

Madani, Mo

From: Joshua Porter <josh.porter@consultengineering.com>
Sent: Wednesday, July 24, 2024 11:27 PM
To: Madani, Mo
Subject: RE: EBIW Milestone Inspection Form
Attachments: 2024-07-24 [Milestone Form Review] 01.pdf

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Mr. Madani,

I searched and could not find the emails of the Florida Building Commission or the members of the EBIWG. I am sending you my review of the Milestone forms and my own recommended versions of the forms. I humbly request that you forward this on to the committee, or if the forms are already being reviewed by the commission, then please forward this on to the members of the FBC.

Thank you for always taking my calls and considering my thoughts and concerns. I hope to be able to contribute more to this industry and my community over the coming years.

Sincerely,

Joshua L. Porter, PE, SI
President



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From: Madani, Mo <Mo.Madani@myfloridalicense.com>
Sent: Friday, June 28, 2024 8:54 AM
To: Joshua Porter <josh.porter@consultengineering.com>
Subject: RE: EBIW Milestone Inspection Form



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From: Madani, Mo <Mo.Madani@myfloridalicense.com>
Sent: Thursday, June 27, 2024 4:31 PM
To: Joshua Porter <josh.porter@consultengineering.com>
Subject: RE: EBIW Milestone Inspection Form

I have just called and left a message. Please call me when available.

Thanks

Mo Madani, Technical Director
Building Codes & Standards office
2601 Blair Stone Road
Tallahassee, Florida 32399
850-717-1825

From: Joshua Porter <josh.porter@consultengineering.com>
Sent: Thursday, June 27, 2024 4:11 PM
To: Burke, Alan <Alan.Burke@myfloridalicense.com>; Madani, Mo <Mo.Madani@myfloridalicense.com>
Subject: EBIW Milestone Inspection Form
Importance: High

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Gentlemen,

Our firm has completed numerous Milestone inspections since the law went into effect. The attached Inspection Form was sent to us this week from the City of Punta Gorda claiming that this is an approved form from the Florida Building Commission and that we are required to use this form to submit our milestone inspections. When I first

What bulging? I am a top expert in my field having been an expert witness on over 40 cases and I have never used a generic term like “bulging” as a standalone descriptor. Bulging of what? Slabs? Stucco? Doors? What is “Good” bulging? What is “Poor” bulging?

“Settlement:”

What is “Good” settlement? What is “Poor” settlement? Engineers work with numbers and math. This entire page seems to have been written by someone that hasn’t spent a day on a job-site. The legend which attempt to define “Good” and “Poor” doesn’t fit with these items. For example: “Bulging: Poor” indicates that ‘substantial structural deterioration’ of “bulging” existed... what?

I could go on and on for page after page. There is nothing positive I can say about this form. The form attempts to organize the reporter’s thoughts but it’s not in a way that real engineers performing these inspections think.

I have been putting people’s lives and building safety first ever since I started specializing in this field 17 years ago. When Champlain Towers collapsed (which prompted all this new legislation), I made numerous videos on Youtube discussing the structural shortcomings and history of the building. I was featured in the Washington Post, New York Times, and Miami Herald regarding that case. Two years later, NIST came out and said everything I had already said two years prior. There isn’t an engineer alive that knows more about that collapse than I do. I was retained by the State Attorney’s Office to make a presentation to the Grand Jury for the Surfside Collapse case, and I consulted with the Senate Attorney’s Office when they were reviewing the then proposed FS 553.899. I am deeply passionate about the profession of engineering and about Existing Structures, especially in Florida the state I was born and raised in.

There are only two engineering firms that I know of in the entire state of Florida that specialize 100% in restoring existing structures and Consult is one of them. We are the only firm in Florida that specializes 100% in restoring Condominium buildings, the very subject of this legislation. I take what I do very seriously and I can tell you that this form is so poorly thought through that it will do more harm than good. I would be happy to take all of you along for a day to our jobsites to see firsthand how we are structurally restoring condominiums in Florida. It’s all we do, and we are overseeing about \$30M worth of condominium repairs this year alone. We have over \$50M worth of condominium repairs already on contract to start in 2025. I would also be honored to help draft a much better form that is more concise and more useful to the purpose. We have another 6 months to get this right, there is no need to rush forward with this. I would love to help in this endeavor. I ask for nothing in return, only to see the industry get better, not worse.

Sincerely,

Joshua L. Porter, PE, SI
President



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Milestone Reporting Forms

A Review of the Final Recommended Form for Milestone Reporting in Florida and Alternative Form Submission

Prepared for:
The Florida Building Commission and the Existing Building Inspection Workgroup



Prepared on:
24 July 2024

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1 GENERAL INFORMATION

1.1 PERSONAL COMMENT

- 1.1.1 I apologize in advance for any lack of professionalism or perceived rudeness on the part of myself in writing this report and the tone it might take. I only discovered very recently that there existed a committee drafting the Milestone Inspection Forms and that the final version had been submitted to the Florida Building Commission for approval. In the lateness of the hour, I prioritized brevity over tact. I hope that no one reading this perceives this report as anything more than sincere concern for our industry and a deep appreciation for everyone who volunteered their time and worked through the current Milestone forms. If I had more time, I would have certainly given this report several more pass-throughs re-writing anything I felt might come across “wrong” or “harsh”. So, I ask for your forgiveness in advance and humbly present my feedback and recommendations for format changes.

1.2 REVIEWER BACKGROUND

- 1.2.1 The undersigned of this report is a licensed and registered Florida Professional Engineer and Special Inspector (limited) with extensive experience in the Construction Industry with a career that began by working for a custom home builder in SW Florida around the year 1993.
- 1.2.2 Over the last 16+ years, the undersigned has been providing construction oversight and consulting services for construction projects ranging from a few thousand dollars in construction cost to \$40M+ for a single project.
- 1.2.3 For the last 14+years, the undersigned has been the owner of Consult Engineering, Inc. (Consult), an engineering firm specializing in building inspections and construction consulting and has provided expert testimony on well over 40 construction defect cases and other construction-related subject matter.
- 1.2.4 Consult is the only firm that the undersigned is aware of in Florida that specializes and focuses exclusively on the inspection and structural repair/maintenance of high-rise structures owned by Condominium Associations. It serves a very niche market and is highly specialized as experts in this field, the very industry and subject matter which the Milestone Inspection process was contemplated to serve.
- 1.2.5 The undersigned has consulted on structural matters with the Washington Post, New York Times, Miami Herald, Florida State Attorney’s Office, and the Chief Attorney with The Florida Senate Committee on Regulated Industries.
- 1.2.6 After the collapse of Champlain Towers in Surfside Florida, the undersigned produced 27 videos covering the engineering and physics of the collapse on their YouTube channel “Building Integrity” and began creating educational content focused on advancing the quality of work and services in both the engineering and construction industries. The channel has been met with great interest with an

overall approval rating of 97% and well over 75,000 subscribers at the time of this report.

- 1.2.7 Since the bill was signed into law by Governor Ron DeSantis, the undersigned has performed numerous Milestone Inspections of buildings throughout the SW Florida region.

1.3 PURPOSE

- 1.3.1 The purpose of this report is to provide feedback regarding the recommended Final version of the Milestone inspection form that the EBIWG committee has put before the Florida Building Commission for adoption.

- 1.3.2 Based on our aforementioned experience and expertise in this subject matter, the undersigned has found both fundamental and minor errors and problems with the current proposed state of the recommended form.

1.4 MILESTONE INSPECTION GOALS

- 1.4.1 The structures in Florida are getting older. When the 40-year recertification program was created in South Florida, most of the buildings there were not 40 years old. When the undersigned started in this industry 17 years ago, most of the buildings we worked on in SW Florida were between 25 and 35 years old. Now, we are revisiting many of these same buildings decades later and have observed that the damage has accelerated and become more extensive. Most of our client's buildings are all over 40 years old. There will come a time very soon when the 10-year Milestone Inspection cycle will become too long to wait.

- 1.4.2 The goal of any Milestone Inspection, plain and simple, should be to prevent the next condominium collapse from ever happening. This goal will not be accomplished with really thorough government forms. It will be accomplished by properly training and equipping architects and engineers to properly assess high-rise structures. This is an industry-wide effort that needs to include universities, private educators, the Florida Board of Professional Engineers, the Florida Building Commission, Florida lawmakers, and the public at large.

- 1.4.3 Our recommendation is to abandon the form structure currently in place and create guidelines for developing useful reports. The goal should be to get the inspector to look at everything that is readily visible and available for inspection. The secondary goal is to get Building Officials trained on what to look for and how to read these reports.

- 1.4.4 The one thing all Building Officials have in common is that they almost never send inspectors out to inspect structural restoration projects. They almost always rely solely on Private Provider inspections and Threshold inspections. There is nothing wrong with that, but the structural repair of existing buildings is a massively growing industry and it is largely run and inspected by the private sector. Without the Building Department staff getting firsthand experience on these types of projects,

we are worried about whether they are really equipped to understand and safely evaluate the quality of Milestone reports being submitted to them.

- 1.4.5 Our concerns are also for the architects and engineers. One of Consult's specialties is re-fixing high-rise condominium buildings that were recently "repaired" and overseen by another engineering firm; yet the building is still leaking and has structural problems. We have seen firsthand the lack of understanding among the engineering profession regarding the evaluation and repair of existing complex structures. Engineering firms throughout SW Florida are divided on this subject matter. Most firms will not even attempt to oversee a high-rise restoration project. There is not a single architectural firm that we know of in our region that will oversee this work. And the engineering firms that do take on this kind of work have exhibited mixed results over the decades.
- 1.4.6 We mention the problems in this industry and the lack of technical subject experts only to demonstrate why we believe that education on this subject matter is vitally important. This is why we feel the overarching goal of the Milestone Inspection process should be one where a feedback loop exists between Milestone Inspectors and the Building Officials, where both parties are constantly learning and improving. We do not feel that the recommended Milestone Inspection Form is conducive to this type of system. It will serve only to encourage architects and engineers with even less experience to feel comfortable performing these inspections because, after all, they just need to fill out a handful of boxes.
- 1.4.7 Our summary of Milestone Inspection Program goals:
- 1.4.7.1 Meet the building inspection requirements of the Statutes
 - 1.4.7.2 Create a reporting framework system where Inspectors are thoughtfully provoked to analyze each aspect of the Primary Structural Systems and Members of a building and look out for any other structural or life-safety concern.
 - 1.4.7.3 Create a reporting procedure where Building Officials can read the reports in plain English and determine with some satisfaction that the Milestone Inspector accomplished the above two goals or not.
 - 1.4.7.4 Checkboxes and itemized lists of things to check should be avoided. Instead, categories of building aspects should be established and open-ended descriptions of distress should be required.
- 1.4.8 If these goals are met, you will end up with Building Departments that receive really well written and researched reports as well as poorly written, non-descriptive reports. The Building Departments will be able to learn over time, what should be in a "good" report and through a rejection/revision feedback system require the poorly performed inspections to be redone. In this way, the firms who at first write poor reports will improve over time thus improving the industry as a whole and increasing the net safety of the public by making them better engineers and architects.

1.5 INTENT OF THIS REPORT

- 1.5.1 Our intent is twofold. First, to dissuade the Florida Building Commission from adopting the Milestone Inspection form in its current state. Second, to provide a recommended form to which we humbly submit for review and eventual adoption.
- 1.5.2 The body of this report covers both intents in more detail with supporting argumentation and reasoning on why we believe a change in course is necessary.
- 1.5.3 The undersigned respects the time and effort put into this process by the committee and hopes that any critiques we may have are not interpreted in any other manner than as a professional review for the betterment of the industry with the ultimate goal of public safety first and foremost. The undersigned was not aware of the formation of this committee or the work it was doing until very recently or we would have participated in the process to the best of our ability and contributed earlier.

2 REVIEW OF FORM EB18-2024

2.1 GENERAL

- 2.1.1 The version of the form utilized for this review is the form found at the following website on 07/24/2024:

https://www.floridabuilding.org/fbc/commission/FBC_0424/

- 2.1.2 The form appears to be very closely based on the Miami-Dade Recertification Program forms generated for buildings located in South Florida.

- 2.1.3 A similar version of this form and the recertification program was in place when Champlain Towers collapsed in Surfside Florida. After reading the completed form for Champlain Towers South, the Building Official met with the Condominium Association board and told them that their building was "safe". After all, the form did not have the "unsafe" box checked. Several months later, the building collapsed and took the lives of 98 people.

- 2.1.4 The undersigned is extremely researched on the collapse of Champlain Towers South. And while there were numerous contributing factors that led to that tragedy, one of those factors was the false sense of security that was given to the Association board as a result of the entire recertification process. This led them to put off their restoration project until a later date. The undersigned does not believe that the forms and process used by Miami-Dade, which ultimately contributed to collapse, should be the starting point for a statewide Milestone Inspection program.

- 2.1.5 When we attempt to list every aspect of a building and query every conceivable thing that might be wrong with that building on a series of forms, we will develop a generation of architects and engineers that simply stop attempting to think outside the literal boxes. Furthermore, we will develop Building Officials who do not inquire, "has this person inspected this building thoroughly?", but who instead simply ask, "have all the boxes been filled in?".

2.2 DETAILED CRITIQUE

- 2.2.1 Our objections to each part of the 25 pages of the form are too numerous to explain in detail in this report. Most of our criticism is with the overall structure and the attempt to list every aspect of the building. I could add 3 pages of items that are missing from the list off the top of my head, but that would defeat the goals we established for this report in the previous section.

- 2.2.2 Instead, this report will focus on the very most dangerous parts of the form, critique select issues with the form, and provide an overall discussion on how it should be reformatted to suit the goals established above. A hand-written redlined version of the Milestone Inspection Report form is attached to this report for review. Please bear in mind that we REDLINED this form as if it were prepared by one of our staff. None of the redlines or comments are intended to be personal in nature.

- 2.2.3 The Florida Statutes requires that the Association post a “copy of the inspector-prepared summary in a conspicuous place on the condominium or cooperative property...” To that end, we would strongly encourage the first page of the forms to contain all of the data necessary to qualify as a summary. That way, the Association can simply print the first page or second and post that physically on the property.
- 2.2.4 There are numerous holdovers from the Miami-Dade Recertification forms which have no useful bearing on a Milestone Inspection Program. By including these unnecessary tidbits of information, the existing recommended form forces the inspector to perform more research and answer more questions than are really needed. This will increase the time it takes to perform the Inspections as well as the cost. As an engineering firm at the forefront of providing these services we can attest that there are already not enough firms willing and capable to perform these inspections and the costs are already very high. Some examples of these holdovers are listed as follows (this list is miniscule to the actual number of problems):
- 2.2.4.1 **“Describe any additions to original structure”** This serves no practical value in determining if there is structural distress to the primary structural members of a building.
- 2.2.4.2 **“Description of laboratory or other formal testing...”** Testing is not required under a Phase 1 Milestone. This section also doesn’t list what testing or what lab work is intended.
- 2.2.4.3 **“Sheets of written data...”** What does this mean? The number of sheets? The types of sheets? How does this keep a building safe?
- 2.2.4.4 **“Is wood in contact or near soil?”** What does this matter? Let’s assume the inspector selects “YES” but doesn’t note any structural problems with the member. Or let’s assume they select “NO”. What will the building department do with this information either way? It’s not useful for anything.
- 2.2.4.5 **“Masonry Finishes – Exterior: Paint Only:”** Why are we grading the paint? This has nothing to do with the structural integrity of the Primary Structural Members of the building. We challenge anyone to explain to satisfaction why the Building Official needs to know about the paint condition. If we asked 10 Building Officials if they care about the quality of the paint on a condominium building, I am confident that 10 of them will answer “no”.
- 2.2.4.6 The majority of the Miami-Dade-based form is simply a collection of facts about the building, few of which are relevant to the structural integrity of the building and the safety of the public. These fact-finding escapades may seem trivial when taken individually, but when you add them up on form after form, it adds a wasteful amount of time and money to these inspections. The architects and engineers performing these inspections should stay hyper-focused on what matters only.

- 2.2.5 The form contains a grading system which is not helpful at all. If you are an employee at the Building Department and you see under “Bulging” that the inspector checked “Fair”, what is that supposed to tell you? According to the form, only if “Bulging” is significant does the inspector have to explain. At no time does the form attempt to explain what “bulging” is nor does it ask the inspector to explain *what on the building* is “bulging”. This criticism of “bulging” can be extrapolated for most of the items which require grading in the form. A grading system for this type of open-ended structural inspection is not helpful and can be dangerous as demonstrated later in this report.
- 2.2.6 The language contained in this form opens the engineer up to liability they should not be taking on. The statute only requires that the Milestone Inspection be *visual* and of the readily accessible components of the building. It does not require the inspector to inspect hidden or inaccessible areas of the building. However, the form requires the inspector to attest to certain things they cannot possibly know or at least know thoroughly. Some examples (again, a very tiny sampling):
- 2.2.6.1 **“Reason to Believe a Dangerous Inaccessible Condition of Major Structural Component”** This is all well and good if the inspector feels that *there is* a hidden problem. But if the inspector does not check this box, the legal interpretation could be that the inspector is affirmatively attesting that *there is no* hidden problems... which is not something we would ever sign. Therefore, if this form remains in its current state, we will be crossing this out in its entirety and adding the label “Not Applicable to Milestone Inspections”.
- 2.2.6.2 **“Has the property record been researched for any current code violations or unsafe structure cases?”** The statute does not require us to do this. If we select *yes* and we list a code violation we found, we could be liable for missing other violations. If we select *no*, and some calamity befalls the structure based on some previous code violation we weren’t aware of, we could be found liable for not researching this. This is another example in the form where we will not be searching for records and we will not be answering this question. It will be struck out and labelled “Not Applicable to Milestone Inspections”.
- 2.2.6.3 **“Is there additional sub-soil investigation required?”** This question is asked twice in the form. Again, if we see a condition and we feel soil testing is required, that is fine if we recommend that. But we are not going to select *no* if we don’t feel it is required. The reason is the same as the above. By selecting *no*, we are positively attesting that testing is NOT required. What if a hidden condition exists that the inspector can’t know about, and afterwards its determined that a sub-soil investigation would have caught it. The owners can come back to the inspector and blame them for stating that sub-soil testing was not required. Why isn’t there a box for “I don’t know”? In reality, the problem lies with the way the question is formed. For liability purposes it SHOULD have been formed as follows:

Did inspector observe any conditions which may benefit from further sub-soil investigation? (Yes/No)

- 2.2.6.4 In the above, if the inspector answers “No” they are no longer in legal trouble. In that case the inspector is attesting that they did not observe anything that concerned them. In the current way it’s written, a “No” selection attests that no problems exist. There is an important and distinct difference between stating “we did not find a problem”, and “there were no problems”.

2.3 HARM TO PUBLIC SAFETY

- 2.3.1 This critique of the existing form is very serious and warrants its own section. There are multiple instances in the language of the form where the form itself presupposes engineering judgement which should not only be left up to an engineer (not an architect) but which is patently incorrect and can possible lead to loss of life in the future.
- 2.3.2 Page 7, Section 6 Masonry Bearing Wall: In an attempt to list masonry bearing wall components the form leaves out span beams, opening sills, ladder reinforcement, filled cells, bearing pockets, etc. This is the least of my safety concerns, but it is exemplary of the types of problems we found with other attempts to list building components. Architects and engineers will become conditioned to only inspect those components on the list. So, if Florida forgot to mention something, it may not get inspected at all. This failure of a system is often referred to as “teaching to the test”. But in this case it is “inspecting to the list”.
- 2.3.3 Page 8, Section 6 Masonry Bearing Wall: Under the section for rebar corrosion the inspector is allowed to check, among other options, **“Minor – Patching will suffice”** and **“Significant – Patching will suffice”**. This is one of the most common problems we face in this industry is engineers who think that you can patch over rebar corrosion. It shows a complete lack of understanding of what caused the corrosion in the first place.
- 2.3.3.1 If you do not execute a full proper structural repair of corroded rebar and the surrounding material per ACI and ICRI standards, you will create something called the “ring-anode” effect. This effect accelerates the structural degradation of the area around the patch **rapidly**.
- 2.3.3.2 We have seen columns that are “patched” in the manner suggested by the form which became structurally shattered and extremely dangerous within 3 years. And as we know... now that the State has adopted a 10-year inspection cycle that column won’t get inspected for another 7 years after its dangerous... assuming the building is still standing.
- 2.3.3.3 Rebar corrosion should be treated as though it is NEVER MINOR. And the state form absolutely should not include what is essentially an engineering judgement/specification of “Patching will suffice”. These types of questions on these types of forms will get someone killed eventually.

- 2.3.4 Page 9, Section 6 Masonry Bearing Wall: In subsection “k” the question is asked **“Were samples chipped out for examination in spalled areas?”** This level of investigation is completely inappropriate for a Phase 1 Milestone Inspection. We would not want architects or inexperienced engineers going around and knocking out chunks of masonry or concrete to satisfy some question on a form when they could be creating an unsafe condition by doing so. The statute is very clear that Phase I is supposed to be visual only. Destructive testing and limited destructive testing would be appropriate for a Phase II Milestone Inspection conducted by experts. This was one of the reasons there are two inspections. The first is supposed to be visual only and lower intensity thus engaging more people to be able to provide Phase I Milestones, but Phase II Milestones are supposed to be conducted by people that actually know a lot more about existing structures.
- 2.3.5 Page 10, Section 7 Floor and Roof System: One option for the roof deck material is **“non-structural / insulating concrete on steel deck”**. Every single roof deck we have ever worked on that was insulating concrete on steel deck was in fact structural. This option on the form implies to inexperienced architects and engineers that insulating concrete on steel decks is “non-structural”. They will then take this knowledge and make judgements and engineering decisions that may compromise those systems and put people’s lives at risk. The undersigned acted as the Engineer of Record on such an exact legal case where the engineering firm failed to recognize that the lightweight and steel deck was the structural diaphragm of the building and proceeded with destroying the entire system... because, after all, it was “non-structural” right? This system was quite popular with older buildings built in the 60’s and 70’s... the very buildings that need extra care, not misdiagnosis of their structural roofing systems.
- 2.3.6 Page 12, Section 7 Floor and Roof System: **“Balcony structural system”** uses a description of a deck which is confusing. Also, the heading “Balcony” is incompatible with the description “edge and building face supported”. A “Balcony” by definition is cantilevered from the building face. Both “Balcony” and “Deck” have specific descriptions in the codes already and should not be reinvented on a state form.
- 2.3.7 Page 12, Section 7 Floor and Roof System: **“Balcony condition rating”** contains an option for “Fair...minor rebar corrosion – patching will suffice”. For similar reasons explained previously in this report, this false assumption that “patching will suffice” for rebar corrosion will get someone killed eventually.
- 2.3.8 Page 16, Section 9 Concrete Framing System: **“Rebar Corrosion”** this section allows for patching of “significant” rebar corrosion. Not only is patching a violation of the ACI code, but it will accelerate damage to surrounding concrete and risk the safety of the end users and public for all the reasons mentioned in this report. This type of assumption in a building inspection form is very dangerous.
- 2.3.9 Page 16, Section 9 Concrete Framing System: **“Were samples chipped out...”** Again, we don’t want architects and engineers performing Phase I Milestone

Inspections to be chipping out anything. That is for an expert to decide during a Phase II Inspection.

- 2.3.10 Page 24 (Milestone Phase II), 5: ***“Provide graded urgency of each recommended repair”***. The undersigned strongly recommends against this. At the conclusion of a Phase II study, the engineer needs to determine if there are structural repairs that are needed or not. If structural repairs are needed, they should be done as soon as possible. We should not be asking engineers to make certain judgements and inventing their own urgency scale. In addition, we shouldn't have Building Departments creating their own scale either, nor should they be left to interpret every engineer's scale they invent for Phase II Milestone reports. This can lead to situations where the inspector feels something should be fixed, and it gets delayed several years because he didn't rank it 5/5 on the danger scale, and therefore it was interpreted by the Building Official or owners as being less severe than the engineer intended.

3 RECOMMENDED MILESTONE FORMS

- 3.1 Attached to this report is a mock-up of a Milestone Form format that reflects the stated goals in section 1.3.7. While these submitted forms may appear to be lacking in specificity, we believe this format will prevent the inspection reports from becoming tools that limit the inspector's perceived responsibility to "just the checkboxes" and force them to really consider all aspects of the structure.
- 3.2 The theory behind this format is that we break up all buildings into their respective structural groupings. Instead of focusing on materials such as masonry, concrete, and steel, we will instead have the inspector focus on primary load bearing components, shear walls (of any material), roofs, and slabs, to name just a few categories. Instead of giving them checkboxes for three types of slabs (as the form currently is setup), we will require them to describe the structural floor system in their own words so that the Building Official can determine if they actually understand how the building is put together.
- 3.3 The undersigned recognizes the need to look at non-structural components, but instead of attempting to list all the components the inspector should be investigating, it is better to break these items up into categories and perhaps just provide a few examples to get the inspector thinking.
- 3.4 **FORM STRUCTURE:**
- 3.4.1 The cover page was reformatted to include information which would be valuable and pertinent to the Building Department in order to organize the report in whatever filing/archival system they are using.
- 3.4.2 Page 2 was constructed to be a 1-page summary brief that the Owners can print and post on their property to comply with the Florida Statutes.
- 3.4.3 Pages 3 and 4 describes the reporting requirements that will be required for each Section and the Section headings.
- 3.4.4 The Phase 2 Milestone form is similar but slightly modified from the Phase 1 Milestone form. It is also attached to this report for your convenience.

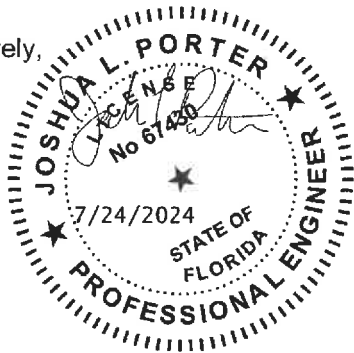
4 CONCLUSION

The sole intention of the undersigned is to enhance the Milestone process to improve public safety. The undersigned is also passionate about the Engineering Profession and the state of Construction in Florida in general. The undersigned receives no personal gain or financial gain from preparing and presenting this report to the Florida Building Commission and the Existing Building Inspection Workgroup committee.

Our hope is that this will be received with an open mind. We fully understand that the presented form is likely not the final, should the FBC and EBIWG choose to move forward with some version of what we have presented. The goal was to create something, a launching pad if you will, that was drastically different than the current format which is based on the Miami-Dade Recertification program.

Any questions related to this report can be brought to the attention of the undersigned. The undersigned reserves the right to amend or change any of the opinions contained in this report upon examination of new information or evidence.

Sincerely,



Joshua L. Porter, PE, SI 67430

This item has been digitally signed and sealed by Joshua L. Porter, PE, SI on the date on or adjacent to the seal.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

PHASE 1 MILESTONE INSPECTION REPORT FORM

Form EB18-2024

1. DESCRIPTION OF BUILDING	
a. Legal Name of Condominium:	
b. Subject Property Address:	
c. Number of Stories:	
d. Folio Number of Property on which building is located:	
e. Owner Contact Name:	
f. Owner's Mailing Address:	
g. Email Address:	Contact Number:
h. Is subject property located within 2,500 ft of saltwater shoreline subject to wave action? (yes/no)	
2. INSPECTION COMPANY (ARCHITECT OR ENGINEER)	
a. Legal Name of Firm:	
b. Mailing Address:	
c. Name of Licensed Architect/Engineer in Responsible Charge of this Report (Print):	
d. Professional License # Architect/Engineer in Responsible Charge:	
e. Name of Primary Contact:	
f. Primary Contact Email Address:	Primary Contact Number:

Florida Statute 553.899(8)

(8) Upon completion of a phase one or phase two milestone inspection, the architect or engineer who performed the inspection must submit a sealed copy of the inspection report with a separate summary of, at minimum, the material findings and recommendations in the inspection report to the condominium association or cooperative association, to any other owner of any portion of the building which is not subject to the condominium or cooperative form of ownership, and to the building official of the local government which has jurisdiction.

PHASE 1 MILESTONE INSPECTION REPORT

SUMMARY BRIEF

1. DESCRIPTION OF BUILDING	
	a. Legal Name of Condominium:
	b. Subject Property Address:
2. SUBSTANTIAL STRUCTURAL DETERIORATION	
<i>(Check one only)</i>	<input type="checkbox"/> WAS NOT FOUND on any of the building components observed visually. A Phase 2 Milestone Inspection is not required at this time.
<i>(Check one only)</i>	<input type="checkbox"/> WAS FOUND on one or more structural components of the building thus requiring a Phase 2 Milestone Inspection to be performed in accordance with FS 553.899.
<i>(Check one only)</i>	<input type="checkbox"/> Inspection did not reveal any readily observable components of the building that exhibited obviously unsafe conditions.
<i>(Check one only)</i>	<input type="checkbox"/> The building or portions of the building were determined to be potentially UNSAFE and should not be occupied until further notice. See full report for more details.
3. NON-SUBSTANTIAL STRUCTURAL DETERIORATION	
<i>(Check one only)</i>	<input type="checkbox"/> WAS NOT FOUND and no further action is required at this time.
<i>(Check one only)</i>	<input type="checkbox"/> WAS FOUND and recommendations for repair are included in the full Phase 1 Milestone Inspection Report.
4. INSPECTOR'S SEAL (ARCHITECT OR ENGINEER)	
	a. Legal Name of Firm:
	b. Mailing Address:
	c. Name of Licensed Architect/Engineer (Print):
	d. Professional License # Architect/Engineer:
Date, Signature and seal of Architect/Engineer	

This document may have been signed and sealed using electronic digital encryption. Printed copies are only valid if they contain an original signature of the architect or engineer on a raised or printed seal in accordance with FS 481 or FS 471 respectively.

PHASE 1 MILESTONE INSPECTION REPORT

REPORTING REQUIREMENTS

1. GENERAL REPORT REQUIREMENTS

- a. It is the intent of the Milestone Inspection process that ALL readily visible and uncovered structural elements of the building be inspected by a qualified individual in accordance with FBC Chapter 18 and Florida Statute 553.899.
- b. It is the responsibility of the inspector to ensure that all of the Primary Structural Members and Primary Structural Systems of the building are visually inspected and report any Substantial Structural Deterioration or any conditions which may lead to or imminently cause Substantial Structural Deterioration to any of the Primary Structural Members or Primary Structural Systems of the building located at the subject property.
- c. These reporting requirements are not to be considered exhaustive. It is up to the inspector to exercise professional judgement when preparing their report.

2. REPORT LAYOUT REQUIREMENTS

Section 1 **BACKGROUND:** Provide background information on Inspector, any Duly Authorized Representatives which the Inspector may have relied upon to perform this inspection, and background information on the architectural or engineering firm where the Inspector is employed.

Section 2 **DESCRIPTION OF PROPERTY:** Provide as detailed of a description of the subject building as possible. Be sure to include descriptions of the type of foundation, composition of the Primary Structural Members, composition of the structural floors and wall systems, composition of the structural components of the roof and any other building elements which may be load resisting or otherwise transfer loads through the Primary Structural System.

Provide as detailed of a description of the building's secondary load-resisting components. These are elements of the building which may not be integral to the overall structural integrity of the Primary Structural System but which may be relied upon during regular use by the occupants or their guests for life safety purposes. Example: Guardrails

Section 3 **ROOF:** Report any observed Substantial Structural Deterioration to any component of the roof's structural system. Where readily available for visual inspection:

- a. The roof structure should be inspected where the roof components bear on the walls or other Primary Structural Members.
- b. The structural roof components themselves should be inspected.
- c. Roof decking materials, if any, should be inspected.
- d. In addition to the above structural components of the roofing system, the inspector should inspect the roof for any other signs of distress or problems which may cause the structural components of the structural roofing system to become damaged in the future.
- e. Note: Many buildings have multiple roof types and multiple roofing materials depending on location. Inspector is expected to visually inspect all of the roofs to the best of their ability for structural distress.

Section 4 **PRIMARY STRUCTURAL SYSTEM:** Report any observed Substantial Structural Deterioration to any component of the building's Primary Structural System. Where readily available for visual inspection:

- a. The load-bearing walls, beams, columns, joists, girders, joints, moment frames, bracing, and any other component of the building which carries loads from other structural components should be inspected.

- b. Load-bearing elements that do not normally carry other load-bearing members such as, but not limited to, slabs, decks, balconies, diaphragms, and shear walls should all be inspected.
- c. In addition to the above structural components of the building, the inspector should inspect the building for any other signs of distress or problems which may cause the structural components of the building to become damaged in the future.

Section 5 FOUNDATION: Report any observed Substantial Structural Deterioration to any component of the building's Primary Structural System or Structural Foundation Components that may be experiencing differential settlement or other foundation failure/distress problems. Where readily available for visual inspection:

- a. Ground Floor Slab-On-Grade: Inspect building, ground floor slabs, exposed footings, piling caps and other readily visible foundation elements for Substantial Structural Deterioration. Any significant cracking observed to the foundation elements or the building which indicates foundation distress should be sketched and mapped when possible.
- b. Raised Ground Floor Slab: Inspect the structural components of the ground floor slab, columns, beams, joists, piers, piles, pile caps, grade beams, and other readily visible foundation elements for Substantial Structural Deterioration. Any cracks or spalls should be noted in the report with a description of the nature of the distress and locations.
- c. All Other Foundation Types: Whether the building has wooden piers, concrete piers, steel piles, or any other type of conceivable foundation, it shall be inspected from the earth to the base of the building's first floor and any distress observed to any related structural building material should be reported.

Section 6 OTHER: Report any observed conditions to any component of the building which may accelerate damage to other structural components or otherwise compromise the structural integrity of the building. Some examples of this (this is not an exhaustive list):

- a. Roof gutters dumping close to foundation elements.
- b. Deteriorated roofing material, building sealants, expansion joints, and waterproofing.
- c. Standing water on roofs or horizontal surfaces may present slip hazards or accelerate the carbonation process of cementitious building materials.
- d. Loose guardrails, handrails, stair rails.
- e. Decorative features of the building such as corbels, EIFS, trim, statues, and faux architectural components which may appear loose or otherwise present a danger to the public.

Section 7 SUMMARY: Provide a summary of all of the Substantial Structural Deterioration visually observed to the Primary Structural Members and Systems of the Building. This list will become the framework which a Phase 2 Milestone Inspection will be based on. A general scope of work should be provided for the following:

- a. Maintenance recommendations for preventative maintenance to correct conditions observed which, if left uncorrected, could potentially lead to Substantial Structural Deterioration.
- b. Non-substantial structural deterioration. This is damage that was observed, but which may be properly repaired per industry standards and does not necessitate a Phase 2 Milestone Inspection.

Attach inspection report to all 4 pages of this form when delivering to the Building Official and Building Owners. By attaching this form to the inspection report, the Inspector affirms that they have read the reporting requirements contained in this form and that they have complied with the requirements of this form to the best of their knowledge.

PHASE 2 MILESTONE INSPECTION REPORT FORM

Form EB18.2-2024

1. DESCRIPTION OF BUILDING	
a. Legal Name of Condominium:	
b. Subject Property Address:	
c. Number of Stories:	
d. Folio Number of Property on which building is located:	
e. Owner Contact Name:	
f. Owner's Mailing Address:	
g. Email Address:	Contact Number:
h. Is subject property located within 2,500 ft of saltwater shoreline subject to wave action? (yes/no)	
2. INSPECTION COMPANY (ARCHITECT OR ENGINEER)	
a. Legal Name of Firm:	
b. Mailing Address:	
c. Name of Licensed Architect/Engineer in Responsible Charge of this Report (Print):	
d. Professional License # Architect/Engineer in Responsible Charge:	
e. Name of Primary Contact:	
f. Primary Contact Email Address:	Primary Contact Number:

Florida Statute 553.899(8)

(8) Upon completion of a phase one or phase two milestone inspection, the architect or engineer who performed the inspection must submit a sealed copy of the inspection report with a separate summary of, at minimum, the material findings and recommendations in the inspection report to the condominium association or cooperative association, to any other owner of any portion of the building which is not subject to the condominium or cooperative form of ownership, and to the building official of the local government which has jurisdiction.

PHASE 2 MILESTONE INSPECTION REPORT

SUMMARY BRIEF

1. DESCRIPTION OF BUILDING	
	a. Legal Name of Condominium:
	b. Subject Property Address:
2. SUBSTANTIAL STRUCTURAL DETERIORATION	
<i>(Check one only)</i>	<input type="checkbox"/> WAS NOT FOUND on any of the building components observed visually. A Phase 2 Milestone Inspection is not required at this time.
<i>(Check one only)</i>	<input type="checkbox"/> WAS FOUND on one or more structural components of the building thus requiring a Phase 2 Milestone Inspection to be performed in accordance with FS 553.899.
<i>(Check one only)</i>	<input type="checkbox"/> Inspection did not reveal any readily observable components of the building that exhibited obviously unsafe conditions.
<i>(Check one only)</i>	<input type="checkbox"/> The building or portions of the building were determined to be potentially UNSAFE and should not be occupied until further notice. See full report for more details.
3. NON-SUBSTANTIAL STRUCTURAL DETERIORATION	
<i>(Check one only)</i>	<input type="checkbox"/> WAS NOT FOUND and no further action is required at this time.
<i>(Check one only)</i>	<input type="checkbox"/> WAS FOUND and recommendations for repair are included in the full Phase 1 Milestone Inspection Report.
4. INSPECTOR'S SEAL (ARCHITECT OR ENGINEER)	
	a. Legal Name of Firm:
	b. Mailing Address:
	c. Name of Licensed Architect/Engineer (Print):
	d. Professional License # Architect/Engineer:
Date, Signature and seal of Architect/Engineer	

This document may have been signed and sealed using electronic digital encryption. Printed copies are only valid if they contain an original signature of the architect or engineer on a raised or printed seal in accordance with FS 481 or FS 471 respectively.

PHASE 2 MILESTONE INSPECTION REPORT	REPORTING REQUIREMENTS
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1. GENERAL REPORT REQUIREMENTS
<p>a. It is the intent of the Milestone Inspection process that ALL readily visible and uncovered structural elements of the building be inspected by a qualified individual in accordance with FBC Chapter 18 and Florida Statute 553.899.</p>
<p>c. These reporting requirements are not to be considered exhaustive. It is up to the inspector to exercise professional judgement when preparing their report. The purpose of the Phase 2 Milestone Inspection is to attempt to reach a conclusion as to the condition of the identified deterioration and provide a recommendation for repair.</p>
2. PHASE 2 SPECIFIC REQUIREMENTS
<p>a. The Phase 2 Milestone inspection report should identify those locations of reported Substantial Structural Deterioration which were reported on in the Phase 1 Milestone Report.</p>
<p>b. The locations of Substantial Structural Deterioration should be investigated by the Phase 2 Milestone Inspector using whatever engineering testing method(s) they deem appropriate in their professional judgment. Testing may not be needed. It is up to the discretion of the Phase 2 Milestone Inspector to make such determination.</p>
<p>c. The Phase 2 Milestone report should identify any testing method(s) used and whether that testing involved limited destruction or destruction of any building component. Only Professionals experienced in limited destructive testing and destructive testing techniques should use these methods when evaluating a distressed building. If the Inspector utilizes a sub-consultant to perform specialized testing of any kind, their report should identify who the firm was, what testing they performed, and should attach any reports generated by the specialized testing sub-consultant.</p>
<p>d. It is understood that the Phase 2 Milestone Inspector may not be able to provide a specific scope of repair as many structural repairs in buildings must be further evaluated and specific repair details prepared once shoring is in place and a licensed General Contractor can excavate the deteriorated building component. The report should be clear about what can be repaired, how it can be repaired, and the procedure for proceeding with next steps.</p>

Attach Phase 2 inspection report to all 3 pages of this form when delivering to the Building Official and Building Owners. By attaching this form to the inspection report, the Inspector affirms that they have read the reporting requirements contained in this form and that they have complied with the requirements of this form to the best of their knowledge.