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# TOWN OF NEWMARKET, NH

# ANALYSIS OF PLANNING, BUILDING, & ECONOMIC DEVELOPMENT FUNCTIONS

# **JULY 2021**

#### **INTRODUCTION**

This assessment was requested to review the current conditions and practices of the Newmarket Planning and Building Permitting offices to determine present conditions and opportunities for change. This continues the direction proposed by MRI in the prior report of November 2016 to further define an appropriate level of staffing to effectively administer and support growth and development proactively. Additionally, driving this need is the proposed retirement of the incumbents in those positions.

As part of the review, present practices have been documented (see Addendum) to be able to compare to best practices and industry standards with an eye towards efficiency and effectiveness. Underpinning the recommendations is an understanding of how artificial barriers can be an impediment and harm the town's economic growth.

#### **ANALYSIS**

To conduct the evaluation MRI completed the following tasks:

- Collected data and completed interviews as necessary.
  - Mike Hoffman- Building Inspector
  - Sue Jordan- Administrative Assistant
  - o Diane Hardy- Planner and Zoning Administrator
  - o Steve Fournier- Town Manager
- Compared to best practices:
  - Reviewed the number of inspections made, types and Certificates of Occupancy issued, pass/fail rates.
  - Reviewed compliance with RSA 155- A: 3 and ICC/IRC minimum requirement for permits/ inspections and certificates of occupancy.
  - o Reviewed the level of detail of plan review and inspections of one and two-family

- dwellings, multifamily dwellings, and commercial buildings and the use of forms/check-sheets/software. There is little permitting for projects larger than single family.
- o Reviewed the approval process for development in both Planning and Inspections.
- Reviewed office functions.

# **ORGANIZATION**

The Planning and Building Inspections efforts are housed in separate departments, but they share one staff member. The Planner manages the planning and zoning responsibilities for the Town which includes the Planning Board, and the Zoning Board of Adjustment. She is the Zoning Administrator. The part-time Inspector (8 till 1) manages permits of various sorts and is the Health Inspector. Permit applications and information are entered into a new software permit system which has been identified as cumbersome by the Inspector and the Administrative Assistant.

The steps described by the inspector to review and manage plans review and the issuance of permits are reasonable and fairly comprehensive. Reviewed for completeness, plans and permit applications are sorted and distributed to departments and reviewers. The ethic of the inspector is to not be an "I gotcha" kind of inspector, but the type that community members seek advice from. He functions as a code consultant that relies on enforcement as a last resort. He believes that encouragement and education are the first tools of the building safety professional. He has credentials from the International Code Council that are up to date. To obtain these credentials you must pass an examination and maintain them by participation with peers and defined continuing education.

The Administrative Assistant has multiple functions and roles. In addition to document management and minutes she is also the central figure for customer service and permit procession management. Typical of her responsibility are those commonly described as a Permit Technician.

Copies of jobs descriptions (which shows existing and proposed) were provided.

### **Administrative Support**

The Administrative Assistant is the core of the office function is the office manager, and under most circumstances will be the first person contacted by the public. For Planning as well as for the Building Inspector, the Administrative Assistant performs regular office duties such as data entry and the preparation of a variety of paperwork, including correspondence, notices of upcoming classes, memos, emails, memoranda, and forms. Upon request, the Administrative Assistant conducts research and compiles data for boards, committees, supervisors, other departments and is often in support of special projects.

She additionally maintains current and archived filing systems, files of correspondence, memoranda, building plans, reports, studies, septic plans, all permits, inspection records, and a variety of other material, both hardcopy and electronic. Other duties include the distribution of agenda for Town boards and departments. The Administrative Assistant also maintains the website for Planning and the Building Inspector. One function that is not often seen in such as small department is the scanning of paperwork of official documents, permits, minutes, correspondence, plans, applications, studies, etc., for the laser fiche archive. The Administrative Assistant compiles statistics and creates monthly & annual Building Safety Department reports including building permits pending, issued, and completed, as well as details of all inspections for each permit. Creates, updates, and maintains computer databases of archived material, including recorded plans, Town building projects, other building plans, tax maps, court records, and other material. She collects, records, and reconciles appropriate fees and prepares bank deposits and compiles monthly statistics for data collection agencies and the Census Bureau.



Directly for and with customers, the Administrative Assistant receives telephone calls and customers to the department. She screens for nature of business and refers to administrative superior. When necessary or when possible, she answers inquiries based on her knowledge of operations and assists the public by supplying information. Often the Administrative Assistant interacts with developers, realtors, appraisers, attorneys, clients, the general public, and vendors. As part of this interaction, she will;

- 1. Receive complaints regarding zoning, property and health issues and refer them;
- 2. Assist the public in the completion of applications for alarm permits, building permits, sidewalk café permits, sign permits, vendor permits, water and sewer hookups, oil burner permits, home businesses, and other applications.
- 3. Receive completed Building applications and calculates necessary fees.
- 4. Assists the public in the completion of applications for site plan, subdivision, boundary line adjustments, impact fee waivers, special use permits, variances, special exceptions, appeals from administrative decisions, equitable waivers, and other applications.
- 5. Receives completed Planning and Zoning applications and calculates necessary fees.

Most of the duties described so far fit very well with the function of an intake person/customer service person with duties related to permit/plans intake and management. In addition to those very core functions the Administrative Assistant:

- 1. Transcribes and distributes Planning Board and Zoning Board of Adjustment minutes.
- 2. Transcribes minutes for both Planning and Zoning Boards.
- 3. Prepares for various meetings, makes meeting room reservations, sets up nameplates, sets out paperwork, agendas, applications, public informational paperwork, etc.
- 4. Reviews and records plans and other documents at the Rockingham County Registry of Deeds, in Brentwood, NH.
- 5. Interacts with and assists Planning Board and Zoning Board members, as well as other committees and members, such as Capital Improvements Program Committee, Macallen Dam Study Committee, Economic Development Committee, etc., as necessary.
- 6. Occasionally, takes minutes at certain subcommittee meetings and conferences, such as developers' meetings, transcribes and distributes them.
- 7. Makes sure Planning Board members have paper copies of application material and Zoning Board members have electronic copies prior to meetings.

#### **Planning**

The planning function of this department seems to consist largely of plan review, with less time devoted to future planning. We understand that the Planning Board does engage in regular updates to the Town's Master Plan; however, based on our interview with the Planner, much time seems to be spent on processing applications, and on monitoring various engineering projects – some related to development applications, and others related to special projects for which grants have been awarded.

It also appears that other aspects of planning are not getting the attention they should, including economic development. It is less clear to us whether the land use regulations are being amended and updated to reflect current master plan work.



Surprising to us was learning that the Town Council is leading an effort to develop future plans for two areas of town. We find it odd that this effort is being initiated by the Council and not the planning department.

We think the planning function could benefit greatly from more robust use of geographic information technology. The office does have ArcView, however, we believe that more investment in this tool, including training would reap significant benefits for the planning function. Whether this means more time for the Planner to devote to this, or another staff person (part-time?), is not clear to us at this time.

#### **Permit Process**

The land development process prior to building permitting is more complex and time consuming than it should be. When the process has advanced to the point of permit application that process is straightforward. Most of the proposed work frankly is minor, with single-family houses as the largest construction generally.

### **Policies, Procedures**

The written policy for Building inspection is simple to understand, and comprehensive. It should however be reviewed for present accuracy, and it should be made available to the public.

Policies and procedures for the planning functions are somewhat more straightforward, in that – for the planning and zoning boards at least, there are state statutes that dictate the manner in which applications are processed. Furthermore, the Planning Department utilizes completeness checklists for both site plan review and subdivision applications, which is an effective method to guide both applicants and the planner's review.

For other boards and committees there do not appear to be official policies or procedures in place.

#### **Plans Examination**

The inspector states that he uses the residential checklist mostly as a guide. This checklist is adequate for single-family plan review, but it should be reviewed and if needed updated to the 2015 State Minimum Building Codes. The inspector states that this checklist, when used, is not normally filed with the permit. No checklist was presented that is used for commercial work. The details shown for commercial work that are reviewed are much less comprehensive than residential, with some reliance on the design professional and/or special inspector. We would recommend that a checklist be created for either commercial (a minimum size or use category can be established), or software used, or outsourcing the review can become standard. A checklist can be detailed or a summary and filed for each project. Ideally, the department would use a software product.

# **Inspections**

The inspector states that he uses the town checklist mostly as a guide (except perhaps for projects that are more commercial or complex and then filed). It is best practice to use some sort of checklist for inspections to create a permanent record of what was inspected. Anytime one is used it should be filed as part of the record. No checklist was presented that is used for commercial work and there is some reliance on the design professional and/or special inspector. There are checklists available that could be adapted, or there are technical solutions potentially that could assist. No fee is charged for re-inspections. Some inspections are allotted 30 minutes including travel time. Single-family rough (IE. Framing, Electrical-wiring, Plumbing- concealed piping) inspections and single-family final inspections are typically allotted an hour but may be modified due to scope of project. Based on an analysis of the items normally checked for single-family permit plans review and for inspections in New Hampshire, there is barely enough time to complete these inspections and perform the other duties assigned to the position. Should the town require more detailed inspections or should there be changes in code or permit requirement the time allotment will be challenging with the present tight workload and time available.



# The Inspector

The inspector is normally in the office for two hours and then in the field for three hours. 50% of his time is spent on plan review and inspections. Zoning, planning regulations and other code enforcement duties approximate 25% of the time. Health Officer and Emergency Management Team duties approximate 10%. Another 15% could be categorized as economic and community development. Some of this work is special assignments such as liaison to the Ad Hoc Riverfront Advisory Committee, liaison to the Newmarket Business Association, liaison to the Newmarket Main Street Corporation, Joint Loss Management Committee oversight or working on welcoming signs or park signage. The present inspector, while well qualified and experienced, does not have any certifications that relate to New Hampshire building codes other than the Residential Code. There are also none for the trades. When the town seeks to replace the inspector after his retirement, the replacement should either have certifications for the trades in addition to residential building inspection and plans review. Ideally the new inspector would have certification as a Certified Building Official or ideally a Master Code Official. A person with minimal qualifications can be hired with the requirement that within a specified period of time they are able to achieve other certifications. One other path for this would be to have a third-party review of the plans and/or inspections in addition to any special inspections for larger projects. It is clear from the workload documented that the Building Inspector may be performing most of the zoning approvals. The Planner is the Zoning Administrator. We would recommend that this position become full-time and be the Zoning Administrator. This will allow more time to provide service and should provide more opportunity for the Planner to conduct future planning.

The incumbent Building Inspector is well qualified for this position which is primarily residential construction. He is also active with the New Hampshire Building Officials Association and has through continuing education kept his national (ICC) certifications up to date.

Certified under this name City State Certificates

Residential Electrical Inspector (expires 03/18/2022) Residential Building Inspector (expires 03/18/2022)

Michael Hoffman Durham NH Fire Inspector II (expires 03/18/2022)

Fire Plans Examiner (expires 03/18/2022)

Fire Inspector I (expires 03/18/2022)

#### The Planner

The planning position is staffed by a full-time Town Planner who is responsible for a wide range of planning and zoning activities that are typical for this position, e.g., staff support to boards and committees, processing development applications, etc. In addition to the typical and customary responsibilities, the Planner is also engaged in other activities that are not as typical, i.e., grant writing, overseeing the projects that are funded in this way, monitoring the MS4 requirements; in essence, acting as a default town engineer on many projects.

Based on our interview, it appears that the planning function in the office is somewhat overtaken by processing applications and these other tasks that the Planner has taken on. This workload imbalance does not leave sufficient time for the Town Planner to actually engage in or initiate future planning initiatives, which has a direct impact on economic development in Newmarket (addressed below). In some ways, this position has evolved to the point that the Planner spends at least the same amount of time if not more, as an administrator than a planner.

# **Technology**

Each Planning and Inspections employee interviewed expressed concern about the new software used to manage the building permit process. The problems and delay they experience may have a number of causes but reviewing those issues was not the charge of this review. Technology can be especially useful



for processing, documentation and for communication. The Building Inspector does not use software for plans review but does to some extent use a plan review checklist. The advantage of a checklist or software is that is forces a standard to be applied across the board and creates a record. Also being human, it can help prompt, so that important items are not missed. This is true of the inspection process as well. Codes can be accessed on the phone; and notes and records (and yes checklists) recorded to the file via phone or tablet. The actual inspection can be recorded (and done remotely by the permit applicant) and permanently recorded. Important for single-family but much more so for commercial projects, especially should Newmarket have larger buildings proposed.

# **Economic Development**

The goal should be that planning and building inspection services are advocates of the evolution of the community, not a hindrance. There are clear economic impacts that arise from Planning practices, Zoning and Building Codes. Planning processes can make development or redevelopment difficult or simple depending on how they are specified, organized and managed. Overzealous enforcement of building codes causes conflict, delay, and expense, especially when the Code Official is not competent. Long range planning and with zoning code amendments to update allow a community to take advantage of new ideas and evolving types of uses. Many of our zoning codes conceptually have not changed since the 1920's and if reviewed in some detail they show thinking current 20 years past. Building codes have evolved through the years to address safety issues and respond to calamities such as earthquakes, hurricanes and building collapses as well as fires. Just as important are changes that reflect new technique and materials. However, when the rules or the enforcement of the rules are out of character with the community you get a drag on the process, delay and cost.

To achieve the goals of high value with an eye towards efficiency, we must look at the development review process differently. It is effective to combine planning operations and building permitting into one single entity with the goal of protecting values and rapid processing. In this world of competitive communities and high costs an easy workflow and decision process assures that these goals are met. High goals, predictably and rapid permitting promote economic stability.

# **KEY RECOMMENDATIONS**

Our key recommendations are as follows:

- 1. We recommend that the informal organization of Building, Planning and Zoning be combined into a single department. This department would consist of a Planner, a Code Official, and the Administrative Assistant. Some of the present functions of the Planner and possibly the Building Inspector, should be reallocated or, if found unnecessary, cease.
- 2. Zoning Administration should be delegated to the Code Official rather than the Planner.
- 3. Engineering and related technical activities should be delegated to an engineer either a Town Engineer, or a third-party consultant that might be on retainer or utilized on an as-needed basis.
- 4. The main function of the Planner should be the advancement of future planning such as studies related to the quality of life in Newmarket, the review and advancement of elements of the Master Plan as well as monitoring compliance with the master plan. Part of the effort in this office should be complicit with the Town of Newmarket's economic development goals and objectives.
- 5. The Administrative Assistant should have a core function like a Permit Technician which will allow the flow of plans and approvals as well as inspections to be more formally organized around this central position (informally it is now). This would also allow better customer service as well as one-stop permitting in some cases.
- 6. A minute taker function should be explored, with the consistent workload and the ability of staff to



- maintain it, having that function realized outside of their daily duties would be beneficial.
- 7. A review should be conducted for record keeping. The maintenance of files and preparation for Laserfiche may be more efficient if connected to the larger record keeping activities of the town. Most permitting software products allow the applications, plans, and inspections records to be stored as part of the software. The present permitting software may have this function.

The intent is to organize around the concept of service, where service is high value, high standards and quick decisions with Economic Development as a core goal. The organization coordinates the work of a "one-stop" permitting service for planning and zoning, building and possibly fire permit applications. The Organization works with collaborating town departments to implement technology for effective processes and systems, establishes priorities for completion of permit review and approval processes, including providing information and education to promote user compliance and citizen satisfaction. One goal of the department should be to obtain and maintain a Building Code Effectiveness Grading Schedule of at least 4:4. There are varying titles for combined departments. Titles include Community Development or Development Services when the focus is more Economic Development, where the department head coordinates all review and approval resources. When the goal is strictly public safety, the organization tends to include or be part of fire safety. All three staff members expressed that they are having difficulty with the permitting software. Review of those problems or how they may or could be resolved was not part of this review.

### **ADDENDUM**

A well-written permit and inspection policy was provided, but it does not appear to be on the town website and transparent to the public. The types of permits reviewed and issued as well as the permit steps are generally in conformance with the adopted state Building Codes as well as the recommended practice of the New Hampshire Building Officials Association. Copies of plans review, and inspection checklists were provided, they are used for most inspection and filed, but not used and filed generally with permit reviews. Plan review software is not used. Quite a bit of general permit information as well as general code information is available of the Town website. This assists with the ability of the public at large (or non-town contractors) to understand the requirements for permits and inspections and creates transparency. Overall operations compare favorably with other departments in New Hampshire and better than most small departments.



# THE BUILDING PERMIT AND INSPECTION PROCESS

**The Permit Process:** In the Town of Newmarket most of the permits by classification are single family dwellings and minor building and/or sub-trade permits. Minor building permits are minimally reviewed. Larger projects such as new single-family houses, additions, commercial building receives more detailed review provided the code and checklist are followed. No actual review of the permits and plans to determine the quality assurance or quality control of the plans was conducted.

This is the permit count that reflects what is contained in the Town Report when permits are classed as Building, Electrical, and Plumbing.

	Building Permits	Single Family		Fees	Valuation			
			(Buildi	ng permits only	7)			
2020	93	6	\$	10,350	\$	20,000,000		
2019	122	14	\$	56,768	\$	10,160,853		
2018	117	19	\$	51,104	\$	31,174,176		
2017	129	24	\$	51,463	\$	9,337,622		
2016	129	43	\$	63,996	\$	11,457,682		
2015	134	25	\$	45,991	\$	9,645,108		
2014	129	10	\$	38,847	\$	7,442,055		
2013	128	1	\$	24,173	\$	4,174,822		
2012	157	6	\$	43,921	\$	7,864,411		
2011	173	5	\$	40,193	\$	6,847,033		
Median	129	12	Ş	8 44,956.00	\$	9,491,365.00		
Mean	131.1	15.3	\$	42,680.60	\$ 11	,810,376.20		
	Fees							
2020 Elec	\$	17,453						
2020 Tot	al Permit Fees Co	\$	27,803					



# Data Provided by Inspector:

# **Building Permits by Type for 2020 Type**

# **Number Issued**

lew Dwelling Unit Permits					
Additions/Alterations/Miscellaneous					
Commercial/additions & alterations					
Swimming pools Demolitions		9 9			
Mobile Homes		3			
Electrical Plumbing Mechanical		101 30 85			

# **Time Review:**

# Maximal Standard 2015 IRC

	Single Fammily Detached											
	Required by Code/Practice				Actual Re		Required by	Required by Code/Practice			Actual	
	Detail	Time	#	Total I	#	Town/City	Detail	Time	Number	Total I	#	Town/City
ion	Footing	15	1	15			Electric 1st Rough	20	1	20		
dat	Foundation	15	1	15			T-Pole	20	1			
Foundation	Slab/FEMA Elevation	15	1	10			Electric 2nd Rough	20		20		
ഥ	Wall Frame	30	1	30			Electric Equipment	5	-	5		
	Roof Frame/Truss	30	1	30			Electric Final	20	1	20		
Φ	Connections	30	1	30								
Frame	Wall Sheathing	30	1	30			Tank or Lines	10				
<u> </u>	Draft Stop/Penetrations	10	1	10			Tank Rough In-Test	10		10		
	Insulation	15	1	15			Tank Final	10	1	10		
<u>S</u>	Table R402.4.1.1	10	1	10								
Energy	Windows/doors	15	1	15			HVAC Duct Rough	10		10		
山山	Envelope- Air Leakage	15	1	15			HVAC Final	10	1	10		
	Roof Sheathing	15	1	15								
	Underlayment/ Flash	15	1	15			Egress Doors/Windows	10	1	10		
	Coverings	15	1	15			Smoke Detectors	15	1	15		
	Building Final	30	1	30								
	Water Service	10	1									
	Plumbing 1st Rough	20	1									
	Sewer	20	1	20								
	Plumbing 2nd Rough	20	1	20			Zoning	10	1	10		
	Backflow Device-each	10	1	10					į			
	Plumbing Fixtures-each	10	1	10			Plans Review/Admin	30	1	30		
	Plumbing Final	20	1	20								
							Sub-Total		37		0	0
							Reinspections	0.25	5		0	0
							Grand Total		65	1845	0	0
	Sub-Total		23	415	0		In Hours	30.75		In Hours		0



# Review Based on Maximal ie 30 Hours per house:

SF Only Inspector works per week 32 Weeks (average holidays, vacations, sick) 50 Total Hours Available 1600 -250 Assume one hour per day admin time 50 x 5 x 1 1350 Assume 1/2 hour per plan use mode = 22 11 1518 759 Assume Travel time divide inspection time in half Divide time available by 30 HRS HIGH NUMBER **26 Permits** 

# Actual Capacity: 1600 work Hours Available per year...

Data Provided by Inspector	: Building	Permits by	Type for 2	020			
Туре	Number Issued	Avr. Number of Inspections	HRS to Preview	HRS to	Travel Time	Total hrs P and I	Hrs. Per Year
New Dwelling Unit Permits	22	6	0.5	1	0.25	7.75	170.5
Additions/Alterations/Misc ellaneous	71	5	0.5	0.75	0.25	6.5	461.5
Commercial/additions &							
alterations	8	7	2	1	0.25	10.25	82
Swimming pools	9	2	0.25	0.5	0.25	3	27
Demolitions	9	1	0	0.5	0.25	1.75	15.75
Mobile Homes	3	2	0.5	0.5	0.25	3.25	9.75
Electrical	101	2	0	0.5	0.25	2.75	277.75
Plumbing	30	2	0	0.5	0.25	2.75	82.5
Mechanical	85	1	0	0.5	0.25	1.75	148.75
							1275.5
					Ad Min Hr	250	
					Total Wor	k Hrs,	1525.5



# **Permit Application:**

These are the *typical steps* required for a *single-family building permit* which is usually the largest type of Newmarket Construction project.

**Step One:** Permit Applications are, at the very first step, evaluated for land-use compliance. On most permits, The Building Official conducts the review for Zoning compliance. On projects with a Major Site Plan Approval or Major Subdivision, where a Developers Agreement has been executed, the Building Office seeks approval from the Planner before issuing a permit. This had been an informal process the approval is documented in email format.

- o If applicable, applicants are advised of the process and application for a variance, special exception or referred to Planning for site plan approval consultation.
- o If Land Use Board Approval is required, permit is put on hold until Notice of Decision is received by Building Department (being a small office, often a verbal notification of decision is provided before the document is drafted, expediting the permit approval) Upon meeting land-use board controls:

**Step Two:** Plan review is conducted – there is a plan review checklist, but it is a guide only.

Plan review on single-family projects includes:

- Zoning compliance
- o DES compliance
- o Egress
- o Table 301.2 compliance
- o Framing compliance

Mechanical, Electrical and Plumbing details are not reviewed in plan review and are field verified at Rough inspection.

Commercial and Industrial plans review include:

- o Fire Department review; The Fire Department is supplied with second set of construction documents for concurrent review. They do issue permits for Fire Alarms and Suppressions systems. Any concerns with the architectural or other aspects would be addressed in a letter of comment. The permit is not held up for Fire Department response. Life safety systems review (E/M lighting, Exit Signage, smoke control, etc.
- o Fire area/fire wall/ fire separation/occupancy separation and draft-stopping review
- o Code Summary Review/height and area compliance and allowances
- o Summary of Special Inspections audit
- o Access and accessibility compliance

**Step 3:** For those permits that require a licensed contractor either the Permit Clerk prior to issuing permit, the building inspector at random times will verify the licensed and issued the permit. The Building Inspector approves valuation, if it comes close to the Building Valuation Data, Newmarket accepts the estimated value and then the permit(s) are issued.

#### **Inspections:**

The Newmarket building inspection process is meant to compare the work to the permitted plans and documents submitted to the Planning Department, in addition to the State Minimum code. Inspections are requested by either phone call or email request; staff has two calendars to check as the permitting calendar does not sync with Microsoft Office. The Permit Clerk will generally try to group inspections by location in town to maximize efficiency. Requested permits can typically be accommodated at the requested date and time with minor modification. Most inspections can be accomplished within 30



minutes including travel time. Full Building roughs and final inspections are typically allotted an hour but can be modified due to scope of project. The standard operating procedure is to hold office hours 8:00-10:00 a.m. and conduct most field work from 10:00 a.m.-1:00pm. The current inspector is a retiree from NHRS and is limited to 32 hours per week. The inspection checklist is not used every time. When the Inspector has a lot of projects going or a phased project, the checklist is used more, primarily to keep it all straight (a guide). Typically, when used, a copy of the checklist is placed in the file. When an inspection fails a re-inspection, the inspector may provide guidance and informs the party he will check for compliance at the next regular inspection. No re-inspection fee is charged. Full Building roughs and final inspections are typically allotted an hour but can be modified due to scope of project.

### **The Single-Family Inspection Process**

2015 IRC with Statewide Amendments- Newmarket Compared to Best Practices

**Present Inspection Tasks** 

# 1ST Inspection

Appropriate erosion control

Foundation location pursuant to setbacks

Temporary power for approval

Compaction of excavated area

Foundation substrate & footing forms per R403

Port-o-let on site

# Footings and Foundations: All Footings and piers

Possible Inspections Tasks- Best Practices-

supported by undisturbed natural soil or engineered fill with max. load values per Table R401.4.1.

Footings clear of mud, standing water, vegetation and roots prior to placement of concrete.

All trenches or excavations and formwork in accordance with the size(s) and configuration(s) as per permit plans and

Area within excavation or forms properly compacted.

The bottoms of all foundations below the frost line -(48)" minimum).

All steel reinforcement in place overlapped and tied as required.

#### **Foundation Inspection**

Verify wall location, width, height.

Verify proposed slopes.

All reinforcement in place, overlapped, and tied as required.

Reinforcement placed so that bars do not "burn" the form.

For masonry walls, verify reinforcement, placement, cleanouts if needed and bond beams.

Verify anchor bolt size and spacing per plans and shear wall schedule.

Foundation Insulation, drainage and waterproofing.

Floodplain: upon placement of the lowest floor prior any vertical construction, elevation certificate.

# 2nd Inspection

Anchor bolts (straps not permitted)

All snap tie ends removed interior/exterior

Perimeter drain extended 35' from foundation

Temporary power for approval

Sleeve for soil pipe (2) pipe sizes larger

Sleeve for water line (2) pipe sizes larger

Stone for perimeter drain

Filter fabric in place



Water stop at snap ties ends

Moisture proof/water proof foundation

Foundation test for re-bar if code required

Erosion control maintained

Ground to re-bar (Ufer Ground)

# 3<sup>rd</sup> Inspection

Rough frame

Rough electrical

Rough plumbing

No corner boards, siding or building wrap applied

Roofing per manufacturers installation

U 0.35 or less windows installed with flexible flashing (spec stickers left on)

Doors installed with flexible flashing

Fire safing/stopping

Chimneys and vents

Erosion control maintained

**Building Slab (if any):** Elevation Certificate if required for FEMA elevation of lowest floor.

All excavations and/or forms erected in accordance with the size and configuration as per the permit plans.

Area within excavation of formwork properly compacted.

Vapor barrier, steel reinforcement and expansion joint materials in place.

<u>Sub-Floor</u>: Sub-floor Framing (Pier and Beam foundation only) A floor joist inspection prior to the installation of subfloor decking. This is a partial inspection for the floor frame system. The underside subfloor insulation is required.

#### Frame- All sub-inspections complete.

All wall and roof sheathing installed in accordance with the fastening schedule on the approved plans and/or code.

All bearing points (continuous load path) have load path continuity to foundation per the plans and code. All wall and roof framing, bracing, fireblocking, draftstopping, fire stopping, and anchoring devices must be in place and installed in accordance with the type, sizes(s) and configuration(s) on the approved plans and code.

Braced walls and wall lines to code.

High wind and/corrosion resistant fasteners.

Beams, headers and posts; joists, rafters, valleys and hips are installed per the plans. Lumber has the appropriate grade stamp and species per the approved plans.

Use of approved truss plan and truss design drawings provided with the shipment of trusses. Truss details and layout. Trusses (including gable end truss) installed and laterally braced per engineered truss plan. Attention paid to bearing points, gable ends, and cathedral ceilings. Truss clips installed per manufacturer's instructions, and connected to walls and beams.

Rooms, spaces, corridors, and doorways sized and configured in accordance with the approved plans.

Notching and Boring.

Fireplace and chimney installed and provided with the proper clearances as per manufacturer specifications. Firebox width/depth hearth and extension Width.

Sleeping rooms in dwellings and dwelling units-emergency egress openings.

Sill heights.

Attic and crawl space ventilation provided as well as access.

All electrical, plumbing, fire, gas and mechanical components completed, tested and passed inspection before concealing.



All safety glazing in hazardous locations in place and properly identified.

Certificate of elevation when required (flood zone).

Windows and doors, sizing, ratings, location, installation to meet loads and energy code.

Check for rated walls/floors/ceiling and penetrations.

<u>Insulation</u> and corresponding *R*-values and their correct location and proper installation.

Fenestration properties (*U*-factor and SHGC) and proper installation and flashing.

Air leakage/ vapor barrier.

Weather envelope, flashings, wall coverings (cladding)

Fire stopping and blocking.

# **Roofing- Components and Cladding**

High wind or/corrosion resistant fasteners.

Siding and soffits attached per components and cladding details and code.

Flashings- wall and valley.

Underlayment.

Ice Barriers.

Roof Covering- Slope/fasteners/manufacturers installation.

#### **Final**

Zoning Compliance.

Building Numbers.

Railings, doors, steps and stairs.

Egress elements.

Blower Door test results.

Energy Efficiency Certificate posted.

Fireplace Combustion Air checked.

Prefab Fireplaces installed per spec.

Sealed Doors to meet Energy Code.

Grade slopes and siding clearances.

Exhausts (bathroom, stove etc.)

**Elevation documentation**. If located in a flood hazard area.

R-302.13.1 *opt out-* A Fire Protection of Floors Omission Disclosure Document recorded by legal owner of record at the Registry of Deeds, copy to property file.

Page 14

# 4th Inspection

Insulation installed per IECC

Permanent power approval

Erosion control maintained

### 5<sup>th/</sup> Final Inspection

Electrical panel, with panel front removed, by electrician

Circuit directory typed and secured inside of panel door

Final electrical

Energy Code Compliance Certificate secured inside of Service Entrance panel door

Finish grade sloped 6: in 10' from foundation and finish grade 6" from wood siding, sheathing, and wall framing

Wellhead inspection well report, standard analysis, DES,

fact sheet WD-WSEB-2-1

Garage/ Unit fire separation

Decks

Siding installed per manufacturers guidelines

Homeowners manuals on maintaining their septic system, as well as those provided with appliances and products

Interior stairs, rails and safety glass

Stairs exterior with concrete stair rest at base

Property number

Escape window to grade checked

Impact fee paid by certified bank check

Fire Department sign off on boiler

Fire Department sign off on smoke detectors

Public Works director sign off on driveway

Water Department sign off for Town water

Sewer Department sign off for Town sewer

Exterior lighting shaded to property line

Erosion control maintained – leach field loamed and seeded

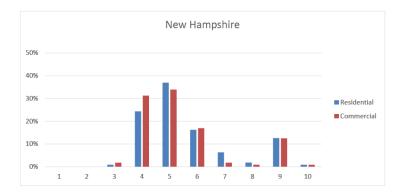
Septic permit to operate

# **Newmarket Certificate of Occupancy requirements:**

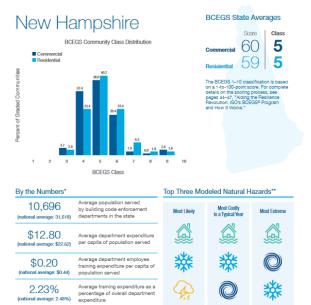
- Septic System Approval for Operation or Sewer Connection Acceptance
- Planning/Zoning inspection and approval
- Duct pressurization test documentation
- Blower door test results
- Street number readily visible from driveway entrance posted
- As-built certified plot plan –DEPENDS ON PROXIMATY TO LOT LINE

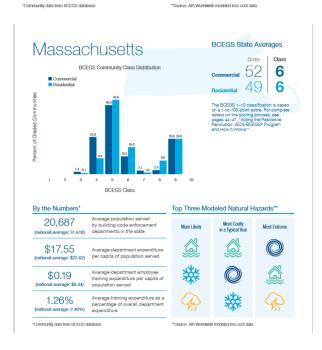
BCEGS- The information can help you benchmark your community's level of enforcement against other cities and towns in your state and in the country as a whole. The Building Code Effectiveness Grading Schedule (BCEGS®) assesses the building codes in effect in a particular community and how the community enforces its building codes, with special emphasis on mitigation of losses from natural hazards. The concept is simple: municipalities with well-enforced, up-to-date codes should demonstrate better loss experience, and insurance rates can reflect that. The prospect of lessening catastrophe-related damage and ultimately lowering insurance costs provides an incentive for communities to enforce their building codes rigorously — especially as they relate to windstorm and earthquake damage. The BCEGS program assigns each municipality a BCEGS grade of 1 (exemplary commitment to building code enforcement) to 10. ISO develops advisory rating credits that apply to ranges of BCEGS classifications (1-3, 4-7, 8-9, 10). ISO gives insurers BCEGS classifications, BCEGS advisory credits, and related underwriting information.





State Average								
Score Class								
Commercial	55.64	6						
Residential	53.58	6						







Newmarket Plans Review Checklist	
Property Address	<b>Z</b> one
Date of Review	IBC / IRC
ADMINISTRATION	
[] Permit application complete	
[] Meets zoning - need variance yes no	variance granted date
[ ] Planning Board Approval	
[] Fees paid in full	
[] Required Fire Department Review (NFP.	A 13, 14, 72 and non-one- and two-family)
[] Plans and specifications adequate for rev	iew
[] The plans submitted require an architect'	s or engineers seal and signature (except 1-and 2-family)
[] Other	
LOCATION ON LOT	
[] Table IBC 602 IRC 302 compliance	
[] wetlands set back	
[] floodplain/flood-prone compliant elevation	on certificate required
[] Other	
ATTACHED GARAGES	
[] Garage dwelling separation: ½ gypsum b	oard or equivalent
On the garage side.5/8" if habitable	space over garage R302.6
[] Door: 1-3/8" minimum solid or 20 minut	e fire rated doors
R302.5.1.1	
[ ] Floor shall slope to main vehicle entry do	porway or a drain.
R309	
[] Other—	
INTERIOR ENVIRONMENT REQUIRI	EMENTS
[] Light required: minimum 8% of floor are	ea R303.1
[] Ventilation required: minimum 4% of flo	oor area R303.1
[] Habitable room: minimum ceiling height	7'no portion less than 5' R305.1



[] Attic Access >30"/30 sq. ft. 22"x30" weather stripped opening
[ ] Crawl space ventilation R408.1 and R408.2
[ ] Crawl space access 18" x 24" R408.3
[ ] Other———
ENERGY CODE
[] air sealing N1102.4
[ ] Roof/Ceiling minimum N1102.1
[ ] Floors N1102.1
[ ] Slabs N1102.1
[] Crawl Spaces N1102.1
[] Basement Walls N1102.1
[] Fenestration N1102.1
[] Hatch and door weather-stripping N 1102.2.3
[] Other————
GUARDRAILS
[] Required for balconies, open sides of stairs or raised
Floor surfaces more than 30" above floor R316.1
[] Guardrail height: 36: minimum R316.1
[] Opening limitations: Such that a 4" sphere cannot
Penetrate it R312.3
[] Other————
HANDRAILS
[] 34" minimum height, 38" maximum height R315.1
[] Handrails required for stairs with 4 or more risers R311.7.7
MEANS OF EGRESS
[] Basements with habitable space and every sleeping room
Shall have one openable emergency escape window
Opening 5.7 square feet. (grade floor 5 square feet). 24"
Net clear height 20" net clear width. Maximum sill
Height = 44" R310.1.1, R310.1.2, R310.1.3
[] Exit door (minimum size 3'-0" x 6' x 8" R311.1, R311.3



[] Locks and latches R311.2
[] Passageways: Minimum clear width with = 36" R311.4
STAIRWAYS
[] Minimum width = 3' R314.1
[] Minimum landing = 3' x 3' R312.1, R312.2
[ ] Stair rise = 8-1/4" maximum R314.2
[] Tread width = 9" minimum R314.2
[] A nosing shall be provided on stairways with solid risers
(minimum 3/4", maximum 1-1/4") R313.2.1
[] Headroom = 6'-8" minimum R314.3
[] Winders 6" minimum at narrowest point of tread. 10"
Minimum at a point 12" from the narrowest point of tread
R314.4
[ ] Spiral stairways R314.5
[ ] Other————————————————————————————————————
FLOORS
[ ] Floor framing R502
[ ] Allowing spans R502.3 table R502.3.1(1)(2)
[] joists under bearing partitions R502.4
[] Allowable girder spans R502.5 table R502.3.1(1)(2)
[ ] Bearing R502.6
[ ] Floor sheathing R503.1 Tables R503.1, R503.2.1.1 (1)
R503.2.1.1(2)
[ ] Lateral support and bridging R502.7 table R502.7.1
[] Floor cantilevers R502.3.3
[ ] Other———
ROOFS
[ ] Roof snow load R301.2(5)
[ ] Ceiling joist spans R802.4, tables R802.4(1)(2)
[ ] Rafter spans R802.5, Table R802.5.1(1)(8)
[ ] Trusses R 802.10



[] Roof sheathing R803.1
[] Asphalt shingles. Underlayment (felt) is
Required R905.2.7
[] Ice shields are required R905.2.7.1
[ ] Flashing required: Wall and roof intersections
Chimneys, vents, change of roof slope or
Direction etc R703.8, R903.2, R905.2.8
[ ] Re-roofing: Remove existing roof covering
When the existing roof has two or more
Applications R907.3
[ ] Other————————————————————————————————————
FIRE RESISTIVE CONSTRUCTION
[] Fire stopping required R602.8, R602.8.1
[] Concealed wall spaces
[ ] Connections between horizontal and vertical
Spaces (soffits, dropped ceilings etc.)
[] Stairways
[] Ceiling and floor opening (vents, pipes, ducts,
Chimneys, fireplaces etc.)
[] Access to attic: Minimum size 22" x 30" R807.1
[ ] Other————————————————————————————————————
SAFETY GLAZING
[ ] Safety glazing is required in the following locations:
R308.4
[ ] Glazing in doors
[ ] Glazing adjacent to doors within the same wall plane.
[ ] Glazing in walls enclosing bathtubs, showers,
Whirlpools, etc
[] Glazing in fixed panels in excess of 9 square feet
With the lowest edge less than 18" to the floor.
[] Skylights, roofs, and sloped glazing R308.6
[] Other—



SMOKE/CO DETECTORS
Smoke detectors shall be wired interconnected, and
Provided with battery backup when appropriate, in
The following locations R317 as modified by NH SFMO
[] In the immediate vicinity of the bedrooms (smoke &CO)
[ ] In all bedrooms (smoke only)
[ ] In each story within the dwelling unit including Basements (smoke &CO)
[] Other—
PRESSURE TREATED WOOD
[] Pressure treated wood required R323
[] Floor joists closer that 18" to the ground R323.1
[] Wood girders closer than 12" to the ground R323.1
[] Wood framing, siding and sheathing on exterior
Walls closer than 6" from the exposed earth R323.1
[] Sleepers and sills on concrete or masonry R323.1
[] Wood siding closer than 6" to the earth R323.1
[ ] Other—
FOUNDATIONS
[] Design criteria R301.2
[] Footing size R403.1 Table R403.1
[] Foundation wall size R404, Table R404.1.1(1)(4)
[] Waterproofing required R406.2
[ ] Damp proofing required R406.1
[] Foundation drain required R405.1
[] Site grading: slope 6" with first 10' from house R401.3
[] Foundation anchorage ½" diameter bolts at 6'o.c. and
Within 12" from corner, 7" embedment in concrete and
Masonry. Anchor straps shall be spaced and installed
In compliance with manufacturers specifications R403.1.6
[] Column and post connection required R407.3
[] Beam and girder bearing R502.6



[ ] Mobile home tie downs required Appendix E 604.1

[] Vapor barrier of 6 mil plastic is required under the
Basement floor R506.2.3
[ ] Other
WALLS
[ ] Identification R602.1
[ ] Stud spacing R602.3.1 Table R602.3.1
[ ] Top plate R602.3.2
[] Drilling and notching studs R602.6
[] Bracing, corner bracing and every 25' of wall
TR602.10.3
[] Headers R602.7 Table R502.5 (1)(2)
[] Framing around chimneys: 2" fire-stopped clearance required
R1001.15
[] Masonry veneers shall be provided with a sheathing
Paper, flashed and provided with weepholes.



R73.2, R703.7.5, R703.7.6 and 703.8

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PROJEC	T SCOPE:								
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	,	BRACED	WALL DESIGN (IF	R 106.1.3	3				
		USED)							
			OADS-SEISMIC,	R301.1/.	0				
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		FLOODPLAIN		R301.2.4	ļ				
		LIVE LOAD		R301.5					
		FIRE-RESISTANT		R302					
		CONTRU		5202.5					
			IG-GARAGE	R302.5					
			VENTILATION	R302					
			LE ROOMS	R303					
		CEILING		R305					
		SHOWER	BATHS AND IS	R307					
		SAFETY G	GLAZING	R308					
		ESCAPE V	WINDOWS	R310					
		LOCATIO	NS						
		SIZE REQ	UIREMENTS	R310.2					
		SILLS-PRO	OTECTION FROM	R310.2.2					
		FALLING							
		EGRESS [	DOOR	R311.2					
			AND LANDINGS	R311.3					
		VERTICAL	L EGRESS	R311.4					
		CONSTRU	JCTION	R311.5					
		HALLWA	Y WIDTHS	R311.6					
		WIDTH		R311.7					
		STAIR HE	ADROOM	R311.7.2					
		RISER / T	READ / NOSING	R311.7.5	/	<u> </u>			· · · · · · · · · · · · · · · · · · ·

5.3

		HANDRAIL	R311.7.8		
		GUARDRAIL	R312		
		WINDOW FALL	R312.2		
		R-302.13.1 <i>opt out</i> - A Fire	R302.13.1		
		Protection of Floors	as		
		Omission Disclosure	amended		
		Document recorded by	by NH		
		legal owner of record at	BCRB		
		the Registry of Deeds, copy			
		to property file.			
		SMOKE & CO ALARM	R314/315		
		LOCATIONS			
		FOAM PLASTIC	R316		
		PROTECTION AGAINST DECAY	R317		
		TERMITES	R318		
		ACCESSIBILITY	R320		
		FLOOD RESISTANT	R322		
		CONTRUCTION			
		SOLAR	R324		
			FOUNDA	TION	
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		SOIL TEST REQUIRED?	R401.4.1		
		SIZE	R403.1.1		
		FOUNDATION WIDTH	TABLE403.		
		(FRAME)	1(1)		
		DEPTH	R404.1.4		
		DEPTH FROST DEPTH	R404.1.4 R404.1.4.1		
		DEPTH FROST DEPTH ANCHORAGE	R404.1.4 R404.1.4.1 R403.1.6		
		DEPTH FROST DEPTH ANCHORAGE SLOPES	R404.1.4 R404.1.4.1 R403.1.6 R403.1.7		
		DEPTH FROST DEPTH ANCHORAGE SLOPES FOUNDATION WALLS	R404.1.4 R404.1.4.1 R403.1.6 R403.1.7 R404		
		DEPTH FROST DEPTH ANCHORAGE SLOPES FOUNDATION WALLS REINFORCEMENT	R404.1.4 R404.1.4.1 R403.1.6 R403.1.7 R404 R404.1.3.2		
		DEPTH FROST DEPTH ANCHORAGE SLOPES FOUNDATION WALLS	R404.1.4 R404.1.4.1 R403.1.6 R403.1.7 R404		
		DEPTH FROST DEPTH ANCHORAGE SLOPES FOUNDATION WALLS REINFORCEMENT SUPPORTING LIGHT FRAME	R404.1.4 R404.1.4.1 R403.1.6 R403.1.7 R404 R404.1.3.2 R404.1.3.2		
		DEPTH FROST DEPTH ANCHORAGE SLOPES FOUNDATION WALLS REINFORCEMENT SUPPORTING LIGHT FRAME PLACEMENT TABLE R404.1.2	R404.1.4 R404.1.4.1 R403.1.6 R403.1.7 R404 R404.1.3.2 R404.1.3.2		
		DEPTH FROST DEPTH ANCHORAGE SLOPES FOUNDATION WALLS REINFORCEMENT SUPPORTING LIGHT FRAME	R404.1.4 R404.1.4.1 R403.1.6 R403.1.7 R404 R404.1.3.2 R404.1.3.2		
		DEPTH FROST DEPTH ANCHORAGE SLOPES FOUNDATION WALLS REINFORCEMENT SUPPORTING LIGHT FRAME PLACEMENT TABLE R404.1.2(3) & (4) & (8)	R404.1.4 R404.1.4.1 R403.1.6 R403.1.7 R404 R404.1.3.2 R404.1.3.2 .2		
		DEPTH FROST DEPTH ANCHORAGE SLOPES FOUNDATION WALLS REINFORCEMENT SUPPORTING LIGHT FRAME PLACEMENT TABLE R404.1.2(3) & (4) & (8)	R404.1.4 R404.1.4.1 R403.1.6 R403.1.7 R404 R404.1.3.2 R404.1.3.2 .2 (1) & (2) &		
		DEPTH FROST DEPTH ANCHORAGE SLOPES FOUNDATION WALLS REINFORCEMENT SUPPORTING LIGHT FRAME PLACEMENT TABLE R404.1.20 (3) & (4) & (8) OPENINGS	R404.1.4 R404.1.4.1 R403.1.6 R403.1.7 R404 R404.1.3.2 R404.1.3.2 .2 (1) & (2) & R404.1.3.3 .7.3		
		DEPTH FROST DEPTH ANCHORAGE SLOPES FOUNDATION WALLS REINFORCEMENT SUPPORTING LIGHT FRAME PLACEMENT TABLE R404.1.2(3) & (4) & (8) OPENINGS DRAINAGE	R404.1.4 R404.1.4.1 R403.1.6 R403.1.7 R404 R404.1.3.2 R404.1.3.2 .2 (1) & (2) & R404.1.3.3 .7.3 R405		
		DEPTH FROST DEPTH ANCHORAGE SLOPES FOUNDATION WALLS REINFORCEMENT SUPPORTING LIGHT FRAME PLACEMENT TABLE R404.1.2(3) & (4) & (8) OPENINGS  DRAINAGE DAMPPROOFING	R404.1.4 R404.1.4.1 R403.1.6 R403.1.7 R404 R404.1.3.2 R404.1.3.2 .2 (1) & (2) & R404.1.3.3 .7.3 R405 R406	DR	
STAFF	OWN	DEPTH FROST DEPTH ANCHORAGE SLOPES FOUNDATION WALLS REINFORCEMENT SUPPORTING LIGHT FRAME PLACEMENT TABLE R404.1.2(3) & (4) & (8) OPENINGS  DRAINAGE DAMPPROOFING	R404.1.4 R404.1.4.1 R403.1.6 R403.1.7 R404 R404.1.3.2 R404.1.3.2 .2 (1) & (2) & R404.1.3.3 .7.3 R405 R406 R408	PLAN PAGE	NOTES



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	∜	EDAMINIC EL COS JOJET	D 502 2 2		
		FRAMING FLOOR JOIST	R 502.3 &		
		SIZE/SPAN/SPACING/	TABLE R		
			502.3.1(1) and R		
		LLOOP OPENINGS (®	502.3.1(2) R 502.10		
		FLOOR OPENINGS (@ STAIRS, ETC.)	K 502.10		
		FLOOR TRUSSES	R 502.11		
		(DRAFTSTOPPING)	N 302.11		
		TRUSS DESIGN DRAWINGS.	R 502.11.4		
		SHEATHING TYPE /	R 503		
		THICKNESS	1. 303		
		CONCRETE SLAB (W/WWF)	R 506		
		EXTERIOR DECKS	R 507		
		EXTERIOR BEERS	WAL	16	<u> </u>
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		DESIGN AND	R 602.3		
		CONSTRUCTION	N 002.3		
		FRAMING STUD SIZE /	R 602.3.1		
		SPACING / HEIGHT	1 002.3.1		
		SHEATHING TYPE	R602.1.8		
		/THICKNESS / BRACING	Wood		
		,	structural		
			panels.		
			R602.1.9		
			Particlebo		
			ard.		
			R602.1.10		
			Fiberboar		
			d.		
			TABLE		
			602.3(1)		
		HEADER SIZES	TABLES		
			R602.7(1)		
			AND		
		MUNICONIC AND DOORS	R602.7(2)		
		WINDOWS AND DOORS	R 609		
		SIPS	R 610		
		EXTERIOR COVERING	R 703		
		WATER RESISTIVE BARRIER	R 703.2		
		FLASHING @	703.4		
		WINDOWS/DOORS/WALL			
		TO ROOF / LINTELS			



		ROC	F/CEILING C	ONSTRUCTION	
STAFF	OWN ER ⊗∕	SUBJECT	CODE	PLAN PAGE	NOTES
		CEILING JOIST - SIZE / SPACING / SPAN	TABLE R802.4(1), (2)		
		RAFTERS - SIZE / SPACING / SPAN CHOOSE BASED ON LOADS FRAMING OF OPENINGS	TABLE R802.5.1(1 )(9) R 802.9		
		ROOF TRUSSES ROOF TIE DOWN	R804.3.5 R 802.10 R 802.11		
		SHEATHING / THICKNESS  CEILING AND ROOF DIAPHRAGMS  VENTILATION REQUIRED	R 803 R 804.3.7		
		ATTIC ACCESS SIZE / LOCATION FLASHING	R 807.1		
		UNDERLAYMENT ICE BARRIER	R 905.1.1 R 905.2		
		ASPHALT SHINGLES FLASHING PHOTOVOLTAIC SYSTEMS	R 905.2 R 905.2.8 R 907 &		
			909 FIREPI	ACE	
STAFF	OWN ER	SUBJECT	CODE	PLAN PAGE	NOTES
	≪	MASONRY PLAN W/FIREBOX WIDTH/DEPTH, HEARTH	R 1001 R 1001.6		
		SECTION W/ FLUE/FIREBOX HEIGHT /HEARTH EXT., EXTENSION WIDTH	FIGURE R1001.1 R1001.9		
		COMBUSTION AIR  PREFAB FIREPLACES &  CHIMNEYS LISTED &  LABELED PER UL127 &  INSTALLED PER	R 1006.1 R 1005		
		MANUFACTURER INSTRUCTIONS (SPECS REQUIRED FOR BEDROOM LOCATIONS)			



		SEALED DOORS PER IECC	N1102.4.2		
		(WOOD BURNING FIREPLACE)			
		FINEPLACE	ENERGY CO	DDF- IRC	
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		Residential Energy Code			
		Application (EC-1 Form) or			
		RES <i>check™</i> RES <i>check™</i> Inspection List			
		INFORMATION ON	N 1101.5		
		CONSTRUCTION	14 1101.5		
		DOCUMENTS			
		1. Insulation materials and			
		their <i>R</i> -values.			
		2. Fenestration <i>U</i> -factors			
		and SHGCs.			
		AMENDED TILL 2022 CLIMATE ZONE	N 1101.7		
		COMPLIANCE METHOD	N1101.7		
		1. Sections N1101.14	1111011110		
		through N1104. or			
		2. Section N1105 and the			
		provisions of			
		SectionsN1101.14 through			
		N1104 labeled "Mandatory." or			
		3. An energy rating index			
		(ERI) approach in Section			
		N1106.			
		VAPOR RETARDER	N 1102.1.1		
		INSULATION AND	N 1102.1.2		
		FENESTRATION CRITERIA	114465 : 5		
	-	R-VALUE COMPUTATION	N 1102.1.3		
		U-FACTOR ALTERNATIVE TOTAL UA ALTERNATIVE	N 1101.1.4 N 1101.1.5		
		ALL BUILDING	N 1101.1.5 N 1101.1.6		
		COMPONENTS IDENTIFIED	14 1101.1.0		
		EQUIPMENT SIZING AND	N 1103.7		
		EFFICIENCY RATING	Manual S		
			Manual J		
			or		
			Other	NICAL	
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		EQUIPMENT SIZE BASED			
		ON BLDG. LOADS			
		FURNACE LOCATION			
		CONDENSATE DISPOSAL			
		KITCHEN EXHAUST			
		>400CFM			
		METHOD OF RADON			
		MITIGATION			
		ACCESS/SERVICE SPACE			
		IDENTIFY COMBUSTION AIR			
		EQUIPMENT SIZE BASED			
		ON BLDG. LOADS			
	•		PLUM	BING	
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		WATER SERVICE SIZE			
		(PROPOSED OR EXISTING)			
		PLUMBING WALLS (5 ½"			
		MIN.)			
		EJECTOR PIT			
		FLOOR DRAIN			
		STEAM SHOWER			
		WATER HEATER(S) (W/PAN			
		REQUIRED ABOVE LIVING			
		AREAS)			
		PROTECTION FROM			
		FREEZING (SEE IECC)			
			ELECT	ı	
STAFF	OWN	SUBJECT	CODE	PLAN PAGE	NOTES
⋖	ER				
	⋖				
		IDENTIFY ELECTRICAL			
		PANEL & SERVICE SIZE			
		LIGHTING LOCATIONS			
		CLOSET/STORAGE (>6SF)			
		3 WAY SWITCHING			
		RECEPTACLES: GFCI			
		(KITCHEN, BATH, EXTERIOR,			
		GARAGE, UNFIN.			
		BASEMENT)			
		AFCI (LIVING AREAS)			

