0.00
Totals	**78,405**	**1.80**		**3.04**

Existing Impact Rating / Redevelopment Area = 1.69

Proposed Conditions

Land Use	Area (SF)		Pollutant Rank	Proposed Impact
High Use Parking Lots and Roads	0	0.00	5	0.00
Other Road and Medium Use Parking Lots	14,215	0.33	4	1.31
Other parking lots & driveways/Flat Roof	850	0.02	3	0.06
Other roof, bikeways, grass, walkways	38,390	0.88	2	1.76
Non-grass landscape/stormwater system	7,855	0.18	1	0.18
Forest/Meadow	17,095	0.39	0	0.00
Totals	**78,405**	**1.80**		**3.31**

Proposed Impact Rating / Redevelopment Area = 1.84

Treatment Requirements

Ranked Impact Change Due to Redevelopment = 0.15
Percentage of Developed Area to be treated (Table 3) = 60%

Total Developed Area = 61,310 sf
(Deduct Forest/Meadow)

Developed Area Treatment

WS-20	845	sf	Roofline Dripedge (Deducted Existing Building from Total WS Area)
WS-21	2,515	sf	Roofline Dripedge
WS-22	2,240	sf	Roofline Dripedge
WS-23	37,710	sf	Underdrained Filter Basin (Deducted Existing Building from Total WS Area)
Total	**43,310**	**sf**	

% Redeveloped Area Treated = 71% > Required

ATTACHMENT 3

UNDERDRAINED FILTER BASIN SIZING CALCULATIONS

DM ROMA
CONSULTING ENGINEERS

Country Village Assisted Living Expansion
Calculated by: JRH
Printed 5/22/2026
Job #19063

Underdrained Filter Basin Sizing Calculations

Filter Basin 1

Tributary Impervious Area=	20,200	sf	(WS-23 Impervious Area)
Tributary Landscaped Area=	21,835	sf	(WS-23 Landscaped Area)

Water Quality Volume (WQV) Calculation

WQV (Required) = 1"xImpervious Area + 0.4"xLandscaped Area

WQV (Required) = 2,411 cf

Stage Storage Volume

Elevation	Area (sf)	Storage (cf)
453	1,705	0
454	2,435	2,070
456	4,615	9,120

Outlet Elevation = 454.50

Storage Volume Provided= 3,424 cf > Required

Filter Bottom Calculation

Filter Area (Required) = 5%xImpervious Area + 2%xLandscaped Area

Filter Area Required = 1,447 sf

Filter Area Provided = 1,705 sf > Required

Level Spreader Sizing

Maine Erosion and Sedimentation Control BMPs - Section G4 Sizing Calculations

Level Spreader Length = 0.25 cfs per foot of level spreader during 10-year storm event

Discharge flow during 10-year storm	2.48	cfs	(See HydroCAD output)
Required Level Spreader Length =	**10**	**ft**	
Proposed Level Spreader Length =	**15**	**ft**	

Summary for Pond FB:

Inflow Area = 42,035 sf, 48.06% Impervious, Inflow Depth = 4.54" for 25-Year event
Inflow = 4.27 cfs @ 12.14 hrs, Volume= 15,910 cf
Outflow = 3.91 cfs @ 12.19 hrs, Volume= 12,486 cf, Atten= 9%, Lag= 3.1 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
Secondary = 3.91 cfs @ 12.19 hrs, Volume= 12,486 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Peak Elev= 454.83' @ 12.19 hrs Surf.Area= 3,339 sf Storage= 4,465 cf

PEAK WS ELEV. = 454.83
TOP OF BERM = 456.00
FREEBOARD = 456.00-454.83
= **1.17' > 1.0' Required**

Plug-Flow detention time= 134.3 min calculated for 12,473 cf (78% of inflow)
Center-of-Mass det. time= 56.6 min (849.6 - 793.0)

Volume	Invert	Avail.Storage	Storage Description
#1	453.00'	9,120 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
453.00	1,705	0	0
454.00	2,435	2,070	2,070
456.00	4,615	7,050	9,120

Device	Routing	Invert	Outlet Devices
#1	Primary	450.00'	**1.0" Vert. 1" Orifice in Cap X 0.00** C= 0.600
#2	Device 1	450.83'	**4.0" Round Culvert** L= 32.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 450.83' / 450.00' S= 0.0259 '/' Cc= 0.900 n= 0.013, Flow Area= 0.09 sf
#3	Device 2	453.00'	**2.410 in/hr Exfiltration over Surface area**
#4	Secondary	454.50'	**8.0' long x 11.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.55 2.60 2.70 2.67 2.67 2.67 2.66 2.64

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=453.00' TW=450.00' (Dynamic Tailwater)
↑—**1=1" Orifice in Cap** (Controls 0.00 cfs)
↑—**2=Culvert** (Passes 0.00 cfs of 0.46 cfs potential flow)
↑—**3=Exfiltration** (Passes 0.00 cfs of 0.10 cfs potential flow)

Secondary OutFlow Max=3.86 cfs @ 12.19 hrs HW=454.83' TW=450.36' (Dynamic Tailwater)
↑—**4=Broad-Crested Rectangular Weir** (Weir Controls 3.86 cfs @ 1.48 fps)

Drain Down Calculation

19063-POST
Prepared by DM Roma Consulting Engineers
HydroCAD® 10.00-26 s/n 09237 © 2020 HydroCAD Software Solutions LLC

Type III 24-hr WQ Storm Rainfall=2.70"
Printed 5/22/2026

Rain event to fill to 18" (Channel Protection Volume elevation)

Hydrograph for Pond FB:

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)
0.00	0.00	0	453.00	0.00	0.00	0.00
1.00	0.00	0	453.00	0.00	0.00	0.00
2.00	0.00	0	453.00	0.00	0.00	0.00
3.00	0.00	0	453.00	0.00	0.00	0.00
4.00	0.00	0	453.00	0.00	0.00	0.00
5.00	0.00	0	453.00	0.00	0.00	0.00
6.00	0.00	0	453.00	0.00	0.00	0.00
7.00	0.00	0	453.00	0.00	0.00	0.00
8.00	0.01	0	453.00	0.01	0.01	0.00
9.00	0.02	0	453.00	0.02	0.02	0.00
10.00	0.04	0	453.00	0.04	0.04	0.00
11.00	0.08	42	453.02	0.05	0.05	0.00
12.00	**0.79**	688	453.37	0.05	0.05	0.00
13.00	**0.19**	2,921	454.33	0.05	0.05	0.00
14.00	0.12	3,245	454.44	0.06	0.06	0.00
15.00	0.09	**3,410**	**454.50**	**0.06**	**0.06**	**0.00**
16.00	0.06	**3,446**	**454.51**	**0.07**	**0.06**	**0.01**
17.00	0.05	3,426	454.50	0.06	0.06	0.00
18.00	0.04	3,385	454.49	0.06	0.06	0.00
19.00	0.03	3,315	454.46	0.06	0.06	0.00
20.00	0.03	3,233	454.44	0.06	0.06	0.00
21.00	0.03	3,140	454.40	0.05	0.05	0.00
22.00	0.03	3,039	454.37	0.05	0.05	0.00
23.00	0.02	2,929	454.33	0.05	0.05	0.00
24.00	0.02	2,812	454.29	0.05	0.05	0.00
25.00	0.00	2,629	454.22	0.05	0.05	0.00
26.00	0.00	2,436	454.15	0.05	0.05	0.00
27.00	0.00	2,246	454.07	0.05	0.05	0.00
28.00	0.00	2,057	453.99	0.05	0.05	0.00
29.00	0.00	1,870	453.92	0.05	0.05	0.00
30.00	0.00	1,685	453.84	0.05	0.05	0.00
31.00	0.00	1,501	453.76	0.05	0.05	0.00
32.00	0.00	1,320	453.68	0.05	0.05	0.00
33.00	0.00	1,141	453.59	0.05	0.05	0.00
34.00	0.00	964	453.51	0.05	0.05	0.00
35.00	0.00	789	453.42	0.05	0.05	0.00
36.00	0.00	616	453.34	0.05	0.05	0.00
37.00	0.00	446	453.25	0.05	0.05	0.00
38.00	0.00	278	453.16	0.05	0.05	0.00
39.00	0.00	112	453.06	0.05	0.05	0.00
40.00	0.00	0	453.00	0.00	0.00	0.00
41.00	0.00	0	453.00	0.00	0.00	0.00
42.00	0.00	0	453.00	0.00	0.00	0.00
43.00	0.00	0	453.00	0.00	0.00	0.00
44.00	0.00	0	453.00	0.00	0.00	0.00
45.00	0.00	0	453.00	0.00	0.00	0.00
46.00	0.00	0	453.00	0.00	0.00	0.00
47.00	0.00	0	453.00	0.00	0.00	0.00
48.00	0.00	0	453.00	0.00	0.00	0.00

POND AT CPV AT 16 HRS
EMPTY AT 40 HRS
DRAWDOWN TIME = 40-16 = 24 HRS

Time span=0.00-48.00 hrs, dt=0.05 hrs, 961 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 20: Runoff Area=1,645 sf 100.00% Impervious Runoff Depth=4.36"
Tc=6.0 min CN=98 Runoff=0.17 cfs 598 cf

Subcatchment 21: Runoff Area=2,515 sf 100.00% Impervious Runoff Depth=4.36"
Tc=6.0 min CN=98 Runoff=0.25 cfs 915 cf

Subcatchment 22: Runoff Area=2,240 sf 100.00% Impervious Runoff Depth=4.36"
Tc=6.0 min CN=98 Runoff=0.23 cfs 815 cf

Subcatchment 23: Runoff Area=42,035 sf 48.06% Impervious Runoff Depth=3.39"
Flow Length=217' Tc=10.0 min CN=89 Runoff=3.24 cfs 11,876 cf

Reach FD: Foundation Drain Avg. Flow Depth=0.38' Max Vel=3.14 fps Inflow=0.64 cfs 2,327 cf
8.0" Round Pipe n=0.013 L=135.0' S=0.0074 '/' Capacity=1.04 cfs Outflow=0.64 cfs 2,327 cf

Reach R10: Riprap Swale Avg. Flow Depth=0.27' Max Vel=3.32 fps Inflow=2.49 cfs 14,206 cf
n=0.069 L=50.0' S=0.2000 '/' Capacity=34.28 cfs Outflow=2.52 cfs 14,206 cf

Pond FB: Peak Elev=454.72' Storage=4,113 cf Inflow=3.24 cfs 11,876 cf
Primary=0.06 cfs 6,539 cf Secondary=2.14 cfs 5,339 cf Outflow=2.20 cfs 11,878 cf

Flow tributary to level spreader in 10-year storm event. Based on sizing calculations provided within the MDEP Erosion Control and Sedimentation Control Best Management Practices Manual, for every 0.25 cubic feet per second of peak runoff generated during the 10-year storm event, requires 1 foot of level spreader.

Required Spreader Length=2.52 cfs/ 0.25 cfs / per foot
Required Spreader Length=10.1 feet
Proposed Spreader Length=15 feet

Summary for Subcatchment 20:

Runoff = 0.17 cfs @ 12.09 hrs, Volume= 598 cf, Depth= 4.36"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=4.60"

	Area (sf)	CN	Description
*	845	98	New Building
*	800	98	Existing Building
	1,645	98	Weighted Average
	1,645		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment 21:

Runoff = 0.25 cfs @ 12.09 hrs, Volume= 915 cf, Depth= 4.36"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=4.60"

	Area (sf)	CN	Description
*	2,515	98	Building
	2,515		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment 22:

Runoff = 0.23 cfs @ 12.09 hrs, Volume= 815 cf, Depth= 4.36"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=4.60"

	Area (sf)	CN	Description
*	2,240	98	Building
	2,240		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment 23:

Runoff = 3.24 cfs @ 12.14 hrs, Volume= 11,876 cf, Depth= 3.39"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=4.60"

	Area (sf)	CN	Description
*	3,990	98	Building
*	16,210	98	Pavement
*	21,835	80	Lawn D
	42,035	89	Weighted Average
	21,835		51.94% Pervious Area
	20,200		48.06% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.8	120	0.0300	0.20		**Sheet Flow, A to B** Grass: Short n= 0.150 P2= 3.10"
0.2	97	0.0200	6.80	34.00	**Trap/Vee/Rect Channel Flow, B to C** Bot.W=2.00' D=1.00' Z= 3.0 '/' Top.W=8.00' n= 0.022 Earth, clean & straight
10.0	217	Total			

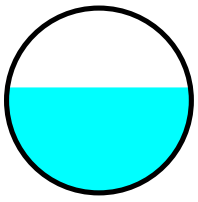
Summary for Reach FD: Foundation Drain

Inflow Area = 6,400 sf,100.00% Impervious, Inflow Depth = 4.36" for 10-Year event
Inflow = 0.64 cfs @ 12.09 hrs, Volume= 2,327 cf
Outflow = 0.64 cfs @ 12.10 hrs, Volume= 2,327 cf, Atten= 0%, Lag= 0.6 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Max. Velocity= 3.14 fps, Min. Travel Time= 0.7 min
Avg. Velocity = 1.07 fps, Avg. Travel Time= 2.1 min

Peak Storage= 28 cf @ 12.10 hrs
Average Depth at Peak Storage= 0.38'
Bank-Full Depth= 0.67' Flow Area= 0.3 sf, Capacity= 1.04 cfs

8.0" Round Pipe
n= 0.013
Length= 135.0' Slope= 0.0074 '/'
Inlet Invert= 452.00', Outlet Invert= 451.00'



Summary for Reach R10: Riprap Swale

Inflow Area = 48,435 sf, 54.92% Impervious, Inflow Depth = 3.52" for 10-Year event
Inflow = 2.49 cfs @ 12.27 hrs, Volume= 14,206 cf
Outflow = 2.52 cfs @ 12.27 hrs, Volume= 14,206 cf, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Max. Velocity= 3.32 fps, Min. Travel Time= 0.3 min
Avg. Velocity = 0.95 fps, Avg. Travel Time= 0.9 min

Peak Storage= 38 cf @ 12.27 hrs
Average Depth at Peak Storage= 0.27'
Bank-Full Depth= 1.00' Flow Area= 5.0 sf, Capacity= 34.28 cfs

2.00' x 1.00' deep channel, n= 0.069 Riprap, 6-inch
Side Slope Z-value= 3.0 '/' Top Width= 8.00'
Length= 50.0' Slope= 0.2000 '/'
Inlet Invert= 450.00', Outlet Invert= 440.00'

‡

Summary for Pond FB:

Inflow Area = 42,035 sf, 48.06% Impervious, Inflow Depth = 3.39" for 10-Year event
Inflow = 3.24 cfs @ 12.14 hrs, Volume= 11,876 cf
Outflow = 2.20 cfs @ 12.27 hrs, Volume= 11,878 cf, Atten= 32%, Lag= 8.0 min
Primary = 0.06 cfs @ 12.21 hrs, Volume= 6,539 cf
Secondary = 2.14 cfs @ 12.27 hrs, Volume= 5,339 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Peak Elev= 454.72' @ 12.27 hrs Surf.Area= 3,222 sf Storage= 4,113 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 366.3 min (1,167.4 - 801.1)

Volume	Invert	Avail.Storage	Storage Description
#1	453.00'	9,120 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
453.00	1,705	0	0
454.00	2,435	2,070	2,070
456.00	4,615	7,050	9,120

Device	Routing	Invert	Outlet Devices
#1	Primary	450.00'	**1.0" Vert. 1" Orifice in Cap** C= 0.600
#2	Device 1	450.83'	**4.0" Round Culvert** L= 32.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 450.83' / 450.00' S= 0.0259 '/' Cc= 0.900 n= 0.013, Flow Area= 0.09 sf
#3	Device 2	453.00'	**2.410 in/hr Exfiltration over Surface area**
#4	Secondary	454.50'	**8.0' long x 11.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.55 2.60 2.70 2.67 2.67 2.67 2.66 2.64

Primary OutFlow Max=0.06 cfs @ 12.21 hrs HW=454.69' TW=450.24' (Dynamic Tailwater)
└─**1=1" Orifice in Cap** (Orifice Controls 0.06 cfs @ 10.16 fps)
└─**2=Culvert** (Passes 0.06 cfs of 0.58 cfs potential flow)
└─**3=Exfiltration** (Passes 0.06 cfs of 0.18 cfs potential flow)

Secondary OutFlow Max=2.07 cfs @ 12.27 hrs HW=454.72' TW=450.26' (Dynamic Tailwater)
└─**4=Broad-Crested Rectangular Weir** (Weir Controls 2.07 cfs @ 1.19 fps)

ATTACHMENT 4

ROOF DRIP EDGE SIZING CALCULATIONS

DM ROMA
CONSULTING ENGINEERS

Country Village Assisted Living Expansion
Calculated by: JRH
Printed 5/22/2026
Job #19063

Drip Edge Sizing Calculations

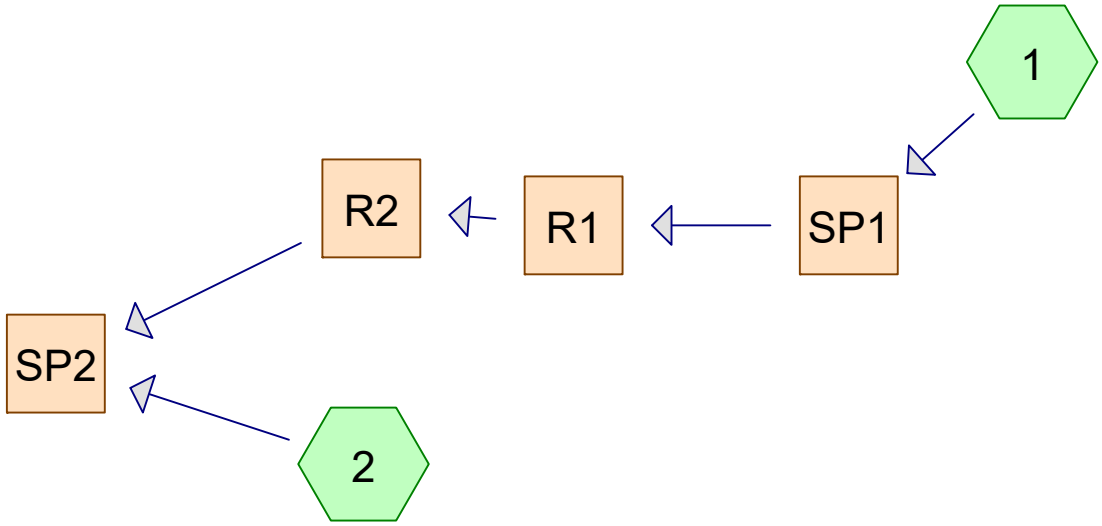
WQV (Required) = 1.0"xImpervious Area + 0.4"xLandscaped Area
Void Ratio of Reservoir Layer 40%
Void Ratio of Filter Layer 30%

SINGLE-FAMILY UNITS:

Watershed	**Tributary Roof Area (sf)**	**WQV (Required)**	**Dripedge Surface Area (sf)**	**Reservoir Layer Depth (ft)**	**Filter Layer Depth (ft)**	**WQV (Provided)**
WS-20 & 21	4,160	346.67	482.00	1.75	0.50	409.70
WS-22	2,240	186.67	220.00	1.75	0.50	187.00

ATTACHMENT 5

STORMWATER MODEL OUTPUT



Subcat Reach Pond Link

Routing Diagram for 19063-PRE
Prepared by DM Roma Consulting Engineers, Printed 5/22/2026

Time span=0.00-48.00 hrs, dt=0.05 hrs, 961 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1: Runoff Area=21,330 sf 55.72% Impervious Runoff Depth=4.65"
Flow Length=319' Tc=6.6 min CN=90 Runoff=2.46 cfs 8,268 cf

Subcatchment 2: Runoff Area=159,555 sf 19.03% Impervious Runoff Depth=4.01"
Flow Length=426' Tc=14.3 min CN=84 Runoff=13.05 cfs 53,314 cf

Reach R1: Avg. Flow Depth=0.06' Max Vel=1.86 fps Inflow=2.46 cfs 8,268 cf
n=0.022 L=112.0' S=0.0402 '/' Capacity=142.93 cfs Outflow=2.44 cfs 8,268 cf

Reach R2: Avg. Flow Depth=0.09' Max Vel=4.81 fps Inflow=2.44 cfs 8,268 cf
n=0.022 L=122.0' S=0.1311 '/' Capacity=170.15 cfs Outflow=2.44 cfs 8,268 cf

Reach SP1: Inflow=2.46 cfs 8,268 cf
Outflow=2.46 cfs 8,268 cf

Reach SP2: Inflow=14.87 cfs 61,581 cf
Outflow=14.87 cfs 61,581 cf

Summary for Subcatchment 1:

Runoff = 2.46 cfs @ 12.10 hrs, Volume= 8,268 cf, Depth= 4.65"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=5.80"

	Area (sf)	CN	Description
*	4,430	98	Building
*	7,455	98	Pavement
*	9,445	80	Lawn D
	21,330	90	Weighted Average
	9,445		44.28% Pervious Area
	11,885		55.72% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.6	49	0.0200	0.15		**Sheet Flow, A to B** Grass: Short n= 0.150 P2= 3.10"
1.0	270	0.0100	4.48	27.98	**Trap/Vee/Rect Channel Flow, B to C** Bot.W=0.00' D=0.50' Z= 50.0 & 0.0 '/' Top.W=25.00' n= 0.013 Asphalt, smooth
6.6	319	Total			

Summary for Subcatchment 2:

Runoff = 13.05 cfs @ 12.20 hrs, Volume= 53,314 cf, Depth= 4.01"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=5.80"

	Area (sf)	CN	Description
*	9,990	98	Building
*	20,370	98	Pavement
*	5,580	96	Gravel
*	103,295	80	Lawn D
*	10,410	77	Woods D
	9,910	78	Meadow, non-grazed, HSG D
	159,555	84	Weighted Average
	129,195		80.97% Pervious Area
	30,360		19.03% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.7	150	0.0300	0.21		**Sheet Flow, A to B** Grass: Short n= 0.150 P2= 3.10"
1.8	154	0.0400	1.40		**Shallow Concentrated Flow, B to C** Short Grass Pasture Kv= 7.0 fps
0.8	122	0.1300	2.52		**Shallow Concentrated Flow, C to D** Short Grass Pasture Kv= 7.0 fps
14.3	426	Total			

Summary for Reach R1:

Inflow Area = 21,330 sf, 55.72% Impervious, Inflow Depth = 4.65" for 25-Year event
Inflow = 2.46 cfs @ 12.10 hrs, Volume= 8,268 cf
Outflow = 2.44 cfs @ 12.11 hrs, Volume= 8,268 cf, Atten= 1%, Lag= 0.7 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Max. Velocity= 1.86 fps, Min. Travel Time= 1.0 min
Avg. Velocity = 0.52 fps, Avg. Travel Time= 3.6 min

Peak Storage= 147 cf @ 12.11 hrs
Average Depth at Peak Storage= 0.06'
Bank-Full Depth= 0.50' Flow Area= 22.5 sf, Capacity= 142.93 cfs

20.00' x 0.50' deep channel, n= 0.022 Earth, clean & straight
Side Slope Z-value= 50.0 '/' Top Width= 70.00'
Length= 112.0' Slope= 0.0402 '/'
Inlet Invert= 458.50', Outlet Invert= 454.00'

‡

Summary for Reach R2:

Inflow Area = 21,330 sf, 55.72% Impervious, Inflow Depth = 4.65" for 25-Year event
Inflow = 2.44 cfs @ 12.11 hrs, Volume= 8,268 cf
Outflow = 2.44 cfs @ 12.11 hrs, Volume= 8,268 cf, Atten= 0%, Lag= 0.3 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Max. Velocity= 4.81 fps, Min. Travel Time= 0.4 min
Avg. Velocity = 1.38 fps, Avg. Travel Time= 1.5 min

Peak Storage= 62 cf @ 12.11 hrs
Average Depth at Peak Storage= 0.09'
Bank-Full Depth= 1.00' Flow Area= 9.0 sf, Capacity= 170.15 cfs

5.00' x 1.00' deep channel, n= 0.022 Earth, clean & straight
Side Slope Z-value= 4.0 '/' Top Width= 13.00'
Length= 122.0' Slope= 0.1311 '/'
Inlet Invert= 454.00', Outlet Invert= 438.00'

‡

Summary for Reach SP1:

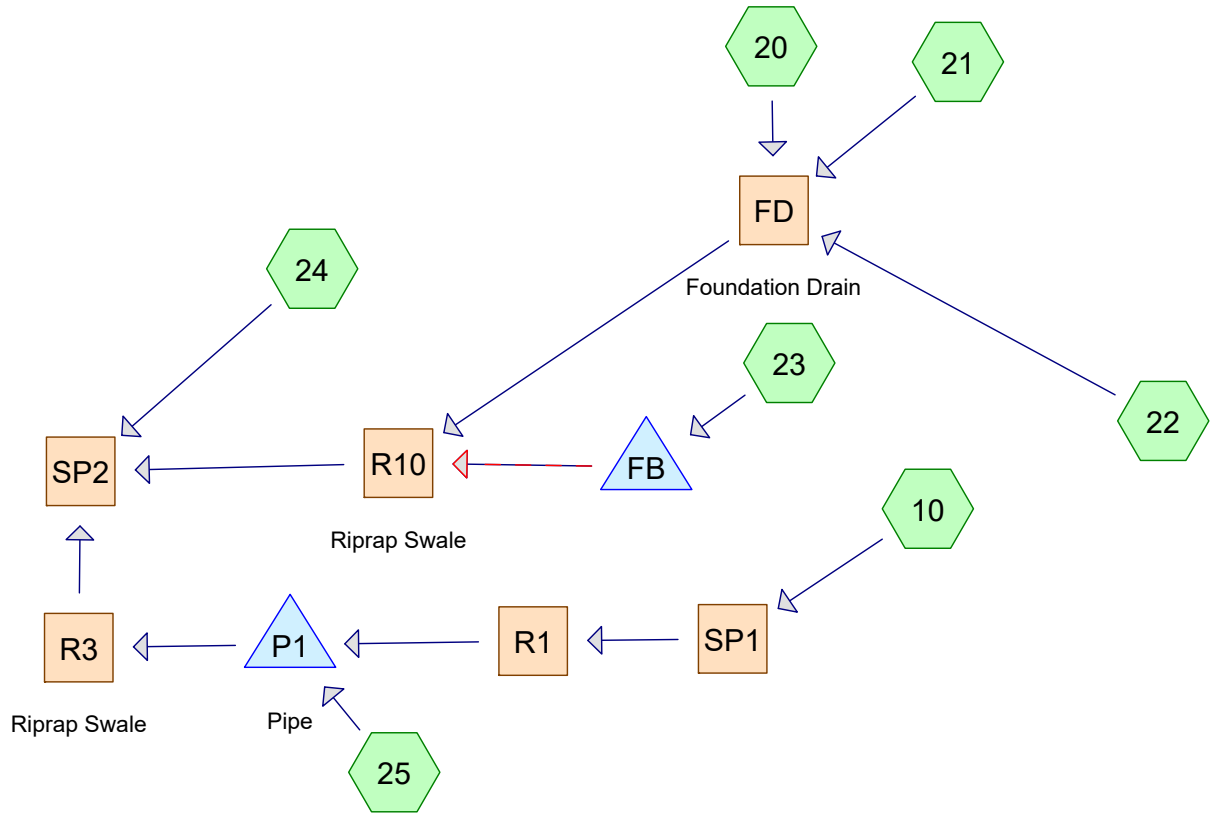
Inflow Area = 21,330 sf, 55.72% Impervious, Inflow Depth = 4.65" for 25-Year event
Inflow = 2.46 cfs @ 12.10 hrs, Volume= 8,268 cf
Outflow = 2.46 cfs @ 12.10 hrs, Volume= 8,268 cf, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Summary for Reach SP2:

Inflow Area = 180,885 sf, 23.35% Impervious, Inflow Depth = 4.09" for 25-Year event
Inflow = 14.87 cfs @ 12.18 hrs, Volume= 61,581 cf
Outflow = 14.87 cfs @ 12.18 hrs, Volume= 61,581 cf, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs



Subcat Reach Pond Link

Routing Diagram for 19063-POST
Prepared by DM Roma Consulting Engineers, Printed 5/22/2026

Time span=0.00-48.00 hrs, dt=0.05 hrs, 961 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 10: Runoff Area=20,260 sf 53.38% Impervious Runoff Depth=4.65"
Flow Length=319' Tc=6.6 min CN=90 Runoff=2.34 cfs 7,853 cf

Subcatchment 20: Runoff Area=1,645 sf 100.00% Impervious Runoff Depth=5.56"
Tc=6.0 min CN=98 Runoff=0.21 cfs 762 cf

Subcatchment 21: Runoff Area=2,515 sf 100.00% Impervious Runoff Depth=5.56"
Tc=6.0 min CN=98 Runoff=0.32 cfs 1,166 cf

Subcatchment 22: Runoff Area=2,240 sf 100.00% Impervious Runoff Depth=5.56"
Tc=6.0 min CN=98 Runoff=0.29 cfs 1,038 cf

Subcatchment 23: Runoff Area=42,035 sf 48.06% Impervious Runoff Depth=4.54"
Flow Length=217' Tc=10.0 min CN=89 Runoff=4.27 cfs 15,910 cf

Subcatchment 24: Runoff Area=92,285 sf 20.58% Impervious Runoff Depth=3.91"
Flow Length=417' Tc=16.6 min CN=83 Runoff=6.98 cfs 30,040 cf

Subcatchment 25: Runoff Area=19,905 sf 4.57% Impervious Runoff Depth=3.70"
Flow Length=318' Slope=0.0300 '/' Tc=14.0 min CN=81 Runoff=1.53 cfs 6,141 cf

Reach FD: Foundation Drain Avg. Flow Depth=0.44' Max Vel=3.30 fps Inflow=0.82 cfs 2,966 cf
8.0" Round Pipe n=0.013 L=135.0' S=0.0074 '/' Capacity=1.04 cfs Outflow=0.81 cfs 2,966 cf

Reach R1: Avg. Flow Depth=0.06' Max Vel=1.83 fps Inflow=2.34 cfs 7,853 cf
n=0.022 L=112.0' S=0.0402 '/' Capacity=142.93 cfs Outflow=2.32 cfs 7,853 cf

Reach R10: Riprap Swale Avg. Flow Depth=0.36' Max Vel=3.91 fps Inflow=4.32 cfs 18,878 cf
n=0.069 L=50.0' S=0.2000 '/' Capacity=34.28 cfs Outflow=4.34 cfs 18,878 cf

Reach R3: Riprap Swale Avg. Flow Depth=0.32' Max Vel=3.02 fps Inflow=2.84 cfs 13,993 cf
n=0.069 L=69.0' S=0.1362 '/' Capacity=28.29 cfs Outflow=2.85 cfs 13,993 cf

Reach SP1: Inflow=2.34 cfs 7,853 cf
Outflow=2.34 cfs 7,853 cf

Reach SP2: Inflow=14.07 cfs 62,912 cf
Outflow=14.07 cfs 62,912 cf

Pond FB: Peak Elev=454.82' Storage=4,436 cf Inflow=4.27 cfs 15,910 cf
Primary=0.06 cfs 6,837 cf Secondary=3.75 cfs 9,075 cf Outflow=3.81 cfs 15,912 cf

Pond P1: Pipe Peak Elev=453.55' Storage=737 cf Inflow=3.57 cfs 13,993 cf
12.0" Round Culvert n=0.013 L=119.0' S=0.0050 '/' Outflow=2.84 cfs 13,993 cf

Summary for Subcatchment 10:

Runoff = 2.34 cfs @ 12.10 hrs, Volume= 7,853 cf, Depth= 4.65"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=5.80"

	Area (sf)	CN	Description
*	4,430	98	Building
*	6,385	98	Pavement
*	9,445	80	Lawn D
	20,260	90	Weighted Average
	9,445		46.62% Pervious Area
	10,815		53.38% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.6	49	0.0200	0.15		**Sheet Flow, A to B** Grass: Short n= 0.150 P2= 3.10"
1.0	270	0.0100	4.48	27.98	**Trap/Vee/Rect Channel Flow, B to C** Bot.W=0.00' D=0.50' Z= 50.0 & 0.0 '/' Top.W=25.00' n= 0.013 Asphalt, smooth
6.6	319	Total			

Summary for Subcatchment 20:

Runoff = 0.21 cfs @ 12.09 hrs, Volume= 762 cf, Depth= 5.56"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=5.80"

	Area (sf)	CN	Description
*	845	98	New Building
*	800	98	Existing Building
	1,645	98	Weighted Average
	1,645		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment 21:

Runoff = 0.32 cfs @ 12.09 hrs, Volume= 1,166 cf, Depth= 5.56"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=5.80"

	Area (sf)	CN	Description
*	2,515	98	Building
	2,515		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment 22:

Runoff = 0.29 cfs @ 12.09 hrs, Volume= 1,038 cf, Depth= 5.56"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=5.80"

	Area (sf)	CN	Description
*	2,240	98	Building
	2,240		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment 23:

Runoff = 4.27 cfs @ 12.14 hrs, Volume= 15,910 cf, Depth= 4.54"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=5.80"

	Area (sf)	CN	Description
*	3,990	98	Building
*	16,210	98	Pavement
*	21,835	80	Lawn D
	42,035	89	Weighted Average
	21,835		51.94% Pervious Area
	20,200		48.06% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.8	120	0.0300	0.20		**Sheet Flow, A to B** Grass: Short n= 0.150 P2= 3.10"
0.2	97	0.0200	6.80	34.00	**Trap/Vee/Rect Channel Flow, B to C** Bot.W=2.00' D=1.00' Z= 3.0 '/' Top.W=8.00' n= 0.022 Earth, clean & straight
10.0	217	Total			

Summary for Subcatchment 24:

Runoff = 6.98 cfs @ 12.22 hrs, Volume= 30,040 cf, Depth= 3.91"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=5.80"

	Area (sf)	CN	Description
*	13,210	98	Pavement
*	5,785	98	Building
*	5,555	96	Gravel
*	49,225	80	Lawn D
	2,065	77	Woods, Good, HSG D
	16,445	71	Meadow, non-grazed, HSG C
	92,285	83	Weighted Average
	73,290		79.42% Pervious Area
	18,995		20.58% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.8	150	0.0200	0.18		**Sheet Flow, A to B** Grass: Short n= 0.150 P2= 3.10"
1.4	101	0.0280	1.17		**Shallow Concentrated Flow, B to C** Short Grass Pasture Kv= 7.0 fps
0.3	48	0.0250	2.55		**Shallow Concentrated Flow, C to D** Unpaved Kv= 16.1 fps
0.8	58	0.0300	1.21		**Shallow Concentrated Flow, D to E** Short Grass Pasture Kv= 7.0 fps
0.3	60	0.2500	3.50		**Shallow Concentrated Flow, E to F** Short Grass Pasture Kv= 7.0 fps
16.6	417	Total			

Summary for Subcatchment 25:

Runoff = 1.53 cfs @ 12.19 hrs, Volume= 6,141 cf, Depth= 3.70"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=5.80"

	Area (sf)	CN	Description
*	18,995	80	Lawn D
*	910	98	Pavement
	19,905	81	Weighted Average
	18,995		95.43% Pervious Area
	910		4.57% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.7	150	0.0300	0.21		**Sheet Flow, A to B** Grass: Short n= 0.150 P2= 3.10"
2.3	168	0.0300	1.21		**Shallow Concentrated Flow, B to C** Short Grass Pasture Kv= 7.0 fps
14.0	318	Total			

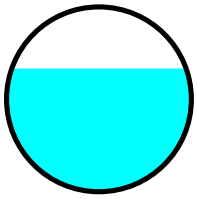
Summary for Reach FD: Foundation Drain

Inflow Area = 6,400 sf,100.00% Impervious, Inflow Depth = 5.56" for 25-Year event
Inflow = 0.82 cfs @ 12.09 hrs, Volume= 2,966 cf
Outflow = 0.81 cfs @ 12.10 hrs, Volume= 2,966 cf, Atten= 0%, Lag= 0.6 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Max. Velocity= 3.30 fps, Min. Travel Time= 0.7 min
Avg. Velocity = 1.15 fps, Avg. Travel Time= 1.9 min

Peak Storage= 33 cf @ 12.10 hrs
Average Depth at Peak Storage= 0.44'
Bank-Full Depth= 0.67' Flow Area= 0.3 sf, Capacity= 1.04 cfs

8.0" Round Pipe
n= 0.013
Length= 135.0' Slope= 0.0074 '/'
Inlet Invert= 452.00', Outlet Invert= 451.00'



Summary for Reach R1:

Inflow Area = 20,260 sf, 53.38% Impervious, Inflow Depth = 4.65" for 25-Year event
Inflow = 2.34 cfs @ 12.10 hrs, Volume= 7,853 cf
Outflow = 2.32 cfs @ 12.11 hrs, Volume= 7,853 cf, Atten= 1%, Lag= 0.7 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Max. Velocity= 1.83 fps, Min. Travel Time= 1.0 min
Avg. Velocity = 0.51 fps, Avg. Travel Time= 3.7 min

Peak Storage= 142 cf @ 12.11 hrs
Average Depth at Peak Storage= 0.06'
Bank-Full Depth= 0.50' Flow Area= 22.5 sf, Capacity= 142.93 cfs

20.00' x 0.50' deep channel, n= 0.022 Earth, clean & straight
Side Slope Z-value= 50.0 '/' Top Width= 70.00'
Length= 112.0' Slope= 0.0402 '/'
Inlet Invert= 458.50', Outlet Invert= 454.00'

‡

Summary for Reach R10: Riprap Swale

Inflow Area = 48,435 sf, 54.92% Impervious, Inflow Depth = 4.68" for 25-Year event
Inflow = 4.32 cfs @ 12.19 hrs, Volume= 18,878 cf
Outflow = 4.34 cfs @ 12.19 hrs, Volume= 18,878 cf, Atten= 0%, Lag= 0.3 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Max. Velocity= 3.91 fps, Min. Travel Time= 0.2 min
Avg. Velocity = 1.00 fps, Avg. Travel Time= 0.8 min

Peak Storage= 55 cf @ 12.19 hrs
Average Depth at Peak Storage= 0.36'
Bank-Full Depth= 1.00' Flow Area= 5.0 sf, Capacity= 34.28 cfs

2.00' x 1.00' deep channel, n= 0.069 Riprap, 6-inch
Side Slope Z-value= 3.0 '/' Top Width= 8.00'
Length= 50.0' Slope= 0.2000 '/'
Inlet Invert= 450.00', Outlet Invert= 440.00'

‡

Summary for Reach R3: Riprap Swale

Inflow Area = 40,165 sf, 29.19% Impervious, Inflow Depth = 4.18" for 25-Year event
Inflow = 2.84 cfs @ 12.23 hrs, Volume= 13,993 cf
Outflow = 2.85 cfs @ 12.24 hrs, Volume= 13,993 cf, Atten= 0%, Lag= 0.7 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Max. Velocity= 3.02 fps, Min. Travel Time= 0.4 min
Avg. Velocity = 0.97 fps, Avg. Travel Time= 1.2 min

Peak Storage= 65 cf @ 12.24 hrs
Average Depth at Peak Storage= 0.32'
Bank-Full Depth= 1.00' Flow Area= 5.0 sf, Capacity= 28.29 cfs

2.00' x 1.00' deep channel, n= 0.069 Riprap, 6-inch
Side Slope Z-value= 3.0 '/' Top Width= 8.00'
Length= 69.0' Slope= 0.1362 '/'
Inlet Invert= 451.40', Outlet Invert= 442.00'

‡

Summary for Reach SP1:

Inflow Area = 20,260 sf, 53.38% Impervious, Inflow Depth = 4.65" for 25-Year event
Inflow = 2.34 cfs @ 12.10 hrs, Volume= 7,853 cf
Outflow = 2.34 cfs @ 12.10 hrs, Volume= 7,853 cf, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Summary for Reach SP2:

Inflow Area = 180,885 sf, 31.69% Impervious, Inflow Depth = 4.17" for 25-Year event
Inflow = 14.07 cfs @ 12.21 hrs, Volume= 62,912 cf
Outflow = 14.07 cfs @ 12.21 hrs, Volume= 62,912 cf, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Summary for Pond FB:

Inflow Area = 42,035 sf, 48.06% Impervious, Inflow Depth = 4.54" for 25-Year event
Inflow = 4.27 cfs @ 12.14 hrs, Volume= 15,910 cf
Outflow = 3.81 cfs @ 12.20 hrs, Volume= 15,912 cf, Atten= 11%, Lag= 3.7 min
Primary = 0.06 cfs @ 12.08 hrs, Volume= 6,837 cf
Secondary = 3.75 cfs @ 12.20 hrs, Volume= 9,075 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Peak Elev= 454.82' @ 12.20 hrs Surf.Area= 3,330 sf Storage= 4,436 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 288.5 min (1,081.5 - 793.0)

Volume	Invert	Avail.Storage	Storage Description
#1	453.00'	9,120 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
453.00	1,705	0	0
454.00	2,435	2,070	2,070
456.00	4,615	7,050	9,120

Device	Routing	Invert	Outlet Devices
#1	Primary	450.00'	**1.0" Vert. 1" Orifice in Cap** C= 0.600
#2	Device 1	450.83'	**4.0" Round Culvert** L= 32.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 450.83' / 450.00' S= 0.0259 '/' Cc= 0.900 n= 0.013, Flow Area= 0.09 sf
#3	Device 2	453.00'	**2.410 in/hr Exfiltration over Surface area**
#4	Secondary	454.50'	**8.0' long x 11.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.55 2.60 2.70 2.67 2.67 2.67 2.66 2.64

Primary OutFlow Max=0.06 cfs @ 12.08 hrs HW=454.70' TW=450.27' (Dynamic Tailwater)
↑**1=1" Orifice in Cap** (Orifice Controls 0.06 cfs @ 10.13 fps)
↑**2=Culvert** (Passes 0.06 cfs of 0.59 cfs potential flow)
↑**3=Exfiltration** (Passes 0.06 cfs of 0.18 cfs potential flow)

Secondary OutFlow Max=3.75 cfs @ 12.20 hrs HW=454.82' TW=450.36' (Dynamic Tailwater)
↑**4=Broad-Crested Rectangular Weir** (Weir Controls 3.75 cfs @ 1.46 fps)

Summary for Pond P1: Pipe

Inflow Area = 40,165 sf, 29.19% Impervious, Inflow Depth = 4.18" for 25-Year event
Inflow = 3.57 cfs @ 12.13 hrs, Volume= 13,993 cf
Outflow = 2.84 cfs @ 12.23 hrs, Volume= 13,993 cf, Atten= 20%, Lag= 6.2 min
Primary = 2.84 cfs @ 12.23 hrs, Volume= 13,993 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Peak Elev= 453.55' @ 12.23 hrs Surf.Area= 933 sf Storage= 737 cf

Plug-Flow detention time= 3.3 min calculated for 13,993 cf (100% of inflow)
Center-of-Mass det. time= 2.6 min (805.2 - 802.7)

Volume	Invert	Avail.Storage	Storage Description
#1	452.00'	1,220 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
452.00	20	0	0
454.00	1,200	1,220	1,220

Device	Routing	Invert	Outlet Devices
#1	Primary	452.00'	**12.0" Round Culvert** L= 119.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 452.00' / 451.40' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=2.83 cfs @ 12.23 hrs HW=453.54' TW=451.72' (Dynamic Tailwater)
↑**1=Culvert** (Barrel Controls 2.83 cfs @ 3.61 fps)

ATTACHMENT 6

INSPECTION, MAINTENANCE AND HOUSEKEEPING PLAN

DM ROMA
CONSULTING ENGINEERS

INSPECTION, MAINTENANCE, AND HOUSEKEEPING PLAN

COUNTRY VILLAGE ASSISTED LIVING FACILITY EXPANSION
CASCO, MAINE

Responsible Party

Owner: 960 Meadow Road Holdings, LLC
960 Meadow Road
Casco, ME 04015

Prepared by

Engineer: **DM Roma Consulting Engineers**
Designer: Jayson Haskell, PE #13002
DEP Erosion Control Certification #4769

The owner/applicant is responsible for the maintenance of all stormwater management structures and related site components and the keeping of a maintenance log book with service records.

Records of all inspections and maintenance work performed must be kept on file with the owner and retained for a minimum of five years. The maintenance log will be made available to the Town upon request. At a minimum, the maintenance of stormwater management systems will be performed on the prescribed schedule.

The procedures outlined in this plan are provided as a general overview of the anticipated practices to be utilized on this site. In some instances, additional measures may be required due to unexpected conditions. *The Maine Erosion and Sedimentation Control BMP* and *Stormwater Management for Maine: Best Management Practices* Manuals published by the Maine Department of Environmental Protection (MDEP) should be referenced for additional information.

During Construction

1. **Inspection and Corrective Action:** It is the contractor's responsibility to comply with the inspection and maintenance procedures outlined in this section. Inspection shall occur on all disturbed and impervious areas, erosion control measures, material storage areas that are exposed to precipitation, and locations where vehicles enter or exit the site. These areas shall be inspected, including winter work, at least once a week as well as 24 hours before and after a storm event generating more than 0.5 inch of rainfall over a 24-hour period and prior to completing permanent stabilization measures. A person with

knowledge of erosion and stormwater control, including the standards and conditions in the permit, shall conduct the inspections.

2. **Maintenance:** Erosion controls shall be maintained in effective operating condition until areas are permanently stabilized. If best management practices (BMPs) need to be repaired, the repair work should be initiated upon discovery of the problem but no later than the end of the next workday. If BMPs need to be maintained or modified, additional BMPs are necessary, or other corrective action is needed, implementation must be completed within seven calendar days and prior to any rainfall event.

3. **Construction vehicles and equipment:** Construction vehicles and equipment shall not be driven or stored within any proposed stormwater treatment ponds.

4. **Documentation:** A report summarizing the inspections and any corrective action taken must be maintained on site. The log must include the name(s) and qualifications of the person making the inspections; the date(s) of the inspections; and the major observations about the operation and maintenance of erosion and sedimentation controls, materials storage areas, and vehicle access points to the parcel. Major observations must include BMPs that need maintenance, BMPs that failed to operate as designed or proved inadequate for a particular location, and location(s) where additional BMPs are needed. For each BMP requiring maintenance, BMP needing replacement, and location needing additional BMPs, note in the log the corrective action taken and when it was taken. The log must be made accessible to Town staff, and a copy must be provided upon request. The owner shall retain a copy of the log for a period of at least three years from the completion of permanent stabilization.

Housekeeping

1. **Spill prevention:** Controls must be used to prevent pollutants from construction and waste materials on site to enter stormwater, which includes storage practices to minimize exposure of the materials to stormwater. The site contractor or operator must develop, and implement as necessary, appropriate spill prevention, containment, and response planning measures.

2. **Groundwater protection:** During construction, liquid petroleum products and other hazardous materials with the potential to contaminate groundwater may not be stored or handled in areas of the site draining to an infiltration area. An "infiltration area" is any area of the site that by design or as a result of soils, topography and other relevant factors accumulates runoff that infiltrates into the soil. Dikes, berms, sumps, and other forms of secondary containment that prevent discharge to groundwater may be used to isolate portions of the site for the purposes of storage and handling of these materials. Any project proposing infiltration of stormwater must provide adequate pre-treatment of stormwater prior to discharge of stormwater to the infiltration area, or provide for

treatment within the infiltration area, in order to prevent the accumulation of fines, reduction in infiltration rate, and consequent flooding and destabilization.

3. **Fugitive sediment and dust:** Actions must be taken to ensure that activities do not result in noticeable erosion of soils or fugitive dust emissions during or after construction. Oil may not be used for dust control, but other water additives may be considered as needed. A stabilized construction entrance (SCE) should be included to minimize tracking of mud and sediment. If off-site tracking occurs, public roads should be swept immediately and no less than once a week and prior to significant storm events. Operations during dry months, that experience fugitive dust problems, should wet down unpaved access roads once a week or more frequently as needed with a water additive to suppress fugitive sediment and dust.

4. **Debris and other materials:** Minimize the exposure of construction debris, building and landscaping materials, trash, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials to precipitation and stormwater runoff. These materials must be prevented from becoming a pollutant source.

5. **Excavation de-watering:** Excavation de-watering is the removal of water from trenches, foundations, coffer dams, ponds, and other areas within the construction area that retain water after excavation. In most cases the collected water is heavily silted and hinders correct and safe construction practices. The collected water removed from the ponded area, either through gravity or pumping, must be spread through natural wooded buffers or removed to areas that are specifically designed to collect the maximum amount of sediment possible, like a cofferdam sedimentation basin. Avoid allowing the water to flow over disturbed areas of the site. Equivalent measures may be taken if approved by the Department.

6. **Authorized Non-stormwater discharges:** It is the contractor's responsibility to identify and prevent contamination by non-stormwater discharges. Where allowed non-stormwater discharges exist, they must be identified and steps should be taken to ensure the implementation of appropriate pollution prevention measures for the non-stormwater component(s) of the discharge. Authorized non-stormwater discharges are:
   (a) Discharges from firefighting activity;
   (b) Fire hydrant flushings;
   (c) Vehicle washwater if detergents are not used and washing is limited to the exterior of vehicles (engine, undercarriage and transmission washing is prohibited);
   (d) Dust control runoff in accordance with permit conditions and Appendix (C)(3);
   (e) Routine external building washdown, not including surface paint removal, that does not involve detergents;
   (f) Pavement washwater (where spills/leaks of toxic or hazardous materials have not occurred, unless all spilled material had been removed) if detergents are not used;
   (g) Uncontaminated air conditioning or compressor condensate;

(h) Uncontaminated groundwater or spring water;
(i) Foundation or footer drain-water where flows are not contaminated;
(j) Uncontaminated excavation dewatering (see requirements in Appendix C(5));
(k) Potable water sources including waterline flushings; and
(l) Landscape irrigation.

7. **Unauthorized non-stormwater discharges:** Approval from the Town does not authorize a discharge that is mixed with a source of non-stormwater, other than those discharges in compliance with Section 6 above. Specifically, the Town's approval does not authorize discharges of the following:
   (a) Wastewater from the washout or cleanout of concrete, stucco, paint, form release oils, curing compounds or other construction materials;
   (b) Fuels, oils or other pollutants used in vehicle and equipment operation and maintenance;
   (c) Soaps, solvents, or detergents used in vehicle and equipment washing; and
   (d) Toxic or hazardous substances from a spill or other release.

Post construction

1. **Inspection and Corrective Action:** All measures must be maintained by the owner in effective operating condition. An inspector hired by the owner shall at least annually inspect the stormwater management facilities. This person should have knowledge of erosion and stormwater control, including the standards and conditions of the site's approvals. The following areas, facilities, and measures must be inspected, and identified deficiencies must be corrected. Areas, facilities, and measures other than those listed below may also require inspection on a specific site.

   A. **Vegetated Areas:** Inspect vegetated areas, particularly slopes and embankments, early in the growing season or after heavy rains to identify active or potential erosion problems. Replant bare areas or areas with sparse growth. Where rill is evident, armor the area with an appropriate lining or divert the erosive flows to on-site areas able to withstand the concentrated flows.

   B. **Ditches, Swales, and Open Channels:** Inspect ditches, swales, and other open channels after heavy rains to remove any obstructions to flow, remove accumulated sediments and debris, control vegetative growth that could obstruct flow, and repair any erosion of the ditch lining. Vegetated ditches must be mowed at least annually or otherwise maintained to control the growth of woody vegetation and maintain flow capacity. Grass to be mowed to a minimum height of six inches. Any woody vegetation growing through riprap linings must also be removed. Repair any slumping side slopes as soon as practicable. The channel must receive adequate routine maintenance to maintain capacity and prevent or correct any erosion of the channel's bottom or side slopes.

C. **Culverts:** Inspect culverts in the spring, late fall, and after heavy rains to remove any obstructions to flow; remove accumulated sediments and debris at the riprap inlet, at the riprap outlet, and within the conduit; and to repair any erosion damage at the culvert's inlet and outlet.

D. **Underdrained Filter Basin:** The filter basins are not intended to function as snow storage areas. Inspector to verify that winter plowing operations are not dumping or pushing snow into the basins. The basins shall also not be used for vehicle or heavy equipment storage. Basins should be inspected after several major storm events (0.5 inches rainfall over 24 hours) to determine drawdown time during the first year. The basins to be inspected every six months thereafter with at least one inspection after a major storm event.

   The basins should drain dry within 24 to 48 hours following a one-inch storm. If ponding exceeds 48 hours, the top of the filter bed must be rototilled to reestablish the soil's filtration capacity. If water ponds on the surface of the bed for more than 72 hours, the top several inches of the filter shall be replaced with fresh material. Inspect for debris and sediment build up in the forebays and basins and remove as needed. Mowing of the basins can only occur semi-annually to a height of no less than 6 inches utilizing a hand-held string trimmer or push-mower. Any bare areas or erosion rills shall be repaired with new filter media or sandy loam then seeded and mulched. The basins should also be inspected annually for destabilization of side slopes, embankment settling and other signs of structural failure.

E. **Level Spreader:** Level spreader should be inspected semi-annually and following major storm events for the first year and every six months thereafter to remove any obstructions to flow. Stormwater runoff should discharge from the level spreader as sheet flow, and any observed channelization of flows or erosion should be corrected immediately. Any woody vegetation growing through riprap must be removed. Replace riprap on areas where any underlying soil or sediment buildup is showing through the stone or where stones have been dislodged.

F. **Emergency Spillway:** Spillways should be inspected semi-annually and following major storm events for the first year and every six months thereafter to remove any obstructions to flow. Any woody vegetation growing through riprap lining must be removed. Replace riprap on areas where any underlying filter fabric is showing through the stone or where stones have been dislodged.

G. **Roofline Drip edges:** The drip edges should be inspected semi-annually and following major storm events for the first year and every six months thereafter. The reservoir crushed stone should drain within 24 to 48 hours following a major storm event. If ponding exceeds 48 hours, the stone reservoir course shall be removed and the filter bed be rototilled to reestablish the soil's filtration capacity. If water ponds in the reservoir course for more than 72 hours, the top several inches of the filter shall be

replaced with fresh material. Inspect for debris and sediment build up at surface and remove as needed. The drip edges are part of the stormwater management plan and cannot be paved over or altered in anyway.

H. Regular Maintenance: Clear accumulations of winter sand along roadway once a year, preferably in the spring. Accumulations on pavement may be removed by pavement sweeping. Accumulations of sand along pavement shoulders may be removed by grading excess sand to the pavement edge and removing it manually or by a front-end loader.

I. Documentation: Keep a log (report) summarizing inspections, maintenance, and any corrective actions taken. The log must include the date on which each inspection or maintenance task was performed, a description of the inspection findings or maintenance completed, and the name of the inspector or maintenance personnel performing the task. If a maintenance task requires the clean-out of any sediments or debris, indicate where the sediment and debris was disposed after removal. The log must be made accessible to Town staff upon request. The permittee shall retain a copy of the log for a period of at least five years from the completion of permanent stabilization. Attached is a sample log.

Duration of Maintenance

The "Responsible Party" shall perform maintenance as described.

MAINTENANCE LOG

COUNTRY VILLAGE ASSISTED LIVING FACILITY EXPANSION
CASCO, MAINE

(GENERAL INSPECTION FORM PAGE 1 OF 2)

The following stormwater management and erosion control items shall be inspected and maintained as prescribed in the Maintenance Plan with recommended frequencies as identified below. The owner is responsible for keeping this maintenance log on file for a minimum of five years and shall provide a copy to the Town upon request. Inspections are to be performed by a qualified third-party inspector and all corrective actions shall be performed by personnel familiar with stormwater management systems and erosion controls.

Maintenance Item	Maintenance Event	Date Performed	Responsible Personnel	Comments
Vegetated Areas	Inspect slopes and embankments early in Spring.			
Drainage Swales	Inspect after major rainfall event			
	Inspect for erosion or slumping & repair			
	Mowed at least annually.			
	Inspect and remove obstructions as necessary.			
	Remove woody vegetation.			
	Replace riprap as necessary.			
Culverts	Inspect semiannually and after major rainfall.			
	Repair erosion at inlet or outlet of pipe.			
	Repair displaced riprap within inlet and outlet aprons.			
	Clean accumulated sediment in culverts when >20% full.			

MAINTENANCE LOG

COUNTRY VILLAGE ASSISTED LIVING FACILITY EXPANSION
CASCO, MAINE

(GENERAL INSPECTION FORM PAGE 2 OF 2)

The following stormwater management and erosion control items shall be inspected and maintained as prescribed in the Maintenance Plan with recommended frequencies as identified below. The owner is responsible for keeping this maintenance log on file for a minimum of five years and shall provide a copy to the Town upon request. Inspections are to be performed by a qualified third-party inspector and all corrective actions shall be performed by personnel familiar with stormwater management systems and erosion controls.

Maintenance Item	Maintenance Event	Date Performed	Responsible Personnel	Comments
Roofline Dripedges	Check after each rainfall event to ensure that the stone reservoir drains within 24-48 hours.			
	Replace top several inches of filter if reservoir does not drain within 72 hours.			
	Inspect and remove sediment or debris build up on the surface of the stone			
	Inspect semi-annually for erosion or sediment accumulation and repair as necessary.			
Regular Maintenance	Clear accumulation of winter sand in paved areas annually.			

MAINTENANCE LOG

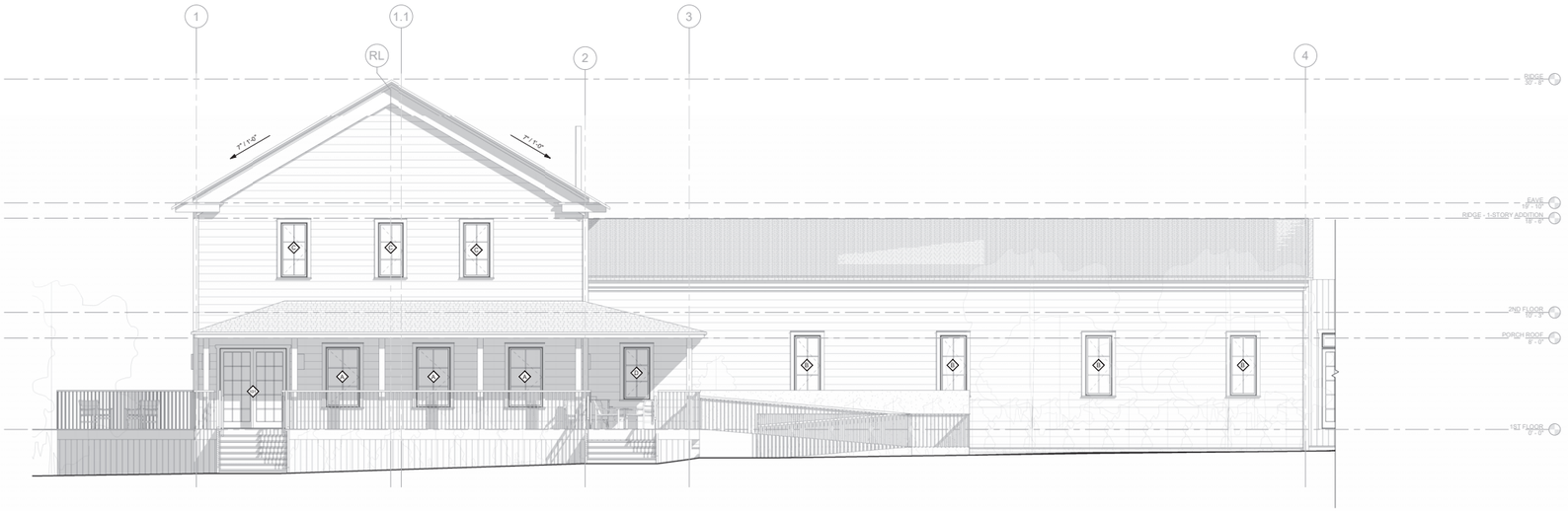
COUNTRY VILLAGE ASSISTED LIVING FACILITY EXPANSION
CASCO, MAINE

(UNDERDRAINED FILTER BASIN)

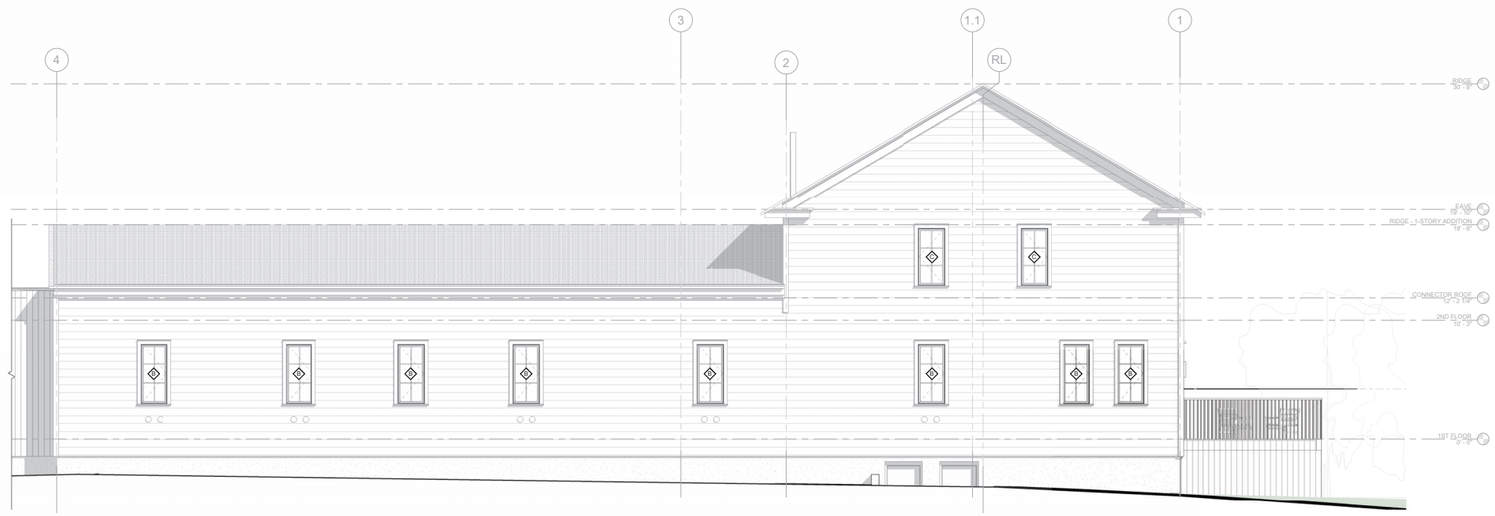
Maintenance Item	Maintenance Event	Date Performed	Responsible Personnel	Comments
Underdrained Filter Basin	Check after each rainfall event to ensure that pond drains within 24-48 hours.			
	Replace top several inches of filter if pond does not drain within 72 hours.			
	Mow grass no more than twice a year to no less than 6 inches in height.			
	Inspect semi-annually for erosion or sediment accumulation and repair as necessary.			
	Inspector to verify basin not utilized for snow storage			
	Inspector to verify basin not utilized for vehicle or heavy equipment storage.			
Emergency Spillway	Inspect and remove obstructions as necessary.			
	Remove woody vegetation.			
	Replace riprap as necessary.			
Level Lip Spreaders	Inspect for sand accumulation and remove when pool volume is reduced by 25%.			
	Remove leaf litter, branches and tree growth from spreader.			
	Inspect to verify spreader is not utilized for snow storage.			

SECTION 9

PRELIMINARY ARCHITECTURAL PLANS



2 SOUTH BUILDING ELEVATION
1/4" = 1'-0"



1 NORTH BUILDING ELEVATION
1/4" = 1'-0"

WOODHULL
93 High Street
(207) 283-8777
Portland | ME 04101
woodhullmaine.com

PRELIMINARY
NOT FOR
CONSTRUCTION

960 Meadow Road
Casco, ME 04015

Country Village
Assisted Living

CONSTRUCTION DOCUMENTS-PROGRESS SET

COUNTRY VILLAGE ASSISTED LIVING ADDITION

ISSUANCES:

REV	DATE	DESCRIPTION
1	2020.02.13	100% SCHEMATIC DESIGN

PROJECT LEAD:
AP

REVIEWED BY:
PB

EXTERIOR ELEVATIONS

A-201A

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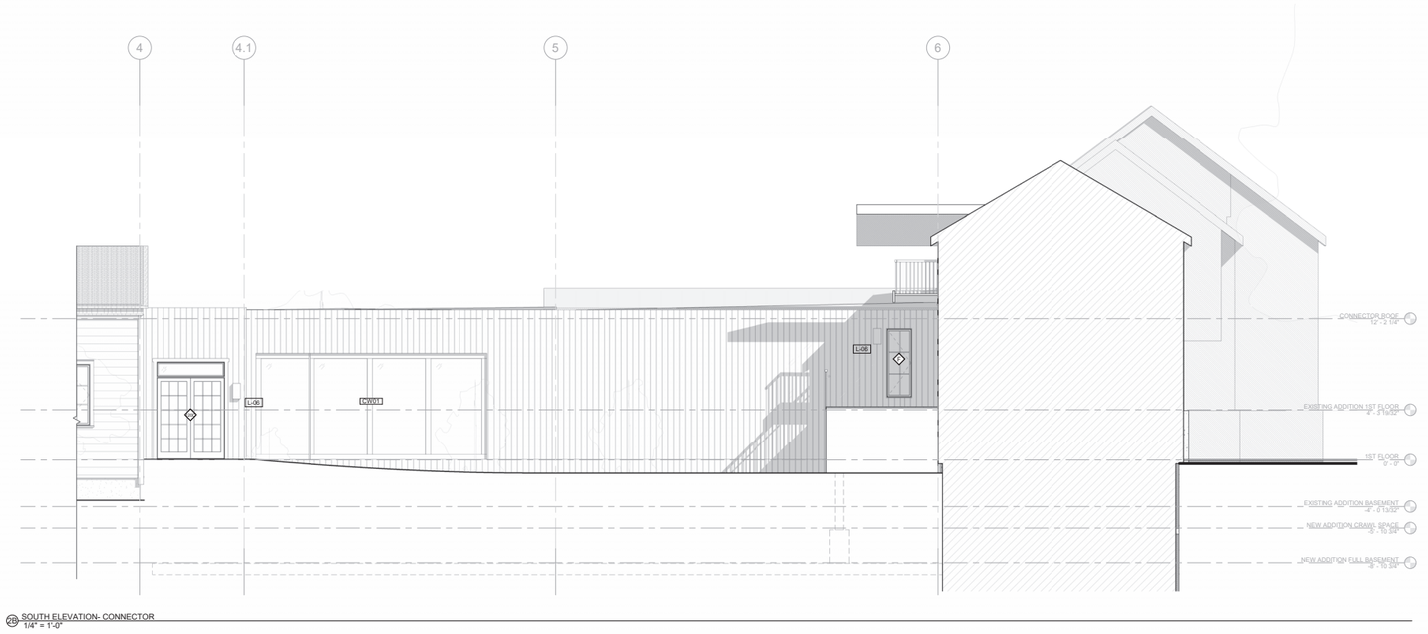
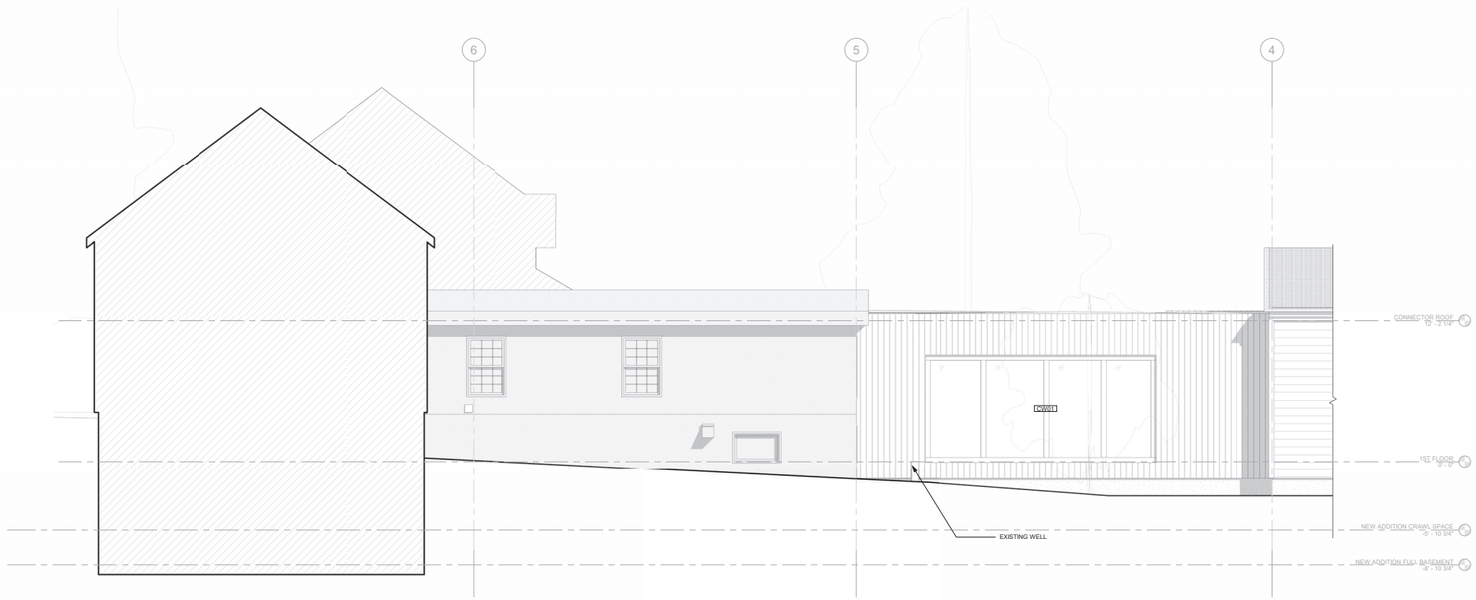


2B SOUTH ELEVATION- CONNECTOR
1/4" = 1'-0"



1B NORTH ELEVATION-CONNECTOR
1/4" = 1'-0"

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WOODHULL
93 High Street
Portland | ME 04101
(207) 283-8777
woodhullmaine.com

PRELIMINARY
NOT FOR
CONSTRUCTION

960 Meadow Road
Casco, ME 04015

Country Village
Assisted Living

CONSTRUCTION
DOCUMENTS-
PROGRESS
SET

COUNTRY VILLAGE ASSISTED LIVING ADDITION

ISSUANCES:

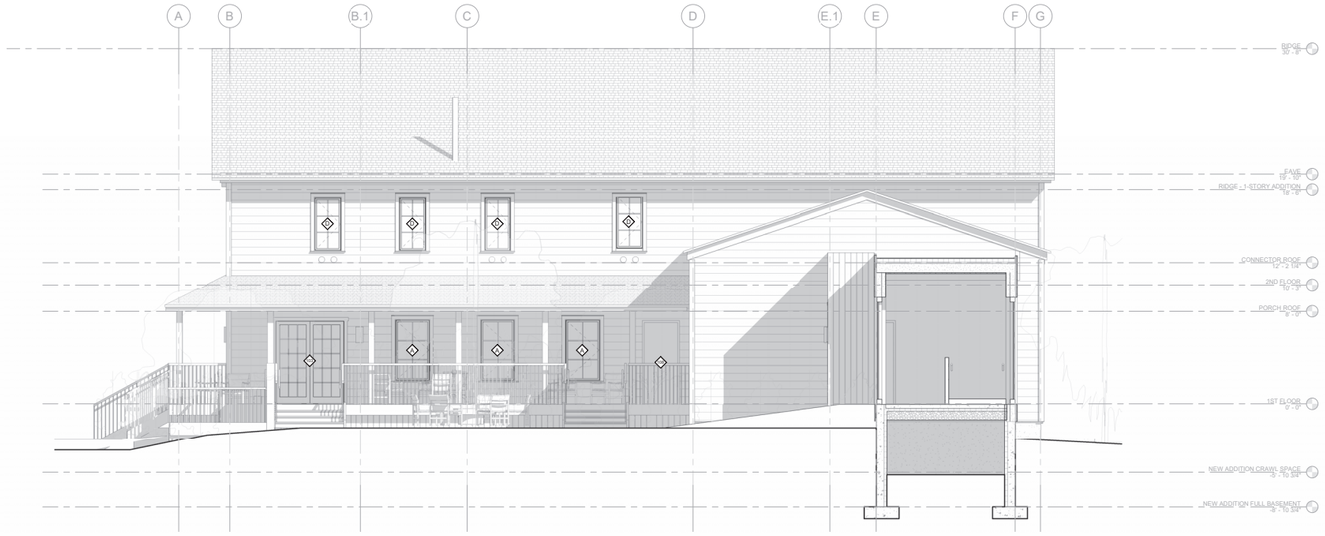
REV	DATE	DESCRIPTION
1	2025.02.13	100% SCHEMATIC DESIGN

PROJECT LEAD:
AP

REVIEWED BY:
PB

EXTERIOR
ELEVATIONS-CONNECTOR

A-201B



2 EAST BUILDING ELEVATION
1/4" = 1'-0"

1 WEST BUILDING ELEVATION
1/4" = 1'-0"

WOODHULL
93 High Street
(207) 283-8777
Portland | ME 04101
woodhullmaine.com

PRELIMINARY
NOT FOR
CONSTRUCTION

960 Meadow Road
Casco, ME 04015

Country Village
Assisted Living

CONSTRUCTION
DOCUMENTS-
PROGRESS
SET

COUNTRY VILLAGE ASSISTED LIVING ADDITION

ISSUANCES:

REV	DATE	DESCRIPTION
1	2026.02.13	100% SCHEMATIC DESIGN

PROJECT LEAD:
AP

REVIEWED BY:
PB

EXTERIOR ELEVATIONS

A-202

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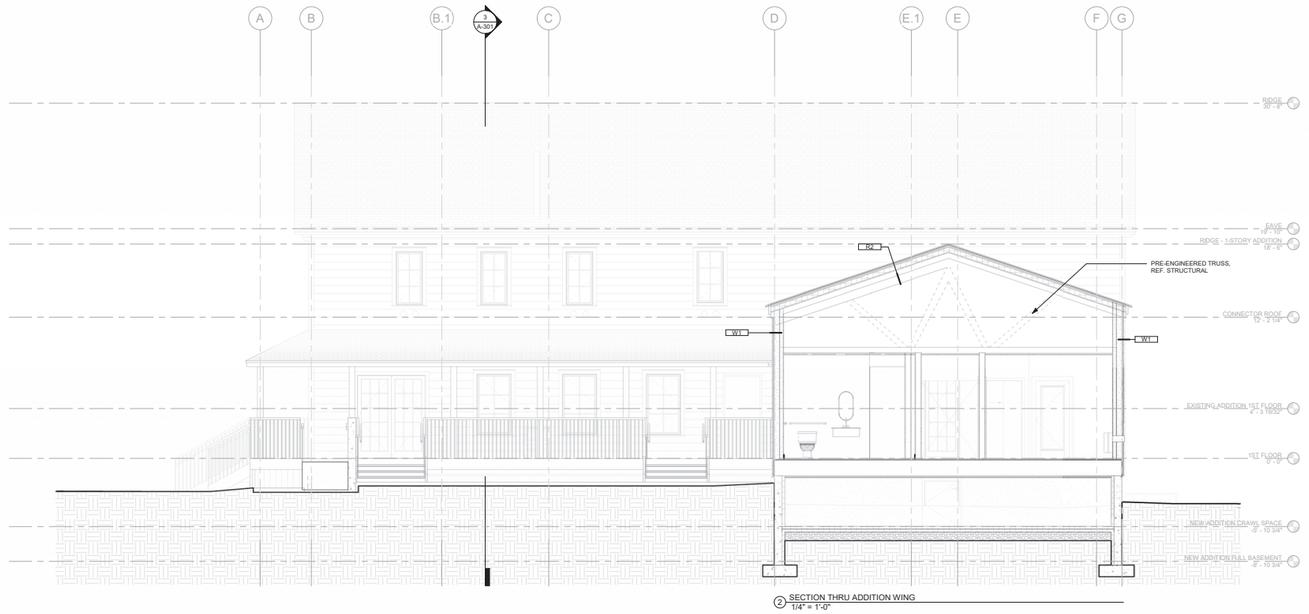
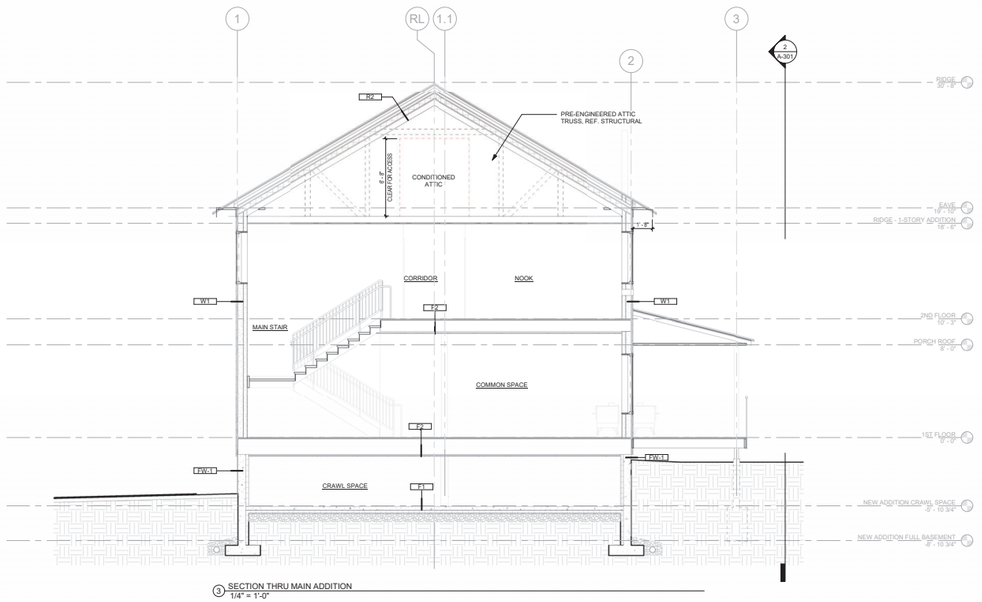


2 SECTION THRU ADDITION WING
1/4" = 1'-0"



3 SECTION THRU MAIN ADDITION
1/4" = 1'-0"

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Casco, ME 04015

Country Village
Assisted Living

CONSTRUCTION
DOCUMENTS-
PROGRESS
SET

COUNTRY VILLAGE ASSISTED LIVING ADDITION

ISSUANCES:

REV	DATE	DESCRIPTION
1	2022.02.15	100% SCHEMATIC DESIGN

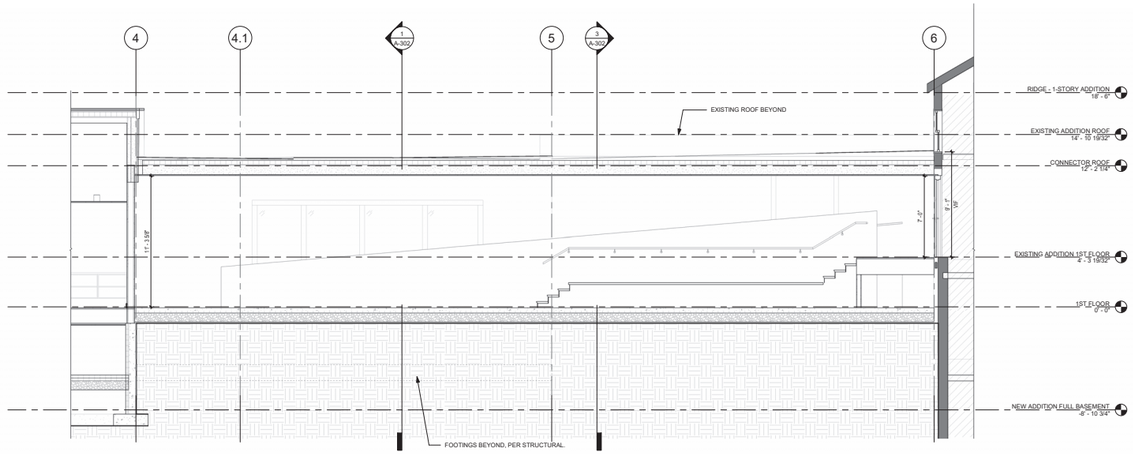
PROJECT LEAD:
AP

REVIEWED BY:
PB

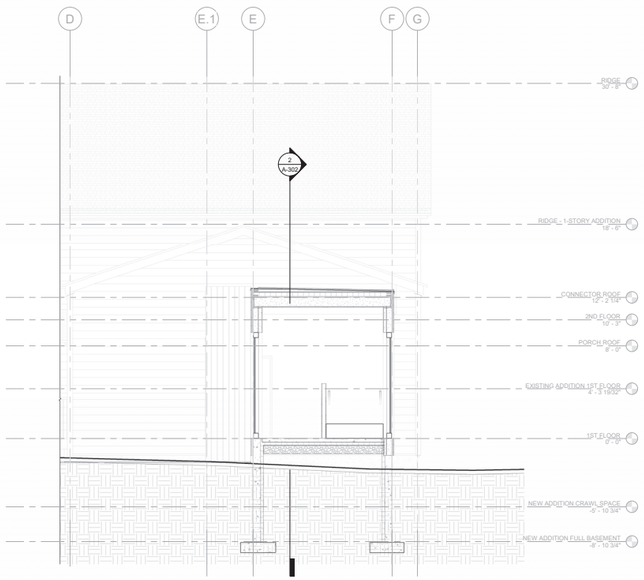
BUILDING SECTIONS

A-301

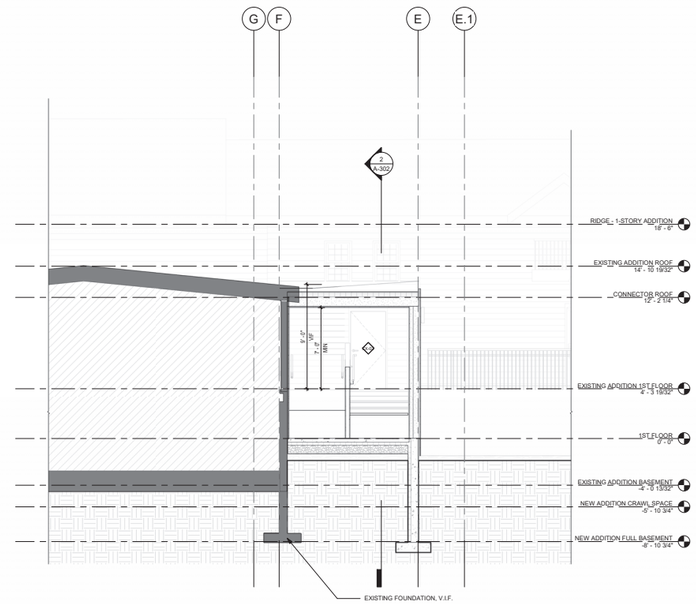
5/19/2022 5:20:22 PM



2 LONGITUDAL SECTION THRU CONNECTOR
1/4" = 1'-0"



1 CROSS SECTION THRU CONNECTOR (LOOKING TO NEW ADDITION)
1/4" = 1'-0"



3 CROSS SECTION THRU CONNECTOR (LOOKING TO EXISITNG)
1/4" = 1'-0"

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DOCUMENTS-
PROGRESS
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COUNTRY VILLAGE ASSISTED LIVING ADDITION

ISSUANCES:

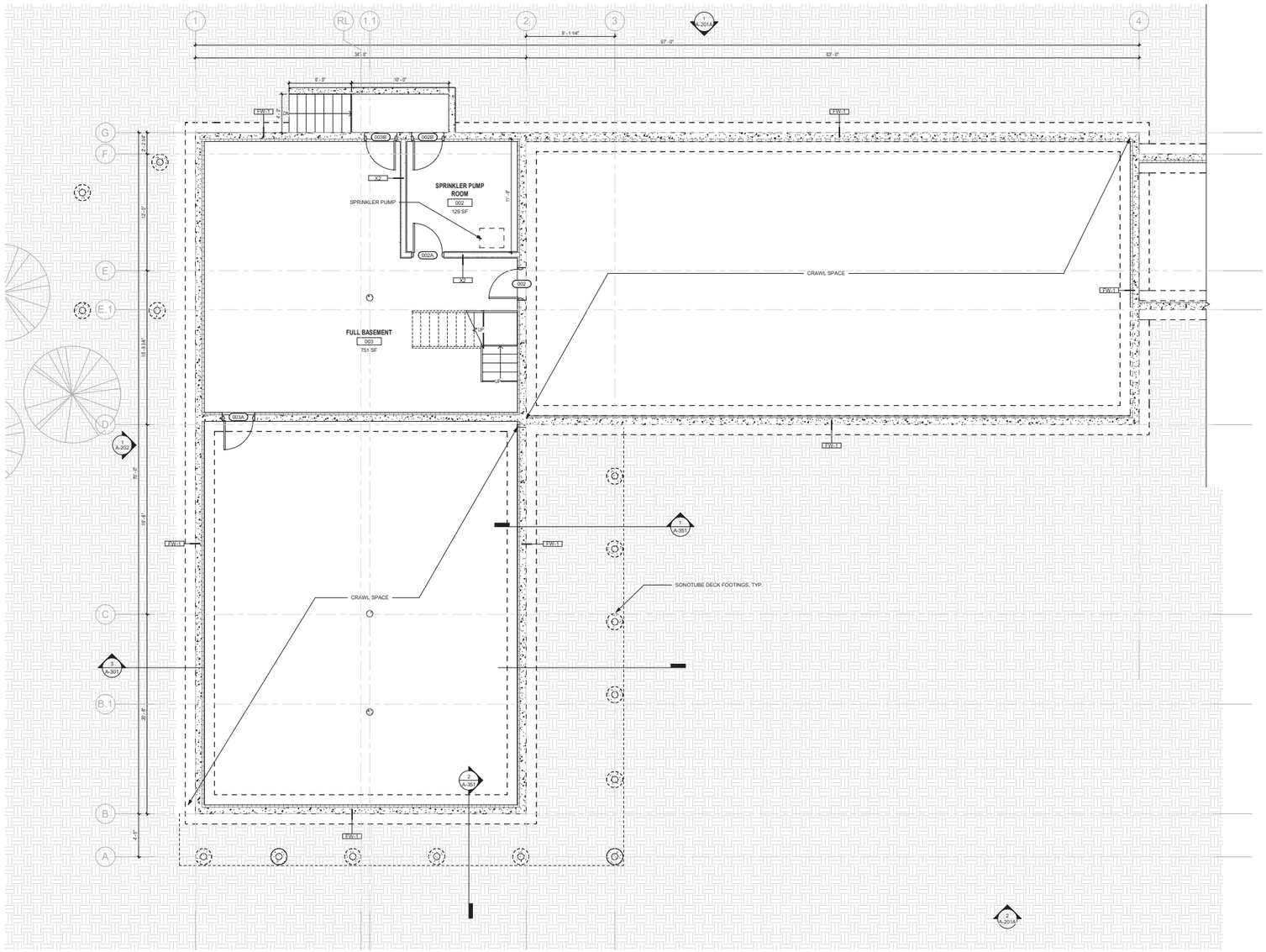
REV	DATE	DESCRIPTION

PROJECT LEAD:
AP

REVIEWED BY:
PB

BUILDING
SECTIONS-CONNECTOR

A-302



1 NEW ADDITION BASEMENT AND FOUNDATION
1/4" = 1'-0"

GENERAL NOTES - FLOOR PLAN:

1. This is a SD Issuance released for review. Additional information, dimensions, clarifications, and specifications to be requested from the Architect and/or Owner as required to perform the Work.
2. Dimensions are from face of core structure material or to grid, UNO.
3. Specifications: Forthcoming
4. Assemblies: Refer to Sheet A-400 for Wall, Floor, Roof, Foundation and Ceiling assemblies.
5. Doors and Windows: Refer to Sheet A-410 for Window and door types.
6. MEP: Mechanical, Electrical and Plumbing work is in progress. Refer to MEP sheets for preliminary design. The Architect has made basic assumptions for size and space requirements and locations for incoming service. Contractor is to review and bring to the Architect's attention if additional information is required.
7. Refer to G-001 for additional Document Use Guidelines.
8. Finishes:
   Ceiling: painted GWB, color TBD
   Flooring:
   A. Units: Low-pile 2x2 Carpet Tile
   B. Unit Bathrooms: non-slip porcelain tile
   C. Common areas: non-slip LVT/Marmoleum
9. Millwork:
   A. Units: Wall-mounted casework with veneer finish as shown on A-701A-702, cont. solid wood counter to match casework
   B. Kitchenette: Upper and lower cabinets in communal room per plan, painted finish and solid surface countertop

KEY NOTES

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COUNTRY VILLAGE
ASSISTED LIVING
ADDITION

ISSUANCES:

REV	DATE	DESCRIPTION
1	2020.02.17	100% SCHEMATIC DESIGN

PROJECT LEAD:
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REVIEWED BY:
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BASEMENT PLAN

A-100A

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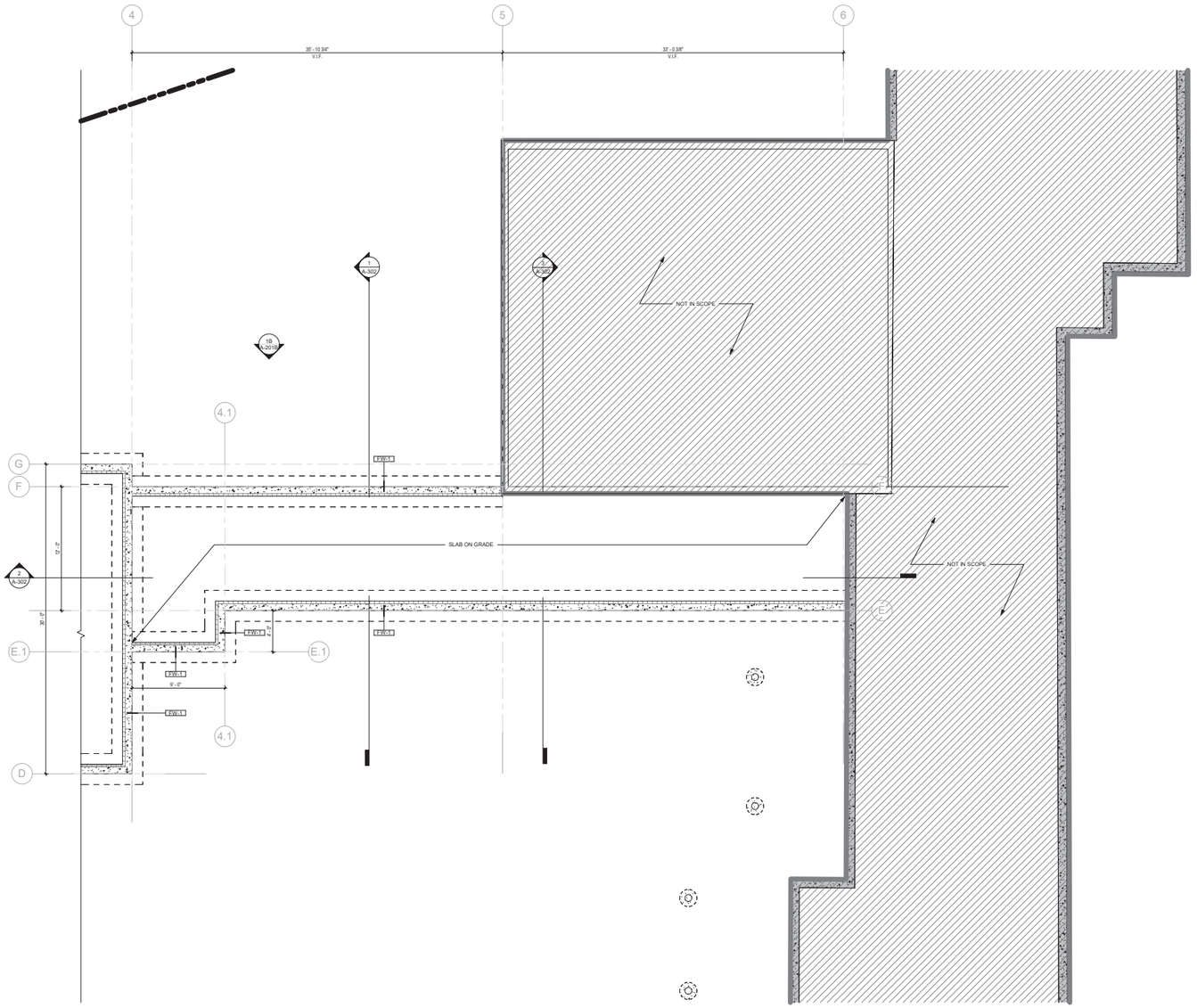

1 NEW ADDITION FULL BASEMENT-CONNECTOR
1/4" = 1'-0"

GENERAL NOTES - FLOOR PLAN:

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2. Dimensions are from face of core structure material or to grid, UNO.
3. Specifications: Forthcoming
4. Assemblies: Refer to Sheet A-400 for Wall, Floor, Roof, Foundation and Ceiling assemblies.
5. Doors and Windows: Refer to Sheet A-410 for Window and door types.
6. MEP: Mechanical, Electrical and Plumbing work is in progress. Refer to MEP sheets for preliminary design. The Architect has made basic assumptions for size and space requirements and locations for incoming service. Contractor is to review and bring to the Architect's attention if additional information is required.
7. Refer to G-001 for additional Document Use Guidelines.
8. Finishes:
   Ceiling: painted GWB, color TBD
   Flooring:
   A. Units: Low-pile 2x2 Carpet Tile
   B. Unit Bathrooms: non-slip porcelain tile
   C. Common areas: non-slip LVT/Marmoleum
9. Millwork:
   A. Units: Wall-mounted casework with veneer finish as shown on A-701/A-702, cont. solid wood counter to match casework
   B. Kitchenette: Upper and lower cabinets in communal room per plan, painted finish and solid surface countertop

KEY NOTES

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CONSTRUCTION DOCUMENTS-PROGRESS SET

COUNTRY VILLAGE ASSISTED LIVING ADDITION

ISSUANCES:

REV	DATE	DESCRIPTION
1	2020.02.17	100% SCHEMATIC DESIGN

PROJECT LEAD:
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BASEMENT PLAN-CONNECTOR

A-100B

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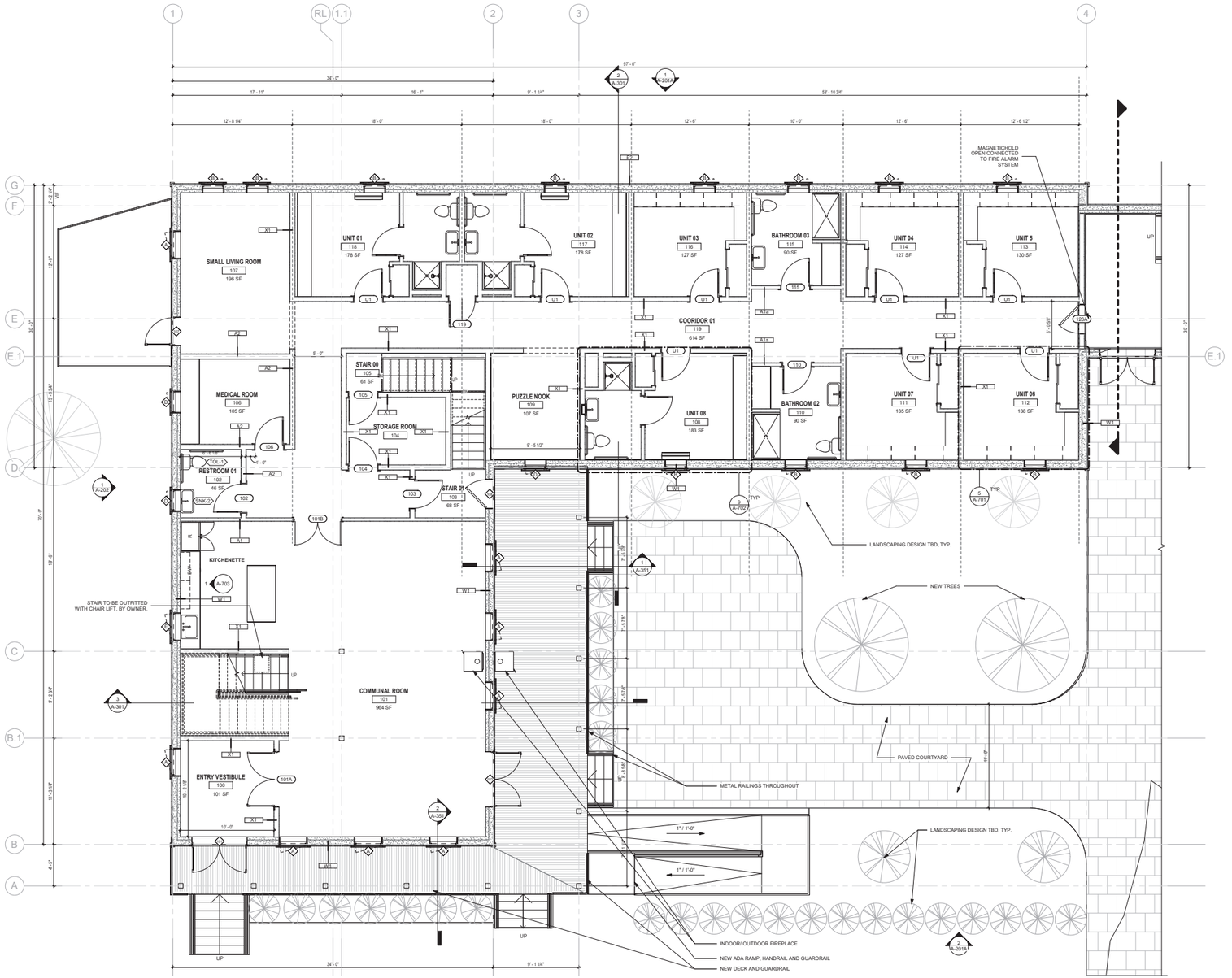

1 NEW ADDITION 1ST FLOOR
1/4" = 1'-0"

GENERAL NOTES - FLOOR PLAN:

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2. Dimensions are from face of core structure material or to grid, UNO.
3. Specifications: Forthcoming
4. A. Assemblies: Refer to Sheet A-400 for Wall, Floor, Roof, Foundation and Ceiling assemblies.
5. Doors and Windows: Refer to Sheet A-410 for Window and door types.
6. MEP: Mechanical, Electrical and Plumbing work is in progress. Refer to MEP sheets for preliminary design. The Architect has made basic assumptions for size and space requirements and locations for incoming service. Contractor is to review and bring to the Architect's attention if additional information is required.
7. Refer to G-001 for additional Document Use Guidelines.
8. Finishes:
   Ceiling: painted GWB, color TBD
   Flooring:
   A. Units: Low-pile 2x2 Carpet Tile
   B. Unit Bathrooms: non-slip porcelain tile
   C. Common areas: non-slip LVT/Marmoleum
9. Millwork:
   A. Units: Wall-mounted casework with veneer finish as shown on A-701A-702, cont. solid wood counter to match casework
   B. Kitchenette: Upper and lower cabinets in communal room per plan, painted finish and solid surface countertop

KEY NOTES

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CONSTRUCTION DOCUMENTS- PROGRESS SET

COUNTRY VILLAGE ASSISTED LIVING ADDITION

ISSUANCES:

REV	DATE	DESCRIPTION
1	2026.02.13	100% SCHEMATIC DESIGN

PROJECT LEAD:
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FIRST FLOOR PLAN

A-101A

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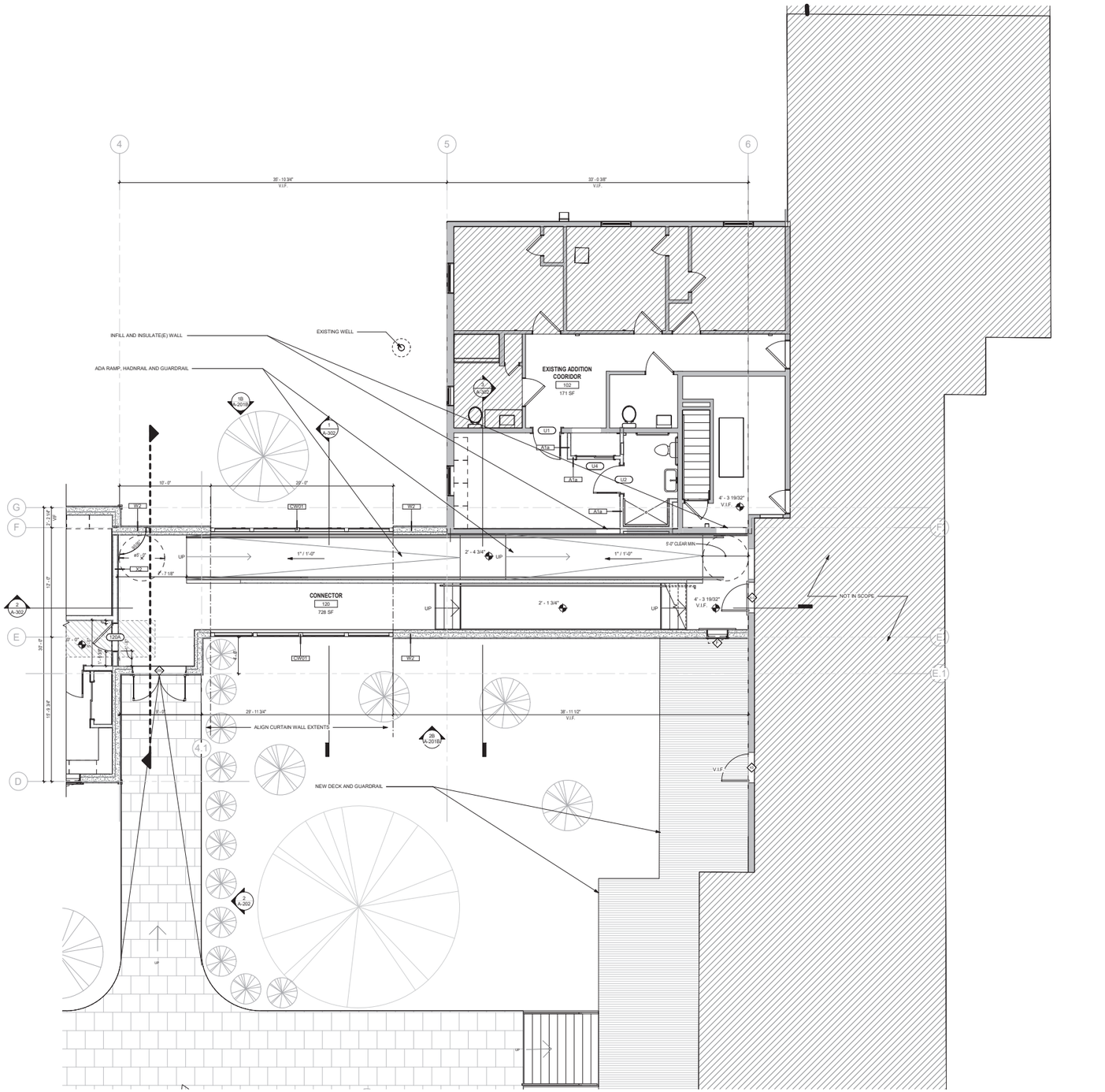

1 NEW ADDITION 1ST FLOOR-CONNECTOR
1/4" = 1'-0"

GENERAL NOTES - FLOOR PLAN:

1. This is a SD Issuance released for review. Additional information, dimensions, clarifications, and specifications to be requested from the Architect and/or Owner as required to perform the Work.
2. Dimensions are from face of core structure material or to grid, UNO.
3. Specifications: Forthcoming
4. Assemblies: Refer to Sheet A-400 for Wall, Floor, Roof, Foundation and Ceiling assemblies.
5. Doors and Windows: Refer to Sheet A-410 for Window and door types.
6. MEP: Mechanical, Electrical and Plumbing work is in progress. Refer to MEP sheets for preliminary design. The Architect has made basic assumptions for size and space requirements and locations for incoming service. Contractor is to review and bring to the Architect's attention if additional information is required.
7. Refer to G-001 for additional Document Use Guidelines.
8. Finishes:
   Ceiling: painted GWB, color TBD
   Flooring:
   A. Units: Low-pile 2x2 Carpet Tile
   B. Unit Bathrooms: non-slip porcelain tile
   C. Common areas: non-slip LVT/Marmoleum
9. Millwork:
   A. Units: Wall-mounted casework with veneer finish as shown on A-701A-702, cont. solid wood counter to match casework
   B. Kitchenette: Upper and lower cabinets in communal room per plan, painted finish and solid surface countertop

KEY NOTES

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COUNTRY VILLAGE ASSISTED LIVING ADDITION

ISSUANCES:

REV	DATE	DESCRIPTION
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PROJECT LEAD:
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FIRST FLOOR
PLAN-CONNECTOR

A-101B

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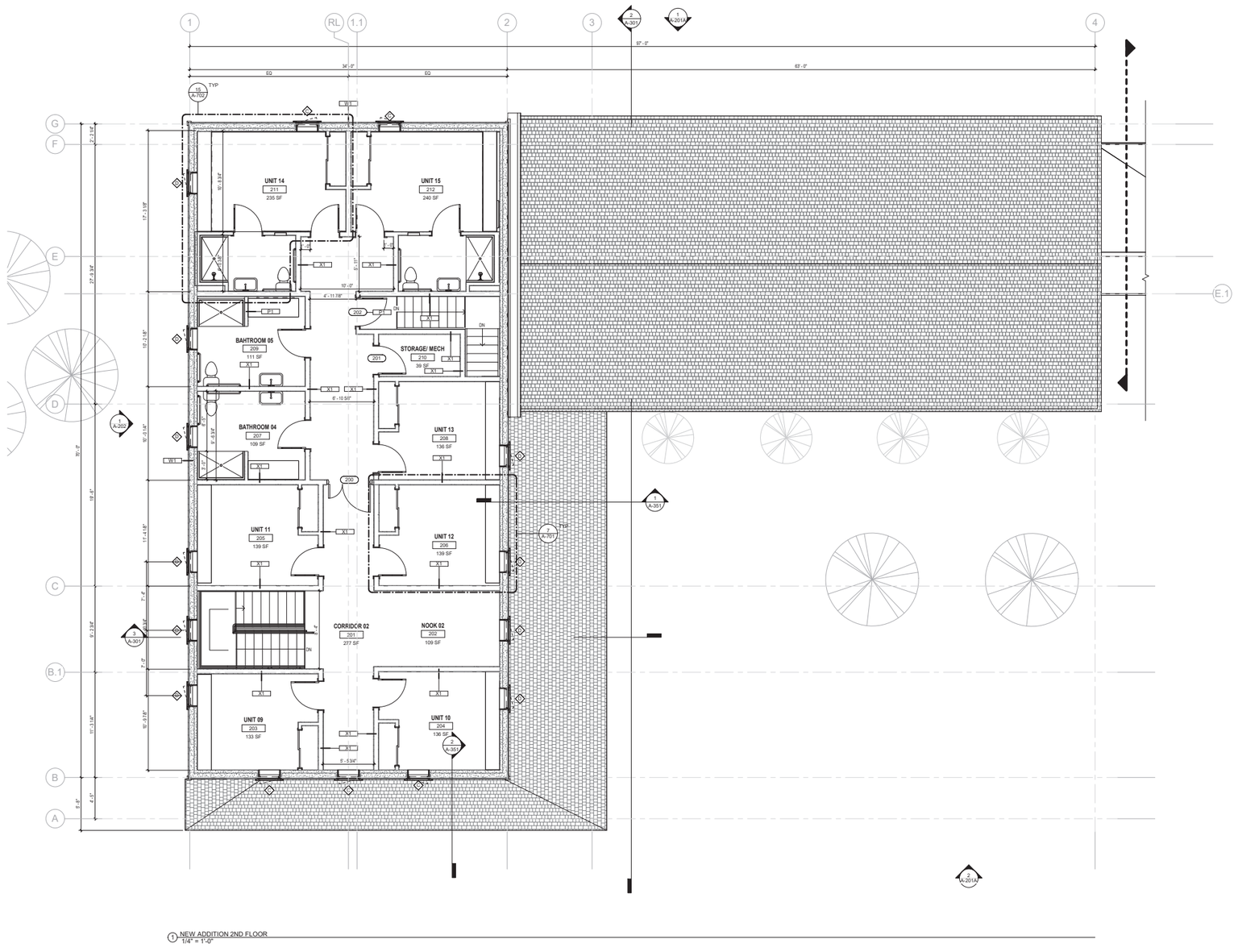

1 NEW ADDITION 2ND FLOOR
1/4" = 1'-0"

GENERAL NOTES - FLOOR PLAN:

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2. Dimensions are from face of core structure material or to grid, UNO.
3. Specifications: Forthcoming
4. Assemblies: Refer to Sheet A-400 for Wall, Floor, Roof, Foundation and Ceiling assemblies.
5. Doors and Windows: Refer to Sheet A-410 for Window and door types.
6. MEP: Mechanical, Electrical and Plumbing work is in progress. Refer to MEP sheets for preliminary design. The Architect has made basic assumptions for size and space requirements and locations for incoming service. Contractor is to review and bring to the Architect's attention if additional information is required.
7. Refer to G-001 for additional Document Use Guidelines.
8. Finishes:
   Ceiling: painted GWB, color TBD
   Flooring:
   A. Units: Low-pile 2x2 Carpet Tile
   B. Unit Bathrooms: non-slip porcelain tile
   C. Common areas: non-slip LVT/Marmoleum
9. Millwork:
   A. Units: Wall-mounted casework with veneer finish as shown on A-701A-702, cont. solid wood counter to match casework
   B. Kitchenette: Upper and lower cabinets in communal room per plan, painted finish and solid surface countertop

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COUNTRY VILLAGE ASSISTED LIVING ADDITION

ISSUANCES:

rev	Date	Description
1	2026.02.13	100% SCHEMATIC DESIGN

PROJECT LEAD:
AP

REVIEWED BY:
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SECOND FLOOR PLAN

A-102

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