

City of Pembroke Pines
Planning & Economic Development Department
601 City Center Way 3rd Floor
Pembroke Pines FL, 33025

Summary

Agenda Date:	June 27, 2019	Application ID:	SP 2019-06
Project:	Diversified Aviation Phase IIA	Project Number:	PRJ 2019-08
Project Planner:	Joseph Yaciuk, Planning Administrator		
Owner:	Cary Goldberg	Agent:	Barranco Gonzalez Architecture
Location:	North of Pembroke Road and west of Southwest 72 Avenue		
Existing Zoning:	A-1 (Limited Agricultural)* (Existing Airport)	Existing Land Use:	Transportation
Reference Applications:	SP 2011-18, ZV 2011-50, SP 2012-12, SP 2014-23		
Applicant Request:	Amending a previous site plan to allow for the construction of two new Hangars to replace three previously approved and unbuilt hangars.		
Staff Recommendation:	Approval, subject to the applicant providing LED lighting fixtures that do not exceed 3000k Correlated Color Temperature (CCT) in compliance with City of Pembroke Pines lighting code.		
Final:	<input checked="" type="checkbox"/> Planning & Zoning Board	<input type="checkbox"/> City Commission	
Reviewed for the Agenda:	Director: <u></u>	Planning Administrator: <u></u>	

Project Description / Background

Cary Goldberg, agent for Diversified Companies., submitted a development application to amend a previously approved site plan for the subject Diversified Aviation site generally located north of Pembroke Road and west of Southwest 72 Avenue on North Perry Airport. The applicant contemplates the construction of two new airplane hangars to replace three previously approved and un-built T-hangars with associated parking, landscape, traffic circulation, lighting, and signage.

The Planning and Zoning Board previously approved the following applications for this site:

- Variance Application (ZV 2011-50) – November 10, 2011 meeting approved a parking variance for the site.
- Site Plan Application (SP 2011-18) – January 26, 2012 meeting approved the construction of airplane hangars / offices, a pilot office, fuel and plane wash and associated signage, traffic circulation, parking, and landscaping to be built in three phases.
- Site Plan Amendment Application (SP 2012-12) – September 27, 2012 meeting approved various modifications Hangar design changes and hangar additions to previously approved plan (SP 2011-18).
- Site Plan Amendment Application (SP 2014-23) – Various modifications to phase 2 and 3 hangars and the addition of the Broward College Aviation building to phase 2 (total 14 buildings over the three phase project).

To date, only the phase 1 buildings (Buildings #1, 2, 3, 4, 13) and the Broward College Building (Phase 2 – Building #14) of the approved three phase project have been constructed. The subject site plan amendment will only amend the building and site plan for phase 2 as depicted on the plan.

Phase 3 (Former Border Patrol site at south east corner of airport) will not be built as previously approved. The applicant will be required to submit a new site plan for phase 3 at a later date once a new plan is finalized.

BUILDINGS / STRUCTURES:

The applicant proposes two hangar buildings to be located to the north of the existing Broward College Aviation building. Both metal hangar buildings will be positioned parallel to the Broward College facility. The southernmost building (Hangar #5) will be 16,407 square feet in size where the northern building (Hangar #6) will be 16,711 square feet. Both buildings will be 24'-4" in height (highest point) and are designed to look similar architecturally. Hangar #5 will contain three hangar bays with associated office facilities. Hangar #6 will contain five hangar bays and associate office areas. The applicant proposes the following color selections for the buildings which match the colors of the existing Broward College building:

- Base Color – Snow White, Samovar Silver
- Standing Seam Metal Roof – Harbor Blue
- Canvas and Metal Awnings – Tricorn Black
- Swing Hangar Metal Doors – Snow White
- Entry Doors – Glass / Slate Gray Metal Frames

ACCESS:

Access to this site will be through existing driveways along airport road. No off-site roadway changes are proposed as a result of this application.

PARKING:

The applicant proposes 60 parking spaces on site. Phase 1, 2 and 2A provide for 134 parking spaces where 134 are required based on use.

SIGNAGE:

Signage will be required to comply with the Uniform Sign Plan which was approved in the original site plan submittal.

LANDSCAPING:

Landscape for the amended site consists of the following:

- Installation of 50 trees, 18 palms, and 1,009 shrubs is proposed on the property. Primary species of trees include Japanese Blueberry Tree and High Rise Live Oak. Primary species of palms is Sabal Palm and Double Alexander Palm. Primary species of shrubs include Green Island Ficus and Burle Marx.

OTHER SITE FEATURES:

The proposed parking areas will be illuminated by a series of full cut off LED fixtures mounted upon 20 feet high foot high tapered concrete poles. Additional lighting will be located on the buildings at varying heights (10 feet, 16 feet, and 23 feet). All LED fixtures must be 3000K or less Correlated Color Temperature (CCT) per Section 116 of the Code of Ordinances.

Staff has reviewed the proposed changes and finds that the proposal meets code requirements. Staff therefore recommends approval of this application subject to the applicant providing LED lighting fixtures that do not exceed 3000k Correlated Color Temperature (CCT) in compliance with City of Pembroke Pines lighting code.

Enclosed:

Site Plan Application
Email from SBDD (6/20/19)
Memo from Zoning Administrator (6/19/19)
Memo from Planning Division (6/18/19)
Memo from Fire Prevention Bureau 6/12/19)
Memo from Environmental Services (6/12/19)
Memo from SBDD (6/6/19)
Memo from Fire Prevention Bureau 6/5/19)

Memo from Landscape Planner (6/4/19)

Memo from Planning Division (5/30/19)

Site Plan

Subject Site Aerial Photo

MEMORANDUM

June 19, 2019

To: Joe Yaciuk
Planning Administrator

From: Dean A. Piper
Zoning Administrator

Re: SP 2019-06 (Diversified Aviation)

All of my comments regarding the above Miscellaneous Plan have been satisfied.

PLANNING DIVISION STAFF COMMENTS

Memorandum:

Date: June 18, 2019
To: SP 2019-06 file
From: Joseph Yaciuk, Planning Administrator
Re: Diversified Aviation

Items which do not conform with the City of Pembroke Pines Code of Ordinances or other Governmental Regulations:

Staff recommends approval of this application subject to the applicant providing LED lighting fixtures that do not exceed 3000k Correlated Color Temperature (CCT) in compliance with City of Pembroke Pines lighting code.

Recommendations: N/A

DRC REVIEW FORM

PEMBROKE PINES FIRE RESCUE

FIRE PREVENTION BUREAU

FIRE PLANS EXAMINER BY: Sandra Lluis, Fire Marshal

(954) 499-9560

PROJECT NAME: Diversified Aviation at NPA – Ph. IIA

REFERENCE #: SP 2019-06

DATE REVIEWED: June 12, 2019

CONFORMS TO THE CITY OF PEMBROKE PINES FIRE DEPARTMENT STANDARDS

Site Plan review approved contingent the following:

1. COPP Engineering verification of:
 - a. Fire Hydrant installation on a minimum of an eight – inch looped water line in city rights-of-way or easement.
 - b. Turning Radius and T-Turn
 - c. All-weather driving surface to support the imposed load of fire apparatus weight a minimum of 32 tons.
2. BCAD review: Must provide a set of plans with BCAD's comments along with your response letter demonstrating where comments have addressed on final set of plans.
3. Must provide a detail of T-Turn demonstrating the type of pavement that will be provided support the fire apparatus. Detail must include striping as a fire lane. The fire lane must be provided with a method to prevent unwanted parking or storage. Acceptable method may be bollards and chain with FD Knox pad lock or similar. (Must be approved by our office.)
4. If fire hydrants are located within the wing span of aircrafts, you must provide a detail showing that the fire hydrants will clear aircraft wing span.
5. Must demonstrate that fire flow requirements for manual firefighting operations is met with the proposed fire hydrants. This must be provided by the engineer of record on company letterhead, signed and sealed.

NOTE to Fire: Proposed hanger type Group III Type II (000) – storage only.

**DRC REVIEW COMMENTS
CITY OF PEMBROKE PINES**

AGENCY: **SOUTH BROWARD DRAINAGE DISTRICT**
CONTACT: **KEVIN HART, P.E. (954)680-3337**

PROJECT NAME: **Diversified Aviation at North Perry Airport –Phase IIA;**
SP2019-06

DATE: 6/6/2019

**THE SITE PLAN FOR THE ABOVE-REFERENCED PROJECT HAS BEEN
REVIEWED BY THE DISTRICT AND THE FOLLOWING COMMENTS MUST
BE MET ADDRESSED/SATISFIED/NOTED:**

1. A Paving and Drainage Permit will be required from SBDD.
Response - Acknowledged
2. Provide drainage calculations to include:
 - Land Use breakdown
 - Pre-development/post-development analysis
 - Pre-treatment calculations
 - Flood routing calculations demonstrating that the parking lot is protected during the 10-year, 3-day storm and the buildings are protected during the 100-year, 3-day storm.Response - Drainage calculations will be submitted for review as part of the permit review.
3. Upon completion of the project, provide an overall drainage plan for the entire Diversified Aviation site.
Response - Acknowledged
4. Indicate the size of all proposed drainage structures in the SBDD permit set.
Response - Acknowledged
5. All new connections to existing drainage structures shall be core-drilled.
Response - Acknowledged
6. Verify that the existing manhole structure (proposed to be converted to a grate inlet) meets SBDD criteria for sumps and clearances taking into account the proposed new pipe connection.
Response - This will be verified as part of the permit review.
7. How is roof drainage being handled?
Response - This will be clarified as part of the permit review.
8. Include an Erosion Control Plan in the SBDD permit set.
Response - Acknowledged
9. Please note that portions of the existing drainage system may need to be cleaned upon completion of construction. To be determined in the field by SBDD's inspector.
Response - Acknowledged
10. Please note that Broward County (property owner) will be responsible for the

maintenance of the on-site drainage system.
Response - Acknowledged

11. Additional comments may be issued upon receipt of the final Paving & Drainage Plans and drainage calculations.
Response - Acknowledged

(REGARDLESS OF APPLICABLE COMMENTS, THE PETITIONER IS NOT EXEMPT FROM MEETING ALL STORMWATER MANAGEMENT REGULATIONS, STANDARDS AND PROCEDURES AS OUTLINED IN THE SBDD DESIGN CRITERIA MANUAL DATED MAR. 26, 2015.)

(ALL STANDARD COMMENTS WILL BE GIVEN TO THE PETITIONER ON A SEPARATE HANDOUT. THE PETITIONER WILL ONLY BE REQUIRED TO RESPOND TO THE COMMENTS RAISED ON THE DRC REVIEW FORM.)

DRC REVIEW FORM

**PEMBROKE PINES FIRE RESCUE
FIRE PREVENTION BUREAU
FIRE PLANS EXAMINER BY: Sandra Lluis, Fire Marshal
PH: (954) 499-9560
EMAIL: slluis@ppines.com**

**PROJECT NAME: Diversified Aviation at NPA – Ph. IIA
REFERENCE #: SP2019-06
DATE REVIEWED: June 5, 2019**

**ITEMS WHICH DO NOT CONFORM TO THE CITY OF PEMBROKE PINES
CODE OF ORDINANCES OR OTHER GOVERNMENTAL REGULATIONS:**

This site plan was previously approved as part of SP2011-18 and SP2014-23. This site plan submittal eliminates buildings 8 thru 12 and replaces buildings 5, 6, & 7 for buildings 5 and 6 named Phase IIA.

Please address the following comments:

1. Has this revision been reviewed by BCAD? Provide BCAD's comments.
2. On page A101 show Fire Codes in effect: Florida Fire Prevention Code (FFPC) 6th edition with Broward County Amendments, which includes NFPA 101, 2015 edition, NFPA 1, 2015 edition, & State Statutes, 2018 edition. NFPA 409, 2011 edition, FBC 6th edition. (Adopted referenced publications found herein.)
3. Insufficient building data information provided on plans. On sheet A101, please declare Aircraft Hanger Classification Group Type and Construction Type on Plans. (NFPA 409: Chapter 4 and 5, 2011 Edition).
4. Declare on sheet A101 of strictly storage or will there be servicing of aircrafts as well.
5. Show fire hydrant placement on sheet A101.
6. Fire hydrant show on the north side of building 6 appears to be on the airside of the building; if so, provide detail of height clearance for aircraft wing span.
7. I am unclear if these buildings are to be provided with fire sprinkler systems. Page C5 has multiple references to fire sprinklers, fire department connections, and a DDCV detail, but yet Point of Service is not declared, and FDC & DDCV placement not shown. If a sprinkler system is not required in accordance with NFPA 409, please remove references or indicate not used.
8. Dead end fire department access roads in excess of 150 feet in length shall be provided with approved provision for the fire apparatus to turn around. See the north side of building 6. Please address. NFPA 1: 18.2.3.4.4.
9. Fire flow requirements for buildings not provided. Please demonstrate how fire flow requirements are met in accordance with NFPA 1: 18.4.

For questions with this review, please email Assistant Fire Marshal Daniel Almaguer at dalmaguer@ppines.com and you may copy me as well.

**CITY OF PEMBROKE PINES
PUBLIC SERVICES DEPARTMENT
ENVIRONMENTAL SERVICES/ENGINEERING DIVISION**

DRC REVIEW FORM



June 12, 2019

PROJECT: *DIVERSIFIED AVIATION*

CITY REFERENCE NUMBER: *SP 2019-06/PRJ 2019-08*

**To: To: Joe Yaciuk, Planning Administrator
Planning and Economic Development Department**

**From: John L. England, P.E.
Environmental Services/Engineering Division, Public Services Department
(954) 518-9046**

RECOMMENDATIONS:

As any remaining Environmental Services/Engineering Division ‘DRC Comments’ are related to “constructability” issues/items and/or plans/design clarifications, which can be addressed at Construction Permit, we hereby recommend the proposed project for ‘Consideration’ by the Planning and Zoning Board.

The issuance of any still remaining “constructability” and/or plans/design clarification related ‘Comments’ is being deferred to the Construction Permit phase and will be issued at that time as part of the plans review for permit.

NOTE that an Engineering Construction Permit is required for construction of the proposed project site related improvements. Submittal of appropriate signed and sealed plans/details and Plans Review Fee will be required, as a minimum, by the Environmental Services/Engineering Division for acceptance of the proposed project for initiation of the plans review for Construction Permit.

DRC REVIEW FORM

PEMBROKE PINES FIRE RESCUE

FIRE PREVENTION BUREAU

FIRE PLANS EXAMINER BY: Sandra Lluis, Fire Marshal

(954) 499-9560

PROJECT NAME: Diversified Aviation at NPA – Ph. IIA

REFERENCE #: SP 2019-06

DATE REVIEWED: June 12, 2019

CONFORMS TO THE CITY OF PEMBROKE PINES FIRE DEPARTMENT STANDARDS

Site Plan review approved contingent the following:

1. COPP Engineering verification of:
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5. Must demonstrate that fire flow requirements for manual firefighting operations is met with the proposed fire hydrants. This must be provided by the engineer of record on company letterhead, signed and sealed.

NOTE to Fire: Proposed hanger type Group III Type II (000) – storage only.

Yaciuk, Joseph

Subject: FW: Diversified Aviation at NP Airport - Phase IIA; SP 2019-06

From: Kevin Hart [mailto:kevin@sbdd.org]

Sent: Friday, June 07, 2019 5:17 PM

To: Yaciuk, Joseph <jyaciuk@ppines.com>

Cc: Dennis Shultz <dshultz@flynnengineering.com>; Pam Walsh <Pam@SBDD.org>

Subject: RE: Diversified Aviation at NP Airport - Phase IIA; SP 2019-06

Joe,

Please be advised that the applicant has addressed SBDD's DRC comments on the site plan for this project.

A Paving & Drainage Permit will be required from SBDD and all District criteria will need to be met.

Thanks.

Kevin Hart, P.E., CFM

District Director

South Broward Drainage District

6591 Southwest 160th Avenue

Southwest Ranches, FL 33331

954-680-3337 (office)

e-mail: kevin@sbdd.org

MEMORANDUM

June 4th, 2019

To: Cole Williams
Planner & Zoning Specialist

From: Kristen Jensen
Landscape Planner/ Designer

Re: (SP2019-06/PRJ2019-08) Diversified Aviation

The City of Pembroke Pines Planning Division has conducted a landscape review for Diversified Aviation as per documents provided. The following items need to be addressed prior to this project being found in compliance:

1. As per City of Pembroke Pines Landscape Ordinance 153.03 (M)(4), "All trees shall be planned to ensure that there is adequate root and canopy space at maturity. Trees planted within ten feet of a paved surface or a form of infrastructure (determined to have an invasive root system) shall require an approved root barrier system."
2. Irrigation must be repaired/installed properly to ensure that all new and existing landscape material is properly being irrigated. A "wet-check" shall be done at time of final inspection to ensure all irrigation heads are working properly etc.

Plant diversification is important for the project in order to sustain a healthy and vigorous landscape. It is also required that projects utilize best management practices set by Florida Friendly Landscape Standards.

Please contact me with any questions.

Kristen Jensen
Landscape Planner/Designer
Planning and Economic Development Division
City of Pembroke Pines
954.392.2107 (Office) • kjensen@ppines.com
Please consider the environment before printing this email.

PLANNING DIVISION STAFF COMMENTS

Memorandum:

Date: May 30, 2019
To: SP 2019-06 file
From: Joseph Yaciuk, Planning Administrator
Re: Diversified Aviation

Items which do not conform with the City of Pembroke Pines Code of Ordinances or other Governmental Regulations:

1. Remove the word non-conforming from the site data table. You may write existing airport use.
2. Building signs do not appear to meet Uniform Sign Plan requirements. Please remove.
3. Provide light pole / fixture cut sheet. Include pole detail / height / material / color / light fixture details including illumination specs and fixture color. If LED fixtures to be used, maximum Correlated Color Temperature is 3,000K. All lights must be full cut off type.
4. Provide details of any attached building light fixture color / light fixture type. If LED fixtures to be used, maximum Correlated Color Temperature is 3,000K. All lights must be full cut off type.
5. Verify that all parking terminal islands contain at least 10 feet wide of green area.

Recommendations: N/A

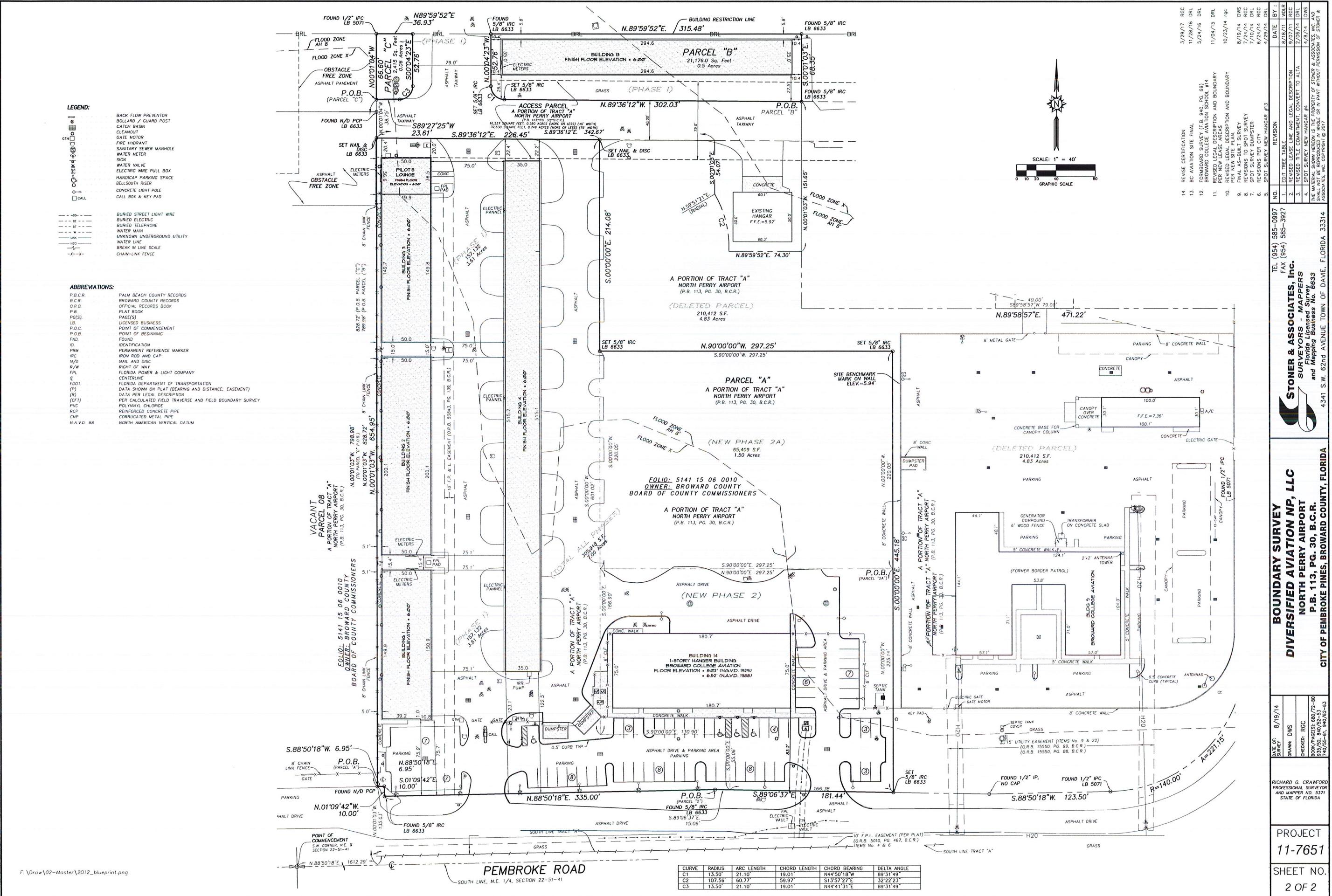
SUBJECT SITE AERIAL PHOTO

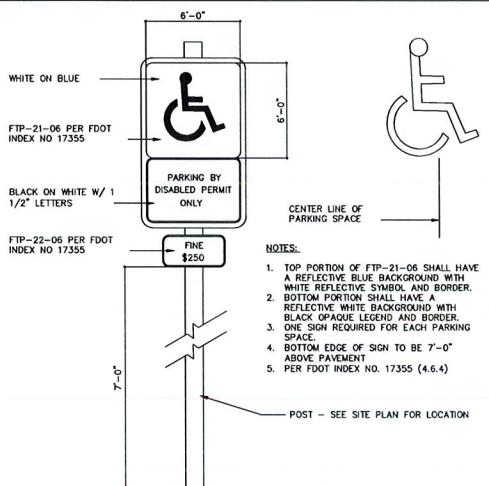
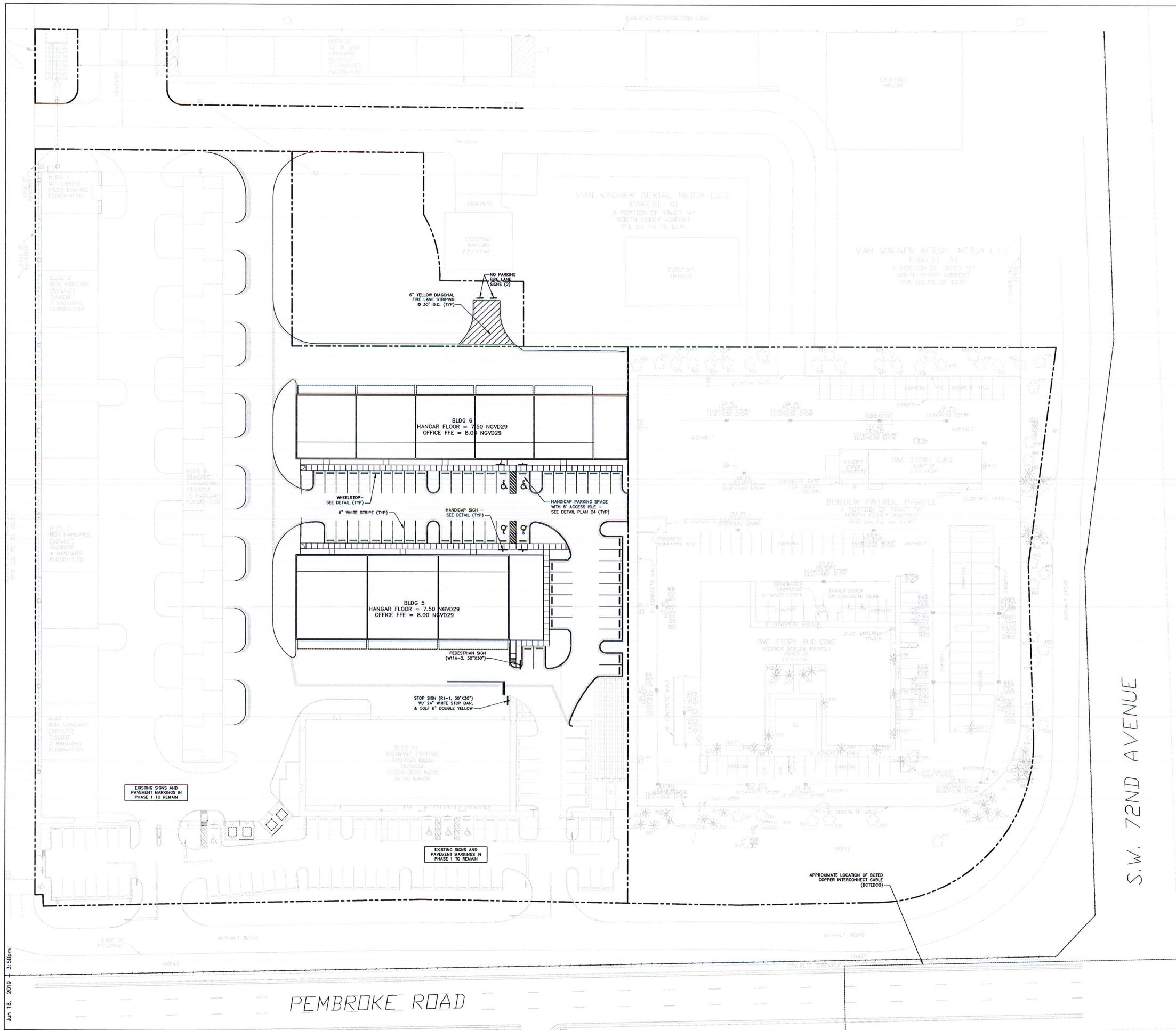
DIVERSIFIED AVIATION

(SP 2019- 06)

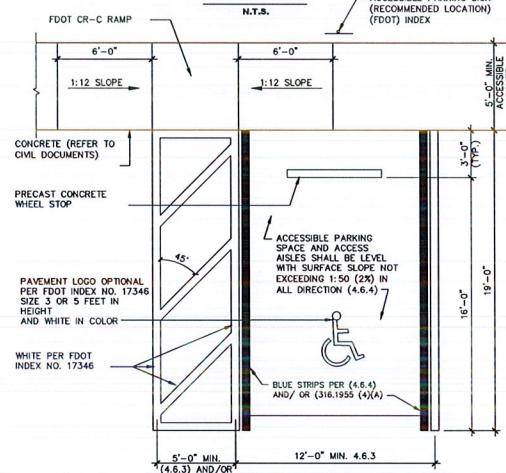
(PRJ 2019-08)



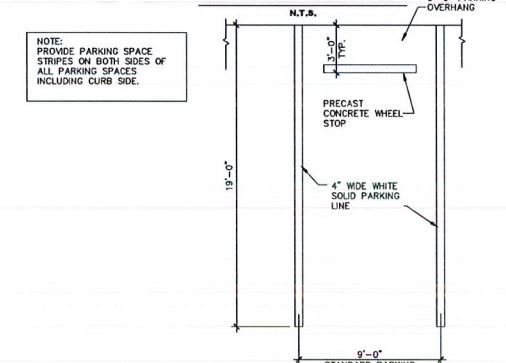




HANDICAP SIGN DETAIL



HANDICAP PARKING SPACE DETAIL



SPACE **TYPICAL PARKING** **SPACE DETAIL**

PAVEMENT MARKING AND SIGNAGE NOTES:

1. ALL PAVEMENT MARKINGS AND SIGNAGE SHALL CONFORM TO BROWARD COUNTY TRAFFIC ENGINEERING STANDARDS (BCTED) AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) STANDARDS.
2. ALL PAVEMENT MARKINGS SHALL BE 6" THERMOPLASTIC MATERIAL MEETING BCTED STANDARDS, EXCEPT FOR THE PARKING SPACE MARKINGS WHICH MAY BE 4" WHITE REFLECTORIZED PAINT MEETING BCTED STANDARDS.
3. ALL ACCESSIBLE PARKING SPACES, ACCESSIBLE PARKING ISLES, SIDEWALK CURB RAMPS, RAMPS, AND ACCESSIBLE ROUTES MUST BE ADA COMPLIANT PER FLORIDA BUILDING CODE, FIFTH EDITION, ACCESSIBILITY.
4. PAVEMENT MARKINGS AND SIGNAGE FOR ALL ACCESSIBLE PARKING SPACES SHALL ALSO MEET THE STANDARDS OF THE FEDERAL DEPARTMENT (FDOT) DESIGN STANDARDS INDEX NOS 17346 AND 17353.
5. ALL SIDEWALK CURBS 5' OUTSIDE AND BEYOND THE BUILDING ENVELOPE SHALL BE PER FDOT DESIGN STANDARDS INDEX 304.
6. ANY PAVEMENT MARKINGS AND SIGNING DAMAGED DURING CONSTRUCTION, SHALL BE RESTORED TO BROWARD COUNTY TRAFFIC ENGINEERING AND FDOT STANDARDS.
7. ALL SIGN POSTS SHALL BE BCTED STANDARD SQUARE POSTS.
8. ALL SIGNS SHALL BE MADE WITH TYPE XI SHEETING MATERIAL.
9. RPMs SHALL BE INSTALLED ACCORDING TO BROWARD COUNTY TRAFFIC ENGINEERING DIVISION, DETAIL SHEET AND INDEX 17352.

Sheet Title

PAVEMENT MARKING & SIGNAGE PLAN

DIVERSIFIED AVIATION NP
PAGE 24

1100 2A
NORTH PERRY AIRPORT
7201 PEMBROKE ROAD
PEMBROKE PINES, FLORIDA 33023

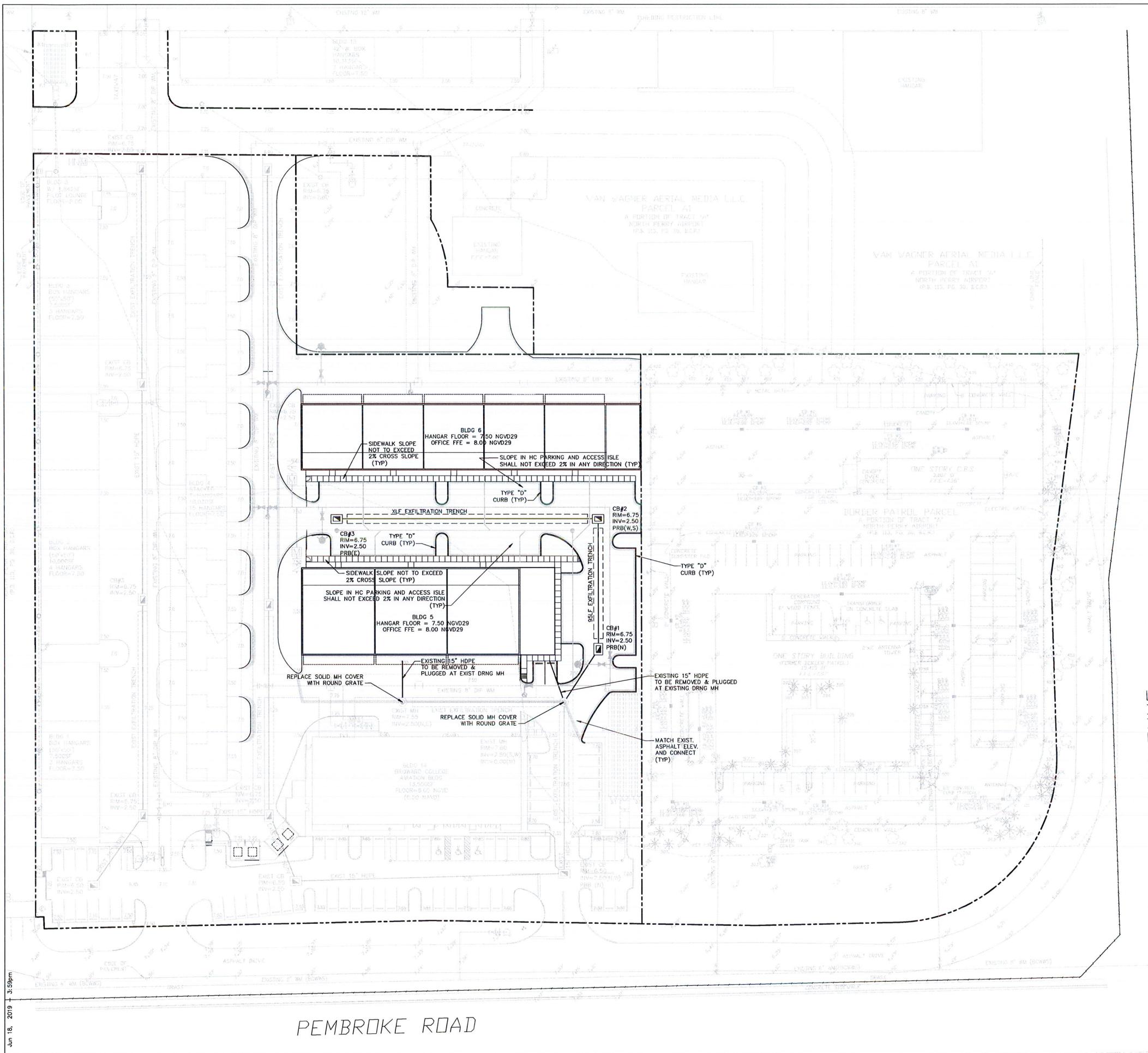


11

Phase:
PERMIT

TING

Scale: 1"=40'	Date 05/13/19
Job No. 11-0968.06	Plot Date 06/18/19
Drawn by DRS	Sheet No.
Proj. Mgr. DRS	C1
Appr. by DRS	1 of 5



PAVING AND DRAINAGE GENERAL NOTES:

1. ALL CONSTRUCTION SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE CITY OF PEMBROKE PINES.
2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL GIVE TIMELY NOTIFICATION TO ALL UTILITY COMPANIES WITH FACILITIES IN THE AREA.
3. THE LOCATION OF EXISTING FACILITIES WERE DETERMINED BY THE CONTRACTOR. THE CONTRACTOR SHALL FIELD LOCATE ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
4. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO SAFEGUARD ALL EXISTING STRUCTURES, UTILITIES, AND SURVEY MARKERS.
5. MAXIMUM GRASS SLOPES SHALL NOT EXCEED 4.1.
6. CONTRACTOR SHALL COORDINATE GRADING PLAN WITH LANDSCAPE ARCHITECT.
7. ALL UTILITIES INCLUDING TELEPHONE, ELECTRICAL, CABLE, ETC. MUST BE INSTALLED UNDERGROUND.
8. DESIGN BASE FILE UTILIZED IS FLYNN ENGINEERING DESIGN FILE FOR DIVERSIFIED AVIATION PHASES 1 & 2.
9. ELEVATIONS SHOWN ARE NVGD 88 DATUM.

FLOOD ZONE "X", ELEV N/A NAVD
ON FIRM MAP #12086C0726H,
DATE 08/18/14 WITH LOMR 15-04-4500P
EFF 11/12/15.

PROPERTY IS IN SFPP BASIN S-1

PROPERTY IS IN SBOD BASIN 3-1
BASIN CWE=2.50 NGVD / 1.0 NAVD
BASIN ROAD CROWN=6.5 NGVD / 5.0 NAVD
BASIN MIN FFE=8.0 NGVD / 6.5 NAVD

VERTICAL DATUM
CONVERSION

GRADING SHOWN UTILIZES N.G.V.D. 29

N.G.V.D. 29



N.A.V.D. 88

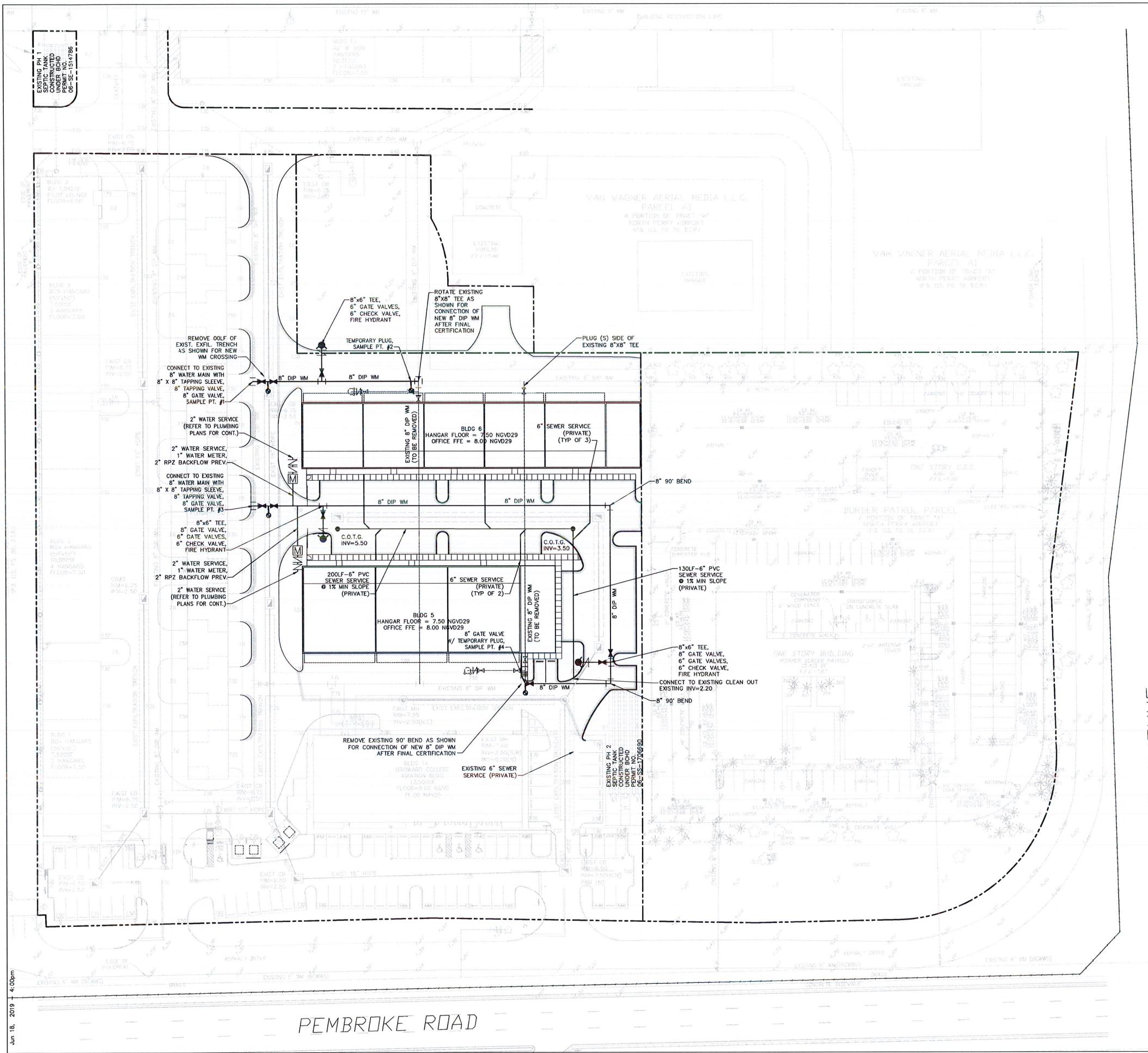
N.A.V.D. 88 = N.G.V.D. 29 - 1.51'
N.G.V.D. 29 = N.A.V.D. 88 + 1.51'

A black and white graphic of the state of Florida. Inside the state outline, there is a stylized lightning bolt and a shovel. The lightning bolt is positioned in the upper left area, and the shovel is in the lower right area, pointing towards the lightning bolt. The background of the state outline is filled with a dotted pattern.

S.S.W. 72ND AVENUE

LEGEND:

0.00	PROPOSED ELEVATION (NGVD)	- W -	WATER MAIN
1.5	EXISTING ELEVATION (NGVD)	- FM -	SANITARY FORCE MAIN
	PROPOSED CATCH BASIN	►	VALVE
C	PROPOSED PLUG	►	FIRE HYDRANT
	TEE	►	SIAMESE CONNECTION
M	WATER METER	●	CLEANOUT
XIN	DOUBLE DETECTOR CHECK W/ WAFER CHECK VALVE ON DOWNSTREAM SIDE	=====	EDGE OF NEW ASPHALT PAVEMENT
NN	REDUCED PRESSURE BACKFLOW PREVENTOR	=====	ASPHALT PAVEMENT RESTORATION
	DIRECTIONAL FLOW ARROW AND GRAVITY SEWER	z	DIRECTION OF SURFACE DRAINAGE
●	PROPOSED MANHOLE	- W -	EXIST. WATER MAIN
		XXX	EXIST. UTILITY LINE TO BE REMOVED
Scale: 1"=40'		Date 05/13/19	
Job No. 11-0968.06		Plot Date 06/18/19	
Drawn by DRS		Sheet No. C2	
Proj. Mgr. DRS			
Appr. by DRS		2 of 5	



Sheet Title

DIVERSIFIED AVIATION NP PHASE 2A

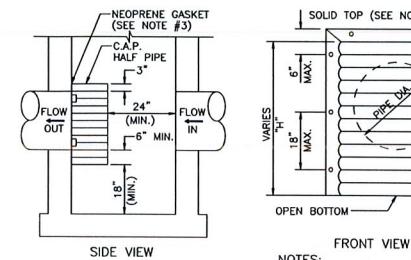
NORTH PERRY AIRPORT
7201 PEMBROKE ROAD
PEMBROKE PINES, FLORIDA 33023

Revisions	

Phase:
DRC
DOCUMENTS

SEAL

Scale:	NTS	Date
Job No.		05/13/19
Job No.	11-0968.06	Rev. Date
Drawn by	DRS	Sheet No.
Proj. Mgr.	DRS	C4
Appr. by	DRS	4 of 5



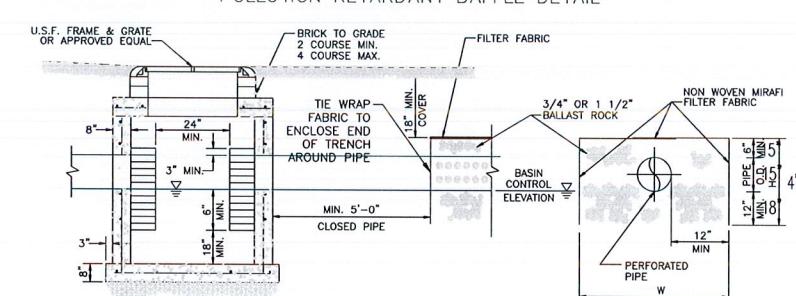
SIDE VIEW

FRONT VIEW

PIPE DIA.	W ¹ (IN)	W ² (IN)	T (GAUGE)	H (IN)	NOTES:
15"	21"	21"	16	VARIES	1. ALUMINUM SHEET OF SAME THICKNESS (GAUGE) AS PIPE SHALL BE WELDED TO CLOSE OPENING AT THE TOP.
18"	24"	24"	16	VARIES	2. NEOPRENE ADHESIVE BACKED GASKET, OR APPROVED EQUAL (1/2" X 3") SHALL BE INSTALLED ON THE SIDES AND TOP OF ALL BAFFLES.
21"	30"	30"	16	VARIES	3. POLLUTION RETARDANT BAFFLE TO BE FASTENED IN PLACE WITH 3/8" X 4" STAINLESS STEEL "RED" HEADS", OR APPROVED EQUAL.
24"	30"	36"	16	VARIES	4. ALL EXFILTRATION TRENCHES SHALL HAVE A POLLUTION RETARDANT BAFFLE AT EACH CONNECTION POINT TO A STRUCTURE (SEE EXFILTRATION TRENCH DETAIL). THE DIA. OF THE BAFFLE SHALL BE A MIN. OF 12" BELOW C.W.E.
30"	36"	42"	14	VARIES	5. FIBERGLASS BAFFLES ARE NOT PERMITTED.
36"	42"	48"	14	VARIES	6. MOUNTING BRACKETS MAY BE NEEDED TO FLAT BARS TO EASE INSTALLATION IN ROUND STRUCTURES. SPACING TO MATCH HOLES IN FLAT BARS.
42"	48"	54"	14	VARIES	7. FOR POLLUTION RETARDANT BASINS THE BOTTOM ELEVATION OF THE BAFFLE MUST BE A MINIMUM OF 2' BELOW THE CONTROL WATER ELEVATION.
48"	54"	60"	14	VARIES	
54"	60"	66"	14	VARIES	

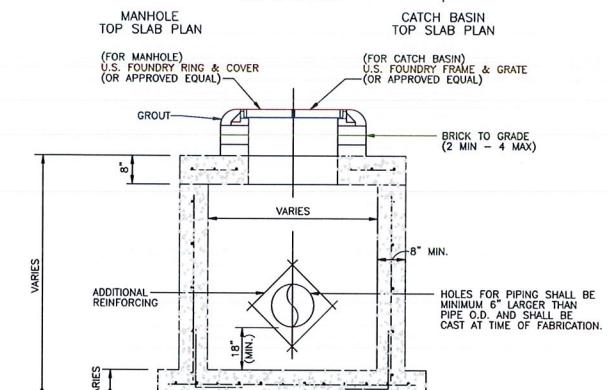
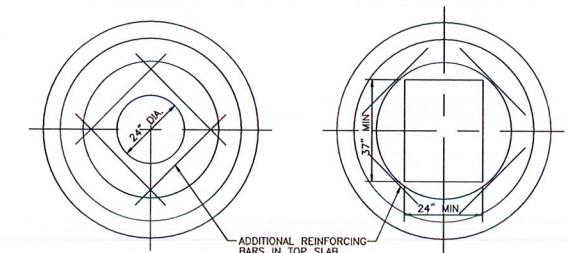
1. RECTANGULAR STRUCTURE
2. ROUND STRUCTURE

POLLUTION RETARDANT BAFFLE DETAIL



NOTES:
1. SIDES AND TOP OF TRENCH ONLY TO BE LINED WITH FILTER FABRIC, OVERLAP LINER A MINIMUM OF 2' AT THE TOP OF THE TRENCH.
2. BALLAST ROCK SHALL BE FROM FRESH WATER, WASHED AND FREE OF DELETERIOUS MATTER.
3. ALL EXFILTRATION TRENCHES SHALL HAVE A POLLUTION RETARDANT BAFFLE AT EACH CONNECTION POINT TO A STRUCTURE (SEE POLLUTION RETARDANT BAFFLE DETAIL, EXHIBIT 28).
4. GASKETS SHALL BE USED WITH RCP IN EXFILTRATION TRENCH.

EXFILTRATION TRENCH DETAIL



* RISER SECTIONS AND TOP SLABS TO HAVE "KEY-CUTS"

PRECAST CATCH BASIN AND MANHOLE DETAIL

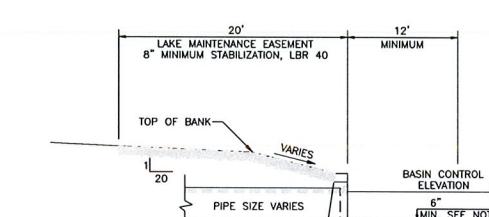
FRONT VIEW

TOP VIEW

RECTANGULAR STRUCTURE

TOP VIEW

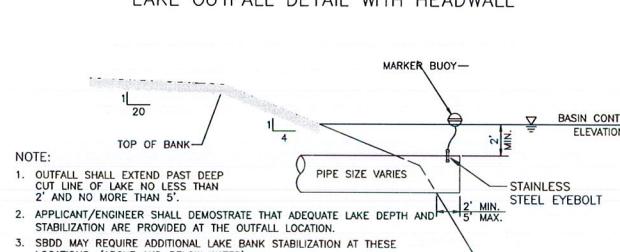
ROUND STRUCTURE



NOTES:

1. TOP OF CAP TO BE 1' ABOVE THE BASIN CONTROL ELEVATION FOR LAKES AND 2' ABOVE BASIN CONTROL ELEVATION FOR CANALS, UNLESS OTHERWISE APPROVED BY THE DISTRICT.
2. HEADWALLS ARE REQUIRED FOR ALL LAKE AND CANAL INTERCONNECTS.
3. CONCRETE AND RIP-RAP ENDWALLS ARE ACCEPTED PER FDOT INDEX 250-255, AND INDEX 258 WITH EXCEPTIONS AS NOTED IN SECTION 3.7.2 OF THE SBDD DESIGN CRITERIA MANUAL.
4. CHANNEL IN FRONT OF PIPE TO BE MIN. 6" BELOW THE INVERT OF THE PIPE AND AT LEAST 1 1/2 TIMES THE DIA. OF THE PIPE TO THE DEEP CUT LINE AND CENTERED ON THE PIPE.
5. FACE OF HEADWALL TO BE LOCATED AT DESIGN EDGE OF WATER.

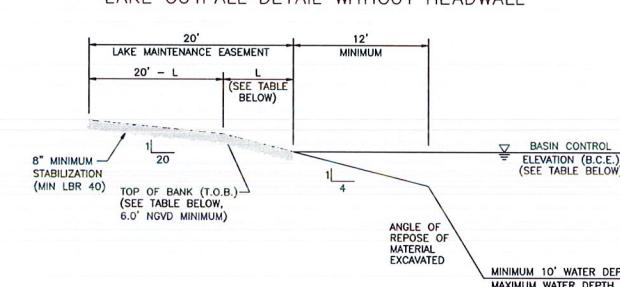
LAKE OUTFALL DETAIL WITH HEADWALL



NOTE:

1. OUTFALL SHALL EXTEND PAST DEEP CUT LINE OF LAKE NO LESS THAN 2' AND NO MORE THAN 5'.
2. APPLICANT/ENGINEER SHALL DEMONSTRATE THAT ADEQUATE LAKE DEPTH AND STABILIZATION ARE PROVIDED AT THE OUTFALL LOCATION.
3. SBDD MAY REQUIRE ADDITIONAL LAKE BANK STABILIZATION AT THESE LOCATIONS (ABOVE AND BELOW WATER).
4. IF DISSIMILAR PIPE MATERIAL ARE TO BE USED REFER TO EXHIBIT 29.
5. OUTFALL PIPE SHALL HAVE A STAINLESS STEEL EYEBOLT AND MARKER BUOY.

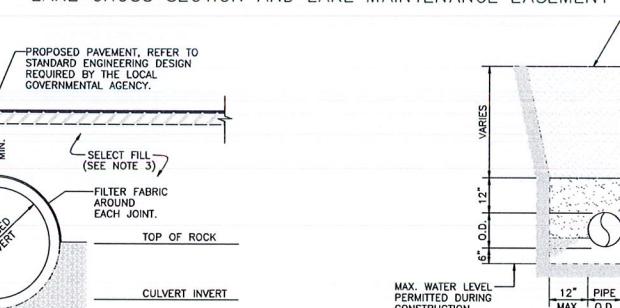
LAKE OUTFALL DETAIL WITHOUT HEADWALL



NOTES:

1. ALL EXFILTRATION TRENCHES SHALL HAVE A POLLUTION RETARDANT BAFFLE AT EACH CONNECTION POINT TO A STRUCTURE (SEE POLLUTION RETARDANT BAFFLE DETAIL, EXHIBIT 28).
2. BALLAST ROCK SHALL BE FROM FRESH WATER, WASHED AND FREE OF DELETERIOUS MATTER.
3. ALL EXFILTRATION TRENCHES SHALL HAVE A POLLUTION RETARDANT BAFFLE AT EACH CONNECTION POINT TO A STRUCTURE (SEE POLLUTION RETARDANT BAFFLE DETAIL, EXHIBIT 28).
4. GASKETS SHALL BE USED WITH RCP IN EXFILTRATION TRENCH.

LAKE CROSS SECTION AND LAKE MAINTENANCE EASEMENT



NOTES:

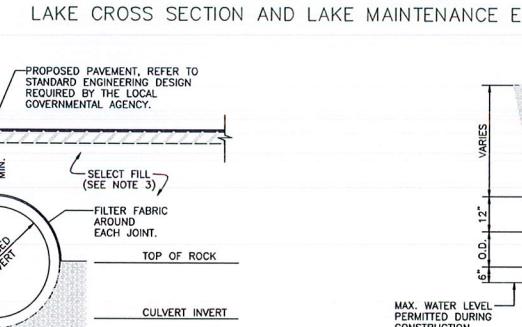
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2. SHEETING WILL BE REQUIRED AS DETERMINED IN THE FIELD.
3. BACKFILL IN 3" LAYERS, TO 90% COMPACTION, WITH MATERIALS NOT LARGER THAN 1/2" INCHES.
4. IF A CULVERT IS CORRODED ALUMINUM STRUCTURAL PLATE, FILTER FABRIC SHALL BE PLACED THE ENTIRE LENGTH OF THE PIPE.
5. FILTER FABRIC SHALL BE PLACED THE FULL LENGTH OF ANY SECTION OF CULVERT UNDER ASPHALT.

LAKE/CANAL INTERCONNECT BEDDING DETAIL

BASIN No.	B.C.E. (FT-NGVD)	T.O.B. (FT-NGVD)	L (FT)	BASIN No.	B.C.E. (FT-NGVD)	T.O.B. (FT-NGVD)	L (FT)
S-1	2.50	6.50	16.00	S-8	3.50	6.00	10.00
S-2 & S-7	2.70	6.00	13.20		4.00	6.50	10.00
S-3	3.00	6.50	14.00	S-9 & S-10	3.50	6.50	12.00
S-4	3.50	6.00	10.00		4.00	6.50	10.00
S-5	4.00	6.00	8.00	S-12	3.00	6.50	14.00
	4.25	6.50	9.00	S-13	3.00	6.50	14.00
	4.50	6.50	8.00				

* EXISTING LAKE BANKS AND SLOPES SHALL BE CLEARED AND REGRADED AS PER SBDD CRITERIA ALONG THE ENTIRE LIMITS OF ALL DEVELOPMENT AND REDEVELOPMENT PROJECTS.

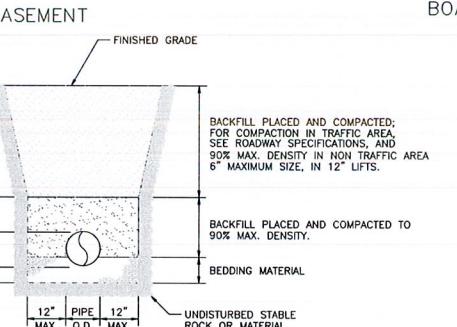
PROPOSED PAVEMENT, REFER TO STANDARD ENGINEERING DESIGN REQUIRED BY THE LOCAL GOVERNMENTAL AGENCY.



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TRENCH EXCAVATION DETAIL



NOTES:

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2. SHEETING WILL BE REQUIRED AS DETERMINED IN THE FIELD.
3. BACKFILL IN 3" LAYERS, TO 90% COMPACTION, WITH MATERIALS NOT LARGER THAN 1/2" INCHES.
4. WHEN THE PIPE IS LAID IN THE PREPARED TRENCH, TRUE TO LINE AND GRADE, THE PIPE BARREL SHALL RECEIVE CONTINUOUS UNIFORM SUPPORT. WHERE NECESSARY, COURSE SAND, PEA ROCK OR 3/4" LIMESTONE GRAVEL SHALL BE USED TO PROVIDE UNIFORM BEDDING.
5. JOINTS MAY BE REQUIRED TO BE WRAPPED AT THE DISCRETION OF THE DISTRICT AND THE SITE CONDITIONS.

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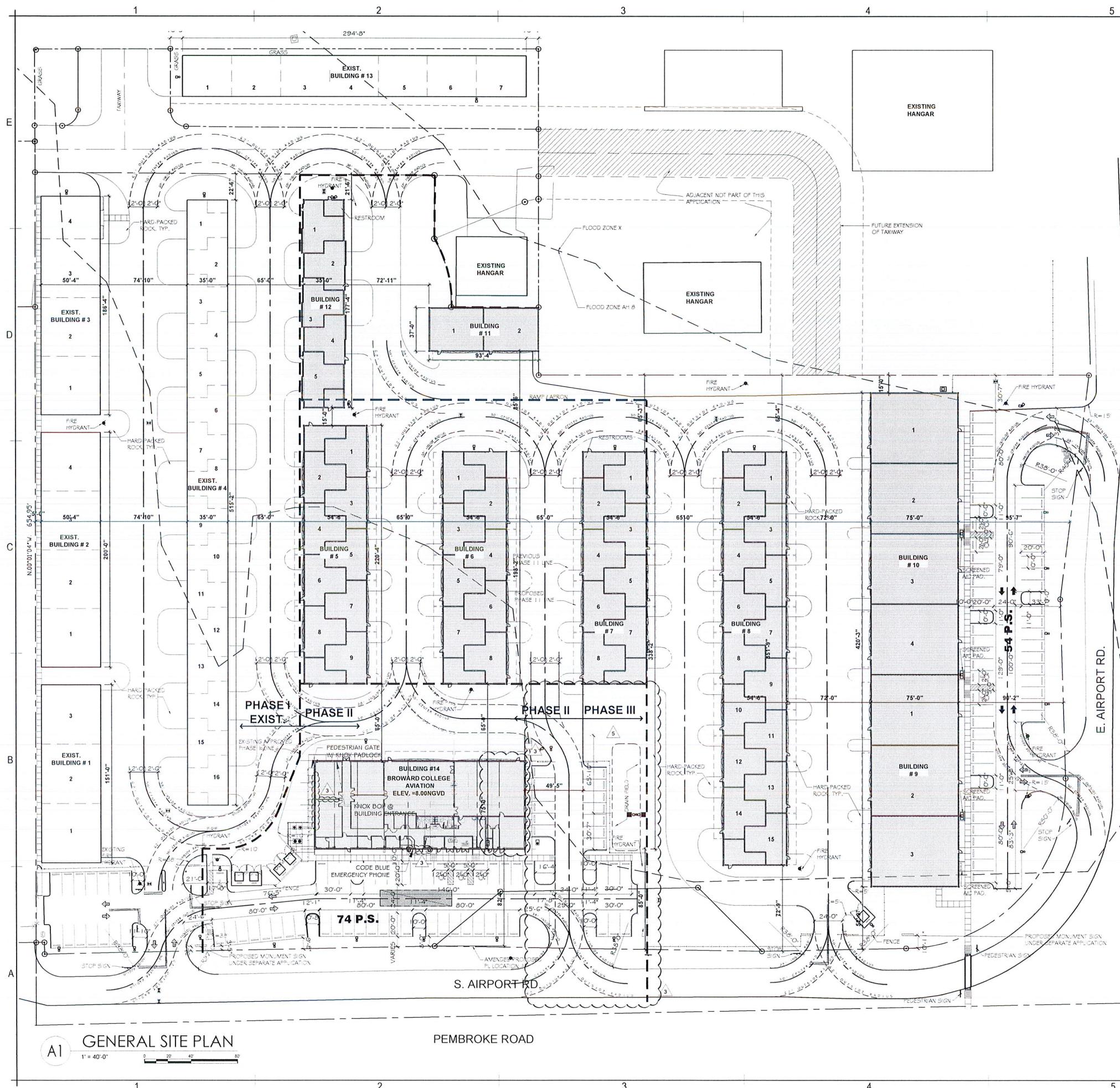
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<p>Applicant Responsibility Compliance with the Code. Review and approval by the AHJ shall not relieve the applicant from the responsibility of compliance with this Code. NFPA 1-1.4.4</p> <p>Fire Apparatus Access Plans. Plans for fire apparatus access roads shall be submitted to the fire department for review and approval prior to construction. NFPA 1-18.1.3.1</p> <p>Fire Hydrant Systems. Plans and specifications for fire hydrant systems shall be submitted to the fire department for review and approval prior to construction. NFPA 1-18.1.3.2</p> <p>Change of Use. In any building or structure, whether or not a physical alteration is needed, a change from one occupancy classification to another shall be permitted only where such a structure, building, or portion thereof conforms with the requirements of this Code that apply to new construction. NFPA 1-18.1.3.7</p> <p>Fire Department Access Door and Door Assembly. Wherever the fire service provider access as referenced in this code or the FFC, access to the dwelling unit or building or structure are specified, shall mean a side-hinged, swinging type egress exterior door / door assembly that can be opened from the outside and that provides access to the of the dwelling unit or building. Broward County Local Amendments to FFC F-101.2.2.1</p> <p>Access to Building. The AHJ shall have the authority to require an access building to be installed in an accessible location where access to or within a structure or area is difficult because of security. The access building(s) shall be an approved type listed in accordance with UL 1037. A Know Box shall be provided to access to the of the dwelling unit or building. NFPA 1-18.2.1.1</p> <p>Access to Gated Subdivisions or Developments. The AHJ shall have the authority to require fire department access be provided to gated subdivision or developments through the use of an approved device or system. NFPA 1-18.2.2.2</p>	<p>Commercial and Residential Entry and Interior Gates. All gates requiring Fire Department Access serving access roads shall be considered fire apparatus access roads and shall be operated by an electrically or hydraulically operated knox which mounted at 4' off the fire department access road with cover and A RADIO FREQUENCY SERVED BY REMOTE CONTROL.</p> <p>The Radio Frequency product shall be comparable to Access Pro Controller, Model AXR-1 and can be obtained through EDL or Gate Master's Service Department @ 954-525-0386. Programming of the Radio Frequency product must be performed by Gate Masters. NFPA 1-18.2.2.1.1 COPP CO 93.11(A) and 193.079.</p> <p>NOTE: Manual, swinging non-electrical gates for areas not accessing buildings requires approval of location by the AHJ and required to provide NEMA padlock(s).</p> <p>Fire Department Access Roads Where required, roads shall be provided to all elevations for Fire Department emergency use. In all cases a minimum of one fire elevation shall be made available for Fire Department Apparatus and must be located on the main entrance elevation. Local Code</p> <p>All premises which the Fire Department may be called to on protect in case of fire and which are not readily accessible from public roads shall be provided with suitable gates, access roads, and fire lanes so that all buildings on the premises are accessible to fire apparatus. COPP CO 93.11 (A)</p> <p>Required Access. Approved fire department access roads shall be provided for every facility, building, or portion of a building hereafter construction or relocated. NFPA 1-18.2.3.1.1</p> <p>Fire department access roads shall consist of fireway, fire lanes, parking lots, or a combination thereof. NFPA 1-18.2.3.1.2</p> <p>When fire department access roads cannot be installed due to location on property, topography, waterways, vegetation, or other natural features, the AHJ shall be authorized to require additional access roads. NFPA 1-18.2.3.1.4</p> <p>Fire lanes shall be provided for all buildings which are a setback of more than 150' from a public roadway, or exceed 30' in height and are setback over 50' from a public road. Fire lanes shall be at least 20' feet in width with road edge closest to the building at least ten feet from the building. COPP CO 93.11</p> <p>Access to Building. A fire department access road shall extend to within 50' of a single exterior door that is opened from the outside and that provides access to the interior of the building. NFPA 1-18.2.3.2.1</p> <p>Where a one-or-family dwelling, or townhouse, is protected with an approved automatic sprinkler system that is installed in accordance with NFPA 130 or NFPA 13R, as applicable, the distance in NFPA 1-18.2.3.2.1 shall be permitted to be increased to 150'. NFPA 1-18.2.3.2.1.1</p>	<p>When required by the AHJ, roads(s) or parking lots providing access to main entrance door(s) shall be considered access roads and shall comply with the requirements of NFPA 1-18.2.3.4.1.1.</p> <p>For exterior access roads shall be provided such as portion of the facility or any portion of an exterior wall of the first story of the building is located not more than 150' (45.7m) from the fire department access road with cover and A RADIO FREQUENCY SERVED BY REMOTE CONTROL.</p> <p>The Radio Frequency product shall be comparable to Access Pro Controller, Model AXR-1 and can be obtained through EDL or Gate Master's Service Department @ 954-525-0386. Programming of the Radio Frequency product must be performed by Gate Masters. NFPA 1-18.2.3.2.2 and NFPA 1-18.2.3.2.1</p> <p>Multiple Access Roads. More than one Fire Department access road shall be provided when it is determined by the AHJ that access by a single road could be impaired by vehicle congestion, condition of terrain, or other natural features. NFPA 1-18.2.3.3</p> <p>Dimensions. Fire department access roads to fire department use only shall have an unobstructed width of not less than 30'. NFPA 1-18.2.3.4.1.1</p> <p>Note: The minimum 30' width required by 18.2.3.4.1.1 allows for two-way vehicular traffic and for one fire apparatus to pass while another is working at a fire hydrant or conducting aerial operations.</p> <p>Driving Lanes. Driving lanes shall have a minimum clear width of 24 feet for two-way traffic, 15 feet for one-way traffic. COPP CO 194.315 (S)</p> <p>Turning Radius. Fire access roads shall be a minimum centeline turning radius of 50'. Show min. 38' inside radius and min. 62' outside radius throughout area. Show a shaded truck route including entering and leaving the site with the above turning radius numerals on plans shown throughout. COPP Engineering department verification is required. COPP CO 154.35 (S)</p> <p>Note: The end of the paragraph states "All centerline turning radii must be minimum 50 feet."</p> <p>On a separate page demonstrate fire apparatus ability to maneuvering throughout the fire access road using the fire apparatus specifications provided.</p> <p>Vertical Clearance. Fire department access roads shall have an unobstructed vertical clearance of not less than 10' 6" above the ground. NFPA 1-18.2.3.4.3.2 (Weatherproof signages) where applicable. (Applicable areas are truck access routes.)</p> <p>Vertical clearances or widths shall be increased when vertical clearances or widths are not adequate to accommodate fire apparatus. NFPA 1-18.2.3.4.1.2</p> <p>There shall be a 14' minimum width at level 6' from roadway to accommodate vehicle mirrors where applicable. (Applicable areas are truck access routes.)</p>	<p>Surface. Fire department access roads shall be designed and maintained to support the imposed loads of fire apparatus (weighing a minimum of 32 tons) and shall be provided with an all-weather driving surface. NFPA 1-18.2.3.4.2</p> <p>Note: Roads during Construction. Hard compacted surface supporting 32 tons shall be provided on roads for fire rescue vehicles to access of buildings under construction.</p> <p>Dead Ends. Dead end streets shall be prohibited, except where appropriate as route to permit future street extension into adjoining an unbuilt roads, or when designed as cut-de-sac. COPP CO 154.32 (E)</p> <p>Dead-end fire department access roads in excess of 100 ft. in length shall be provided with approved provisions for the fire apparatus to turn around. NFPA 1-18.2.3.4.4</p> <p>Acceptable turnarounds can include a cut-de-sac, a T turn, or a Y turn.</p> <p>Cul-De-Sacs: Cul-de-sacs, permanently designed as such, shall not exceed 400' in length except on finger islands. Cul-de-sacs shall be provided at the closed end with a circular dedicated area not less than 60' in diameter for turnaround purposes, except that on finger islands the diameter of a turn-around area shall be determined by the AHJ.</p> <p>Bridges, Ramps, and Inverted Roadways. When a bridge is required to be used as part of a fire department access road, it shall be constructed and maintained in accordance with nationally recognized standards. The bridge shall be designed for live load sufficient to carry the imposed loads of fire apparatus. NFPA 1-18.2.3.4.5.1 and NFPA 1-18.2.3.4.5.2</p> <p>Vehicle load limits shall be posted at both entrances to bridges where required by the AHJ. NFPA 1-18.2.3.4.5.3</p> <p>Grade. The right of way, property and easements for any means of the fire department access road shall not exceed 15' drop or 20% in design limitation of the fire apparatus of the fire department, and shall be subject to approval by the AHJ. NFPA 1-18.2.3.4.6.2</p> <p>Fire department access roads connecting to roadways shall be provided with curb cuts extending at least 2 ft. beyond each of the fire lane. NFPA 1-18.2.3.4.6.3</p> <p>Traffic Calming Devices. The design and use of traffic calming devices shall require approval by the AHJ and COPP Engineer. NFPA 1-18.2.3.4.7</p>													
<p>Marking of Fire Apparatus Access Roads. Where required by the AHJ, approved signs, approved roadway surface marking, or other approved notices shall be provided and prohibit the obstruction thereof or both. NFPA 1-18.2.3.5.1</p> <p>Fire Lane Marking. The designation of fire lanes or fire zones on private property shall be accomplished as specified by the City Fire Chief or a subordinate appointed by him to perform this duty. Signs shall be posted designating such for lanes or zones. COPP CO 93.12</p> <p>Fire lanes shall be designated by yellow thermoplastic paint, striping, or marking of curbs and roadway between each fire lane. Signs shall be provided. See Fire Lane Details</p> <p>Fire Lane Signage. 18" x 24", shall be provided for each fire lane sign with the words "NO PARKING FIRE LANE" OR "NO PARKING FIRE LANE OR FIRE DEPARTMENT" OR "NO PARKING FIRE LANE". Such signs shall be 12" by 18" with white background and red letters and shall a maximum of seven feet in height from the roadway to the bottom part of the sign. The signs shall be within sight of the traffic flow and be a maximum of 60 feet apart. NFPA 1-18.2.3.5.3</p> <p>Water Supply, Fire Flow and Fire Hydrants Fire Protection during Construction A water supply for fire protection, either temporary or permanent, shall be made available as soon as combustibles material accumulates. NFPA 1-18.4.3.1.1</p> <p>Where underground water mains and hydrants are to be provided, they shall be installed, completed, and in service prior to commencing construction work on any structure. NFPA 1-16.4.3.3 and NFPA 241.8.7.2.3</p> <p>Note: It is not intended to prohibit the construction of noncombustible structure foundation elements, such as concrete and footings, prior to the completion of underground water mains and hydrants. NFPA 1-18.4.3.1.3</p> <p>Water Supplies. An approved water supply capable of supplying the required fire flow for fire protection shall be provided to all premises upon which facilities, buildings, or portions of building are hereafter constructed or moved into the jurisdiction. The approved water supply shall be in accordance with Section 18.4 Fire Flow Requirements for Building. NFPA 1-18.3.1</p> <p>Fire flow calculations for manual fire suppression purposes are required to be provided in accordance with NFPA 1.18.4. The flow calculation must be provided on separate sheets, signed and sealed by a Professional Engineer.</p> <p>Note: Fire Flow Test is required to be witnessed by a Pembroke Pines Fire Inspector. Please call (954) 499-9560 to coordinate a test.</p> <p>Fire Hydrant Spacing and Installation. The number and type of fire hydrant and connections to other approved water supplies shall be capable of delivering the required fire flow and shall be provided at approved locations. NFPA 1-18.5.1</p>	<p>Fire hydrants and connections to other approved water supplies shall be accessible to the fire department. The hydrants and connection to approved water supplies must be installed and maintained in a manner that allows the fire department to access the water supply point without being delayed by fences, signs, and other obstructions. NFPA 1-18.5.2</p> <p>A 15' clear space shall be maintained around the circumference of fire hydrants except as otherwise required or approved. NFPA 1-18.5.3</p> <p>Where required by the AHJ, fire hydrants subject to vehicular damage shall be protected unless located within a public right of way. NFPA 1-18.5.5</p> <p>Marking of Hydrants. Hydrants shall be marked with an approved reflector affixed to or proximate to the fire hydrant required by AHJ. NFPA 1-18.5.7</p> <p>Fire hydrants in zoning classifications R-3 and R-4 residential classifications with greater density than R-3 shall be installed on a minimum of an eight-inch looped water line in city rights-of-way or easements and within 300 feet of the entrance of any future building as measured along streets or alleys. COPP CO 93.15</p> <p>Fire hydrants in zoning classifications R-3 and R-4 residential classifications with greater density than R-3 shall be installed on a minimum of an eight-inch looped water line in city rights-of-way or easements and within 300 feet of the entrance of any future building as measured along streets or alleys. COPP CO 93.15</p> <p>Fire hydrants in zoning classifications R-3 and R-4 residential classifications with greater density than R-3 shall be installed on a minimum of an eight-inch looped water line in city rights-of-way or easements and within 300 feet of the entrance of any future building as measured along streets or alleys. COPP CO 93.15</p> <p>Fire hydrants in zoning classifications R-3 and R-4 residential classifications with greater density than R-3 shall be installed on a minimum of an eight-inch looped water line in city rights-of-way or easements and within 300 feet of the entrance of any future building as measured along streets or alleys. COPP CO 93.15</p> <p>Note: Where new hydrants are required to meet spacing, hydrants shall be placed at the entrances to access roads and entrances to the complex. Measurements taken as the fire truck travels. Engineering department verification required.</p> <p>Fire hydrants 4 1/2 inches in diameter shall be located on the nearest roadway, shall be between 24' and 30' above grade, and shall have a blue reflector in center of hydrant in front of the hydrant. COPP CO 93.15 (B)</p> <p>No trees, bush, hedge, or shrub shall be planted within 15 feet diameter of a hydrant and located such that the hydrant shall be fully visible from the street. COPP CO 93.25 (F)</p> <p>In every case, at least two fire hydrants shall be within 400' feet of the entrance of any future building, and be spaced 500' feet part throughout. Measurements taken as the fire truck travels. COPP CO 93.25 (C) (6)</p> <p>Signage Light Weight Construction Identification Placard. Notice Required for Structures with Light-frame Truss-type Construction for new and existing structures, effective 12-13-09. Declare if structure(s) are to be constructed with light-frame truss-type Construction. (Please provide a detail site plan addressing type of structure, location, and dimensions proposed) FAC 694-40-00081</p> <p>All buildings, including, commercial buildings, industrial buildings, and other structures buildings within the city shall be numbered with the street address, front and rear and/or side doors, with the numbers not less than six, nor more than nine inches in height. The numbers shall contrast with their background and be kept free of obstructions. COPP CO 52.10</p> <p>Numbers shall be maintained in a conspicuous place where they can be seen and read from the street. COPP CO 52.10 (D)</p>	<p>Fire Departments Connections for Sprinklered, and / or Standpipes Buildings with standpipes / sprinklers require a fire hydrant within 100' of each standard sprinkler Fire Department connection. COPP CO 93.25 (D) and NFPA 14-6.4.5.4 (2010)</p> <p>Location of Fire Department Connection. Fire department connections should be located and arranged so that hose lines can be readily and conveniently attached without interference from nearby objects, including trees, shrubs, or other departmental or other departmental equipment. NFPA 1-18.2.3.1.1 (2010)</p> <p>For fire department connections to be installed, be located on the street side of the street. NFPA 14-6.4.5.1 (2010)</p> <p>Note: Fire department connections shall be located on the street side of the street as the fire hydrant. Each fire department connection to be provided shall be designed by a permanent sign constructed of weather resistant metal or rigid plastic material in red and white letters, having raised or engraved letters at least 1" in height on plate of fire hydrant or standpipe sign that shall be attached to the exterior of the building adjacent to the connection, secured with substantial and corrosion resistant hardware - for example, USXK, OPEN SPINKLER, or STANDPIPE as applicable. NFPA 14-6.4.5.2.1 (2010)</p> <p>The fire department connection shall be located not less than 18' or more than 4' above grade Pembroke Pines Fire Department requires FDC to be installed at 3' above grade. NFPA 14-6.4.4 (2010)</p> <p>Point of Service: Show and label point of service on water Civil plans, the tie in where the water is being used exclusively for the sprinkler / standpipe system.</p> <p>A Florida Certified Sprinkler Contractor shall pull permits and begin work from the point of service. FAC 694-40-040 (E)</p>	<p>Two-Way Radio Communication Enhancement Systems Two-Way Radio Communication Enhancement Systems. NFPA 1-11.10, 2012 edition</p> <p>In all new and existing buildings, minimum radio signal strength for fire department communications shall be maintained at a level determined by the AHJ. NFPA 1-11.20.1</p>													
<p>Details</p> <p>Fire Lane Detail.</p> <p>Fire Hydrant Detail.</p> <p>Fire Hydrant Detail.</p> <p>Fire Lane Requirements.</p> <table border="1"> <tr> <td>STANDARD ROAD DETAIL</td> <td>FIRE LANE REQUIREMENTS</td> </tr> </table> <p>Fire Hydrant Detail.</p>	STANDARD ROAD DETAIL	FIRE LANE REQUIREMENTS	<p>Turnarounds and Turning Radii Exhibits.</p> <p>AIR SIDE PAVEMENT DETAIL</p> <p>Turnarounds and Turning Radii Exhibits.</p> <p>ACCEPTANCE</p> <p>1. If three non-conforming areas fall below with less than -55 decibels per milliwatt (-9.65 dBm), and/or a DAQ3 or better (or a DAQ2 if fall below -55 decibels per milliwatt (-9.65 dBm), and/or a DAQ1 or below), the GC will be required to pull separate plans and permit and install an IPRES, In-Building Public Safety Radio Enhancement Systems, and/or</p> <p>2. If there is less than 99% percent floor area radio coverage to all General building areas, the GC will be required to pull separate plans and permit and install an IPRES; In-Building Public Safety Radio Enhancement Systems.</p> <p>Rev. 10/20/2015</p>	<p>Turnarounds and Turning Radii Exhibits.</p> <p>ACCEPTANCE</p> <p>1. If three non-conforming areas fall below with less than -55 decibels per milliwatt (-9.65 dBm), and/or a DAQ3 or better (or a DAQ2 if fall below -55 decibels per milliwatt (-9.65 dBm), and/or a DAQ1 or below), the GC will be required to pull separate plans and permit and install an IPRES, In-Building Public Safety Radio Enhancement Systems, and/or</p> <p>2. If there is less than 99% percent floor area radio coverage to all General building areas, the GC will be required to pull separate plans and permit and install an IPRES; In-Building Public Safety Radio Enhancement Systems.</p> <p>Rev. 10/20/2015</p>	<p>Revisions</p> <table border="1"> <tr> <td>Scale: NTS</td> <td>Date: 05/13/19</td> </tr> <tr> <td>Job No.: 11-0968.06</td> <td>Plot Date: 06/18/19</td> </tr> <tr> <td>Drawn by DRS</td> <td>Sheet No. C5</td> </tr> <tr> <td>Proj. Mgr. DRS</td> <td></td> </tr> <tr> <td>Appr. by DRS</td> <td>5 of 5</td> </tr> </table> <p>SEAL</p>	Scale: NTS	Date: 05/13/19	Job No.: 11-0968.06	Plot Date: 06/18/19	Drawn by DRS	Sheet No. C5	Proj. Mgr. DRS		Appr. by DRS	5 of 5	<p>Job Title: DIVERSIFIED AVIATION NP PHASE 2A</p> <p>Phase: NORTH PERRY AIRPORT NORTH PEMBROKE ROAD PEMBROKE PINES, FLORIDA 33392</p> <p>Page 12 of 16</p> <p>Page 13 of 16</p> <p>Page 14 of 16</p> <p>Page 15 of 16</p> <p>Page 16 of 16</p>
STANDARD ROAD DETAIL	FIRE LANE REQUIREMENTS															
Scale: NTS	Date: 05/13/19															
Job No.: 11-0968.06	Plot Date: 06/18/19															
Drawn by DRS	Sheet No. C5															
Proj. Mgr. DRS																
Appr. by DRS	5 of 5															



AREA CALCULATIONS				
BUILDING DESCRIPTION		ACRES	AREA (SF)	COVERAGE (%)
GROSS SITE AREA		11.83	515,650	100%
MAIN SITE AREA	492,057 SF (PER SURVEY)			
PARCEL B	21,176 SF (PER SURVEY)			
PARCEL C	2,417 SF (PER SURVEY)			
 BUILDING *1*	7,523 SF.			
BUILDING *2*	10,017 SF.			
BUILDING *3*	9,333 SF.			
BUILDING *4*	18,030 SF.			
BUILDING *5*	12,008 SF.			
BUILDING *6*	10,800 SF.			
BUILDING *7*	10,787 SF.	5		
BUILDING *8*	19,172 SF.			
BUILDING *9/10*	31,519 SF.			
BUILDING *11*	3,453 SF.			
BUILDING *12*	6,206 SF.			
BUILDING *13*	10,313 SF.			
 TOTAL HANGAR	149,161 SF.			
 BUILDING *14*	13,550 SF.			

GROSS BUILDING AREA	162,711	31.55		
PERVIOUS	113,866	22.08		
IMPERVIOUS	239,073	46.36		
MAX. BUILDING HEIGHT ALLOWED + 60'-0"				
MAX. BUILDING HEIGHT PROPOSED + 28'-0"				
ZONING	A-1 (NON-CONFORMING)			
LAND USE	AGRICULTURE			
OCCUPANCY	STORAGE (HANGER) S-2			
PARKING:				
REQUIRED: HANGER = 1 SPACE PER HANGER; 88 HANGER = 88 SPACES				
(NOTE: 1/2 REQUIRED PARKING MAY BE ALLOWED INSIDE THE HANGARS)				
= 44 PARKING SPACES				
5				
PLUS ANCILLARY OFFICE USE (1,800 S.F. PILOTS MEETING ROOM) = 3.5 SPACES PER 1,000 S.F. (1,800 / 1,000 = 1.8 X 3.5)				
= 7 PARKING SPACES				
5				
PLUS ADDITIONAL OFFICE SPACE (8,000 S.F.) = 3.5 SPACES PER 1,000 S.F. (8,000 / 1,000 = 8.0 X 3.5)				
= 28 PARKING SPACES				
5				
PLUS COLLEGE UNIVERSITY BASED ON 35% POPULATION = 120 PERSONS X .35				
= 42 PARKING SPACES				
5				
TOTAL PARKING REQUIRED:	121 SPACES	5		
TOTAL PARKING PROVIDED:	128 SPACES	5		
ACCESSIBLE PARKING SPACES REQUIRED:	4 SPACES			

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DESIGNED	DRAWN	CHECKED
CVG	AAG	CVG
DATE:	COMM:	
09/30/14		140327
R E V I S I O N S		
 1	05.31.15 CITY COMMENTS	
 3	11.11.15 VE REVISION	
 6	3.11.16 VE REVISION	

ANY STRUCTURE 20 FEET OR MORE IN HEIGHT SHALL BE SETBACK FROM ALL PLOT LINES AT LEAST ONE FOOT FOR EACH TWO FEET BY WHICH THE HEIGHT OF THE STRUCTURE EXCEEDS 20 FEET.

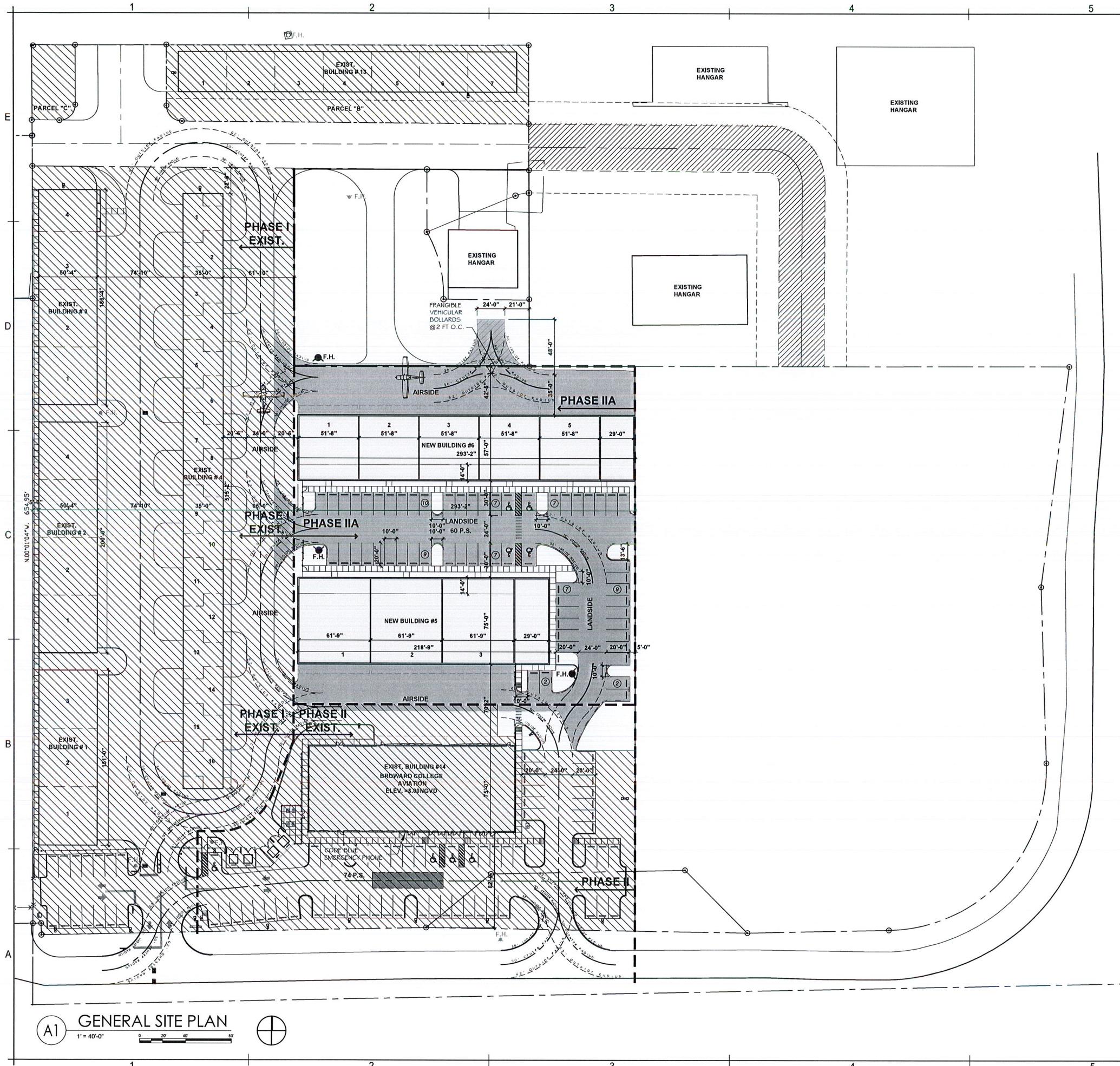
OCCUPANCY TO BE 5-2 STORAGE FOR APPLICABLE ZONING CODES. AS PER CITY OF PEMBROKE PINES/BROWARD COUNTY FIRE REQUIREMENTS, OCCUPANCY TO BE BASED UPON 'F-1' FACTORY/INDUSTRIAL. ALL HANGAR BUILDINGS TO BE DESIGNED TO THIS REQUIREMENT.

AREA CALCULATIONS

1. PROPOSED SITE PLAN MODIFICATION ON PHASE II AND PHASE III.
2. 31 PARKING SPACES ADDED TO THE SITE PLAN - PREVIOUSLY APPROVED 96 SPACES + 31 ADDITIONAL SPACES = 127 TOTAL PARKING SPACES
3. ADULT COLLEGE UNIVERSITY USE PROPOSED - BUILDING 14 13,550 SQ. FT. BUSINESS/ADULT COLLEGE UNIVERSITY.
4. CHANGE OF EXISTING PROPERTY LINE TO THE PARCEL'S SOUTH BOUNDARY

ARCHITECTURAL
SITE PLAN

CONSTRUCTION DOCUMENTS



AREA CALCULATIONS			
BUILDING DESCRIPTION	ACRES	AREA (SF)	COVERAGE (%)
GROSS SITE AREA	7.3	305,218	100%
MAIN SITE AREA	281,627 SF (PER SURVEY)		
PARCEL B	21,176 SF (PER SURVEY)		
PARCEL C	2,415 SF (PER SURVEY)		
EXIST. BUILDING "1"	7,523 SF		
EXIST. BUILDING "2"	10,017 SF		
EXIST. BUILDING "3"	9,333 SF		
EXIST. BUILDING "4"	18,030 SF		
PROPOSED BUILDING "5"	16,407 SF		
PROPOSED BUILDING "6"	16,711 SF		
BUILDING "7"	N/A SF		
BUILDING "8"	N/A SF		
BUILDING "9/10"	N/A SF		
BUILDING "11"	N/A SF		
BUILDING "12"	N/A SF		
EXIST. BUILDING "13"	10,313 SF		
TOTAL	88,334 SF.		
EXIST. BUILDING "14"	13,550 SF.		
GROSS BUILDING AREA	101,884	33.38	
PERVIOUS	48,450	15.87	
IMPERVIOUS	154,884	50.75	
MAX. BUILDING HEIGHT ALLOWED + 60'-0"			
MAX. BUILDING HEIGHT PROPOSED + 28'-0"			
ZONING	A-1 (EXISTING AIRPORT USE)		
LAND USE	TRANSPORTATION		
OCCUPANCY	STORAGE (HANGAR) S-1		
PARKING:			
REQUIRED: HANGAR = 1 SPACE PER HANGAR: 42 HANGARS = 42 SPACES			
(NOTE: 1/2 REQUIRED PARKING MAY BE ALLOWED INSIDE THE HANGARS)			
= 21 PARKING SPACES			
PLUS ANCILLARY OFFICE USE (1,800 S.F. PILOTS MEETING ROOM) = 3.5 SPACES PER 1,000 S.F. (1,800 / 1,000 = 1.8 X 3.5)			
= 7 PARKING SPACES			
PLUS ADDITIONAL OFFICE SPACE (8,000 S.F.) = 3.5 SPACES PER 1,000 S.F. (8,000 / 1,000 = 8.0 X 3.5)			
= 28 PARKING SPACES			
PLUS ADDITIONAL OFFICE SPACE (10,156 S.F.) = 3.5 SPACES PER 1,000 S.F. (10,156 / 1,000 = 10.2 X 3.5)			
= 36 PARKING SPACES			
TOTAL PARKING REQUIRED:	134 SPACES		
TOTAL PARKING PROVIDED:	134 SPACES		
ACCESSIBLE PARKING SPACES REQUIRED:	6 SPACES		
ACCESSIBLE PARKING SPACES PROVIDED:	8 SPACES		

C6 AREA CALCULATIONS

YEAR EDITION OF CODE:
FLORIDA BUILDING CODE 2017: FLORIDA FIRE PREVENTION CODE (FFPC)
6TH EDITION, EFFECTIVE DECEMBER 31, 2017, WITH BROWARD COUNTY AMENDMENTS, NFPA 101, 2015 EDITION / NFPA 409, 2011 EDITION; FBC ACCESS, 2017 EDITION & STATE STATUTES, 2017 EDITION

New Construction Renovation (Existing Bldg.) Upfit Alteration

BUILDING DATA FBC-2017 / NFPA 209 / NFPA 409 CHPT. 8
BUILDING ICS #5 & #6 Construction Type:
GROUP II AIRCRAFT HANGAR
TYPE I (1,000 PER NFPA 409 TABLE 4.1.3 MAX. FIRE AREAS OF 12,000 S.F. TYPE II B PER F.B.C. CHPT. 6 TABLE 6.01)

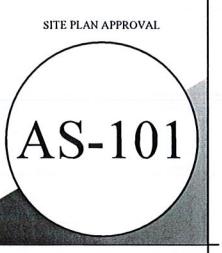
Sprinklers: No Yes NFPA 13 NFPA 13R NFPA 13D
Foam Fire Suppression: No Yes NFPA 409 NFPA 409 NFPA 409
Standpipes: No Yes 6.1.1 (1) 6.1.1 (2) 6.1.1 (3)
Fire District: No Yes
Building Height: 24' Feet 4' Number of Stories REFER TO MAJUF. SHOP DWGS.
Mezzanine: No Yes
High Rise: No Yes

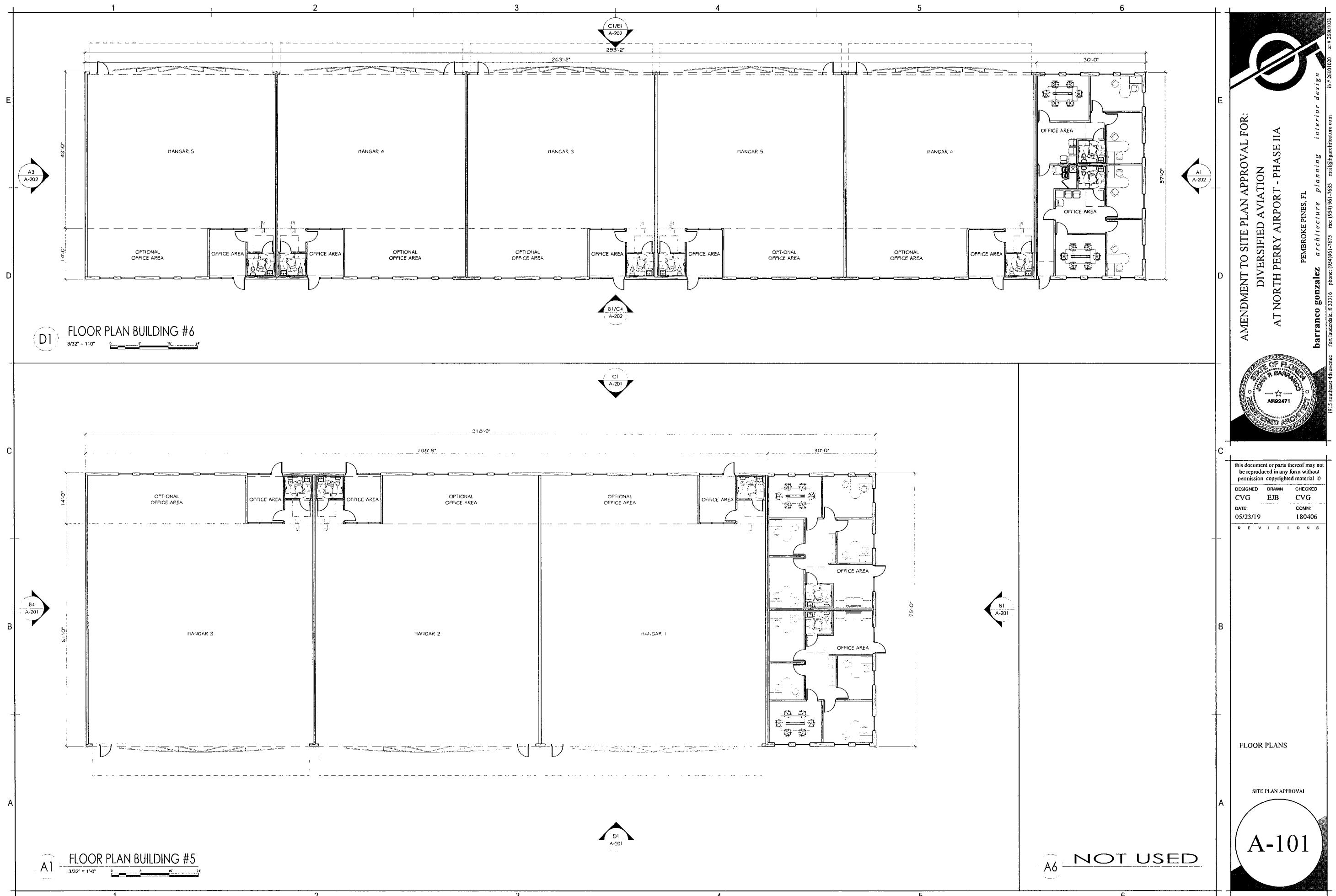
ANY STRUCTURE 20 FEET OR MORE IN HEIGHT SHALL BE SETBACK FROM ALL PLOT LINES AT LEAST ONE FOOT FOR EACH TWO FEET BY WHICH THE HEIGHT OF THE STRUCTURE EXCEEDS 20 FEET.

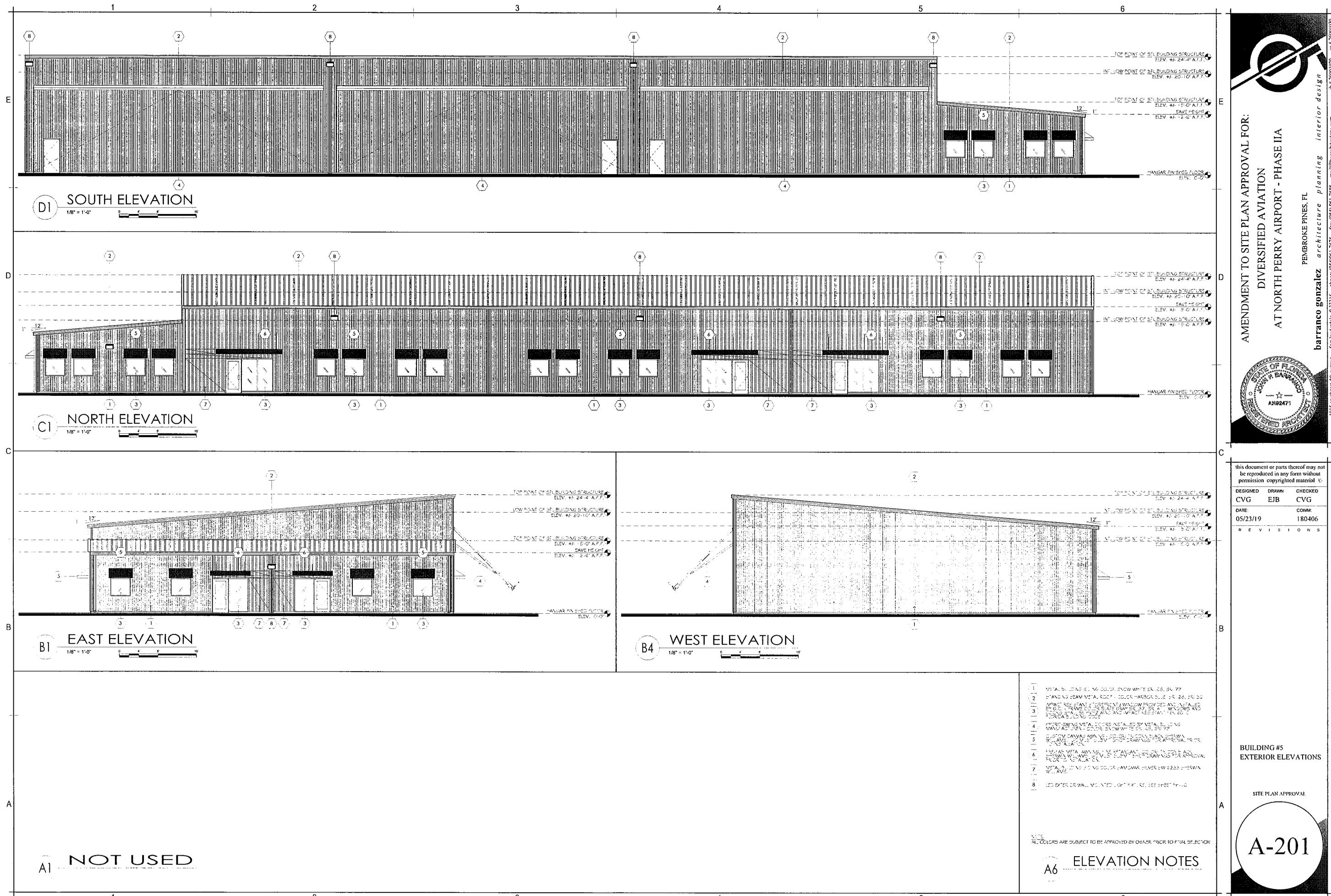
OCCUPANCY TO BE S-1 STORAGE FOR APPLICABLE ZONING CODES. AS PER CITY OF PEMBROKE PINES/BROWARD COUNTY FIRE REQUIREMENTS, OCCUPANCY TO BE BASED UPON "F-1" FACTORY/INDUSTRIAL. ALL HANGAR BUILDINGS TO BE DESIGNED TO THIS REQUIREMENT. THE INTENDED USE OF PROPOSED AIRCRAFT HANGAR BUILDINGS #5 & #6 IS FOR AIRCRAFT STORAGE ONLY. NO AIRCRAFT MAINTENANCE, AIRCRAFT PAINTING SHALL BE ALLOWED. NO STORAGE OF HAZARDOUS MATERIALS.

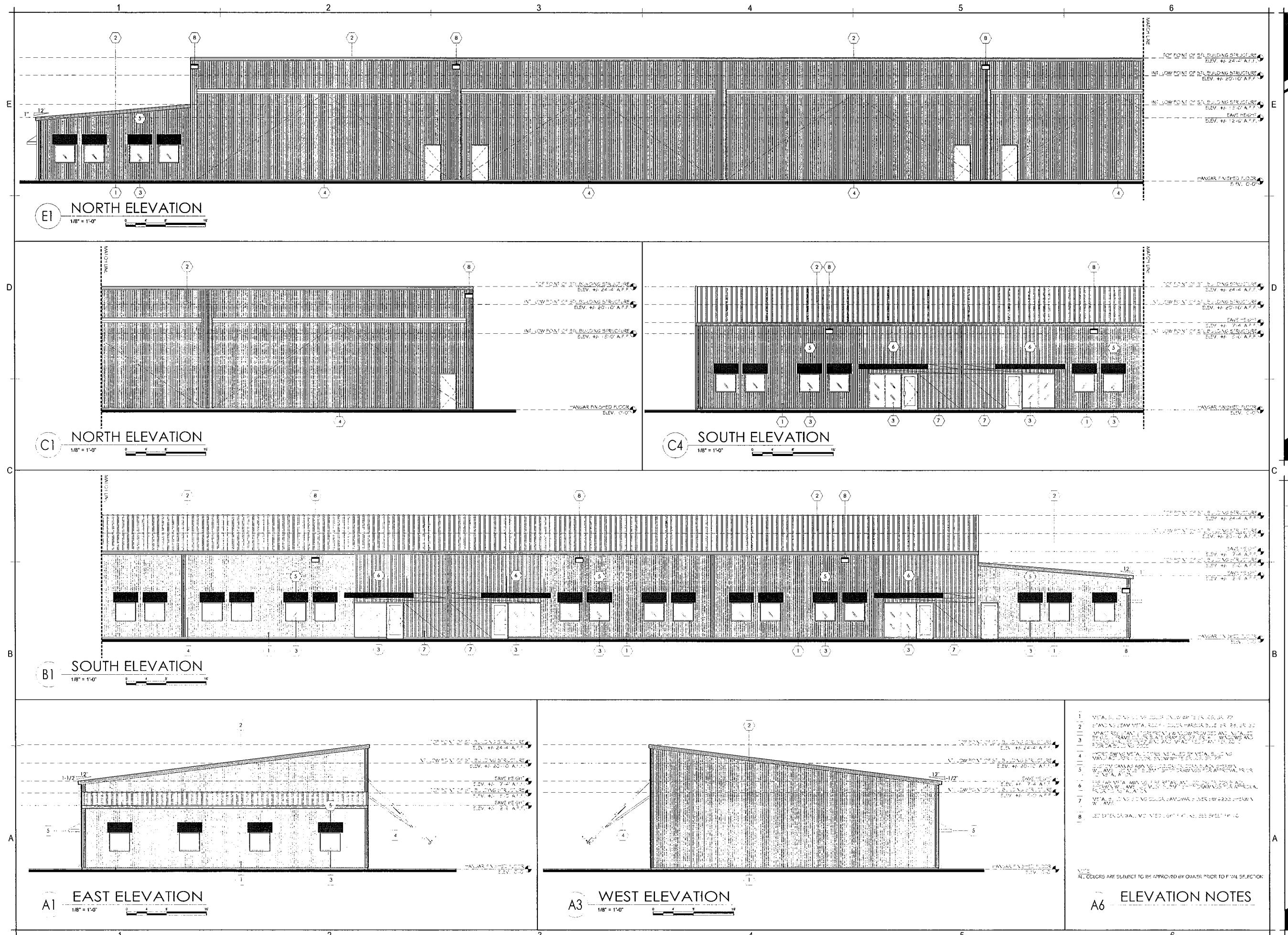
B6 CODE ANALYSIS

A6 SCOPE OF WORK



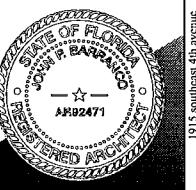






**AMENDMENT 10311 PLAN APPROVAL FOR:
DIVERSIFIED AVIATION
AT NORTH PERRY AIRPORT - PHASE IIA**

Marranco gonzalez architecture planning interior
PEMBROKE PINES, FL
133316, phone: (305) 761-7615, fax: (305) 761-7685, mail@bunchelstudio.com
on lauderdale: 133316, phone: (954) 961-7685, mail@bunchelstudio.com



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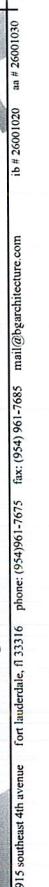
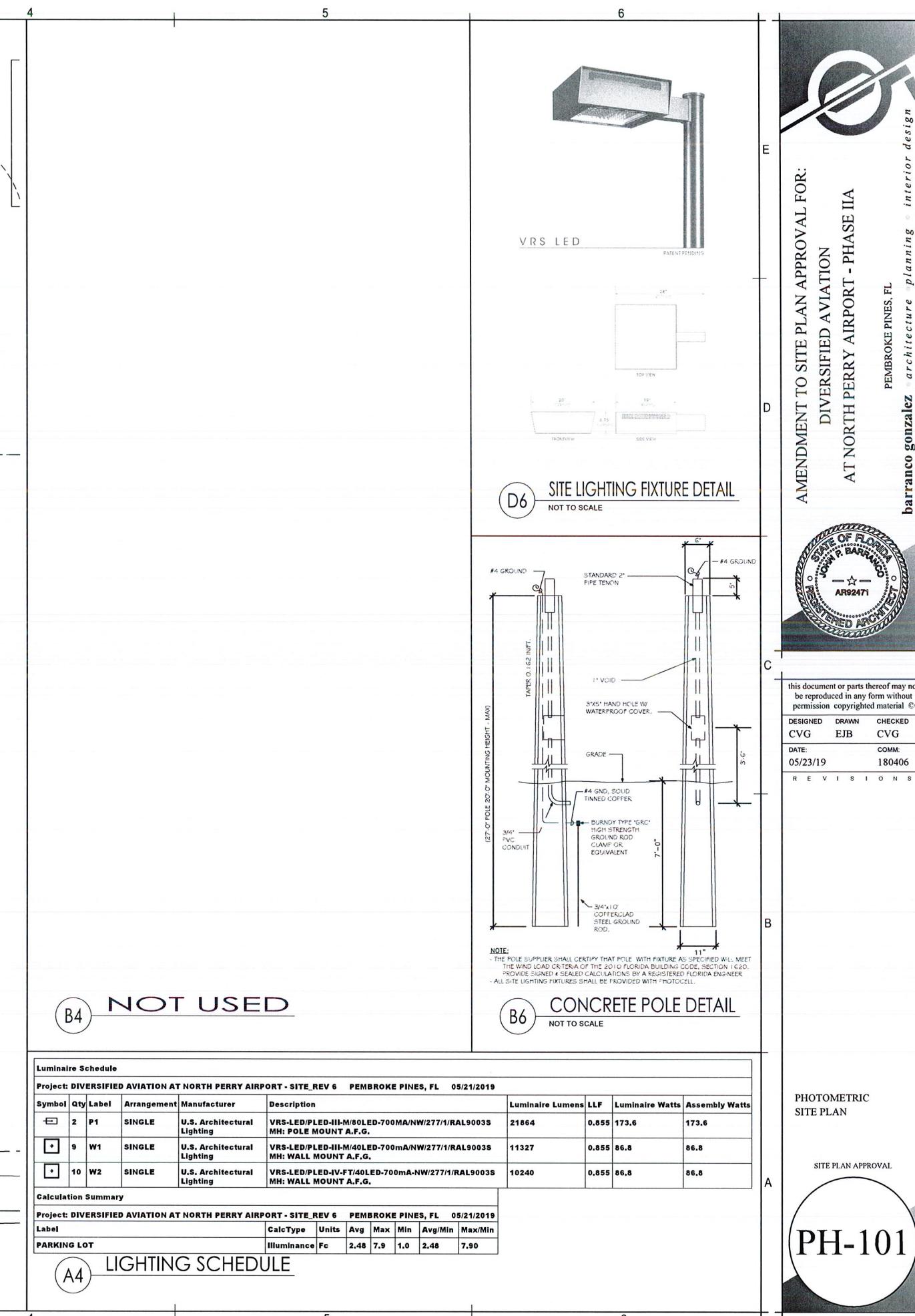
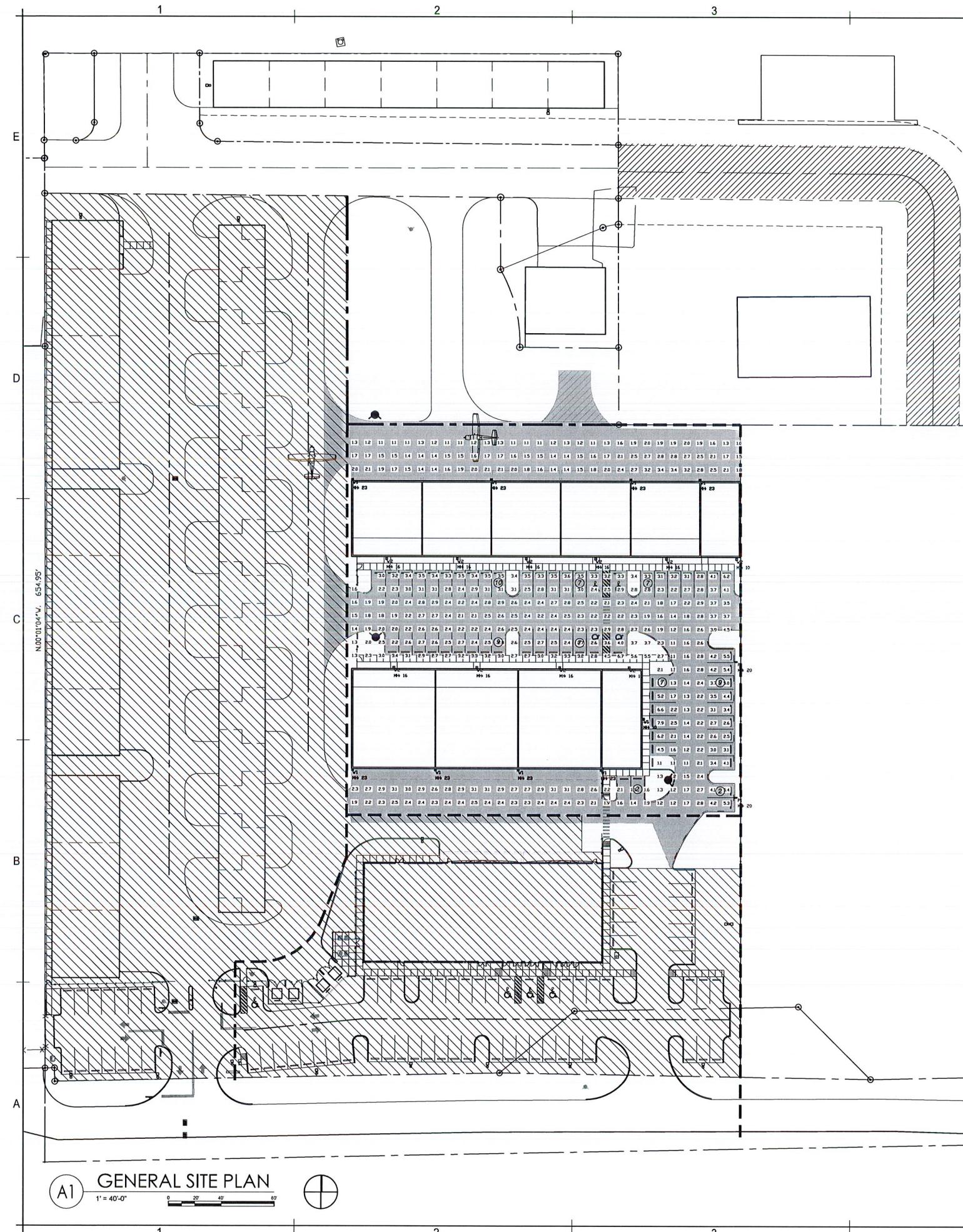
**BUILDING #6
EXTERIOR ELEVATIONS**

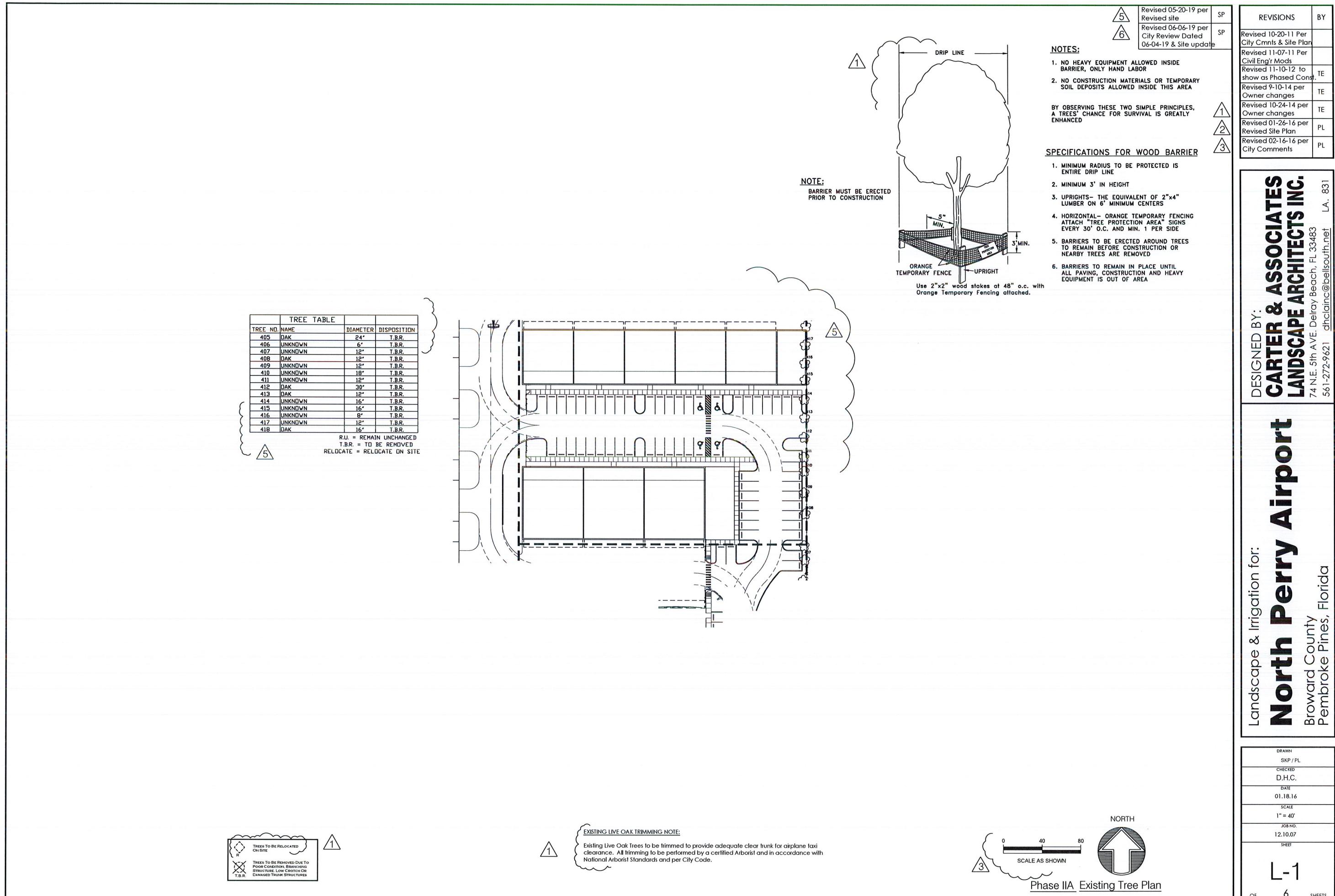
SITE PLAN APPROVAL

A-202

1. METAL SURFACE COATING INK, WHITE, GLOSS, 70
2. METAL SURFACE COATING INK, WHITE, GLOSS, 70
3. METAL SURFACE COATING INK, WHITE, GLOSS, 70
4. METAL SURFACE COATING INK, WHITE, GLOSS, 70
5. METAL SURFACE COATING INK, WHITE, GLOSS, 70
6. METAL SURFACE COATING INK, WHITE, GLOSS, 70
7. METAL SURFACE COATING INK, WHITE, GLOSS, 70

NOTE
ALL COLORS ARE SUBJECT TO BE APPROVED BY OWNER PRIOR TO FINAL SELECTION





MATERIAL SCHEDULE (Phase 2 - A)

QTY	KEY	BOTANICAL/COMMON NAME	SIZE
13	Pep-d	Ptychosperma elegans/ Alexander palm, dbl	16ft.o.a.dble.
11	Edt-10*	Elaeocarpus decipiens/ Japanese blueberry tree	12x5ft.6ft.cl.,columnar shaped, mtchg.
5	Sp*	Sabal palms	16,18,20ft.oa.
10	Qvt-hr*	Quercus virginiana, Highrise/High rise live oak tree	14-16'oa.x7'spr, 4"calip@6" off ground
4	Bat-v*	Bulnesia arborea/ Verawood tree	12x6ft, 6ft.cl. 3"calip@ 6" off ground
4	Cet *	Conocarpus erectus/ Green buttonwood tree	12x6ft, 6ft.cl. 3"calip@ 6" off ground
425	Gif*	Ficus macrocarpa/ Green island ficus	15-18'3g @ 18"oc.
185	Mg*	Muhlenbergia capillaris/ Muhy grass, pink	15-18'3g @ 18"oc.
310	P-bm	Philodendron, Burle marx	15-18'3g @ 18"oc.
120	Tf*	Tripsacum floridanum/Dwf. Fakahatchee grass	18'3g @ 18"oc.
12	Mf*	Myrcianthes fragrans/Simpson stopper	24" 3g @ 2"oc.

Planting soils, see specs & details
Mulch, brown, see details & specs.
Sod, solid Palmetto St.Augustine

* - Indicates native, or highly drought tolerant materials, per the Fl.Friendly Guidelines.

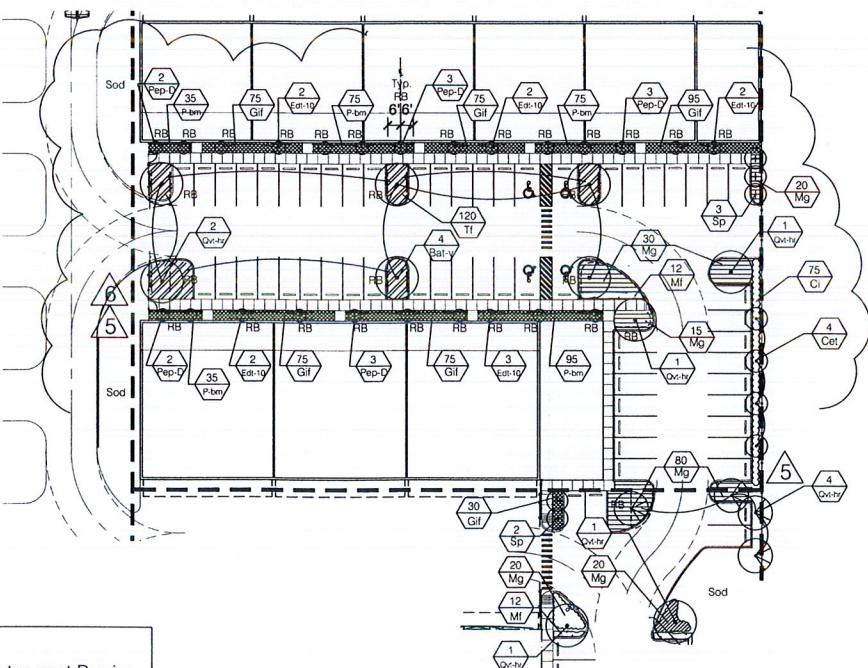
4	Revised 03-22-16 per City Comments	PL
5	Revised 05-20-19 per Revised site	SP
6	Revised 06-06-19 per City Review Dated 06-04-19 & Site update	SP
	REVISED 6.14.19 PHASE 2-A MATERIAL SCHEDULE ON SHT.L-2, Per City Rqs!	

1	REVISED 6.14.19 PHASE 2-A MATERIAL SCHEDULE ON SHT.L-2, Per City Rqs!	TE
2	Revised 02-16-19 per City Comments	PL
3	Revised 02-16-19 per City Comments	PL

DESIGNED BY:
CARTER & ASSOCIATES
LANDSCAPE ARCHITECTS INC.

LA. 831

74 NE. 5th AVE. Delray Beach, FL 33483
561-272-9621



Note:
RB :- Denotes root Barrier.
See Sheet L-3 For Details

FLORIDA FRIENDLY LANDSCAPE TABULAR DATA:

DESIGN OPTIONS:

- Utilization of moisture sensing controller other than a rain switch
- Plan submitted with low, moderate, and high water usage zones indicated
- Grass:**
25%-50% of the grass areas are made up of natural drought tolerant grass species
51% or more of the grass areas are made up of natural drought tolerant species from the list
- Shrubs:**
25%-50% of the required shrubs areas are made up of natural drought tolerant shrub species
51% or more of the required shrubs are made up of natural drought tolerant species from the list
- Trees:**
25%-50% of the required trees are made up of natural drought tolerant tree species
51% or more of the required trees areas are made up of natural drought tolerant species from the list
- Extra shade trees in vehicular use areas:**
25% more than the required shade trees planted in the vehicular use areas
50% more than the required shade trees planted in the vehicular use areas
- Natural sod area less than 50% of landscape area.**
- Utilization of compacted mulched planting beds at least 3" in depth in all planting areas except ground covers**

POINTS:
5 / 5
5 / 0
5 / 0
10 / 10
5 / 0
10 / 10
5 / 0
10 / 10
5 / 0
10 / 10
10 / 0
10 / 10
10 / 0
TOTAL: 50 Points

CONTRACTOR TO UTILIZE "BEST MANAGEMENT PRACTICES"
PER FLORIDA FRIENDLY LANDSCAPE STANDARDS

ALL VEGETATION MUST CONFORM TO USDA STANDARDS



DRAWN	SKP / PL
CHECKED	D.H.C.
DATE	01.18.16
SCALE	1" = 40'
JOB NO.	12.10.07
SHEET	L-2
OF	6
SHEETS	1 / 4 / 5

MATERIAL SCHEDULE			REVISIONS	
Qty.	Key	Botanical / common name	Size	BY
6	Dct*	Senna mexicana / Desert cassia Tree	9 - 10' x 4' - 5' B & B	Revised 10-20-11 Per City Cncls & Site Plan
7	Pit	Peltorphorum pterocarpus/ yellow poinciana tree	14 x 7' w/ 6' cl. 2' Dbh	Revised 11-07-11 Per Civil Eng'g Mods
6	Cest*	Conocarpus E. Sericeus /Silver buttonwood tree	10' - 12' x 5' w/ 5' cl	Revised 11-10-12 to show as Phased Const.
19	Qvt-hr*	Quercus virginiana / High rise Live oak tree	14' - 16' o.a. x 7' spr 4' Caliper @ 6" off ground	Revised 9-10-14 per Owner changes
7	Bst*	Bursera Simaruba/ Gumbo limbo tree	14' x 7' Caliper @ 6' off ground	Revised 10-24-14 per Owner changes
1	Bst-R*	Bursera Simaruba/ Gumbo limbo tree Relocated	Relocate from Phase 1 Planting	Revised 01-26-16 per Revised Site Plan
14	Cst	Chrysophyllum oliviforme/ Satin leaf	16x7', 8' cl. mtg.	Revised 02-16-16 per City Comments
13	Vmp-S	Veitchia Montgomeryana/ Montgomery Palm	16' o.a. hhy. Caliper	Revised 05-20-19 per Revised site
8	Ephit	East Palakka Holly tree	12 x 6'	Revised 06-06-19 per City Review Dated 06-04-19 & Site update
7	Cet*	Conocarpus erectus/green buttonwood tree	10-12'x4'	1
4	Bat-v*	Bulnesia arborea/ Verawood tree	16 - 18' o.a. size - Relocated, refer to plan	2
37	Sp-R*	Sabal Palm	16' o.a. triple	3
7	Pept	Ptychosperma elegans / Alexander palm triple	16' o.a. double	4
3	Pep-d	Ptychosperma elegans / Alexander palm double	14' o.a.	5
9	Cdt*	Coccoloba diversifolia/ Pigeon Plum Tree	14x6' w/ 6' cl, 2' Dbh	6
2	Drt*	Delonix regia/ Royal poinciana tree	14x7' w/ 6' cl, 2' Dbh	1
20	Edt-10*	Elaeocarpus decipiens/Japanese blueberry tree	12 x 6', w/ 6' cl, Matching	2
3	Sp*	Sabal Palm	16 - 18' o.a.	3
681	Ct*	Chrysobalanus icaco / Cocoplum	24" x 24" 3g. @ 30" o.c.	
180	Ms*	Ilex vomitoria / Dwarf Youpon	15" @ 24" o.c.	
905	Mg*	Muhlenbergia capillaris/ Muhy grass	15' 3g. @ 15' o.c.	
60	Hp-d*	Hamelia patens, dvt. / Dvt. firebush	18" 3g. @ 30" o.c.	
20	Hp-i*	Hamelia patens, dvt. / Dvt. firebush, Relocated	18" 3g. @ 30" o.c.	
630	Wt*	Polyodium scop. / Warf fern	10' 1g. @ 1' o.c.	
100	Az-V	Alpinia zerumbet, variegated / Variegated ginger	30" 3g. @ 30" o.c.	
140	Tt*	Tripsacum floridana / Dvt. Jokhatchee grass	15" 3g. @ 15' o.c.	
715	Gt*	Ficus microcarpa / Green island fig	18" 3g. @ 15' o.c.	
80	D-bf	Dianella tasmanica /Blue lily	15-18' 3g. @ 20' o.c.	
265	Jc-p*	Juniperus chinensis, Parsonii / Parson's Juniper	15" 3g. @ 24" o.c.	
260	Ce*	Conocarpus erectus / Green buttonwood	4' x 2' @ 36" o.c.	
68	Ce-7*	Conocarpus erectus / Green buttonwood	3 1/2' - 4', Full to base @ 30" o.c.	
200	A	Annuals	4' Pot.	
150	Ch	Codiaeum variegatum/ Croton bravo	15" 3g. @ 18" o.c.	
142	Mt*	Myrsinthes fragrans/ Simpson stopper	24" 3g. @ 2' o.c.	
325	WGR	White crushed rock, on typer filter fabric	cubic yards	
72	Pm-7	Podocarpus makii / Yew	6'x3'	
3	Ca-qe	Cirium Augustum/ Queen emma	30'x30'	
315	Pm	Pholidendron hastatum/ Burle Marx	15" 3g. @ 20' o.c.	
20	H-ld	Heliconia /Lady Di	3'-4' o.a.	

* - Denotes native, or highly drought tolerant plant materials, per SFWMD. "Waterwise Manual".

Planting soils, see specs. & details

Mulch, see specs. & details

Sod Solid Horatian (DBH) Diameter @ Breast Height

GENERAL LANDSCAPE NOTES:

1. All plant material shall be F1, #1, or better, as per the latest addition of F1, Grades & standards. All "specimen" quality materials shall be F, Fancy, and shall be pre-approved by the Landscape Architect.
2. All plant materials shall be true to name & size, as per F1, Grades & Standards. Plant materials which do not meet, or exceed these standards will not be accepted.
3. Quantities, sizes, and locations of plants will be determined by the plan and material schedule. Sizes of the specified plants shall take precedence over the container size. Spacing of the ground covers will be determined by the material schedule. Quantities shown on the material schedule are to be used as a guideline. The landscape contractor shall be responsible for the actual quantities shown on the plan. The plans will take precedence over the material schedule. Discrepancies shall be brought to the attention of the Landscape Architect, prior to bidding the project, and commencing any work.
4. No substitutions shall be accepted without the Landscape Architect's written approval. All substitution requests shall be made in writing.
5. Planting soils shall be clean, sterile, and free of debris. Soil shall consist of 40% Fl. mulch & 60% existing native soils, mixed thoroughly together, clean sand. Tree's shall be installed with a minimum of 6' on sides & bottom of root balls. Shrubs, plants & ground covers shall be installed with a minimum of 6' on sides & bottom of root balls. Rooted cuttings shall be installed with a minimum of 4" of planting soils worked into the top 6" of the existing soils. Sabal palms and Phoenix specie shall be installed with a clean well drained sand.
6. Milorganite, or equal, fertilizer shall be applied to all plantings, per manufacturers recommendations. In addition, "Agriflorm" table (20-10-5) shall also be applied to all plants 1 gal, and above, per manufacturers recommendations.
7. All trees & palms shall be mulched with a 3ft. diameter circle, 3" minimum depth. All planting beds shall receive 3" finished depth, mulch upon completion of planting process. Mulch shall "Eucalyptus", or approved equal. NO CYPRESS MULCH SHALL BE UTILIZED ON THE PROJECT.
8. All plants shall be planted at soil levels which they were previously grown. Shrubs and hedges are to be planted 2ft. away from any wall, or structures. Materials with a six greater than overhangs shall be planted as not to impede the natural growth habit of the plant.
9. All materials are to be watered-in immediately after planting, so as to remove all air pockets. BIB materials are to be hand-watered for a minimum of 1 week after installation, and there-after as required. Contractor shall advise the owner of any additional hand-watering requirements.
10. All tree's 8ft., or larger, are to be staked, or guyed, to provide ample support such that materials remain straight & true in an up-right position through the guarantee period. Staking & guying shall be performed at the option of the landscape contractor, except where required by code. However, the landscape contractor shall be responsible for all tree's & palms remaining straight & true through the guarantee period. In the event that a material shifts after it has been properly staked, or guyed, the landscape contractor shall not be held responsible.
11. All sod shall be "Floratam", unless otherwise specified. Sod shall be dense, green, well-rooted, and free of debris, weeds, disease, or insects. A complete 6-6-6 fertilizer shall be applied at a rate of 10lbs. per 1,000sq.ft. Sod is to be watered to a depth of 3" immediately after installation. Grades are to be raked smooth, and all debris removed, prior to installation.
12. All trees, plants & ground-covers shall be guaranteed for a period of 120 days, and all palms are to be guaranteed for a period of one year, after the date of substantial completion. Phoenix canariensis & dactylifera palms are to be maintained, per growers/suppliers recommendations, by a qualified person, or firm. Said maintenance program shall be the responsibility of the owner.
13. The landscape invoice will be deemed as rejection of the plant materials. The landscape contractor shall remove any, or all of the rejected materials from the site as their discretion.
14. The removal of "base rock" is not included in the landscape contract.
15. All grades are to be within 2" of finished grade, prior to the landscape contractor commencing work.

EXISTING MATERIAL TO REMAIN/RELOCATE

QTY.	DESCRIPTION	
1	Cpp	Syagrus romanzoffiana / Queen Palm
4	Bbt	Bucida buceras / Black Olive Tree
18	Qvt-hr	Quercus virginiana / Live Oak Tree
35	Sp	Sabal palms (18'-22' o.a.) - 27 Relocated 8 to Remain

TOTAL NUMBER OF EXISTING MATERIALS TO REMAIN ON SITE = 59 SEE PLANTING PLANS FOR LOCATIONS

EXISTING MATERIAL REMOVAL SCHEDULE

TOTAL NUMBER OF EXISTING MATERIALS TO BE REMOVED = 61 TREES TO BE REMOVED DUE TO HEALTH, SAFETY & WELFARE OF AIRCRAFT OPERATIONS.

NOTE:
Remove All Exotic Nuisance Species, Including But Not Limited To (Fl. Holly, Australian Pine, Melaleuca, etc.) Per Pembroke Pines Code.

NOTE:
THE LANDSCAPE INSTALLATION SHALL UTILIZE BEST MANAGEMENT PRACTICES SET FORTH BY FLORIDA FRIENDLY LANDSCAPE STANDARDS

NOTE:
Existing native soil within all landscape islands, interior landscape strips and perimeter landscape strips, adjacent to vehicular use areas, shall be excavated down to a depth of thirty (30) inches below existing grade, except for a 12" buffer from the inside of curb or pavement (see detail). A suitable planting soil mixture of fifty/fifty (50/50), sixty/forty (60/40) (sand / planting soil) shall either be backfilled in place of the native soil or efficiently mixed with the native soil create an optimum environment for successful root development. If native soil is to be mixed, it shall first be screened to remove rocks and debris larger than one-half (1/2) inch in diameter prior to mixing. All properties under this section shall be required to have an open landscape bed inspection prior to backfilling to insure the thirty (30) inch depth has been met.

MATURE CANOPY CALCULATIONS

QTY	MATERIAL CODE	CANOPY SIZE	SQ. FT. CANOPY
6	DCT	@ 10' x 10' / 100 SQ. FT. =	600 SQ. FT.
7	PIT	@ 30' x 30' / 900 SQ. FT. =	6,300 SQ. FT.
6	CEST	@ 15' x 15' / 225 SQ. FT. =	1,350 SQ. FT.
10	Qvt-hr	@ 40' x 40' / 1600 SQ. FT. =	16,000 SQ. FT.
7	BST	@ 40' x 40' / 1600 SQ. FT. =	11,200 SQ. FT.
1	BST-R	@ 40' x 40' / 1600 SQ. FT. =	1,600 SQ. FT.
13	VMP-S	@ 12' x 12' / 144 SQ. FT. =	1,872 SQ. FT.
18	EPHT	@ 12' x 12' / 144 SQ. FT. =	2,592 SQ. FT.
37	SP-R	@ 10' x 10' / 100 SQ. FT. =	3,700 SQ. FT.
7	PEP-T	@ 12' x 12' / 144 SQ. FT. =	1,008 SQ. FT.
1	PEP-D	@ 12' x 12' / 144 SQ. FT. =	144 SQ. FT.
3	PEP-S	@ 12' x 12' / 144 SQ. FT. =	432 SQ. FT.
25	Cdt	@ 30' x 30' / 900 SQ. FT. =	22,500 SQ. FT.
6	DRT	@ 40' x 40' / 1600 SQ. FT. =	9,600 SQ. FT.
TOTAL MATURE CANOPY PROVIDED			= 78,898 SQ. FT.

ALL VEGETATION MUST CONFORM TO USDA STANDARDS

CONTRACTOR TO UTILIZE "BEST MANAGEMENT PRACTICES" PER FLORIDA FRIENDLY LANDSCAPE STANDARDS

EXISTING MATERIAL (Perimeter Buffer East Airport Road)

DESCRIPTION
Cs Chlorisia speciosa/ Silk floss tree
Bst Bursera Simaruba/ Gumbo limbo tree
Dr Delonix regia/ Royal poinciana
Ts Tecoma stans/ Yellow elder
Ce Conocarpus erectus 'sericeus'/ Silver buttonwood
Li Ligustrum lucidum/ Glossy privet
Sp Sabal palms
Bn Bismarckia nobilis/ Silver lantan palm

Landscape Data
Pembroke Pines / (North Perry Airport)

ROW	REQUIRED	PROVIDED
Trees ½ Lin Ft. (1100)	22	47 (including existing) Provided
Hedge Cont.		
PERIMETER: Abutting Prop.	N/A	
PARKING LOT:		
1 Tree / 3 Parking Spaces(113)	37 TREES	38 TREES
Industrial Zoning (50% Less Requirements)		

REVISIONS

4	Revised 03-22-16 per City Comments	PL
5	Revised 05-20-19 per Revised site	SP
6	Revised 06-06-19 per City Review Dated 06-04-19 & Site update	SP

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Landscape & Irrigation for:
North Perry Airport
Broward County, Pembroke Pines, Florida

DRAWN
SKP / PL

CHECKED
D.H.C.

DATE
01.18.16

SCALE
1" = 40'

JOB NO.
12.10.07

SHEET

L-3
6 SHEETS

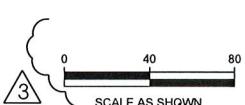
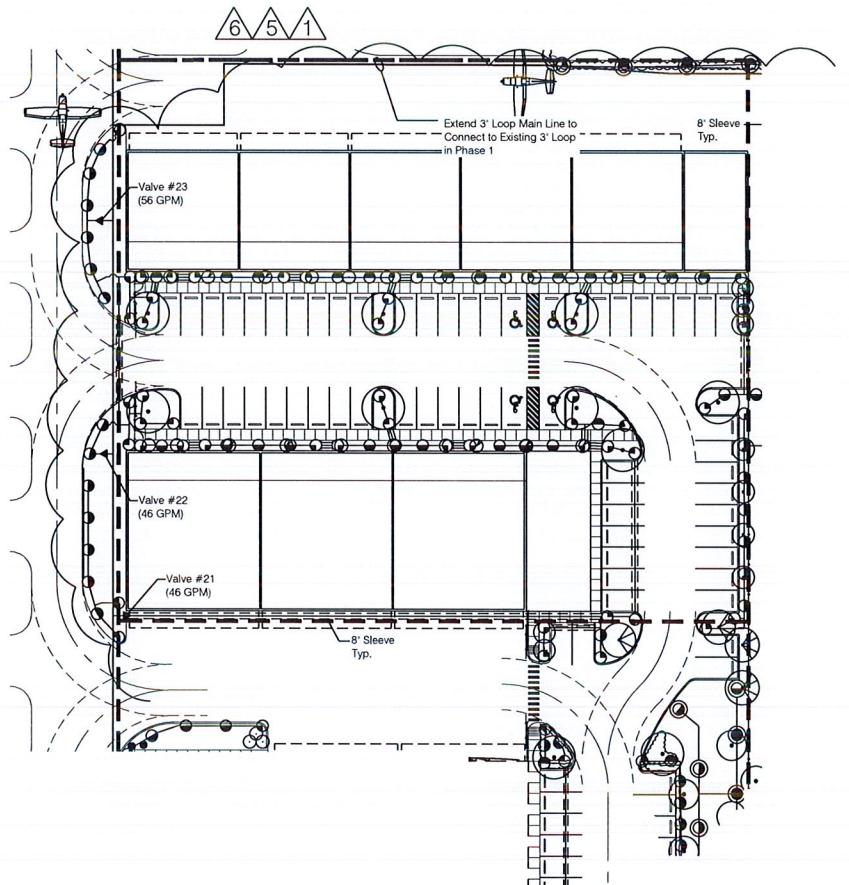
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Revised 10-20-11 Per City Cmnl & Site Plan	SP
Revised 06-06-19 per City Review Dated 06-04-19 & Site update	SP
Revised 11-10-12 to show as Phased Const.	TE
Revised 9-10-14 per Owner changes	TE
Revised 10-24-14 per Owner changes	TE
Revised 01-26-16 per Revised Site Plan	PL

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OF 6 SHEETS



Phase IIA
Irrigation Plan

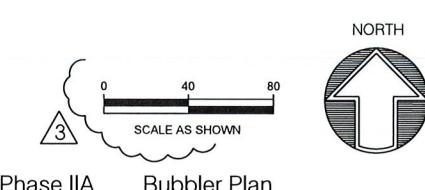
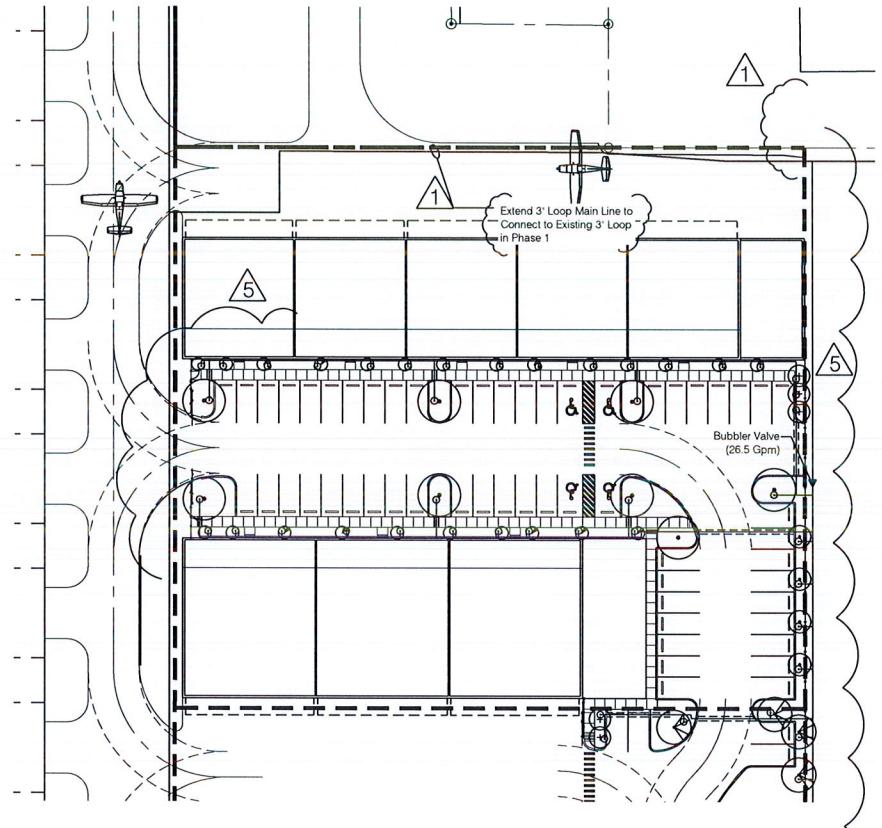
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Revised 9-10-14 per Owner changes	TE
Revised 10-24-14 per Owner changes	TE
Revised 01-26-16 per Revised Site Plan	PL
Revised 02-16-16 per City Comments	PL

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North Perry Airport

Broward County
Pembroke Pines, Florida



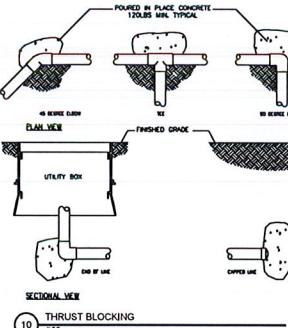
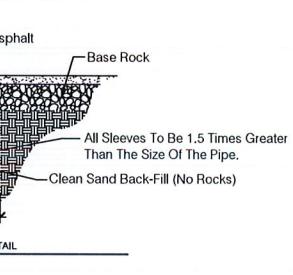
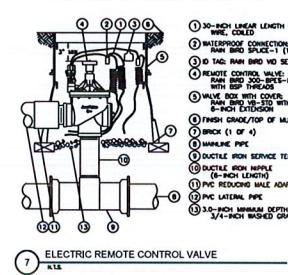
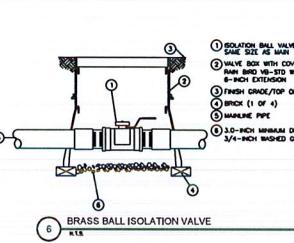
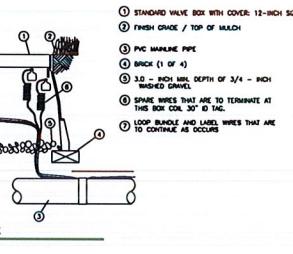
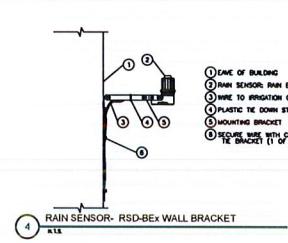
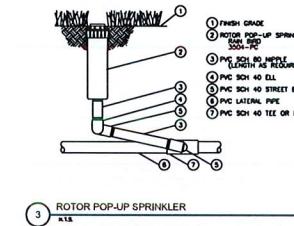
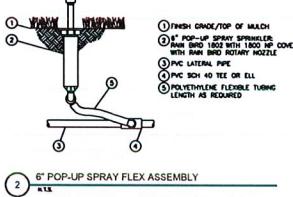
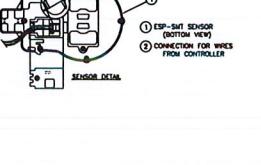
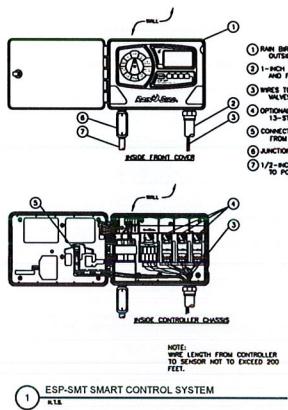
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OF	6 SHEETS

REVISIONS	BY
Revised 10-20-11 Per City Cmnl & Site Plan	
Revised 11-07-11 Per Civil Eng't Mods	
Revised 11-10-12 to show as Phased Const.	TE
Revised 9-10-14 per Owner changes	TE
Revised 10-24-14 per Owner changes	TE
Revised 01-26-16 per Revised Site Plan	PL

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NOTE: Main Line (Typ.) & valve locations are shown for graphic clarity only. All Main Line (Typ.) & valves are to be located within landscape area's on-site.

IRRIGATION NOTES:

Notes:
Automatic Irrigation System
Water demand/ zone
Pressure required (refer to plan)

GENERAL
System shall be installed in accordance with a Federal, State, and local codes, Contract drawings and Contract Specifications. Irrigation design is based on "Planting Plan" dated 05.20.19 Phase 2. Contractor shall refer to this plan to coordinate sprinkler locations and pipe routing with plant locations.

The water source for this system shall be the existing Well & Pump System. The master shutoff valve shall be activated via the automatic controller, and shall be used to depressurize the zone lines when the system is not operational. Contractor shall adjust the irrigation, where noted on the plans for actual field conditions, and shall install the system in accordance with South Florida Irrigation Society Standards and specifications.

To insure proper operation of this system, pump size, pressure required, pipe and wire sizes, sprinkler spacing, installation details, and specifications shall be followed as shown on the drawings and in the specifications.

Irrigation system shall provide 100% coverage, with a 50% overlap minimum, utilizing "rust-free" water source. If a well & pump system is to be utilized, the contractor shall provide a

"chemical injection system" to inhibit rust stains, if water sample testing indicates that there will be "rust" staining from the well water.

PIPING
Pipe routing is schematic only, and shall be field adjusted for on-site conditions. All pipe shall be installed in accordance with local codes, and per manufacturers recommendations. Pipe routed under paving surfaces, and through planter walls shall be sleeved in SCH 40 PVC. Sleeves shall be of adequate size to allow for 1/2" clearance for pipe & wire. Contractor shall verify the location, depth & size of all existing sleeves, as required. Pipe installed above grade for the backflow preventer shall be SCH 40 Galvanized pipe. All other piping shall be PVC. The Main Line (Typ.) shall be SCH 40 PVC, laterals sized from 1" to 2" shall be SDR 26, Class 160, and laterals sized from 1" to 3/4" shall be SDR 21, Class 200 PVC pipe.

Pipe shall be installed so the backfill depths are maintained at 18", for Main Line (Typ.) and all lateral lines routed beneath pavement, and at 12" for all other lines. The depths from 1" to 2" shall be SDR 26, Class 160, and laterals sized from 1" to 3/4" shall be SDR 21, Class 200 PVC pipe.

are to be taken from finished grades. Backfill material shall be suitable material, free of rocks, stones, or other debris that could damage components of the irrigation system.

SPRINKLERS
Sprinkler locations are schematic only, and shall be adjusted for wind, landscape materials, hardscape elements, etc., to provide 100% coverage with no overflow onto property lines, or building facades. Pop-up spray heads shall be Toro series 6", and 12" type, which are to be installed on flexible swing joints of Toro thick-walled poly pipe with 1/2" insert elbows. THERE SHALL BE NO 1" POP-UP HEADS UTILIZED FOR THE PROJECT. Shrub heads shall be installed at a uniform height of 6" above the plantings, and are to be located within planting masses so as to be concealed from view. Shrub type spray heads shall be Toro 570 series, and are to be installed on a 1/2" SCH 40 PVC risers. Bubblers are to be installed on a SCH 40 PVC risers. All SCH 40 PVC risers are to be painted "Forest green", or Brown, to be less conspicuous. Toro 12" pop-up sprinklers shall be installed in ground-cover areas of the parking-lot islands, and at other critical locations, as determined in the field by the Landscape Architect.

Sprinklers located adjacent to pavement, sidewalks, decks, patios, buildings, etc., shall be installed 8" from the edge. Unless otherwise noted on the plans, pop-up sprinklers shall be installed 6" from the edge, and shrub sprinklers shall be installed 18" from the edge. Shrub risers are not to be installed at walk-way intersections, or where-ever a "trip & fall" hazard may occur. Adjustment feature of sprinklers specified shall be utilized to insure proper coverage, while minimizing undesirable overflow. Contractor shall use precaution in locating, and setting sprinkler heads in planting areas adjacent to parking spaces to minimize the damage to sprinklers by overhanging car bumpers.

Pop-up sprinklers with "low angle" nozzles shall be installed amid masses of tall shrubs, for low level watering. Contractor shall install sprinklers at optimum locations for the most effective coverage.

CONTROL SYSTEM
Rainbird control system shall be installed, per manufacturer's recommendations, to activate in-line valves, and the master shutoff valve. Proper grounding equipment shall be installed, for the controller. Controller location shall be approved by the Landscape Architect, and project supervisor. The irrigation contractor shall supply the controller, however the physical installation there-of, and the electrical hook-up shall be by others.

VALVES
Rain bird PVB, or approved equal, electric valves shall be installed per manufacturer's recommendations, and as per details. All valves are to be installed in a 10" Ametex valve box, see details.

RAIN SENSOR
Mini-click rain sensor shall be installed, per manufacturer's recommendations. Rain sensor location shall be approved by the Landscape Architect.