Lee County
Southwest Florida

LEE COUNTY BOARD OF ADJUSTMENTS AND APPEALS
Community Development/Public Works Center
1500 Monroe Street, 1st Floor Conf. Room 1B

Thursday, May 28, 2015
10:00 A.M.

AGENDA

CASE TO BE HEARD

Case #ADM2015-00002

Florida Cancer Specialists represented by David Douglas Associates, Inc.

The applicant is requesting a variance from Sec. 1612.4 of the Florida Building Code and by reference ASCE 24 Section 2.3 elevation requirements.

MEMORANDUM
FROM THE
DEPARTMENT OF
COMMUNITY DEVELOPMENT
DEVELOPMENT SERVICES DIVISION

DATE: May 28, 2015

TO: Board of Adjustments and Appeals Members

FROM: Robert Stewart
Building Official

RE: Case #ADM2013-00002 (RE: COM2015-00361) – Florida Cancer Specialists

This is a request for a variance from Sec. 1612.4 of the Florida Building Code and by reference ASCE 24 Section 2.3 elevation requirements.

This property is located in a special flood hazard area with established elevations of AE-EL 8.0 and 9.0 NAVD. The building is located in the AE-EL 9.0 portion of the property.

In the 2010 edition of the Florida Building Code, flood design and elevation requirements were added. A reference is made in FBS Section 1612.4 to the requirements of ASCE 24. Section 2.3 of ASCE 24 has "freeboard" requirements based on a building's classification.

As a category II building, the subject structure (doctor's office) is required to be elevated1 ft. above the required FEMA base flood elevation requirement.

The engineer for the project has established in his narrative that the parcel is long and narrow and is too small to meet the freeboard requirement and still be developable. The property is located between two roadways which have established elevations.

This is NOT a variance from the minimum FEMA requirement of 9.0 NAVD. The variance request is from the additional 1 ft. freeboard requirement of the Florida Building Code and ASCE 24. The elevation requirement from the building code would be 10.0 NAVD. The variance request is for the elevation to be set at 9.1 NAVD or 6.3 ft. above existing grade.

Staff recommends approval of the variance with the condition that the property owner provides the County with a Hold Harmless Agreement.

cc: Terry Lenick, Esquire
Neysa Borkert, Assistant County Attorney

BS/ph
U:\201503\ADM20150.000\2\STAFF MEMO.DOCX

commercial - Ind
multi. family
Assembly

Permanent construction does not include land preparation (such as clearing, excavation, grading or filling), the installation of streets or walkways, excavation for a basement, footings, piers or foundations, the erection of temporary forms or the installation of accessory buildings such as garages or sheds not occupied as *dwelling units* or not part of the main building. For a substantial improvement, the actual "start of construction" means the first *alteration* of any wall, ceiling, floor or other structural part of a building, whether or not that *alteration* affects the external dimensions of the building.

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.

SUBSTANTIAL IMPROVEMENT. Any repair, reconstruction, rehabilitation, *addition* or improvement of a building or structure, the cost of which equals 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 are 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.

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 in an engineering report entitled "The Flood Insurance Study for [INSERT NAME OF JURISDICTION]," dated [INSERT DATE OF ISSUANCE], as amended or revised with the accompanying Flood Insurance Rate Map (FIRM) and Flood Boundary and Floodway Map (FBFM) and related supporting data along with any revisions thereto. The adopted flood hazard map and supporting data are hereby adopted by reference and declared to be part of this Section.

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 flood hazard areas subject to high-velocity wave action, shall be in accordance with Chapter 5 of ASCE 7 and with ASCE 24.

1612.5 Flood hazard documentation. The following documentation shall be prepared and sealed by a registered design professional and shall be submitted to the building official:

1. For construction in flood hazard areas not subject to high-velocity wave action:
   - 1.1 The elevation of the lowest floor, including basement, as required by the foundation inspection and the final inspection in Section 110.3.
   - 1.2. For fully enclosed areas below the design flood elevation where provisions to allow for the automatic entry and exit of floodwaters do not meet the minimum requirements in Section 2.6.2.1, ASCE 24, construction documents shall include a statement that the design will provide for equalization of hydrostatic flood forces in accordance with Section 2.6.2.2 of ASCE 24.
   - 1.3. For dry floodproofed nonresidential buildings, construction documents shall include a statement that the dry floodproofing is designed in accordance with ASCE 24.
2. For construction in flood hazard areas subject to high-velocity wave action:
   - 2.1 The elevation of the bottom of the lowest horizontal structural member as required by the foundation inspection and the final inspection in Section 110.3.
   - 2.2 Construction documents shall include a statement that the building is designed in accordance with ASCE 24, including that the pile or column foundation and building or structure to be attached thereto is designed to be anchored to resist flotation, collapse and lateral movement due to the effects of wind and flood loads acting simultaneously on all building components, and other load requirements of Chapter 16.
   - 2.3 For breakaway walls designed to resist a nominal load of less than 10 psf (0.48 kN/m²) or more than 20 psf (0.96 kN/m²), construction documents shall include a statement that the breakaway wall is designed in accordance with ASCE 24.

TABLE 1-1. Classification of Structures for Flood-Resistant Design and Construction (Classification same as ASCE 7, Ref. [1])

Nature of Occupancy	Category
Buildings and other structures that represent a low hazard to human life in the event of failure including, but not limited to: • Agricultural facilities[a] • Certain temporary facilities • Minor storage facilities[b]	I
All buildings and other structures except those listed in Categories I, III, and IV SFR, Duplex, Town House	II Other Commercial
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 where more than 300 people congregate in one area Large Assembly • Buildings and other structures with day-care facilities with capacity greater than 150 • Buildings and other structures with elementary school or secondary school facilities with capacity greater than 250 • Buildings and other structures with a capacity greater than 500 for colleges or adult education facilities • Health care facilities with a capacity of 50 or more resident patients but not having surgery or emergency treatment facilities • Jails and detention facilities • Power generating stations and other public utility facilities not included in Category IV Buildings and other structures not included in Category IV (including, but not limited to, facilities that manufacture, process, handle, store, use, or dispose of such substances as hazardous fuels, hazardous chemicals, hazardous waste, or explosives) containing sufficient quantities of hazardous materials considered to be dangerous to the public if released. Buildings and other structures containing hazardous materials shall be eligible for classification as Category II structures if it can be demonstrated to the satisfaction of the authority having jurisdiction by a hazard assessment as described in Section 1.5.2[c] that a release of the hazardous material does not pose a threat to the public.	III ~~Church~~
Buildings and other structures designated as essential facilities including, but not limited to: • Hospitals and other health care facilities 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, communication, and operation centers and other facilities required for emergency response • Power generating stations and other public utility facilities required in an emergency • Ancillary structures (including, but not limited to, communication towers, fuel storage tanks, cooling towers, electrical substation structures, fire water storage tanks or other structures housing or supporting water, or other fire-suppression material or equipment) required for operation of Category IV structures during an emergency • Aviation control towers, air traffic control centers, and emergency aircraft hangars • Water storage facilities and pump structures required to maintain water pressure for fire suppression • Buildings and other structures having critical national defense functions Buildings and other structures (including, but not limited to, facilities that manufacture, process, handle, store, use, or dispose of such substances as hazardous fuels, hazardous chemicals, hazardous waste, or explosives) containing extremely hazardous materials where the quantity of the material exceeds a threshold quantity established by the authority having jurisdiction. Buildings and other structures containing extremely hazardous materials shall be eligible for classification as Category II structures if it can be demonstrated to the satisfaction of the authority having jurisdiction by a hazard assessment as described in Section 1.5.2[c] that a release of the extremely hazardous material does not pose a threat to the public. This reduced classification shall not be permitted if the buildings or other structures also function as essential facilities.	IV

[a]Certain agricultural structures may be exempt from some of the provisions of this standard—see Section C1.4.3.
[b]For the purposes of this standard, minor storage facilities do not include commercial storage facilities.
[c]Section 1.5.2 reference is made to ASCE Standard 7-05, not this standard.

If the design flood elevation has been determined and a floodway has not been designated, structures and fill shall not be constructed or placed unless it has been demonstrated that the cumulative effect of proposed structures and fill, combined with all other existing and anticipated development, will not increase the base flood elevation more than 1 ft.

2.3 ELEVATION REQUIREMENTS

Structures shall have the lowest floor (including basements) elevated to or above the Design Flood Elevation (DFE) in conformance with the requirements of Table 2-1. Enclosed areas used solely for parking, building access, or storage that comply with Section 2.6 are allowed below elevated buildings. Elevation requirements for other building components are found in Sections 5, 6, and 7.

A Zones

TABLE 2-1. Minimum Elevation of the Top of Lowest Floor Relative to Base Flood Elevation (BFE) or Design Flood Elevation (DFE)—Flood Hazard Areas Other Than Coastal High Hazard Areas,[a] Coastal A Zones,[a] and High Risk Flood Hazard Areas[a]

Structure Category[b]	Minimum Elevation of Lowest Floor
I	DFE
II[c] NOT SFR Duplex Townhouse (see Res Bldg Code)	BFE + 1 ft or DFE, whichever is higher
III[c]	BFE + 1 ft or DFE, whichever is higher
IV[c]	BFE + 2 ft or DFE, whichever is higher

[a]Minimum elevations shown in Table 2-1 do not apply to Coastal High Hazard Areas and Coastal A Zones (see Table 4-1). Minimum elevations shown in Table 2-1 apply to other High Risk Flood Hazard Areas unless specific elevation requirements are given in Section 3 of this standard.
[b]See Table 1-1 for structure category descriptions.
[c]For nonresidential buildings and nonresidential portions of mixed-use buildings, the lowest floor shall be allowed below the minimum elevation if the structure meets the floodproofing requirements of Section 6.

Exception: Nonresidential structures with the lowest floor below the minimum elevation specified in Table 2-1 and nonresidential portions of mixed-use structures with the lowest floor below the minimum elevation specified by Table 2-1 shall be allowed in conformance with the floodproofing requirements of Section 6.

2.4 USE OF FILL

Structural fill, and nonstructural fill, shall not be placed in floodway areas unless in compliance with the requirements of Section 2.2.

2.4.1 Structural Fill

Structural fill shall not be used unless design and construction of the structural fill account for

1. Consolidation of the underlying soil under the weight of the fill and the structure;
2. Differential settlement due to variations in fill composition and characteristics; and
3. Slope stability and erosion control.

Fill used for structural support or protection shall be suitable for its intended use. Fill used to support or protect a structure shall be placed in lifts of not more than 12-in. loose thickness, with each lift compacted to at least 95% of its maximum Standard Proctor density (see Ref. [5]) or 90% of its maximum modified Proctor density (see Ref. [6]), unless a soils engineering report approved by the authority having jurisdiction specifies otherwise.

The side slopes of structural fill shall be no steeper than 1 on 1.5 (vertical/horizontal). Structural fill, including side slopes, shall be protected from scouring and erosion under flood conditions up to and including the design flood.

2.5 SLABS-ON-GRADE AND FOOTINGS

2.5.1 Use of Slabs-on-Grade

Use of slabs-on-grade is acceptable if the slab is installed on structural fill that is placed in conformance with Section 2.4 or is installed on undisturbed soil of adequate bearing capacity. The top of the slab shall be at or above the DFE as specified in Table 2-1. If turned down to act as footings, the bottom of the turned-down edges of the slab shall be installed at or below the depth of expected scour.

TABLE 4-1. Minimum Elevation of Bottom of Lowest Supporting Horizontal Structural Member of Lowest Floor Relative to Base Flood Elevation (BFE) or Design Flood Elevation (DFE)—Coastal High Hazard Areas and Coastal A Zones

Structure Category[a]	Member Orientation Relative to the Direction of Wave Approach	
	Parallel[b]	Perpendicular[b]
I	DFE	DFE
II	DFE	BFE + 1 ft or DFE, whichever is higher
III	BFE + 1 ft or DFE, whichever is higher	BFE + 2 ft or DFE, whichever is higher
IV	BFE + 1 ft or DFE, whichever is higher	BFE + 2 ft or DFE, whichever is higher

[a]See Table 1-1 for structure category descriptions.
[b]Orientation of lowest horizontal structural member relative to the general direction of wave approach: parallel shall mean less than or equal to +20 degrees from the direction of approach; perpendicular shall mean greater than +20 degrees from the direction of approach.

systems shall be free of obstructions and attachments that will transfer flood forces to the structural system or that will restrict or eliminate free passage of high velocity flood waters and waves during design flood conditions.

Structures shall be supported on piles, columns, or walls serving as shear walls. Spread footing, mat, or raft foundations shall not be used unless the top of the spread footing, mat, or raft foundation is below the eroded ground elevation. Piles shall extend upward to a point at or above the DFE, as required by Table 4-1. Columns shall be connected to and extend upward from the spread footing, mat, or raft foundation to a point at or above the DFE, as required by Table 4-1. Shear walls shall comply with the requirements of Section 4.5.11.

Where surface or subsurface conditions consist of nonerodible soil that prevents the use of pile or deeply embedded column foundations, spread footing or mat foundations shall be permitted provided they are anchored, if necessary to prevent sliding, uplift, or overturning, to nonerodible soil with sufficient strength to withstand forces from the combination of loads in Section 1.6.2.

4.5.2 Special Geotechnical Considerations

In addition to the requirements of Section 1.5.3, foundation design shall account for instability and decreased structural capacity associated with erosion due to wind, waves, currents, local scour, storm-induced erosion, and shoreline movement.

4.5.3 Foundation Depth

The foundation shall extend to a depth sufficient to provide the support required in Section 1.5.3, taking into account the erosion and scour of the supporting soil during the design flood, and shoreline movement, as predicted by an erosion analysis.

4.5.4 Use of Fill

Fill material used for structural support shall not be permitted in Coastal High Hazard Areas and Coastal A Zones. Placement of nonstructural fill for minimal site grading and landscaping, and to meet local drainage requirements, shall be permitted. Placement of nonstructural fill under and around a structure for dune construction or reconstruction shall be permitted if the fill will not result in wave runup, ramping, or deflection of floodwaters that cause damage to structures.

4.5.5 Pile Foundations

Except as provided for under Section 4.5.1, all foundations constructed in erodible soils shall be founded on piles. Piles that are jetted or installed in an augured excavation shall be seated by driving.

In erodible soils, pile tip penetration shall be to a minimum depth of 10 ft below mean water level (−10 ft MWL), unless the design demonstrates that pile penetration to a shallower depth will provide the support and stability required by Section 4.5.3. In the event that unexpected conditions are encountered during construction and refusal or design friction capacity

Case #ADM 2015-00002

LEE COUNTY BOARD OF ADJUSTMENTS AND APPEALS APPLICATION

Name: **David Douglas Associates, Inc.**

Address: **1821 Victoria Ave., Suite 1, Fort Myers, FL 33901**

Phone #: **239-337-3330** Email: **ls@ddai-engineers.com**

STRAP # **34-45-24-00-00002.0000, 0050, & 0060**

Representing: **Florida Cancer Specialists**

IS THIS A ϕVARIANCE OR ϕAPPEAL? (PLEASE SELECT ONE)

Please provide specific sections of the code or ordinance to which the variance or appeal applies:

BUILDING CODE **Section 1612.4 referencing ASCE 24 Section 2.3.**
COASTAL PLAIN MANAGEMENT **N/A**
FIRE CODE **N/A**
FLOOD PLAIN MANAGEMENT **N/A**
LIFE SAFETY CODE N/A
L.D.C. **N/A**
MECHANICAL **N/A**
PLUMBING **N/A**

If this is an appeal of an administrative decision, please indicate the official who made the decision:

I Request that this matter be scheduled for a hearing before the Lee County Board of Adjustments and Appeals. My reason for this request is as follows: (Provide additional sheets if needed.)

SEE ATTACHED

I hereby certify that to the best of my knowledge, the information submitted for this hearing is true and correct.
Signature Authorization: _____ Date: 3/20/15

NOTE: Provide ten (10) copies of all backup information for BOAA members. If there are sealed plans/drawings for the project for which the appeal/variance is requested, the architect/engineer who sealed the plans or drawings **MUST** be present at the hearing.

The applicant's presence is required for a case to be heard by this board.
Hearing dates are usually arranged for Thursday morning at 10:00 a.m.
Applications must be received at least 10 WORKING DAYS before the hearing date.

FEE: $100.00 - Make check payable to Lee County Board of County Commissioners
This application must be submitted to the Lee County Community Development Permit Center.

Justification for Variance:

ASCE-24-05 FEMA Finished Floor Elevation

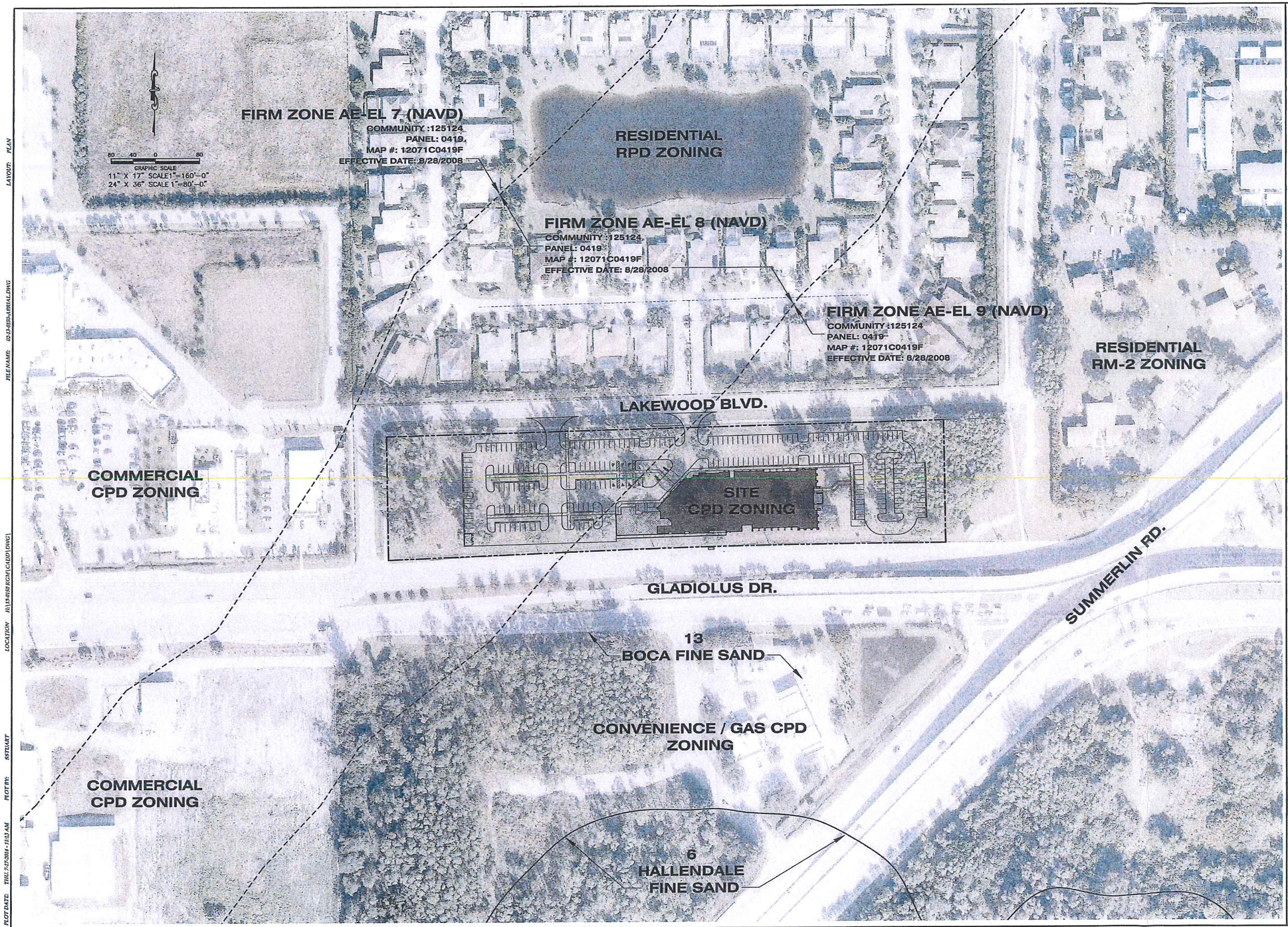
Seeking relief from ASCE-24-05 stating properties located within FEMA Flood Zones shall add an additional one foot of freeboard for all buildings built in flood zones. This property is located at 8320/8380/8590 Gladiolus Drive in Fort Myers and on FEMA Flood Map Community Panel 125124-0419 within Firm Zone AE-EL 8.0 & 9.0 NAVD.

The current average elevation of the property is 3.7 feet with the lowest edges at the parking perimeter designed at 5.50 feet. The finished floor elevation(FFE) is currently designed at 9.1' NAVD. The new regulation would require the finished floor elevation to be elevated to 10' NAVD. This would mean an increase in existing site elevation of 6.3 feet.

The site currently sits between two existing, Lee County maintained roadways: Lakewood Boulevard and Gladiolus Drive. The elevation of Lakewood Boulevard is 4.1 feet and the elevation of Gladiolus Drive is between 5.0 and 6.0 feet. Therefore the designed site is already 5 feet above the existing roadways serving the property. Any additional elevation requirements above the Flood elevation on the property would basically render the site useless due to the narrow nature/orientation of the site and surrounding roadway features.

The engineering design plans have received an ERP permit from the South Florida Water Management District (Permit No. 36-08229-P) and a Development Order approval from Lee County Development Review (D.O. No. DOS2014-00035) for the current design utilizing the FFE of 9.1' NAVD.

The proposed variance will not result in increased flood heights, additional threats to public safety or extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing regulations or ordinances; and does not adversely impact surrounding land uses, public health, safety or general welfare of the public.



LAYOUT: PLAN
FILENAME: 03-13-0165-AERIAL.DWG
LOCATION: H:\13-0165 RGM\CADD\1.DWG
PLOT BY: SSTUART
PLOT DATE: THU, 7-17-2014 - 11:13 AM

DDAI
DAVID DOUGLAS ASSOCIATES, INC.
1821 Victoria Avenue,
Fort Myers, Florida 33901
Ph. 239-337-3330
Website: www.ddai-engineers.com
Certification of Authorization # 7568

Project Name:

FLORIDA
CANCER
SPECIALISTS
MEDICAL OFFICE

Project Address:

JOB ADDRESS
8320/8380/8590 Gladiolus Dr.
Fort Myers, Florida 33908

Client/Owner:

OWNER INFO
Florida Cancer Specialists
4371 Veronica Shoemaker Blvd.
Fort Myers, Florida 33916

Clair Wright, P.E. Project Manager
Phone: 239-337-3330
Email: cw@ddai-engineers.com

Project Engineer:

CLAIR GLEN WRIGHT, III — LICENSE — 54089 — STATE OF FLORIDA — PROFESSIONAL ENGINEER
8/1/14

Clair Wright, III
FLA. REG. P.E. NO: 54089
NOT VALID WITHOUT THE SIGNATURE, DATE AND THE ORIGINAL SEAL OF A FLORIDA PROFESSIONAL ENGINEER.

Legal Disclaimer:

Revisions:

DATE:	DESCRIPTION

SITE DATA:

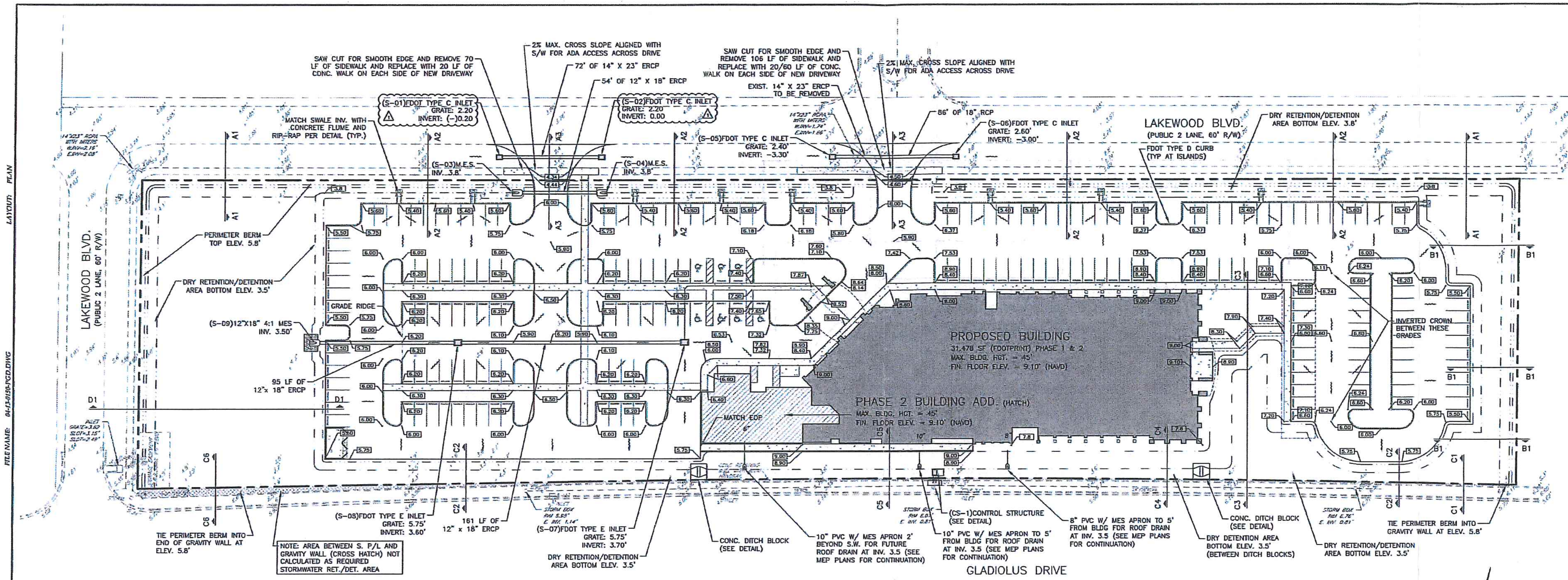
STRAP #	34-45-24-00-00002.0009, .0059, .0060
SEC-TWP-RGE	SEC. 34 TWP. 45S RGE. 24E
CITY PERMIT#	N/A
SF PERMIT #	N/A
LEE COUNTY #	N/A
PROJECT MGR.	DAVID DOUGLAS, P.E.
PROJECT #	13-0150
FILE NAME	03-13-0165-AERIAL.DWG
ORIGIN DATE	03.04.14
DESIGNER	STS
CADD	STS
CHECKED BY	CEW
PLOT DATE	THU, 7-17-2014-11:13 AM
PLOTTED BY	SSTUART

SHEET TITLE:

AERIAL

SHEET NO. 02 OF 08

APPROVED
DOS2014-00035
Benjamin Dickson, Acting Director
Lee County Development Services Division
8/31/2014



PAVING, GRADING AND DRAINAGE NOTES

1. PROPERTY IS LOCATED IN FLOOD ZONE AE COMMUNITY-PANEL NUMBER 12071C0419 F DATED 8/28/2008. 100 YEAR FLOOD ELEVATION = 9.0'.
2. ALL ELEVATIONS REFER TO VERTICAL DATUM N.A.V.D. 88 BY GULF SHORE SURVEYING CIRCA NOVEMBER 2013.
3. THE ENGINEER HAS ANALYZED THAT NO NEGATIVE IMPACTS TO GROUNDWATER OR SURFACE WATER ARE ANTICIPATED.
4. THE CONTRACTOR SHALL SUBMIT FOR APPROVAL TO THE OWNER'S ENGINEER, SHOP DRAWINGS ON ALL PROPOSED PRECAST AND MANUFACTURED STRUCTURES. FAILURE TO OBTAIN APPROVAL BEFORE INSTALLATION MAY RESULT IN REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE. ALL SHOP DRAWINGS ARE TO BE REVIEWED AND APPROVED BY CONTRACTOR SIGNATURE PRIOR TO SUBMITTAL TO THE OWNER'S ENGINEER.
5. ALL DELETERIOUS SUBSTANCE MATERIAL, (I.E. MUCK, PEAT, BURIED DEBRIS), IS TO BE EXCAVATED IN ACCORDANCE WITH THESE PLANS, OR AS DIRECTED BY THE OWNER'S ENGINEER, OR OWNER'S SOIL TESTING COMPANY. DELETERIOUS MATERIAL IS TO BE REMOVED FROM THE SITE AS DIRECTED BY THE OWNER. EXCAVATED AREAS ARE TO BE BACKFILLED WITH APPROVED MATERIALS AND COMPACTED AS SHOWN ON THESE PLANS.
6. STANDARD INDICES REFER TO THE LATEST OF FDOT "ROADWAY AND TRAFFIC DESIGN STANDARDS".
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXCAVATIONS AGAINST COLLAPSE AND WILL PROVIDE BRACING, SHEETING, OR SHORING, AS NECESSARY. TRENCHES SHALL BE KEPT DRY WHILE PIPE AND APPURTENANCES ARE BEING PLACED. CONTRACTOR SHALL COMPLY WITH THE STATE OF FLORIDA "TRENCH SAFETY ACT".
8. THE CONTRACTOR IS TO PROVIDE A ½" BITUMINOUS EXPANSION JOINT MATERIAL WITH SEALER, AT ABUTMENT OF CONCRETE AND ANY STRUCTURE.
9. MATERIALS AND CONSTRUCTION METHODS FOR STREETS AND STORM DRAINAGE CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LOCAL REGULATORY AGENCY AND THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION.
10. UNDERCUTTING AND/OR OVER EXCAVATING THE RETENTION/DETENTION AREAS WILL NOT BE ALLOWED.
11. GREEN OPEN SPACE ELEVATIONS SHOWN ARE TO TOP OF SOD. FINISH GRADE TO WITHIN 2" OF PAVEMENT ELEVATIONS BEFORE LAYING SOD & MULCH BEDS. (STRICTLY ENFORCED). ALL AREAS TO BE GRADED AND SODDED MUST DRAIN WITHOUT ANY NOTICEABLE PONDING. THE CONTRACTOR WILL BE REQUIRED TO REGRADE AND RESOD ANY AREAS WHICH DO NOT COMPLY WITH POSITIVE DRAINAGE WITHOUT PONDING.
12. STORM DRAINAGE CULVERTS SHALL BE SUBJECT TO A VISUAL INSPECTION BY THE OWNER'S ENGINEER PRIOR TO THE PLACEMENT OF BACKFILL. THE CONTRACTOR IS TO NOTIFY THE ENGINEER 48 HOURS IN ADVANCE TO SCHEDULE AN INSPECTION.
13. THE CONTRACTOR SHALL MAINTAIN THE STORM DRAINAGE SYSTEMS UNTIL FINAL ACCEPTANCE OF THE PROJECT.
14. ALL CONSTRUCTION SHALL COMPLY WITH THE AMERICANS WITH DISABILITIES ACT (ADA) AND THE FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION (FACBC).
15. THE CONTRACTOR IS REQUIRED TO ADJUST ALL VALVE BOXES, MANHOLE RIMS, ETC. AS NECESSARY TO MATCH PROPOSED GRADES. ALL ADJUSTMENTS SHALL BE MADE IN ACCORDANCE WITH LEE COUNTY UTILITIES AND FDOT STANDARDS AND SPECIFICATIONS.
16. BACKFILL MATERIAL SHALL BE COMPACTED TO FDOT SPECIFICATIONS AROUND PIPES IN 6" LAYERS UP TO A LEVEL OF AT LEAST ONE FOOT ABOVE THE TOP AND BELOW BOTTOM OF THE PIPE. IN AREAS TO BE PAVED, BACKFILL SHALL BE FILLED IN 1 FT. MAXIMUM LIFTS AND COMPACTED TO 98% MAXIMUM DENSITY AS DETERMINED BY AASHTO T-99, MODIFIED PROCTOR. ALL OTHER AREAS TO BE FILLED SHALL ADHERE TO FDOT EMBANKMENT CONSTRUCTION AND QUALITY CONTROL ACCEPTANCE CRITERIA SPECIFICATIONS.
17. NO DEWATERING IS ANTICIPATED FOR THE PROPOSED CONSTRUCTION. IN THE EVENT DEWATERING IS REQUIRED THE CONTRACTOR SHALL APPLY FOR ALL APPLICABLE WATER USE PERMITS AT THAT TIME.
18. ALL HANDICAP SIDEWALK RAMPS SHALL BE CONSTRUCTED PER FDOT INDEX 304.
19. CONTRACTOR SHALL FLUSH ALL EXISTING AND PROPOSED ONSITE STORM DRAIN PIPES AND STRUCTURES WITHIN WORK AREAS. ALL DRAINAGE INFRASTRUCTURE IS TO BE CLEAR OF DEBRIS PRIOR TO CONTRACTOR'S REQUEST FOR ENGINEER'S FINAL INSPECTION, ALL DEBRIS IS TO BE REMOVED FROM SITE AND TRANSPORTED TO APPROVED LOCATION. CONTRACTOR SHALL PUMP DRAINAGE SYSTEM DRY FOR FINAL INSPECTION.
20. CONTRACTOR SHALL COMPACT EMBANKMENTS THAT WILL SUPPORT STRUCTURES TO A MINIMUM OF 95 PERCENT OF THE MAXIMUM DRY DENSITY (MODIFIED PROCTOR) UNLESS OTHERWISE SPECIFIED BY ARCHITECT OR GEOTECHNICAL ENGINEER. FOR ALL OTHER AREAS, THE CONTRACTOR SHALL COMPACT EMBANKMENT TO 90 PERCENT OF MAXIMUM DRY DENSITY (MODIFIED PROCTOR) IN ACCORDANCE WITH ASTM D1557. THE CONTRACTOR SHALL PROVIDE SIGNED AND SEALED GEOTECHNICAL TEST REPORTS CERTIFYING THAT PLACED EMBANKMENT WAS COMPACTED TO ITS FULL THICKNESS.

ON-SITE LAND USE COVERAGE

BUILDING FOOTPRINT (INCLUDES FUTURE)	= 31,478 SF	= 0.72 AC
ASPHALT/CONCRETE	= 97,658 SF	= 2.24 AC
TOTAL IMPERVIOUS	= 129,136 SF	= 2.96 AC
RETENTION/DETENTION AREA (TOE)	= 39,765 SF	= 0.91 AC
ADDITIONAL IMPERVIOUS AREA	= 47,976 SF	= 1.10 AC
BETWEEN P/L AND TOE	= 4,634 SF	= 0.11 AC
TOTAL PERVIOUS	= 92,375 SF	= 2.12 AC
TOTAL SITE	= 221,511 SF	= 5.09 AC

GRAPHIC SCALE
11" X 17" SCALE 1"=80'-0"
24" X 36" SCALE 1"=40'-0"

LEGEND
- PROPERTY LINE
- EXISTING FEATURE
- PROPOSED EDGE OF PAVEMENT
- PROPOSED BUILDING
- PROPOSED TOB
- PROPOSED TOE
- PROPOSED GRADE
- EXISTING GRADE
- FLOW ARROW

DDAI
DAVID DOUGLAS ASSOCIATES, INC.
1821 Victoria Avenue,
Fort Myers, Florida 33901
Ph. 239-337-3330
Website: www.ddai-engineers.com
Certification of Authorization # 7568

Project Name:
FLORIDA CANCER SPECIALISTS MEDICAL OFFICE

Project Address:
JOB ADDRESS
8320/8380/8590 Gladiolus Dr.
Fort Myers, Florida 33908

Client/Owner:
OWNER INFO
Florida Cancer Specialists
4371 Veronica Shoemaker Blvd.
Fort Myers, Florida 33916

Clair Wright, P.E. Project Manager
Phone: 239-337-3330
Email: cw@ddai-engineers.com

Project Engineer:
Clair Wright, III
FLA. REG. P.E. NO: 64089
NOT VALID WITHOUT THE SIGNATURE, DATE AND THE ORIGINAL SEAL OF A FLORIDA PROFESSIONAL ENGINEER

Revisions:

DATE:	DESCRIPTION
05/05/14	CURB AND FLUMES AT N. EOP
06/13/14	LEE COUNTY DO COMMENTS ⚠

SITE DATA:

STRAP #	34-45-24-00-00002.0000, .0050, .0060
SEC-TWP-RGE	SEC. 34 TWP. 45S RGE. 24E
CITY PERMIT#	N/A
SF PERMIT #	N/A
LEE COUNTY #	N/A

PROJECT MGR. : DAVID DOUGLAS, P.E.
PROJECT # : 13-0150
FILE NAME : 04-13-0150-PGD.DWG
ORIGIN DATE : 03.04.14
DESIGNER : STS
CADD : STS
CHECKED BY : CEW
PLOT DATE : THU. 7-17-2014-11:13 AM
PLOTTED BY : SSTUART

SHEET TITLE:
PAVING, GRADING & DRAINAGE PLAN

SHEET NO. 04 OF 08

PLOT DATE: THU, 7-17-2014 - 11:13 AM PLOT BY: SSTUART LOCATION: H:\13-0150 KGM\CADD\DWG\ FILE NAME: 04-13-0150-PGD.DWG LAYOUT: PLAN

APPROVED
DOS2014-00035
Benjamin Dickson, Acting Director
Lee County Development Services Division
8/31/2014