ADAPTIVE REUSE OF SOUTH PALM BEACH TOWN HALL

3577 South Ocean Blvd.
South Palm Beach, FL 33480

ISLAND DESIGNS, INC.
ARCHITECTS AND PLANNERS
11911 U.S. HIGHWAY ONE SUITE 205
NORTH PALM BEACH, FLORIDA 33408
561-799-5204 PH. 561-799 5205 FAX
islanddesigns @ att.net

L. JOHN BELLAMY
ARCHITECT

CHARLES J. LETIZIA
ARCHITECT

Dated August 31, 2018

ADAPTIVE REUSE OF TOWN HALL

The following is a summary report of preliminary findings regarding the suitability for adaptive reuse of the existing 6,690 square foot South Palm Beach Town Hall, which currently includes the Town Council Meeting Hall, Town Manager Office, Administrative Offices, Building and Zoning Dept., the Town Police Headquarters (Public Safety/Emergency Operations Center EOC), Record Storage Areas, and Mechanical Equipment/Electrical Rooms. We visited and photographed the existing Town Hall and site, reviewed the Property Assessment Report and structural evaluation document prepared by Alexis Knight Architects (Alexis Knight Report) dated March 8, 2017, and reviewed the existing building plans of each of the three phases (1976, 1993, 1996). We also met with the Town Manager Mo Thornton and the Building Official Mike Crisafulle.

Some of the improvements desired were discussed with Town Manager Mo Thornton and also come from previous discussions included in the Alexis Knight Architects Report as follows:

1. New enhanced building exterior facing S. Ocean Blvd. including a new public entrance and covered drop off / porte-cochere;
2. Remove the exterior dividing wall (NE corner of the existing apparatus bay by the garage door);
3. Remove / gut entire interior and reconfigure the space;
4. Arrange the available interior space to best suit the needs of each department (the current Town Hall interior use of space is not efficient for the 12 full time and several part time staff members as well as the Community Center uses);
5. Open office plan for administration;
6. Improve building accessibility for the disabled;
7. Re-purpose the former apparatus bay to increase usable space;
8. The building interior should be flexible and include multiuse spaces;
9. Separate offices for meetings and for use by the Mayor and Council members;
10. The renovated Town Hall to function as a Community Center and include dedicated space with storage for this purpose;
11. New larger Town Council Meeting Hall and provide adjacent adequate storage area;
12. Reconfigure parking to gain additional spaces;
13. Provide outdoor activity spaces for art shows, the book mobile, etc.;
14. Open space (park like) at the eastern most portion of the site adjacent to S. ocean Blvd.;
15. Provide better access to the Intracoastal Waterway;
16. Provide a dock on the Intracoastal and access to water activities.

The existing approx. 6,690 sq. ft. Town Hall was constructed in three phases. Phase one was constructed in 1976, was 3,320 square feet, and included the Fire Station, Police Headquarters, Clerk/Administrative Offices, and Mezzanine Mechanical /Storage. Phase two was constructed in 1993, was approximately 1,354 square feet, and included a Council

Meeting Hall, Administrative Offices and Public Restrooms. Finally, 2,016 square feet was added in the 1996 phase three, which included the current Town Council Meeting Hall and a small elevator to an enlarged second floor Records Storage Area. The net usable site is .85 acres and includes an emergency generator and a fueling station. There are 25 parking spaces (20 employee and 5 visitor spaces).

The existing building appears to be in good condition and well maintained. Although a complete inspection of the existing exterior and interior of the building is beyond our scope, we did obtain the construction drawings for all three phases for our review. Also, we reviewed the Property Assessment Report prepared by Alex Knight Architects dated March 6, 2017 which according to Part 4 Structural assessment generally found the building shell, structural components and foundation of the building to be sound and stable except for a sinking foundation and resultant stress cracks in adjacent walls for the Storage add-on Building on the north side. Next, we met with our structural engineer to review existing drawings for each of the three phases, and are reasonably confident the existing building can be renovated to comply with the current codes, although no soils reports or testing information was available at this time.

The original 1976 one and two story building is constructed of 8" reinforced concrete block, over poured concrete floor slabs, over compacted fill with stem wall foundations. Both phase two and three are reinforced concrete floors, over reinforced concrete grade beams, over reinforced concrete auger cast piles. The original phase one Mezzanine and phase three second floor Records Storage floors are constructed of structural reinforced concrete.

The roof structure over the phase one apparatus bay is 2-1/2" permadeck over steel trusses at 4'-0" on center. The original mezzanine is wood rafters with a flat plywood roof. The balance of the entire building roof (phase 1,2,&3) is constructed of sloping pre-engineered wood trusses at 24" on center below plywood roof decking. The roofing is asphalt shingles throughout except for the built up flat roof over the original Mezzanine.

The existing Florida Building Code (FBC) occupancy classifications for the Town Hall are as follows:

1. Business;
2. Assembly;
3. Storage;
4. Essential Facilities (Police and EOC);

According to the Alexis Knight Architects Report (updated in this report to comply with Table 1004.1.2 of the 2017 6th Ed. of the FBC in effect today), the existing allowable occupant load is as follows:

1. Business Use @ 100 s.f. per occupant (3,215 s.f.).....32 occupants
2. Storage Use @ 300 s.f. per occupant (2,475 s.f.)..... 8 occupants
3. Assembly (moveable chairs) @ 7 n.s.f per occupant (1,000 s.f.)...143 occupants
4. Total 183 occupants

The 2017 Florida Building Code Sixth Edition (FBC) defines planned renovations as a "Substantial Improvement" as the cost is expected to exceed $402,000. - 50% of the market value of the structure (refer to FBC definition and $804,769 Improvement Value per PBC Property Appraiser). This means all improvements to the existing building must be brought into compliance with all applicable codes for new construction.

The existing building will require certain renovations in order to comply with the current Florida Building Code. Renovations to comply with applicable current building codes would include the following:

1. The original 1976 phase one building employed a standard reinforced concrete spread footing and reinforced concrete masonry stem wall foundation system. Backfilled stemwalls are permitted in the coastal zones, although the renovations may require the foundation design to account for scouring;
2. The original 1976 phase one building will also require additional reinforcement of the 8" reinforced masonry walls by adding additional vertical reinforcement retrofitted in the hollow masonry cells and then filled with grout top to bottom. Additionally, stiffening on the exterior of the existing tall 18 foot high 8" reinforced masonry walls of the former apparatus bay will likely be required;
3. Additional reinforcement (as described in item 2) of existing phase one and phase two 8" masonry walls adjacent to windows and where required to resist current code wind pressures;
4. Phase three 8" masonry walls may also require some additional reinforcement;
5. Roof and wall insulation will need to comply with the Energy Code. The flat roof over the original phase one mezzanine will require tapered insulation to achieve the required slope;
6. Retrofit new connection anchors to tie down the roof structure to the walls where current anchors are insufficient to comply with current codes;
7. Replace plywood roof decking and/or re-nail where required to meet code and where access is blocked to retrofit new connection anchors to tie down the roof structure to the walls to meet current codes;
8. Replace all exterior windows and doors with energy efficient impact resistant type properly anchored to resist wind pressures and sealed/flashed to resist moisture intrusion;
9. Entire interior will likely require removal / gutting and reconstructed to comply with the new interior space sizes and spatial relationships defined in the new building program;
10. Redesign interiors/remodel restrooms to comply with the latest accessibility codes and the Americans with Disabilities Act;
11. Will need to replace most of the existing HVAC (Heating, Ventilation and Air Conditioning) systems including condensing units, air handling units, air distribution, controls, etc.(to comply with new layouts, and the current mechanical code ventilation requirements as well as the energy code);
12. Will need to replace most of the existing electrical system including interior wiring and circuits, lighting fixtures, communications systems, exterior switchgear, etc.
13. New life safety / fire protection, fire rated partitions for fire rated occupancy separations, exit signs, emergency lighting and fire alarm systems to correspond to the new layout, smoke detectors, fire separations, means of egress and life safety in accordance with current codes;

14. Rework the entire existing plumbing system including plumbing fixtures, piping, vents, etc. as required to comply with new layout and current code;
15. Rework and repave parking areas and accessible routes to comply with the latest accessibility codes and to achieve additional parking spaces. While parking requirements are beyond the scope of this report, according to the Alexis Knight Architects report, 25 parking stalls exist, while 66 spaces are required per Table 6.A.1.B Minimum Parking Requirements from the ULDC. (Note: 47 of the 66 spaces required are to provide for the Assembly Occupancy i.e. the Town Council Meeting Hall and we are told that most attendees walk to the meetings);
16. Rework the site and parking areas to provide outdoor activity space for art shows, the book mobile, etc. and open space (park like) at the eastern most portion of the site adjacent to South Ocean Blvd.;
17. Rework landscaping to comply with both the new parking and site plan layout;
18. Rework site lighting to comply with both the new parking layout, current lighting standards, local code for site lighting and energy efficiency;
19. Rework site drainage to comply with new layout and to correct drainage issues;
20. Remove and replace Storage addition shed on North side of building with poor structural condition and sinking foundation;
21. The maintenance shed will likely need to removed and replaced since it does not appear to designed in accordance with current codes.

Furthermore, the FBC-Existing Building Code in Section 403 Alterations states that when located in flood hazard areas "any alteration that constitutes substantial improvement of the existing structure must comply with flood design requirements for new construction". The FEMA Flood Map considers the Town Hall site in Zone AE (El 6 Feet).

The flood risk category for Town Hall is established by the FBC in Table 1604.5. The Police and EOC are considered "essential facilities" and are Flood Design Risk Category IV. All other Town Hall functions are Flood Design Risk Category II. FBC Sec. 1612.4 refers to ASCE 24, Flood Resistant Design and Construction. According to ASCE 24-14, Flood Design Class IV "essential facilities" structures require the minimum elevation of the lowest floor be a minimum two (2) feet above the base flood elevation of 6.0' NAVD or 500-year flood elevation (whichever is higher), while Flood Design Class II structures require the minimum elevation of the lowest floor to be one (1) foot above the base flood elevation of 6.0' NAVD(Note: NFIP adopts FIRM as regulatory instrument; thus, BFE=DFE).

The new Elevation Certificate dated 7/31/18 prepared by Richard H. Smith, Surveyor and Mapper, found the existing ground floor level of Town Hall to be elevation 7.3 feet NAVD. Since the FEMA Flood Insurance Rate Map (FIRM) AE Zone Base Flood Elevation is 6 feet, the existing building exceeds the one (1) foot above base flood elevation (El. 7.0') for all Town Hall occupancies except the Police Department/EOC which must exceed two (2) feet above the 6 foot base flood elevation (El. 8.0'). The garage is at 6.5 feet, which could be easily corrected by pouring a new concrete slab over the existing to achieve the 7.0' to permit that approx. 1,120 sq.ft. to be used for Town Hall expansion.

Conclusion

Thus, all Police and Emergency Operations EOC spaces are "Essential Facilities" required to be a minimum of two (2) feet above the base flood elevation or 500-year flood elevation (whichever is higher). All other Town Hall uses including Business, Assembly and Storage occupancies must a minimum of one (1) foot above the base flood elevation.

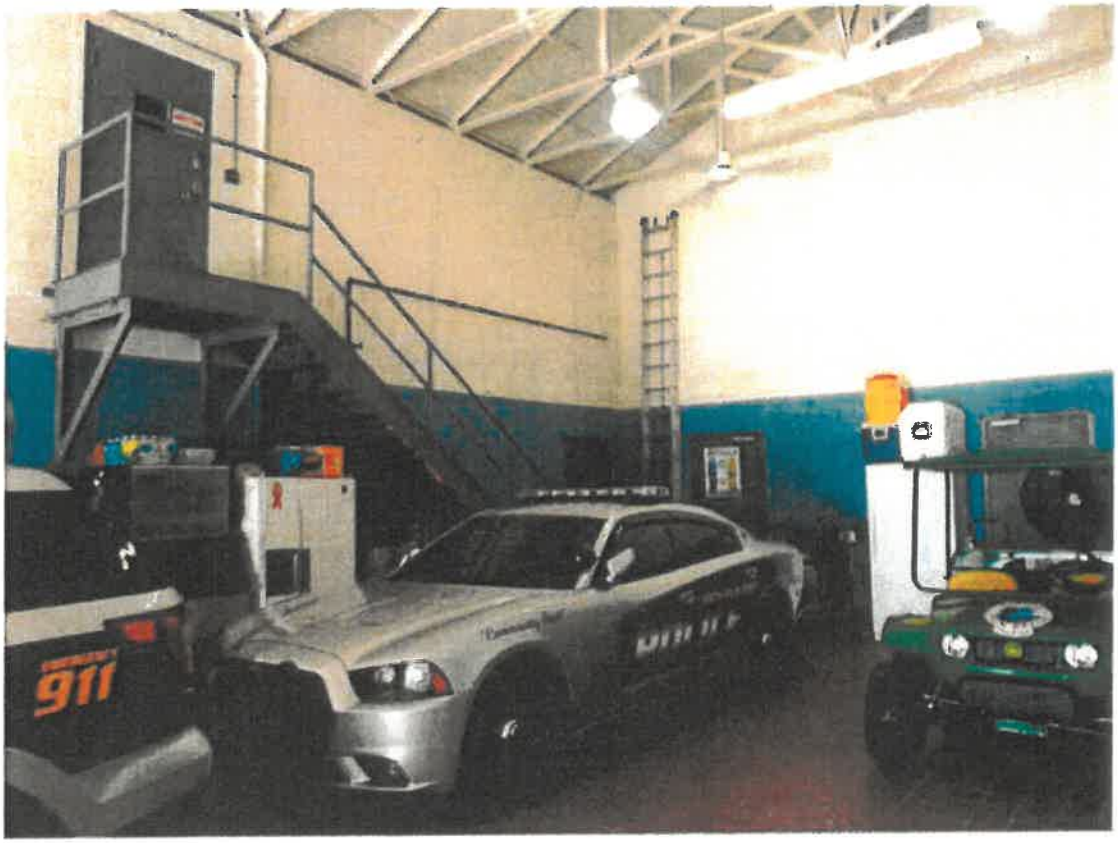
- FEMA Flood Map Flood Zone AE Base Flood Elevation (BFE)..... 6.0 feet NAVD
- Existing Gd. Floor Elevation (see Elev. Certificate).....7.3 feet NAVD
- Essential Facilities (Police/EOC) Elev. 6.0 foot BFE + 2 feet.....8.0 feet NAGD*
- All other Town Hall occupancies Elev. 6.0 foot BFE + 1 feet.....7.0 feet NAGD

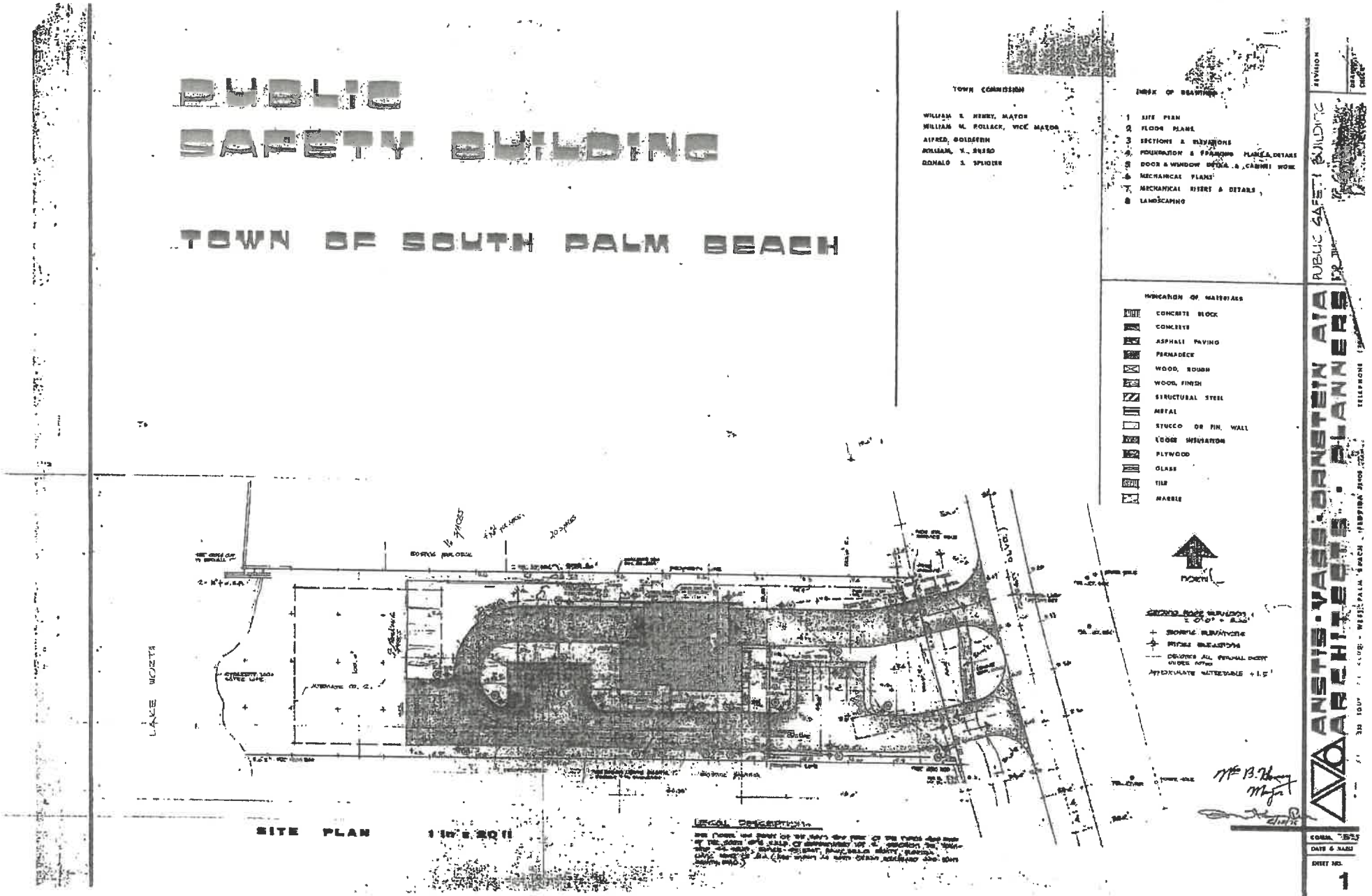
  * or 500 year flood elevation, whichever is higher

Since the new updated Elevation Certificate finds the existing building to comply with the required flood elevation of 7.0 feet, it would be reasonable to conclude that the building can be renovated and modified in a cost effective manner to comply with the current codes for all existing Town Hall occupancies except the Police and EOC. In order to comply with required flood elevations for Police/EOC uses, and allow for Town Hall expansion, we would recommend construction of a new elevated Police/EOC building to the 2nd story level with parking and mechanical equipment below. The new Police/EOC building could be located to the west, behind the existing building, and could be connected to the existing Town Hall with a covered walkway, leading to an elevator and stairs to access the Police/EOC on the 2nd story designed to withstand both flooding and category 5 storms.

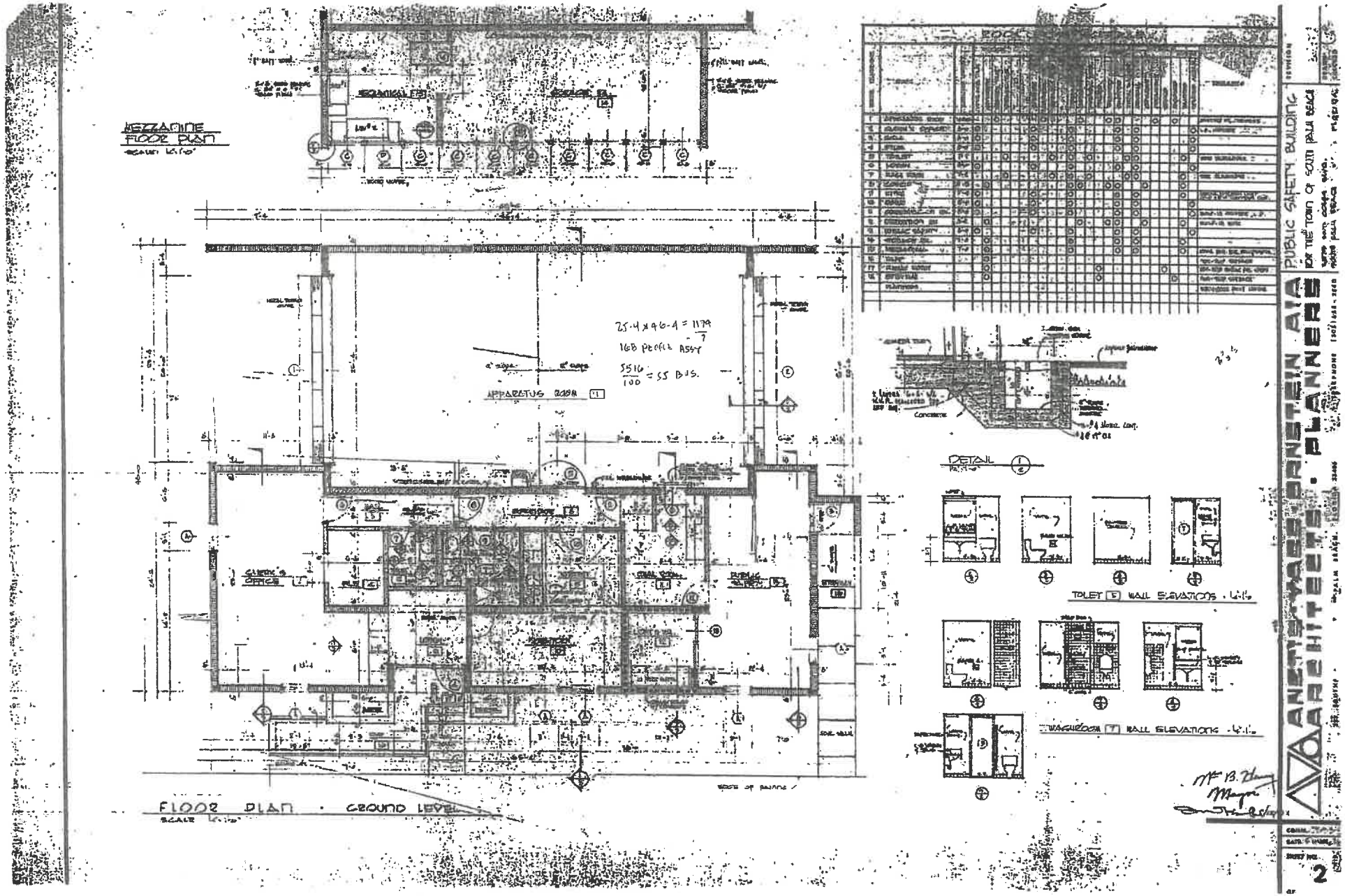
This would permit additional expansion of other Town Hall functions into both the approx. 850 square foot space occupied by the Police, the approx. 1,120 square foot garage and the second floor police record & evidence storage. Combined with a new enhanced building exterior facing South Ocean Blvd., including a new public entrance and covered drop off / porte-cochere, the existing building would now permit better use of the existing Town Hall. The result would be a code compliant, storm hardened, energy efficient and accessible community center with a dedicated multi-purpose area with storage, a new Council Meeting Hall and new interior layout with increased space for all existing Town Hall administrative activities. Furthermore, the essential Police and EOC functions would be able to remain in their existing space until the new space is ready for occupancy.


TOWN HALL
SOUTH PALM BEACH


911



1976 ORIGINAL BUILDING



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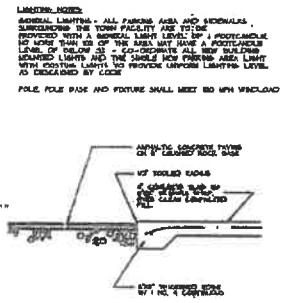
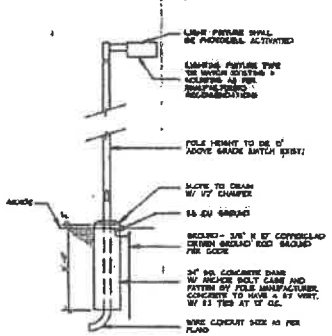
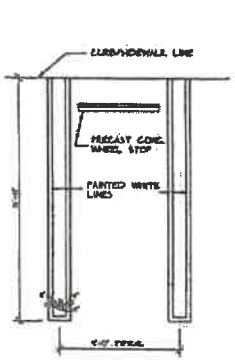


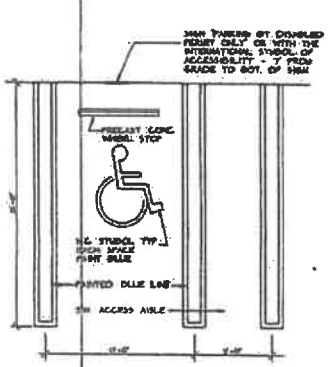
CURB/ASPHALT DETAIL



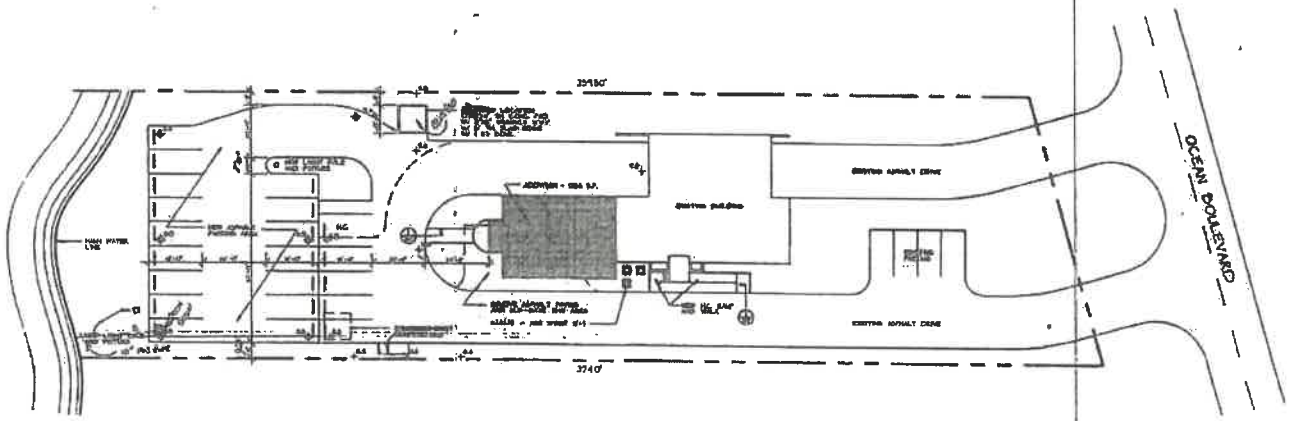
LIGHT POLE DETAIL



PARKING STALL DETAIL



HANDICAP PARKING DETAIL



SITE PLAN

LAKE WORTH

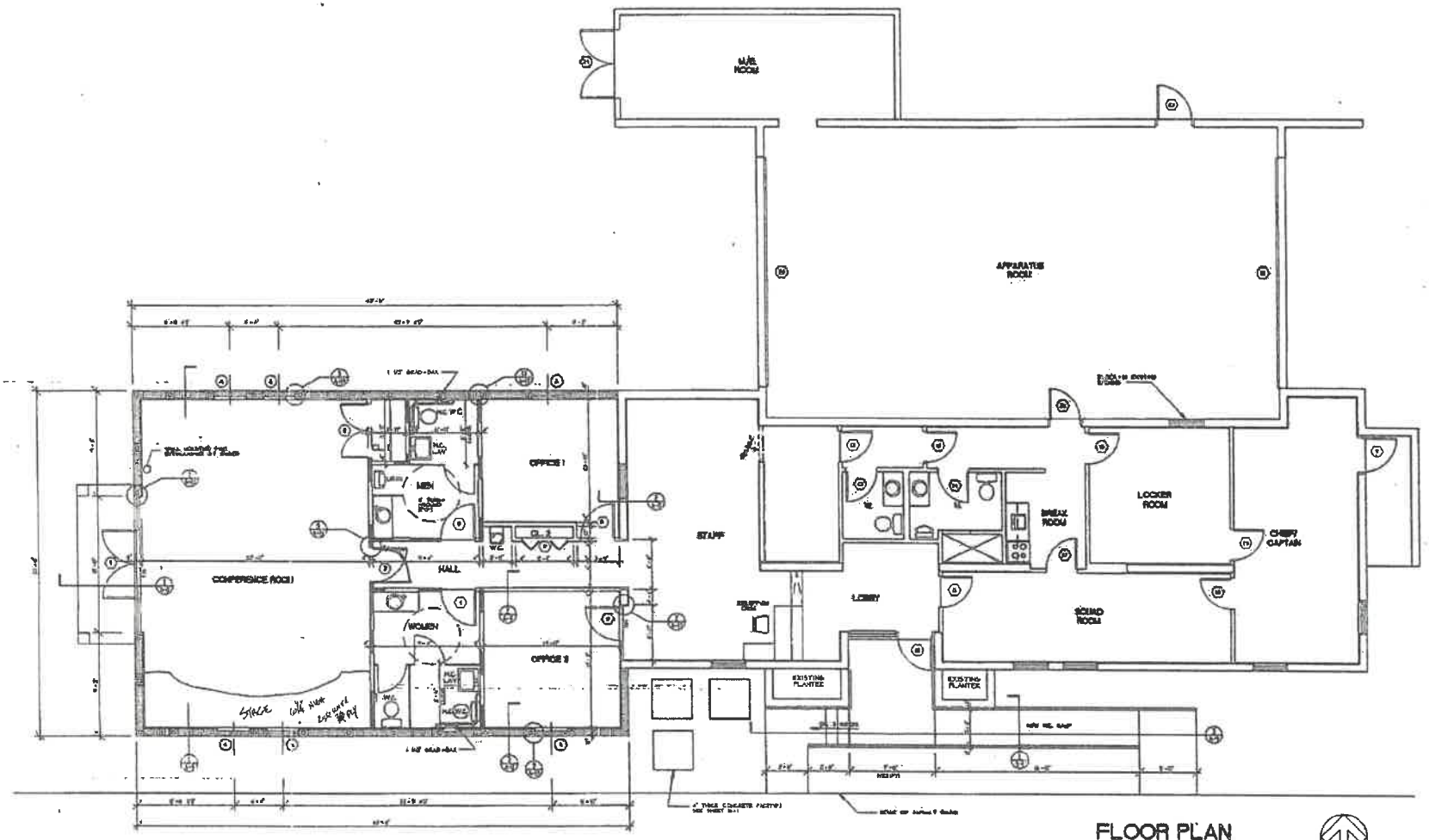
OCEAN BOULEVARD

1993 ADDITION

Town Hall S.P.B.
3577

SOUTH PALM BEACH TOWN HALL

REVISIONS
NO | DATE



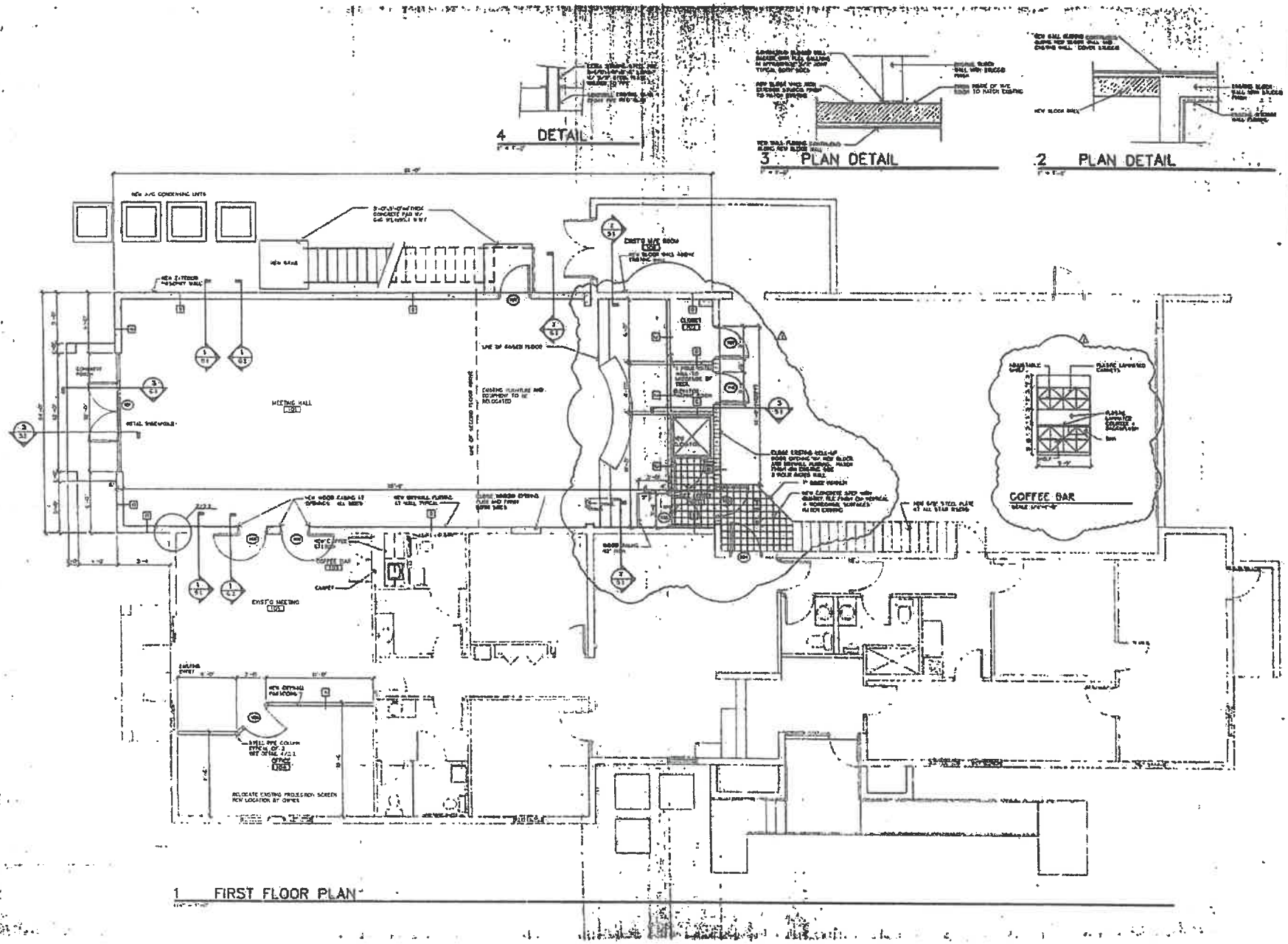
FLOOR PLAN

SCALE : 1/4"=1'-0"

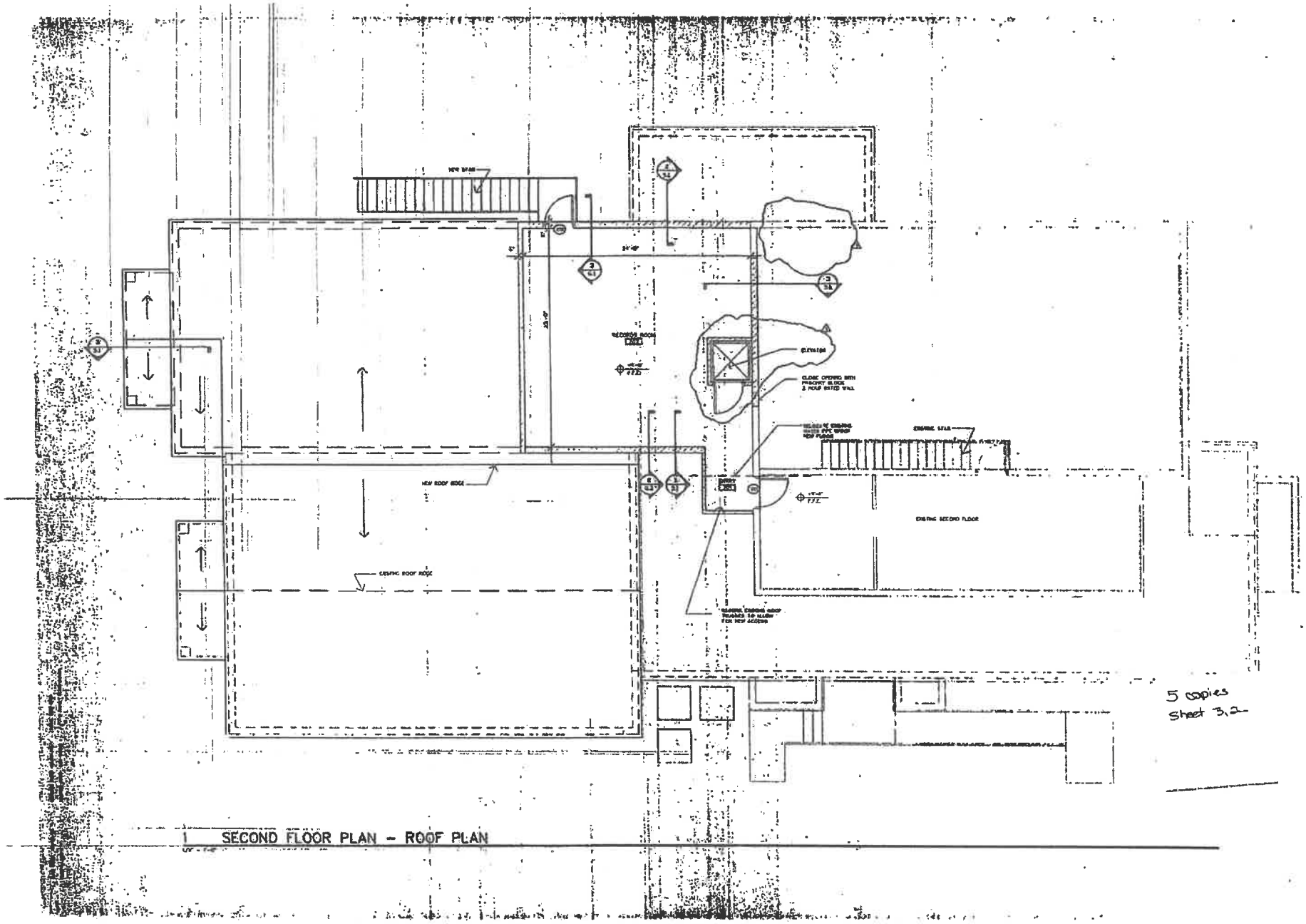
SOUTH PALM BEACH TOWN HALL

1993 ADDITION

1996 ADDITION



1996 ADDITION



1 SECOND FLOOR PLAN – ROOF PLAN

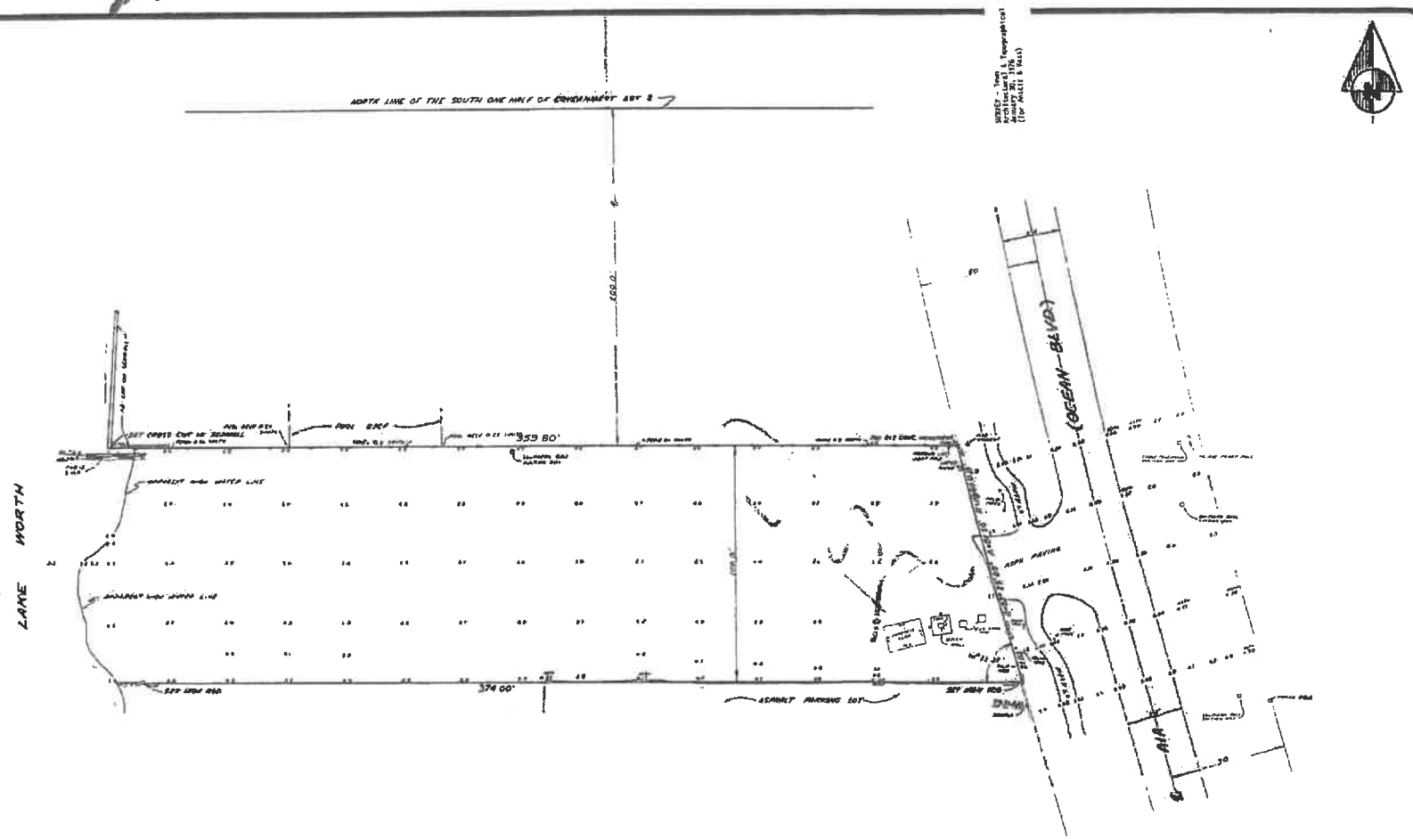
ALAN STRASSLER
ARCHITECTS, INC.

PROPOSED ADDITION FOR:
SOUTH PALM BEACH TOWN HALL
3577 SOUTH OCEAN BLVD. SOUTH PALM BEACH, FLORIDA
SECOND FLOOR PLAN
1/4"=1'-0"

DATE 7/1/96
DRAWN BY STA
PROJ NO 95-10-20
REVISED
ADDENDUM #1
8/16/96

SHEET
3.3

1996 ADDITION



LEGAL DESCRIPTION

THE NORTH 100 FEET OF THE SOUTH 200 FEET OF THE NORTH 400 FEET OF THE SOUTH ONE HALF OF GOVERNMENT LOT 2, SECTION 35, TOWNSHIP 46 SOUTH, RANGE 43 EAST, PALM BEACH COUNTY, FLORIDA, LYING WEST OF A1A (also known as South Ocean Boulevard and South County Road).

SUBJECT TO RESTRICTIONS, RESERVATIONS AND EASEMENTS OF RECORD.

NOTE: ELEVATION SHOWN HEREON REFER TO N.O.S. DATUM, M.S.L. 0.0C AND WAS BEEN TRANSFERRED FROM PALM BEACH COUNTY BENCH MARK NO. F-315.

I HEREBY CERTIFY that the plat of survey shown hereon is a true and correct representation of the property description as furnished to Dailey Survey, it was made by direction, to accurate to the best of my knowledge and belief, it contains no visible encroachments, unless shown.

[signature]
Registered Land Surveyor
Certificate No. 2237
State of Florida

Dailey · Fotopay, inc.
land surveyors, planners, engineers

ARCHITECTURAL AND TOPOGRAPHICAL
SURVEY FOR:
ANSTIS AND WASS ARCHITECTS

Drawn	DATE 1-30-76
Chkd.	WORK NO. 76-004
REVISIONS	SCALE 1"=20'
	SHEET 1 OF 1

TABLE 1004.1.2
MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT

FUNCTION OF SPACE	OCCUPANT LOAD FACTOR[a]
Accessory storage areas, mechanical equipment room	300 gross
Agricultural building	300 gross
Aircraft hangars	500 gross
Airport terminal	
Baggage claim	20 gross
Baggage handling	300 gross
Concourse	100 gross
Waiting areas	15 gross
Assembly	
Gaming floors (keno, slots, etc.)	11 gross
Exhibit gallery and museum	30 net
Assembly with fixed seats	See Section 1004.4
Assembly without fixed seats	
Concentrated	7 net
(chairs only—not fixed)	5 net
Standing space	15 net
Unconcentrated (tables and chairs)	
Bowling centers, allow 5 persons for each lane including 15 feet of runway, and for additional areas	7 net
Business areas	100 gross
Courtrooms—other than fixed seating areas	40 net
Day care	35 net
Dormitories	50 gross
Educational	
Classroom area	20 net
Shops and other vocational room areas	50 net
Exercise rooms	50 gross
Group H-5 Fabrication and manufacturing areas	200 gross
Industrial areas	100 gross
Institutional areas	
Inpatient treatment areas	240 gross
Outpatient areas	100 gross
Sleeping areas	120 gross
Kitchens, commercial	200 gross
Library	
Reading rooms	50 net
Stack area	100 gross
Locker rooms	50 gross
Mall buildings—covered and open	See Section 402.8.2
Mercantile	60 gross
Storage, stock, shipping areas	300 gross
Parking garages	200 gross
Residential	200 gross
Skating rinks, swimming pools	
Rink and pool	50 gross
Decks	15 gross
Stages and platforms	15 net
Warehouses	500 gross

For SI: 1 square foot = 0.0929 m^2, 1 foot = 304.8 mm

a. Floor area in square feet per occupant.

dimension of the strand elements.

Parallel strand lumber (PSL).
A composite of wood strand elements with wood fibers primarily oriented along the length of the member where the least dimension of the wood strand elements is 0.25 inches (6.4 mm) or less and their average lengths not less than 300 times the least dimension of the wood strand elements.

[BS] STRUCTURAL GLUED-LAMINATED TIMBER.
An engineered, stress-rated product of a timber laminating plant, comprised of assemblies of specially selected and prepared wood laminations in which the grain of all laminations is approximately parallel longitudinally and the laminations are bonded with adhesives.

[BS] STRUCTURAL OBSERVATION.
Reserved.

[A] STRUCTURE.
That which is built or constructed.

[BS] SUBSTANTIAL DAMAGE.
Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before-damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

[BS] SUBSTANTIAL IMPROVEMENT.
Any *repair*,reconstruction, rehabilitation, alteration, *addition* or other improvement of a building or structure, the cost of whichequals or exceeds 50 percent of the market value of the structure before the improvement or repair is started. If the structure has sustained *substantial damage*, any *repairs*are considered substantial improvement regardless of the actual *repair* work performed. The term does not, however, include either:

1. Any project for improvement of a building required to correct existing health, sanitary or safety code violations identified by the *building official* and that is the minimum necessary to assure safe living conditions.
2. Any *alteration* of a historic structure provided that the *alteration* will not preclude the structure's continued designation as a historic structure.

ESSENTIAL FACILITIES.

Buildings and other structures that are intended to remain operational in the event of extreme environmental loading from *flood*, wind, snow or earthquakes.

[F] EXHAUSTED ENCLOSURE.

An appliance or piece of equipment that consists of a top, a back and two sides providing a means of local exhaust for capturing gases, fumes, vapors and mists. Such enclosures include laboratory hoods, exhaust fume hoods and similar appliances and equipment used to locally retain and exhaust the gases, fumes, vapors and mists that could be released. Rooms or areas provided with general *ventilation*, in themselves, are not exhausted enclosures.

[BS] EXISTING STRUCTURE.

A structure erected prior to the date of adoption of the appropriate code, or one for which a legal building *permit* has been issued. For application of provisions in *flood hazard areas*, an existing structure is any building or structure for which the start of construction commenced before the effective date of the community's first flood plain management code, ordinance or standard.

DOROTHY JACKS CFA, AAS
Palm Beach County Property Appraiser

Real Property

Search by Owner Name(Last Name first) or Address or PCN | Search

Classic PAPA | MyPAPA | Print This Page | Save as PDF | Print Property Summary

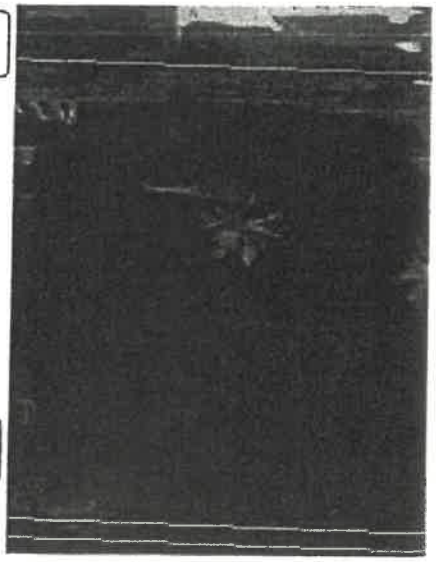
2017 Proposed Tax Notice

Property Detail • Owner Information • Sales Information • Exemption Information • Property Information • Appraisals • Assessed and Taxable Values • Taxes

Filtered Property Detail

Property Detail

Show Full Map



Location Address	3577 S OCEAN BLVD
Municipality	SOUTH PALM BEACH
Parcel Control Number	62-43-44-35-00-002-0191
Subdivision	
Official Records Book/Page	02493 / 1435
Sale Date	JAN-1975
Legal Description	35-44-43, S 100 FT OF N 300 FTOF S 1/2 OF GOV LT 2 LYG W OF A1A

Nearby Sales Search

Units	0 View Building Details
Total Square Feet*	6143
Acres	0.88
Property Use Code	8900 - MUNICIPAL
Zoning	R2 - (62-SOUTH PALM BEACH)

* May indicate living area in residential properties.

Request Structural Details Change

Appraisals

Show 5 year | Show 10 year

Tax Year	2017	2016	2015	2014	2013
Improvement Value	$804,769	$770,535	$302,570	$273,172	$266,031
Land Value	$1,671,343	$1,591,755	$1,515,957	$1,515,957	$1,443,768
Total Market Value	$2,476,112	$2,362,290	$1,818,527	$1,789,129	$1,709,799

All values are as of January 1st each year

Assessed and Taxable Values

Show 5 year | Show 10 year

Tax Year	2017	2016	2015	2014	2013
Assessed Value	$2,476,112	$2,362,290	$1,818,527	$1,789,129	$1,709,799
Exemption Amount	$2,476,112	$2,362,290	$1,818,527	$1,789,129	$1,709,799
Taxable Value	$0	$0	$0	$0	$0

Taxes

Show 5 year | Show 10 year

Tax Year	2017	2016	2015	2014	2013
Ad Valorem	$0	$0	$0	$0	$0
Non Ad Valorem	$0	$0	$0	$0	$0
Total tax	$0	$0	$0	$0	$0

FEMA
(//www.fema.gov/)

FEMA Flood Map Service Center: Search By Address

Navigation

Search

Languages

MSC Home
(//msc.fema.gov/portal/)

MSC Search by Address
(//msc.fema.gov/portal/search)

MSC Search All Products
(//msc.fema.gov/portal/advanceSearch)

MSC Products and Tools
(//msc.fema.gov/portal/resources/productsandtools)

Hazus
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LOMC Batch Files
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Product Availability
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MSC Frequently Asked Questions (FAQs)
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MSC Email Subscriptions
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Contact MSC Help
(//msc.fema.gov/portal/resources/contact)

Enter an address, place, or coordinates:

3577 S. Ocean Boulevard South Palm beach Fl

Search

Whether you are in a high risk zone or not, you may need flood insurance (https://www.fema.gov/national-flood-insurance-program) because most homeowners insurance doesn't cover flood damage. If you live in an area with low or moderate flood risk, you are 5 times more likely to experience flood than a fire in your home over the next 30 years. For many, a National Flood Insurance Program's flood insurance policy could cost less than $400 per year. Call your insurance agent today and protect what you've built.

Learn more about steps you can take (https://www.fema.gov/what-mitigation) to reduce the risk flood damage.

Search Results—Products for SOUTH PALM BEACH, TOWN OF

Show ALL Products » (https://msc.fema.gov/portal/availabilitySearch?addcommunity=120227&communityName=SOUT

The flood map for the selected area is number **12099C0783F**, effective on **10/05/2017**

DYNAMIC MAP

PRINT MAP/ FIRMette

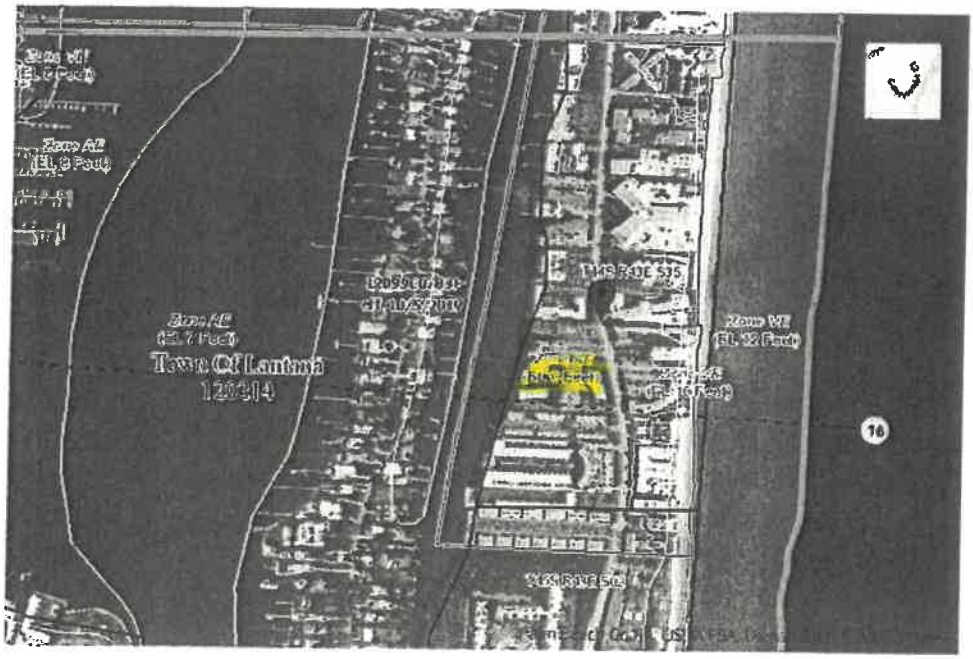
MAP IMAGE

DOWNLOAD FIRM PANEL (https://msc.fema.gov/portal/downloadProduct?filepath=/12/P/Firm/12099C0783F.png&productTypeID=FINAL_PRODUCT&productSubTypeID=FIRM_PANEL

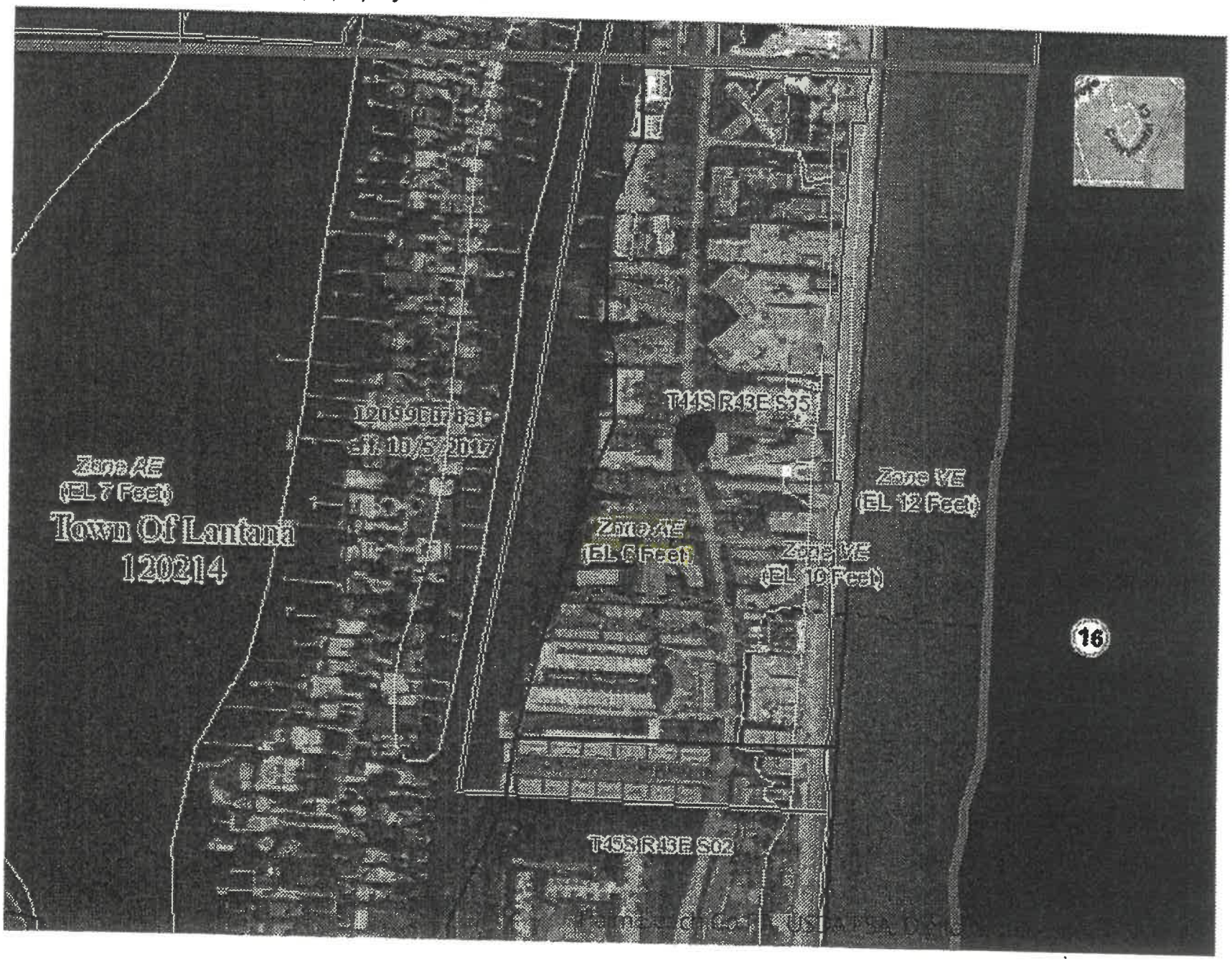
Changes to this FIRM

Revisions (0)
Amendments (1)
Revalidations (2)

You can choose a new flood map or move the location pin by selecting a different location on the locator map below or by entering a new location in the search field above. It may take a minute or more during peak hours to generate a dynamic FIRMette. NOTE: Please be sure to enable popups for this site



location in the search field above. It may take a minute or more during peak hours to generate a dynamic
:: Please be sure to enable popups for this site.



Flood Zone Definitions

Special Flood Hazard Areas – High Risk

Special Flood Hazard Areas represent the area subject to inundation by 1-percent-annual chance flood. Structures located within the SFHA have a 26-percent chance of flooding during the life of a standard 30-year mortgage. Federal floodplain management regulations and mandatory flood insurance purchase requirements apply in these zones.

ZONE	DESCRIPTION
A	Areas subject to inundation by the 1-percent-annual-chance flood event. Because detailed hydraulic analyses have not been performed, no Base Flood Elevations (BFEs) or flood depths are shown.
AE, A1-A30	Areas subject to inundation by the 1-percent-annual-chance flood event determined by detailed methods. BFEs are shown within these zones. (Zone AE is used on new and revised maps in place of Zones A1–A30.)
AH	Areas subject to inundation by 1-percent-annual-chance shallow flooding (usually areas of ponding) where average depths are 1–3 feet. BFEs derived from detailed hydraulic analyses are shown in this zone.
AO	Areas subject to inundation by 1-percent-annual-chance shallow flooding (usually sheet flow on sloping terrain) where average depths are 1–3 feet. Average flood depths derived from detailed hydraulic analyses are shown within this zone.
AR	Areas that result from the decertification of a previously accredited flood protection system

structure shall be shown to meet the requirements of Sections1609 and 1613 (the High-Velocity Hurricane Zone shall comply with Section 1620) of the*Florida Building Code, Building*.

Exception: Any existing lateral load-carrying structural element whose demand-capacity ratio with the *additionconsidered* is no more than 10 percent greater than its demand-capacity ratio with the addition ignored shall be permitted to remain unaltered. For purposes of calculating demand-capacity ratios, the demand shall consider applicable load combinations with design lateral loads or forces in accordance with Sections 1609and 1613 of the *Florida Building Code, Building*. For purposes of this exception, comparisons of demand-capacity ratios and calculation of design lateral loads, forces and capacities shall account for the cumulative effects of *additions* and *alterations* since original construction.

402.5Smoke alarms in existing portions of a building.

Where an *addition* is made to a building or structure of a Group R or I-1 occupancy, the *existing building* shall be provided with smoke alarms in accordance with the *Florida Fire Prevention Code*.

SECTION 403 ALTERATIONS

403.1General.

Except as provided by Section 401.2 or this section,*alterations* to any building or structure shall comply with the requirements of the *Florida Building Code, Building* for new construction. *Alterations* shall be such that the existing building or structure is no less conforming to the provisions of the *Florida Building Code, Building* than the *existing building* or structure was prior to the *alteration*.

Exceptions:

1. An existing stairway shall not be required to comply with the requirements of Section 1011 of the *Florida Building Code, Building* where the existing space and construction does not allow a reduction in pitch or slope.
2. Handrails otherwise required to comply withSection 1011.11 of the *Florida Building Code, Building* shall not be required to comply with the requirements of Section 1014.6 of the *Florida Building Code, Building* regarding full extension of the handrails where such extensions would be hazardous due to plan configuration.

[BS] 403.2Flood hazard areas.

For buildings and structures in *flood hazard areas*established in Section 1612.3 of the *Florida Building Code, Building*, or Section R322 of the *Florida Building Code, Residential*, as applicable, any *alteration* that constitutes*substantial improvement* of the existing structure shall comply with the flood design requirements for new construction, and all aspects of the existing structure shall be brought into compliance with the requirements for new construction for flood design.

For buildings and structures in *flood hazard areas*established in Section 1612.3 of the *Florida Building Code, Building*, or Section R322 of the *Florida Building Code,Residential*, as applicable, any alterations that do not constitute *substantial improvement* of the existing structure are not required to comply with the flood design requirements for new construction.

1604.5Risk category.

Each building and structure shall be assigned a risk category in accordance with Table 1604.5. Where a referenced standard specifies an occupancy category, the risk category shall not be taken as lower than the occupancy category specified therein. Where a referenced standard specifies that the assignment of a risk category be in accordance with ASCE 7, Table 1.5-1, Table 1604.5 shall be used in lieu of ASCE 7, Table 1.5-1.

TABLE 1604.5
RISK CATEGORY OF BUILDINGS AND OTHER STRUCTURES

RISK CATEGORY	NATURE OF OCCUPANCY
I	Buildings and other structures that represent a low hazard to human life in the event of failure, including but not limited to: • Agricultural facilities. • Certain temporary facilities. • Minor storage facilities. • Screen enclosures.
II	Buildings and other structures except those listed in Risk Categories I, III and IV.
III	Buildings and other structures that represent a substantial hazard to human life in the event of failure, including but not limited to: • Buildings and other structures whose primary occupancy is public assembly with an occupant load greater than 300. • Buildings and other structures containing Group E occupancies with an occupant load greater than 250. • Buildings and other structures containing educational occupancies for students above the 12th grade with an occupant load greater than 500. • Group I-2 occupancies with an occupant load of 50 or more resident care recipients but not having surgery or emergency treatment facilities. • Group I-3 occupancies. • Any other occupancy with an occupant load greater than 5,000.[a] • Power-generating stations, water treatment facilities for potable water, wastewater treatment facilities and other public utility facilities not included in Risk Category IV. • Buildings and other structures not included in Risk Category IV containing quantities of toxic or

	explosive materials that: Exceed maximum allowable quantities per control area as given in Table 307.1(1) or307.1(2) or per outdoor control area in accordance with the*Florida Fire Prevention Code; and* Are sufficient to pose a threat to the public if released.[b]
IV	Buildings and other structures designated as essential facilities, including but not limited to: • Group I-2 occupancies having surgery or emergency treatment facilities. • Fire, rescue, ambulance and police stations and emergency vehicle garages. • Designated earthquake, hurricane or other emergency shelters. • Designated emergency preparedness, communications and operations centers and other facilities required for emergency response. • Power-generating stations and other public utility facilities required as emergency backup facilities for Risk Category IV structures. • Buildings and other structures containing quantities of highly toxic materials that: Exceed maximum allowable quantities per control area as given in Table 307.1(2) or per outdoor control area in accordance with the *Florida Fire Prevention Code; and* Are sufficient to pose a threat to the public if released.[b] • Aviation control towers, air traffic control centers and emergency aircraft hangars. • Buildings and other structures having critical national defense functions. • Water storage facilities and pump structures required to maintain water pressure for fire suppression.

U.S. DEPARTMENT OF HOMELAND SECURITY
Federal Emergency Management Agency
National Flood Insurance Program

OMB No. 1660-0008
Expiration Date: November 30, 2018

ELEVATION CERTIFICATE

Important: Follow the instructions on pages 1–9.

Copy all pages of this Elevation Certificate and all attachments for (1) community official, (2) insurance agent/company, and (3) building owner.

SECTION A – PROPERTY INFORMATION

FOR INSURANCE COMPANY USE

A1. Building Owner's Name
TOWN OF SOUTH PALM BEACH, FLORIDA

Policy Number:

A2. Building Street Address (Including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.
3577 SOUTH OCEAN BOULEVARD

Company NAIC Number:

City: SOUTH PALM BEACH | State: FLORIDA | ZIP Code: 33480

A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.)
N 100' of S 200' of N 400' of S1/2 of Govt Lot 2, Section 35/44/43 Plam Beach County, FL Parcel ID 62-43-44-35-00-002-0191

A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) Non-Residential

A5. Latitude/Longitude: Lat. 26°35'21.75" N Long. 80°02'22.33" W Horizontal Datum: ☐ NAD 1927 ☒ NAD 1983

A6. Attach at least 2 photographs of the building if the Certificate is being used to obtain flood insurance.

A7. Building Diagram Number 1B

A8. For a building with a crawlspace or enclosure(s):

a) Square footage of crawlspace or enclosure(s) N/A sq ft

b) Number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade N/A

c) Total net area of flood openings in A8.b N/A sq in

d) Engineered flood openings? ☐ Yes ☒ No

A9. For a building with an attached garage:

a) Square footage of attached garage 1500 sq ft

b) Number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade 0

c) Total net area of flood openings in A9.b 0 sq in

d) Engineered flood openings? ☐ Yes ☒ No

SECTION B – FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

B1. NFIP Community Name & Community Number	B2. County Name	B3. State
Town of South Palm Beach - 120227	Palm Beach	Florida

B4. Map/Panel Number	B5. Suffix	B6. FIRM Index Date	B7. FIRM Panel Effective/ Revised Date	B8. Flood Zone(s)	B9. Base Flood Elevation(s) (Zone AO, use Base Flood Depth)
12099C0783	F	10/05/2017	10/05/2017	AE	6 Feet

B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in Item B
☐ FIS Profile ☒ FIRM ☐ Community Determined ☐ Other/Source:

B11. Indicate elevation datum used for BFE in Item B9: ☐ NGVD 1929 ☒ NAVD 1988 ☐ Other/Source:

B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? ☐ Yes ☒ No
Designation Date: ☐ CBRS ☐ OPA

ELEVATION CERTIFICATE

OMB No. 1660-0008
Expiration Date: November 30, 2018

IMPORTANT: In these spaces, copy the corresponding information from Section A.			FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 3577 SOUTH OCEAN BOULEVARD			Policy Number:
City South Palm Beach	State Florida	ZIP Code 33480	Company NAIC Number

SECTION C – BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)

C1. Building elevations are based on: ☐ Construction Drawings* ☐ Building Under Construction* ☒ Finished Construction

*A new Elevation Certificate will be required when construction of the building is complete.

C2. Elevations – Zones A1–A30, AE, AH, A (with BFE), VE, V1–V30, V (with BFE), AR, AR/A, AR/AE, AR/A1–A30, AR/AH, AR/AO. Complete items C2.a–h below according to the building diagram specified in Item A7. In Puerto Rico only, enter meters.

Benchmark Utilized: NGS BM F 315 - EL = 2.28 Vertical Datum: NAVD 1988

Indicate elevation datum used for the elevations in items a) through h) below.

☐ NGVD 1929 ☒ NAVD 1988 ☐ Other/Source:

Datum used for building elevations must be the same as that used for the BFE.

		Check the measurement used.	
a) Top of bottom floor (including basement, crawlspace, or enclosure floor)	7.3	☒ feet	☐ meters
b) Top of the next higher floor	16.6	☒ feet	☐ meters
c) Bottom of the lowest horizontal structural member (V Zones only)	N/A	☐ feet	☐ meters
d) Attached garage (top of slab)	6.5	☒ feet	☐ meters
e) Lowest elevation of machinery or equipment servicing the building (Describe type of equipment and location in Comments)	5.3	☒ feet	☐ meters
f) Lowest adjacent (finished) grade next to building (LAG)	5.2	☒ feet	☐ meters
g) Highest adjacent (finished) grade next to building (HAG)	6.7	☒ feet	☐ meters
h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support	N/A	☐ feet	☐ meters

SECTION D – SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION

This certification is to be signed and sealed by a land surveyor, engineer, or architect authorized by law to certify elevation information. *I certify that the information on this Certificate represents my best efforts to interpret the data available. I understand that any false statement may be punishable by fine or imprisonment under 18 U.S. Code, Section 1001.*

Were latitude and longitude in Section A provided by a licensed land surveyor? ☒ Yes ☐ No ☒ Check here if attachments.

Certifier's Name Richard H. Smith	License Number LS 5239	
Title Professional Surveyor and Mapper		
Company Name Richard H. Smith, Inc.		
Address 4902 Forest Dale Drive		
City Lake Worth	State Florida	ZIP Code 33449

Place Seal Here

7/31/18

LS 5239

Signature	Date	Telephone
	7/31/18	(561)536-8191

Copy all pages of this Elevation Certificate and all attachments for (1) community official, (2) insurance agent/company, and (3) building owner.

Comments (including type of equipment and location, per C2(e), if applicable)
A5 determined using google earth.

C2e is an air conditioner unit on a concrete slab outside the structure.

FLOOD INSURANCE STUDY.

FLOODWAY.

LOWEST FLOOR.

SPECIAL FLOOD HAZARD AREA.

START OF CONSTRUCTION.

SUBSTANTIAL DAMAGE.

SUBSTANTIAL IMPROVEMENT.

1612.3 Establishment of flood hazard areas.

To establish *flood hazard areas*, the applicable governing authority shall, by local floodplain management ordinance, adopt a flood hazard map and supporting data. The flood hazard map shall include, at a minimum, areas of special flood hazard as identified by the Federal Emergency Management Agency.

1612.3.1 Design flood elevations.

Where design flood elevations are not included in the*flood hazard areas* established in Section 1612.3, or where floodways are not designated, the *building official* is authorized to require the applicant to:

1. Obtain and reasonably utilize any design flood elevation and floodway data available from a federal, state or other source; or
2. Determine the design flood elevation and/or floodway in accordance with accepted hydrologic and hydraulic engineering practices used to define special flood hazard areas. Determinations shall be undertaken by a *registered design professional* who shall document that the technical methods used reflect currently accepted engineering practice.

1612.3.2 Determination of impacts.

In riverine *flood hazard areas* where design flood elevations are specified but floodways have not been designated, the applicant shall provide a floodway analysis that demonstrates that the proposed work will not increase the design flood elevation more than 1 foot (305 mm) at any point within the jurisdiction of the applicable governing authority.

1612.4 Design and construction.

The design and construction of buildings and structures located in flood hazard areas, including coastal high hazard areas and Coastal A Zones, shall be in accordance with Chapter 5 of ASCE 7 and with ASCE 24.

1612.4.1 Modification of ASCE 24.

Table 6-1 and Section 6.2.1 in ASCE 24 shall be modified as follows:

1. The title of Table 6.1 shall be "Minimum Elevation of Floodproofing, Relative to Base Flood Elevation (BFE) or Design Flood Elevation (DFE), in Coastal A Zones and in Other Flood Hazard Areas that are not High Risk Flood Hazard Areas."
2. Section 6.2.1 shall be modified to permit dry floodproofing in Coastal A Zones, as follows: "Dry floodproofing of nonresidential structures and nonresidential areas of mixed-use

See next page for description of Flood Design Classes →		Flood Design Class 1	Flood Design Class 2	Flood Design Class 3	Flood Design Class 4
Minimum Elevation* of Lowest Floor (Zone A: ASCE 24-14 Table 2-1)	Zone A not identified as Coastal A Zone	DFE	BFE +1 ft or DFE, whichever is higher	BFE +1 ft or DFE, whichever is higher	BFE +2 ft or DFE, or 500-year flood elevation, whichever is higher
Minimum Elevation of Bottom of Lowest Horizontal Structural Member (Zone V: ASCE 24-14 Table 4-1)	Coastal High Hazard Areas (Zone V) and Coastal A Zone	DFE	BFE +1 ft or DFE, whichever is higher	BFE +2 ft or DFE, whichever is higher	BFE +2 ft or DFE, or 500-year flood elevation, whichever is higher
Minimum Elevation Below Which Flood-Damage-Resistant Materials Shall be Used (Table ASCE 24-14 5-1)	Zone A not identified as Coastal A Zone	DFE	BFE +1 ft or DFE, whichever is higher	BFE +1 ft or DFE, whichever is higher	BFE +2 ft or DFE, or 500-year flood elevation, whichever is higher
	Coastal High Hazard Areas (Zone V) and Coastal A Zone	DFE	BFE +1 ft or DFE, whichever is higher	BFE +2 ft or DFE, whichever is higher	BFE +2 ft or DFE, or 500-year flood elevation, whichever is higher
Minimum Elevation of Utilities and Equipment (ASCE 24-14 Table 7-1)**	Zone A not identified as Coastal A Zone	DFE	BFE +1 ft or DFE, whichever is higher	BFE +1 ft or DFE, whichever is higher	BFE +2 ft or DFE, or 500-year flood elevation, whichever is higher
	Coastal High Hazard Areas (Zone V) and Coastal A Zone	DFE	BFE +1 ft or DFE, whichever is higher	BFE +2 ft or DFE, whichever is higher	BFE +2 ft or DFE, or 500-year flood elevation, whichever is higher
Minimum Elevation of Dry Floodproofing of non-residential structures and non-residential portions of mixed-use buildings (ASCE 24-14 Table 6-1)	Zone A not identified as Coastal A Zone	BFE +1 ft or DFE, whichever is higher	BFE +1 ft or DFE, whichever is higher	BFE +1 ft or DFE, whichever is higher	BFE +2 ft or DFE, or 500-year flood elevation, whichever is higher
	Coastal High Hazard Areas (Zone V) and Coastal A Zone	Not permitted	Not permitted	Not permitted	Not permitted
Minimum Elevation of Wet Floodproofing* (ASCE 24-14 Table 6-1)**	Zone A not identified as Coastal A Zone; Coastal A Zone; Coastal High Hazard Areas (Zone V)	BFE +1 ft or DFE, whichever is higher	BFE +1 ft or DFE, whichever is higher	BFE +1 ft or DFE, whichever is higher	BFE +2 ft or DFE, or 500-year flood elevation, whichever is higher

* Flood Design Class 1 structures shall be allowed below the minimum elevation if the structure meets the wet floodproofing requirements of ASCE 24-14 Section 6.3.
** Unless otherwise permitted by ASCE 24-14 Chapter 7
*** Only if permitted by ASCE 24-14 Section 6.3.1