TOWN OF MELBOURNE BEACH

PLANNING & ZONING BOARD MEETING

TUESDAY, OCTOBER 7, 2025

AGENDA PACKET

PLANNING AND ZONING
OCTOBER 7, 2025
TABLE OF CONTENTS

APPROVAL OF MINUTES

NEW BUSINESS

PUBLIC HEARINGS

Town of Melbourne Beach

PLANNING & ZONING BOARD MEETING
TUESDAY, OCTOBER 7, 2025 @ 6:30 PM
COMMUNITY CENTER – 509 OCEAN AVENUE

PUBLIC NOTICE
AGENDA

Board Members:
Chairman David Campbell
Vice-Chairman Kurt Belsten
Member April Evans
Member Dan Harper
Member Gabor Kishegyi

Alternate Board Members
Alternate Todd Albert
Alternate Jason Judge

Staff Members:
Town Manager Elizabeth Mascaro
Town Clerk Amber Brown
Building Official Roberto Moreno

1. CALL TO ORDER

2. ROLL CALL

3. APPROVAL OF MINUTES

A. August 21, 2025 minutes
B. September 9, 2025 minutes

4. NEW BUSINESS

A. Site Plan approval for 411 Hibiscus Trail – new home
B. Discussion on the report from Member Dan Harper regarding the landscape proposal
C. Discussion on the Environmental Advisory Board's proposed changes to the tree ordinance
D. Review of Robert's Rules of Order, ethics, and Florida Sunshine Law – Town Attorney Ryan Knight

5. PUBLIC HEARINGS

A. Ordinance 2025-04 Sign Ordinance

AN ORDINANCE OF THE TOWN OF MELBOURNE BEACH, FLORIDA, RELATING TO LAND DEVELOPMENT REGULATIONS AND SIGNAGE; AMENDING SECTION 7A-52, TOWN CODE OF ORDINANCES, RELATING TO PROHIBITED SIGNS AND PROVIDING FOR ADDITIONAL REGULATIONS AS TO TYPE OF SIGNAGE PROHIBITED WITHIN THE TOWN, AMENDING SIGN LOCATION AND DURATION OF SIGNAGE PERMITTED IN THE TOWN; REVISING SIGNAGE STANDARDS; PROVIDING FOR REMOVAL OF SIGNAGE BY THE TOWN; PROVIDING FOR SEVERABILITY; AND PROVIDING FOR AN EFFECTIVE DATE.

6. OLD BUSINESS

7. PUBLIC COMMENT

Please limit comments to items that are not on the agenda

8. REPORTS: TOWN MANAGER AND TOWN ATTORNEY

9. ITEMS TO BE ADDED TO THE AGENDA FOR FUTURE MEETINGS

10. ADJOURNMENT

PURSUANT TO SECTION 286.0105, FLORIDA STATUTES, THE TOWN HEREBY ADVISES THE PUBLIC THAT: In order to appeal any decision made at this meeting, you will need a verbatim transcript of the proceedings. It will be your responsibility to ensure such a record is made. Such person must provide a method for recording the proceedings verbatim as the Town does not do so. In accordance with the Americans with Disability Act and Section 286.26, Florida Statutes, persons needing special accommodations for this meeting shall, at least 5 days prior to the meeting, contact the Office of the Town Clerk at (321) 724-5860 or Florida Relay System at 711.

Town of Melbourne Beach

MINUTES

PLANNING & ZONING BOARD WORKSHOP
THURSDAY, AUGUST 21, 2025 @ 6:30 PM
COMMUNITY CENTER – 509 OCEAN AVENUE

Board Members:
Chairman David Campbell
Vice Chairman Kurt Belsten
Member April Evans
Member Dan Harper
Member Gabor Kishegyi

Alternate Board Members
Alternate Todd Albert
Alternate Jason Judge

Staff Members:
Town Manager Elizabeth Mascaro
Town Clerk Amber Brown

1. CALL TO ORDER

Vice Chairman Kurt Belsten called the meeting to order at 6:31 p.m.

2. ROLL CALL

Deputy Clerk Cyd Cardwell conducted the roll call.

Present:
Vice Chairman Kurt Belsten
Member April Evans
Member Dan Harper
Alternate Todd Albert
Alternate Jason Judge

Staff Present:
Town Manager Elizabeth Mascaro
Deputy Clerk Cyd Cardwell

Absent:
Chairman David Campbell
Member Gabor Kishegyi

3. NEW BUSINESS

A. Discussion on adding a finger pier/dock at the Sixth Ave boat ramp
   i. Documents from the June Regular Town Commission Meeting agenda packet
   ii. Drawings provided by Alternate Member Todd Albert

Member April Evans spoke about having concerns, so she reached out to DEP, but did not get additional information. The Board has not had to deal with this before. Has concerns about boat size, how to handle parking, restrict it to residents only, preventing parking along the street, possible insurance liability, and how to control the use of the ramp in a residential area. A resident will finance it and do the repairs.

Will we request that his estate and heirs be committed to this, or at some point will it revert to the Town to do the maintenance?

Alternate Jason Judge spoke about some of what was covered in the last meeting by Mike Kalajian. DEP effectively does not have any say in building a small finger pier. As far as maintenance, he has agreed to maintain it.

Member April Evans spoke about not being sure we can recommend this to the Commission to accept this gift because we're dealing with public property. Also, it's disruptive to the neighborhood if it is enlarged.

Alternate Todd Albert spoke about this being a bigger issue than the pier. This is a neighborhood ramp, and needs to stay that way, but about half of the people using it don't have Melbourne Beach stickers. The ramp has other issues. When water comes up the ramp, it goes to the neighbors' yards. The south side seawall is deteriorating, and the rebar is showing; now there is coquina rock, so you cannot use it to load and unload. The only way to load and unload is to go down the ramp, which is slippery. That's where the pier comes in as a safety possibility. The seawall needs to be repaired, or it is going to be gone. Take the walls of the ramp out to the parking area where the ramp ends, or take additional measures to contain the water. The main things are safety and controlling access. Have parking only for residents. Parking already limits how many people can use it.

Alternate Jason Judge spoke about having a meeting with all of the people that live there, and Mike Kalajian had a solution for the water going to the neighboring yards. There are some problems, like with anything, but there are ways to work around them to make it work for everyone.

Member Dan Harper spoke about being in favor of the dock. The parking would have to be enforced. The safety of getting on and off your vessel is a big deal. As for the insurance liability, we already have a pier, so not sure if there's much additional exposure. As long as Mike gets the DEP permit, there are no codes preventing this.

Town Manager Elizabeth Mascaro spoke about there being minimal impact regarding insurance liability.

Alternate Jason Judge spoke about coming up with this years ago because he used the ramp regularly. It has always been difficult to use. It's usable, but it is not safe. The problems exist, but there are also solutions out there.

Town Manager Elizabeth Mascaro spoke about how the Commission is addressing the parking ordinance. It does exist, but the fine amount is going to be amended. There is an enforcement piece that is in place and would be applicable to the boat ramp area. Unless the street says no parking, you are allowed to park on the street.

Andy Atkinson – South side of the ramp – *This was never an issue until the ramp was redone after a storm. Before, you could never launch anything more than a jet*

ski. Now it is very popular. Every weekend, there are 4-5 trailers. Thinks the objective is to be able to launch a boat without having to get in the water and do so safely. Before, there was no wall or coquina rock, and people would just bring their boat up to the seawall and hop in. Repair the seawall, remove the wall, and get rid of the coquina rocks. Anything past 10 feet, you're in their backyard. People are going to loiter and party out there. It has to do with their privacy and safety. If you were on a dock, you would be looking directly into their kitchen.

Marivi Walker – *Spoke about having a gate that closes at night. When there were parking issues at Avenue A, the police wrote tickets, and people stopped doing it.*

Billy Stephens – *Spoke about there being 3 groups to satisfy: what's best for the whole Town, those that want the dock, and those that have concerns. What is best for the Town is safety. The drawback is that if you build it, they will come. Privacy is his biggest concern. It's unreasonable to say you cannot have a dock, but it's also unreasonable not to sit down with people who have concerns. If we are going to do this, propose it be a package: a seawall, beautification, and a dock. Address parking, tags, penalty, and make sure the dock doesn't expand in the future. If the dock is to accomplish people getting on and off their boat safely, what size dock is needed? Proposed 3 feet wide, but 5 feet long, and add a pole 10-15 feet beyond that.*

Alison Dennington – *Spoke about having a flat-bottom boat, and they get in and out just fine. There have been problems there after storms. If we make it bigger, there will be the same, but bigger problems. What's the actual cost from the insurance? If they pay to build it and maintain it, we would need an agreement with everyone who works on it. You cannot park on Pine Street because there is no shoulder. It will make it dangerous. If safety is the issue, why not just sink a post out there?*

Marivi Walker – *Spoke about the Town having an umbrella insurance policy that covers the pier and the playground.*

Kari Ross – *Spoke about the current situation as an unintended consequence. Before, you had the possibility of standing on the sea wall to load and unload, but now there is coquina rock, which goes out quite a bit, but it is dangerous. There is a change that has happened which has created this problem.*

A resident *spoke about launching a boat there, and before, it wasn't too bad. It is a safety issue. It is not easy to launch. The idea of the dock is not to impede on their privacy. The dock will speed up the launching process. Loitering can be addressed.*

Bruce Larson – *Spoke about using the ramp for years. It is useful for smaller crafts; for larger crafts, it is more realistic to use another ramp. Concerned about how many people are using the ramp, the problem people are not from in Town, and parking issues. Make sure it cannot be dredged to limit the size of vessels. Safety is a concern. The coquina rock that was added due to the seawall failing has made it more difficult to launch. Address all of those concerns, and then you are closer to addressing the complete picture of what the right solution would be.* Friday, Saturday, and Sunday

during the sunset hours are the larger problems. If it is used when it is dark, then lighting needs to be addressed as well.

Alternate Todd Albert asked Mike Kalajian about removing the coquina, fixing the seawall, and putting something along the line of the seawall to step on.

Mike Kalajian – *Spoke about having something along the seawall to step on would give people more access to the neighbor's property. You can do the seawall, and people can step from there, but it is not the safest. 95-98% of ramps have some type of access to get on and off a boat.*

Alison Dennington – *Spoke about the coquina rock as a stopgap due to the seawall. The best option is to take the coquina out, repair the wall, and take the top part out.*

Kari Ross – *Spoke about how this proposal would be a cost-free solution for the Town. Now people are talking about spending $100,000 from the Town's budget.*

Billy Stephens – *Spoke about how there has to be a way to satisfy everyone.*

Alternate Jason Judge spoke about doing some more research and going out there and looking at it.

Mike Kalajian – *Spoke about how this has become such a big deal. It was supposed to be about safety, and it has become about dredging, which will never happen.*

Bruce Larson – *Spoke about how there is currently a design problem during storms, and the seawall needs to be addressed either way.*

Vice Chairman Kurt Belsten spoke about there being more than one problem. There are security issues, ramp issues, flooding issues, coquina issues, pier issues, safety issues, parking issues, and rowdiness at night issues.

Marivi Walker – *Spoke about how there are also a lot of solutions.*

Bruce Larson – *Spoke about for any project or any issue, look at how many people are affected positively and negatively and to what level.*

Marivi Walker – *Confirmed the Planning and Zoning Board has not received a proper presentation from Mike Kalajian, who proposed the project.*

Member April Evans spoke about the other problems that come into play that need to be addressed.

Marivi Walker – *Spoke about writing down the problems and the solutions.*

Member Dan Harper spoke about still thinking this is an asset to the community with the appropriate mitigations.

Vice Chairman Kurt Belsten spoke about the area's need for beautification.

The Board agreed that it needs to be addressed as an entire project as a whole.

Mike Kalajian – *Spoke about only building the minimum of 15-20 feet because he is not going to build something that doesn't work. It would be a waste.*

A resident *spoke about when the road was redone, it was raised, and that is what causes the flooding because the water cannot run off the road and down the ramp.*

Alternate Jason Judge left at 7:49 pm

4. PUBLIC COMMENT

Karen Fenaughty – 323 Third Ave – *Spoke about being a member of the Environmental Advisory Board, and the landscape ordinance recommendations that the Board was provided were missing pages. They have received some feedback and made changes to the proposal.*

Alison Dennington – *Spoke about a proposed ordinance about tree canopy that the Mayor of Cocoa Beach is looking at doing as part of retention, because grass swales are not how you're supposed to do it.*

Member Dan Harper spoke about doing a summary of the EAB proposal. Would like to further discuss this in October.

Bruce Larson *– Spoke about doing a hyperspectral memory survey of the Town to put some metrics on this. It will take 3-4 generations to recover some of the trees that have been taken out now.*

5. ADJOURNMENT

Member April Evans motioned to adjourn; Member Dan Harper seconded; Motion carried 5-0.

The meeting adjourned at 7:59 p.m.

ATTEST:

_____ _____

David Campbell
Chairman

Amber Brown, CMC
Town Clerk

Town of Melbourne Beach

MINUTES

PLANNING & ZONING BOARD MEETING
TUESDAY, SEPTEMBER 9, 2025 @ 6:30 PM
COMMUNITY CENTER – 509 OCEAN AVENUE

Board Members:
Chairman David Campbell
Vice Chairman Kurt Belsten
Member April Evans
Member Dan Harper
Member Gabor Kishegyi

Alternate Board Members
Alternate Todd Albert
Alternate Jason Judge

Staff Members:
Town Manager Elizabeth Mascaro
Town Clerk Amber Brown

1. CALL TO ORDER

Chairman David Campbell called the meeting to order at 6:31 p.m.

2. ROLL CALL

Town Clerk Amber Brown conducted the roll call.

Present:
Chairman David Campbell
Vice Chairman Kurt Belsten
Member Gabor Kishegyi
Alternate Todd Albert
Alternate Jason Judge

Staff Present:
Town Manager Elizabeth Mascaro
Building Official Roberto Moreno
Town Clerk Amber Brown

Absent:
Member April Evans
Member Dan Harper

3. APPROVAL OF MINUTES

A. August 5, 2025 minutes

Vice Chairman Kurt Belsten made a motion to approve; Member Gabor Kishegyi seconded; Motion carried 5-0.

4. NEW BUSINESS

5. PUBLIC HEARINGS

6. OLD BUSINESS

A. Site plan approval for 206 Sixth Ave – Renovation, Addition, and Paver Driveway

Alternate Todd Albert and Chairman David Campbell had no issues with the drainage plan.

Vice Chairman Kurt Belsten made a motion to approve, Member Gabor Kishegyi seconded; Motion carried 5-0.

B. Review of the Environmental Advisory Board's proposed changes to the tree ordinance with supporting documents from EAB

Vice Chairman Kurt Belsten made a motion to table this; Member Gabor Kishegyi seconded; Motion carried 5-0.

EAB Member Karen Fenaughty spoke about three EAB members being in attendance to discuss the items on the agenda that involve their Board. Provided a handout summarizing the suggested landscape ordinance changes.

EAB Chairman Curtis Byrd asked how the EAB and PNZ Boards interact with this process.

Vice Chairman Kurt Belsten spoke about PNZ being an advisory board that would only be able to present their recommendations on the ordinance to the Commission, similar to how the EAB operates.

Town Manager Elizabeth Mascaro spoke about Dan Harper speaking with the EAB and wanting more specific, actionable items that could then go from PNZ to the Town Planner and then the Commission.

Alternate Todd Albert asked about the process for working with the EAB if they have issues with the proposed changes.

Town Clerk Amber Brown spoke about when this ordinance is ready to go through the final approval process of a first and second hearing, it will have to go in front of the PNZ Board for an advertised public hearing. The concern is if PNZ and EAB are not on the same page the PNZ Board might not recommend approval to the Commission. The Commission could still approve it without the PNZ recommendation.

C. Discussion on pervious/impervious ratios
   i. Document from the Environmental Advisory Board
   ii. EAB requested land development code fact check – Dan Harper

EAB Member Karen Fenaughty spoke about the Commission requesting EAB to review the pervious and impervious ratios and compare to what other municipalities have done. Spoke about the EAB talking to the Department of Natural Resources and EAB is not going to be doing any additional work on this because of the new state legislation that is coming.

D. Update on adding a finger pier/dock at the Sixth Ave boat ramp

Alternate Todd Albert provided a handout and spoke about the dock and ramp considerations.

Alternate Jason Judge spoke about a 10-foot dock being basically useless. You would need a 20-foot dock, but 30-foot would be excessive.

Chairman David Campbell asked if the Town would be paying for this.

Town Manager Elizabeth Mascaro spoke about asking Mike Kalajian to provide a quote for the seawall repairs, which would need to go in front of the Commission. Spoke about the repairs being necessary due to the current hazardous condition of the seawall.

Alternate Jason Judge spoke about Mike Kalajian probably being unwilling to build the dock at 10 feet because he wouldn't put his name on something unusable.

Member Gabor Kishegyi asked for confirmation that the seawall itself needs repairs.

Alternate Todd Albert spoke about the cost of the seawall he recently had installed at home and the cost and labor involved.

Billy Stephens and Allison Stephens – 1508 Pine St. – *Provided a picture depicting his 23-foot boat next to a 9.5-foot platform. North side property owners. Spoke against a dock but feels it is unreasonable not to listen to people on the other side. There are 3 groups: the group against it, the group for it, and the community as a whole. The compromise that works for all three groups is a 10-foot dock. A little dock would hit every mark. It would be a win for everyone.*

Curtis Byrd – 306 Surf Rd. – *Spoke about there didn't use to be an issue at sunrise or 4th of July. If you put a bigger dock out there, more people would go. Would be in favor of a smaller dock but wouldn't encourage people to go.*

Andy Atkinson – 1602 Pine St. – *Lives on the south side of the ramp. Does not believe the dock is mission-critical. People have been getting on and off their dock forever. However, a 10-foot dock is a good compromise.*

Mike Kalajian – 524 Sunset Blvd. – *Spoke about the picture provided by Billy Stephens depicting the water 2 feet higher than normal. The minimum he's willing to build would be 15-20 feet. It has become such a big deal, and it is a hassle. If the dock is going to be short, don't build it and just fix the seawall.*

Town Manager Elizabeth Mascaro advised that the board needs to make a motion of their recommendation to the Commission.

Alternate Jason Judge spoke about his recommendation being 20 feet and that if they're going to recommend shorter to just not do the dock at all.

Alternate Todd Albert made a motion to recommend to the Commission to build a 10-foot dock and make repairs to the seawall and ramp; Vice Chair Kurt Belson seconded; Motion carried 4-1 with Alternate Jason Judge dissenting.

7. **PUBLIC COMMENT**

8. **REPORTS: TOWN MANAGER AND TOWN ATTORNEY**

9. **ITEMS TO BE ADDED TO THE AGENDA FOR FUTURE MEETINGS**

10. **ADJOURNMENT**

Alternate Todd Albert motioned to adjourn; Vice Chairman Kurt Belsten seconded; Motion carried 5-0.

The meeting adjourned at 7:12 p.m.

ATTEST:

_____ _____

David Campbell
Chairman

Cyd Cardwell
Deputy Town Clerk

411 HIBISCUS TRAIL
SITE PLAN

TOWN OF MELBOURNE BEACH
DEVELOPMENT APPLICATION

I. SUBMITTAL REQUIREMENTS:

1. Fees per current schedule.
2. Deed to property.
3. Pre-Application meeting is mandatory. Contact the Building Official or Building Clerk to submit information required and to schedule a pre-application meeting.
4. Application deadlines are determined annually by the Boards and will be provided at the pre-application meeting.
5. All applicants must complete pages 1-3 and the section(s) as applicable to the request (refer to section II. below). All materials listed in the applicable sections must be provided, and fees paid.

II. REQUEST:

- ☐ Land Use Plan Amendment
- ☐ Special Exception
- ☐ Variance
- ☑ Site Plan Review Single Family (1RS, 2RS, 3RS)
- ☐ Site Plan Review Commercial (6B, 7C, 8B, 9I)
- ☐ Rezoning
- ☐ Coastal Construction Variance
- ☐ Appeal (Application must be filed within 30 days)
- ☐ Site Plan Review Multifamily (4RM, 5RMO)
- ☐ Amendment to the Land Development Code
- ☐ Other (specify)_____

III. PROPERTY INFORMATION:

General Location: Island shores of melbourne Beach

Address: 411 Hibiscus Trail, Melbourne Beach, FL 32951

Parcel Number(s): 28-38-06-75-10-6

Area (in acreage): 0.29 Area (in square feet): 12,632

Current Zoning: 2RS Proposed Zoning: 2RS

Current Future Land Use: SFR Proposed Future Land Use: SFR

Brief Description of Application: Construction of a Single Family residence on vacant land.

Date of Mandatory Pre-Application Meeting (attach meeting minutes if applicable):_____

IV. APPLICANT INFORMATION:

Property Owner

Name: Zeth James Phone: 321-242-3255

Address: 315 Miami Ave Fax: ——

Indiatlantic, FL 32903 Email: Permitting@lowmanbrothers.com

Applicant (if other than property owner)

Name: Lowman Brothers Construction LLC Phone: 321-242-3255

Address: 4011 Digital Light Dr. St.101 Fax: ——

Melbourne, FL 32934 Email: Permitting@lowmanbrothers.com

V. OWNER AUTHORIZATION:*

See attached owner Authorization

The undersigned hereby affirms the following:

1. That I/we are the fee simple title owner/contract purchaser (circle one) of the property described in this application.
2. That I/we have read and understands the entire application and concurs with the request.
3. That I/we have appointed the Applicant to represent the application, and empowers the Applicant to accept any and all conditions of approval imposed by the Town of Melbourne Beach.

Signature:_____ Date:_____

Print Name:_____ Title:_____

*Must sign in front of notary.

State of Florida
County of Brevard.
The foregoing application is acknowledged before me
this _____ day of _____, 20___, by_____,
who is/are personally known to me, or who has/have produced _____
as identification.

_____
Signature of Notary Public, State of Florida

NOTARY SEAL

VI. APPLICANT CERTIFICATION:*

I/we affirm and certify that I/we understand and will comply with the land development regulations of the Town of Melbourne Beach, Florida. I/we further certify that the application and support documents are fully complete and comply with the requirements of the land development regulations of the Town of Melbourne Beach, Florida. I/we further certify that the statements and/or diagrams made on any paper or plans submitted here with are true to the best of my/our knowledge and belief that this application, attachments and application filing fees become part of the official public record of the Town of Melbourne Beach, Florida and are not returnable or refundable.

Under penalties of perjury, I/we declare that I/we have read the foregoing application and that to the best of my/our knowledge and belief the facts stated in the application are true.

Signature: _____ Date: 9/3/25

Print Name: Jonathan Lowman Title: President

*Must sign in front of notary.

State of Florida
County of Brevard.
The foregoing application is acknowledged before me
this 3 day of September, 2025, by Jonathan Lowman,
who is/are personally known to me, or who has/have produced _____
as identification.

_____
Signature of Notary Public, State of Florida

Notary Public State of Florida
Angela L Kratz
My Commission HH 400430
Expires 6/3/2027

VII. PROJECT DESCRIPTION:

Describe Application: Construct Single Family Residential Home on vacant land

Provide attachment if more space is needed.

Describe Existing Conditions: Vacant lot

Provide attachment if more space is needed.

Future Land Use Plan Amendment*

Consistency with the Comprehensive Plan – Provide a written summary of how the proposed Amendment to the Future Land Use Plan is consistent with the Comprehensive Plan, and cite Comprehensive Plan Goals, Objectives and Policies in this analysis.

N/A

Provide attachment if more space is needed.

Impact of Public Facilities – the applicant must provide information on the impact of the proposed future land use plan amendment on public facilities including, but not limited to parks and open space, traffic, public utilities, police and fire.

N/A

Provide attachment if more space is needed.

Environmental Impacts – the applicant must provide information on the impacts of the proposed future land use plan amendment on environmental resources including but not limited to wetlands, soils posing severe limitations to development, unique habitat, endangered wildlife and/or plant species, flood prone areas, and coastal zones/dune systems.

N/A

Provide attachment if more space is needed.

Public notification – As required by code for the respective applications, the applicant must provide a map showing the subject site and all properties within a 500' radius. The applicant must also provide self-addressed envelopes with the Town's return address for each property owner within that 500' radius for purposes of providing notice to property owners of record. A sign must also be posted on the property within the timeframes required to provide additional public notification as required by Code.

* **Provide twelve (12) copies of the completed application and all supporting documentation.**

Rezoning*

Justification – Provide a written justification of the proposed rezoning and the need for the change as proposed.

N/A

Provide attachment if more space is needed.

Effect – Provide a written narrative on the effect of the change, if any, on the particular property and on surrounding properties.

N/A

Provide attachment if more space is needed.

Undeveloped land – provide information on the amount of undeveloped land in the town having the same classification as that being requested.

N/A

Purpose and Intent – Provide a written description of the proposed change in relationship to the purpose and intent of the present zoning and zoning requested.

N/A

Provide attachment if more space is needed.

Public notification – As required by code for the respective applications, the applicant must provide a map showing the subject site and all properties within a 500' radius. The applicant must also provide self-addressed envelopes with the Town's return address for each property owner within that 500' radius for purposes of providing notice to property owners of record. A sign must also be posted on the property within the timeframes required to provide additional public notification as required by Code.

* **Provide twelve (12) copies of the completed application and all supporting documentation.**

Amendment to the Land Development Code*

General Description of the proposed amendment to the Land Development Code – Provide a written description of the proposed change and explain why the amendment is necessary or appropriate.

N/A

Provide attachment if more space is needed.

The specific code section to be amended or adopted – Provide the specific wording of the proposed change.

N/A

Provide attachment if more space is needed.

Consistency with the Comprehensive Plan – Provide a written summary of how the proposed amendment to the Land Development Code is consistent with the Comprehensive Plan.

N/A

Provide attachment if more space is needed.

Impact of Public Facilities – the applicant must provide information on the impact of the proposed amendment to the Land Development Code on the Town's ability to provide adequate public facilities including, but not limited to parks and open space, traffic, public utilities, police and fire and maintain the existing level of service as identified in the Comprehensive Pan, if the amendment is grated.

N/A

Provide attachment if more space is needed.

Environmental/Natural/Historical Impacts – the applicant must provide information on the impacts of the proposed amendment to the Land Development Code on environmental/natural/historical resources including but not limited to wetlands, soils posing severe limitations to development, unique habitat, endangered wildlife and/or plant species, flood prone areas, and coastal zones/dune systems.

N/A

Provide attachment if more space is needed.

Public notification – Payment for all appropriate processing fees and charges will be made at the time of the application and at any other time as set forth by the Town Commission or Resolution.
Payment by the applicant shall include all costs necessary for giving of any public notice as required by state or local law.

* **Provide twelve (12) copies of the completed application and all supporting documentation.**

Special Exception*

Site and architectural plans elevations of all faces of a building and an overhead view shall be submitted with all special exception applications that include a **new building(s), facade renovations, or substantial improvements to an existing building**. The drawings shall be submitted in color and at the minimum shall include:

- Sealed and signed survey of existing improvements. All elevations should be NGVD/NAVD or Comparable for FEMA reference. (Include Lot Dimensions, Square footage & Coverage Percentage)
- Architectural elevations showing:
  - Proposed architectural style.
  - Exterior construction material specifications.
  - Color charts.
- A site plan pursuant to the requirements of Section 7A-51/7A-51.1.
- Structure dimensions and setbacks from all property lines.
- Refuse service area location.
- Mechanical outdoor equipment location.
- Master outdoor lighting plan.
- Screening devices.
- Master signage plan.
- Master landscaping and irrigation plan.
- Wall or fence details.
- Stormwater Management

Narrative – the applicant shall provide a narrative that explains how the use and the development will be compatible with surrounding uses in its function, its hours of operation, the type and amount of traffic to be generated, building size and setbacks, its relationship to land values and other factors that may be used to measure compatibility.

N/A

Provide attachment if more space is needed.

Special Exception Applications for space in an **existing building** must provide the following information:

- Survey of existing improvements.
- Architectural elevations showing:
  - Existing/proposed architectural style.
  - Existing/proposed exterior construction material specifications.
  - Existing/proposed exterior color.
- A site plan showing any proposed site improvements as described pursuant to the requirements of Section 7A-51/7A-51.1.
- Structure dimensions and setbacks from all property lines.
- Existing/proposed refuse service area location.
- Existing/proposed mechanical outdoor equipment location.

- Existing/proposed outdoor lighting layout.
- Existing/proposed screening and buffering.
- Existing/proposed signage.
- Existing/proposed landscaping and irrigation.
- Existing/proposed Wall or fence details.
- Stormwater Management

Public notification – As required by code for the respective applications, the applicant must provide a map showing the subject site and all properties within a 500' radius. The applicant must also provide self-addressed envelopes with the Town's return address for each property owner within that 500' radius for purposes of providing notice to property owners of record. A sign must also be posted on the property within the timeframes required to provide additional public notification as required by Code.

*** Provide twelve (12) copies of the completed application and twelve (12) 11X17 copies of all supporting documentation.**

Variances*

Variances are allowed only for area, size of structure, size of yards, and open spaces. All applications shall provide a written Justification Statement describing the existing conditions, the proposed improvements necessitating a variance, and shall address the following specific criteria:

Describe the special conditions and circumstances exist which are peculiar to the land, structure or building involved and which are not applicable to other lands, buildings or structures in the same district

N/A

Provide attachment if more space is needed.

Describe why the literal interpretation of the provisions of this Land Development Code would deprive the applicant of rights commonly enjoyed by other properties in the same district under the terms of this Land Development Code

N/A

Provide attachment if more space is needed.

Document that the special conditions and circumstances referred to above, do not result from the actions of the applicant.

N/A

Provide attachment if more space is needed.

NOTE: Establishment or expansion of a use otherwise prohibited shall not be allowed by variance, nor shall a variance be granted because of the presence of nonconformities in the zoning district or uses in an adjoining zoning district. Variances to maximum building heights are not authorized. Under no circumstances shall the Board of Adjustment grant a variance to permit a use not generally or by special exception permitted in the district involved, or any use expressly or by implication prohibited by the terms of the Land Development Code.

Public notification – As required by code for the respective applications, the applicant must provide a map showing the subject site and all properties within a 500' radius. The applicant must also provide self-addressed envelopes with the Town's return address for each property owner within that 500' radius for purposes of providing notice to property owners of record. A sign must also be posted on the property within the timeframes required to provide additional public notification as required by Code.

* **Provide twelve (12) copies of the completed application and all supporting documentation.**

A. Variance to Coastal Construction Line Restrictions*

Applications for variance to the Coastal Construction restrictions shall provide a statement describing the proposed work, activity, and construction seaward of the coastal setback line.

N/A

Provide attachment if more space is needed.

Applications shall also include a topographic survey of the subject property with the following specific information:

- The location of the contour line corresponding to elevation zero feet NGVD;
- The location of any existing vegetation line on the subject property;
- The location of the established State Department of Environmental Protection Coastal Construction Control Line and the mean high water line, for the full width of the subject property, including the location and number of the two nearest State Department of Environmental Protection's baseline monuments;
- The location of all proposed development to be constructed as a result of the proposed variance;
- The location of all existing development to remain on-site as a part of the development or redevelopment of the site;
- The location seaward of the coastal construction control line of all portions of all existing, and planned development, depicting the number of feet seaward of the coastal construction control line of the development;
- The location for the full width of the subject property of: the line of continuous construction; the top of the coastal dune system; the toe of the coastal dune system on or adjacent to the property at the time of application to the point at the dune, as it existed in September, 1972; and the location of the East side of the A-1-A right-of-way; the location of any principal structure to the North and South of the proposed project property and located within 100 feet of the proposed project property. As used in this subsection, the term ***LINE OF CONTINUOUS CONSTRUCTION*** is a line drawn from the most seaward edge of any principal structure to the North, and within 100 feet of the proposed project to the most seaward edge of any principal structure to the South, and within 100 feet, of the proposed project; and
- A certification as to the maximum number of feet seaward of the coastal construction control line for which the variance is requested for the full width of the subject property.

The applicant shall also provide detailed final construction plans and specifications for all structures proposed to be constructed seaward of the coastal setback line. These documents shall be signed and sealed by a professional engineer or architect, as appropriate, who must be registered in the state.

The Applicant must provide documentation and narrative demonstrating the following:

That the subject property experienced less than 25 feet of beach-dune erosion since September, 1972. The erosion will be measured by determining the extent of horizontal recession from the toe of the dune as it exists at the time of application to the point at the dune as it existed in September, 1972, which corresponds to the same elevation as the toe of the dune as it exists at the time of application;

N/A

Provide attachment if more space is needed.

That the granting of the variance will not be injurious to adjacent properties, nor contrary to the public interest

N/A

Provide attachment if more space is needed.

That the granting of the variance will not jeopardize the stability of the beach-dune system.
In granting any variance, the Board of Adjustment will when reasonable to do so require that new development on the property subject to the variance be no further seaward than existing development to the North or South of the subject property.

N/A

Provide attachment if more space is needed.

A notice containing the aforementioned information shall be posted by the applicant on the affected property at least 15 days prior to the public hearing. If the property abuts a public road right-of-way, the notice shall be posted in such a manner as to be visible from the road right-of-way. An affidavit signed by the owner or applicant evidencing posting of the affected real property shall be received by the Town Board of Adjustment, prior to the public hearing.

Public notification – As required by code for the respective applications, the applicant must provide a map showing the subject site and all properties within a 500' radius. The applicant must also provide self-addressed envelopes with the Town's return address for each property owner within that 500' radius for purposes of providing notice to property owners of record. A sign must also be posted on the property within the timeframes required to provide additional public notification as required by Code.

* **Provide twelve (12) copies of the completed application and all supporting documentation.**

APPEAL*

1. Nature of Appeal – Please be specific in your narrative:

N/A

2. Provide any supporting drawings, information and documentation. All records and attachments shall be considered part of the application and will become part of the public record and will not be returned.

Public notification – As required by code for the respective applications, the applicant must provide a map showing the subject site and all properties within a 500' radius. The applicant must also provide self-addressed envelopes with the Town's return address for each property owner within that 500' radius for purposes of providing notice to property owners of record. A sign must also be posted on the property within the timeframes required to provide additional public notification as required by Code.

*** Provide twelve (12) copies of the completed application and all supporting documentation.**

Site Plan for Single Family Development

A site plan must be reviewed and evaluated by the Town Engineer, Building Official and or Zoning Official and Planning and Zoning Board and approved by the Town Commission. The applicant shall provide the following in support of their application for site plan approval of a single family home:

1. **Narrative description of proposed improvements and demolitions.**
2. **Two (2) Sealed Surveys of the existing conditions prepared by a professional surveyor. All elevations should be NGVD/DAVD or Comparable for FEMA reference. (Include Lot Dimensions, Square footage & Coverage Percentage)**
    a. All existing structures (including but not limited to outbuildings, sheds, pools, etc), major features, trees and fences shall be fully dimensioned, including the height of all structures and the distance between principal and accessory structures on site and the distance between structures and driveways, and property or lot lines.
3. **Two (2) Professionally prepared plans in compliance with Ordinance 2019-06 showing the following:**
    a. Name, location, owner, and designer of the proposed development and the intended use
    b. Location of the site in relation to surrounding properties, including the means of ingress and egress to such properties
    c. Date, north arrow, and graphic scale (not less than one inch equals 20 feet)
    d. Location of all property lines, existing streets adjacent to the subject property, easements, as well as proposed driveways and general lot layout
    e. All existing and/or proposed structures, major features, and fences shall be fully dimensioned, including the height of all structures and the distance between principal and accessory structures on site and the distance between structures and driveways, and property or lot lines
    f. Site data providing all information needed to confirm compliance with zoning regulations including "required" and "provided" information:
        i. Proposed principal use and/or any proposed accessory uses
        ii. Lot size and dimensions
        iii. Lot coverage
        iv. Proposed living area square footage (e.g., square footage under air), and square footage of any other spaces including garage, covered entries, covered porches, screen rooms, etc.
        v. Number of enclosed parking spaces
        vi. Setbacks from all property lines
        vii. Number of stories
        viii. Height of structure
        ix. Floor plan – a fully dimensioned floor plan shall be provided depicting all existing and/or proposed spaces corresponding to the square footages on the site data breakdown above.
        x. Architectural elevations of each building façade professionally prepared plan drawn to scale and depicting the height dimension of the proposed structure, construction, or expansion or redevelopment thereof.
        xi. Landscaping & irrigation plan
4. **Drainage Site Plan showing flow paths and retention areas to meet certification requirements. (3A-80 & 7A-51.1)**
5. **Ten (10) 11X17 Complete sets of plans (all information as outlined in item 3 above) including a copy of the survey both existing and proposed and the Drainage Site Plan.**

Site Plan for duplex, multi-family, and/or commercial

A site plan must be reviewed and evaluated by the Town Engineer, Building Official and or Zoning Official and Planning and Zoning Board and approved by the Town Commission. The applicant shall provide the following in support of their application for site plan approval of a single family home:

1. **Narrative description of proposed improvements and demolitions.**
2. **Survey of the existing conditions prepared by a professional surveyor. All elevations should be NGVD/NAVD or Comparable for FEMA reference. (Include Lot Dimensions, Square footage & Coverage)**
    a. All existing structures (including but not limited to outbuildings, sheds, pools, etc), major features, trees and fences shall be fully dimensioned, including the height of all structures and the distance between principal and accessory structures on site and the distance between structures and driveways, and property or lot lines.
3. **Two (2) Professionally prepared plans in compliance with Ordinance 2019-06 showing the following:**
    a. Name, location, owner, and designer of the proposed development and the intended use
    b. Location of the site in relation to surrounding properties, including the means of ingress and egress to such properties
    c. Date, north arrow, and graphic scale (not less than one inch equals 20 feet)
    d. Location of all property lines, existing streets adjacent to the subject property, easements, as well as proposed driveways and general lot layout
    e. All existing and/or proposed structures, major features, and fences shall be fully dimensioned, including the height of all structures and the distance between principal and accessory structures on site and the distance between structures and driveways, and property or lot lines
    f. Site data providing all information needed to confirm compliance with zoning regulations including "required" and "provided" information:
        i. Proposed principal use and/or any proposed accessory uses
        ii. Lot size and dimensions
        iii. Lot coverage
        iv. Proposed living area square footage (e.g., square footage under air), and square footage of any other spaces including garage, covered entries, covered porches, screen rooms, etc.
        v. Number of enclosed parking spaces
        vi. Setbacks from all property lines
        vii. Number of stories
        viii. Height of structure
        ix. Floor plan – a fully dimensioned floor plan shall be provided depicting all existing and/or proposed spaces corresponding to the square footages on the site data breakdown above.
        x. Architectural elevations of each building façade professionally prepared plan drawn to scale and depicting the height dimension of the proposed structure, construction, or expansion or redevelopment thereof.
        xi. Landscaping and irrigation plan
4. **Drainage Site Plan showing flow paths and retention areas to meet certification requirements. (3A-80 & 7A-51.1)**

5. **Ten (10) 11X17 Complete sets of plans (all information as outlined in item 3 above) including a copy of the survey both existing and proposed and the Drainage Site Plan.**

P: 321.725.3674
F: 321.723.1159
www.bseconsult.com
312 South Harbor City Boulevard, Suite #4, Melbourne, Florida 32901

September 11, 2025

Via E-mail
Mr. Roberto Moreno
Town of Melbourne Beach
507 Ocean Avenue
Melbourne Beach, FL 32951
E-mail address: building@melbournebeachfl.org

Re: Stormwater Report & Survey Review – 411 Hibiscus Trail
B.S.E. File #11440.100.35

Dear Roberto:

We have reviewed the Stormwater Report prepared by Lantic Solutions, dated July 21, 2025, the Topo and Boundary Survey, prepared by AAL Land Surveying Services, Inc., signed June 18, 2025 and the Plot Plan, prepared by AAL Land Surveying Services, Inc., signed July 23, 2025, for the above referenced project.

We offer the following comments:

1. Please provide spot elevations to 10' beyond the property line to ensure a match. No need to resubmit as we use some desktop software in this case.
2. Stormwater calculations ensure code is being met.
3. The only Lot Drainage Plan is an 8.5" x 11" sized plan located within the report. Please provide a larger sized plan for review.
4. No elevations are provided on the drawing to grade the driveway to the dry stormwater facility. Please add and resubmit.
5. It appears that we can recommend approval of the drainage plan with resubmittal of #3 & 4 above.

Should you have any questions, feel free to contact me.

Very truly yours,

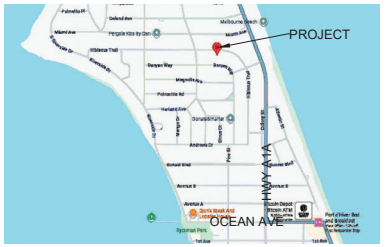
Scott M. Glaubitz, P.E., P.L.S

Scott M. Glaubitz, P.E., P.L.S.
President
B.S.E. Consultants, Inc. an LJA company

SMG/alm
11440.100.35.town.corr.25-s6042.sept

ZETH JAMES

411 HIBISCUS TRAIL
MELBOURNE BEACH, FL 32951



LOCATION MAP
N.T.S

SHEET INDEX:	
1	COVER SHEET & GENERAL NOTES
2	DRAINAGE PLAN

LEGAL DESCRIPTION:

LOT 6, BLOCK 10, ISLAND SHORES OF MELBOURNE BEACH

GENERAL NOTES:

1. PROPERTY LAYOUT INFORMATION AND ELEVATIONS SHOWN HAVE BEEN PROVIDED TO THE ENGINEER BY THE OWNER AND/OR OWNER'S AGENT. ITHEY HAVE NOT BEEN VERIFIED FOR ACCURACY. ENGINEER DOES NOT ACCEPT LIABILITY FOR INCORRECT OR INACCURATE PROPERTY AND/OR AREA INFORMATION PROVIDED.
2. THE MINIMUM THE FINISHED FLOOR ELEVATION (FFE) IS 18 INCHES ABOVE THE CENTERLINE ELEVATION OF 12.26 FEET. MINIMUM SETBACK REQUIREMENTS ARE 25 FEET FOR FRONT AND REAR YARDS AND 15 FEET FOR SIDE YARDS.
3. ALL SITE DRAINAGE SHALL BE DIRECTED AWAY FROM THE RESIDENCE. OVERHANGS THAT HAVE GUTTERS, ROOF VALLEY'S DOWNSPOUTS, SCUPPERS, OR OTHER RAINWATER OR COLLECTION DEVICES SHALL NOT BE DIRECTED TOWARDS ADJACENT PARCELS OF LAND LOCATED WITHIN TEN (10) FEET OF THE TERMINUS OF SUCH COLLECTION DEVICES.
4. SIDE SLOPES ON ANY AREA WITHIN THE LOT CANNOT EXCEED ONE (1) FOOT VERTICAL FOR EACH FOUR (4) FEET HORIZONTAL.
5. DRAINAGE EASEMENTS SHALL NOT CONTAIN PERMANENT IMPROVEMENTS, INCLUDING BUT NOT LIMITED TO SIDEWALKS, DRIVEWAYS, IMPERVIOUS SURFACES, PATIOS, DECKS, POOLS, AIR CONDITIONERS, STRUCTURES, AND UTILITY SHEDS.
5. CONTRACTOR TO FIELD VERIFY ELEVATIONS OF ADJACENT PROPERTIES PRIOR TO CONSTRUCTION FOR CONNECTION TO EXISTING PROPERTY LINE WITHOUT BLOCKING OR DRAINING ONTO ADJACENT PROPERTIES. CONTRACTOR TO COORDINATE GRADING ALONG COMMON LOT LINES WITH ADJACENT NEIGHBORS TO ENSURE CONTINUED POSITIVE DRAINAGE. CONTACT ENGINEER OF RECORD IF ELEVATIONS AS PROPOSED CANNOT BE MAINTAINED.
6. ALL ELEVATIONS SHOWN HEREON ARE BASED ON THE NAVD88 DATUM. CONVERSION FROM NAVD88 TO NGVD29 IS 1.43 FEET. EXISTING ELEVATIONS WERE PROVIDED TO THE ENGINEER BY THE OWNER AND/OR OWNER'S AGENT AND WERE NOT VERIFIED FOR ACCURACY.

REVISION SUMMARY:

1. REVISED SURVEY
2. ADDED ELEVATIONS 10' ON ADJACENT PROP. & D/W
3. REV. CROSS SECTIONS & ADDED CROSS SECTIONS
4. ADDED DIM. B/N POOL & HOUSE

THIS PLAN HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY ELIA G. TWIGG, PE USING A DIGITAL SIGNATURE AND DATE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

ELIA GOVANTES TWIGG
LICENSE
No. 65711
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

CONTRACT NO: C2405.16
JOB NO.: 25.06-073
DATE: 09/24/25
SHEET 1 OF 2

ELIA G. TWIGG, PE
FLORIDA LICENSE NO: 65711

TITLE: LOT DRAINAGE PLAN

SCALE: 1" = 20'
PARCEL ID: 28-38-06-75-10-6
LOT(S) / BLOCK: LOT 6 BLK 10
SUBDIVISION: ISLAND SHORES OF MELBOURNE BEACH
PLAT BK/PG: 10 / 52
CONTRACTOR: LOWMAN BROTHERS

PROJECT:
ZETH JAMES
411 HIBISCUS TRAIL
MELBOURNE BEACH, FL 32951

REVISIONS:
1 9/12/25 - MELB BCH COMMENTS

LANTIC SOLUTIONS
355 TORTOISE VIEW DRIVE, SUITE E
SATELLITE BEACH, FL 32937
Ph: (321) 413-0027
eliatwigg@lanticsolutions.com

LEGEND AND TYPICAL SECTIONS:

EXISTING ELEVATION

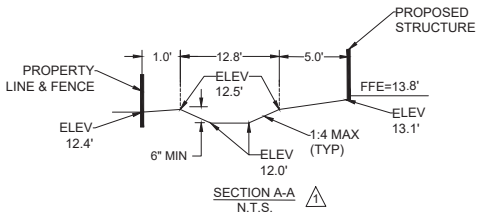
PROPOSED ELEVATION

FLOW DIRECTION

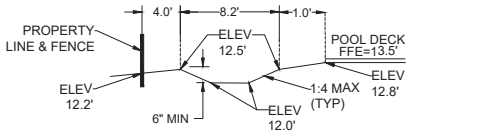
GRAPHIC SCALE IN FEET (0, 20, 40)

NORTH

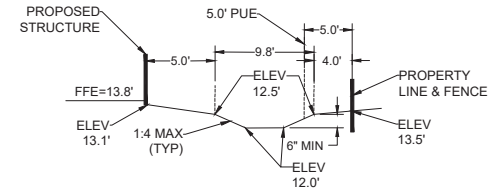
SCALE : 1" = 20'



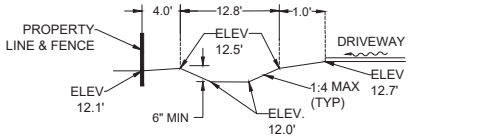
SECTION A-A
N.T.S.



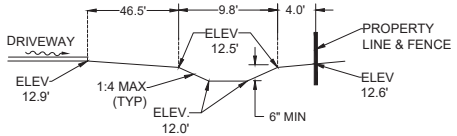
SECTION B-B
N.T.S.



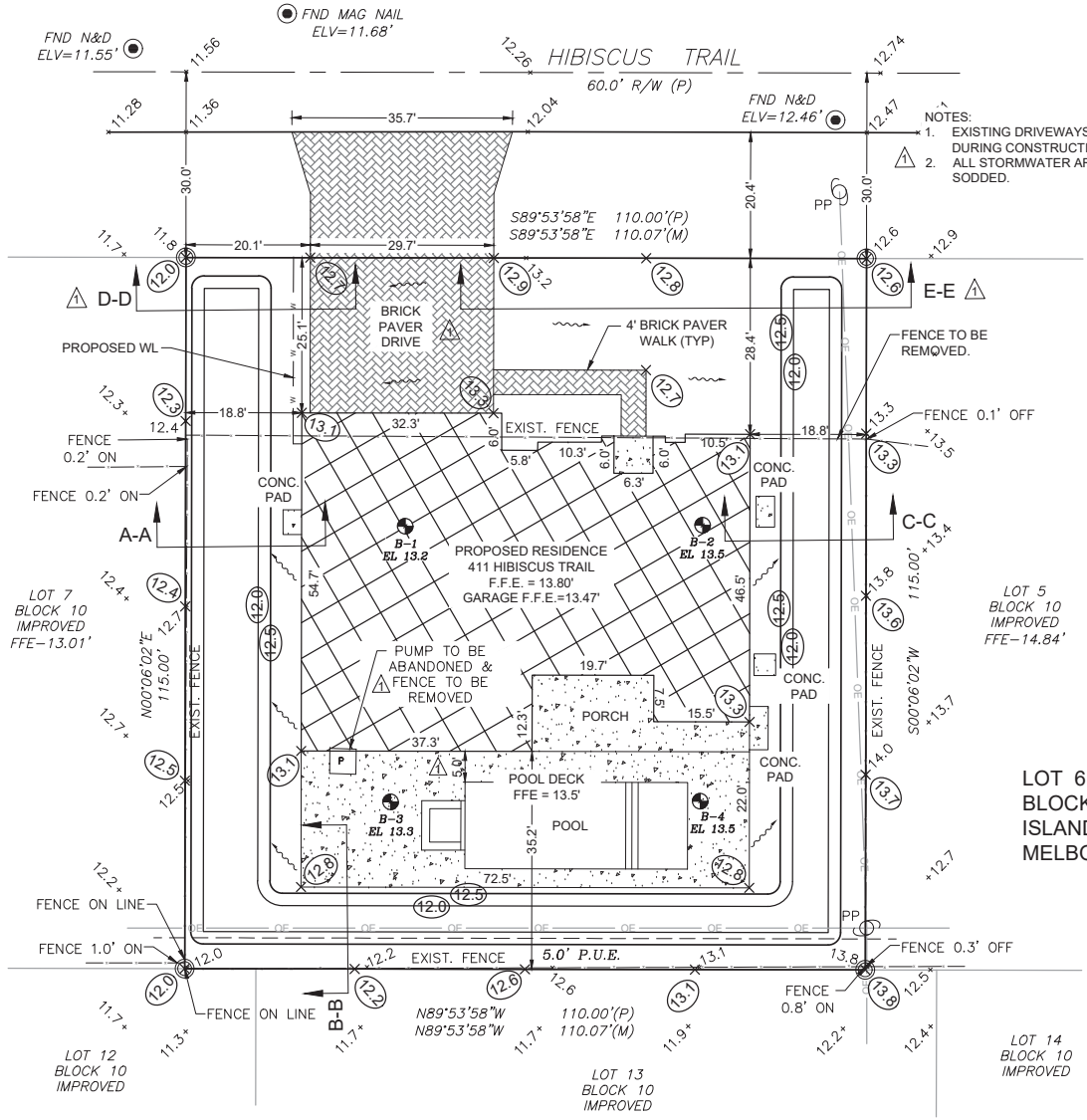
SECTION C-C
N.T.S.



SECTION D-D
N.T.S.



SECTION E-E
N.T.S.



NOTES:
1. EXISTING DRIVEWAYS WILL BE REMOVED DURING CONSTRUCTION.
2. ALL STORMWATER AREAS ARE TO BE SODDED.

LOT 6
BLOCK 10
ISLAND SHORES OF
MELBOURNE BEACH

CONVERSION TO NGVD29: +1.43	ELEVATIONS	
ELEVATIONS BASED ON: NAVD88	NGVD29	NAVD88
BREVARD COUNTY BENCHMARK: 422-43	10.41	8.98

CONTRACT NO: C2405.16
JOB NO.: 25.06-073
DATE: 09/24/25
SHEET 2 OF 2

ELIA G. TWIGG, PE
FLORIDA LICENSE NO: 65711

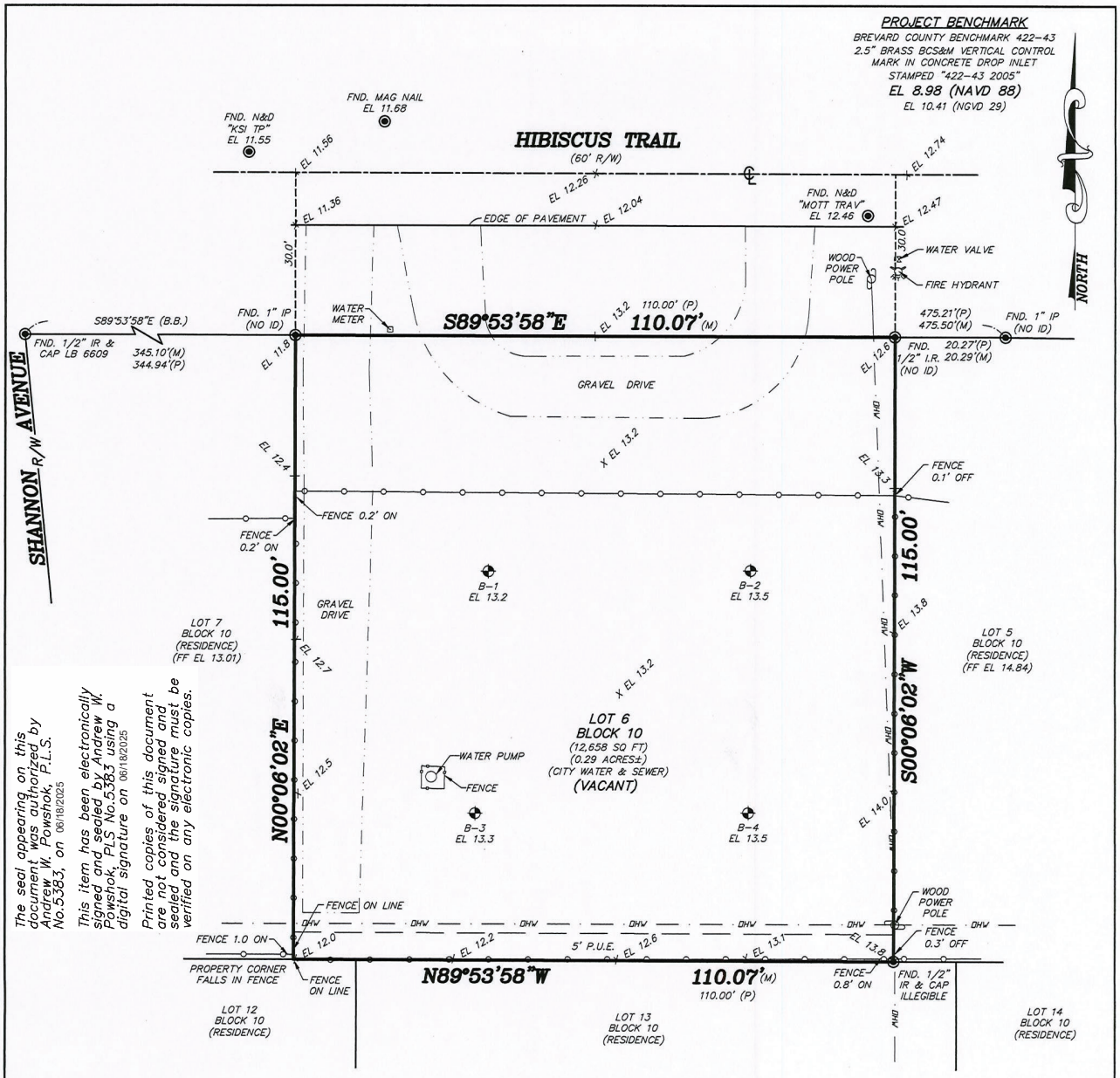
TITLE: LOT DRAINAGE PLAN

SCALE: 1" = 20'
PARCEL ID: 28-38-06-75-10-6
LOT(S) / BLOCK: LOT 6 BLK 10
SUBDIVISION: ISLAND SHORES OF MELBOURNE BEACH
PLAT BK/PG: 10 / 52
CONTRACTOR: LOWMAN BROTHERS

PROJECT:
ZETH JAMES
411 HIBISCUS TRAIL
MELBOURNE BEACH, FL 32951

REVISIONS:
1 9/17/25 - MELB BCH COMMENTS

ANTIC SOLUTIONS
355 TORTOISE VIEW DRIVE, SUITE E
SATELLITE BEACH, FL 32937
Ph: (321) 413-4002
eliatwigg@lanticsolutions.com



The seal appearing on this document was authorized by Andrew W. Powshok, P.L.S. No.5383, on 06/18/2025

This item has been electronically signed and sealed by Andrew W. Powshok, PLS No.5383 using a digital signature on 06/18/2025

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

SURVEY PREPARED FOR:
ZETH JAMES
LOWMAN BROTHERS CONSTRUCTION, LLC

DESCRIPTION: LOT 6, BLOCK 10, ISLAND SHORES OF MELBOURNE BEACH, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 10, PAGE 52A, OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA.

AAL LAND SURVEYING SERVICES, INC.

ACCORDING TO FLOOD INSURANCE RATE MAP #12009C 0604 H , DATED JANUARY 29, 2021 THIS PROPERTY IS LOCATED WITHIN FLOOD ZONE X. (NAVD 1988)

TYPE OF SURVEY: **BOUNDARY**

SCALE: **1" = 20'**

REVISION: _____
REVISION: _____
REVISION: _____
REVISION: _____
REVISION: _____
REVISION: _____
REVISION: _____
REVISION: TOPOGRAPHIC: 06-04-25

FIELD DATE: 01/15/2025

SECTION 06, TOWNSHIP 28 SOUTH, RANGE 38 EAST

PROJECT #50276

GENERAL NOTES:

1. THIS SURVEY AND DRAWING HAS BEEN PREPARED TO CONFORM WITH APPLICABLE STANDARD OF PRACTICE AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL SURVEYORS IN CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE, PURSUANT TO SECTION 472.027 OF THE FLORIDA STATUTES.
2. THIS SURVEY AND DRAWING IS FOR THE SOLE USE AND BENEFIT OF THE PARTIES NAMED HEREON AND FOR THE SPECIFIC PURPOSE AS NOTED, AND SHOULD NOT BE RELIED UPON BY ANY OTHER ENTITY, AND IS NOT TRANSFERABLE UNDER ANY CIRCUMSTANCES.
3. THIS SURVEY IS NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND THE SEAL OF THE FLORIDA LICENSED SURVEYOR, AND REPRODUCTION OF THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE SURVEYOR IS HEREBY FORBIDDEN.
4. NO OPINION OF TITLE OR OWNERSHIP IS HEREBY EXPRESSED OR IMPLIED BY THE SURVEYOR.
5. THIS SURVEY WAS PREPARED FROM INFORMATION FURNISHED TO THE SURVEYOR BY THE CLIENT, AND MAY BE SUBJECT TO EASEMENTS OR LIMITATIONS EITHER RECORDED OR IMPLIED.
6. BEARINGS ARE BASED ON AN ASSUMED DATUM AND ON THE LINE SHOWN AS BEING THE BASIS OF BEARINGS.
7. NO UNDERGROUND IMPROVEMENTS HAVE BEEN LOCATED UNLESS OTHERWISE SHOWN.
8. ELEVATIONS, IF SHOWN, ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988, UNLESS OTHERWISE NOTED.
9. "NO WELLS" AND "NO SEPTICS" ARE DEFINITIONS TO SHOW AN ATTEMPT BY THE SURVEYOR TO LOCATE POSSIBLE EXISTING WELLS AND SEPTICS, HOWEVER NONE WERE FOUND USING STANDARD SURVEY LOCATING EQUIPMENT.

3970 MINTON ROAD, WEST MELBOURNE, FL 32904 L.B. #6623
PHONE: (321)768-8110 FAX: (321)952-9771 EMAIL: frontdesk@aalsurvey.com

Andrew W Powshok — Digitally signed by Andrew W Powshok, Date: 2025.06.18 13:13:40 -04'00'

ANDREW W. POWSHOK
P.L.S. No. 5383

DANIEL D. GARNER
P.L.S. No. 6189

LEGEND

BB	–	BEARING BASE
(M)	–	MEASURED
(P)	–	PLAT
(D)	–	DEED
IR	–	IRON ROD
IP	–	IRON PIPE
N&D	–	NAIL AND DISC
N&TT	–	NAIL AND TIN TAB
C.M.	–	CONCRETE MONUMENT
PRM	–	PERMANENT REFERENCE MARKER
LB	–	LICENSED BUSINESS
PLS	–	PROFESSIONAL LAND SURVEYOR
TBM	–	TEMPORARY BENCHMARK
FND.	–	FOUND
D	=	DELTA
R	=	RADIUS
L	–	ARC LEGNTH
CH	–	CHORD LEGNTH
CB	–	CHORD BEARING
PRC	–	POINT OF REVERSE CURVE
P.O.L.	–	POINT ON LINE
R/W	–	RIGHT OF WAY
WPP	–	WOOD POWER POLE
OHW	–	OVERHEAD WIRES
E.P.	–	EDGE OF PAVEMENT
P.U.	–	PUBLIC UTILITY EASEMENT
D.E.	–	DRAINAGE EASEMENT
FPL	–	FLORIDA POWER & LIGHT
FH	–	FIRE HYDRANT
WV	–	WATER VALVE
UB	–	UTILITY BOX
CONC.	–	CONCRETE
WM	–	WATER METER
W	–	WELL
℄	–	CENTERLINE

September 24, 2025

Town of Melbourne Beach
Building Department
507 Ocean Avenue
Melbourne Beach, FL 32951

RE: Zeth James – 411 Hibiscus Trail, Melbourne Beach, FL 32951
Lantic Job #25.06-073

To Whom it May Concern,

Please accept this submittal as the response to comments dated September 12, 2025. Below are the comments with our responses to their comments directly below each comment.

DEPT (Reviewer Name)

1. **Lot Grading Plan comments**
    a. **Provide spot elevations 10-feet outside the perimeter of the project/property boundary line to ensure proper grading with adjacent properties. Update cross-sections as well.**

    Elevations 10 feet outside the perimeter of the property boundary have been added and cross sections have been updated with an elevation at the lot line. Please see the Drainage Plan for the revision.

    b. **Provide driveway elevations to show flow is being directed to the stormwater area.**
        i. **Flow arrow NE of driveway indicates flow offsite; provide elevations to ensure flow is to stormwater area.**

        Additional elevations and flow arrows were added on the driveway and in the area east of the driveway. All flow arrows show water flow to the retention areas. Please see the Drainage Plan for the revision.

    c. **Add fence and PUE to cross-sections.**

    The fences and PUE were added to the cross sections. Please see the Drainage Plan for the revision.

    d. **Will stormwater area be sodded? Confirm and note in the cross-sections including note.**

    All stormwater areas are to be sodded. Note 2 was added at the top right of the Drainage Plan.

321-413-0027
www.lanticsolutions.com
355 Tortoise View Drive, Suite E
Satellite Beach, FL 32937

e. Provide ground elevation adjacent to building FFE and pool deck in cross-sections.

Ground elevations adjacent to the building FFE and pool deck have been added to the cross sections. Please see the Drainage Plan for the revision.

f. There is a water pump with fence enclosure noted on the plan that falls with the proposed building footprint – please revise.

A note has been added to the plan that the pump is to be abandoned and fence to be removed. Please see the drainage plan for the note.

g. Please provide cross-sections at the stormwater area and road r/w (both east and west of the driveway).

Cross sections D-D and E-E were added. Please see the Drainage Plan for the revision.

h. The survey plot plan does not reflect the perimeter stormwater area – please revise accordingly.

The stormwater area is shown on the Drainage Plan.

We trust that this satisfies the Town's requirements. Should you have any questions, please contact me at (321) 413-0046 or via email at eliatwigg@lanticsolutions.com.

Sincerely,

Elia Twigg, PE
Engineer of Record

Enclosures:

1. Revised Plans

KSM ENGINEERING AND TESTING

September 11, 2025 **KSM JOB # :** 2506498-1d/AH/JM

CLIENT: George Construction

JOB LOCATION: 411 4th Ave
Melbourne Beach, Florida

To Whom it may concern,

Enclosed, please find the density test results performed on the compacted foundation fill for the detached studio at the above referenced project.

Should you have any questions, please feel free to contact our office.

Respectfully,

This item has been digitally signed and sealed by Eric A. McAra, P.E. on the date 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.

Digitally signed by Eric A McAra
Date: 2025.09.11 11:57:13 -04'00'

Eric A. McAra, P.E.
V.P. of Engineering
PE # 69841 09/11/25
Email: mgeorge@georgeconstructioninc.com

Proudly Serving Florida since 1990

KSM ENGINEERING AND TESTING

SOIL COMPACTION REPORT
ASTM D 1557 and ASTM D 6938

DATE TESTED: September 10, 2025

KSM JOB #: 2506498-1d/AH/JM
NUC # 215
Nuc Model: MC-1DR-P
Nuc Serial # MD80404215

CLIENT: George Construction

JOB LOCATION: 411 4th Ave
Melbourne Beach, Florida

ITEM TESTED: **Compacted Foundation Fill for the Detached Studio**

	TEST LOCATION OF SAMPLE	DEPTH	MOISTURE %	DRY DENSITY (P.C.F.)	MAX. DRY PROCTOR VALUE (P.C.F)	PERCENT COMPACTION
1	N.E.	0" - 12"	9.4	115.1	115.6	99.6%
2	S.E.	0" - 12"	8.5	113.8	115.6	98.4%
3	S.W.	0" - 12"	8.1	112.1	115.6	97.0%
4	N.W.	0" - 12"	9.2	114.6	115.6	99.1%

Soil Description:

Tan Shelled Sand

Proctor Optimum Moisture:
10.3 %
Proctor Max. Dry Density: P.C.F.
115.6
@ Test Locations the Density & Penetrometer readings indicate the Degree of Compaction Meets Minimum Requirement
For a Formed Foundation

Disclaimer: Contractor is responsible to maintain the tested area in the condition that KSM completed the indicated passed compaction test. KSM is not responsible if the tested area has been altered from the approved inspected condition.

Proudly Serving Florida since 1990

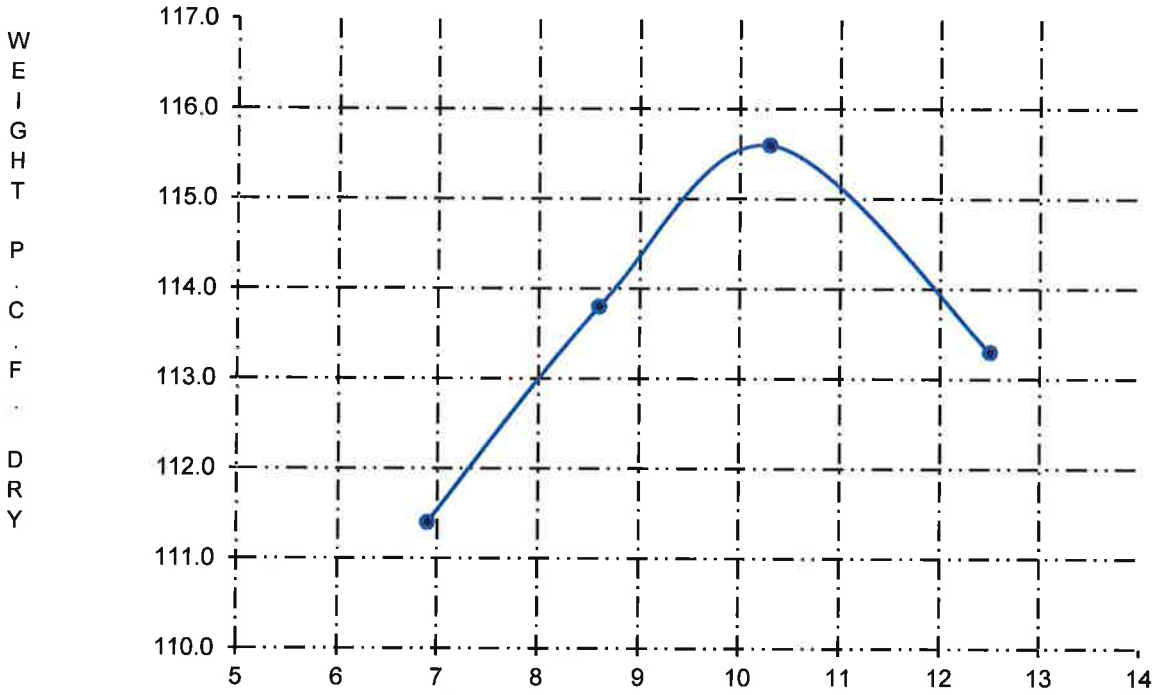
KSM ENGINEERING AND TESTING

SOIL COMPACTION REPORT
ASTM D 1557

DATE TESTED: September 10, 2025 **KSM JOB # :** 2506498-1d/AH/JM

CLIENT: George Construction

JOB LOCATION: 411 4th Ave
Melbourne Beach, Florida



Soil Description:
Tan Shelled Sand

Proctor Optimum Moisture:
10.3 %

Proctor Max. Dry Density: P.C.F.
115.6

Proudly Serving Florida since 1990

KSM ENGINEERING AND TESTING

SOIL COMPACTION REPORT
ASTM D 1557 and ASTM D 6938

DATE TESTED: September 10, 2025

KSM JOB #: 2506498-1d/AH/JM
NUC # 215
Nuc Model: MC-1DR-P
Nuc Serial # MD80404215

CLIENT: George Construction

JOB LOCATION: 411 4th Ave
Melbourne Beach, Florida

ITEM TESTED: **Compacted Foundation Fill for the Detached Studio**

	TEST LOCATION OF SAMPLE	DEPTH	MOISTURE %	DRY DENSITY (P.C.F.)	MAX. DRY PROCTOR VALUE (P.C.F)	PERCENT COMPACTION
1	N.E.	0" - 12"	9.4	115.1	115.6	99.6%
2	S.E.	0" - 12"	8.5	113.8	115.6	98.4%
3	S.W.	0" - 12"	8.1	112.1	115.6	97.0%
4	N.W.	0" - 12"	9.2	114.6	115.6	99.1%

Soil Description:

Tan Shelled Sand

Proctor Optimum Moisture:
10.3 %
Proctor Max. Dry Density: P.C.F.
115.6
@ Test Locations the Density & Penetrometer readings indicate the Degree of Compaction Meets Minimum Requirement
For a Formed Foundation

Disclaimer: Contractor is responsible to maintain the tested area in the condition that KSM completed the indicated passed compaction test. KSM is not responsible if the tested area has been altered from the approved inspected condition.

Proudly Serving Florida since 1990

KSM ENGINEERING AND TESTING

September 11, 2025 **KSM JOB # :** 2506498-1d/AH/JM

CLIENT: George Construction

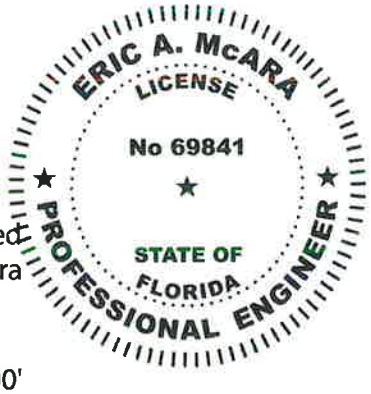
JOB LOCATION: 411 4th Ave
Melbourne Beach, Florida

To Whom it may concern,

Enclosed, please find the density test results performed on the compacted foundation fill for the detached studio at the above referenced project.

Should you have any questions, please feel free to contact our office.

Respectfully,



This item has been digitally signed and sealed by Eric A. McAra, P.E. on the date 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.

Digitally signed by Eric A McAra
Date: 2025.09.11 11:57:13 -04'00'

Eric A. McAra, P.E.
V.P. of Engineering
PE # 69841 09/11/25
Email: mgeorge@georgeconstructioninc.com

Proudly Serving Florida since 1990

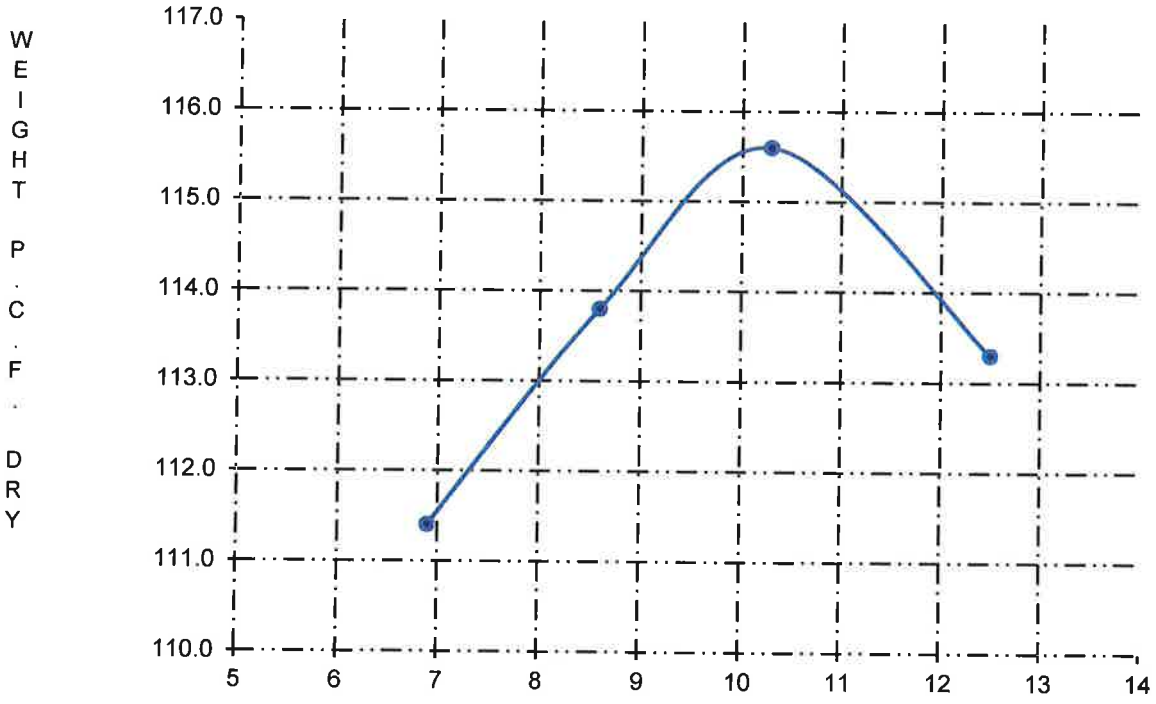
KSM ENGINEERING AND TESTING

SOIL COMPACTION REPORT
ASTM D 1557

DATE TESTED: September 10, 2025 **KSM JOB # :** 2506498-1d/AH/JM

CLIENT: George Construction

JOB LOCATION: 411 4th Ave
Melbourne Beach, Florida

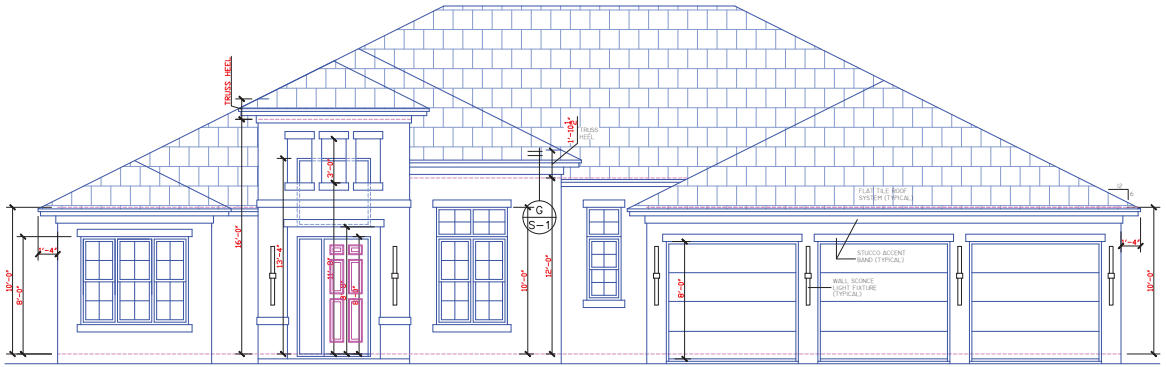


Soil Description:
Tan Shelled Sand

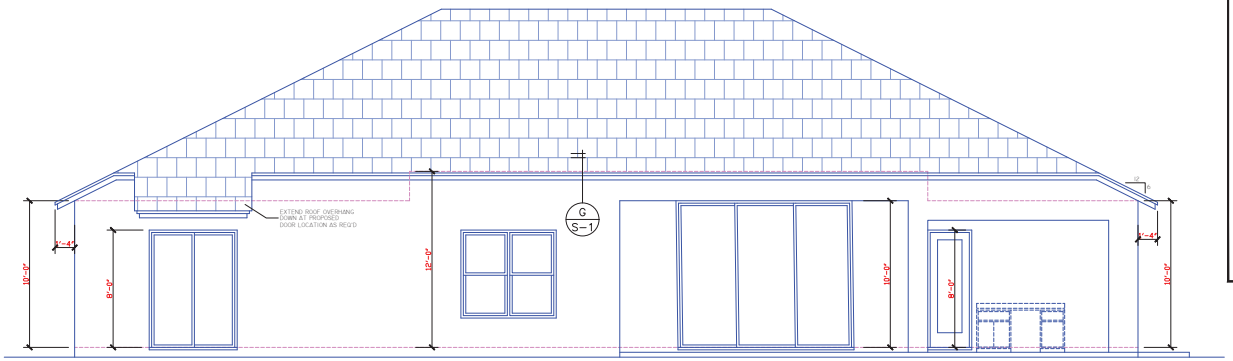
Proctor Optimum Moisture:
10.3 %

Proctor Max. Dry Density: P.C.F.
115.6

Proudly Serving Florida since 1990



RESIDENCE-FRONT ELEVATION
SCALE: 1/4" = 1'-0"



RESIDENCE-REAR ELEVATION
SCALE: 1/4" = 1'-0"

THE MAIN WIND RESISTANCE FOR THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH THE 2023 FLORIDA RESIDENTIAL BUILDING CODE 8TH EDITION AND LATEST ADOPTED SUPPLEMENTS TO WITHSTAND THE WIND LOADS ASSOCIATED WITH A MINIMUM WIND SPEED OF 160 MILES PER HOUR, EXPOSURE "D" STRUCTURE.

THE COMPONENTS AND CLADDING HAVE BEEN SELECTED AND THEIR USE INCORPORATED INTO THE DESIGN AND SPECIFICATIONS IN ACCORDANCE WITH THE 2023 FLORIDA RESIDENTIAL BUILDING CODE 8TH EDITION AND LATEST ADOPTED SUPPLEMENTS TO WITHSTAND THE WIND LOADS ASSOCIATED WITH A MINIMUM WIND SPEED OF 160 MILES PER HOUR, EXPOSURE " D" STRUCTURE

1. ULTIMATE WIND SPEED = 160 MILES PER HOUR/NOMINAL WIND SPEED = 124 MILES PER HOUR
2. WIND IMPORTANCE FACTOR = 1 / BUILDING CATEGORY = 2 / ENCLOSED (FULLY)
3. WIND EXPOSURE = EXPOSURE " D"
4. INTERNAL PRESSURE COEFFICIENT: + 0.18 / - 0.18
5. COMPONENTS & CLADDING: + 40.8 PSF / - 54.7 PSF

ALL DOOR AND WINDOW UNITS SHALL BE INSTALLED PER MANUFACTURERS SPECIFICATIONS (WHERE APPLICABLE)

THIS STRUCTURE HAS BEEN DESIGNED AS A FULLY ENCLOSED STRUCTURE. THIS STRUCTURE IS LOCATED IN A WIND-BORNE DEBRIS ZONE PER FLORIDA BUILDING CODE. GLAZING PROTECTION (IMPACT GLASS AND/OR HURRICANE SHUTTERS) IS REQUIRED TO BE INSTALLED.

FLASHING NOTES
APPROVED METAL FLASHING, VINYL FLASHING, SELF-ADHERED MEMBRANES AND MECHANICALLY ATTACHED FLEXIBLE FLASHING SHALL BE APPLIED SHINGLE-FASHION OR IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. METAL FLASHING SHALL BE CORROSION RESISTANT. FLUID-APPLIED MEMBRANES USED AS FLASHING SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. ALL FLASHING SHALL BE APPLIED IN A MANNER TO PREVENT THE ENTRY OF WATER INTO THE WALL CAVITY OR PENETRATION OF WATER TO THE BUILDING STRUCTURAL FRAMING COMPONENTS. SELF-ADHERED MEMBRANES USED AS FLASHING SHALL COMPLY WITH AAMA 711. ALL EXTERIOR FENESTRATION PRODUCTS SHALL BE SEALED AT THE JUNCTURE WITH THE BUILDING WALL WITH A SEALANT COMPLYING WITH AAMA 800 OR ASTM C920 CLASS 25 GRADE NS OR GREATER FOR PROPER JOINT EXPANSION AND CONTRACTION. ASTM C1281, AAMA 812, OR OTHER APPROVED STANDARD AS APPROPRIATE FOR THE TYPE OF SEALANT. FLUID-APPLIED MEMBRANES USED AS FLASHING IN EXTERIOR WALLS SHALL COMPLY WITH AAMA 714. THE FLASHING SHALL EXTEND TO THE SURFACE OF THE EXTERIOR WALL FINISH. APPROVED FLASHINGS SHALL BE INSTALLED AT THE FOLLOWING LOCATIONS:

1. EXTERIOR WINDOW AND DOOR OPENINGS. FLASHING AT EXTERIOR WINDOW AND DOOR OPENINGS SHALL EXTEND TO THE SURFACE OF THE EXTERIOR WALL FINISH OR TO THE WATER-RESISTIVE BARRIER COMPLYING WITH SECTION 703.2 FOR SUBSEQUENT DRAINAGE. MECHANICALLY ATTACHED FLEXIBLE FLASHINGS SHALL COMPLY WITH AAMA 712. FLASHING AT EXTERIOR WINDOW AND DOOR OPENINGS SHALL BE INSTALLED IN ACCORDANCE WITH ONE OR MORE OF THE FOLLOWING:

1.1. THE FENESTRATION MANUFACTURER'S INSTALLATION AND FLASHING INSTRUCTIONS, OR FOR APPLICATIONS NOT ADDRESSED IN THE FENESTRATION MANUFACTURER'S INSTRUCTIONS, IN ACCORDANCE WITH THE FLASHING MANUFACTURER'S INSTRUCTIONS. WHERE FLASHING INSTRUCTIONS OR DETAILS ARE NOT PROVIDED, PAN FLASHING SHALL BE INSTALLED AT THE SILL OF EXTERIOR WINDOW AND DOOR OPENINGS. PAN FLASHING SHALL BE SEALED OR SLOPED IN SUCH A MANNER AS TO DIRECT WATER TO THE SURFACE OF THE EXTERIOR WALL FINISH OR TO THE WATER-RESISTIVE BARRIER FOR SUBSEQUENT DRAINAGE. OPENINGS USING PAN FLASHING SHALL INCORPORATE FLASHING OR PROTECTION AT THE HEAD AND SIDES.

1.2. IN ACCORDANCE WITH THE FLASHING DESIGN OR METHOD OF A REGISTERED DESIGN PROFESSIONAL.

1.3. IN ACCORDANCE WITH OTHER APPROVED METHODS.

1.4 IN ACCORDANCE WITH FMA/AAMA 100, FMA/AAMA 200, FMA/WDMA 250, FMA/AAMA/WDMA 300 OR FMA/AAMA/WDMA 400.

2. AT THE INTERSECTION OF CHIMNEYS OR OTHER MASONRY CONSTRUCTION WITH FRAME OR STUCCO WALLS, WITH PROJECTING LIPS ON BOTH SIDES UNDER STUCCO COPINGS.

3. UNDER AND AT THE ENDS OF MASONRY, WOOD OR METAL COPINGS AND SILLS.

4. CONTINUOUSLY ABOVE ALL PROJECTING WOOD TRIM.

5. WHERE EXTERIOR PORCHES, DECKS OR STAIRS ATTACH TO A WALL OR FLOOR ASSEMBLY OF WOOD-FRAME CONSTRUCTION.

6. AT WALL AND ROOF INTERSECTIONS.

7. AT BUILT-IN GUTTERS.

REVISIONS
07/10/25 ISSUE
09/11/25 CLIENT REVS
***
***
***

215 PALM BAY ROAD STE. 6
PALM BAY, FL. 32905
TEL. (321) 724-5740
FAX. (321) 914-4206
EMAIL:
BCARTER350@GMAIL.COM

EDC
ENGINEERING AND DESIGN CONCEPTS, INC.

SFR FOR:
411 HIBISCUS TRAIL
MELBOURNE BEACH, FLORIDA

ENGINEER OF RECORD
EDWARD F. SHINSKIE, PE
4707 WILD TURKEY ROAD
MIMS, FLORIDA 32754
FLORIDA PE# 47515
PH: 321-863-3223

EDWARD F SHINSKIE JR. LICENSE No. 47515 STATE OF FLORIDA PROFESSIONAL ENGINEER

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY EDWARD F. SHINSKIE, PE LIC NO 47515 ON THE DATE AND/OR TIME STAMP SHOWN USING A DIGITAL SIGNATURE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPY.

Digitally signed by Edward F Shinskie
Date: 2025.09.11 15:21:23 -04'00'

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY EDWARD F. SHINSKIE, PE LIC NO 47515 ON THE DATE AND/OR TIME STAMP SHOWN USING A DIGITAL SIGNATURE.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPY.

DESIGN CRITERIA	
FULLY ENCLOSED	
WIND SPEED	160
EXPOSURE	D
BUILDING CATEGORY	TWO (2)

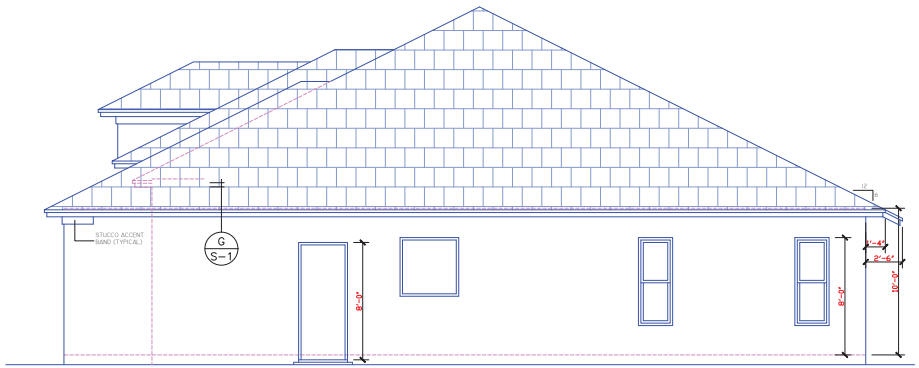
GENERAL NOTES

1. THESE DRAWINGS WERE PREPARED WITH THE ASSUMPTION THE CONTRACTOR/OWNER BUILDER IS KNOWLEDGEABLE OF COMMON CONSTRUCTION PRACTICES.
2. THE CONTRACTOR/OWNER-BUILDER SHALL REVIEW DRAWINGS FOR ACCURACY AND INTERPRETATION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGNERS PRIOR TO CONSTRUCTION.
3. THE FOUNDATION PLAN SHALL BE VERIFIED BY THE TRUSS MANUFACTURER TO CORRESPOND WITH THE FINAL ENGINEERED TRUSS LAYOUT.
4. DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE.

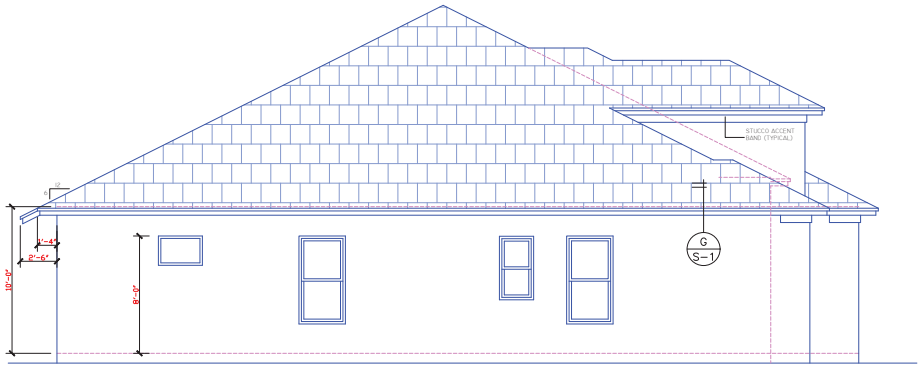
DO NOT SCALE DRAWINGS

TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, THE FOLLOWING PLANS COMPLY WITH ALL APPLICABLE REQUIREMENTS OF THE 2023 FLORIDA RESIDENTIAL BUILDING CODE 8TH EDITION AND LATEST ADOPTED SUPPLEMENTS

A1
SHEET 1 OF *
DRAWN BY:
RDC



RESIDENCE-RIGHT SIDE ELEVATION
SCALE: 1/4" = 1'-0"



RESIDENCE-LEFT SIDE ELEVATION
SCALE: 1/4" = 1'-0"

WINDLOAD SOLUTIONS

ASCE 7-22

General Information

Design Wind Speed	Nominal	
Wind Speed, V (mph)	160	Click Here to find the right wind speed
Exposure Category	D	(ASCE 7-22, Sect. 26.7)
Enclosure Classification	Enclosed	(ASCE 7-22, Section 26.12 & Figure 26.13-1)

Building Information

Height above ground, z (ft.)		Elevation of raised structure (i.e. house floor on piles)
Building Width, B (ft)	72.50	-
Building Length, L (ft)	54.67	-

Frequency Information

Damping Ratio, β	0.0700	(Suggested Range = 0.010-0.070)
Period Coef., C_t	0.0200	(Suggested Range = 0.020-0.035), (T = C_t*(h)^(3/4) , and h = L/T)

Roof Information

Roof Type	Hip w/Overhang	
Ridge Height, h_r (ft)	23.67	($h_r \geq h_e$), Roof Peak Height
Eave Height, h_e (ft.)	10.00	($h_e \leq h_r$), Roof Edge @ Wall
Overhang, h_o (ft.)	1.33	
Parapet Along Roof Perimeter (ft.)	0.00	
Roof Slope (x:12)	6.00	
Mean Roof Height (h) - (ft.)	17.50	($h=(h_r+h_e)/2$, for roof angle >10 deg.)

Topographic Information

Hill Shape	Flat - No Hill	Click to view Topographic Diagram
H_c (ft.)		
L_h (ft.)		
x, (ft.)		
z, (ft.)		

Project Information

Client	
Address	
Company	
Job Number	
Preparer	

Determinations

Internal Pressure	0.18
Roof Angle, θ (degrees)	26.57
Edge Strip, a (ft.)	5.47
Directionality Factor, K_d	0.85
Topo. Factor, K_{zt}	1.00
Gust Factor, G	0.85
Building Type	Rigid

Components & Cladding (C&C)

		WALL OPENINGS - user entry					WIND LOAD PRESSURES		NOA INFORMATION		VENDOR INFORMATION	
							Nominal Wind Load Pressures					
INFO.	DESCRIPTION	ZONE	OPENING ELEVATION (ft.)	WIDTH (in.)	LENGTH (in.)	EFFECTIVE WIND AREA (sq.ft.)	MAXIMUM POSITIVE PRESSURE (psf)	MAXIMUM NEGATIVE PRESSURE (psf)	NOA Approval Number	Max Pressure Per NOA	Manufacturer	Model Number
WALL OPENING INFORMATION	1 4/8 x 8/0 ext dr	4	5	56.0	96.0	37.3	**37.3**	**-40.8**				
	2 4/8 x 4/8 transom	4	5	56.0	56.0	21.8	**38.8**	**-42.2**				
	3 (3) 1/2 36 windows	5	5	92.0	72.0	46.0	**36.8**	**-46.6**				
	4 26 window	4	5	38.0	72.0	19.0	**39.1**	**-42.6**				
	5 1/2 34 window	4	5	28.0	52.0	10.1	**40.8**	**-44.3**				
	6 26 window	4	5	38.0	72.0	19.0	**39.1**	**-42.6**				
	7 3/0 x 2/0 transom	4	5	36.0	24.0	6.0	**40.8**	**-44.3**				
	8 2/8 x 8/0 ext dr	5	5	32.0	96.0	21.3	**38.8**	**-50.6**				
	9 12/0 x 10/0 sldg gls dr	4	5	144.0	120.0	120.0	**34.2**	**-37.7**				
	11 (2) 26 windows	5	5	78.0	72.0	39.0	**37.2**	**-47.4**				
	12 (2) 26 windows	5	5	78.0	72.0	39.0	**37.2**	**-47.4**				
	13 8/0 x 8/0 sldg gls dr	5	5	72.0	96.0	48.0	**36.7**	**-46.3**				
	14 1/2 35 window	5	5	28.0	65.0	12.6	**40.2**	**-53.4**				
	15 1/2 35 window	4	5	38.0	65.0	17.2	**39.4**	**-42.8**				
	16 4/0 x 4/0 transom	4	5	48.0	48.0	16.0	**39.6**	**-43.0**				
	17 3/0 x 8/0 ext dr	4	5	36.0	96.0	24.0	**38.5**	**-42.0**				
	18 9/0 x 8/0 oh door	5	5	108.0	96.0	72.0	**35.6**	**-44.2**				
	19 9/0 x 8/0 oh door	4	5	108.0	96.0	72.0	**35.6**	**-39.0**				
	20 9/0 x 8/0 oh door	5	5	108.0	96.0	72.0	**35.6**	**-44.2**				
	21 1/2 34 window	4	5	28.0	52.0	10.1	**40.8**	**-44.3**				
	22 28 x 24 transom	4	5	28.0	24.0	4.7	**40.8**	**-44.3**				
	23 (2) 1/2 36 windows	5	5	58.0	72.0	29.0	**38.0**	**-49.0**				
	24 58 x 24 transom	5	5	58.0	24.0	9.7	**40.8**	**-54.7**				
WALL OPENING INFORMATION												

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY EDWARD F. SHINSKIE, PE LIC NO 47515 ON THE DATE AND/OR TIME STAMP SHOWN USING A DIGITAL SIGNATURE.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPY.

DESIGN CRITERIA	
FULLY ENCLOSED	
WIND SPEED	160
EXPOSURE	D
BUILDING CATEGORY	TWO (2)

GENERAL NOTES

1. THESE DRAWINGS WERE PREPARED WITH THE ASSUMPTION THE CONTRACTOR/OWNER BUILDER IS KNOWLEDGEABLE OF COMMON CONSTRUCTION PRACTICES.
2. THE CONTRACTOR/OWNER-BUILDER SHALL REVIEW DRAWINGS FOR ACCURACY AND INTERPRETATION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGNERS PRIOR TO CONSTRUCTION.
3. THE FOUNDATION PLAN SHALL BE VERIFIED BY THE TRUSS MANUFACTURER AND SHALL BE CORRESPOND WITH THE FINAL ENGINEERED TRUSS LAYOUT.
4. DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE.

DO NOT SCALE DRAWINGS

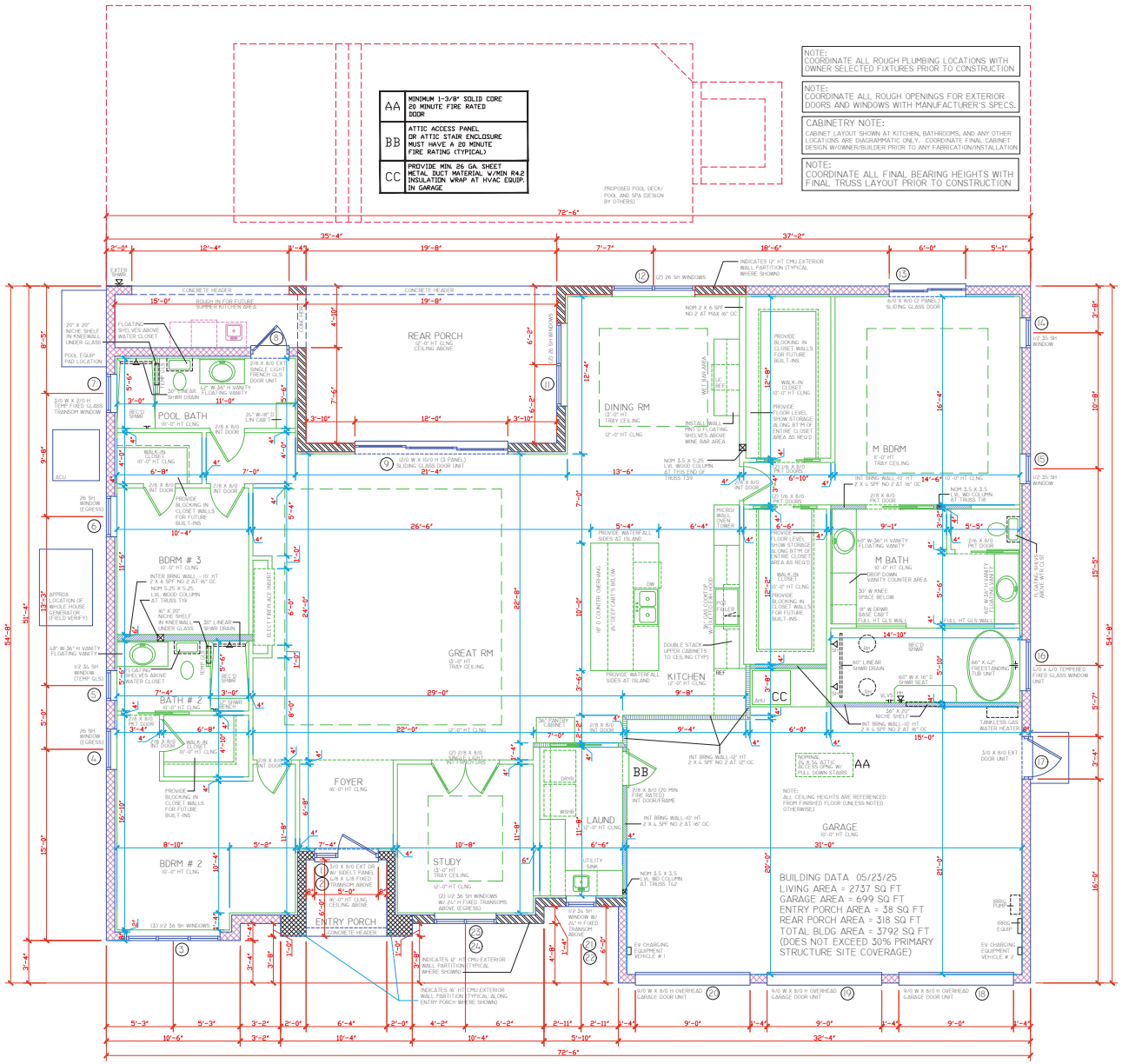
REVISIONS
***
***
***

EDC
ENGINEERING AND DESIGN CONCEPTS, INC.
2161 PALM BAY ROAD STE. 6
PALM BAY, FL. 32905
TEL: (321) 724-5740
FAX: (321) 914-4286
EMAIL: BCARTER350@GMAIL.COM

SFR FOR:
411 HIBISCUS TRAIL
MELBOURNE BEACH, FLORIDA

ENGINEER OF RECORD
EDWARD F. SHINSKIE, PE
4707 WILD TURKEY ROAD
MIMS, FLORIDA 32754
FLORIDA PE# 47515
PH: 321-863-3223

A2
SHEET 2 OF *
-DRAWN BY-
RDC



RESIDENCE-FLOOR PLAN
SCALE: 1/4" = 1'-0"

DESIGN CRITERIA	
FULLY ENCLOSED	
WIND SPEED	160
EXPOSURE	D
BUILDING CATEGORY	TWO (2)

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY EDWARD F. SHINSKIE, PE LIC NO 47515 ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPY.

GENERAL NOTES
1. THESE DRAWINGS WERE PREPARED WITH THE ASSUMPTION THE CONTRACTOR/OWNER BUILDER IS KNOWLEDGEABLE OF COMMON CONSTRUCTION PRACTICES.
2. THE CONTRACTOR/OWNER-BUILDER SHALL REVIEW DRAWINGS FOR ACCURACY AND INTERPRETATION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGNERS PRIOR TO CONSTRUCTION.
3. THE FOUNDATION PLAN SHALL BE VERIFIED BY THE ENGINEER OF RECORD TO CORRESPOND WITH THE FINAL ENGINEERED TRUSS LAYOUT.
4. DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE.
DO NOT SCALE DRAWINGS

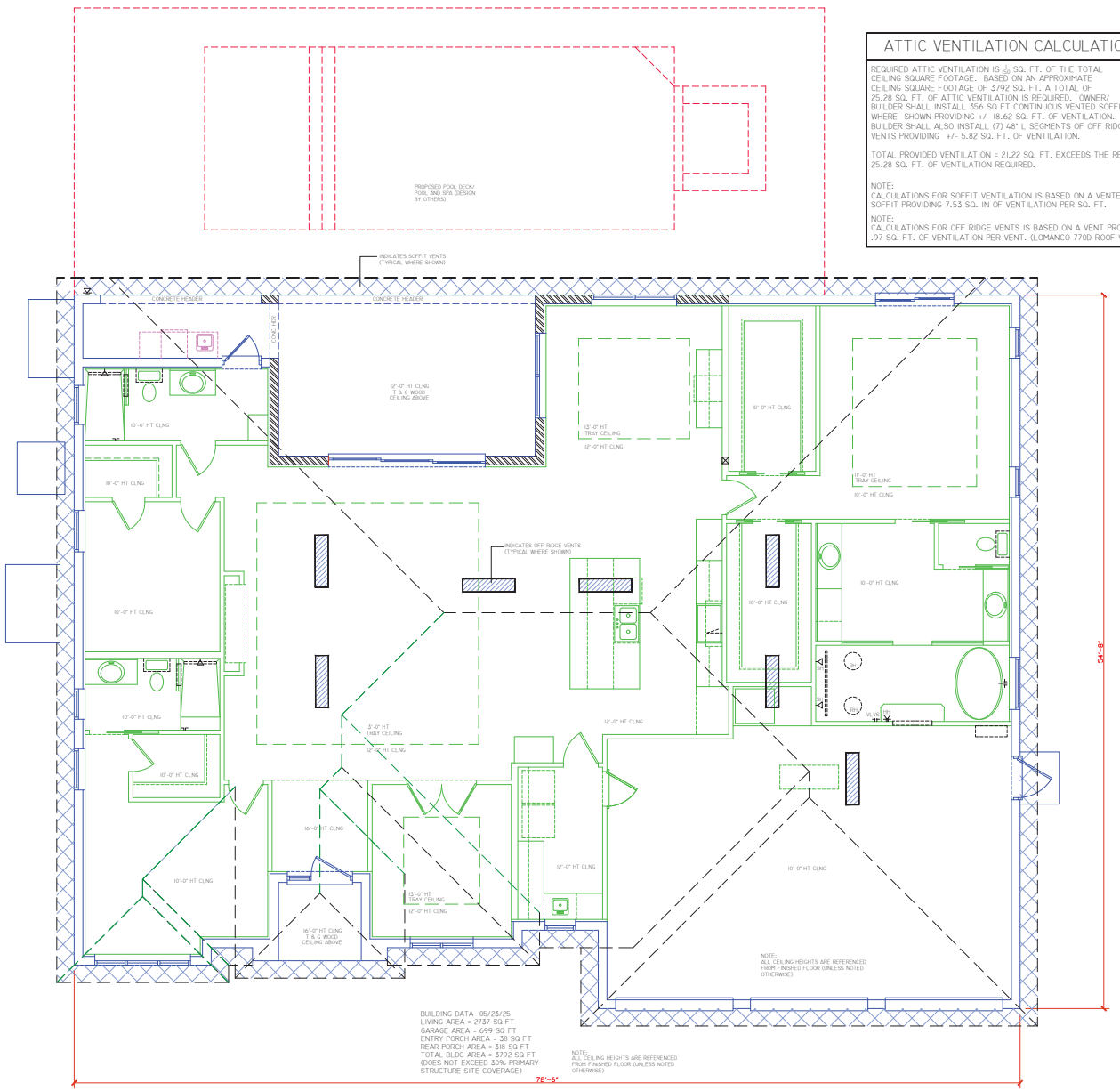
REVISIONS
***
***
***

EDC
ENGINEERING AND DESIGN CONCEPTS, INC.
2161 PALM BAY ROAD STE. 6
PALM BAY, FL. 32905
TEL. (321) 724-0740
FAX. (321) 914-4206
EMAIL: BCARTER3509@GMAIL.COM

SFR FOR:
411 HIBISCUS TRAIL
MELBOURNE BEACH, FLORIDA

ENGINEER OF RECORD
EDWARD F. SHINSKIE, PE
4707 WILD TURKEY ROAD
MIMS, FLORIDA 32754
FLORIDA PE# 47515
PH. 321-863-3223

A3
SHEET 3 OF *
DRAWN BY: RDC



RESIDENCE-ROOF PLAN
SCALE: 1/4" = 1'-0"

ATTIC VENTILATION CALCULATION

REQUIRED ATTIC VENTILATION IS $\frac{1}{300}$ SQ. FT. OF THE TOTAL CEILING SQUARE FOOTAGE. BASED ON AN APPROXIMATE CEILING SQUARE FOOTAGE OF 3792 SQ. FT. A TOTAL OF 25.28 SQ. FT. OF ATTIC VENTILATION IS REQUIRED. OWNER/ BUILDER SHALL INSTALL 356 SQ FT CONTINUOUS VENTED SOFFIT WHERE SHOWN PROVIDING +/- 18.62 SQ. FT. OF VENTILATION. OWNER/ BUILDER SHALL ALSO INSTALL (7) 48" L SEGMENTS OF OFF RIDGE VENTS PROVIDING +/- 5.82 SQ. FT. OF VENTILATION.

TOTAL PROVIDED VENTILATION = 21.22 SQ. FT. EXCEEDS THE REQUIRED 25.28 SQ. FT. OF VENTILATION REQUIRED.

NOTE:
CALCULATIONS FOR SOFFIT VENTILATION IS BASED ON A VENTED SOFFIT PROVIDING 7.53 SQ. IN OF VENTILATION PER SQ. FT.

NOTE:
CALCULATIONS FOR OFF RIDGE VENTS IS BASED ON A VENT PROVIDING .97 SQ. FT. OF VENTILATION PER VENT. (LOMANCO 770D ROOF VENT)

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY EDWARD F. SHINSKIE, PE LIC NO 47515 ON THE DATE AND/OR TIME STAMP SHOWN USING A DIGITAL SIGNATURE.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPY.

DESIGN CRITERIA	
FULLY ENCLOSED	
WIND SPEED	160
EXPOSURE	D
BUILDING CATEGORY	TWO (2)

GENERAL NOTES

1. THESE DRAWINGS WERE PREPARED WITH THE ASSUMPTION THE CONTRACTOR/OWNER BUILDER IS KNOWLEDGEABLE OF COMMON CONSTRUCTION PRACTICES.
2. THE CONTRACTOR/OWNER-BUILDER SHALL REVIEW DRAWINGS FOR ACCURACY AND INTERPRETATION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGNERS PRIOR TO CONSTRUCTION.
3. THE FOUNDATION PLAN SHALL BE VERIFIED BY THE TRUSS MANUFACTURER AS TO CORRESPOND WITH THE FINAL ENGINEERED TRUSS LAYOUT.
4. DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE.

DO NOT SCALE DRAWINGS

REVISIONS
***
***
***

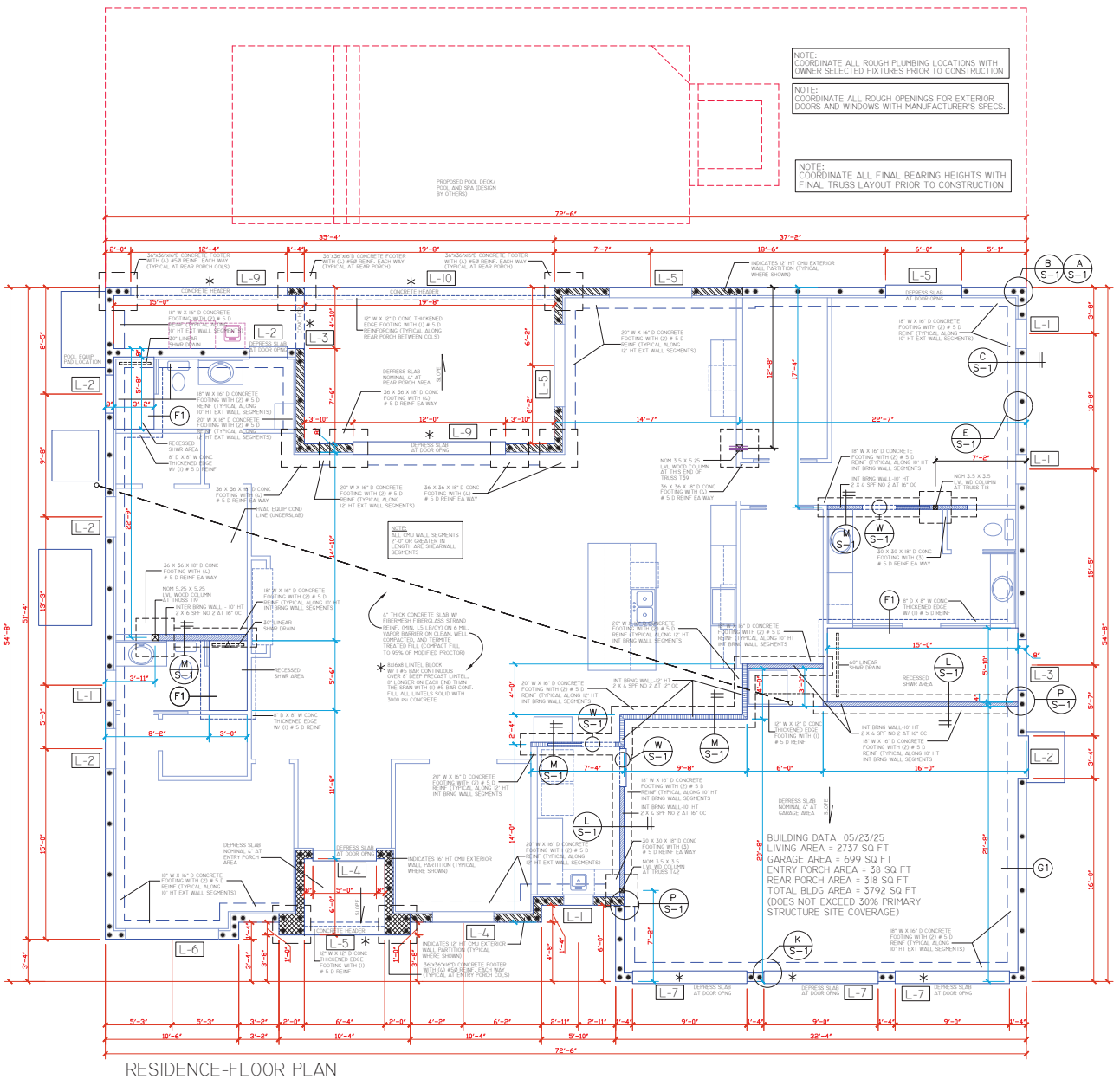
216 PALM BAY ROAD STE. 6
PALM BAY, FL. 32905
TEL. (321) 724-0740
FAX. (321) 914-4286
EMAIL:
BCARTER350@
@GMAIL.COM

EDC
ENGINEERING AND DESIGN CONCEPTS, INC.

SFR FOR:
411 HIBISCUS TRAIL
MELBOURNE BEACH, FLORIDA

ENGINEER OF RECORD
EDWARD F. SHINSKIE, PE
4707 WILD TURKEY ROAD
MIMS, FLORIDA 32754
FLORIDA PE# 47515
PH. 321-863-3223

A4
SHEET 4 OF *
-DRAWN BY-
RDC



RESIDENCE-FLOOR PLAN
SCALE: 1/4" = 1'-0"

SAFE GRAVITY LOADS FOR 8" PRECAST & PRESTRESSED U-LINTELS

SAFE UPLIFT LOADS FOR 8" PRECAST & PRESTRESSED U-LINTELS

(#) THE NUMBERS IN PARENTHESES ARE PERCENT REDUCTIONS FOR GRHO FIELD ADDED REBAR.

SPECIFICATIONS

ENGINEERING

8F24-18/17

LINTEL SECTIONS N.T.S.

WINDOW AND DOOR BUCK INSTALLATION (MASONRY)

MASONRY	TAP-CONS	PAF'S	PIN'S
ROUGH OPNG.	BUCK TO HEAD AND JAMB		
UP TO 8'-0"	3/16" @ 16" O.C.	.145 @ 8" O.C.	.120 @ 6" O.C.
8'-1" TO 10'-0"	3/16" @ 12" O.C.	.145 @ 6" O.C.	.120 @ 4" O.C.
10'-1" TO 12'-0"	3/16" @ 9" O.C.	.145 @ 4" O.C.	.120 @ 4" O.C.
12'-1" AND BEYOND	BY DESIGN	BY DESIGN	BY DESIGN

LEGEND:
PAF = POWDER ACTUATED FASTENERS
PIN = PNEUMATICALLY DRIVEN FASTENERS

NOTES:
- MAINTAIN 3" EDGE CLEARANCE FOR PAF'S
- EMBED PAF'S 1.25" MIN. INTO CMU OR CONC.
- EMBED TAP-CONS 1.25" MIN. INTO CMU OR CONC.

NOTE:
FOAM SEAL AT ALL BUCKS, WINDOWS AND DOORS

NOTE: IF DOOR/WINDOW BUCK IS LESS THAN 1-1/2" DOOR/WINDOW MUST BE ANCHORED THROUGH JAMB INTO THE STRUCTURAL SUBSTRATE

NOTE: WINDOWS AND DOORS SHALL BE ANCHORED PER MANUFACTURERS SPECIFICATIONS

CMU HEAD OR JAMB
TAP-CON OR PAF
1" X P.T. BUCK STRIP
WOOD SCREWS

SITE PREPARATION NOTES:

THE PROPOSED BUILDING AREA, PLUS A MINIMUM MARGIN OF FIVE FEET BEYOND THE PROPOSED BUILDING LIMITS SHALL BE STRIPPED AND GRUBBED OF SURFACE DEBRIS, INCLUDING VEGETATION, ROOTS AND ORGANIC MATTER AND ANY REMNANTS OF PREVIOUS CONSTRUCTION SUCH AS OLD FOOTINGS AND SLABS.

THE BUILDING AND PAVEMENT AREAS SHALL BE FILLED TO THE DESIRED GRADES. THE HORIZONTAL PORTION OF THE BUILDING PAD SHALL EXTEND A MINIMUM FIVE FEET BEYOND THE BUILDING AND PAVEMENT AREAS. CLEAN IMPORTED FILL MATERIAL SHALL BE PLACED IN MAXIMUM LOOSE LAYERS OF 12 INCH LIFTS IN THICKNESS. EACH LIFT SHALL BE COMPACTED TO 95% OF A MODIFIED PROCTOR.

FIELD DENSITY TESTS AND ON-SITE INSPECTION ARE REQUIRED TO BE PERFORMED, BY A STATE OF FLORIDA LICENSED GEOTECHNICAL ENGINEER, AT APPROPRIATE TIMES DURING THE EARTH WORK OPERATIONS IN ORDER TO VERIFY THAT THE SITE PREPARATIONS HAVE BEEN PROPERLY CONSTRUCTED. A MINIMUM SOIL BEARING CAPACITY OF 2000 POUNDS PER SQUARE FOOT IS REQUIRED.

DESIGN CRITERIA	
FULLY ENCLOSED	
WIND SPEED	160
EXPOSURE	D
BUILDING CATEGORY	TWO (2)

GENERAL NOTES

1. THESE DRAWINGS WERE PREPARED WITH THE ASSUMPTION THE CONTRACTOR/OWNER BUILDER IS KNOWLEDGEABLE OF COMMON CONSTRUCTION PRACTICES.
2. THE CONTRACTOR/OWNER-BUILDER SHALL REVIEW DRAWINGS FOR ACCURACY AND INTERPRETATION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGNERS PRIOR TO CONSTRUCTION.
3. THE FOUNDATION PLAN SHALL BE VERIFIED BY THE TRUSS MANUFACTURER TO CORRESPOND WITH THE FINAL ENGINEERED TRUSS LAYOUT.
4. DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE.

DO NOT SCALE DRAWINGS

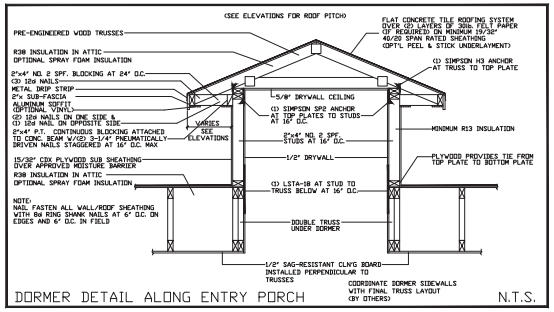
REVISIONS
***
***
***

EDC
ENGINEERING AND DESIGN CONCEPTS, INC.
2185 PALM BAY ROAD STE. 6
PALM BAY, FL. 32905
TEL. (321) 724-0740
FAX. (321) 914-4286
EMAIL:
BCARTER3500@GMAIL.COM

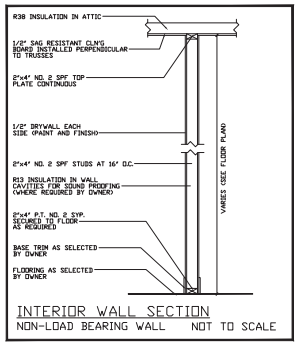
SFR FOR:
411 HIBISCUS TRAIL
MELBOURNE BEACH, FLORIDA

ENGINEER OF RECORD
EDWARD F. SHINSKIE, PE
4707 WILD TURKEY ROAD
MIMS, FLORIDA 32754
FLORIDA PE# 47515
PH. 321-863-3223

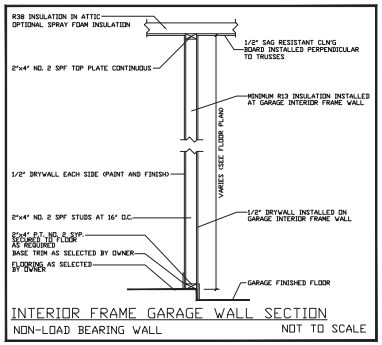
A5
SHEET 5 OF *
DRAWN BY-
RDC



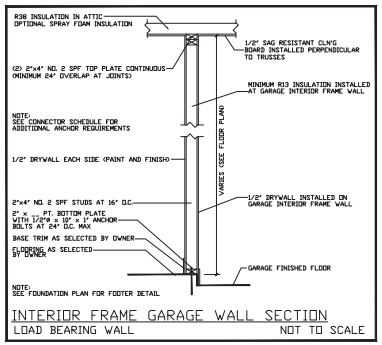
DORMER DETAIL ALONG ENTRY PORCH N.T.S.



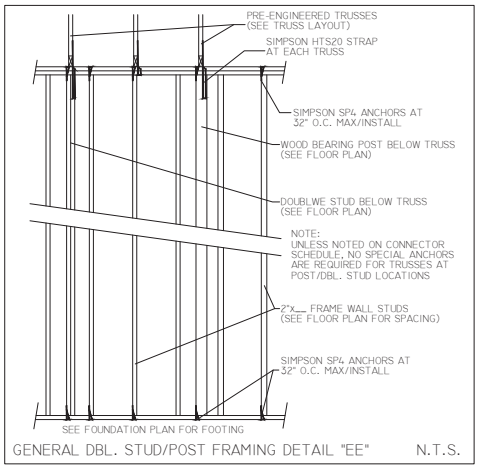
INTERIOR WALL SECTION
NON-LOAD BEARING WALL NOT TO SCALE



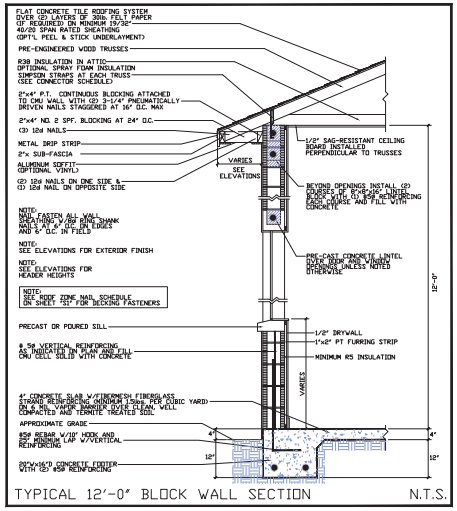
INTERIOR FRAME GARAGE WALL SECTION
NON-LOAD BEARING WALL NOT TO SCALE



INTERIOR FRAME GARAGE WALL SECTION
LOAD BEARING WALL NOT TO SCALE



GENERAL DBL. STUD/POST FRAMING DETAIL "EE" N.T.S.



TYPICAL 12'-0" BLOCK WALL SECTION N.T.S.

REVISIONS
*
*
*

216 PALM BAY ROAD STE. 6
PALM BAY, FL. 32905
TEL. (321) 724-5740
FAX. (321) 914-4206
EMAIL:
BCARTER350@
@GMAIL.COM

EDC
ENGINEERING AND DESIGN CONCEPTS, INC.

SFR FOR:
411 HIBISCUS TRAIL
MELBOURNE BEACH, FLORIDA

ENGINEER OF RECORD
EDWARD F. SHINSKIE, PE
4707 WILD TURKEY ROAD
MIMS, FLORIDA 32754
FLORIDA PE# 47515
PH. 321-863-3223

A6
SHEET 6 OF *
-DRAWN BY-
RDC

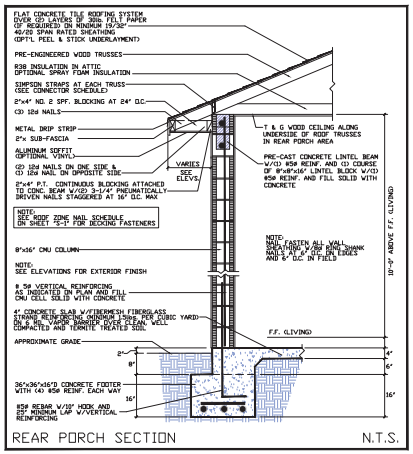
THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY EDWARD F. SHINSKIE, PE LIC NO 47515 ON THE DATE AND/OR TIME STAMP SHOWN USING A DIGITAL SIGNATURE.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPY.

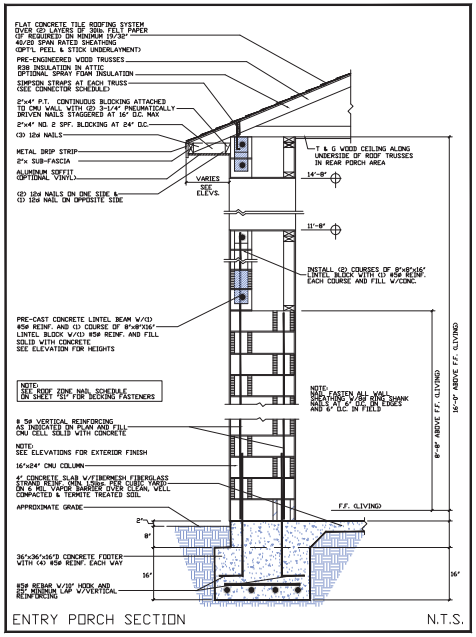
DESIGN CRITERIA	
FULLY ENCLOSED	
WIND SPEED	160
EXPOSURE	D
BUILDING CATEGORY	TWO (2)

GENERAL NOTES
1. THESE DRAWINGS WERE PREPARED WITH THE ASSUMPTION THE CONTRACTOR/OWNER BUILDER IS KNOWLEDGEABLE OF COMMON CONSTRUCTION PRACTICES.
2. THE CONTRACTOR/OWNER-BUILDER SHALL REVIEW DRAWINGS FOR ACCURACY AND INTERPRETATION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGNERS PRIOR TO CONSTRUCTION.
3. THE FOUNDATION PLAN SHALL BE VERIFIED BY THE TRUSS MANUFACTURER TO CORRESPOND WITH THE FINAL ENGINEERED TRUSS LAYOUT.
4. DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE.

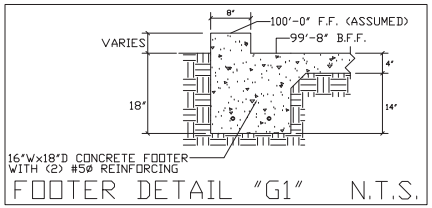
DO NOT SCALE DRAWINGS



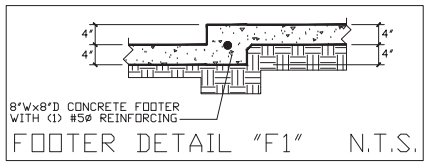
REAR PORCH SECTION N.T.S.



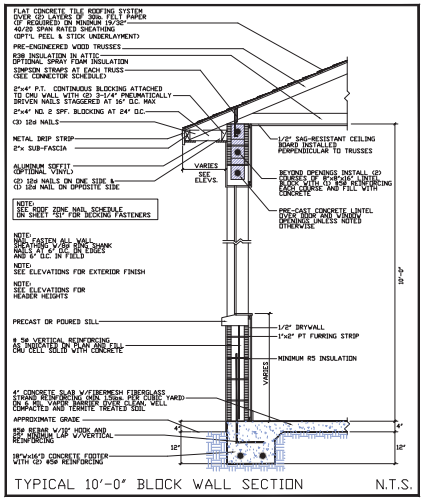
ENTRY PORCH SECTION N.T.S.



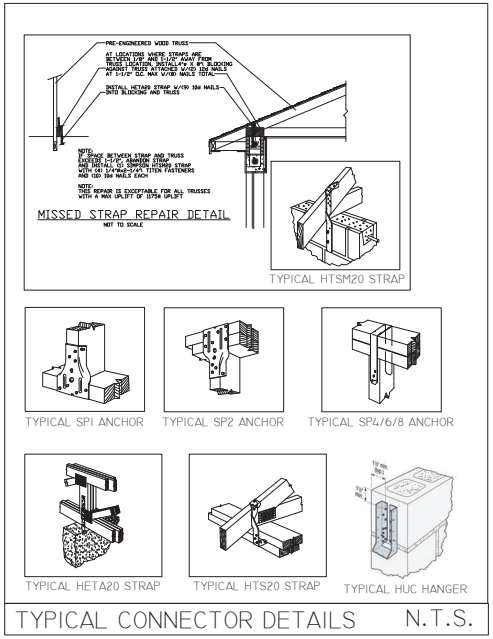
FOOTER DETAIL "G1" N.T.S.



FOOTER DETAIL "F1" N.T.S.



TYPICAL 10'-0" BLOCK WALL SECTION N.T.S.



TYPICAL CONNECTOR DETAILS N.T.S.

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY EDWARD F. SHINSKIE, PE LIC NO 47515 ON THE DATE AND/OR TIME STAMP SHOWN USING A DIGITAL SIGNATURE.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPY.

DESIGN CRITERIA	
FULLY ENCLOSED	
WIND SPEED	160
EXPOSURE	D
BUILDING CATEGORY	TWO (2)

GENERAL NOTES

1. THESE DRAWINGS WERE PREPARED WITH THE ASSUMPTION THE CONTRACTOR/OWNER BUILDER IS KNOWLEDGEABLE OF COMMON CONSTRUCTION PRACTICES.
2. THE CONTRACTOR/OWNER-BUILDER SHALL REVIEW DRAWINGS FOR ACCURACY AND INTERPRETATION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGNERS PRIOR TO CONSTRUCTION.
3. THE FOUNDATION PLAN SHALL BE VERIFIED BY THE TRUSS MANUFACTURER SHALL CORRESPOND WITH THE FINAL ENGINEERED TRUSS LAYOUT.
4. DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE.

DO NOT SCALE DRAWINGS

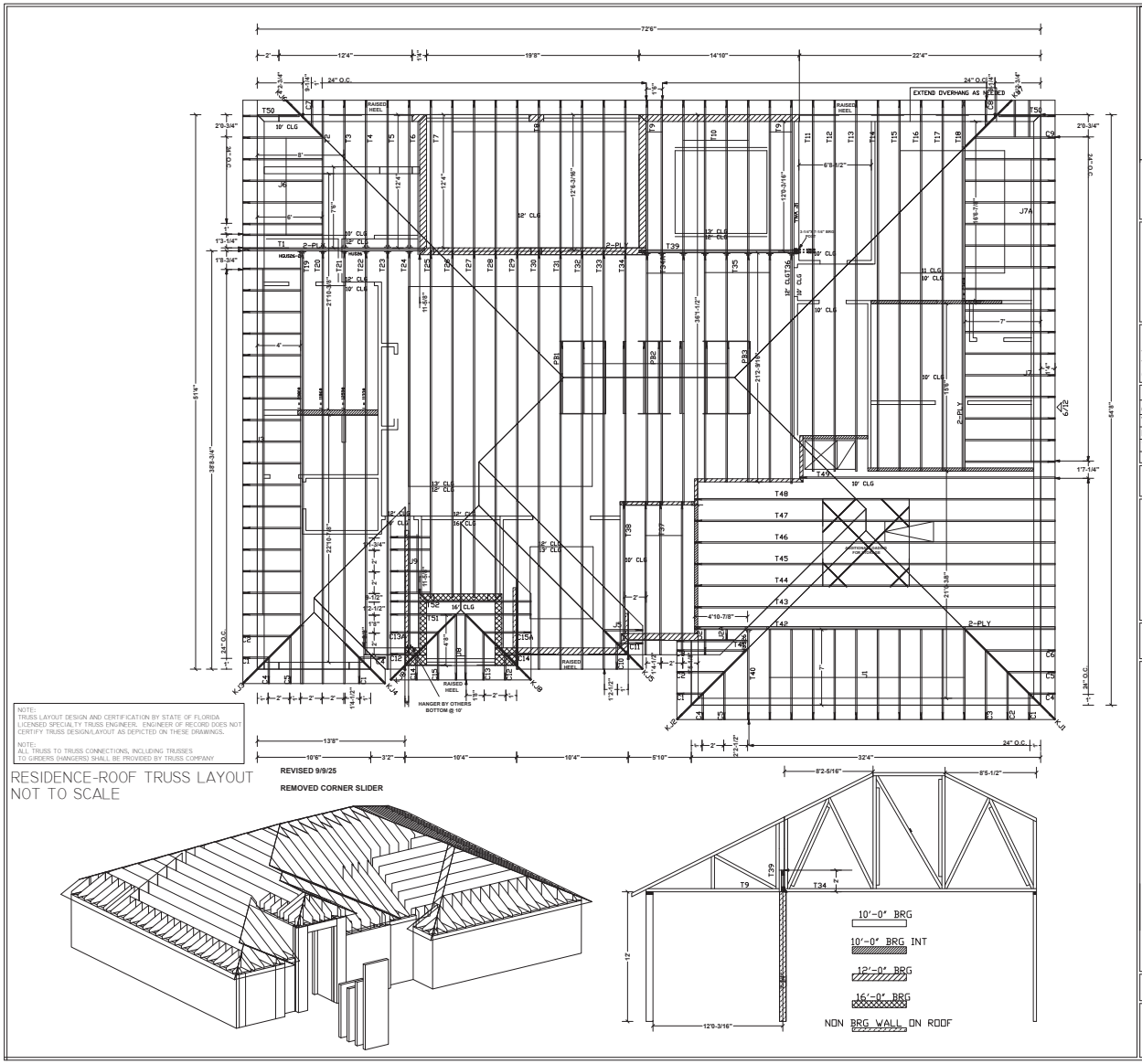
REVISIONS
1 ***
2 ***
3 ***

EDC
ENGINEERING AND DESIGN CONCEPTS, INC.
2161 PALM BAY ROAD STE. 6
PALM BAY, FL. 32905
TEL. (321) 724-0740
FAX. (321) 914-4286
EMAIL:
BCARTER350@
@GMAIL.COM

SFR FOR:
411 HIBISCUS TRAIL
MELBOURNE BEACH, FLORIDA

ENGINEER OF RECORD
EDWARD F. SHINSKIE, PE
4707 WILD TURKEY ROAD
MIMS, FLORIDA 32754
FLORIDA PE# 47515
PH. 321-863-3223

A7
SHEET 7 OF *
DRAWN BY:
RDC



NOTE:
TRUSS LAYOUT DESIGN AND CERTIFICATION BY STATE OF FLORIDA LICENSED SPECIALTY TRUSS ENGINEER. ENGINEER OF RECORD DOES NOT CERTIFY TRUSS DESIGN/LAYOUT AS DEPICTED ON THESE DRAWINGS.

NOTE:
ALL TRUSS TO TRUSS CONNECTIONS, INCLUDING TRUSSES TO GIRDERS (HANGERS) SHALL BE PROVIDED BY TRUSS COMPANY

RESIDENCE-ROOF TRUSS LAYOUT
NOT TO SCALE

REVISED 9/9/25
REMOVED CORNER SLIDER

C:\Alpine\Ais\USR01\LOGO.bmp

P.O. BOX 455
1500 U.S. HWY. 17 N.
BARTOW, FL 33831

BARTOW
(863) 533-0821
FAX: (863) 533-9517

MELBOURNE
(321) 259-7507
FAX: (321) 242-8017

SARASOTA
(941) 371-6239
FAX: (941) 377-7788

TOLL FREE: 1-800-233-0821

DESIGN CRITERIA
FBC2023 RESIDENTIAL

WIND CODE	: ASCE 7-22
WIND SPEED	: 160 MPH
EXPOSURE	: " D "
RISK CATEGORY	: II
ENCLOSURE	: ENCLOSED
INT. PRES. COEF.	: +/- 0.18

ROOF DATA

T.C. PITCH	: 6 / 12
T.C. SIZE	: 2x4
OVERHANG	: 1"

FLOOR DATA

TYPE	
O.A.H.	
O.C.	

LOADING

CHORD	POUNDS / SQ. FT. LIVE	DEAD	TOTAL
TOP	20	15	35
BOT'M	0***	10	10
TOTAL	20	25	45
DURATION FACTOR :	1.25		

LOADING

CHORD	POUNDS / SQ. FT. LIVE	DEAD	TOTAL
TOP	40	10	50
BOT'M	0	5	5
TOTAL	40	15	55
DURATION FACTOR :	1.00		

NOTE: ALL ROOF TRUSSES HAVE BEEN CHECKED FOR AN ADDITIONAL:
* 10PSF NON-CONCURRENT BOTTOM CHORD LIVE LOAD.
** 20PSF CONCURRENT BOTTOM CHORD LIVE LOAD WHERE A 24" W x 42" H CLEARANCE EXISTS OVER 2 OR MORE TRUSSES.

NOTES :

DO NOT CUT OR ALTER TRUSSES IN ANYWAY WITHOUT AUTHORIZATION FROM CENTRAL FLORIDA TRUSS, INC.

LAYOUT APPROVED BY : _____
APPROVAL DATE : _____
REQUESTED DELIVERY DATE : _____

Customer : LOWMAN BROS.
Project : :
Lot # : :
Address : 411 HIBISCUS TRAIL
City : MELBOURNE
County : BREVARD

LAYOUT BY :	DATE :
RICK	09/09/25

25-0301

PAGE 1 of 1

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY EDWARD F. SHINSKIE, PE LIC NO 47515 ON THE DATE AND/OR TIME STAMP SHOWN USING A DIGITAL SIGNATURE.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPY.

DESIGN CRITERIA	
FULLY ENCLOSED	
WIND SPEED	160
EXPOSURE	D
BUILDING CATEGORY	TWO (2)

GENERAL NOTES
1. THESE DRAWINGS WERE PREPARED WITH THE ASSUMPTION THE CONTRACTOR/OWNER BUILDER IS KNOWLEDGEABLE OF COMMON CONSTRUCTION PRACTICES.
2. THE CONTRACTOR/OWNER-BUILDER SHALL REVIEW DRAWINGS FOR ACCURACY AND INTERPRETATION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGNERS PRIOR TO CONSTRUCTION.
3. THE FOUNDATION PLAN SHALL BE VERIFIED BY THE TRUSS MANUFACTURER TO CORRESPOND WITH THE FINAL ENGINEERED TRUSS LAYOUT.
4. DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE.

DO NOT SCALE DRAWINGS

REVISIONS
***
***
***

215 PALM BAY ROAD STE. 6
PALM BAY, FL 32905
TEL: (321) 724-0740
FAX: (321) 914-4206
EMAIL:
BCARTER350@GMAIL.COM

EDC
ENGINEERING AND DESIGN CONCEPTS, INC.

SFR FOR:
411 HIBISCUS TRAIL
MELBOURNE BEACH, FLORIDA

ENGINEER OF RECORD
EDWARD F. SHINSKIE, PE
4707 WILD TURKEY ROAD
MIMS, FLORIDA 32754
FLORIDA PE# 47515
PH. 321-863-3223

A8
SHEET 8 OF *
-DRAWN BY-
RDC

JOBKEY: 25-0301
COMPANY: CENTRAL FLORIDA TRUSS
ADDRESS: 2955 PINEDA PLAZA WAY #109
MELBOURNE, FL 32940
PHONE: (321)259-7507
SITE ADDRESS: 411 HIBISCUS TRAIL
MELBOURNE BCH,FL-32951

SUPPORT REPORT JOB DESCRIPTION: 25-0301
WIND CODE: ASCE 7-22 WIND MPH: 160 BLDG TYPE: CLOSED

TRUSS DESC	TRUSS SPAN-FT	SUPPORT SIZE-IN.	SUPPORT TYPE	BEARING XLOC-FT.	BEARING YLOC-FT.	REACT. MAX.+#	REACT. MAX.-#	MAX WIND UPLFT.-#
T1	15.47	7.63	WALL	0.000	10.000	2742		-1701
T1	15.47	5.25	WALL	15.031	12.000	4908		-3241
T2	12.33	7.62	WALL	0.000	10.000	460		-321
T2	12.33	7.63	WALL	4.833	10.000	1355		-885
T2	12.33	3.00	*SPECIAL	12.083	10.000	617		-429
T3	12.33	7.62	WALL	0.000	10.000	368		-123
T3	12.33	7.63	WALL	4.833	10.000	622		-341
T3	12.33	3.00	*SPECIAL	12.083	10.000	307		-197
T4	12.33	7.62	WALL	0.000	10.000	424		-165
T4	12.33	7.63	WALL	4.833	10.000	496		-224
T4	12.33	3.00	*SPECIAL	12.083	10.000	359		-270
T5	12.33	7.62	WALL	0.000	10.000	344		-56
T5	12.33	7.63	WALL	4.833	10.000	633		-357
T5	12.33	3.00	*SPECIAL	12.083	10.000	315		-245
T6	12.33	7.62	WALL	0.000	10.000	360		-25
T6	12.33	7.63	WALL	4.833	10.000	611		-359
T6	12.33	3.00	*SPECIAL	12.083	10.000	319		-282
T7	12.61	7.62	WALL	0.000	12.000	730		-269
T7	12.61	3.31	WALL	12.333	12.000	591		-371
T8	12.61	7.62	WALL	0.000	12.000	729		-263
T8	12.61	3.31	WALL	12.333	12.000	578		-414
T9	12.78	7.62	WALL	0.000	12.000	730		-261
T9	12.78	3.12	WALL	12.516	14.000	584		-429
T10	12.78	7.62	WALL	0.000	12.000	730		-260
T10	12.78	3.12	WALL	12.516	14.000	584		-427
T11	33.00	7.62	WALL	0.000	10.000	1522		-686
T11	33.00	3.50	WALL	29.708	10.000	1697		-975
T12	33.00	7.62	WALL	0.000	10.000	1518		-686
T12	33.00	3.50	WALL	29.708	10.000	1696		-1006
T13	33.00	7.62	WALL	0.000	10.000	1522		-703
T13	33.00	3.50	WALL	29.708	10.000	1697		-979
T14	33.00	7.62	WALL	0.000	10.000	855		-331
T14	33.00	3.50	WALL	17.208	10.000	1744		-996
T14	33.00	3.50	WALL	32.708	10.000	659		-359
T15	33.00	7.62	WALL	0.000	10.000	922		-396
T15	33.00	3.50	WALL	17.208	10.000	1598		-898
T15	33.00	3.50	WALL	32.708	10.000	701		-382
T16	33.00	7.62	WALL	0.000	10.000	924		-409
T16	33.00	3.50	WALL	17.208	10.000	1611		-902
T16	33.00	3.50	WALL	32.708	10.000	694		-367
T17	33.00	7.62	WALL	0.000	10.000	923		-432
T17	33.00	3.50	WALL	17.208	10.000	1614		-885
T17	33.00	3.50	WALL	32.708	10.000	693		-367
T18	33.00	7.62	WALL	0.000	10.000	1704		-1097
T18	33.00	3.50	WALL	17.208	10.000	3807		-2354
T18	33.00	3.50	WALL	32.708	10.000	1695		-996
T19	38.73	3.00	*SPECIAL	0.000	10.000	512		-321
T19	38.73	5.50	WALL	14.750	10.000	2981		-2072
T19	38.73	7.63	WALL	38.094	10.000	1264		-873
T20	38.73	3.00	*SPECIAL	0.000	10.000	422		-283
T20	38.73	5.50	WALL	14.750	10.000	1875		-1186
T20	38.73	7.63	WALL	38.094	10.000	839		-537
T21	38.73	3.00	*SPECIAL	0.000	12.000	386	-7	-168
T21	38.73	5.50	WALL	14.750	10.000	1964		-1258
T21	38.73	7.63	WALL	38.094	10.000	838		-546
T22	37.40	3.00	*SPECIAL	0.000	12.000	434		-282
T22	37.40	5.50	WALL	14.750	10.000	1775		-1133
T22	37.40	7.63	WALL	36.760	10.000	728		-454
T23	37.40	3.00	*SPECIAL	0.000	12.000	1410		-929
T23	37.40	7.63	WALL	36.760	10.000	1500		-959
T24	36.76	3.00	*SPECIAL	0.000	12.000	1542		-994
T24	36.76	3.00	*SPECIAL	36.497	10.000	2361		-1541
T25	32.09	3.81	WALL	0.000	12.000	1190		-908
T25	32.09	4.00	WALL	31.714	16.000	1198		-1001
T26	32.05	3.81	WALL	0.047	12.000	1212		-897
T26	32.05	4.00	WALL	31.760	16.000	1212		-923
T27	32.05	3.81	WALL	0.047	12.000	1212		-915
T27	32.05	4.00	WALL	31.760	16.000	1212		-931
T28	32.05	3.81	WALL	0.047	12.000	1212		-933
T28	32.05	4.00	WALL	31.760	16.000	1212		-918
T29	37.29	3.81	WALL	0.000	12.000	1404		-974
T29	37.29	6.88	WALL	36.714	12.000	1498		-969
T30	37.29	3.81	WALL	0.000	12.000	1404		-977
T30	37.29	6.88	WALL	36.714	12.000	1498		-972
T31	37.29	3.81	WALL	0.000	12.000	1404		-975
T31	37.29	6.88	WALL	36.714	12.000	1498		-970
T32	37.29	3.81	WALL	0.000	12.000	1409		-978
T32	37.29	6.88	WALL	36.714	12.000	1496		-965
T33	37.29	3.81	WALL	0.000	12.000	1413		-973
T33	37.29	6.88	WALL	36.714	12.000	1566		-1210
T34	23.47	3.81	WALL	0.000	12.000	888		-729
T34	23.47	3.50	WALL	23.182	12.000	888		-727
T34A	23.34	3.00	*SPECIAL	0.021	12.000	1141		-726
T34A	23.34	3.50	WALL	23.047	12.000	1126		-720
T35	21.08	3.00	*SPECIAL	0.021	12.000	1028		-631
T35	21.08	3.50	WALL	20.786	12.000	1009		-678
T36	21.08	3.00	*SPECIAL	0.021	12.000	797		-617
T36	21.08	3.50	WALL	20.786	12.000	797		-671
T37	12.83	3.50	WALL	0.000	12.000	477		-425
T37	12.83	7.63	WALL	12.198	12.000	574		-281
T38	12.83	3.50	WALL	0.000	12.000	480		-324
T38	12.83	3.63	WALL	12.198	12.000	544		-341
T38	12.83	4.00	WALL	12.500	12.000	175		-183
T39	14.79	7.63	WALL	0.000	12.000	7183		-4781
T39	14.79	5.50	WALL	14.333	12.000	6368		-4328
T40	7.00	7.63	WALL	0.000	10.000	470		-335
T40	7.00	3.00	*S HUS26	6.750	10.000	661		-452
T41	5.21	7.63	WALL	0.000	10.000	411		-352
T41	5.21	1.50	NAILED	5.208	10.000	97		-31
T41	5.21	1.50	NAILED	5.208	12.844	134		-136
T42	32.03	3.50	WALL	0.000	10.000	2939		-2257
T42	32.03	7.63	WALL	31.396	10.000	3026		-2104
T43	32.03	3.50	WALL	0.000	10.000	1206		-796
T43	32.03	7.63	WALL	31.396	10.000	1297		-826
T44	32.03	3.50	WALL	0.000	10.000	1320		-961
T44	32.03	7.63	WALL	31.396	10.000	1408		-1038
T45	32.03	3.50	WALL	0.000	10.000	1313		-804
T45	32.03	7.63	WALL	31.396	10.000	1406		-795
T46	32.03	3.50	WALL	0.000	10.000	1312		-818
T46	32.03	7.63	WALL	31.396	10.000	1406		-783
T47	32.03	3.50	WALL	0.000	10.000	1309		-834
T47	32.03	7.63	WALL	31.396	10.000	1400		-767
T48	32.03	3.50	WALL	0.000	12.000	1305		-824
T48	32.03	7.63	WALL	31.396	10.000	1395		-796
T49	22.29	3.50	WALL	0.000	12.000	836		-619
T49	22.29	7.63	WALL	21.656	10.000	927		-518
T50	3.87	46.44	WALL	0.000	10.000	537		-774
T51	10.21	7.63	WALL	1.302	16.000	912		-588
T51	10.21	7.63	WALL	8.271	16.000	912		-588
T52	10.21	7.63	WALL	1.302	16.000	493		-338
T52	10.21	7.63	WALL	8.271	16.000	493		-338
J1	7.00	7.63	WALL	0.000	10.000	357		-171
J1	7.00	1.50	NAILED	7.000	10.000	129		0
J1	7.00	1.50	NAILED	7.000	13.740	178		-229
J2	1.00	1.50	NAILED	-0.125	10.000	223		-155
J2	1.00	1.50	NAILED	1.000	10.000	127		-83
J2	1.00	1.50	NAILED	1.000	12.740	159	-114	-192
J2A	1.00	1.50	NAILED	-0.125	10.000	34		-9
J2A	1.00	1.50	NAILED	1.000	10.000	23		-4
J2A	1.00	1.50	NAILED	1.000	12.740	18		-13
J3	4.00	7.63	WALL	0.000	10.000	250		-128
J3	4.00	1.50	NAILED	4.000	10.000	74		0
J3	4.00	1.50	NAILED	4.000	12.240	93		-126
J5	1.75	1.50	NAILED	-0.125	12.000	292		-202
J5	1.75	1.50	NAILED	1.750	12.000	35		0
J5	1.75	1.50	NAILED	1.750	14.687	92	-6	-90
J6	6.00	7.63	WALL	0.000	10.000	321		-156
J6	6.00	1.50	NAILED	6.000	10.000	110		0
J6	6.00	1.50	NAILED	6.000	13.240	151		-196
J7	7.00	7.63	WALL	0.000	10.000	473		-171
J7	7.00	1.50	NAILED	7.000	10.000	132		0
J7	7.00	1.50	NAILED	7.000	13.740	232		-229
J7A	7.00	7.63	WALL	0.000	10.000	473		-170
J7A	7.00	1.50	NAILED	7.000	11.000	176		-89
J7A	7.00	1.50	NAILED	7.000	13.740	141		-133
J8	4.60	6.88	WALL	0.000	16.000	295		-278
J8	4.60	1.50	NAILED	4.604	16.000	90		0
J8	4.60	1.50	NAILED	4.604	19.406	109		-65
J9	2.27	1.50	WALL	0.271	16.000	279		-221
J9	2.27	1.50	NAILED	2.271	16.000	40	-1	-14
J9	2.27	1.50	NAILED	2.271	18.240	65		-54
KJ1	9.90	10.78	WALL	0.000	10.000	401		-279
KJ1	9.90	1.50	NAILED	9.899	10.000	341		-131
KJ1	9.90	1.50	NAILED	9.899	13.717	235		-234
KJ2	7.37	10.78	WALL	0.000	10.000	244		-174
KJ2	7.37	1.50	NAILED	7.366	10.000	91		0
KJ2	7.37	1.50	NAILED	7.366	12.822	217		-214
KJ3	5.66	10.78	WALL	0.000	10.000	179		-134
KJ3	5.66	1.50	NAILED	5.657	10.000	49		0
KJ3	5.66	1.50	NAILED	5.657	12.217	120		-119
KJ4	3.36	10.78	WALL	0.000	10.000	139		-113
KJ4	3.36	1.50	NAILED	3.359	10.000	12		0
KJ4	3.36	1.50	NAILED	3.359	11.405	22		-24
KJ5	2.97	8.97	WALL	0.000	12.000	136		-112
KJ5	2.97	1.50	NAILED	2.972	12.000	13		0
KJ5	2.97	1.50	NAILED	2.972	14.665	12		-16
KJ6	2.65	8.62	WALL	0.000	10.000	270		-277
KJ6	2.65	1.50	NAILED	2.648	10.000	49		0
KJ6	2.65	1.50	NAILED	2.648	13.217	27		-92
KJ7	4.06	8.62	WALL	0.000	10.000	283		-185
KJ7	4.06	1.50	NAILED	4.062	10.000	94		-6
KJ7	4.06	1.50	NAILED	4.062	13.717	116		-164
KJ8	6.45	14.63	WALL	0.000	16.000	242		-208
KJ8	6.45	1.50	NAILED	6.449	16.000	70		0
KJ8	6.45	1.50	NAILED	6.449	19.384	154		-178
C1	1.04	7.63	WALL	0.000	10.000	207		-130
C1	1.04	1.50	NAILED	1.037	10.000	15	-1	-9
C1	1.04	1.50	NAILED	1.037	10.758	52	-27	-58
C2	3.04	7.63	WALL	0.000	10.000	219		-116
C2	3.04	1.50	NAILED	3.037	10.000	55		0
C2	3.04	1.50	NAILED	3.037	11.758	64		-92
C3	5.04	7.63	WALL	0.000	10.000	286		-142
C3	5.04	1.50	NAILED	5.037	10.000	93		0
C3	5.04	1.50	NAILED	5.037	12.758	124		-164
C4	1.04	7.63	WALL	0.000	10.000	207		-130
C4	1.04	1.50	NAILED	1.037	10.000	15	-1	-9
C4	1.04	1.50	NAILED	1.037	10.758	52	-27	-58
C5	3.04	7.63	WALL	0.000	10.000	219		-116
C5	3.04	1.50	NAILED	3.037	10.000	55		0
C5	3.04	1.50	NAILED	3.037	11.758	64		-92
C6	5.04	7.63	WALL	0.000	10.000	286		-142
C6	5.04	1.50	NAILED	5.037	10.000	93		0
C6	5.04	1.50	NAILED	5.037	12.758	124		-164
C7	1.04	7.63	WALL	0.000	10.000	249		-175
C7	1.04	1.50	NAILED	1.037	10.000	18		0
C7	1.04	1.50	NAILED	1.037	12.758	97	-45	-104
C8	1.04	7.63	WALL	0.000	10.000	304		-175
C8	1.04	1.50	NAILED	1.037	10.000	18		0
C8	1.04	1.50	NAILED	1.037	12.758	97	-78	-114
C9	6.10	7.63	WALL	0.000	10.000	433		-157
C9	6.10	1.50	NAILED	6.099	10.000	114		0
C9	6.10	1.50	NAILED	6.099	13.289	199		-199
C10	0.97	6.88	WALL	0.000	12.000	269		-192
C10	0.97	1.50	NAILED	0.974	12.000	17		0
C10	0.97	1.50	NAILED	0.974	14.102	110	-58	-121
C11	0.97	6.88	WALL	0.000	12.000	269		-192
C11	0.97	1.50	NAILED	0.974	12.000	17		0
C11	0.97	1.50	NAILED	0.974	14.102	110	-58	-121
C12	0.97	10.00	WALL	0.000	16.000	269		-203
C12	0.97	1.50	NAILED	0.974	16.000	17		0
C12	0.97	1.50	NAILED	0.974	17.591	116	-58	-121
C13	2.97	6.88	WALL	0.000	16.000	255		-222
C13	2.97	1.50	NAILED	2.974	16.000	57		0
C13	2.97	1.50	NAILED	2.974	18.591	58		-41
C13A	2.97	7.63	WALL	1.302	16.000	553		-302
C13A	2.97	1.50	NAILED	2.974	16.000	103	-130	-152
C13A	2.97	1.50	NAILED	2.974	18.591	73	-113	-119
C14	0.97	10.00	WALL	0.000	16.000	269		-203
C14	0.97	1.50	NAILED	0.974	16.000	17		0
C14	0.97	1.50	NAILED	0.974	17.591	116	-58	-121
C15	2.97	6.88	WALL	0.000	16.000	255		-222
C15	2.97	1.50	NAILED	2.974	16.000	57		0
C15	2.97	1.50	NAILED	2.974	18.591	58		-41
C15A	2.97	7.63	WALL	1.302	16.000	553		-302
C15A	2.97	1.50	NAILED	2.974	16.000	102	-130	-152
C15A	2.97	1.50	NAILED	2.974	18.591	73	-113	-119
PB1	6.58	57.35	WALL	21.944	23.156	404		-334
PB2	6.58	57.35	WALL	21.944	23.156	404		-375
PB3	6.58	57.35	WALL	21.944	23.156	404		-374

* DENOTES A CONNECTION CALCULATED BY THE LAYOUT PROGRAM.
REFER TO THE ALPINE HARDWARE CATALOG FOR A COMPLETE LIST OF CONNECTIONS.

CONNECTOR SCHEDULE

TRUSS ID:	CONNECTOR
T 1	* AT CMU WALL ONE (1) SIMPSON MGT ANCHOR EACH END WITH (22) 10D NAILS AND 5/8" THREADED ROD ANCHOR EPOXY EMBED INTO TOP OF REINF/CONC FILLED CMU HEADER MIN 12" DEPTH
T 7, T 8 T 25, T 26, T 27, T 28 T 29, T 30, T 31, T 32 T 33, T 34, T 50, T 51 T 52	* AT CMU WALL ONE (1) SIMPSON HETA20 STRAP AT EACH TRUSS W(10) 10DX1-1/2"L NAILS EACH
T 18	* AT CMU WALL ONE (1) SIMPSON HETA20 STRAP AT EACH TRUSS W(10) 10DX1-1/2"L NAILS EACH * AT LVL WOOD COLUMN ONE (1) SIMPSON LGT 2 ANCHOR WITH (30) # 9 X 1 1/2" SD SCREWS TO TRUSS AND COL AT BASE OF COLUMN - INSTALL ONE (1) SIMPSON ABU44Z ANCHOR WITH (12) 16D NAILS TO WOOD AND 5/8" THREADED ROD ANCHOR-EPOXY EMBED MIN 12" INTO CONC FOUNDATION * AT INTERIOR BEARING WALL TOP PLATES ONE (1) SIMPSON HTS-20 ANCHOR AT EACH TRUSS W(24) 10DX1-1/2"L NAILS EACH
T 11, T 12, T 13, T 14, T 15 T 16, T 17 T 43, T 44, T 45, T 46 T 47, T 48, T 49	* AT CMU WALL ONE (1) SIMPSON HETA20 STRAP AT EACH TRUSS W(10) 10DX1-1/2"L NAILS EACH * AT INTERIOR BEARING WALL TOP PLATES ONE (1) SIMPSON HTS-20 ANCHOR AT EACH TRUSS W(24) 10DX1-1/2"L NAILS EACH
T 39	* AT CMU WALL ONE (1) SIMPSON HD 9B ANCHOR WITH (3) 7/8" DIA ANCHOR BOLTS THRU TRUSS AND 7/8" D THREADED ROD ANCHOR-EPOXY EMBED MIN 12" INTO TOP OF CONCRETE WALL * AT LVL WOOD COLUMN ONE (1) SIMPSON HD 9B ANCHOR WITH (3) 7/8" DIA ANCHOR BOLTS THRU TRUSS AND 7/8" DIA THREADED ROD ANCHOR DOWN TO SIMPSON HD 9B ANCHOR AT COLUMN WITH (3) 7/8" DIA THRU BOLTS TO COL AT BASE OF COLUMN - INSTALL ONE (1) SIMPSON HD 9B ANCHOR WITH (3) 7/8" DIA ANCHOR BOLTS THRU TRUSS AND 7/8" D THREADED ROD ANCHOR-EPOXY EMBED MIN 12" INTO CONC FOUNDATION
T 42	* AT CMU WALL ONE (1) SIMPSON HETA20 STRAP AT EACH TRUSS W(10) 10DX1-1/2"L NAILS EACH * AT LVL WOOD COLUMN ONE (1) SIMPSON LGT 2 ANCHOR WITH (30) # 9 X 1 1/2" SD SCREWS TO TRUSS AND COL AT BASE OF COLUMN - INSTALL ONE (1) SIMPSON ABU44Z ANCHOR WITH (12) 16D NAILS TO WOOD AND 5/8" THREADED ROD ANCHOR-EPOXY EMBED MIN 12" INTO CONC FOUNDATION
T 19	* AT CMU WALL ONE (1) SIMPSON HETA20 STRAP AT EACH TRUSS W(10) 10DX1-1/2"L NAILS EACH * AT LVL WOOD COLUMN ONE (1) SIMPSON LGT 2 ANCHOR WITH (30) # 9 X 1 1/2" SD SCREWS TO TRUSS AND COL AT BASE OF COLUMN - INSTALL ONE (1) SIMPSON ABU44Z ANCHOR WITH (12) 16D NAILS TO WOOD AND 5/8" THREADED ROD ANCHOR-EPOXY EMBED MIN 12" INTO CONC FOUNDATION * TRUSS TO TRUSS ANCHOR PER TRUSS COMPANY DESIGN
T 20, T 21, T22 T 34A, T 35, T 36 T 37, T 38	* AT CMU WALL ONE (1) SIMPSON HETA20 STRAP AT EACH TRUSS W(10) 10DX1-1/2"L NAILS EACH * AT INTERIOR BEARING WALL TOP PLATES ONE (1) SIMPSON HTS-20 ANCHOR AT EACH TRUSS W(24) 10DX1-1/2"L NAILS EACH * TRUSS TO TRUSS ANCHOR PER TRUSS COMPANY DESIGN
T 2, T 3, T 4, T 5, T 6 T 23, T 24, T 31, T 32 T 33, T 40, T 41 C 1, C 2, C 3, C 4, C 5 C 6, C 7, C 8, C 9, C 10 C 11, C 12, C 13, C 13A C 14, C 15, C 15A J 1, J 2, J 2A, J 3, J 5 J 6, J 7, J 7A, J 8, J 9 KJ 1, KJ 2, KJ 3, KJ 4 KJ 5, KJ 6, KJ 7, KJ 8	* AT CMU WALL ONE (1) SIMPSON HETA20 STRAP AT EACH TRUSS W(10) 10DX1-1/2"L NAILS EACH * TRUSS TO TRUSS ANCHOR PER TRUSS COMPANY DESIGN
T 9, T 10	* AT CMU WALL ONE (1) SIMPSON HETA20 STRAP AT EACH TRUSS W(10) 10DX1-1/2"L NAILS EACH * AT GIRDER TRUSS ONE (1) SIMPSON HTS-20 ANCHOR AT EACH TRUSS W(24) 10DX1-1/2"L NAILS EACH
PB 1, PB 2, PB 3	* TRUSS TO TRUSS ANCHOR PER TRUSS COMPANY DESIGN
2"X4" FRAME BEARING WALL TOP PLATES TO STUD AND STUD TO BOTTOM PLATE (STUD SPACING AT 12" O.C. MAX)	ONE (1) SIMPSON SP4 ANCHOR AT 24" O.C. MAX WITH (6) 10DX1-1/2"L NAILS
2"X4" FRAME BEARING WALL TOP PLATES TO STUD AND STUD TO BOTTOM PLATE (STUD SPACING AT 16" O.C. MAX)	ONE (1) SIMPSON SP4 ANCHOR AT 32" O.C. MAX WITH (6) 10DX1-1/2"L NAILS
2"X6" FRAME BEARING WALL TOP PLATES TO STUD AND STUD TO BOTTOM PLATE (STUD SPACING AT 16" O.C. MAX)	ONE (1) SIMPSON SP6 ANCHOR AT 32" O.C. MAX WITH (6) 10DX1-1/2"L NAILS
IN LIEU OF SP4/SP6 ANCHORS, THE FOLLOWING MAY BE INSTALLED AS A SUBSTITUTION	ONE (1) SIMPSON SP2 ANCHOR WITH (12) 10D NAILS, INSTALLED AT EVERY STUD TO TOP PLATES ONE (1) SIMPSON SP1 ANCHOR WITH (6) 10D NAILS, INSTALLED AT EVERY STUD TO BOTTOM PLATE
WOOD POSTS/DBL. STUDS INDICATED ON FLOOR PLAN WITH AN UPLIFT LESS THEN 1310#	SEE DETAIL "EE/A3"
LOCATIONS WHERE EMBEDDED HETA20 STRAP MISSES TRUSS LOCATION BY MORE THEN 3/4"	ONE (1) SIMPSON HTSM20 STRAP WITH (10) 10D NAILS AND (4) 1/4"ØX2-1/4"L TITEN SCREWS

ALL ANCHORS ARE SIMPSON ANCHORS UNLESS NOTED OTHERWISE

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY EDWARD F. SHINSKIE, PE LIC NO 47515 ON THE DATE AND/OR TIME STAMP SHOWN USING A DIGITAL SIGNATURE.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPY.

DESIGN CRITERIA	
FULLY ENCLOSED	
WIND SPEED	160
EXPOSURE	D
BUILDING CATEGORY	TWO (2)

GENERAL NOTES

1. THESE DRAWINGS WERE PREPARED WITH THE ASSUMPTION THE CONTRACTOR/OWNER BUILDER IS KNOWLEDGEABLE OF COMMON CONSTRUCTION PRACTICES.
2. THE CONTRACTOR/OWNER-BUILDER SHALL REVIEW DRAWINGS FOR ACCURACY AND INTERPRETATION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGNERS PRIOR TO CONSTRUCTION.
3. THE FOUNDATION PLAN SHALL BE VERIFIED BY THE CONTRACTOR/OWNER-BUILDER TO CORRESPOND WITH THE FINAL ENGINEERED TRUSS LAYOUT.
4. DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE.

DO NOT SCALE DRAWINGS

REVISIONS
1 ***
2 ***
3 ***

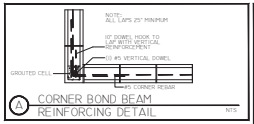
2115 PALM BAY ROAD STE. 6
PALM BAY, FL. 32905
TEL. (321) 724-0740
FAX. (321) 914-4206
EMAIL: BCARTER1350@ @GMAIL.COM

EDC
ENGINEERING AND DESIGN CONCEPTS, INC.

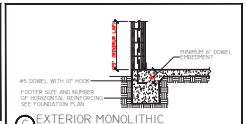
SFR FOR:
411 HIBISCUS TRAIL
MELBOURNE BEACH, FLORIDA

ENGINEER OF RECORD
EDWARD F. SHINSKIE, PE
4707 WILD TURKEY ROAD
MIMS, FLORIDA 32754
FLORIDA PE# 47515
PH. 321-863-3223

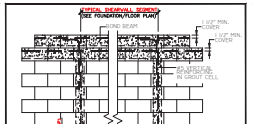
A9
SHEET 9 OF *
-DRAWN BY-
RDC



A CORNER BOND BEAM REINFORCING DETAIL NTS

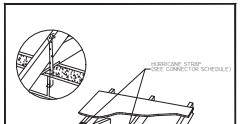


C EXTERIOR MONOLITHIC FOOTING DETAIL NTS

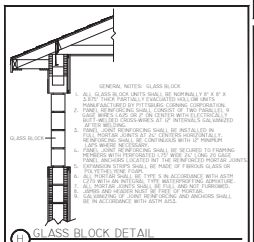


E ONE STORY MASONRY WALL NTS

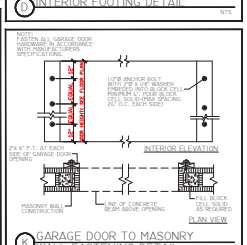
F ROOF SHEATHING LAYOUT & ENDWALL BRACING NTS



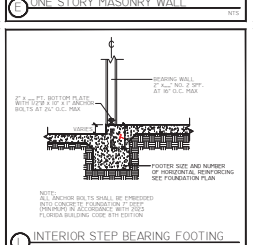
G ROOF TO MASONRY SIDE-WALL CONNECTION NTS



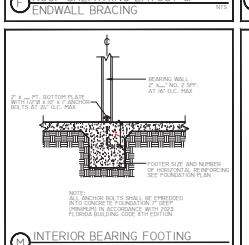
H GLASS BLOCK DETAIL NTS



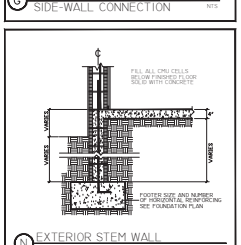
K GARAGE DOOR TO MASONRY WALL FASTENING DETAIL NTS



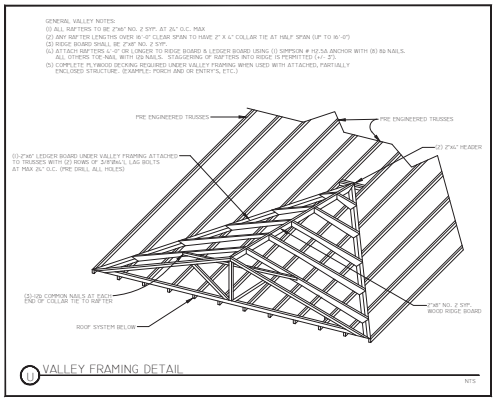
L INTERIOR STEP BEARING FOOTING NTS



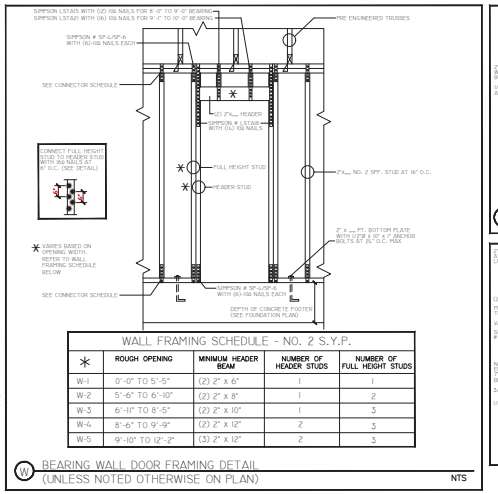
M INTERIOR BEARING FOOTING NTS



N EXTERIOR STEM WALL FOOTING DETAIL NTS



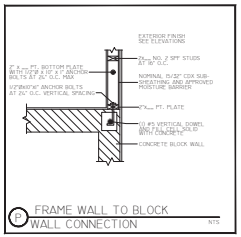
U VALLEY FRAMING DETAIL NTS



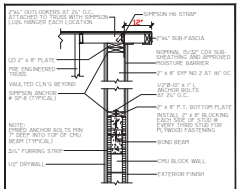
WALL FRAMING SCHEDULE - NO. 2 S.Y.P.

*	ROUGH OPENING	MINIMUM HEADER BEAM	NUMBER OF HEADER STUDS	NUMBER OF FULL HEIGHT STUDS
W-1	0'-0" TO 5'-5"	(2) 2" x 6"	1	1
W-2	5'-6" TO 6'-10"	(2) 2" x 8"	1	2
W-3	6'-11" TO 8'-5"	(2) 2" x 10"	1	3
W-4	8'-6" TO 9'-9"	(2) 2" x 12"	2	3
W-5	9'-10" TO 12'-2"	(3) 2" x 12"	2	3

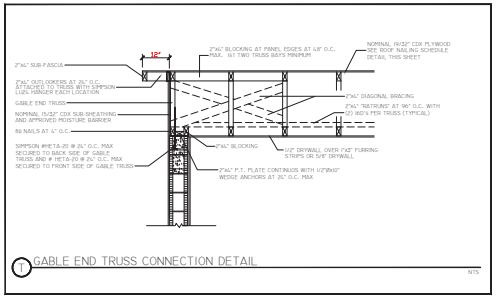
W BEARING WALL DOOR FRAMING DETAIL (UNLESS NOTED OTHERWISE ON PLAN) NTS



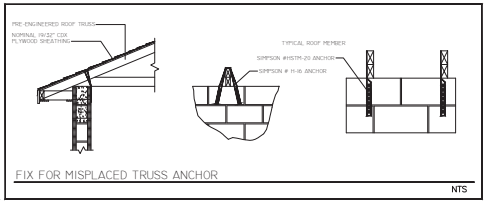
O FRAME WALL TO BLOCK WALL CONNECTION NTS



Q WOOD FRAME GABLE END WALL DETAIL N.T.S.



T GABLE END TRUSS CONNECTION DETAIL NTS



FIX FOR MISPLACED TRUSS ANCHOR NTS

GENERAL NOTES: MASONRY

1. ALL CONSTRUCTION WORKMANSHIP AND MATERIALS SHALL CONFORM TO "SPECIFICATIONS FOR MASONRY STRUCTURES" (ACI 530/530.1-13, ASCE 7-22, TMS 402/602-22. (LATEST EDITIONS)
2. COURSE GROUT (SIZE 8) SHALL BE USED IN CONFORMANCE TO THE REQUIREMENTS OF ASTM C476 "STANDARD SPECIFICATIONS FOR GROUT OF REINFORCED AND NON-REINFORCED MASONRY".
3. CONCRETE MASONRY SHALL BE NORMAL WEIGHT, GRADE N, TYPE I OR II, CONFORMING WITH ASTM C90-08 "STANDARD SPECIFICATIONS FOR HOLLOW LOAD BEARING CONCRETE MASONRY UNITS".
4. THE NET AREA COMPRESSIVE STRENGTH OF MASONRY UNITS (f'm) SHALL BE 1900 PSI USING TYPE M OR S MORTAR.
5. THICKNESS OF MORTAR BED SHALL NOT EXCEED 5/8".
6. HORIZONTAL REINFORCING SHALL CONFORM WITH ASTM A82-02.
7. MASONRY REINFORCING STEEL BARS SHALL BE CONTINUOUS WITH LAP SPLICES OF 30 BAR DIAMETERS MINIMUM.
8. THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT ALL MASONRY STRUCTURAL ELEMENTS ARE ADEQUATELY BRACED TO RESIST WIND, BACKFILLING, SOIL COMPACTION, AND OTHER CONSTRUCTION AS WELL NATURAL OCCURING FORCES ORDINARILLY ENCOUNTERED DURING THE CONSTRUCTION PROCESS.. BRACING SHALL REMAIN IN PLACE UNTIL THE STRUCTURE HAS BEEN COMPLETED.
9. MASONRY GROUT SHALL BE PROPORTIONED AND PRODUCED TO HAVE A SLUMP BETWEEN 8 AND 11 INCHES.
10. WHEN GROUT POURS EXCEED 5 FEET IN HEIGHT, PROVIDE A CLEAN-OUT HOLE AT THE BOTTOM CELL. CLEAN THE CELL BY REMOVING ALL MORTAR DEBRIS, LOOSE AGGREGATES AND ANY MATERIAL DELETERIOUS TO MASONRY GROUT. INSTALL AND SECURELY TIE THE VERTICAL STEEL REINFORCEMENT TOGETHER. CLOSE THE OPENING AFTER INSPECTION.

GENERAL NOTES: WOOD

1. ALL FRAMING CONSTRUCTION, WORKMANSHIP AND MATERIALS (INCLUDING TRUSSES) SHALL CONFORM WITH THE SPECIFICATIONS AND REQUIREMENTS OF THE REFERENCES LISTED BELOW: "AMERICAN INSTITUTE OF TIMBER CONSTRUCTION" SIXTH EDITION "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION "2018 AND SUPPLEMENT "U.S. PRODUCT STANDARD PS 1" OR APA PRP-- 108 PERFORMANCE STANDARDS "MANUAL FOR HOUSE FRAMING, WOOD CONSTRUCTION DATA NO. 1 "NATIONAL FOREST PRODUCTS ASSOCIATION.
2. ALL TRUSS BEAM AND COLUMN MEMBERS SHALL BE SPECIES AND GRADES OF LUMBER WHICH WILL PRODUCE DESIGN VALUES EQUAL TO OR GREATER THAN VALUES FOR SOUTHERN YELLOW PINE NO. 2, 19% MAX. M.C.
3. GALVANIZED METAL HANGERS AND FRAMING ANCHORS SHOWN ON THE PLANS SHALL BE USED AND SHALL BE FASTENED IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS. SUBSTITUTIONS REQUIRE ENGINEER'S APPROVAL.
4. ANCHORING AND NAILING NOT IDENTIFIED SHALL COMPLY WITH THE NAILING SCHEDULE GIVEN WITHIN "MANUAL FOR HOUSE FRAMING", AND 2023 FLORIDA BUILDING CODE 8th EDITION
5. A MINIMUM OF TWO STUDS SHALL BE INSTALLED ADJACENT TO ALL OPENINGS IN EXTERIOR AND LOAD BEARING WALLS AND BENEATH ALL BEAM & GIRDER BEARING POINTS.
6. TRUSSES SHALL BE SIZED AND DETAILED IN ACCORDANCE WITH THE DIMENSIONS AND LOADS INDICATED.
7. TRUSS SHOP DRAWINGS AND CALCULATIONS SHALL BE SUBMITTED BY A FLORIDA LICENSED ENGINEER FOR REVIEW PRIOR TO FABRICATION. THE SPECIALTY ENGINEER SHALL SPECIFY BLOCKING AND BRACING N NECESSARY TO WITHSTAND WIND LOADS DETERMINED USING ASCE 7-22.
8. AS A MINIMUM, ROOF SHEATHING SHALL CONSIST OF 19/32" (NOMINAL) APA 40/20 SPAN RATED, EXPOSURE 1 SHEATHING
9. EXTERIOR WOOD FRAME WALLS SHALL BE SHEATHED WITH 15/32" APA SPAN RATED, EXPOSURE 1 PLYWOOD OR 7/16" O.S.B. THE SHEATHING SHALL BE ATTACHED TO FRAMING MEMBERS WITH 8d NAILS AT 6" O.C.
10. EXTERIOR AND INTERIOR LOAD BEARING WALLS SHALL BE FRAMED WITH 2X4 MEMBERS AT 16" O.C. MAX. SPACING FOR MAX. 8' HIGH PARTITIONS. FOR HEIGHTS ABOVE 8' REFER TO WALL SECTIONS. STUDS SHALL BE SPRUCE-PINE-FIR #2 OR SPECIES WITH EQUAL OR GREATER STRENGTH VALUES.
11. ALL PRESSURE TREATED LUMBER SHALL BE SOUTHERN YELLOW PINE #2 19% MAX. M.C. IN ACCORDANCE WITH AWPA STANDARDS C1,C2 AND C9 LATEST EDITIONS, WITH A WATERBORNE PRESERVATIVE IN ACCORDANCE WITH STANDARD P5. ALL NAILS AND SCREWS SHALL BE STAINLESS STEEL OR GALVANIZED.
12. WHERE DRAWING INDICATES APPLIED EXTERIOR FINISH OVER APPROVED WATER BARRIER OVER WOOD FRAMING MEMBERS, OWNER IS RESPONSIBLE TO INSTALL ALL REQUIRED SEALANT, FLASHING, ETC. TO MAINTAIN WATER-PROOF INTEGRITY TO PREVENT MOISTURE INFILTRATION INTO STRUCTURE. OWNER IS RESPONSIBLE FOR PERIODIC MAINTENANCE AND UPKEEP OF EXTERIOR APPLIED FINISH TO MAINTAIN WATERPROOF INTEGRITY TO PREVENT DAMAGE TO INTERIOR COMPONENTS.
13. WATER-RESISTIVE BARRIER.
EXTERIOR WALLS OF FRAME CONSTRUCTION RECEIVING A VENEER SHALL BE PROVIDED WITH A WATER-RESISTIVE BARRIER. THE WATER RESISTIVE BARRIER SHALL BE A MINIMUM OF ONE LAYER OF NO. 15 ASPHALT FELT, COMPLYING WITH ASTM D 226 FOR TYPE 1 FELT, SHALL BE ATTACHED TO THE SHEATHING, WITH FLASHING IN SUCH A MANNER AS TO PROVIDE A CONTINUOUS WATER-RESISTIVE BARRIER BEHIND THE EXTERIOR WALL VENEER.

GENERAL NOTES: CONCRETE

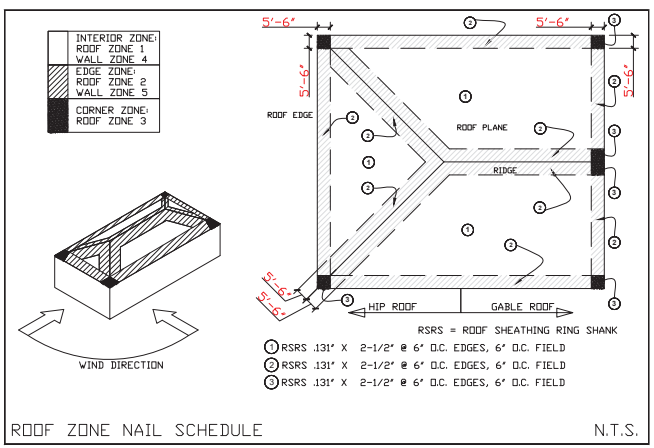
1. ALL CONCRETE CONSTRUCTION WORKMANSHIP AND MATERIAL SHALL COMPLY WITH THE REQUIREMENTS OF ACI 301-89 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS."
2. ALL CONCRETE SHALL BE TYPE I OR II PORTLAND CEMENT COMPLYING WITH ASTM C150 AND SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH SHOWN BELOW:

FOUNDATIONS & SLABS	3000 PSI
BEAMS	3000 PSI
MASONRY	3000 PSI

3. ALL REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM A 615-22 GRADE 60. BARS SHALL BE FREE OF RUST, MILL SCALE, PAINT OR OTHER COATINGS THAT WILL REDUCE CONCRETE BOND.
4. ALL CONCRETE REINFORCEMENT SHALL BE DETAILED, FABRICATED, LABELED, SUPPORTED AND SPACED IN FORMS AND SECURED IN PLACE IN WITH ACI 315R-18 "DETAILS AND DETAILING OF CONCRETE REINFORCEMENT."
5. ALL BAR SPLICES, DOWELS AND CONCRETE COVERAGE SHALL MEET THE REQUIREMENTS OF ACI 318--18 / 318R--18 "BUILDING CODE AND COMMENTARY FOR REINFORCED CONCRETE."
6. BEAMS OVER MASONRY OPENINGS SHALL HAVE CONTINUOUS TOP AND BOTTOM REINFORCEMENT. LAP SPLICES IN BOTTOM BARS SHALL OCCUR OVER SUPPORTS. TOP BARS SHALL LAP AT MID-SPAN.
7. CONCRETE BEAMS AND SLABS SHALL BE FINISHED LEVEL AND TO THE ELEVATIONS SHOWN ON THE DRAWINGS.
8. CALCIUM CHLORIDE SHALL NOT BE USED IN ANY FORM.
9. UNLESS OTHERWISE PERMITTED OR SPECIFIED, CONCRETE SHALL BE PROPORTIONED AND PRODUCED TO HAVE A SLUMP OF 4 INCHES +/- 1 INCH.

GENERAL NOTES

1. THESE DRAWINGS WERE PREPARED WITH THE ASSUMPTION THE CONTRACTOR/OWNER-BUILDER IS KNOWLEDGEABLE OF COMMON CONSTRUCTION PRACTICES.
2. THE CONTRACTOR/OWNER-BUILDER SHALL REVIEW DRAWINGS FOR ACCURACY AND INTERPRETATION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGNERS PRIOR TO CONSTRUCTION.
3. THE FOUNDATION PLAN SHALL BE VERIFIED BY THE CONTRACTOR/OWNER-BUILDER TO CORRESPOND WITH THE FINAL ENGINEERED TRUSS LAYOUT.
4. DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE -- DO NOT SCALE DRAWINGS.
5. FLASHING SHALL BE PROVIDED PER FIELD CONDITONS.
6. MOISTURE PROTECTION SHALL BE PROVIDED BETWEEN ALL MASONARY AND NON PRESSURE TREATED WOOD SURFACES.
7. A 1/2" DIAMETER X 10 " LONG MINIMUM WEDGE ANCHOR MAY BE USED IN LIEU OF 1/2" DIAMETER J-BOLTS. AT FOUNDATION
8. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE DRAWINGS AND SPECIFICATIONS LISTED.
9. THE GENERAL CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION SHOWN ON THE DRAWINGS. ANY QUESTIONS OR DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION TO THE ENGINEER BEFORE STARTING CONSTRUCTION.
10. THE STRUCTURE HAS BEEN DESIGNED TO MEET THE REQUIREMENTS OF 2023 FLORIDA BUILDING CODE 8th EDITION
11. FOUNDATION AND SLAB ARE TO BE FORMED UPON SOIL WITH A MINIMUM SAFE BEARING CAPACITY OF 2000 PSF.
12. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO UNIFORMLY PROVIDE THE BEARING CAPACITY UNDER ALL FOUNDATIONS.
13. THE CONTRACTORS SHALL HIRE A GEOTECHNICAL ENGINEER TO RECOMMEND SOIL IMPROVEMENTS REQUIRED TO OBTAIN THE MINIMUM SAFE BEARING CAPACITY STATED ABOVE.



ROOF ZONE NAIL SCHEDULE N.T.S.

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY EDWARD F. SHINSKIE, PE LIC NO 47515 ON THE DATE AND/OR TIME STAMP SHOWN USING A DIGITAL SIGNATURE.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPY.

DESIGN CRITERIA	
FULLY ENCLOSED	
WIND SPEED	160
EXPOSURE	D
BUILDING CATEGORY	TWO (2)

GENERAL NOTES

1. THESE DRAWINGS WERE PREPARED WITH THE ASSUMPTION THE CONTRACTOR/OWNER BUILDER IS KNOWLEDGEABLE OF COMMON CONSTRUCTION PRACTICES.
2. THE CONTRACTOR/OWNER-BUILDER SHALL REVIEW DRAWINGS FOR ACCURACY AND INTERPRETATION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGNERS PRIOR TO CONSTRUCTION.
3. THE FOUNDATION PLAN SHALL BE VERIFIED BY THE CONTRACTOR/OWNER-BUILDER TO CORRESPOND WITH THE FINAL ENGINEERED TRUSS LAYOUT.
4. DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE.

DO NOT SCALE DRAWINGS

REVISIONS
1 ***
2 ***
3 ***

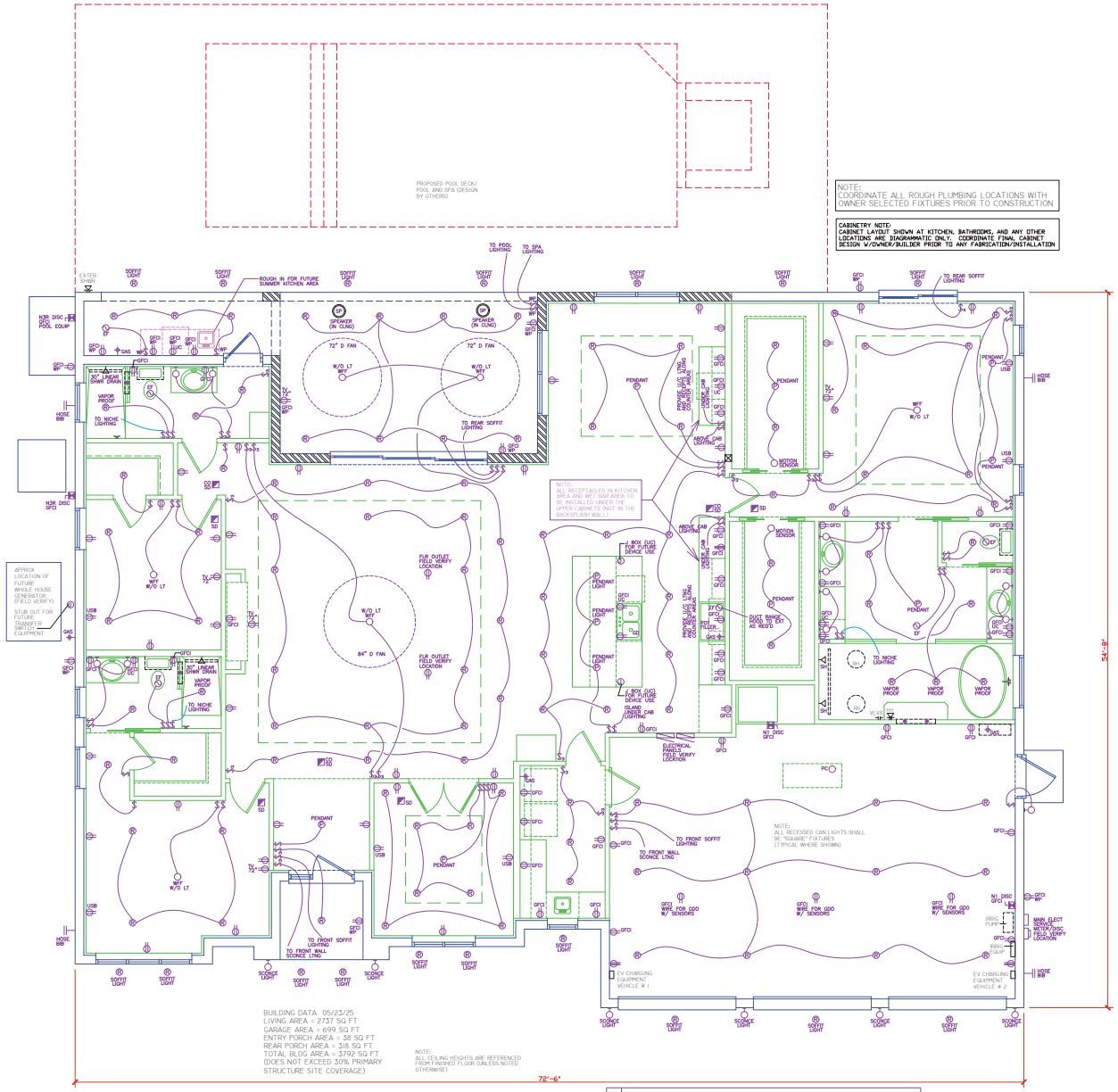
2181 PALM BAY ROAD STE. 6
PALM BAY, FL. 32905
TEL. (321) 724-5740
FAX. (321) 914-4206
EMAIL:
BCARTER350@
@GMAIL.COM

EDC
ENGINEERING AND DESIGN CONCEPTS, INC.

SFR FOR:
411 HIBISCUS TRAIL
MELBOURNE BEACH, FLORIDA

ENGINEER OF RECORD
EDWARD F. SHINSKIE, PE
4707 WILD TURKEY ROAD
MIMS, FLORIDA 32754
FLORIDA PE# 47515
PH: 321-863-3223

S1
SHEET 10 OF *
DRAWN BY: RDC



RESIDENCE-ELECT/LIGHT PLAN
SCALE: 1/4" = 1'-0"

ELECTRICAL SYMBOLS

SINGLE POLE SWITCH	LIGHT FIXTURE
THREE POLE SWITCH	WALL MOUNT FIXTURE
FOUR POLE SWITCH	RECESSED FIXTURE
DIMMER SWITCH	EYEBALL FIXTURE
SINGLE OUTLET	PULL CHAIN
DUPLEX OUTLET	TRACK LIGHTING LENGTH AS INDICATED
SWITCHED DUPLEX	FLOOD LIGHTS
220 OUTLET	EMERGENCY LIGHT
QUAD OUTLET	FLUORESCENT LENGTH AS INDICATED
TELEPHONE	WIRE FOR FAN
TELEVISION	WIRE FOR FAN WITH LIGHT
SMOKE DETECTOR	INDICATES WATERPROOF
ELECTRICAL PANEL	INDICATES GROUND FAULT CIRCUIT INTERRUPT
EXHAUST FAN	INDICATES ARC FAULT CIRCUIT INTERRUPTER
THERMOSTAT	INDICATES HEIGHT ABOVE FLOOR
INTERCOM	GARAGE DOOR OPENER
DOOR BELL BUTTON	
DISCONNECT	
ELECTRICAL METER	
PENDANT LIGHT	
JUNCTION BOX	

NOTE:
ALL SMOKE DETECTORS TO BE LINKED TOGETHER SO AS TO SOUND SIMULTANEOUSLY WHEN ONE IS TRIGGERED.

NOTE:
ALL OUTLETS SHALL BE TAMPER-RESISTANT

NOTE:
PLANS COMPLY WITH THE 2023 FBC-R (8TH ED), 2020 NEC AND 2023 NFPA 70

GENERAL NOTES

CARBON MONOXIDE PROTECTION.

(1) DEFINITIONS: FOR PURPOSES OF THIS RULE, THE FOLLOWING DEFINITIONS SHALL APPLY:
(A) CARBON MONOXIDE ALARM. A DEVICE FOR THE PURPOSE OF DETECTING CARBON MONOXIDE, THAT PRODUCES A DISTINCT AUDIBLE ALARM, AND IS LISTED OR LABELED WITH THE APPROPRIATE STANDARD EITHER ANSI/UL 2034 - 96, STANDARD FOR SINGLE AND MULTIPLE STATION CO ALARMS, INCORPORATED HEREIN BY REFERENCE, OR UL 2075 - 04, GAS AND VAPOR DETECTOR SENSOR, INCORPORATED HEREIN BY REFERENCE, IN ACCORDANCE WITH ITS APPLICATION. BOTH DOCUMENTS MAY BE OBTAINED BY WRITING TO: CODES AND STANDARDS SECTION, DEPARTMENT OF COMMUNITY AFFAIRS, 2555 SHUMARD OAK BOULEVARD, TALLAHASSEE, FLORIDA 32399-2100.

(B) FOSSIL FUEL. COAL, KEROSENE, OIL, FUEL GASES, OR OTHER PETROLEUM OR HYDROCARBON PRODUCT THAT EMITS CARBON MONOXIDE AS A BY-PRODUCT OF COMBUSTION.

(2) EVERY BUILDING FOR WHICH A PERMIT FOR NEW CONSTRUCTION IS ISSUED ON OR AFTER 7/1/08 AND HAVING A FOSSIL-FUEL-BURNING HEATER OR APPLIANCE, A FIREPLACE, OR AN ATTACHED GARAGE SHALL HAVE AN OPERATIONAL CARBON MONOXIDE ALARM INSTALLED WITHIN 10 FEET OF EACH ROOM USED FOR SLEEPING PURPOSES.

(3) IN NEW CONSTRUCTION, ALARMS SHALL RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING WHEN SUCH WIRING IS SERVED FROM THE LOCAL POWER UTILITY. SUCH ALARMS SHALL HAVE BATTERY BACK UP.

(4) COMBINATION SMOKE/CARBON MONOXIDE ALARMS SHALL BE LISTED OR LABELED BY A NATIONALLY RECOGNIZED TESTING LABORATORY. SPECIFIC AUTHORITY 553.885(2) FS. LAW IMPLEMENTED 553.72, 553.73(2), (3), (7), (9), 553.885(2) FS HISTORY-NEW 11-18-07.

EXHAUST FAN VENT/DRYER VENT NOTES

(A) ALL BATHROOM EXHAUST FAN VENTS SHALL EXTEND FROM UNIT UP THRU ROOF TO EXTERIOR AND TERMINATE WITH WEATHERPROOF CAP/GRILLE, OR OUT THROUGH SOFFIT AND TERMINATE WITH WEATHERPROOF CAP/GRILLE

(B) DRYER PIPE VENTING SHALL EXTEND FROM UNIT OUT THRU ADJACENT EXTERIOR WALL (WHERE APPLICABLE) AND TERMINATE WITH WEATHERPROOF CAP/GRILLE. WHERE UNABLE TO EXTEND THRU ADJACENT EXTERIOR WALL, DRYER VENT SHALL EXTEND FROM UNIT UP THRU ROOF TO EXTERIOR AND TERMINATE WITH WEATHERPROOF CAP/GRILLE.

HVAC NOTES

(A) HVAC DESIGN/MODIFICATIONS AND ENERGY CALCULATIONS WILL BE SUBMITTED BY OWNER/ CONTRACTOR WITH THESE PLANS FOR PERMITTING

LIGHTING NOTE

ALL PERMANENTLY INSTALLED LUMINAIRES, EXCLUDING THOSE IN KITCHEN APPLIANCES, SHALL HAVE AN EFFICIENCY OF AT LEAST 45 LUMENS-PER-WATT OR SHALL UTILIZE LAMPS WITH AN EFFICACY OF NOT LESS THAN 65 LUMENS-PER-WATT

ENERGY CODE COMPLIANCE PATH

PERFORMANCE METHOD

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY EDWARD F. SHINSKIE, PE LIC NO 47515 ON THE DATE AND/OR TIME STAMP SHOWN USING A DIGITAL SIGNATURE.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPY.

DESIGN CRITERIA	
FULLY ENCLOSED	
WIND SPEED	160
EXPOSURE	D
BUILDING CATEGORY	TWO (2)

GENERAL NOTES

1. THESE DRAWINGS WERE PREPARED WITH THE ASSUMPTION THE CONTRACTOR/OWNER BUILDER IS KNOWLEDGEABLE OF COMMON CONSTRUCTION PRACTICES.
2. THE CONTRACTOR/OWNER-BUILDER SHALL REVIEW DRAWINGS FOR ACCURACY AND INTERPRETATION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGNERS PRIOR TO CONSTRUCTION.
3. THE FOUNDATION PLAN SHALL BE VERIFIED BY THE TRUSS MANUFACTURER TO CORRESPOND WITH THE FINAL ENGINEERED TRUSS LAYOUT.
4. DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE.

DO NOT SCALE DRAWINGS

REVISIONS
***
***
***

EDC
ENGINEERING AND DESIGN CONCEPTS, INC.
2161 PALM BAY ROAD STE. 6
PALM BAY, FL. 32905
TEL. (321) 724-0740
FAX. (321) 914-4206
EMAIL:
BCARTER3509@GMAIL.COM

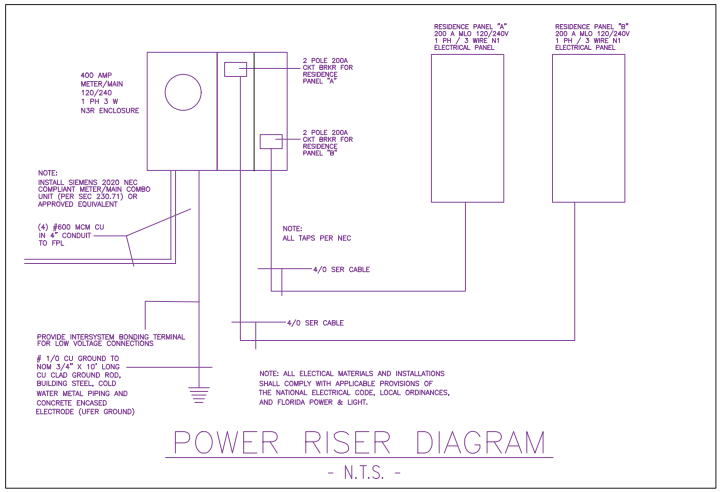
SFR FOR:
411 HIBISCUS TRAIL
MELBOURNE BEACH, FLORIDA

ENGINEER OF RECORD
EDWARD F. SHINSKIE, PE
4707 WILD TURKEY ROAD
MIMS, FLORIDA 32754
FLORIDA PE# 47515
PH. 321-863-3223

E1

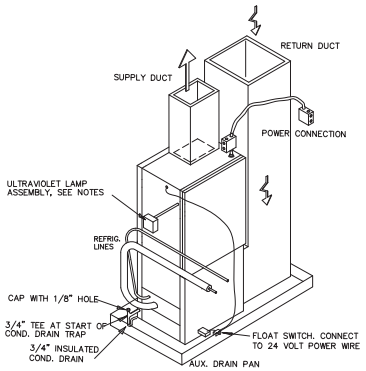
SHEET 11 OF *

DRAWN BY:
RDC



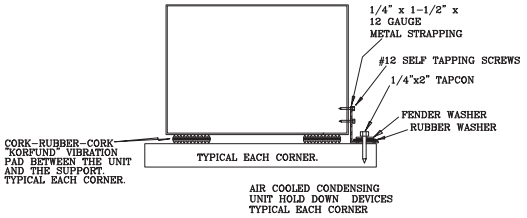
POWER RISER DIAGRAM

- N.T.S. -



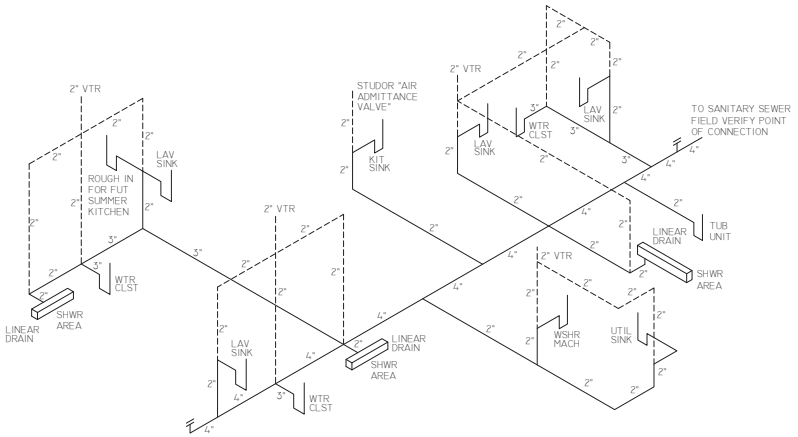
VERTICAL AIR HANDLER DETAIL

N.T.S.



CONDENSING UNIT HOLD DOWN DETAIL

TYPICAL EACH CORNER N.T.S.



PLUMBING RISER DIAGRAM

NOT TO SCALE

PLUMBING GENERAL NOTES

1.0 PROVIDE ALL LABOR AND MATERIALS AS REQUIRED TO PROVIDE A FULLY FUNCTIONING AND COMPLETE DOMESTIC WATER DISTRIBUTION, AND SANITARY DRAINAGE SYSTEM AS INDICATED ON DRAWINGS. THESE DRAWINGS ARE DIAGRAMMATIC IN NATURE AND INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS AND EQUIPMENT. FINAL LOCATIONS OF EQUIPMENT SHALL BE FIELD DETERMINED.

2.0 ALL MATERIALS SHALL BE NEW AND APPROVED BY APPROPRIATE CODES.

3.0 EXTEND SERVICE TO WATER METER AND PROVIDE SHUT OFF VALVE IN VALVE BOX OUTSIDE BUILDING. FIELD VERIFY.

4.0 PROVIDE AND INSTALL PLUMBING FIXTURES AS SCHEDULED IN BUILDER CONTRACT.

5.0 DO NOT SCALE FOR THE EXACT FIXTURES, PIPING, EQUIPMENT, ETC.

6.0 COORDINATE WORK WITH OTHER TRADES TO AVOID INTERFERENCE WITH CONSTRUCTION PROGRESS.

7.0 WATER PIPING TO BE CPVC

8.0 FURNISH AND INSTALL APPROVED AIR CHAMBERS OR SHOCK ABSORBERS AT EACH PLUMBING FIXTURE GROUP.

9.0 USE APPROVED INSULATING UNION FOR JOINED DISSIMILAR METALS.

10.0 FURNISH AND INSTALL CONDENSATE DRAIN PIPING TO A POINT WITHIN 5 FT OF A/C UNIT AND ON TO AN APPROVED DISCHARGE POINT.

DESIGN CRITERIA	
FULLY ENCLOSED	
WIND SPEED	160
EXPOSURE	D
BUILDING CATEGORY	TWO (2)

GENERAL NOTES

1. THESE DRAWINGS WERE PREPARED WITH THE ASSUMPTION THE CONTRACTOR/OWNER BUILDER IS KNOWLEDGEABLE OF COMMON CONSTRUCTION PRACTICES.
2. THE CONTRACTOR/OWNER-BUILDER SHALL REVIEW DRAWINGS FOR ACCURACY AND INTERPRETATION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGNERS PRIOR TO CONSTRUCTION.
3. THE FOUNDATION PLAN SHALL BE VERIFIED BY THE TRUSS MANUFACTURER TO CORRESPOND WITH THE FINAL ENGINEERED TRUSS LAYOUT.
4. DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE.

DO NOT SCALE DRAWINGS

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY EDWARD F. SHINSKIE, PE LIC NO 47515 ON THE DATE AND/OR TIME STAMP SHOWN USING A DIGITAL SIGNATURE.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPY.

REVISIONS
***
***
***

EDC
ENGINEERING AND DESIGN CONCEPTS, INC.
2161 PALM BAY ROAD STE. 6
PALM BAY, FL. 32905
TEL. (321) 724-4740
FAX. (321) 914-4206
EMAIL: BCARTER350@GMAIL.COM

SFR FOR:
411 HIBISCUS TRAIL
MELBOURNE BEACH, FLORIDA

ENGINEER OF RECORD
EDWARD F. SHINSKIE, PE
4707 WILD TURKEY ROAD
MIMS, FLORIDA 32754
FLORIDA PE# 47515
PH. 321-863-3223

E2

SHEET 12 OF *

DRAWN BY: RDC

LANTIC
SOLUTIONS

Stormwater Report

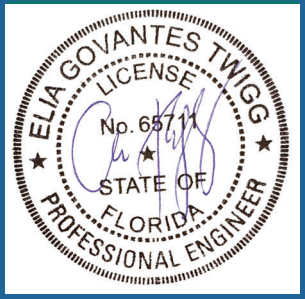
TOWN OF MELBOURNE BEACH

JAMES RESIDENCE

411 HIBISCUS TRAIL
MELBOURNE BEACH, FL 32951

Prepared By:

Elia Twigg, PE
LANTIC SOLUTIONS LLC
355 TORTOISE VIEW DRIVE, SUITE E
SATELLITE BEACH, FL 32937



July 21, 2025

TABLE OF CONTENTS

Stormwater Report

Project Location

The project site is a 0.29-acre undeveloped property located at 411 Hibiscus Trail in Melbourne Beach, FL 32951. It is located approximately 0.6 miles north of Ocean Avenue in Melbourne Beach and approximately 0.2 miles west of Highway A1A.

Existing Conditions

The site is currently a vacant lot within the Melbourne Beach town limits and is zoned as 2-RS. There is an existing driveway that will be removed with the development.

An aerial map from the Property Appraiser's site is included in Appendix A.

Project Description

The project will be constructed as one phase and includes a 3,792 SF single-family residence with a pool. Please refer to the Lot Drainage Plan in Appendix A:

Site Description

According to the National Resources Conservation Service (USDA), the soil types found on site were Canaveral – Palm Beach – Urban Land Complex. The soils can be classified as hydrologic soil group A. Please refer to Appendix A for the soils map and description of the soil type.

According to the Geotechnical Report, the estimated wet seasonal high-water table (SHWT) is approximately two feet higher than the elevation encountered in the field, therefore it is approximately 6.5 ft below grade. Please refer to Appendix C for a copy of the Geotechnical Report completed by UES.

Design

The Town of Melbourne Beach requires that stormwater management facilities provide retention of the first 8 inches of runoff from a 10-year, 24-hour storm event, in accordance with the adopted minimum level of service standards.

The proposed stormwater design includes a 6-inch-deep dry retention area located along the west, south, and east property lines. The Lot Drainage Plan, which includes typical cross-sections of the proposed retention areas, is provided in Appendix A.

Retention basin recovery calculations were performed using methodologies outlined in the St. Johns River Water Management District (SJRWMD) Permit Information Manual, Part X, Section 23.0 – Methodologies & Design Examples.

The total impervious area for the site is 6,317 SF. Based on the 8-inch retention requirement, the total required retention volume is 4,212 cubic feet (CF). Since the total retention volume provided is 1,250 CF, the stormwater design incorporates unsaturated vertical (Stage 1) and saturated lateral (Stage 2) infiltration analyses to account for the remaining volume.

During Stage 1, the volume infiltrated during unsaturated vertical flow (V_u) is 3,068 CF. This leaves the remaining volume (V_2) of 1,144 CF to be recovered during Stage 2 through saturated lateral flow. Based on interpolation, the starting elevation for lateral flow is 0.5 feet above the bottom of the retention areas. Therefore, the 6-inch-deep proposed retention areas will accommodate this volume.

The total recovery time for the runoff volume includes both vertical and lateral infiltration stages. The calculated total recovery time is 3.13 hours, which is well within the required 24-hour recovery period.

To confirm that the runoff volume will not exceed the storage capacity of the retention areas, the height of the retained runoff volume (h_2) was also evaluated. Based on the calculations, the height of the runoff volume is 0.5 feet, which matches the top-of-bank elevation of the proposed dry retention areas (elevation 12.5 feet), ensuring no overflow will occur.

Please refer to Appendix B for the Stormwater Calculations.

Appendix A

EXHIBITS:

AERIAL MAP (BREVARD COUNTY PROPERTY APPRAISER)

LOT DRAINAGE PLAN

SOIL MAP-BREVARD COUNTY, FL

Dana Blickley, CFA
PROPERTY APPRAISER
Brevard County

All BCPAO maps and/or map applications are maintained for assessment and illustrative purposes only and do not represent surveys, plats, or any other legal instrument. Likewise, measurement and location tools are for assessment and illustrative purposes only and do not necessarily reflect real-world conditions. Due to the nature of Geographic Information Systems (GIS) and cadastral mapping, map layers may not precisely align and may not represent precise location, shape, and/or legal boundaries. Only a Florida-licensed surveyor can determine legally-relevant property boundaries, elevation, distance, area, and/or location in Florida.

Map created June 20, 2025 (map data dates may vary)

LEGEND AND TYPICAL SECTIONS:

XXXX EXISTING ELEVATION

(XXXX) PROPOSED ELEVATION

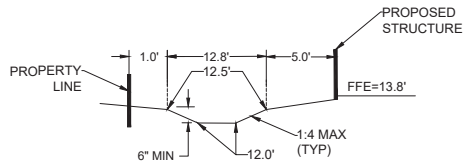
FLOW DIRECTION

0 20 40

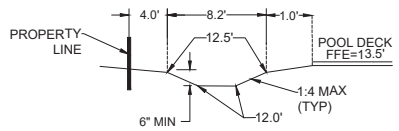
GRAPHIC SCALE IN FEET

SCALE : 1" = 20'

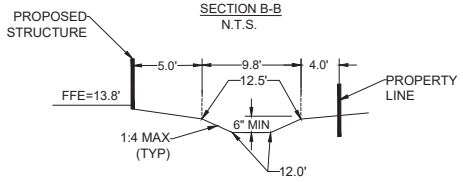
NORTH



SECTION A-A
N.T.S.



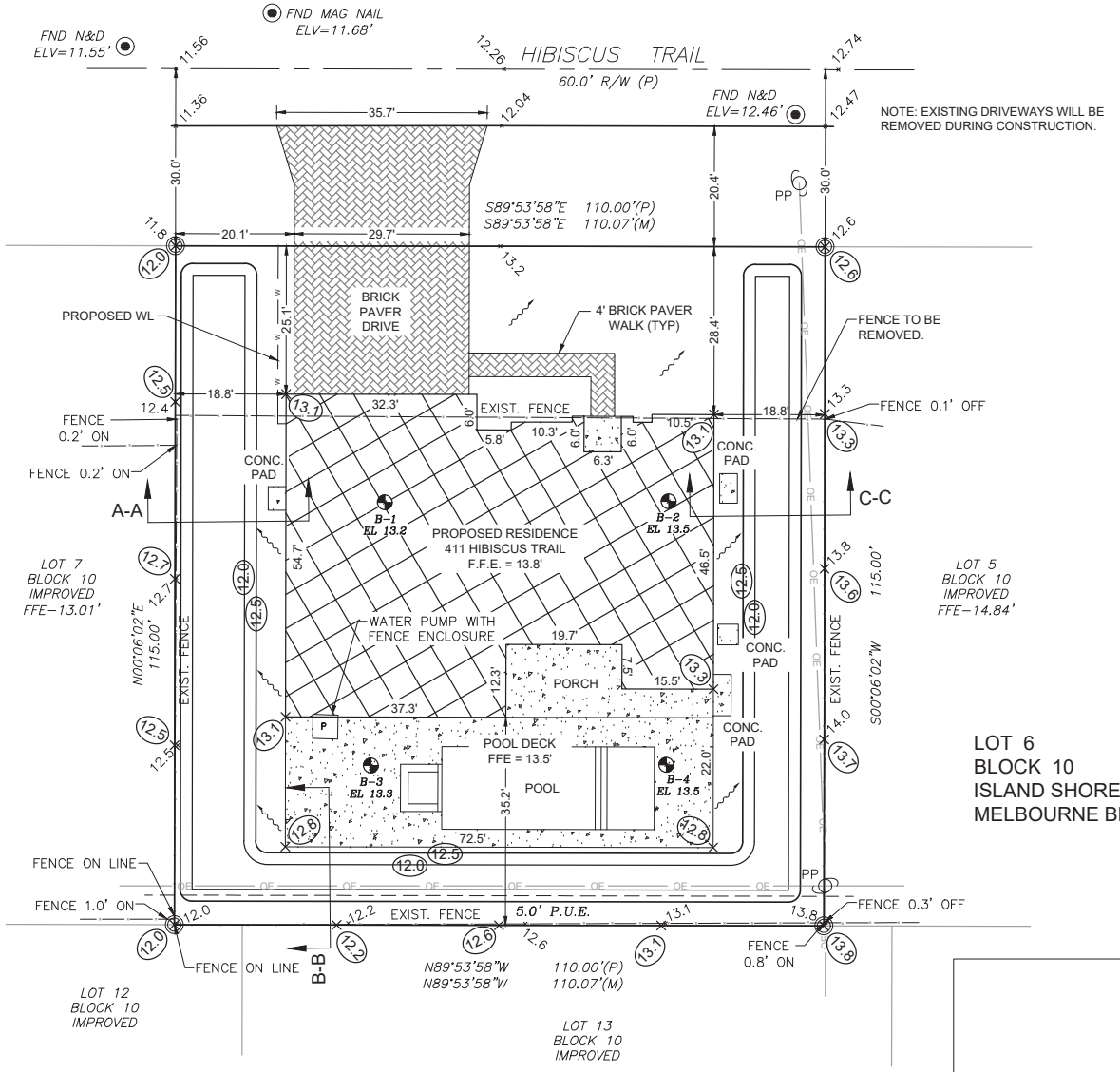
SECTION B-B
N.T.S.



SECTION C-C
N.T.S.

GENERAL NOTES:

1. PROPERTY LAYOUT INFORMATION AND ELEVATIONS SHOWN HAVE BEEN PROVIDED TO THE ENGINEER BY THE OWNER AND/OR OWNER'S AGENT. ITHEY HAVE NOT BEEN VERIFIED FOR ACCURACY. ENGINEER DOES NOT ACCEPT LIABILITY FOR INCORRECT OR INACCURATE PROPERTY AND/OR AREA INFORMATION PROVIDED.
2. THE MINIMUM THE FINISHED FLOOR ELEVATION (FFE) IS 18 INCHES ABOVE THE CENTERLINE ELEVATION OF 12.26 FEET.
3. ALL SITE DRAINAGE SHALL BE DIRECTED AWAY FROM THE RESIDENCE. OVERHANGS THAT HAVE GUTTERS, ROOF VALLEY'S DOWNSPOUTS, SCUPPERS, OR OTHER RAINWATER OR COLLECTION DEVICES SHALL NOT BE DIRECTED TOWARDS ADJACENT PARCELS OF LAND LOCATED WITHIN TEN (10) FEET OF THE TERMINUS OF SUCH COLLECTION DEVICES.
4. SIDE SLOPES ON ANY AREA WITHIN THE LOT CANNOT EXCEED ONE (1) FOOT VERTICAL FOR EACH FOUR (4) FEET HORIZONTAL.
5. DRAINAGE EASEMENTS SHALL NOT CONTAIN PERMANENT IMPROVEMENTS, INCLUDING BUT NOT LIMITED TO SIDEWALKS, DRIVEWAYS, IMPERVIOUS SURFACES, PATIOS, DECKS, POOLS, AIR CONDITIONERS, STRUCTURES, AND UTILITY SHEDS.
5. CONTRACTOR TO FIELD VERIFY ELEVATIONS OF ADJACENT PROPERTIES PRIOR TO CONSTRUCTION FOR CONNECTION TO EXISTING PROPERTY LINE WITHOUT BLOCKING OR DRAINING ONTO ADJACENT PROPERTIES. CONTRACTOR TO COORDINATE GRADING ALONG COMMON LOT LINES WITH ADJACENT NEIGHBORS TO ENSURE CONTINUED POSITIVE DRAINAGE. CONTACT ENGINEER OF RECORD IF ELEVATIONS AS PROPOSED CANNOT BE MAINTAINED.
6. ALL ELEVATIONS SHOWN HEREON ARE BASED ON THE NAVD88 DATUM. CONVERSION FROM NAVD88 TO NGVD29 IS 1.43'. EXISTING ELEVATIONS WERE PROVIDED TO THE ENGINEER BY THE OWNER AND/OR OWNER'S AGENT AND WERE NOT VERIFIED FOR ACCURACY.



CONVERSION TO NGVD29: +1.43	ELEVATIONS	
ELEVATIONS BASED ON: NAVD88	NGVD29	NAVD88
BREVARD COUNTY BENCHMARK: 422-43	10.41	8.98

THIS PLAN HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY ELIA G. TWIGG, PE USING A DIGITAL SIGNATURE AND DATE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

CONTRACT NO: C2405.16
JOB NO.: 25.06-073
DATE: 07/18/25
SHEET 1 OF 1

ELIA G. TWIGG, PE
FLORIDA LICENSE NO: 65711

TITLE: LOT DRAINAGE PLAN

PARCEL ID: 28-38-06-75-10-6
LOT(S) / BLOCK: LOT 6 BLK 10
SUBDIVISION: ISLAND SHORES OF MELBOURNE BEACH
PLAT BK/PG: 10 / 52
SCALE: 1" = 20'
CONTRACTOR: LOWMAN BROTHERS

PROJECT:
ZETH JAMES
411 HIBISCUS TRAIL
MELBOURNE BEACH, FL 32951

REVISIONS:

ATLANTIC SOLUTIONS
355 TORTOISE VIEW DRIVE, SUITE E
SATELLITE BEACH, FL 32937
Ph: (321) 413-4027
eliatwigg@atlanticsolutions.com

Map Scale: 1:1,750 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 25 50 100 150

Feet: 0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features

- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features

- Streams and Canals

Transportation

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

Background

- Aerial Photography

MAP INFORMATION

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

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

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

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

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

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

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

Soil Survey Area: Brevard County, Florida
Survey Area Data: Version 24, Aug 28, 2024

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

Date(s) aerial images were photographed: Jan 19, 2022—Mar 2, 2022

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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
25	Canaveral-Palm Beach-Urban land complex	11.9	100.0%
Totals for Area of Interest		**11.9**	**100.0%**

Brevard County, Florida

25—Canaveral-Palm Beach-Urban land complex

Map Unit Setting

National map unit symbol: 1lg35
Elevation: 10 to 20 feet
Mean annual precipitation: 49 to 57 inches
Mean annual air temperature: 68 to 75 degrees F
Frost-free period: 350 to 365 days
Farmland classification: Not prime farmland

Map Unit Composition

Canaveral and similar soils: 31 percent
Palm beach and similar soils: 30 percent
Urban land: 29 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Canaveral

Setting

Landform: Flats on marine terraces, ridges on marine terraces
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Sandy marine deposits

Typical profile

A - 0 to 6 inches: sand
C - 6 to 12 inches: sand
C - 12 to 80 inches: coarse sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Very high (19.98 to 50.02 in/hr)
Depth to water table: About 12 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 6.0
Available water supply, 0 to 60 inches: Very low (about 1.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: A/D
Ecological site: R155XY170FL - Sandy Coastal Grasslands and Forests
Forage suitability group: Forage suitability group not assigned (G156BC999FL)
Other vegetative classification: Forage suitability group not assigned (G156BC999FL)
Hydric soil rating: No

Description of Palm Beach

Setting

Landform: Flats on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Shells and sandy marine deposits

Typical profile

A - 0 to 3 inches: sand
C - 3 to 80 inches: sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Very high (19.98 to 50.02 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 30 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Very low (about 1.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: A
Ecological site: R155XY230FL - Sandy Scrub on Ridges, Knolls, and Dunes of Xeric Uplands
Forage suitability group: Forage suitability group not assigned (G156BC999FL)
Other vegetative classification: Forage suitability group not assigned (G156BC999FL)
Hydric soil rating: No

Description of Urban Land

Setting

Landform: Marine terraces
Landform position (three-dimensional): Interfluve, talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: No parent material

Interpretive groups

Land capability classification (irrigated): None specified
Ecological site: R155XY170FL - Sandy Coastal Grasslands and Forests
Forage suitability group: Forage suitability group not assigned (G156BC999FL)
Other vegetative classification: Forage suitability group not assigned (G156BC999FL)
Hydric soil rating: Unranked

Minor Components

Paola

Percent of map unit: 4 percent
Landform: Flats on marine terraces, rises on marine terraces
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: R155XY230FL - Sandy Scrub on Ridges, Knolls, and Dunes of Xeric Uplands
Other vegetative classification: Forage suitability group not assigned (G156BC999FL), Sand Pine Scrub (R155XY001FL)
Hydric soil rating: No

Welaka

Percent of map unit: 3 percent
Landform: Rises on marine terraces
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: R155XY180FL - Sandy Scrub on Rises, Ridges, and Knolls of Mesic Uplands
Other vegetative classification: Forage suitability group not assigned (G156BC999FL), Sand Pine Scrub (R155XY001FL)
Hydric soil rating: No

Pomello

Percent of map unit: 3 percent
Landform: Flats on marine terraces, rises on marine terraces
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F155XY150FL - Sandy Flatwoods and Hammocks on Rises and Knolls of Mesic Uplands

Other vegetative classification: Forage suitability group not assigned (G156BC999FL), Sand Pine Scrub (R155XY001FL)
Hydric soil rating: No

Data Source Information

Soil Survey Area: Brevard County, Florida
Survey Area Data: Version 24, Aug 28, 2024

Appendix B

STORMWATER CALCULATIONS

STORMWATER CALCULATIONS

411 Hibiscus Trail
Melbourne Beach, FL 32951

SITE INFORMATION	IMPERVIOUS AREA (SF)	PERVIOUS AREA (SF)	TOTAL AREA (SF)
Total Lot			**12658**
Home & Front Porch	3,475		
Porch & Pool	1,912		
Concrete Pads	60		
Driveway & Walkway	870		
Green Space		6,341	
Total	**6,317**	**6,341**	**12,658**
Total	**50%**	**50%**	

TOTAL DRY RETENTION VOLUME

Drainage Areas	Top Area (SF)	Bottom Area (SF)	Depth (FT)	VOLUME (CF)
Perimeter Swale	3,113	1,888	0.5	1,250
				0
TOTAL	**3,113**	**1,888**	**0.5**	**1,250**

Total Dry Retention Vol. ==> $V_{drainage}$ 1,250 CF

TOTAL VOLUME OF WATER TO RETAIN

Requirement = 8" retention for 10 yr/24 hr storm

REQUIREMENT FOR RECOVERY	DEPTH (in.)	DEPTH (FT)	AREA (SF)	VOLUME (CF)
8" X Impervious	8	0.67	6,317	4,212

Total volume to retain ==> V_{retain} = 4,212 CF

UNSATURATED VERTICAL AND SATURATED LATERAL FLOW ANALYSIS

Calcs based on SJRWMD Permit Information Manual
Part X, Section 23.0 - Methodologies & Design Examples

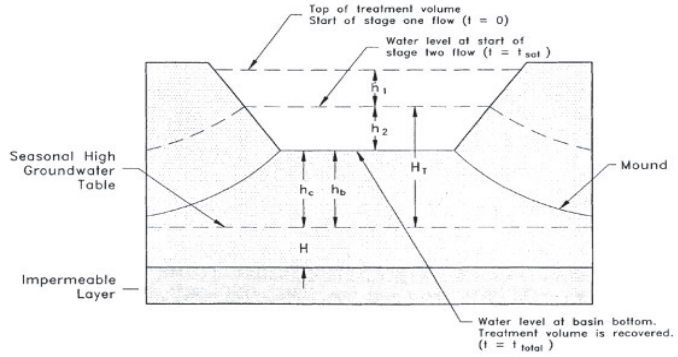


Fig 23-4: Design Parameters for Groundwater Mounding Analysis for Stage 1 & Stage 2 Flow (Source: Andreyev and Wisemand, 1989)

Calculate volume of water infiltrated in unsaturated vertical (Stage 1) flow & time to infiltrate this volume

1. Calculate Volume infiltrated during Stage 1 ==> V_u

Per Equation 23-3 ==> $V_u = (A_b)(h_b)(f)$ CF

V_u = 3,068 CF

V_u is the total volume of water required to saturate the soil below the basin bottom (h_b)

A_b = Area of Basin Bottom
A_b = 1,888 SF
h_b = Height of basin bottom to SHWT [SHWT is 2' above exist. measured level per Geotech Report]
h_b = 6.5 ft
f = Fillable porosity (generally 0.2 or 0.3 - use 0.25 average).
f = 0.25

2. Calculate Unsaturated Vertical Hydraulic Conductivity ==> K_{vu}

Per Equation 23-11 ==> $K_{vu} = (2/3)K_{vs}$ ft/day

K_{vu} = 27 ft/day

K_{vs} = Vertical saturated flow rate per USDA Web Soil Survey
K_{vs} = 19.98 in/hr
K_{vs} = 39.96 ft/day
K_{vs} = 1.665 ft/hr

3. Calculate the Design infiltration rate ==> I_d

Per Equation 23-1 ==> $I_d = K_{vu}/FS$

I_d = 13.3 ft/day

FS = Factor of Safety [use 2]
FS = 2

STORMWATER CALCULATIONS

411 Hibiscus Trail
Melbourne Beach, FL 32951

4. Calculate time to saturate soil beneath the drainage area ==> t_{sat}

Per Equation 23-2 ==> $t_{sat} = (f)(h_b)/I_d$ Days

t_{sat} = 0.12 Days

t_{sat} = 2.9 Hours

5. Calculate the remaining treatment volume to be recovered under saturated lateral (Stage 2) flow conditions ==> V_2

$V_2 = V_{retain} - V_u$ CF — V_2 = Treatment volume to be recovered in saturated lateral flow

V_2 = 1,144 CF — V_{retain} = 4,212 CF

V_u = 3,068 CF

6. Calculate the elevation of V_2 at start of lateral flow ==> h_2

NOTE: the elevation h_2 is calculated by interpolating. It is assumed that the drainage areas continue up to this elevation.

$V_{drainage}$ = 1,250 CF

$h_{drainage}$ (h_v)= 0.5 ft

V_2 = 1,144 CF

h_2 = 0.5 ft NOTE: with h_2 at 0.5 feet, that means it will be at the top of the swale

7. Calculate F_Y and F_X

NOTE: when the V_{retain} is recovered (t = t_{total}), the water level is at the bottom of the drainage area

Per Equation 23-8 ==> $H_T = h_b + h_2$ ft — H_T = Height of water above SHWT at start of saturated lateral flow.

H_T = 7.0 ft — h_b = 6.5 ft

h_2 = 0.5 ft

Per Equation 23-6 ==> $F_Y = h_c/H_T$ — F_y = Dimensionless representing % water level decline below max level

F_Y = 0.93 — h_c = height of water above SHWT at time t

$h_b = h_c$ = 6.5 ft

Need length (L) to width (W) ratio of basin bottom since that is when water level will be at bottom at time t

L = 306 ft

W = 6 ft

L/W = 51.00 ft

Determine F_x using figure 23-7 (pg 23-17 or Page 298 of 652)

f = 0.25

L/W = 51.00

F_Y = 0.93

Fx = 1.0

8. Calculate the time (t_2) to recover the remaining treatment volume (V_2) under saturated lateral flow

Per Equation 23-7 ==> D = H + hc/2 — D = Average thickness of the aquifer.

D = 11.75 ft — H = Initial saturated thickness of the aquifer (ft) - NOTE: based on the UES Geotech report, UES did not encounter a stratum that exhibited restricted flow rates, so it is assumed to be located at the boring terminus, which is at 15 ft below grade. Therefore, the initial saturated thickness is 15 ft minus 6.5 ft for SWHT.

H = 8.5 ft

Per Equation 23-9 ==> $t_2 = \frac{W^2}{4(K_H)(D)(F_x)^2}$ — W = Width of drainage area bottom at water level at time (t)

W = 4 ft

t_2 = 0.0085 Days — K_H = Average horizontal hydraulic conductivity (ft/day)

t_2 = 0.20 Hours — K_H = 19.98 in/hr — NOTE: K_H was not provided and can be up to 2 times higher than the K_{vs}. To be conservative, use the same value as K_{vs}.

K_H = 39.96 ft/day

TOTAL RECOVERY TIME

9. Total time to recover the treatment volume (t_{total}) equals the time to recover during unsaturated vertical flow (t_{sat}) and lateral saturated flow (t_2)

$t_{total} = t_{sat} + t_2$

t_{total} = 3.13 Hours

Appendix C

GEOTECHNICAL REPORT BY UES

June 10, 2025

Lowman Brothers Construction
4011 Digital Light Drive, Suite 101
Melbourne, Florida 32934

Attention: Mr. John Canarie

Reference: **Subsurface Exploration**
Proposed Residence
411 Hibiscus Trail
Melbourne Beach, Brevard County, Florida
UES Project No. 0330.2500113.0000

Dear Mr. John Canarie:

UES Professional Solutions, LLC. (UES) has completed a subsurface exploration at the above referenced site in Melbourne Beach, Brevard County, Florida. Our exploration was authorized by you and was conducted as outlined in UES's proposal No. 0330.0525.00029. This exploration was performed in accordance with generally accepted soil and foundation engineering practices. No other warranty, expressed or implied, is made.

The following report presents the results of our field exploration with a geotechnical engineering interpretation of those results with respect to the project characteristics as provided to us. We have included general engineering recommendations concerning site preparation procedures & foundation design parameters, and our estimates of the typical wet season high groundwater levels at the boring locations.

We appreciate the opportunity to have worked with you on this project and look forward to a continued association. Please do not hesitate to contact us if you should have any questions, or if we may further assist you as your plans proceed.

Sincerely yours,
UES PROFESSIONAL SOLUTIONS, LLC.

Digitally signed by Richard E Hoaglin
DN: c=US, o=Universal Engineering Sciences, dnQualifier=A01410D000001964008897F00033F4C, cn=Richard E Hoaglin
Date: 2025.06.10 12:50:28 -04'00'

Adam Dubaz
Project Manager

Richard E. Hoaglin, P.E.
Regional Manager
Florida registration No. 48796

1 – Client (by e-mail)
UESDOCS # 2150462

UES PROFESSIONAL SOLUTIONS, LLC.

SUBSURFACE EXPLORATION

Proposed Residence
411 Hibiscus Trail Due Diligence
Melbourne Beach, Brevard County, Florida
UES Project No. 0330.2500113.0000

June 10, 2025

PREPARED FOR:
Lowman Brothers Construction, LLC.
4011 Digital Light Drive, Suite 101
Melbourne, Florida 32934

PREPARED BY:
UES Professional Solutions, LLC.
820 Brevard Avenue
Rockledge, Florida 32955
(321) 638-0808

TABLE OF CONTENTS

820 Brevard Ave | Rockledge, FL 32955 | ph 321-638-0808 | fax 321-638-0978
TeamUES.com

LIST OF TABLES

FIGURES

APPENDICES

EXHIBITS

820 Brevard Ave | Rockledge, FL 32955 | ph 321-638-0808 | fax 321-638-0978
TeamUES.com

1.0 INTRODUCTION

UES Professional Solutions, LLC. (UES) has completed a subsurface exploration for the proposed residence at 411 Hibiscus Trail in Melbourne Beach, Brevard County, Florida. Our exploration was authorized by Mr. John Canarie of Lowman Brothers Construction, LLC. and was conducted as outlined in UES's proposal No. 0330.0525.00029. This exploration was performed in accordance with generally accepted soil and foundation engineering practices. No other warranty, expressed or implied, is made.

2.0 PROJECT DESCRIPTION

It is our understanding from review of partial information submitted to UES by the client that the proposed project will include the construction of a new residence at 411 Hibiscus Trail in Melbourne Beach, Florida.

Based on the preliminary site layout provided, we assume the proposed residence will be a one-story masonry structure located in the approximate central area of the property, near the boring locations shown on the attached Figure No. 1. We assume that the finished first floor level will be approximately 2 to 3 feet above existing grades.

We assume that the proposed structure will be constructed using a combination of reinforced concrete, masonry and wood framing. Based on our previous experience with similar structures, we assume that the proposed building will have maximum loading conditions on the order of 20 kips per column, 5 kips per linear foot for load bearing walls and 100 psf for on grade floor slabs.

If any of the above information is incorrect or changes prior to construction, please contact UES immediately so that we may revise the recommendations contained in this report, as necessary. In order to verify that our recommendations are properly interpreted and implemented, UES should be allowed to review the final design and specifications prior to the start of construction.

3.0 PURPOSE

The purposes of this exploration were:

- to explore and evaluate the subsurface conditions at the site with special attention to potential problems that may impact the proposed development,
- to provide our estimates of the typical wet season high groundwater levels at the boring locations
- to provide general engineering recommendations concerning site preparation procedures & foundation design parameters for the proposed structure.

4.0 SITE DESCRIPTION

The subject site is located within Section 6, Township 28 South, Range 38 East in Brevard County, Florida. More specifically, the new residence will be located on the south side of Hibiscus Trail and is listed with an address of 411 Hibiscus Trail in Melbourne Beach, Florida. A

820 Brevard Ave | Rockledge, FL 32955 | ph 321-638-0808 | fax 321-638-0978
TeamUES.com

single-family residence once occupied the property and was demolished sometime in 2006. At the time of drilling the property surface was mostly cleared.

4.1 SOIL SURVEY

The Brevard County Soil Survey (BCSS), issued by the U.S. Department of Agriculture Soil Conservation Service in 1974, maps one primary soil type (pre-developmental) within the general area of the site. A brief description of the soil type is provided in the following Table I.

TABLE I
BREVARD COUNTY SOIL SURVEY DESIGNATED SOIL TYPES

Soil Type (Map Symbol)	Brief Description
Canaveral-Palm Beach-Urban land complex (Ga)	Well drained sandy soils that consist of reworked and leveled sandy materials where 25 to 40 percent of the surface area is covered with buildings or pavements.

4.2 TOPOGRAPHY

According to information obtained from the United States Geological Survey (USGS) Melbourne East, FL 7.5-minute topographic quadrangle map (dated 2024); ground surface elevation across the project site is approximately +15 feet North American Vertical Datum (NAVD).

5.0 SCOPE OF SERVICES

The services conducted by UES during our subsurface exploration program were as listed below:

- Drill four (4) Standard Penetration Test (SPT) borings within the proposed building footprints to depths of 7 to 15 feet below existing land surface (bls).
- Secure samples of representative soils encountered in the soil borings for review, laboratory analysis and classification by a Geotechnical Engineer.
- Measure the existing site groundwater levels and provide an estimate of the typical wet season high groundwater levels at the boring locations.
- Assess the existing soil conditions with respect to the proposed construction.
- Prepare a report that documents the results of our subsurface exploration and analysis with general geotechnical engineering recommendations.

6.0 LIMITATIONS

This report has been prepared in order to aid the client/architect in the design and construction of the proposed residence at 411 Hibiscus Trail in Melbourne Beach, Florida. The scope is limited to the specific project and locations described herein. Our description of the project's design parameters represents our understanding of the significant aspects relevant to soil and foundation characteristics. In the event any changes in the design or location of the structure as outlined in this report are planned, we should be informed so the changes can be reviewed and the conclusions of this report modified, if required, and approved in writing by UES.

820 Brevard Ave | Rockledge, FL 32955 | ph 321-638-0808 | fax 321-638-0978
TeamUES.com

The recommendations submitted in this report are based upon the data obtained from the soil borings performed at the locations indicated on the Boring Location Plan and from other information as referenced. This report does not reflect any variations that may exist between boring locations and within unexplored areas of the site. The nature and extent of such variations may not become evident until the course of construction. If variations become evident, it will then be necessary for a re-evaluation of the recommendations of this report after performing on-site observations during the construction period and noting the characteristics of the variations. Deleterious soils were not encountered within any of the borehole locations; however, we cannot preclude their presence between boring locations, or within unexplored portions of the property. Therefore, this report should not be used for estimating such items as cut and fill quantities.

Borings for a typical geotechnical report are widely spaced and generally not sufficient for reliably detecting the presence of isolated, anomalous surface or subsurface conditions, or reliably estimating unsuitable or suitable material quantities. Accordingly, UES does not recommend relying on our boring information to negate presence of anomalous materials or for estimation of material quantities unless our contracted services ***specifically*** include sufficient exploration for such purpose(s) and within the report we so state that the level of exploration provided should be sufficient to detect such anomalous conditions or estimate such quantities. Therefore, UES will not be responsible for any extrapolation or use of our data by others beyond the purpose(s) for which it is applicable or intended.

All users of this report are cautioned that there was no requirement for UES to attempt to locate any manmade buried objects or identify any other potentially hazardous conditions that may exist at the site during the course of this exploration. Therefore, no attempt was made by UES to locate or identify such concerns. UES cannot be responsible for any buried manmade objects or environmental hazards which may be subsequently encountered during construction that are not discussed within the text of this report. We can provide this service if requested.

For a further description of the scope and limitations of this report, please review the document attached within Exhibit 1, "Important Information about Your Geotechnical Engineering Report", prepared by GBA/The Geoprofessional Business Association.

7.0 FIELD METHODOLOGIES

7.1 STANDARD PENETRATION TEST BORINGS

The four (4) SPT borings, designated B1 through B4 on the attached Figure No. 1, were performed in general accordance with the procedures of ASTM D 1586 (Standard Method for Penetration Test and Split-Barrel Sampling of Soils). The SPT drilling technique involves driving a standard split-barrel sampler into the soil by a 140 pound hammer, free falling 30 inches. The number of blows required to drive the sampler 1 foot, after an initial seating of 6 inches, is designated the penetration resistance, or N-value, an index to soil strength and consistency. The soil samples recovered from the split-barrel sampler were visually inspected and classified in general accordance with the guidelines of ASTM D 2487 (Standard Classification of Soils for Engineering Purposes [Unified Soil Classification System]).

The SPT soil borings were performed with a truck mounted CME 45 drilling rig using either rotary mud techniques or continuous flight augers to the termination depth. The boring locations were determined in the field using a handheld GPS receiver. No survey control was provided

820 Brevard Ave | Rockledge, FL 32955 | ph 321-638-0808 | fax 321-638-0978
TeamUES.com

on-site, and our boring locations should be considered only as accurate as implied by the methods of measurement used. The approximate boring locations are shown on the attached Figure No. 1.

8.0 LABORATORY METHODOLOGIES

8.1 PARTICLE SIZE ANALYSIS

We completed #200 sieve particle size analyses on two (2) representative soil samples. These samples were tested according to the procedures listed ASTM D 1140 (Standard Test Method for Amount of Material in Soils Finer than the No. 200 Sieve). The percentage of soil particles passing the #200 sieve in each sample tested is shown on the appropriate attached boring logs.

9.0 SOIL STRATIGRAPHY

The results of our field exploration, together with pertinent information obtained from the SPT soil borings such as soil profiles, penetration resistance and stabilized groundwater level, are shown on the boring logs included in Appendix A. The Key to Boring Logs, Soil Classification Chart is also included in Appendix A. The soil profile was prepared from the field logs after the recovered soil samples were examined by a Geotechnical Engineer. The stratification lines shown on the boring logs represent the approximate boundaries between soil types and may not depict exact subsurface soil conditions. The actual soil boundaries may be more transitional than depicted.

A generalized profile of the soils encountered at our boring locations is presented in the following Table II. For more detailed soil profiles, please refer to the attached boring logs found in Appendix A.

TABLE II
GENERALIZED SOIL PROFILE

Depth Encountered (feet, bls)	Approximate Thickness (feet)	Soil Description
Surface	2	Fill soils consisting of fine sands with varying quantities of gravel and broken shell; loose to medium dense.
2	5+ to 10	Fine sand [SP], loose.
7 to 12	3+ to 8+	Fine sand [SP] with varying amounts of broken shell and occasional cemented rock layers, loose.

NOTE: [ ] denotes Unified Soil Classification system designation.
+ indicates strata encountered at boring termination, total thickness undetermined.

10.0 GROUNDWATER CONDITIONS

10.1 EXISTING GROUNDWATER CONDITIONS

We measured the water levels within the boreholes on June 5, 2025, after the ground water was allowed to stabilize. As shown on the attached boring logs, the groundwater level depths ranged

820 Brevard Ave | Rockledge, FL 32955 | ph 321-638-0808 | fax 321-638-0978
TeamUES.com

from 8.1 feet bls at boring location B1 to 8.5 feet bls at the boring location B4. Fluctuations in groundwater levels should be anticipated throughout the year, primarily due to seasonal variations in rainfall, surface runoff, and other factors that may vary from the time the borings were conducted.

10.2 Typical Wet Season High Groundwater Levels

The typical wet season high groundwater level is defined as the highest groundwater level sustained for a period of 2 to 4 weeks during the "wet" season of the year, for existing site conditions, in a year with average normal rainfall amounts. Based on historical data, the rainy season in Brevard County, Florida is between June and October of the year. In order to estimate the wet season water level at the boring locations, many factors are examined, including the following:

a. Measured groundwater level
b. Drainage characteristics of existing soil types
c. Season of the year (wet/dry season)
d. Current & historical rainfall data (recent and year-to-date)
e. Natural relief points (such as lakes, rivers, swamp areas, etc.)
f. Man-made drainage systems (ditches, canals, etc.)
g. Distances to relief points and man-made drainage systems
h. On-site types of vegetation
i. Area topography (ground surface elevations)

Groundwater level readings were taken on June 5, 2025. According to data from the National Weather Service, the total rainfall in the previous month of May for Central Brevard County was approximately 4.4 inches, roughly 0.9 inches above the normal levels for the month of May. Year-to-date rainfall for 2025 through June 5, 2025, was approximately 10.4 inches, roughly 3.8 inches below the normal level for this time period.

Based on this information and the factors listed above, we estimate that the typical wet season high groundwater levels at the boring locations will be approximately 2 feet above the existing measured levels. Please note, however, that peak stage elevations immediately following various intense storm events may be somewhat higher than the estimated typical wet season high levels.

Variations in the silt/clay content of the near surface soils at this site, there may be occasional isolated pockets of “perched” groundwater within the project area, particularly after periods of prolonged wet weather. Such temporary perched water table levels may be significantly higher than the estimated wet season high groundwater levels indicated above.

11.0 LABORATORY RESULTS

11.1 Particle Size Analysis

The soil samples submitted for analysis were classified as fine sand [SP]. The percentage of soil sizes passing the #200 sieve size are shown on the attached boring logs at the approximate depth sampled.

820 Brevard Ave | Rockledge, FL 32955 | ph 321-638-0808 | fax 321-638-0978
TeamUES.com

12.0 PROPOSED RESIDENCE

12.1 ANALYSIS

Based on the results of the soil borings, the near surface soils at this site consist primarily of loose to medium dense sandy fill soils to a depth of about 2 feet bls, underlain by loose fine sandy soils to the maximum depth of 15 feet bls.

Based on the results of our subsurface exploration the proposed structure can be supported upon conventional shallow spread footings, provided that any loose soil pockets that are encountered, or created, during construction are properly re-densified prior to footing installation. We believe that this can be effectively accomplished by compacting any loosened foundation soils with medium sized vibratory rollers, then filling to grade (as required) in compacted lifts as recommended in section 12.3 (Site Preparation Procedures) of this report.

The following recommendations are made based upon a review of the attached soil test data, our understanding of the proposed construction, and experience with similar projects and subsurface conditions. If the structural loadings, building location or grading plans change from those discussed previously, we request the opportunity to review and possibly amend our recommendations with respect to those changes.

12.2 RECOMMENDATIONS

Provided our recommended site preparation procedures are followed, we recommend designing conventional, shallow spread footings foundations for a maximum allowable soil-contact pressure of 2,000 pounds per square foot (psf). The base of all footings should be at least 24 inches below finished grade elevation. Backfill above and around the footings should be compacted at least 95 percent of Modified Proctor test maximum dry density (ASTM D1557) as recommended below. For a design criteria, we recommend using an allowable passive earth pressure coefficient of K_p=3.0.

We recommend using a sheet vapor barrier, such as Visqueen, beneath the building slab-on-grade to help control moisture migration through the slab. Floor slabs can be supported upon the compacted fill and should be structurally isolated from other foundations elements or adequately reinforced to prevent distress due to differential movements. We recommend a minimum thickness of at least 4 inches be maintained for the concrete floor slab. If there are areas of anticipated heavy floor loads, then we recommend a minimum thickness of at least 5 inches be maintained.

12.3 SITE PREPARATION PROCEDURES

Following is a list of our recommended site preparation procedures to prepare the site for the proposed construction.

1. If necessary, take measures to lower the groundwater levels to at least 18 inches below bottom of footing elevations. To avoid disturbances to bearing soils, we recommend that this dewatering be continuous until construction and backfilling has reached a level of at least two feet above the groundwater table level.

820 Brevard Ave | Rockledge, FL 32955 | ph 321-638-0808 | fax 321-638-0978
TeamUES.com

2. Excavate the proposed footings, plus an additional margin of at least two feet beyond the proposed edges of the foundations to bottom of footing level. At this point, prior to any further construction, UES personnel should be allowed to examine and probe the bottom of excavation subsoils to ascertain if there are unsuitable soils requiring further removal. All such soils encountered should be removed for a depth of at least 24 inches below the bottom of the proposed footings, or as directed by UES at the time of excavation.

3. After removal of any unsuitable bedding soils, backfill the excavated pockets to the proposed bottom of foundation levels with clean fine sands [SP] placed in 12-inch-thick loose lifts.

4. If vibratory equipment is used to compact the footing bearing soils and any subsequent fill, then we recommend using vibratory plates or rollers weighing less than 2 tons.

5. The footing bearings soils including the two feet margin should be densified to at least 95 percent of the Modified Proctor test maximum dry density (ASTM D 1557, Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft^3 (2,700 kN-m/m^3))) to at least 12 inches below the bottom of footing level. Any fill required afterwards to reach footing level should also consist of fine sands [SP] or fine sands with silt [SP-SM] compacted to at least 95% of the modified proctor test.

6. Construct the footing foundations, taking care not to disturb the bearing soils.

7. Backfill above and adjacent to the footings and across the floor slabs areas should also be fine sands [SP] or fine sand with silt [SP-SM] placed in 12-inch loose lifts with each lift compacted to at least 95% of the Modified Proctor Test maximum dry density. Backfilling should not begin until the footings have had sufficient time to cure and gain sufficient strength.

8. Field density tests should be performed by UES at appropriate times throughout the earthwork operations in order to verify that the compaction requirements have been met. Density tests should be performed after compaction of each lift of structural fill/backfill and in the bottom of all foundation excavations.

14.0 SPECIAL CONSIDERATIONS

Vibrations produced during vibratory compaction operations at the site may be significantly noticeable within 100 feet and may cause settlement distress of adjacent structures if not properly regulated. Therefore, provisions should be made to monitor these vibrations by UES so that any necessary modifications in the compaction operations can be made in the field before potential damages occur. In addition, the conditions of the existing adjacent structures should be ascertained and documented prior to vibratory operations. Slight cosmetic damage (e.g. hairline cracks in stucco, plaster, or masonry) may occur in conjunction with compaction operations.

Cemented rock layers were encountered below a depth of 12 feet bls at some of the boring locations; perhaps forming dense boulders and/or ledges. Shallower rock layers may exist between boring locations and within unexplored areas of the site. Where cementation is the greatest these layers may hinder excavation with typical backhoes or similar equipment.

820 Brevard Ave | Rockledge, FL 32955 | ph 321-638-0808 | fax 321-638-0978
TeamUES.com

Where coquina cobbles or boulders are excavated within borrow zones at the site, we recommend that they be broken up to sizes less than 3 inches in diameter before being included within structural fill areas. We recommend that such items as utility lines & foundations be kept as shallow as possible to help avoid excavating through the rock filled zones.

15.0 EXCAVATIONS

Excavations should be sloped as necessary to prevent slope failure and to allow backfilling. As a minimum, temporary excavations below 4-foot depth should be sloped in accordance with OSHA regulations (29 CFR Par 1926) dated October 31, 1989. Where lateral confinement will not permit slopes to be laid back, the excavation should be shored in accordance with OSHA requirements. During excavation, excavated material should not be stockpiled at the top of the slope within a horizontal distance equal to the excavation depth. Provisions for maintaining workman safety within excavations is the sole responsibility of the contractor.

16.0 DEWATERING

Based on the water level conditions encountered, and depending upon the construction methods used, control of the groundwater may be required at this project. If dewatering does become necessary, the actual method(s) of dewatering should be determined by the contractor.

Dewatering should be accomplished with the knowledge that the permeability of soils decreases with increasing silt [M] and/or clay [C] content. Therefore, a silty fine sand [SM] is less permeable than a fine sand [SP]. The fine sand [SP], fine sand with silt [SP-SM] and silty fine sand [SM] soil types can usually be dewatered by well pointing.

It should be noted that the typical wet season high groundwater levels previously listed may be temporarily exceeded during any given year in the future. Should impediments to surface water drainage exist on the site, or should rainfall intensity and duration, or total rainfall quantities exceed the normally anticipated rainfall quantities, groundwater levels may exceed our seasonal high estimates. We recommend positive drainage be established and maintained on the site during construction. We further recommend permanent measures be constructed to maintain positive drainage from the site throughout the life of the project. We recommend that the contract documents provide for determining the depth to the groundwater table just prior to construction, and for any required remedial dewatering.

17.0 CLOSURE

The soil and groundwater conditions encountered during our subsurface exploration of the property and the results of the laboratory analysis identified no geotechnical issues that would significantly impact the proposed construction, as we currently understand it, using conventional construction practices. Standard methods of excavation, compaction and backfilling should adequately prepare the site.

The geotechnical engineering design does not end with the advertisement of the construction documents. The design is an on-going process throughout construction. Because of our familiarity with the site conditions and the intent of the engineering design, we are most qualified to address site problems or construction changes, which may arise during construction, in a timely and cost-effective manner. We recommend the owner retain the UES Rockledge office to provide inspection & testing services during earthwork & foundation operations.

* * * * * *

820 Brevard Ave | Rockledge, FL 32955 | ph 321-638-0808 | fax 321-638-0978
TeamUES.com

FIGURES

APPROXIMATE BORING LOCATION

FIGURE IS BASED UPON A GOOGLE EARTH AERIAL PHOTOGRAPH

N

UES™

DUE DILIGENCE
411 HIBISCUS TRAIL
MELBOURNE, FLORIDA

BORING LOCATION PLAN

DRAWN BY:	AD	DATE:	6/6/2025	CHECKED BY:	RH	DATE:	6/6/2025
SCALE:	1" = 80'	PROJECT NO:	0330.2500113.0000			PAGE NO:	FIGURE 1

APPENDIX A

UNIVERSAL ENGINEERING SCIENCES
BORING LOG

PROJECT NO.:	0330.2500113.0000
REPORT NO.:	
APPENDIX:	A

PROJECT: DUE DILIGENCE
411 HIBISCUS TRAIL
MELBOURNE, FLORIDA

BORING DESIGNATION: **B1** SHEET: **1 of 1**
SECTION: TOWNSHIP: RANGE:

CLIENT:

LOCATION: SEE BORING LOCATION PLAN

REMARKS:

G.S. ELEVATION (ft):
WATER TABLE (ft): 8.1
DATE OF READING: 6/5/2025
EST. W.S.W.T. (ft):

DATE STARTED: 6/3/25
DATE FINISHED: 6/3/25
DRILLED BY: JL, DW
TYPE OF SAMPLING:

DEPTH (FT.)	SAMPLE	BLOWS PER 6" INCREMENT	N (BLOWS/ FT.)	W.T.	SYMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS LL	ATTERBERG LIMITS PI	K (FT./ DAY)	ORG. CONT. (%)
0						**fine SAND, trace of gravel and clay lumps**, brown, [SP] (fill)						
		4-4-5	9									
						fine SAND, brown, [SP]						
		5-4-4	8									
		2-2-2	4									
5												
		2-2-3	5									
		2-3-4	7			**fine SAND, trace of broken shell**, brown, [SP]						
				▼								
		3-4-4	8									
10												
						fine SAND, trace of broken shell and occasional cemented rock layers, brown, [SP]						
		5-5-4	9									
15						BORING TERMINATED AT 15'						
20												

BL3_2

UNIVERSAL ENGINEERING SCIENCES
BORING LOG

PROJECT NO.:	0330.2500113.0000
REPORT NO.:	
APPENDIX:	A

PROJECT: DUE DILIGENCE
411 HIBISCUS TRAIL
MELBOURNE, FLORIDA

BORING DESIGNATION: **B2** SHEET: **1 of 1**
SECTION: TOWNSHIP: RANGE:

CLIENT:

LOCATION: SEE BORING LOCATION PLAN

REMARKS:

G.S. ELEVATION (ft):
WATER TABLE (ft): N/E
DATE OF READING: 6/5/2025
EST. W.S.W.T. (ft):

DATE STARTED: 6/3/25
DATE FINISHED: 6/3/25
DRILLED BY: JL, DW
TYPE OF SAMPLING:

DEPTH (FT.)	SAMPLE	BLOWS PER 6" INCREMENT	N (BLOWS/ FT.)	W.T.	SYMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS LL	ATTERBERG LIMITS PI	K (FT./ DAY)	ORG. CONT. (%)
0						**fine SAND, trace of broken shell and clay lumps**, brown, [SP] (fill)	2	6				
		5-6-8	14									
						fine SAND, brown, [SP]						
		7-5-4	9									
		3-3-5	8									
5												
		3-3-3	6									
						BORING TERMINATED AT 7'						
10												
15												
20												

BL3_2

UNIVERSAL ENGINEERING SCIENCES
BORING LOG

PROJECT NO.:	0330.2500113.0000
REPORT NO.:	
APPENDIX:	A

PROJECT: DUE DILIGENCE
411 HIBISCUS TRAIL
MELBOURNE, FLORIDA

BORING DESIGNATION: **B3** SHEET: **1 of 1**
SECTION: TOWNSHIP: RANGE:

CLIENT:

LOCATION: SEE BORING LOCATION PLAN

REMARKS:

G.S. ELEVATION (ft):
WATER TABLE (ft): N/E
DATE OF READING: 6/5/2025
EST. W.S.W.T. (ft):

DATE STARTED: 6/3/25
DATE FINISHED: 6/3/25
DRILLED BY: JL, DW
TYPE OF SAMPLING:

DEPTH (FT.)	SAMPLE	BLOWS PER 6" INCREMENT	N (BLOWS/ FT.)	W.T.	SYMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS LL	ATTERBERG LIMITS PI	K (FT./ DAY)	ORG. CONT. (%)
0						**fine SAND, trace of broken shell and clay lumps**, grey, [SP] (fill)						
		4-3-6	9									
						fine SAND, brown, [SP]						
		5-4-4	8									
		1-2-3	5									
5												
		2-4-4	8									
						BORING TERMINATED AT 7'						
10												
15												
20												

BL3_2

UNIVERSAL ENGINEERING SCIENCES
BORING LOG

PROJECT NO.:	0330.2500113.0000
REPORT NO.:	
APPENDIX:	A

PROJECT: DUE DILIGENCE
411 HIBISCUS TRAIL
MELBOURNE, FLORIDA

BORING DESIGNATION: **B4** SHEET: **1 of 1**
SECTION: TOWNSHIP: RANGE:

CLIENT:

LOCATION: SEE BORING LOCATION PLAN

REMARKS:

G.S. ELEVATION (ft):
WATER TABLE (ft): 8.5
DATE OF READING: 6/5/2025
EST. W.S.W.T. (ft):

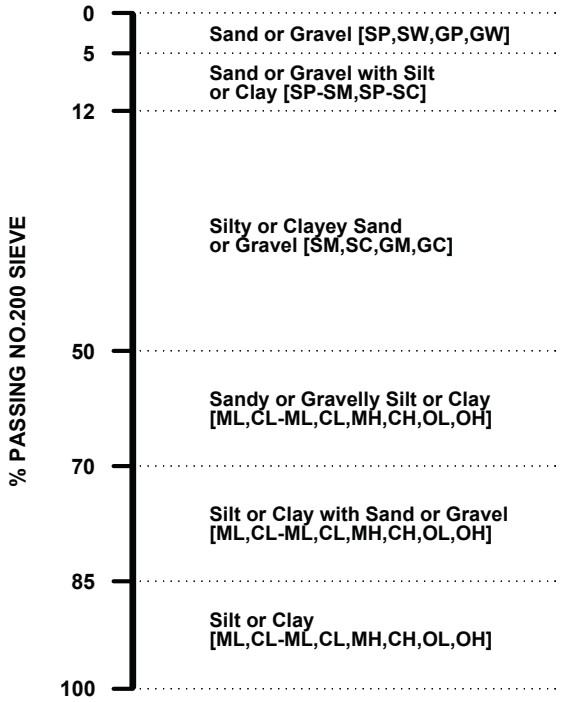
DATE STARTED: 6/3/25
DATE FINISHED: 6/3/25
DRILLED BY: JL, DW
TYPE OF SAMPLING:

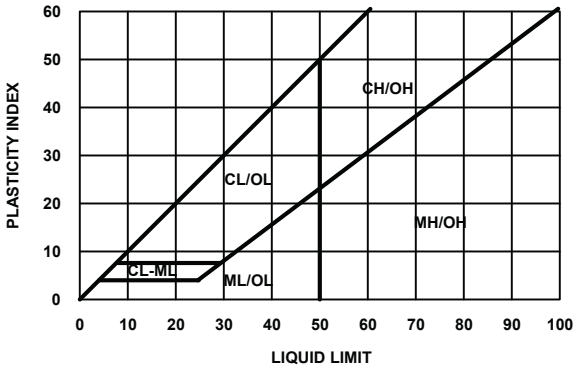
DEPTH (FT.)	SAMPLE	BLOWS PER 6" INCREMENT	N (BLOWS/ FT.)	W.T.	SYMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS LL	ATTERBERG LIMITS PI	K (FT./ DAY)	ORG. CONT. (%)
0						**fine SAND, trace of gravel and broken shell**, grey, [SP] (fill)						
		2-3-4	7									
						fine SAND, brown, [SP]						
		4-4-4	8									
		1-1-1	2									
5												
		2-2-3	5									
		2-2-2	4									
		2-4-4	8	▼								
10												
						fine SANDtrace of broken shell,, brown, [SP]						
		11-6-4	10				2	6				
15						BORING TERMINATED AT 15'						
20												

BL3_2

KEY TO BORING LOGS

SOIL CLASSIFICATION CHART*





PLASTICITY CHART

GROUP NAME AND SYMBOL

COARSE GRAINED SOILS

- WELL-GRADED SANDS [SW]
- POORLY-GRADED SANDS [SP]
- POORLY-GRADED SANDS WITH SILT [SP-SM]
- POORLY-GRADED SANDS WITH CLAY [SP-SC]
- SILTY SANDS [SM]
- CLAYEY SANDS [SC]
- SILTY CLAYEY SANDS [SC-SM]
- WELL-GRADED GRAVELS [GW]
- POORLY-GRADED GRAVELS [GP]
- POORLY-GRADED GRAVELS WITH SILT [GP-GM]
- POORLY-GRADED GRAVELS WITH CLAY [GP-GC]
- SILTY GRAVELS [GM]
- CLAYEY GRAVELS [GC]

FINE GRAINED SOILS

- INORGANIC SILTS SLIGHT PLASTICITY [ML]
- INORGANIC SILTY CLAY LOW PLASTICITY [CL-ML]
- INORGANIC CLAYS LOW TO MEDIUM PLASTICITY [CL]
- INORGANIC SILTS HIGH PLASTICITY [MH]
- INORGANIC CLAYS HIGH PLASTICITY [CH]

HIGHLY ORGANIC SOILS

- ORGANIC SILTS/CLAYS LOW PLASTICITY [OL]**
- ORGANIC SILTS/CLAYS MEDIUM TO HIGH PLASTICITY [OH]**
- PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS [PT]**

IN ACCORDANCE WITH ASTM D 2487 - UNIFIED SOIL

* CLASSIFICATION SYSTEM.

** LOCALLY MAY BE KNOWN AS MUCK.

RELATIVE DENSITY

(SAND AND GRAVEL)

VERY LOOSE - 0 to 4 Blows/ft.
LOOSE - 5 to 10 Blows/ft.
MEDIUM DENSE - 11 to 30 Blows/ft.
DENSE - 31 to 50 Blows/ft.
VERY DENSE - more than 50 Blows/ft.

CONSISTENCY

(SILT AND CLAY)

VERY SOFT - 0 to 2 Blows/ft.
SOFT - 3 to 4 Blows/ft.
FIRM - 5 to 8 Blows/ft.
STIFF - 9 to 16 Blows/ft.
VERY STIFF - 17 to 30 Blows/ft.
HARD - more than 30 Blows/ft.

NOTES:
8* - DENOTES DYNAMIC CONE PENETROMETER (DCP) VALUE
R - DENOTES REFUSAL TO PENETRATION
P - DENOTES PENETRATION WITH ONLY WEIGHT OF DRIVE HAMMER
N/E - DENOTES GROUNDWATER TABLE NOT ENCOUNTERED

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS

APPENDIX A.1

EXHIBIT 1

Important Information about This

Geotechnical-Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

While you cannot eliminate all such risks, you can manage them. The following information is provided to help.

The Geoprofessional Business Association (GBA) has prepared this advisory to help you – assumedly a client representative – interpret and apply this geotechnical-engineering report as effectively as possible. In that way, clients can benefit from a lowered exposure to the subsurface problems that, for decades, have been a principal cause of construction delays, cost overruns, claims, and disputes. If you have questions or want more information about any of the issues discussed below, contact your GBA-member geotechnical engineer. Active involvement in the Geoprofessional Business Association exposes geotechnical engineers to a wide array of risk-confrontation techniques that can be of genuine benefit for everyone involved with a construction project.

Geotechnical-Engineering Services Are Performed for Specific Purposes, Persons, and Projects

Geotechnical engineers structure their services to meet the specific needs of their clients. A geotechnical-engineering study conducted for a given civil engineer will not likely meet the needs of a civil-works constructor or even a different civil engineer. Because each geotechnical-engineering study is unique, each geotechnical-engineering report is unique, prepared *solely* for the client. *Those who rely on a geotechnical-engineering report prepared for a different client can be seriously misled*. No one except authorized client representatives should rely on this geotechnical-engineering report without first conferring with the geotechnical engineer who prepared it. *And no one – not even you – should apply this report for any purpose or project except the one originally contemplated.*

Read this Report in Full

Costly problems have occurred because those relying on a geotechnical-engineering report did not read it *in its entirety*. Do not rely on an executive summary. Do not read selected elements only. *Read this report in full.*

You Need to Inform Your Geotechnical Engineer about Change

Your geotechnical engineer considered unique, project-specific factors when designing the study behind this report and developing the confirmation-dependent recommendations the report conveys. A few typical factors include:

- the client's goals, objectives, budget, schedule, and risk-management preferences;
- the general nature of the structure involved, its size, configuration, and performance criteria;
- the structure's location and orientation on the site; and
- other planned or existing site improvements, such as retaining walls, access roads, parking lots, and underground utilities.

Typical changes that could erode the reliability of this report include those that affect:

- the site's size or shape;
- the function of the proposed structure, as when it's changed from a parking garage to an office building, or from a light-industrial plant to a refrigerated warehouse;
- the elevation, configuration, location, orientation, or weight of the proposed structure;
- the composition of the design team; or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project changes – even minor ones – and request an assessment of their impact. *The geotechnical engineer who prepared this report cannot accept responsibility or liability for problems that arise because the geotechnical engineer was not informed about developments the engineer otherwise would have considered.*

This Report May Not Be Reliable

Do not rely on this report if your geotechnical engineer prepared it:

- for a different client;
- for a different project;
- for a different site (that may or may not include all or a portion of the original site); or
- before important events occurred at the site or adjacent to it; e.g., man-made events like construction or environmental remediation, or natural events like floods, droughts, earthquakes, or groundwater fluctuations.

Note, too, that it could be unwise to rely on a geotechnical-engineering report whose reliability may have been affected by the passage of time, because of factors like changed subsurface conditions; new or modified codes, standards, or regulations; or new techniques or tools. *If your geotechnical engineer has not indicated an "apply-by" date on the report, ask what it should be*, and, in general, *if you are the least bit uncertain* about the continued reliability of this report, contact your geotechnical engineer before applying it. A minor amount of additional testing or analysis – if any is required at all – could prevent major problems.

Most of the "Findings" Related in This Report Are Professional Opinions

Before construction begins, geotechnical engineers explore a site's subsurface through various sampling and testing procedures. *Geotechnical engineers can observe actual subsurface conditions only at those specific locations where sampling and testing were performed*. The data derived from that sampling and testing were reviewed by your geotechnical engineer, who then applied professional judgment to form opinions about subsurface conditions throughout the site. Actual sitewide-subsurface conditions may differ – maybe significantly – from those indicated in this report. Confront that risk by retaining your geotechnical engineer to serve on the design team from project start to project finish, so the individual can provide informed guidance quickly, whenever needed.

This Report's Recommendations Are Confirmation-Dependent

The recommendations included in this report – including any options or alternatives – are confirmation-dependent. In other words, *they are not final*, because the geotechnical engineer who developed them relied heavily on judgment and opinion to do so. Your geotechnical engineer can finalize the recommendations *only after observing actual subsurface conditions* revealed during construction. If through observation your geotechnical engineer confirms that the conditions assumed to exist actually do exist, the recommendations can be relied upon, assuming no other changes have occurred. *The geotechnical engineer who prepared this report cannot assume responsibility or liability for confirmation-dependent recommendations if you fail to retain that engineer to perform construction observation.*

This Report Could Be Misinterpreted

Other design professionals' misinterpretation of geotechnical-engineering reports has resulted in costly problems. Confront that risk by having your geotechnical engineer serve as a full-time member of the design team, to:

- confer with other design-team members,
- help develop specifications,
- review pertinent elements of other design professionals' plans and specifications, and
- be on hand quickly whenever geotechnical-engineering guidance is needed.

You should also confront the risk of constructors misinterpreting this report. Do so by retaining your geotechnical engineer to participate in prebid and preconstruction conferences and to perform construction observation.

Give Constructors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can shift unanticipated-subsurface-conditions liability to constructors by limiting the information they provide for bid preparation. To help prevent the costly, contentious problems this practice has caused, include the complete geotechnical-engineering report, along with any attachments or appendices, with your contract documents, *but be certain to note conspicuously that you've included the material for informational purposes only*. To avoid misunderstanding, you may also want to note that "informational purposes" means constructors have no right to rely on the interpretations, opinions, conclusions, or recommendations in the report, but they may rely on the factual data relative to the specific times, locations, and depths/elevations referenced. Be certain that constructors know they may learn about specific project requirements, including options selected from the report, *only* from the design drawings and specifications. Remind constructors that they may perform their own studies if they want to, and *be sure to allow enough time* to permit them to do so. Only then might you be in a position to give constructors the information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions. Conducting prebid and preconstruction conferences can also be valuable in this respect.

Read Responsibility Provisions Closely

Some client representatives, design professionals, and constructors do not realize that geotechnical engineering is far less exact than other engineering disciplines. That lack of understanding has nurtured unrealistic expectations that have resulted in disappointments, delays, cost overruns, claims, and disputes. To confront that risk, geotechnical engineers commonly include explanatory provisions in their reports. Sometimes labeled "limitations," many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely*. Ask questions. Your geotechnical engineer should respond fully and frankly.

Geoenvironmental Concerns Are Not Covered

The personnel, equipment, and techniques used to perform an environmental study – e.g., a "phase-one" or "phase-two" environmental site assessment – differ significantly from those used to perform a geotechnical-engineering study. For that reason, a geotechnical-engineering report does not usually relate any environmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated subsurface environmental problems have led to project failures*. If you have not yet obtained your own environmental information, ask your geotechnical consultant for risk-management guidance. As a general rule, *do not rely on an environmental report prepared for a different client, site, or project, or that is more than six months old.*

Obtain Professional Assistance to Deal with Moisture Infiltration and Mold

While your geotechnical engineer may have addressed groundwater, water infiltration, or similar issues in this report, none of the engineer's services were designed, conducted, or intended to prevent uncontrolled migration of moisture – including water vapor – from the soil through building slabs and walls and into the building interior, where it can cause mold growth and material-performance deficiencies. Accordingly, ***proper implementation of the geotechnical engineer's recommendations will not of itself be sufficient to prevent moisture infiltration.*** Confront the risk of moisture infiltration by including building-envelope or mold specialists on the design team. ***Geotechnical engineers are not building-envelope or mold specialists.***

GEOPROFESSIONAL BUSINESS ASSOCIATION

Telephone: 301/565-2733
e-mail: info@geoprofessional.org www.geoprofessional.org

Landscape Plan

LEGEND AND TYPICAL SECTIONS:

XXX.X EXISTING ELEVATION

(XX.X) PROPOSED ELEVATION

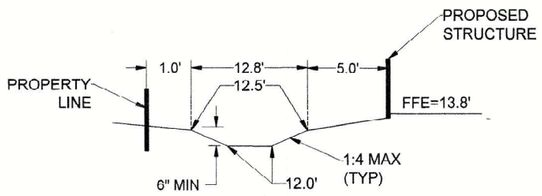
FLOW DIRECTION

0 20 40

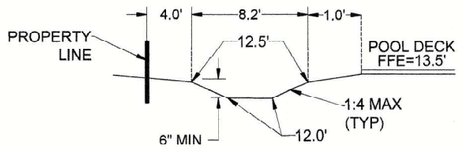
GRAPHIC SCALE IN FEET

SCALE : 1" = 20'

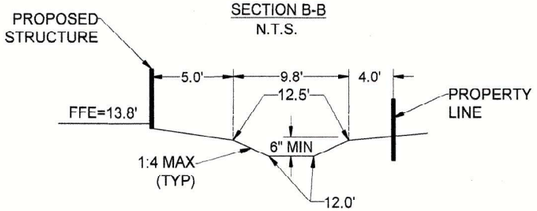
NORTH



SECTION A-A
N.T.S.



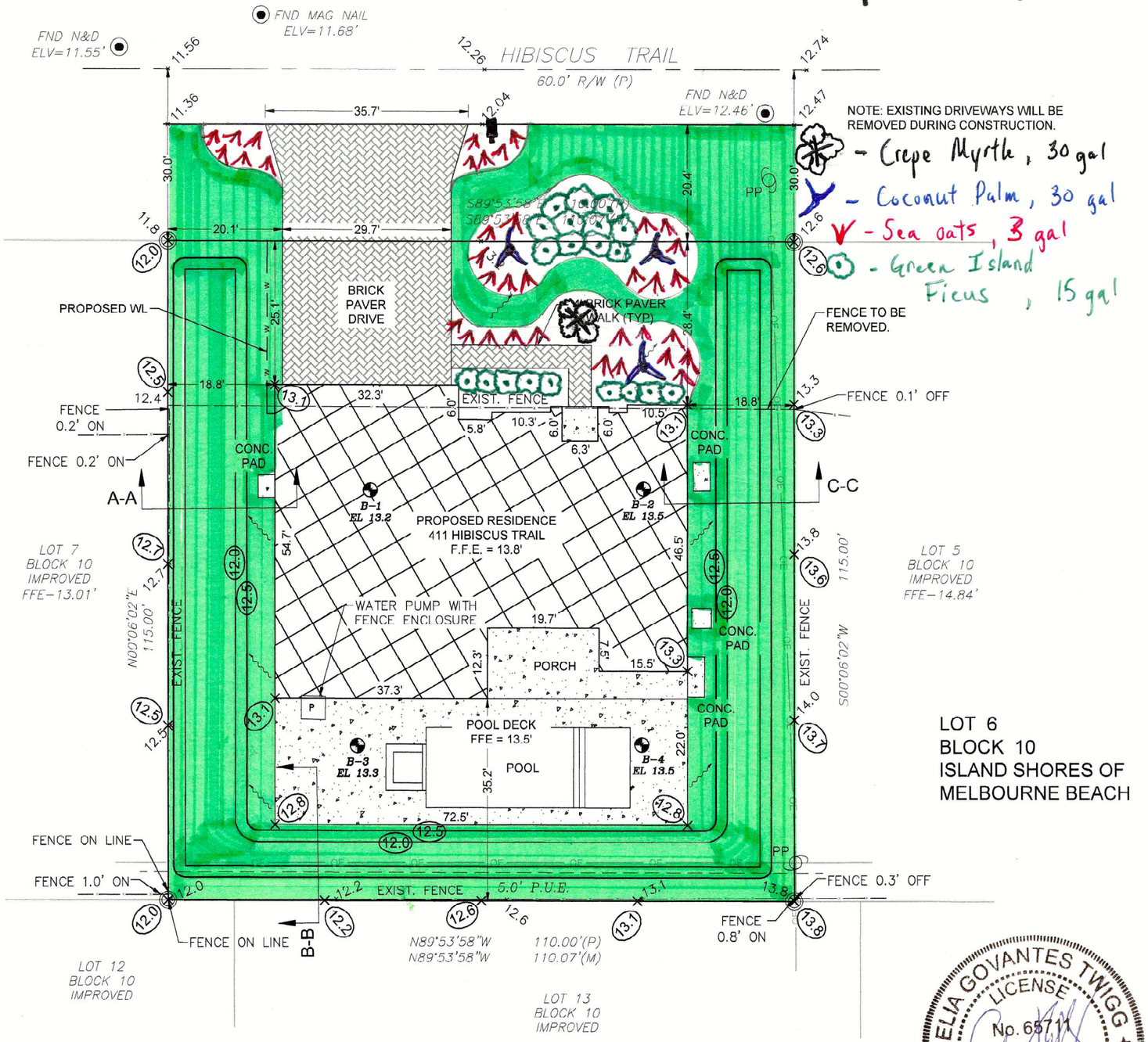
SECTION B-B
N.T.S.



SECTION C-C
N.T.S.

GENERAL NOTES:

1. PROPERTY LAYOUT INFORMATION AND ELEVATIONS SHOWN HAVE BEEN PROVIDED TO THE ENGINEER BY THE OWNER AND/OR OWNER'S AGENT. ITHEY HAVE NOT BEEN VERIFIED FOR ACCURACY. ENGINEER DOES NOT ACCEPT LIABILITY FOR INCORRECT OR INACCURATE PROPERTY AND/OR AREA INFORMATION PROVIDED.
2. THE MINIMUM THE FINISHED FLOOR ELEVATION (FFE) IS 18 INCHES ABOVE THE CENTERLINE ELEVATION OF 12.26 FEET.
3. ALL SITE DRAINAGE SHALL BE DIRECTED AWAY FROM THE RESIDENCE. OVERHANGS THAT HAVE GUTTERS, ROOF VALLEY'S DOWNSPOUTS, SCUPPERS, OR OTHER RAINWATER OR COLLECTION DEVICES SHALL NOT BE DIRECTED TOWARDS ADJACENT PARCELS OF LAND LOCATED WITHIN TEN (10) FEET OF THE TERMINUS OF SUCH COLLECTION DEVICES.
4. SIDE SLOPES ON ANY AREA WITHIN THE LOT CANNOT EXCEED ONE (1) FOOT VERTICAL FOR EACH FOUR (4) FEET HORIZONTAL.
5. DRAINAGE EASEMENTS SHALL NOT CONTAIN PERMANENT IMPROVEMENTS, INCLUDING BUT NOT LIMITED TO SIDEWALKS, DRIVEWAYS, IMPERVIOUS SURFACES, PATIOS, DECKS, POOLS, AIR CONDITIONERS, STRUCTURES, AND UTILITY SHEDS.
5. CONTRACTOR TO FIELD VERIFY ELEVATIONS OF ADJACENT PROPERTIES PRIOR TO CONSTRUCTION FOR CONNECTION TO EXISTING PROPERTY LINE WITHOUT BLOCKING OR DRAINING ONTO ADJACENT PROPERTIES. CONTRACTOR TO COORDINATE GRADING ALONG COMMON LOT LINES WITH ADJACENT NEIGHBORS TO ENSURE CONTINUED POSITIVE DRAINAGE. CONTACT ENGINEER OF RECORD IF ELEVATIONS AS PROPOSED CANNOT BE MAINTAINED.
6. ALL ELEVATIONS SHOWN HEREON ARE BASED ON THE NAVD88 DATUM. CONVERSION FROM NAVD88 TO NGVD29 IS 1.43'. EXISTING ELEVATIONS WERE PROVIDED TO THE ENGINEER BY THE OWNER AND/OR OWNER'S AGENT AND WERE NOT VERIFIED FOR ACCURACY.



LOT 6
BLOCK 10
ISLAND SHORES OF
MELBOURNE BEACH

CONVERSION TO NGVD29: +1.43	ELEVATIONS	
ELEVATIONS BASED ON: NAVD88	NGVD29	NAVD88
BREVARD COUNTY BENCHMARK: 422-43	10.41	8.98

THIS PLAN HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY ELIA G. TWIGG, PE USING A DIGITAL SIGNATURE AND DATE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

ELIA GOVANTES TWIGG LICENSE No. 65711 STATE OF FLORIDA PROFESSIONAL ENGINEER

CONTRACT NO: C2405.16
JOB NO: 25.06-073
DATE: 07/18/25
SHEET 1 OF 1

ELIA G. TWIGG, PE
FLORIDA LICENSE NO: 65711

TITLE: LOT DRAINAGE PLAN

SCALE: 1" = 20'
PARCEL ID: 28-38-06-75-10-6
LOTS / BLOCK: LOT 6 ELK 10
SUBDIVISION: ISLAND SHORES OF MELBOURNE BEACH
PLAT BK/PG: 10 / 52
CONTRACTOR: LOWMAN BROTHERS

PROJECT:
ZETH JAMES
411 HIBISCUS TRAIL
MELBOURNE BEACH, FL 32951

REVISIONS:

LANTIC SOLUTIONS
355 TORTOISE VIEW DRIVE, SUITE E
SATELLITE BEACH, FL 32937
Ph: (321) 413-0027
eliatwigg@lanticsolutions.com

Report on Environmental Advisory Board Landscape Proposal

Prepared for: Planning and Zoning Board (P&Z)

Prepared by: Dan Harper, member P&Z **September 30, 2025**

The Environmental Advisory Board (EAB), is of the opinion that Melbourne Beach would benefit by an increase in its overall tree canopy. They have proposed in essence a complete re-write of the Chapter 9A Landscaping and Trees section of the Land Development Code.

Due to the numerous constraints to live oak tree planting their proposal is simply not feasible.[i] The targeted and narrow focus on new house construction sites prevents them from achieving any material change in the tree canopy. EAB ignores the Communities preference for traditional landscapes. Instead, they impose an extensive canopy tree and 70% native plant requirement. Inconsistencies with the Towns Comprehensive Plan have been ignored, and potential legal problems not addressed.

General considerations and basis for my recommendation.

- Eight live oak trees simply won't fit on the average Melbourne Beach lot (100 x 150). See attached Arborist report.
- Independent ISA Certified Arborist recommendation is to NOT mandate the planting of live oaks on these residential lots. See attached Arborist report.
- EAB proposal gave zero consideration/respect to the desires of the impacted property owners as required by the Town's Comprehensive Plan.[ii]
- The narrow focus on new house builds results in potential increase in canopy of little more than 10% over a 40-year time period.
- Some of the mandated proposals are inconsistent with the Towns Comprehensive Plan and hence not enforceable.[iii]
- Several mandates do not take into account applicable Florida Statues[iv].

RECOMMENDATION

Based upon the materials reviewed, due consideration of the EAB's proposal, and respect for the impacted residents it is my recommendation to vote NO on the proposed EAB re-write of the Chapter 9A of the Melbourne Beach Land Development Code. Lack of feasibility, arborist warning to not mandate, impacted residents don't want it, narrow focus, legal concerns, and incongruence with the comprehensive plan were all factored into this recommendation.

Expanded Rational for Recommendation

The New House Construction Mandated Number of Trees is Simply not Feasible

EAB Proposal - each lot shall contain at least 1 canopy/oak tree per 2,000 square feet of lot area. The average 1/3rd acre lot (100x150) would require 8 oak trees and 56 native plants. See the attached arborist report for the numerous constraints that make this proposal not feasible.

Forced or Mandated Tree Plantings are Potentially Susceptible to Home Owner Challenges

Per attached arborist report - Live Oaks have root systems that are notoriously aggressive and expansive. The species requires ample lateral space to develop properly and can cause significant damage to nearby homes, driveways, sidewalks, or overhead utilities if planted to close. When planted in the wrong location, long-term maintenance costs and infrastructure conflicts can be significant. *Mandating live oaks on residential lots is not advisable*[v].

Extensive Oak/Canopy Trees are not Desired by New Residents

The EAB has observed that new house construction residents have overwhelmingly (80% or more) chosen to plant palms instead of oak/canopy[vi]. This is consistent with P&Z's review of numerous landscape plans. Respect and due consideration for the desires of these impacted residents is a requirement of the Town's Comprehensive Plan and cannot be ignored[vii].

EAB's Desired Objectives of a Material Change to Canopy Restoration Cannot be Achieved with Their Proposal

There are 1,230 households in Melbourne Beach. At the rate of 3 to 5 new houses built per year, this would have only a 6% impact in 20 years. The impact after 40 years results in only a little more than 10%. In other words, their proposal clearly does not materially achieve the desired tree canopy outcome. In addition to not accomplishing the desired effect it places 100% of the burden on a few new residents to Melbourne Beach.

Incongruence with the Town's Comprehensive Plan

The Comprehensive Plan language uses the word encourage related to native plants. The EAB's change to required would most likely require a change to the Comprehensive Plan to be enforceable.[viii] If there is a conflict between an ordinance and the Towns Comprehensive Plan, the Comprehensive Plan would prevail.

The EAB Proposal Contains Conflicts with Florida Statues

- *Fl Statue 163.3209* "A local government shall not adopt an ordinance or land development regulation that requires the planting of a tree or other vegetation that will achieve a height greater than 14 feet in an established electric utility right-of-way or intrude from the side closer than the clearance distance specified in Table 2 of ANSI Z133.1-2000".
- EAB proposal requires annual access to a residents' backyard for three years after trees have been planted. Town attorney stated that no such access would be permitted without the residents' permission.
- *Fl Statue 163.3161 et al.* "If there is a conflict between an ordinance and the Town's Comprehensive Plan, the Town's Comprehensive Plan would prevail, since the comprehensive plan serves as a constitution for future development".
- *Fl Statue 162.09.* This statue limits fines to $5,000, far less than proposed by the EAB.

CONCLUSION

If community residents are truly desirous of more canopy trees they are free to plant as many as they want in their own yards. EAB could be well served by promoting the voluntary planting of canopy trees throughout the Town of Melbourne Beach and perhaps even provide them free of cost. A Community wide informational and encouragement campaign would seem a more productive approach.

Documents Relied upon in Formulating My Recommendation

- **ISA Certified Arborist Report**
- Applicable Florida State Statues
- **Report of Town Attorney**
- Melbourne Beach Comprehensive Plan
- **Several versions of EAB's landscape re-write proposal**
- Meetings with EAB Board and member Karen Fenaughty
- **Survey of trees planted on 26 newly constructed homes**
- Survey of homesites self-selecting native plants (Surf Rd, 3rd St, 2nd St., Ash, Birch, and Cherry).

---

[i] Jeffery Washleck, ISA Certified Arborist report of September 25, 2025
[ii] Inspection of recent builds reflect 95% chose traditional landscapes
[iii] Town of Melbourne Beach Comprehensive Plan, August 2021
[iv] Florida Statues, 163.3209, 163.3161, 162.09
[v] Jeffery Washleck, ISA Certified Arborist report of September 25, 2025
[vi] EAB September 9, 2025 memo to Planning & Zoning
[vii] Comprehensive Plan, Chapter 12 Private Property Rights
[viii] Memo from Town attorney to P&Z, dated Sept. 30, 2025

Best Practices for Planting Live Oaks in Melbourne Beach, FL

Prepared For: Town of Melbourne Beach Planning & Zoning Board
Prepared by: Jeffery Washeck, ISA Certified Arborist / Sigma Tree Consulting LLC
Date: September 25, 2025

Overview and Objective

This report provides professional arboricultural guidance to the Town of Melbourne Beach regarding best practices for the planting of *Quercus virginiana* (Southern Live Oak) on residential properties. The Town's Comprehensive Plan encourages the inclusion of canopy trees, and this report aims to support Planning & Zoning (P&Z) as it evaluates whether live oak planting should be **mandated or merely encouraged** on newly constructed homes.

Due to the spatial constraints of typical residential lots, including narrow side setbacks, mandated stormwater swales, and overhead utility conflicts, careful planning is essential. This report outlines site-appropriate planting recommendations to help prevent future structural conflicts and ensure the long-term viability of live oak specimens in an urban coastal environment.

Lot Characteristics & Planning Constraints

Typical lot dimensions and constraints include:

- **Average lot size:** 90' x 150' (some as narrow as 60' wide)
- **Setbacks:** 15' side setbacks (used entirely for swales), 25' front and rear
- **Stormwater swales:** Located on both sides and at rear fence line
- **Utilities:** Overhead power lines in front yards (some lots)
- **Structures:** Custom homes often built to maximum setback limits

These constraints significantly limit viable planting space, especially on side yards. Tree placement must therefore be strategic, accounting for root development, canopy spread, and potential future conflicts.

Species Overview: Southern Live Oak

The Southern Live Oak (*Quercus virginiana*) is one of the most iconic and durable native tree species in the southeastern United States. Known for its broad, spreading canopy and dense evergreen foliage, it is capable of providing exceptional shade and landscape value when planted in appropriate settings. In favorable conditions, live oaks can grow to over 60 feet tall with a canopy spread exceeding 80 feet, often rivaling or surpassing their height in lateral reach.

Live oaks are exceptionally wind resistant and long-lived, making them a preferred species in coastal communities prone to hurricanes and tropical storms. However, their size and vigor can present challenges in urban environments. Root systems are notoriously aggressive and expansive. The species requires ample lateral space to develop properly and can cause significant damage to nearby homes, driveways, sidewalks, or overhead utilities if planted too close. When planted in the wrong location, long-term maintenance costs and infrastructure conflicts can be significant.

Best Practices & Recommendations for Live Oak Planting

Below are responses to the Town's specific inquiries, integrated with broader arboricultural best practices:

1. Recommended Distance from Slab Foundation

Minimum: 15–20 feet

Live oaks have aggressive, expansive root systems. Planting closer than 15 feet to a slab foundation increases the risk of root encroachment over time, especially if soil moisture gradients or irrigation attract roots toward the home. A 20-foot buffer is ideal for long-term separation.

2. Distance from Driveways & Streets

Minimum: 8–10 feet from driveways / ~ 4+ feet from street edge

Live oak roots are more likely to impact concrete driveways than streets, especially when planted too close to paved surfaces. Maintaining an 8–10 foot buffer from driveways helps avoid structural damage and reduces the need for invasive root pruning. Streets are of lesser concern. While minor lifting of asphalt can occur near street edges, it's relatively uncommon. Live oaks generally perform well as street or median trees when adequate soil volume is available.

3. Distance from Pools

Minimum: 15–20 feet

Live oak roots typically remain in the first 2–4 feet of soil (much closer to 2 feet due to Florida's loose sandy soils) and are much less likely to grow downward or intrude directly into pool walls. However, their sheer size and vigor can create pressure on pool shells or decking if planted too close. Leaf drop and debris are also a nuisance in pool zones. A 15–20 foot buffer helps minimize encroachment, reduces cleanup needs, and avoids potential conflicts with underground infrastructure or future hardscape maintenance. Spacing can be adjusted based on soil conditions and yard layout.

4. Should Live Oaks Be Planted to Avoid Growing Over Roofs?

Ideally, yes—but not mandatory

Overhanging limbs can drop large volumes of leaf litter and acorns, and may potentially pose a

branch-fall risk in storms. While trained canopy growth over roofs can be managed with proper pruning, it's best avoided near two-story homes or steep rooflines.

5. Distance from Overhead Power Lines

☐ **Minimum: 20–30 feet lateral spacing**
Live oaks grow very tall and wide, and they are absolutely not recommended for utility easements. Planting directly under or adjacent to overhead power lines guarantees future clearance conflicts and aggressive pruning. Trees should be placed well outside utility easements to preserve natural form and avoid infrastructure issues.

6. Can a Live Oak Be Planted in a Stormwater Swale?

☐ **No, planting directly in swales is not recommended**
Swales are engineered drainage features. Tree roots can impede flow, destabilize grading, or lead to erosion. Waterlogging may also stress young trees or promote root rot. Older established trees will develop aggressive surface roots within the swale in search of oxygen.

7. Can a Live Oak Be Planted on the Side of a Swale?

☐ **Possibly, if sufficient elevation and distance is maintained**
Trees may be planted atop the swale berm or shoulder if:

- Drainage grades are not compromised
- Root flare is positioned above expected waterline
- Adequate spacing from structures is still maintained
  This can be a workable compromise, especially for rear yard planting.

8. How Far Apart Should Live Oaks Be Planted?

☐ **Minimum: 20–30 feet apart**
Live oaks develop massive horizontal canopies, extending up to 80 feet across (though this is admittedly much less common in coastal regions). Still, to prevent crown competition, limb interlock, and overcrowding, it is recommended to maintain generous spacing between specimens. Cluster planting is not recommended on narrow lots.

9. Best Size for Planting

☐ **Container-grown, 30–65 gallon stock (~1.5–2.5" caliper)**
Smaller, container-grown trees transplant more successfully, establish faster, and develop stronger root architecture. Larger field-grown specimens may look impressive but often suffer transplant shock and require more intensive aftercare. A 30–65 gallon live oak strikes the right balance for establishing a long-term canopy tree without overwhelming the site or irrigation needs.

Additional Notes and Policy Guidance

- **Avoid rigid mandates.** Due to narrow setbacks, overhead lines, and stormwater infrastructure, mandating live oaks on every lot may cause unintended design conflicts or resentment from homeowners. Consider a **recommended placement matrix** tied to lot width, power line presence, and yard orientation.

- **Offer species flexibility.** Where live oaks aren't viable, consider approved alternative canopy trees with less aggressive root systems and narrower growth habits.

- **Incentivize preferred planting.** Instead of mandates, offer incentives (e.g., reduced fees, fast-tracked reviews) for lots that voluntarily incorporate canopy trees per guidelines.

Conclusion

Live oaks are among the most iconic and valuable canopy trees in Florida, offering substantial ecological, aesthetic, and shade benefits. However, their size, vigor, and structural needs make them difficult to accommodate on all residential lots. Where setbacks are narrow and infrastructure is tightly packed, the decision to plant a live oak should be made carefully, based on the specific layout and constraints of the property.

Mandating live oaks on every parcel is not advisable. A more effective approach is to encourage planting where feasible and offer species alternatives where conditions are not suitable. Homeowners should be supported with clear guidance and flexible options rather than rigid requirements.

In neighborhoods where private lots lack space, live oaks can still play a valuable role as public trees. When used in medians or along wider rights-of-way, they provide long-term canopy coverage without conflicting with private structures or utilities. With thoughtful planning and routine maintenance, live oaks can be integrated into the urban landscape in ways that balance homeowner needs with the town's canopy goals.

Arborist Disclosure Statement

ISA certified arborists are tree care specialists who use their education, knowledge, training, and experience to examine trees, recommend measures to enhance the health and beauty of trees, and attempt to reduce the risk of living near trees. Clients may choose to accept or disregard the recommendations of the arborist, or to seek additional advice.

Arborists cannot detect every condition that could possibly lead to the structural failure of a tree. Trees are living organisms that fail in ways we do not fully understand. Conditions are often hidden within the trees and below ground. Arborists cannot guarantee that a tree will be healthy or safe under all circumstances, or for a specified period of time. Likewise, the efficacy of any remedial treatments, such as pruning, fertilization, or medicine, also cannot be guaranteed.

Treatment, pruning, and removal of trees may involve considerations beyond the scope of the arborist's services such as property boundaries, property ownership, site lines, disputes between neighbors, and other issues. Arborists cannot take such considerations into account unless complete and accurate information is disclosed to the arborist. An arborist should then be expected to reasonably rely upon the completeness and accuracy of the information provided.

Disclaimer and Acknowledgment of FL Statute 163.045

My observations made at the site were true and factual to the best of my ability. The methodologies used were in accordance with the code of ethics and tree assessment guidelines laid out by the International Society of Arboriculture (ISA) as well as the ANSI A300 standards. Arboriculture is not a perfect science, and subjectivity is inevitable as different arborists will often have different opinions based on their own personal experiences. My opinions and recommendations are based purely on my education and over a decade of experience actively climbing and working in trees.

Trees can be managed but they cannot be controlled. To live near trees is to accept some degree of risk. The only way to eliminate all risk associated with trees is to remove all trees. There are no certainties when ascertaining the structural integrity of trees, only qualitative likelihoods. The tree owner's personal risk tolerance is, and always should be, the ultimate deciding factor when moving forward with any recommended procedures.

ARTICLE I. LANDSCAPING

§ 9A-1. DEFINITION.

For the purpose of this article the following definitions shall apply unless the context clearly indicates or requires a different meaning.

YARD AREA. The front, side and rear yard areas as established and required by Chapter 7A.

(` 75 Code, § 22-17) (Ord. 75-3, passed 5-27-75; Am. Ord. 2017-05, adopted 12-20-17)

§ 9A-2. INTENT.

The intent of this article is to preserve trees whenever and wherever they exist and to provide trees wherever they are sparse or do not exist, thus enhancing the health, welfare and beautification of the Town. The intent of the article also includes the encouragement of "Florida Friendly Landscaping" as defined by § 375.185(b), Fl. Stat. and "Florida Native Landscaping" as defined by the University of Florida's *Institute of Food and Agricultural Sciences (IFAS)*.

This chapter addresses the increasing canopy loss in the Town, by setting standards to help restore it one property at a time and preserve the environment of the Town for future generations.

Landscaping and trees benefit the Town by performing functions such as the following:

- *Absorb carbon dioxide and return oxygen to the atmosphere.*
- *Remove dust and other particulates from the air.*
- *Provide wildlife habitat, particularly for birds which, in turn, help control insects.*
- *Provide soil stabilization, which reduces erosion and mitigates the effect of flooding.*
- *Provide shade to conserve energy, reduce glare, and make outdoor areas more comfortable during hot weather.*
- *Reduce ground-level wind speeds during tropical storms and hurricanes, thereby reducing danger to people and damage to property.*
- *Enhance the Town's attractiveness.*
- *Provide attractive buffering between different land uses.*
- *Reduce noise and surface water runoff.*
- *Mitigate conflicts between adjoining land uses.*
- Maintain immediate benefits of decade and century old mature trees which cannot be quickly replaced by a new sapling.

(` 75 Code, § 22-16) (Ord. 75-3, passed 5-27-75; Am. Ord. 2017-05, adopted 12-20-17)

§ 9A-3. APPLICABILITY.

The terms and provisions of this article shall apply to all real property in all zoning districts.

(` 75 Code, § 22-18) (Ord. 75-3, passed 5-27-75; Am. Ord. 87-13, passed 9-22-87; Am. Ord. 2017-05, adopted 12-20-17)

§ 9A-4. PERMIT REQUIRED FOR ~~CUTTING DOWN~~REMOVING TREE~~S~~.

No person, organization, society, association or corporation, or any agent or representative thereof, directly or indirectly, shall cut down, destroy, remove, move or effectively destroy through damaging any scrub oak or sand live oak of any size, or any non-invasive tree with a trunk diameter four inches (4") dbh or greater, situated on property in any zoning district without first obtaining a permit as herein provided. Tree removal on any property in any zoning district shall be in accordance with the standards mandated in the most recent edition of the *Best Management Practices - Tree Risk Assessment* published by the International Society of Arboriculture or a certification from an arborist certified by the International Society of Arboriculture or a Florida licensed landscape architect as to substantial compliance with such standards. Any tree which poses an unacceptable risk may qualify for removal without a permit pursuant to Fla. Stat. § 163.045 or as such section may be amended. A current list of Certified Arborists with a tree risk assessment qualification is maintained by the Town manager.

(` 75 Code, § 22-19(a)) (Ord. 75-3, passed 5-27-75; Am. Ord. 2017-05, adopted 12-20-17; Ord. 2023-01, adopted 3-15-23)

§ 9A-5. APPLICATION FOR PERMIT; REVIEW OF APPLICATION.

(a) Application. Permits for removal, relocation, or replacement of trees covered herein, shall be obtained by making application for a permit to the Building Official. The application shall be accompanied by a written statement indicating the reason for removal, relocation, or replacement of trees, a mitigation plan, and two copies of a legible site plan drawn to a minimum scale of one inch (1") equals 20 twenty feet (20'), indicating the following:

(1) Location of all existing or proposed structures, improvements, and sites used, properly dimensioned and referenced to property lines, setback, and yard requirements;

(2) Location of existing or proposed utility services, when known;

(3) The location of all trees on the site designating the trees to be retained, removed, relocated, or replaced. Groups of trees in close proximity may be designated as clumps of trees with the predominant type and estimated number and average diameter noted. Only those trees to be removed, relocated, or replaced must be named (common or botanical name) on the site plan;

(4) The tree information required above shall be summarized in legend form on the plan and shall include the reason for the proposed removal, relocation, or replacement; and

(5) An application involving developed properties may be based on drawings showing only that portion of the site directly involved, and adjacent structures and landscaping or natural growth incidental thereto.

(b) Application review. Upon receipt of a proper application, the Building Official shall review the application, which will include a field check of the site and referral of the application to others concerned as necessary, to determine any adverse effect upon the general public welfare, adjacent properties, or Town services and facilities.

(` 75 Code, § 22-19(b), (c)) (Ord. 75-3, passed 5-27-75; Am. Ord. 2017-05, adopted 12-20-17; Am. Ord. 2023-01, adopted 3-15-23) Penalty, see § 9A-12

§ 9A-6. ~~ON-SITE INSPECTION~~ CRITERIA FOR TREE REMOVAL PERMITTING.

(a) On-site inspection. Prior to the issuance of any~~a~~ permit for tree removal or relocation (and prior to issuance of a certificate of occupancy in the case of new construction), the Building Official or his agent shall conduct an on-site inspection to determine ~~whether or not~~if such a removal or relocation conforms to the requirements of this chapter. The on-site inspection will also be conducted by a Landscape Officer in the case of new landscape designs or permits to remove one or more canopy trees.

(b) Issuance.

(1) Removal. No permit shall be issued for tree removal unless one of the following conditions exists:

a. The tree is located in a buildable area of the property where a structure or improvements may be placed and where not removing the tree would unreasonably restrict the permitted use of the property and the tree removal has been authorized by the Town as part of a site plan review;

b. The tree cannot be relocated on or off the site because of age, type, or size of tree;

c. The tree is diseased, dead, injured, in danger of falling, too close to existing or proposed structures, interferes with utility service, creates unsafe vision clearance at intersections or road entries, or conflicts with other ordinances or regulations; or

d. It is in the welfare of the general public that the tree be removed for a reason other than set forth above.

e. Unless restricted by Florida Statute 163.045, Protected Trees shall not be permitted to be removed without Town Commission approval. Protected Tree determination will be conducted by the Landscape Officer during on-site inspection.

f. A permit request to remove a tree because it poses unacceptable risk to persons or property must be accompanied with a signed risk assessment from an ISA certified arborist or a Florida licensed landscape architect

(2) Relocation or replacement. As a condition to the granting of a permit, unless restricted by Florida Statute 163.045, the applicant ~~may~~ will be required, where practical, to relocate the tree being removed or be required to replace the tree being removed with a tree somewhere ~~within the site~~ on the property of the type that will attain an overall height of at least twelve feet (12') and have a trunk caliper of at least four ~~two~~ inches (~~2~~4") dbh at planting, measured four and one-half feet (4.5') above grade. ~~The green areas left after all building and parking lot requirements have been met shall contain a tree density equal to or greater than that what was existing on the overall site before the beginning of construction.~~A permit to relocate a tree will be granted only if there is a reasonable expectation that the tree will survive the relocation and thrive in the new location. The Town may require a recommendation from a Department of Agriculture F~~f~~orester or a Certified Arborist to determine and assure that the tree is of a species which can be successfully moved at its current size and that all conditions for its survival are being met in the plan to relocate.

(` 75 Code, § 22-19(d)) (Ord. 75-3, passed 5-27-75; Am. Ord. 2017-05, adopted 12-20-17; Am. Ord. 2023-01, adopted 3-15-23) Penalty, see § 9A-12

§ 9A-7. MINIMUM TREE PLANTINGS.

(a) Landscaping in all zoning districts.

(1) All developed lots within the Town shall be landscaped in accordance with the provisions of this section. All lots to be developed or re-developed shall be

landscaped in accordance with this chapter prior to the issuance of a final building inspection or certificate of occupancy.

(2) All permeable and semi-permeable areas of the site shall be designed and maintained in a manner which allows water to percolate into the ground and prevents erosion from wind or rain.

(3) Landscaping plans must incorporate Florida-Friendly landscaping principles, including the use of drought-tolerant native plants, efficient irrigation systems, and soil amendments that promote water retention, consistent with the guidelines set forth by the Florida-Friendly landscaping program and Chapter 373.185, Florida Statues shall be used for all new development and redevelopment. Excluding the grass lawn, at least 70 percent each of the number of ground covers, grasses, vines, shrubs, and *trees* comprising the landscape shall be native plants selected from the current edition of the Florida Native Plant Society's list of native plants, as applicable to the East Central Florida Region. A list of native *trees* and plants known to survive within this region is listed in section 9A-14. This applies to tree removal permits and for all lots being developed or redeveloped with new construction.

(4) Any other activity that involves replacement of ground covers, grasses (excluding lawns), vines, shrubs, and *trees*, replacement species should be Florida natives until or unless 70% native plantings is already attained.

(5) Plants in the Florida Invasive Species Council's most current list of invasive species shall be removed from a property during development or redevelopment and shall not be used in landscapes.

(6) Each lot shall contain at least one (1) canopy tree and seven (7) shrubs for each two thousand (2,000) square feet of lot area (rounded up to the next whole tree). This applies to tree removal permits for vacant lots and to all lots being developed or redeveloped.

(7) For any other activity that involves tree or shrub removal, canopy and shrubs should be replaced one for one, unless the (1) canopy tree and seven (7) shrubs for each 2,000 square feet of area (rounded up) is already attained.

~~(a) Trees in residential zoning districts. Trees planted must be of a variety which is compatible with the existing soil and drainage conditions and must be provided with adequate water and food materials to encourage growth. Trees shall be planted in locations so as not to cause danger to nor interference with existing structures at the time of maturity.~~

(b) Buffer and tree planting requirements for all non-residential and multiple family residential uses.

(1) A landscape buffer with a minimum of ten feet in width shall be provided between any residentially zoned property and a property utilized for a non-residential or multiple family residential use. Responsibility for providing a landscape buffer shall be upon the nonresidential or multifamily use. The landscape buffer shall include a minimum of one canopy tree for every 40 linear feet, or fraction thereof. In addition, one ~~ornamental~~ smaller tree or palm shall be planted for each 50 linear feet, or fraction thereof.

(2) A landscape buffer with a minimum of ten feet in width shall be provided along all road frontage of the site. The landscape buffer shall include a minimum of one canopy tree for every 25 feet of frontage, or fraction thereof.

(3) A continuous hedge shall be planted in all perimeter landscape buffer areas.

(4) Parking areas shall be designed so that there is a minimum of two hundred (200) square feet of open space, not including perimeter landscape buffer areas, at the end of each row of parking. In addition, a minimum of two hundred (200) square feet of open permeable green space shall be provided in the interior of the parking lot for each ten parking spaces, or fraction thereof. These open spaces shall be distributed throughout the parking lot in a manner that no more than ten parking spaces in a row shall be allowed without an intervening landscaped area.

(5) Minimum specifications for trees and hedge material shall be as follows:

a. Canopy trees at the time of planting shall have a trunk diameter of ~~two~~ four (4) inches dbh ~~measured four and one-half feet above grade~~. The trees shall be a minimum of eight feet in height and have a minimum spread of five feet. The trees are not required to be spaced evenly along property lines.

b. ~~Ornamental t~~Trees smaller than canopy trees ~~at the time of planting~~ shall at the time of planting have a trunk diameter of one and one-half inches measured four and one-half feet above grade. The trees shall be a minimum of six feet in height and have a minimum spread of four feet.

c. Palms at the time of planting shall have a minimum clear trunk of eight feet.

d. Hedge material at the time of planting shall be a minimum of eighteen (18) inches in height when planted. Individual plants shall be planted a maximum of 24 inches on center.

(6) All plant material shall be Florida Number 1 in quality and shall be planted according to sound landscape installation standards.

(7) All landscaping shall be maintained to present a neat and orderly appearance. Dead, deteriorating or missing landscape material shall be replaced with ~~substantially equivalent~~ landscaping as permitted ~~by the Land Development Code~~in 9A-7(a). Replacement of landscaping material shall occur within sixty (60) days of loss, unless said time is extended by the Town Manager for good cause shown.

(8) Variations to landscape requirements ~~Exceptions~~ shall be considered on an individual basis based upon demonstrated unique characteristics of the site in question (for variations to landscape requirements)- Any such reduction or relocation shall comply with the intent of this chapter~~when obstacles such as overhead power lines or other conditions inhibit the ability to comply~~.

~~(9) Canopy trees shall be those that develop a crown spread of 25 feet or greater at maturity. Trees with less than twenty five (25) feet of crown spread at maturity shall be considered ornamental trees.~~

~~(10) Clusters of three palms shall be an acceptable substitute for up to 50% of the required canopy trees and 50% of the required ornamental trees.~~

(11) Landscape material should be drought tolerant to the extent practical and feasible. A water source shall be available to ensure the plant material can be watered while it is being established and during drought occurrence. Automatic irrigation systems may be utilized.

(12) Currently developed sites that do not meet the landscape requirements will not be considered non-conforming. Landscaping consistent with the regulations shall be installed at these sites, to the extent practical, as redevelopment occurs. ~~Unless complete reconstruction or rehabilitation that results in closure of a building or buildings for a period of over six months occurs, full compliance with this section shall not be required~~.

(c) Minimum replacement standards for ~~new construction~~development or re-development under the guidelines of the Land Development Code. ~~Any trees that are removed for new construction shall be replaced by the same or similar species.~~ Specifically for ~~mature~~ oak trees 10 years old or more, replacement of ~~one (1)~~ two for one similar species for each tree removed shall be required which at a minimum will attain an overall height of at least twelve feet (12') and have a trunk caliper of at least ~~two~~ four (4) inches dbh~~(2")~~ at planting~~, measured four and one-half feet (4.5') above grade~~. The two for one oak replacement is required until the mini number of canopy trees required has been met.

(d) Maintenance of trees and landscaping. If the removal of any tree or landscaping from any lot causes the number of remaining trees or vegetative species to fall below the

minimum standards required by this section or as reflected on any approved site plan or landscaping plan for said lot, replacement trees or vegetative species meeting the requirements of this chapter ~~section~~ or any approved site plan or landscaping plan shall be re- planted on the lot within thirty (30) days after removal.

(`75 Code, § 22-20) (Ord. 75-3, passed 5-27-75; Am. Ord. 87-13, passed 9-22-87; Am. Ord. 2008-08, adopted 9-3-08; Am. Ord. 2009-03, adopted 4-15-09; Am. Ord. 2017-05, adopted 12-20-17; Am. Ord. 2023-01, adopted 3-15-23) Penalty, see § 9A-12

§ 9A-8. TREE PROTECTION.

(a) Protection of trees during land-clearing.

(1) Trees ~~that are~~ retained during land-clearing of an approved development or re-development project can be applied toward total tree requirements for the property. Prior to land-clearing, on-site protection must be initiated by constructing suitable protective barricades around trees to prevent mechanical damage. Barriers should be constructed around individual trees or groups of trees that are susceptible to mechanical damage. Protective barriers shall be placed around all trees to be retained on the site in accordance with the University of Florida's Institute of Food and Agricultural Sciences (*UF/IFAS*) "Tree Preservation During Land Development"[1] guidance to prevent the destruction or damaging of the trees. No disturbance or addition of soil will be made within the umbrella or drip line of retained trees. Any clearing within the umbrella or drip line of such trees shall be done with utmost care and avoid the use of heavy machinery. Prior to any land-clearing activity, a visual inspection of the site will be made by the Building Official and the Landscape Officer before a land-clearing permit is issued. The land-clearing permit must be posted on-site. Only land-clearing is permitted ~~within~~ outside the drip line of the tree to be protected.

(2) On-site protection of trees may be barriers consisting of two-by four-inch lumber or flag rope and stakes visible to workers and equipment operators, but far enough from the tree to prevent sail compaction and large enough to include the area within the drip line of the tree ~~(drip line refers to the outer edges of tree limbs and branches)~~.

(3) Should a deep filling around a tree be necessary, a dry well, retaining wall or terracing may be required. Procedures for these are available in the site planning and tree protection regulations available at the County Extension Office.

(b) Attachments to tree. No attachments or wires other than those of a protective nature shall be attached to any tree.

[1] https://hort.ifas.ufl.edu/woody/preservation.shtml

(c) Tree survival. Trees must survive on-site in a viable condition for a minimum of three (3) years after the final building inspection or certificate of occupancy is issued, or after a permit is grated for any tree replacement otherwise. Trees failing to meet this survival requirement must be replaced within 45 days after a written notification of code violation is ~~received by the property owner from the town~~issued by the Town. Replacement trees must be tagged or indicated on the as built plans on file with the Town and reinspected for continued viability annually for three (3) years by Code Enforcement.

(d) Landscaping prohibition. Plants included on the current Florida Noxious Weed list – Rule 5B-57.007 in Florida Administrative Code.

(` 75 Code, § 22-21) (Ord. 75-3, passed 5-27-75; Am. Ord. 87-13, passed 9-22-87; Am. Ord. 2017-05, adopted 12-20-17)

§ 9A-9. TREES ON PUBLIC LANDS.

No tree shall be removed from any public park or public right-of-way except under the provisions of this article.

(` 75 Code, § 22-23) (Ord. 75-3, passed 5-27-75; Am. Ord. 2017-05, adopted 12-20-17)

§ 9A-10. VARIATIONS TO LANDSCAPE REQUIREMENTS ~~EXCEPTIONS~~.

(a) In the event that any tree shall be determined to pose an unacceptable risk as provided for in § 9A-4 or to be in a hazardous or dangerous condition so as to endanger the public health, welfare or safety and requires immediate removal without delay such tree may be removed without first obtaining a written permit as herein required.

(b) During a period of emergency, such as a hurricane, tropical storm, flood, or any other act of God, the requirements of this Article may be waived by the Town Commission.

(c) All licensed plant or tree nurseries shall be exempt from the terms and provisions of this Article only in relation to those trees planted and growing on the premises of the licensee, which are so planted and growing for sale or intended sale to the general public in the ordinary course of the licensee's business.

(d) The types of trees included on the current Florida Noxious Weed List and Florida Exotic Pest Council's List of Invasive Plant Species shall be exempt from the terms and provisions of this article and shall not be used to meet any replacement or planting requirements. A copy of the Florida Invasive Species Council List of Invasive Plant Species will be available from the Town code enforcement.

(` 75 Code, § 22-22) (Ord. 75-3, passed 5-27-75; Am. Ord. 87-13, passed 9-22-87; Am. Ord. 2017-05, adopted 12-20-17; Am. Ord. 2023-01, adopted 3-15-23)

§ 9A-11. RESERVED.

(a) Mangroves can only be trimmed per state code. 1996 Mangrove Trimming and Preservation Act (sections 403.9321-403.9333, F.S.)

§ 9A-12. PENALTY.

The improper removal of each tree shall constitute a separate offense under this chapter. Violation of this chapter and imposition of the penalty shall be determined and imposed by the Code Enforcement Special Magistrate or by a court of proper jurisdiction.

Removal of any mature oak or similar trees without first obtaining a permit from the Town as required in § 9A-4 shall constitute prima facie evidence of a violation which is irreparable or irreversible in nature for the purposes of enhanced fine assessment provided for in § 11-21(b)(1) or as otherwise amended. Photography (either ground, areal, or geospatial) or other applicable data may be used as prima-facia evidence of the existence of trees on a site prior to any unapproved removal.

Fee structure for removal of protected trees is provided below.

PROTECTED TREE		**FEE FOR UNLAWFUL REMOVAL**			
Common Name	**Scientific Name**	**Min**	**Per inch, 5-10" dbh***	**Per inch, 10-20" dbh***	**Per inch >20" dbh***
Black mangrove	Avicennia germinans	$1,000			
Gumbo limbo	Bersera simaruba	$1,000	$200	$400	$800
Oak, other	Quercus	$1,000	$200	$400	$800
Longleaf pine	Pinus palustris	$1,000	$200	$400	$800
Magnolia	Magnolia grandiflora	$500	$100	$200	$300
Red mangrove	Rhizophora mangle	$1,000			
Sand live oak	Quercus geminata	$2,000	$400	$600	$1,200
Scrub oak	Quercus inopina	$2,000	$400	$600	$1,200
Slash pine	Pinus elliottii	$1,000	$200	$400	$800
White mangrove	Laguncularia racemosa	$1,000			

Example: A gumbo limbo 15" wide at dbh, if removed without permit, would be subject to a penalty of $6,000 ($400 X 15").

(` 75 Code, § 22-25) (Ord. 75-3, passed 5-27-75; Am. Ord. 87-13, passed 9-22-87; Am. Ord. 2017-05, adopted 12-20-17; Am. Ord. 2023-01, adopted 3-15-23)

~~§§ 9A-13.–9A-99. RESERVED.~~

§ 9A-13. NUISANCE TREES.

a. The following *trees* are considered non-native, noxious, invasive species. Property owners are encouraged to remove all such trees from the properties they own within the Town consistent with this chapter Contact the Town's Environmental Advisory Board for free site visits to identify these species.

- Brazilian pepper (Schinus terebinthifolius)
- Melaleuca (Melaleuca quinquenervia)
- Australian pine (Causarina equisetifolia)
- Carrotwood (Cupaniopsis anacardioides (A. Rich.) Radlk)
- Scefflera (*Schefflera digitata)*

§ 9A-14. LIST OF FLORIDA NATIVE TREES AND PLANTS.

LEGEND

+ Cold tolerant

- Cold intolerant

PROTECTED TREES	
Common Name	**Scientific Name**
Black mangrove	Avicennia germinans
Gumbo limbo	Bersera simaruba
~~Laurel oak~~Oak, other	Quercus ~~hemisphaerica~~
~~Live oak~~	~~Quercus virginiana~~
Longleaf pine	Pinus palustris
Magnolia	Magnolia grandiflora
Red mangrove	Rhizophora mangle
Sand live oak	Quercus geminata

Scrub oak	Quercus inopina
Slash pine	Pinus elliottii
White mangrove	Laguncularia racemosa

GRASSES				
Common Name	**Scientific Name**	**Cold Tolerance**		
Beach Grass	Panicum Amarulum	_	_	+
Muhly Grass	Muhlenbergia Capillaris	_	+	_
Seashore Dropseed	Sporobolus Virginicus	_	+	_
Dwarf Fakahatchee	Tripsacum floridanum	_	_	+
Salt meadow cord grass	Spartina Patens	+	_	_
Smoth Cord Grass	Spartina Alteriflora	_	_	+
Salt grass	Distichlis Spicata	_	+	_
Sand Cord grass	Spartina Bakeri	+	_	_
Eastern Gama Grass	Tripsacum Dactyloides	_	+	_
Love grass	Eragrotis spectabilis	_	_	+
Blue-eyed grass	Sisyrinchium atlanticum	+	_	_

GROUND COVER				
Common Name	**Scientific Name**	**Cold Tolerance**		
Adams Needle	Yucca Filamentosa	_	+	_
Beach Elder	Iva Imbricata	_	_	+
Bracken Fern	Pteridium Aquilinum	_	_	+
Coontie/Arrowroot	Integrifolia, Angustifolia	_	+	_
Coontie/Arrowroot	Zamia Floridana, Pumilia	_	+	_
Florida Beargrass	Nolina Atopocarpa	_	_	+
Florida Beargrass	Nolina Brittoniana	_	_	+
Glaswort	Salicornia Spp Native	_	_	+
Golden Creeper	Ernodea Littoralis	_	-	_
Gopher Apple	Licania Michauxii	_	_	+
Penny Royal	Piloblephis Rigida	_	_	+
Prickly Pear	Opuntia Humifusa Compressa	_	+	_
Prickly Pear	Opuntia Stricta	_	+	_
Rosemary	Creatiola Erocoides	_	_	+
Runner Oak	Quercus Pumila	_	+	_
Sea Oats	Uniola Paniculata	_	+	_
Spanish Dagger	Yucca Aloifolia	+	_	_
St Johns Wort	Hypericum Spp	_	+	_

LARGE *TREES*				
Common Name	**Scientific Name**	**Cold Tolerant**		
Bald cypress	*Taxodium distichum	_	_	+
False dogwood or southern soapberry	Sapindus saponarina	_	_	+
Gumbo limbo	Bersera simaruba	_	-	_
Laurel oak	Quercus hemisphaerica	_	+	_
Live oak	Quercus virginiana	_	_	+
Magnolia	Magnolia grandiflora	_	_	+
Sand live oak	Quercus geminata			
Slash pine	Pinus elliottii	_	_	+
Soapberry	Sapindus marginatus	_	_	+
* Commercial applications around retention areas				

MEDIUM *TREE*				
Common Name	**Scientific Name**	**Cold Tolerant**		
American elm	Ulmus americana	_	+	_
Black ironwood	Krugiodendron ferreum	-	_	_
Black mangrove	Avicennia germinans	_	+	_
Blolly	Guapira discolor	_	-	_
Cherry laurel	Prunus caroliniana	_	_	+
Dahoon holly	Ilex cassine	_	_	+
Florida maple	Acer saccharum	_	+	_
Green buttonwood	Conogarpus erectus	_	_	-
Mastic *tree*	Mastichodendron foetidissimum	_	-	_
Persimmon	Diospyros virginiana	_	_	+
Pigeon	Coccoloba diversifolia	-	_	_
Pignut hickory	Carya glabra	_	+	_
Red bay	Persea borbonia	+	_	_
Red mangrove	Rhizophora mangle	_	_	-
Red maple	Acer rubrum	_	_	+
Sand pine	Pinus clausa	_	_	+
Satin leaf	Chrysophyllum oliveforme	_	_	-
Scrub hickory	Carya floridana	_	+	_
Silk Bay	Persea humilis	_	_	+
Southern red cedar	juniperis silicicola	_	_	-
Swamp bay	Persea pustris	_	_	+
Winged elm	Ulmus alata	_	_	+

PALMS				
Common Name	**Scientific Name**	**Cold Tolerant**		
Cabbage palm	Sabal Palmetto		+	
Florida silver palm	Cocco thrinax-argentata		-	
Parotis palm	Acoelorrhaphe wrightii		+	
Royal palm	Roystonea elata		-	

SHRUBS				
Common Name	**Scientific Name**	**Cold Tolerance**		
Firebush	Hamelia patens		-	
Simpson stopper	Myrcianthes simpsonii	+		
White stopper	Eugenia axillaris		+	
Salt bush	Baccharis halimifolia			+
Myrile oak	Quercus myrtifolia			+
Running oak	Quercus pumila		+	
Wild lime	Zanthoxylum fagara			+
Beauty berry	Callicarpa americana			+
Blueberry	vaccinium native sp			+
Carolina aster	Aster carolinanus		+	
Cassia	Cassia ligustrina		-	
Cassia	Cassia chapmanii		-	
Christmas berry	Lycium carolinianum		+	
Coral bean	Erythrina herbacea			+
Dwarf live oak	Quercus minima		+	
Fetter bush	Lyonia Lucida			+
Florida privet	Foresteria segretata			+
Frostweed	Verbesina virginica			+
Lantana	Lantana depressa	+		
Lantana	Lantana involucrata		+	
Marlberry	Ardisia escallonioides			+
Marsh elder	Iva imbricata			-
Necklace pod	Sophora tomentosa			-
Needle palm	Rhapidophyllum hystrix		+	
Saw palmetto	Serenoa repens		+	
Small privet	Foresteria pinetorum			+
Snow berry	Chiococca alba		+	
Staggerbush	Lyonia ferruginea		+	
Staggerbush	Lyonia fruticosa		+	
Walters viburnum	Viburnum obovatum			+
Wax myrtle	Myrcia cerifera		+	
Wild coffee	Psychotria nervosa			-

Wild coffee	Psychotria sulzneria			-

SMALL *TREES*

Common Name	Scientific Name	Cold Tolerant		
American holly	Ilex opaca		-	
Chapman oak	Quercus Chapmanii			+
Coco plum	Chrysobalanus icaco			-
Fiddlewood	Citharexylum fruticosum		-	
Firebush	Hamelia patens		-	
Florida privet	Forestiera segregata			+
Guiana plum	Drypetes lateriflora			-
Inkwood	Exothea paniculata			-
Jamaica caper	Capparis cyanophallophora			-
Lancewood	Nectandra coriacea			-
Limber caper	Capparis flexuosa		-	
Myrtle oak	Quercus myrti Folia			+
Mysrine	Myrsine floridana	-		
Salt bush	Baccharis halimifolia			+
Sand live oak	Quercus geminata			+
Scrub oak	Quercus inopino		+	
Sea grape	Coccoloba uvifera			-
Simpson stopper	Myrcianthes simpsonii	+		
Southern sumac	Rhus copallina		+	
Spanish stopper	Eugenia foetida	-		
Sweet acacia	Acacia farnesiana		+	
Tough bumelia	Bumelia tenax		+	
Varnish leaf	Dodonoea viscosa			-
Wax Myrtle	Myrica cerifera		+	
White mangrove	Laguncularia racemosa	-		
White stopper	Eugenia axillaris		+	
Wild lime	Zanthoxylum fagara			+
Yaupon holly	Ilex vomitoria			+

VINES				
Common Name	**Scientific Name**	**Cold Tolerant**		
Beach Bean	Canavalia Obtusifolia			-
Beach Morning Glory	Ipomea Stolonifera			-
Coral honeysuckle	Lonicera Sempervire			+
Corky stem passion vine	Passiflora Suberosa		-	
Grapes	Vitis Native Spp		+	

Gray Nickerbean	Caesalpinia Bonduc Crista	-		
Maypop	Passiflora incarnata		-	
Morning Glory	Ipomea Spp		+	
Railroad Vine	Ipomea pes-caprae			-
Virginia Creeper	Parthenocissus Quinque Folia		+	

WILDFLOWERS				
Common Name	**Scientific Name**	**Cold Tolerant**		
Beach Croton	Croton Punctatus		+	
Beach Sunflower	Helianthus Debilis		+	
Beach Verbenia	Verbenia Maritima		+	
Black eyed susan	Rudbeckia hirta	+		
Blazing Star	Liatris Tenufolia		+	
Blue Curl	Trichostema Dichotomum		+	
Blue Eyed Grass	Sysyrinchium Atlanticum	+		
Firewheel	Gaillardia Pulchella			+
Goldenrod	Solidago Spp			+
Horse Mint	Monarda Puncata			+
Partridge Pea	Cassia Spp		+	
Pink Purslane	Portulaca Pilosa		+	
Purslane	Portulaca Rubricaulis			+
Sea Oxide Daisy	Borrichia Spp		+	
Sea Purslane	Sesuvium Portula Castrum		+	
Seaside Evening Primrose	Oenothera Humifusa		+	
Seaside Gentian	Eustoma Exaltatum		+	
Spider Lily	Hymenocallis Latifolia		+	
St. Johns Wort	Hypericum Spp	+		
Standing Cypress	Ipomopsis Rubra		+	
Tampa Verbenia	Verbenia Tempenisis		+	
Tropical Sage	Salvia Coccinea		+	
Twin Flower	Dyschoriste Spp			
Wild Cotton	Gossypum Hirsutum			
Wild Petunia	Ruellia Caroliniensis			+
Wild Plumbago	Plumbago Scandens		+	
Yellow Top	Flaveria Linearis		+	

Legend

A	Aquatic

G	Ground cover
GR	Grass
LT	Large *tree*: average mature height over 60 feet
MT	Medium *tree*: average mature height over 20 feet
P	Palm
S	Shrub
ST	Small *tree*: average mature height of at least ten feet and less than 20 feet
V	Vine
W	Wildflower

DAMP TO WET AREA PLANTS						
	Common Name	**Scientific Name**			**Cold**	**Salt**
W	Alligator lily	Hymencallis palmeri			-	+
G	Batis	Batis maritima			+	+
S	Beauty berry	Callicarpa americana			+	+
GR	Blue eyed grass	Sisyrinchium atlanticum	+	+		
W	Blue flag iris	Iris hexagona			-	-
W	Bushy aster	Aster dumosus			+	-
W	Canna lily	Canna flacida			-	-
S	Buttonbush	Cephalanthus occidentalis		+	-	
W	Cardinal flower	Lobelia cardinalis	+	-		
V	Climbing aster	Aster carolinianus		+	-	
S-ST	Coastal plains willow	Salix caroliniana		+	+	
W	Coreopsis	Coreopsis leavenworthii		+	+	
ST	Dahoon holly	Ilex cassine			+	+
A	Duck potato	Sagittaria sp			+	+
GR	Eastern gamma grass	Tripsacium dactyloides		+	+	
S	Elderberry	Sambucus canadensis			+	-
S	Gallberry	Ilex glabra			+	+
WF	Goldenrod	Solidago sp.			+	-
S	Hibiscus	Hibiscus coccinea or grandiflora		-	+	
G	Lemon bacopa	Bacopa caroliniana		+	+	
MT	Loblolly bay	Gordonia lasianthus			+	-
ST	Mangroves				+	+

W	Narrow-leafed sunflower	Helianthus angustifolius	+	+		
A	Pickeralweed	Pontederia cordata			+	+
W	Rayless sunflower	Helianthus radula		+	-	
P	Sabal palm	Sabal palmetto			+	+
G	Sand Cordgrass	Spartina bakeri	+	-		
G	Sandweed	Hypericum fasiculatum		+	+	
W	Sea ox-eye daisy	Borrichia frutescens		+	+	
W	Sea purslane	Sesuvium portulacastrum		+	+	
W	Seaside gentian	Eustoma exaltaum		+	+	
A	Softrush	Juncus effusus			+	+
W	Spiderwort	Tradescantia ohiensis			+	+
G	St. Andrews cross	Hypericum hypericoides		+	+	
G	Sunshine Mimosa	Mimosa strigillosa			+	+
W	Swamp Milkweed	Asclepias incarnata			+	+
MT	Sweet bay	Magnolia virginica		+	+	
W	Vanilla plant	Carphephorus paniculatus		+	+	
W	Violets	Viola affinis		-	-	
G	Water dropwort	Oxypolis filiformis		+	+	
G	Water hyssop	Bacopa monnieri		+	+	
W	Yellowtop	Flaveria linearis		+	+	
G	Glaswort	Salicornia spp			+	+
	Leather fern	Acrostichum dandeifolium		-	+	
S	Saltmarsh mallow	Kosteletzkaya virginica		+	+	
LT	Bald cypress	Taxodium distichum			+	+

Plants approved for use along the 4RM AND 5RMO.	
Common Name	**Scientific Name**
Indian Hawthorne	Rhaphiolepis Indica "Alba"
Juniper—Parsoni	Juniperus chinensis "Parsonii"
Juniper—Torulosa	Juniperus chinensis "Torulosa"
King Sago	Cycas Revoluta
Buttonwood Green	Conocarpus erectus
Buttonwood Silver	Conocarpus erectus sericeus
Cord Grass	Spartina Bakeri
Necklace Pod	Sophora Tomentosa
Bird of Paradise	Strelitzia Reginae
Elaeagnus	Elaeagnus pungens

Arbicola	Schefflera Arboricola
Coco Plum	Chrysobalanus Icaco
Natal Plum	Carissa Macrocarpa
Pittosporum Green/Varigated	Pittosporum tobira
Palmetto	Sabal Palmetto
Madagascar Olive	Norohnia Emarginata
Sea Oats	Uniola Paniculata
Gallardia	Gaillardia pulchella
Coontie	Zamia Pumila
Zamia	Zamia Maritima
Confederate Jasmine	Trachelospermum Jasminoides
Pindo Palm	Butia Capitat
Cabbage Palm	Sabal palmetto
Sprengeri Fern	Aspargus densiflorus
Fiddlewood	Citharexylum spinosum
Dune Sunflower	Helianthus Debilis
Gazania Daisey	Gazania

The following plants may be used along the 4RM AND 5RMO if protected from the direct wind and salt spray:	
Common Name	**Scientific Name**
Liriope	Liriope "Evergreen Giant"
Oleander Dwarf/Standard	Nerium oleander
Ligustrum	Ligustrum Lucidum
Florida Privet	Forestiera Segregata
Yaupon—Weeping	Ilex vomitoria pendula
Walter's Viburnum	Viburnum Obovatum
Podocarpus	Podocarpus macrophyllus
Ilix Schillings	Ilex vomitoria "Stokes Dwarf"
Ixora	Ixora
Jatropha	Jatropha
European Fan Palm	Chamaerops Humilis
Coconut Palm	Cocos nucifera
Hibiscus	Hibiscus
Snow Bush	Breyneia Disticha
Simpson's Stopper	Myrcianthes Fragrans
Croton	Codiaeum Variegatum
Allamanda	Allamanda cathartica
Agapanthus	Agapanthus arficanus
Blue Daze	Evolvulus glomeratus

Hibiscus	Hibiscus
East Palatka Holly	Ilex attenuata "East Palatka"
Geiger *Tree*	Cordia sebestena
Foxtail Palm	Wodyetia bifurcata
Bismarkia Palm	Bismarckia nobilis
Paurotis Palm	Acoelorrhaphe wrightii
Fountain Grass	Pennisetum setaceum
Crinum Lily	Crinum lily
Society Garlic	Tulbaghie violacea
Indian Hawthorne	Rhaphiolepis Indica "Alba"
Juniper—Parsoni	Juniperus chinensis "Parsonii"
Juniper—Torulosa	Juniperus chinensis "Torulosa"
King Sago	Cycas Revoluta
Buttonwood Green	Conocarpus erectus
Buttonwood Silver	Conocarpus erectus sericeus
Cord Grass	Spartina Bakeri
Necklace Pod	Sophora Tomentosa
Bird of Paradise	Strelitzia Reginae
Elaeagnus	Elaeagnus pungens
Arbicola	Schefflera Arboricola
Coco Plum	Chrysobalanus Icaco
Natal Plum	Carissa Macrocarpa
Pittosporum Green/Varigated	Pittosporum tobira
Palmetto	Sabal Palmetto
Madagascar Olive	Norohnia Emarginata
Sea Oats	Uniola Paniculata
Gallardia	Gaillardia pulchella
Coontie	Zamia Pumila
Zamia	Zamia Maritima
Confederate Jasmine	Trachelospermum Jasminoides
Pindo Palm	Butia Capitat
Cabbage Palm	Sabal palmetto
Sprengeri Fern	Aspargus densiflorus
Fiddlewood	Citharexylum spinosum
Dune Sunflower	Helianthus Debilis
Gazania Daisey	Gazania

ARTICLE I. WETLANDS PROTECTION

§ 11A-1. PURPOSE AND INTENT.

The purpose of this chapter is to protect, preserve and enhance the natural functions of wetlands and other environmentally sensitive areas. It is also the intent of this article to apply the following standards for development in and adjacent to wetlands.

(Am. Ord. 2017-05, adopted 12-20-17)

§ 11A-2. GENERAL PROVISIONS.

(a) During the review of a site plan or any other plan for development, the Town Manager shall use the Natural Wetlands Inventory maps, the Brevard County Soil Survey, the Town Comprehensive Plan, aerial photography or other applicable data in order to determine the potential existence of wetlands on or adjacent to the site.

(b) If a review of the above documents indicates that wetlands may exist on or adjacent to the site, the Town manager or designee shall contact the appropriate authorities listed in section 11A-2(c) to perform verification of wetland determination and provide guidance on wetlands permit requirements. ~~an inspection will be performed by the Town Manager.~~

(c) Based on the assessment of the above site visit, the ~~Town Manager mayrequire the developer to~~property owner shall have the site inspected by a representative from the St. Johns River Water Management District for a determination of jurisdictional limits of the site. This may require the involvement of the Army Corps of Engineers, the Department of Environmental Regulation and the Department of Natural Resources.

(d) No building permit will be issued by the Town until either the site plan has been approved or an exemption letter has been issued by the applicable environmental agency.

(e) All proposed development adjacent to canals, the Indian River and east of State Road A1A will automatically be reviewed under the above process.

(Am. Ord. 2017-05, adopted 12-20-17)

§ 11A-3. PERMITTED USES IN WETLANDS.

The following uses shall be permitted in wetlands provided that they are approved by the St. Johns River Water Management District or the applicable environmental agency:

(1) Open space;

(2) Fish and wildlife management;

(3) Recreation; or

(4) Any other use deemed appropriate by the St. Johns River Water Management District or the Department of Natural Resources.

(Am. Ord. 2017-05, adopted 12-20-17)

§ 11A-4. PROHIBITED USES IN WETLANDS.

The following uses are specifically prohibited in wetlands:

(1) Residential, commercial, industrial and institutional uses, except as provided for in § 1A-3;

(2) Disposal of solid or liquid wastes, and the application or storage of pesticides and herbicides; and

(3) Any activity which impairs the function of the wetlands.

(Am. Ord. 2017-05, adopted 12-20-17)

§§ 11A-5. – 11A-99. RESERVED.

Unique Beauty of Melbourne Beach

Sand Live Oaks (Quercus geminata)

- Slow growing, up to 150 years to reach full height (UF IFSAS)
- Drooping branches with dense canopy provide vital habitat
  - Eastern screech owl, woodpeckers, songbirds, insects, lichen….
- Loss = significant ecological impact

Common Goal: Protect our Legacy

- Preserve ecosystem
- Protect property values

Canopy Benefits

Absorb huge volumes of rainwater

- Reducing runoff to the Indian River, property erosion, and effects from flooding

Provide shade

- Conserving energy, reducing glare, and making outdoor areas more comfortable

Reduce ground-level wind speeds

- Reducing danger property damage

Enhance the Town's attractiveness

- Increasing property values

Reduce noise and surface water runoff

EAB Suggested Priorities

PRIORITY 1

Protect our legacy by preserving the native canopy

PRIORITY 2

Enhance replacements when preservation not possible

PRIORITY 3

Remove invasive species

Melbourne Beach Existing Tree Canopy

Melbourne Beach Recent Construction

Landscape Officer As defined in EAB's suggested ordinance revision:

Any person hired and appointed by the Town as Landscape Officer with the authority and responsibility to administer the provisions of this Code. The Landscape Officer shall receive such training in arboriculture and code enforcement as is deemed necessary by the Town Administration.

Draft Job Description:

Landscape Officer (Retainer Position)

Location: Town of Melbourne Beach
Employment Type: Retainer/Contract
Reports To: Town Building Department

Position Overview

The Landscape Officer will be responsible for reviewing and assessing landscape plans and any tree removal permits submitted for town approval, ensuring compliance with the Town's building code and environmental regulations. The officer will provide expert guidance on arboriculture, plant selection, and sustainable landscaping practices to enhance the town's urban and natural environment.

Key Responsibilities

- Evaluate landscape plans and tree removal permits submitted for approval, ensuring adherence to municipal building codes and environmental policies.
- Provide expert recommendations on tree preservation, plant selection, and sustainable landscaping techniques.
- Conduct site inspections to verify compliance with approved landscape plans.
- Collaborate with Town management, the Environmental Advisory Board, the Planning and Zoning board, engineers, and others to integrate landscaping into development projects.
- Advise on best practices for tree management, including pruning, removal, and disease prevention.
- Respond to inquiries from residents, developers, and town officials regarding landscape regulations.
- Maintain records of landscape plan approvals and compliance assessments.

Qualifications & Skills

- Experience in landscape planning, urban forestry, or environmental assessment.
- Knowledge of the Town's building ordinances and environmental regulations.
- Strong analytical skills to assess landscape designs and compliance.
- Excellent communication skills for engaging with town officials, developers, and the public.
- Ability to conduct site inspections and provide detailed reports.
- Familiarity with local flora and sustainable landscaping practices.

EAB Suggestions for Permit Approval Changes

1. Owner/rep submits **Permit** request to Town >>>> Building Official looks at the landscaping of the lot prior to issuing permit.
2. Owner/rep submits **Site Plan** to Town >>>> Building Official reviews landscape plan to be sure the architect has placed/replaced trees, per code, on the plans, and to see that the plan meet pervious/impervious ratio.
    - Town sends EAB landscape design.
        - EAB Contact identifies Landscape Officer for approval.
        - Landscape Officer submits findings to EAB Contact, Architect, Engineer, and Building Official
3. Owner's Engineer submits **Drainage Calcs** to Town >>>> Town Engineer reviews for approval of water retention plan (8"of water will be retained on the site in a 24 hour period), once approved
    - Drainage Calcs >>>> Building Official
    - All documentation from Owner's engineer and Town engineer is submitted to DEP annually to comply with the BMAP requirements.
4. Building Official prepares **Full Package** for P&Z and sent to Town
    - Town to submit package to EAB at the same time the package is sent to P&Z
    - If Town receives package 3 weeks before P&Z meeting (first Tuesday of the month), package is present next P&Z meeting
    - If Town receives package <3 weeks before P&Z meeting, package is present next P&Z meeting

Section IV

Robert's Rules of Order

Introduction to Robert's Rules of Order

1. What is Parliamentary Procedure?
2. Why is Parliamentary Procedure important?
3. Example of the Order of Business
4. Motions
5. Types of Motions
6. How are Motions presented?
7. Voting on a Motion

1. What is Parliamentary Procedure?

It is a set of rules for conduct at meetings that allows everyone to be heard and to make decisions without confusion.

2. Why is Parliamentary Procedure important?

Because it's a time-tested method used for conducting business at meetings and public gatherings. It can be adapted to fit the needs of any organization. Robert's Rules of Order is the basic handbook of operation for most clubs, organizations and other groups – so it's important to know the basic rules.

3. Organizations using parliamentary procedure usually follow a fixed order of business (Agenda), for example:

1. Call to order
2. Roll call & determination of quorum
3. Reading/approval of minutes of last meeting
4. Officer's/Staff's report
5. Committee report
6. Special orders
7. Unfinished/Old Business
8. New Business
9. Announcements/Board Discussion
10. Adjournment

4. The method used by members to express themselves is in the form of "moving motions". A motion is a proposal that the entire membership take action or a stand on an issue. Individual members can:

1. Call to Order
2. Second motions
3. Debate motions
4. Vote on motions

5. There are four Basic Types of Motions:

1. *Main Motions*: the purpose of a main motion is to introduce items to the membership for consideration. They cannot be made when any other motion is on the floor, and yield to privileged, subsidiary, and incidental motions.
2. Subsidiary Motions: the purpose of subsidiary motions is to change or affect how a main motion is handled, and is voted on before a main motion.
3. *Privileged Motions*: the purpose of a privileged motion is to bring up items that are urgent about special or important matter unrelated to pending business.
4. *Incidental Motions*: the purpose of an incidental motion is to provide a means of questioning procedure concerning other motions and must be considered before the other motion.

6. How are Motions presented?

1. Obtaining the floor
   a. Wait until the last speaker has finished
   b. Raise your hand and address the Chairman by saying, "Mr. Chairman"
   c. Wait until the Chairman recognizes you before speaking

2. Make your motion
   a. Speak in a clear and concise manner
   b. Always state a motion affirmatively. Say, "I move that we …" rather than, "I move that we do not …".
   c. Avoid personalities and stay on topic/subject

3. Wait for someone to second your motion
4. Another member will second your motion or the Chairman will call for a second.
5. If there is no second to your motion, the motion "dies" for lack of a "second".
6. The Chairman re-states Your motion
   a. the Chairman states, "it has been moved and seconded that we …". Thus placing your motion before the members for consideration and action.
   b. The membership then either debates your motion, or may move directly to a vote.
   c. Once your motion is presented to the membership by the Chairman, it becomes "assembly property" and cannot be changed by you without the consent of the members.

7. Expanding on Your Motion
   a. The time for you to speak in favor of your motion is at this time – not when you present it.
   b. The mover is always allowed to speak first.
   c. All comments and debate must be directed to the Chairman.
   d. Keep to the time limit for speaking that has been established.

e. The mover may speak again only after other speakers are finished, unless called upon by the Chairman.

8. Putting the Question (Motion) to the Membership
   a. The Chairman asks, "Are you ready to vote on the question/motion?"
   b. If there is no more discussion, a vote is taken.
   c. On a motion to move the previous question may be adapted.

7. Voting on a Motion:

The method of vote on any motion depends on the situation and the by-laws of the Board. There are five methods used to vote by most organizations:

1. By Voice – the Chairman asks those in favor to say, "aye", those opposed to say "no". Any member may move for an exact count.
2. By Roll Call – the member answers "yes" or "no" as his/her name is called. This method is used when a record of each person's vote is required or desired.
3. By General Consent – when a motion is not likely to be opposed, the Chairman says, "if there is no objection … " The membership shows agreement by their silence, however if one member says, "I object," the item must be put to a vote.
4. By Division – this is a slight verification of a voice vote. It does not require a count unless the Chairman so desires – members raise their hands or stand.
5. By Ballot – members write their vote on a slip of paper; this method is used when secrecy is desired.*

There are two other motions that are commonly used relating to voting:

1. Motion to Table – this motion is often used in the attempt to "kill" a motion. The option is always present, however, to "take from the table", for reconsideration by the membership.
2. Motion to Postpone Indefinitely – this is often used as a means of parliamentary strategy and allows opponents of the motion to test their strength without an actual vote being taken. Also, debate is once again open on the main motion.

Parliamentary Procedure is the best way to get things done at your meetings:

1. Allow motions that are in order;
2. Have members obtain the floor properly;
3. Speak clearly and concisely;
4. Obey the rules of debate; and most importantly …
5. Be courteous.

Information courtesy of: http://www.robertsrules.org

Section II

Florida's Sunshine and Public Records Law

FLORIDA'S SUNSHINE LAW

The Sunshine Law in a nutshell: The public's business must be conducted in public.

- Do not talk to each other in private about any matter that could foreseeably come before this Board.
- What is foreseeable? Any topic related to the Board's function and duties upon which it could conceivably make a decision (vote). Such discussions between Board members must be held at open, public meetings of the Board.
- Notice of the Board meetings must be published in advance, the meetings must be held in a place where the public can attend, and the proceedings must be recorded and made available to the public afterward.
- Assume a decision you've made in the past could come back to the Board for further decision.

What Board Members ***Can*** Do

- Talk with City staff and members of other Boards. Please be aware the requirements of the Sunshine Law are different than requirements for quasi-judicial hearings.

What Board Members ***Cannot*** Do

- No chat rooms, no blogging, no Facebook, no Twitter, no e-mails, no talking during breaks in Board meetings, no whispering or talking among yourselves at the dais, no talking in the parking lot, at the country club, or on the golf course about matters which foreseably could come before your board.
- You can't use other people as a go-betweens to exchange information.
- You cannot send e-mails to other Board members communicating your position on a particular matter which will come before the Board. Send your e-mails to staff.

  No "reply all" please.

Penalties:

- Non-criminal infraction with a fine up to $500.00 (Section 286.011, Fla. Statutes).
- A knowing violation is a second-degree misdemeanor subject to prison for up to 60 days and a fine of up to $500.00 (Section 286.011, Fla. Statutes). If found guilty, the officials could be removed from office (Section 112.52, Fla. Statutes).
- If a Sunshine violation cannot be "cured," the action of the entire Board at a subsequent meeting is void.

RULE OF THUMB: When in Doubt, Don't.

FLORIDA SUNSHINE, PUBLIC RECORDS, AND CODE OF ETHICS LAWS

This presentation is intended to provide a general overview of Florida Sunshine and Public Records law and the Florida Code of Ethics. For specific guidance or a legal opinion, please contact the Attorney's office.

All boards or commissions of any state, county, municipal corporation or political subdivision have a legal obligation to comply with:

- The Sunshine Law, and
- The Public Records Law, and
- The Florida Code of Ethics.

THE LAWS

- SUNSHINE LAW [FS §286.011 ("Sunshine Law") and FL Constitution Art. I, Sec. 24]

Protects the public from "closed door" decision making and provides a right of access to governmental meetings.

- PUBLIC RECORDS LAW [FS Chap. 119]

Creates a right of access to records made or received in connection with official business of a public body.

- CODE OF ETHICS [FS 112, Part III, Code of Ethics for Public Officers and Employees and the FL Constitution Art. II, §8]

Protects against conflict of interest and establishes standards for the conduct of elected official and government employees in situations where conflicts may exist.

Committee type determines the applicability of these laws. There are two types of committees:

1. Decision Making Committees
2. Fact Finding/Focus Group Committees

1. Decision Making Committees - become part of the governing body's decision making process and:

- Choose alternatives and direction; narrow or eliminate options for the governing body's consideration.
- Make decision by voting.
- Make recommendations to the governing body directly or through staff.
- Create by-laws.

2. Fact Finding/Focus Groups - provide a source of community input and factual resources and:

- Have no characteristics of a Decision Making Committee.
- Do not need by-laws.
- Provide individual input, data and factual findings to staff, as part of staff's development in its advisement to the governing body.
- Do not take votes.
- Maintain a brainstorming focus.

The City Commission is a decision making board.

THE SUNSHINE LAW - gives the public access to meetings of "any board or commission of any state agency or authority or of any agency or authority of any county, municipal corporation, or political subdivision" ("Governing Body") *AND*

- Allows the public to observe each preliminary step leading to the final decision.
- Prevents the governing body from creating closed committees that narrow the governing body's decisions.
- Applies to appointed committees.
- An AG opinion advises it may also applies to an individual Board member, appointed to negotiate, narrow decisions, or make decisions for the full board.

MEETINGS SUBJECT TO THE SUNSHINE LAW - include formal or casual discussions about a matter on which the governing body may foreseeably take action, between:

- Two or more members of the governing body, or
- Two or more members of a Decision Making Committee.

Discussions may occur through telephone or e-mail communications, or exchanges during workshops, social events, football games and neighborhood barbeques. **This is why the reply all function is such a bad idea. Don't make bad habit**s.

■ **THE SUNSHINE LAW IMPOSES THREE OBLIGATIONS OF OPENNESS**

1. Reasonable notice of meetings subject to the Sunshine Law must be given; requires giving the public reasonable and timely notice so they can decide whether to attend.

What is "reasonable" or "timely" depends on the circumstances. Does not necessarily require a newspaper advertisement (contact the Attorney's office for guidance).

2. Public must be allowed to attend meetings.
   - Meetings cannot be held at exclusive or inaccessible facilities.
   - No evasive actions are allowed, such as:
     a. Circulating written reports to elicit responses or positions on issues.
     b. Using staff, lobbyists, or other means to seek other members' positions about issues.

3. Minutes of the meetings are required. Written minutes must be taken and made available promptly.

   - Sound recordings may also be used, in addition to written minutes.
   - Minutes may be a brief summary of meeting's events.
   - Minutes are public records.
   - Minutes must record the votes.

■ **THE SUNSHINE LAW APPLIES WHEN:**

- Two or more members of a governing body discuss a matter that may foreseeably come before the governing body.
- A governing body moves any part of its decision making process to a committee or group, thereby appointing an "alter ego."

According to an AG opinion, this may also include an individual Board or Committee member appointed formally or informally to negotiate, narrow or eliminate options or decisions for the full Board or Committee.

- **THE SUNSHINE LAW DOES <u>NOT</u> APPLY TO:**
  1. Committees or groups appointed to engage only in fact-finding activities.
  2. Created focus groups or other such committees that:
     a. Only provide individual input, data and facts as part of staff's development in its advisement to the governing body.
     b. Do not narrow options.

The Sunshine Law is *broadly* construed. ~ Exemptions are *narrowly* construed.

- **SUNSHINE LAW:**
  Penalties for Noncompliance (also applies to Decision Making Committees) *A violation of the Sunshine Law by the governing body or a Decision Making Committee, can <u>nullify</u> governing body's decisions.*

- Criminal Penalties:
  1. It is a second degree misdemeanor to knowingly violate the Sunshine Law.
  2. Is Punishable with a fine of up to $500 and/or up to 60 days imprisonment.

- Other Penalties Include:
  1. Removal from position.
  2. Payment of attorney's fees incurred by the challenging party, as well as declaratory and injunctive relief.

SENTENCED TO JAIL FOR SUNSHINE LAW VIOLATIONS:
Suspended Escambia County Commissioner, W.D. Childers, was sentenced to 60 days in jail for discussing redistricting in a telephone conversation while fellow commissioner listened on a speaker phone, and pleaded no contest for talking with two fellow commissioners about county building projects in front of a staffer.

- **<u>PUBLIC RECORDS LAW:</u>**

Public Records Include: All documents, papers, letters, maps, books, tapes, photographs, films, sound recordings, data processing software, or other material, regardless of physical form or means of transmission made or received pursuant to law in connection with transaction of official business by the agency. (Fl. Stat. Chapter 119)

THE PUBLIC RECORDS LAW APPLIES TO:
- Records developed by the governing body, Board Appointed Committees, and employees;
- All types of records including written communications, letters, notes and e-mails. Numerous exemptions are identified in FS 119.07 and other statutes.

Public Records Requests can be made:
- Verbally or in writing,
- By any person. A PRR A .

THE GOVERNING BODY OR APPOINTED COMMITTEE:
- Has a "reasonable" time to respond.
- Can charge for the cost of retrieving records if the amount requested is voluminous.
- Can charge 15 cents/page.

THE PUBLIC RECORDS LAW DOES NOT REQUIRE:

- The creation of records or the provision of records in the format requested.
- An explanation of the records.

FLORIDA CODE OF ETHICS:

- ADDRESSES:
  a. Standards of conduct
  b. Voting Conflicts
  c. Financial Disclosure
  d. Prohibits certain action or conducts.
  e. Requires certain disclosures be made to the public.

Standards of Conduct Prohibit Public Officials from:

- **Soliciting and Accepting Gifts -** May not solicit or accept anything of value that is based on an understanding that their vote, official action, or judgment would be influenced by such a gift.
- **Accepting Unauthorized Compensation -** May not accept any compensation, payment, or thing of value that is given to influence a vote or other official action.
- **Misusing his/her Public Position -** May not corruptly use their official position to obtain a special privilege for themselves or others.
- **Disclosing or Using Certain Information -** May not disclose or use information not available to the public and obtained by reason of their public positions for the personal benefit of themselves or others.
- **Doing business with their agency -** A public official's agency may not do business with a business entity in which the public official, or their spouse or child own more than 5% interest.
- **Engaging in Conflicting Employment or Contractual Relationships -** A public official may not be employed or contract with any business entity regulated by or doing business with his or her public agency.

Voting Conflicts of Interest Fla. Stat. Sec. 112.3143

- Requires no County, municipal, or other Local Public officer (including members of the appointed committees) shall vote in an official capacity upon any measure which would inure to the special private gain or loss of themselves, any principal or entity by whom they are retained, other than an agency as defined in the Fl. Stat. 112.312(2), or to any relative or business associate.
- Requires that public officers, including members of decision making committees:
  1. Must announce the nature of the conflict before the vote; abstain from voting; and file a memorandum of voting conflict
  2. May not participate in the discussion without first disclosing the nature of their interest in the matter (either in writing prior to the meeting, or orally as soon as they become aware that a conflict exists.

BECOMES AN ISSUE WHEN STAKEHOLDERS ARE APPOINTED TO DECISION-MAKING COMMITTEES

- **FINANCIAL DISCLOSURES**

Appointed committee members must file an annual financial statement.

	Focus Group	Decision-making Committee
Florida Laws		
Sunshine law		X
Public Records Law	X	X
Code of Ethics		
Standards of Conduct	X	X
Voting Conflict		X
Financial Disclosure		X

Conflict of Interest Fla. Stat. 112.313(7)(a) is different than the voting conflict of interest statute. The main difference is a conflict under 313(7)(a) may not be cured by abstaining or not participating. If a conflict exists here, you may not serve on on the board or committee.

"No public officer ... shall have or hold any employment or contractual relationship with any business entity or any agency which is subject to the regulation of, or is doing business with, any agency of which he or she is an officer. . . .; nor shall an officer ... of any agency have or hold any employment or contractual relationship that will create a continuing or frequently recurring conflict between his or her private interests and the performance of his or her public duties or that would impede the full and faithful discharge of his or her public dutes."

Statute has two parts - (1) no employment or contractual relationship with entity regulated by officer's agency or doing business with; and (2) no employment or contractual relationship creating a continuing or frequently recurring conflict or that will impede the full and faithful discharge of public duties.

A conflict of interest is a situation that objectively tempts dishonor. Law firm example and 2020 Commission on Ethics Decision (attached below on pages 4-5 of decision). .**PLEASE READ**.

Exception where the officer is practicing in a particular profession or occupation when such practice is required or permitted by law or ordinance. Fla. Stat. 112.313(7)(b). See me for clarification.

DRAFT ORDINANCE NO. 2025-04

AN ORDINANCE OF THE TOWN OF MELBOURNE BEACH, FLORIDA, RELATING TO LAND DEVELOPMENT REGULATIONS AND SIGNAGE; AMENDING SECTION 7A-52, TOWN CODE OF ORDINANCES, RELATING TO PROHIBITED SIGNS AND PROVIDING FOR ADDITIONAL REGULATIONS AS TO TYPE OF SIGNAGE PROHIBITED WITHIN THE TOWN, AMENDING SIGN LOCATION AND DURATION OF SIGNAGE PERMITTED IN THE TOWN; REVISING SIGNAGE STANDARDS; PROVIDING FOR REMOVAL OF SIGNAGE BY THE TOWN; PROVIDING FOR SEVERABILITY; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the Town Commission desires to amend its Land Development Code relating to signs to promote the public health, safety and general welfare through reasonable, consistent and non-discriminatory sign regulations; and

WHEREAS, the Planning and Zoning Board has examined this Ordinance and has reported its findings to the Town Commission; and

WHEREAS, the Planning and Zoning Board, sitting as the Local Planning Agency, has examined this Ordinance and reported its findings to the Town Commission with regard to consistency of the Ordinance with the Comprehensive Plan; and

WHEREAS, the Planning and Zoning Board has found this Ordinance to be consistent with the Comprehensive Plan; and

WHEREAS, the Planning and Zoning Board has recommended adoption of this Ordinance by the Town Commission; and

WHEREAS, the Town Commission adopts the findings of the Planning and Zoning Board as its own; and

WHEREAS, the Town Commission finds this Ordinance to be in the best interests of the Town and promote the public health, safety, welfare, and aesthetics of the Town.

NOW THEREFORE, BE IT ENACTED BY THE TOWN OF MELBOURNE BEACH, FLORIDA:

Section 1. The findings set forth in the recitals above are adopted and fully incorporated herein as legislative findings of the Town Commission pertaining to this Ordinance.

Section 2. Section 7A-52, "Signs," of the Town of Melbourne Beach Code of Ordinances, shall be amended as follows (Note: additions indicated by underscore; deletions indicated by

~~strikethrough~~; and text that shall remain unaltered that is not reproduced here is indicated by ellipses (***)):

Section 3. Section 7A-52, "Signs," of the Land Development Code is hereby amended to read as follows:

ARTICLE I. GENERAL PROVISIONS

§ 7A-52. SIGNS.

The purpose of this article is to promote the public health, safety and general welfare through reasonable, consistent and non-discriminatory sign regulations. No part of these regulations shall be construed to favor commercial speech over non-commercial speech, nor restrict speech on the basis of content, viewpoint or message. These sign regulations reduce signage conflicts, promote traffic and pedestrian safety, and increase the aesthetic value and economic viability of the Town by classifying and regulating the location, size, type, and number of signs and related matters in a content-neutral manner. Notwithstanding anything in this section to the contrary, no sign or sign structure shall be subject to any limitation based upon the content of the message contain on such sign or displayed on such sign structure.

(a) Single-family districts:

(1) Permitted signs and regulations.

a. Signs permitted in 1-RS, 2-RS and 3-RS Single-Family Residential Districts shall be by sign exceptions as per subsection (g).

(b) Multi-family districts (4-RM, 5-RMO). Single-family dwellings in this district will follow sign criteria for single-family districts as per subsection (g).

(1) Permitted signs and size regulations: One attached sign or one freestanding sign shall be permitted per apartment complex. Attached signs shall not exceed 25% of the total surface area of the wall to which the sign is attached. In no case shall any attached sign exceed nine square feet in total surface area. Freestanding signs shall not exceed nine square feet in total area nor ten feet in height.

(c) Business districts (6-B, 7-C).

Permitted signs and size regulations:

a. One attached sign per business establishment excluding signs installed, affixed, or painted on windows or doors. Attached signs shall not exceed 10% of the total surface area of the front of the building to which the sign is attached or exceed 100 square feet in total surface area, whichever amount shall be less. Measurement of fronts of buildings will include false fronts and any mansard roof frontage. Signs shall not extend above the roof line for buildings with a flat roof or above the eve line for buildings with a sloped roof. Where multiple businesses occupy a building the cumulative total of attached signs shall not exceed 10% of the surface area of the front of the building or 100 square feet, whichever amount shall be less.

b. One freestanding sign per developed site. A maximum of 45 square feet of cumulative sign area shall be permitted on a development site. One or more businesses may advertise on the sign. If more than one sign is utilized on a development site then the signs shall be a minimum of 50 feet from any freestanding or shingle sign of a neighboring business. The maximum size of an individual sign when multiple signs are used on a development site is 32 square feet.

c. One shingle sign not to exceed 12 square feet per business establishment is permitted in lieu of the freestanding sign in front.

d. All business establishments are permitted one shingle sign at the rear of each establishment, provided said sign does not exceed 12 square feet.

e. Freestanding signs in the 6-B, 7-C and 8-B zoning districts shall be monument style signs. The sign shall be constructed of materials that are architecturally compatible with the primary building on the site. The sign shall not have internal lighting. Spot lights illuminating the sign shall be shielded so that the source of light is not visible to vehicular traffic or pedestrians. Shingle signs are not permitted for special exceptions. To the extent of any inconsistency in this section with other sections, with regard to special exceptions this sub-paragraph supersedes other provisions in this section.

(d) Residential-business districts (8-B).

Permitted signs and size regulations:

a. One attached sign or one freestanding sign shall be permitted per apartment complex.

b. One attached sign shall be permitted per business establishment. Attached signs shall not exceed 10% of the total surface area of the wall to which the sign is attached or exceed 16 square feet in total surface area except that buildings with over 30 feet of frontage may add an additional four square feet of sign for each ten linear feet of frontage over 30 feet. Attached signs for special exception uses shall be limited to a maximum of 16 square feet.

c. One freestanding sign per commercial structure shall be permitted.

d. The total surface area of all freestanding signs shall not exceed 25 square feet or 15 feet in height. Such signs must be a minimum of 20 feet from the front building line. Signs less than 20 feet are allowed but may not exceed ten feet in height and nine square feet in surface area.

e. Freestanding signs for special exception uses shall be monument style signs. The maximum size shall be 20 square feet. The maximum height shall be eight feet. The minimum setback is five feet. Only one freestanding sign is allowed per special exception site. The sign shall be constructed of materials that are architecturally compatible with the primary building on the site. The sign shall not have internal lighting. Spot lights illuminating the sign shall be shielded so that the source of light is not visible to vehicular traffic or pedestrians. To the extent of any inconsistency in this section with other sections, with regard to special exceptions this sub-paragraph supersedes other provisions in this section.

(e) Sign setbacks and additional regulations for all signs.

(1) Signs may be placed on the property line. No part of a sign may overhang adjacent property or the right-of-way. In no case may a freestanding or shingle sign be placed within 20 feet of an intersection unless the bottom of said sign is ten feet or more from the ground.

(2) Attached signs affixed to a building shall be placed only on the front facade or roof and shall not protrude above the roof line or beyond the side corners of the front facade, project out more than two feet from the wall or extend more than one-half the distance above the base of the roof to the roof peak.

(3) Signs of any type may not be placed on the roof of any structure.

(4) It shall be unlawful for any owner or permittee to fail to remove any sign after ten days which advertises business, real estate or products no longer conducted, available or for sale on the premises.

(5) Indirect lighting sources in use shall be shaded to eliminate glare on roadways, streets or surrounding properties.

(6) Internally lit signs and signs illuminated by neon lights or bare bulbs shall not exceed two footcandles illumination at any property line.

(f) Nonconforming signs.

(1) A sign or advertising structure existing within the Town limits on the effective date of Ordinance 85-7, passed November 12, 1985, or a sign or advertising structure existing in an area annexed to the Town after the effective date of this Land Development Code, which, by its height, square foot area, location, or use of structural support does not conform to the requirements of this Land Development Code shall hereafter be termed nonconforming.

(2) All nonconforming signs or advertising structures within the Town limits shall be permitted to remain until such time as:

a. The sign or advertising structure becomes a hazard or obstruction.

b. It becomes necessary to replace or rebuild the sign or building, at which time it shall conform to this section.

(3) No conforming sign or sign structure shall be erected on the same lot with an existing nonconforming sign until the nonconforming sign has been removed.

(g) ~~Sign exceptions. The following signs are exempt from the provisions of this section:~~ The following signs are allowed as listed in Table 7A-52(g):

Table 7A-52(g): Residential Sign Standards (1-RS, 2-RS, 3-RS, 4-RM, 5-RMO)

Sign Type	Number per Street Frontage	Sign Area (sq. ft.)	Height (ft)	Duration (Days) [1]	Notes
Garage/Yard sale	1	4	3	3	Located on the property where the garage sale

					occurs and outside the right-of-way; may be in common area of apartments/condo subject to approval by property owners' association
Open house	1	6	See note	6 per month	Wood or steel frame or yard signs shall not exceed three feet in height. Projecting arm-style post signs shall not exceed six feet in height; shall be removed upon sale, lease, or rent; and shall not be placed in the right-of-way
Real estate	1	6 (includes riders)	4	See note	Wood or steel frame or yard signs shall not exceed three feet in height. Projecting arm-style post sign shall not exceed six feet in height; shall be removed upon sale, lease, or rent; and shall not be placed in the right-of-way
Street/Building address		1	See note		Property numbers and names of occupants of premises having no commercial connotations and shall not exceed one square foot of total surface area
Nameplate/occupant		2			
Flag	3 (per lot)	24	20		Shall be attached to a flag pole or mounted hardware permanently affixed to a building or attached to a flag pole anchored in the ground
Window Sign		3			
On-site construction sign	1 (per lot)	6	4		Shall not be illuminated; shall be removed by date that construction is no longer active
String lights/holiday/seasonal decoration					

On-site free expression	1	6	4		Shall not be in the right-of-way; is permitted in addition to any other permitted sign
Campaign	3	4	4	See note	Shall not be in the right of way; may be erected no more than 60 days prior to an election; shall be removed within seven days after election
Warning/safety	n/a	4	6		
Non-commercial directional	n/a	4	See note		Maximum height of four feet unless otherwise required by engineering standards. Message shall be oriented towards vehicular facilities.
Non-commercial directory	n/a	8	8		Message shall be oriented towards pedestrian facilities.
Home Occupation	1	1			Shall be mounted no more than two feet from the main entrance of the residence
Memorial Signs, Tablets, or Plaques	1	2			Shall be cut into any masonry surface or constructed of bronze or other noncombustible material
Legal Notices, Traffic, Informational, Directional Signs, or Other Municipal Signs					As required by the Town or governmental bodies
Subdivision Entrance Signs	2	32	8		No part of the sign structure shall exceed eight (8) feet in height
Bulletin Boards and Signs of Churches, Schools, and Clubs	1	32			Not exceeding one per organization; if located on a corner lot, a 32 square foot sign facing each street is allowed
NOTES: [1] If cell is blank, signs are not required to be removed.					

~~(1) Memorial signs, tablets, plaques or names of buildings and date of erection when the same are two square feet or less in size and are cut into any masonry surface or when constructed of bronze or other noncombustible material.~~

~~(2) Property numbers and names of occupants of premises having no commercial connotations and shall not exceed one square foot of total surface area.~~

~~(3) Legal notices and identification, informational or directional signs erected or required by governmental bodies.~~

~~(4) Reserved.~~

~~(5) Traffic and other municipal signs, legal notices, and other safety directional signs.~~

~~(6) Private directional signs when not more than two square feet in surface area.~~

~~(7) Subdivision entrance signs not exceeding 32 square feet and not having any part of the sign structure exceeding eight feet in height. No more than two signs per entrance will be allowed.~~

~~(8) Bulletin boards and signs of churches, schools and clubs not exceeding 32 square feet in area and not exceeding one per organization. If located on a corner lot, a 32-square-foot sign facing each street is allowed.~~

~~(9) A construction or home improvement sign shall not exceed 16 square feet in surface area, not to be illuminated, and shall be removed immediately after completion of construction or improvement.~~

~~(10) Any dispensing mechanism positioned outside of a business premise such as for ice cream, candy, soda, newspapers and such or for fuel pumps and the like, with a trademark or identification; also, any lighting fixture for the sole purpose of aiding in after-dark business operations or safety with a trademark or identification.~~

~~(11) One real estate sign per interior lot or one sign facing each thoroughfare per corner lot shall be allowed. Real estate signs shall not exceed six square feet in total surface area or four feet in height.~~

~~(12) Political signs shall be permitted and display of the sign shall conform to the following:~~

~~a. Maximum size of a political sign, four square feet.~~

~~b. Signs may not be placed on rights-of-way.~~

~~c. Political signs related to an election must be removed within 72 hours after the election.~~

(h) Prohibited signs.

(1) All other signs not specifically or provisionally permitted herein, such as, but not limited to, flashing signs, billboard signs and banner signs.

(2) No private sign (sign erected by a non-governmental person or entity) is permitted on rights-of-way.

(i) Removal.

(a) *General.* Signs installed in violation of this section shall be removed or brought into compliance with the requirements of this section. The sign owner, the owner of the property on which the sign is placed, and the sign contractor shall each be held responsible for adherence to this section and any other applicable laws or regulations. This section may be enforced through code enforcement proceedings or by any equitable or legal remedy available to the Town.

(b) *Immediate Removal.* If the Town finds that a sign is in violation of this section or other applicable regulations or state law, and by reason of its violation, presents an immediate and serious danger to the public, the Town may, without prior written notice, order the immediate removal or repair of the sign within a specified period. The Town may remove or authorize others to remove the sign if the sign's owner cannot be found or if the sign's owner, after notification, refuses to repair or remove it. The owner of the building, structure, or premises on which the sign is located, are jointly and severally liable for the cost of removing such sign. The Town shall have the right to recover from the owner or person placing such sign the cost of removal and disposal of such sign.

(c) *Removal of Abandoned Signs.* The owner of an abandoned sign shall remove the sign within thirty (30) days of the date of the Town's order of removal. A sign need not be removed when a successor tenant, or business or property owner, agrees to maintain the sign as provided in this section by filing a letter of intent with the Town within thirty (30) days after receiving notice to do so from the Town.

(d) *Removal of Unpermitted Signs.* The Town may remove or order the removal, without prior written notice, of any sign erected without a sign permit required by this section.

(e) *Removal of Signs on Public Property.* Any sign installed or placed on public property, except in accordance with the requirements of this section, shall be forfeited to the Town and confiscated. The Town shall have the right to recover from the owner or person placing such sign the cost of removal and disposal of such sign.

(f) *Removal of Temporary Signs.*

(1) Temporary signs which are erected or used unlawfully are subject to removal. The Town Manager or designee is authorized to remove such sign when unlawfully erected.

(2) The Town shall proceed by notifying the occupant and/or owner of the property. If the sign identifies a party other than the occupant/owner of the property, the identified party will also be notified. Notification shall occur in person, by phone, by email, or by letter.

(3) The required notification shall advise that the sign is unlawful and that the removal is required within forty-eight (48) hours or the sign is subject to removal by the Town. The notice shall advise that the sign, if removed by the Town, may be retrieved within thirty (30) days and that if the sign is not retrieved within that time, it will be disposed of by the City.

(4) Prior to the disposal of the sign, another notice shall be delivered to the occupant and/or owner of the property concerning possible disposal of the sign.

(5) The removal and disposal of the sign shall be at the expense of the property owner or lessee.

Section 4. Codification. The provisions of this Ordinance shall be included and incorporated into the Code of Ordinances of the Town of Melbourne Beach, as additions or amendments thereto.

Section 5. Severability. Should any word, phrase, sentence, subsection, or section be held by a court of competent jurisdiction to be illegal, void, unenforceable, or unconstitutional, then that word, phrase, sentence, subsection, or section so held shall be severed from this Ordinance and all other words, phrases, sentences, subsections, or sections shall remain in full force and effect.

Section 6. Conflicting Ordinances. All ordinances or part thereof, in conflict herewith are, to the extent of such conflict, repealed.

Section 7. Effective Date. This Ordinance shall become effective immediately upon its passage and adoption.

PASSED AND ADOPTED this ____ day of _____, 2025, by the Town Commission of the Town of Melbourne Beach, Florida.

PASSED ON FIRST READING: _____

PASSED ON SECOND READING: _____

TOWN OF MELBOURNE BEACH, FLORIDA

By:_____
ALISON DENNINGTON, Mayor

ATTEST:

(TOWN SEAL)

_____
Amber Brown, Town Clerk

Business Impact Estimate

This form should be included in the agenda packet for the item under which the proposed ordinance is to be considered and must be posted on the Town of Melbourne Beach website by the time notice of the proposed ordinance is published.

ORDINANCE 2025-04
AN ORDINANCE OF THE TOWN OF MELBOURNE BEACH, FLORIDA, RELATING TO LAND DEVELOPMENT REGULATIONS AND SIGNAGE; AMENDING SECTION 7A-52, TOWN CODE OF ORDINANCES, RELATING TO PROHIBITED SIGNS AND PROVIDING FOR ADDITIONAL REGULATIONS AS TO TYPE OF SIGNAGE PROHIBITED WITHIN THE TOWN, AMENDING SIGN LOCATION AND DURATION OF SIGNAGE PERMITTED IN THE TOWN; REVISING SIGNAGE STANDARDS; PROVIDING FOR REMOVAL OF SIGNAGE BY THE TOWN; PROVIDING FOR SEVERABILITY; AND PROVIDING FOR AN EFFECTIVE DATE.

This Business Impact Estimate is provided in accordance with section 166.041(4), Florida Statutes. If one or more boxes are checked below, this means the Town of Melbourne Beach is of the view that a business impact estimate is not required by state law[1] for the proposed ordinance, but the Town of Melbourne Beach is, nevertheless, providing this Business Impact Estimate as a courtesy and to avoid any procedural issues that could impact the enactment of the proposed ordinance. This Business Impact Estimate may be revised following its initial posting.

- ☐ The proposed ordinance is required for compliance with Federal or State law or regulation;
- ☐ The proposed ordinance relates to the issuance or refinancing of debt;
- ☐ The proposed ordinance relates to the adoption of budgets or budget amendments, including revenue sources necessary to fund the budget;
- ☐ The proposed ordinance is required to implement a contract or an agreement, including, but not limited to, any Federal, State, local, or private grant or other financial assistance accepted by the municipal government;
- ☐ The proposed ordinance is an emergency ordinance;
- ☐ The ordinance relates to procurement; or

[1] See Section 166.041(4)(c), Florida Statutes.

☐ The proposed ordinance is enacted to implement the following:

a. Part II of Chapter 163, Florida Statutes, relating to growth policy, county and municipal planning, and land development regulation, including zoning, development orders, development agreements and development permits;
b. Sections 190.005 and 190.046, Florida Statutes, regarding community development districts;
c. Section 553.73, Florida Statutes, relating to the Florida Building Code; or
d. Section 633.202, Florida Statutes, relating to the Florida Fire Prevention Code.

In accordance with the provisions of controlling law, even notwithstanding the fact that an exemption noted above may apply, the Town of Melbourne Beach hereby publishes the following information:

1. Summary of the proposed ordinance (must include a statement of the public purpose, such as serving the public health, safety, morals and welfare):

The ordinance amends Chapter 7A: Zoning of the Land Development Code specifically amending 7A-52 relating to prohibited signs and providing for additional regulations as to the type of signage prohibited within the Town, amending sign locations, duration of signage permitted in the Town, revising signage standards, and providing for removal of signage by the Town.

2. An estimate of the direct economic impact of the proposed ordinance on private, for-profit businesses in the Town of Melbourne Beach, if any:
(a) An estimate of direct compliance costs that businesses may reasonably incur;
(b) Any new charge or fee imposed by the proposed ordinance or for which businesses will be financially responsible; and
(c) An estimate of the Town of Melbourne Beach's regulatory costs, including estimated revenues from any new charges or fees to cover such costs.

There are no direct compliance costs that businesses may incur, no new charges or fees imposed by the ordinance, and no regulatory costs to the Town.

3. Good faith estimate of the number of businesses likely to be impacted by the proposed ordinance:

It is estimated there will be a negligible impact on any businesses as a result of the proposed ordinance.

4. Additional information the governing body deems useful (if any):

None.