COMMUNITY DEVELOPMENT DEPARTMENT
200 NORTH ALSTON STREET
Foley, Alabama 36535
www.cityoffoley.org
(251) 952-4011
FAX (251) 971 -3442

April 15, 2015

Mayor and City Council
City of Foley
407 East Laurel Avenue
Foley, Alabama 36535

RE: Public Project Recommendation

Dear Mayor Koniar and City Council Members:

The City of Foley Planning Commission held a meeting on April 14, 2015 and the following action was taken:

Agenda Item: Public Project – Airport Drainage

Action Taken: Commissioner Rauch made a motion to recommend to Mayor and Council the public project airport drainage as proposed. Commissioner Rouzie seconded the motion. All Commissioners voted aye.

Motion to recommend to Mayor and Council the public project airport drainage as proposed.

Please let me know if you have any questions or concerns.

Respectfully,

Melissa Ringler
Planning & Zoning Coordinator
mringler@cityoffoley.org

STORM DRAIN RECOMMENDATIONS

CRITICAL STRUCTURES

Structures described as "Critical" consist of various inlets, junction boxes, pipe, and outfalls at various locations within the airport property. These structures are considered to be either unsafe, or in need of immediate attention, in order to reduce risk of permanent failure of the structure. Structures 1A, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 15, 18, 22, & 23, are located within the airport's OFA for Runway 18/36 and taxiway system. These structures are responsible for carrying storm water under the existing taxiways and runway, and therefore could create potential unsafe conditions for aircraft if not addressed. Structures 33, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, & 56, are located within the taxiway between Hangar B1 and Hangar B2. Since planes and aircraft operations are located in the vicinity of these structures the deficiencies should be addressed.

A description of recommended improvements for each structure and cost associated with the repair has been provided in Appendix "C" of this report. A brief summary of the estimated cost to repair and/or replace structures described as Critical is shown in Table 1.

CRITICAL STRUCTURES		
ID#	**Drainage Structure Description**	**Estimate**
1A	EARTHERN DIVERSION BERM	$5,000.00
2, 3, & 4	Concrete Drop Inlet, 15" Concrete Pipe, and 15" Headwall	$36,500.00
5, 6, & 7	Concrete Drop Inlet, 18" Concrete Pipe, and 18" Headwall	$34,000.00
8, 9, & 10	Concrete Drop Inlet, 15" x 22" Corrugated Metal Pipe, and Buried Junction Box	$38,500.00
11 & 12	18" Concrete Pipe with Headwall	$68,450.00
15	48" Concrete Headwall	$8,000.00
18	23" X 36" Concrete Arch Pipe (Beneath Runway)	$93,000.00
22	26" x 44" Concrete Headwall	$5,400.00
23	26" x 44" Concrete Headwall	$5,400.00
33	12" PVC Storm Drain Pipe	$3,800.00
45-56	Concrete Drop Inlet, 15" Concrete Pipe, and 15" Headwall	$59,000.00
	Sub-Total	$357,050.00
	Engineering at 20%	$71,410.00
	Total for Critical Structures	**$428,460.00**

Table 1 (Approximate Cost to Repair or Replace Critical Structures)

NEED IMPROVEMENT STRUCTURES

Structures described as "Needs Improvement" consist of various inlets, junction boxes, pipes, and outfalls at various locations within the airport property. These structures at the time of inspection were found to be functioning properly, but were in need of minor maintenance or minor improvements. Structure 17, and 19 are located within the OFA of Runway 18/36. These structures are in need of basic maintenance in the form of backfilling minor washing in the area installing permanent vegetation. Structures 25, 30, 36, 38, and 43 are not located within OFA. These structures should be evaluated periodically to judge changes in conditions and if those changes require immediate attention. A description of possible solutions for each structure and cost associated with the repair has been provided in Appendix "D" of this report. A brief summary of the estimated cost to repair and/or replace structures described as Needs Improvement is shown in Table 1. A brief summary of the estimated cost is shown in Table 2.

NEEDS IMPROVEMENT		
ID#	**Drainage Structure Description**	**Estimate**
17	23" X 36" Headwall	$1,500.00
19	23" X 36" Headwall	$2,100.00
25	26" x 44" Headwall and Slope (Beyond Fence)	$1,700.00
30	18" x 29" Outfall	$1,600.00
36	Standard Yard Inlet	$1,500.00
38	18" Concrete Headwall	$700.00
43	18" Concrete Headwall	$11,000.00
	Sub-Total	$20,100.00
	Engineering at 20%	$4,020.00
	Total for Needs Improvement Structures	**$24,120.00**

Table 2 (Approximate Cost to Repair or Replace Needs Improvement Structures)

SATISFACTORY STRUCTURES

Structures described as "Satisfactory" need not be considered for replacement at this time. These structures were in an acceptable operating condition at the time of this study but should be inspected annually and maintained as needed to prevent problems.

U.S. Department
of Transportation
**Federal Aviation
Administration**

Airports District Office
100 West Cross Street, Suite B
Jackson, Mississippi 39208-
2307

March 20, 2015

Ms. Rachel Keith
Purchasing Agent/Airport Manager
City of Foley
Post Office Box 1750
Foley, AL 36536

Re: AIP Project in FY 2015

Dear Ms. Keith:

This fiscal year, we expect to fund the following project for $160,705.00 at the Foley Municipal Airport and are asking that you get started now. The planned Federal participation rate is 90 percent.

Project Items
Improve airport drainage, Phase 1

Safety Plan: Your proposed FY 2015 project includes development on the airside of your airport and will require submission of a safety plan. If you have not already submitted your safety plan, please do so as soon as possible. You should file your plan electronically at https://oeaaa.faa.gov/oeaaa/external/portal.jsp. Make sure you indicate that the construction is "on airport" so it will be coordinated with this office.

Plans and Specifications: A certification of the plans and specifications is required for all construction and equipment purchase projects. A review of the plans and specifications will be required for certain construction and equipment purchase projects,. Your program manager will coordinate with you when plans and specifications review is required.

SAM Registration: All grant recipients must be registered in the System for Award Management (SAM), formerly CCR, and the correct DUNS number shown on all project applications. Registration must be renewed annually at https://www.sam.gov. You are registered in SAM under DUNS 072630544. Your registration in SAM is current to February 10, 2016.

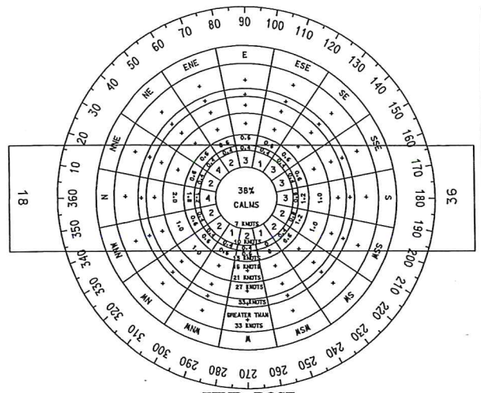
It is important that you take all actions that will enable you to submit a grant application for your project by July 15, 2015, so please work closely with your Program Manager, Mr. Kevin L. Morgan at 601-664-9891.

Sincerely,

Rans D. Black
Manager

e-copy:
Mr. Bobby Odom
ALDOT

A.I.P. NO.	PROJECT NO.	SHEET NO.
3-01-0031-012-2014	036016.07	2



WIND ROSE

SOURCE: U.S. WEATHER BUREAU, CLIMATOGRAPHY OF THE UNITED STATES
STATION NO.: NO. 82-1 FOR BATES FIELD, MOBILE, ALABAMA
LOCATION: 2 MILES NORTHWEST: CITY OF FOLEY, ALABAMA
PERCENTAGE OF WIND COVERAGE TO 10 KNOTS CROSSWIND COMPONENT — 94.7%
PERCENTAGE OF WIND COVERAGE TO 13 KNOTS CROSSWIND COMPONENT — 97.9%
PERCENTAGE OF WIND COVERAGE TO 16 KNOTS CROSSWIND COMPONENT — 99.9%
PERCENTAGE OF WIND COVERAGE TO 20 KNOTS CROSSWIND COMPONENT — 100.0%
PERIOD OF RECORD: 1962

LOCATION MAP
SCALE: N.T.S.

RUNWAY PROTECTION ZONE DIMENSIONS		
RWY END	EXISTING	FUTURE/ULTIMATE
18	1000'L X 500'IW X 700'OW	1000'L X 500'IW X 700'OW
36	1000'L X 500'IW X 700'OW	1000'L X 500'IW X 700'OW

RUNWAY SAFETY AREA DIMENSIONS		
RWY END	EXISTING	FUTURE/ULTIMATE
18	150' W X 300' BEYOND END OF RUNWAY	150' W X 300' BEYOND END OF RUNWAY
36	150' W X 300' BEYOND END OF RUNWAY	150' W X 300' BEYOND END OF RUNWAY

RUNWAY OBJECT FREE AREA DIMENSIONS		
RWY END	EXISTING	FUTURE/ULTIMATE
18	500' W X 300' BEYOND END OF RUNWAY	500' W X 300' BEYOND END OF RUNWAY
36	500' W X 300' BEYOND END OF RUNWAY	500' W X 300' BEYOND END OF RUNWAY

RUNWAY OBSTACLE FREE ZONE DIMENSIONS		
RWY END	EXISTING	FUTURE/ULTIMATE
18	250' W X 200' BEYOND END OF RUNWAY	250' W X 200' BEYOND END OF RUNWAY
36	250' W X 200' BEYOND END OF RUNWAY	250' W X 200' BEYOND END OF RUNWAY

CONSTRUCTION NOTICE REQUIREMENT
TO PROTECT OPERATIONAL SAFETY AND FUTURE DEVELOPMENT, ALL PROPOSED CONSTRUCTION ON THE AIRPORT MUST BE COORDINATED BY THE AIRPORT OWNER WITH THE FAA AIRPORTS DISTRICT OFFICE PRIOR TO CONSTRUCTION. FAA'S REVIEW TAKES APPROXIMATELY 60 DAYS.

BUILDING DATA		
NO.	STRUCTURE	ELEVATION
B1	ALUMINUM HANGAR	69.64'
B2	T. HANGAR	69.65'
B3	T. HANGAR	69.83'
B4	PUMP HOUSE	71.35'
B5	TERMINAL & HANGAR	72.09'
B6	STORAGE BUILDING	70.00'
B7	T. HANGAR	63.00'

VIOLATIONS TO FAR PART 77 SURFACES				
	DESCRIPTION	ELEVATION	VIOLATION	PROPOSED DISPOSITION
V1	FERN AVE.	76.46'	4.66'	DISPLACE RWY 36 THRESHOLD 125'
V2	FERN AVE.	73.19'	1.28'	

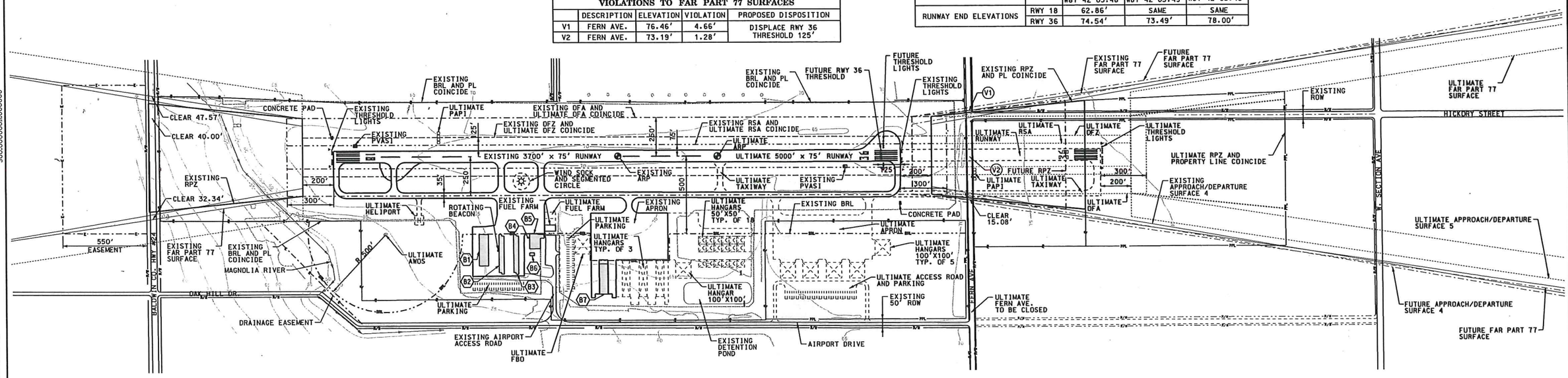
AIRPORT DATA				
		EXISTING	FUTURE	ULTIMATE
AIRPORT REFERENCE POINT COORDINATES (NAD 83 WEST)		N30°25'39.64" W87°42'03.46"	SAME	N30°25'33.20" W87°42'03.47"
MEAN MAX. TEMP. HOTTEST MONTH		91.2°F	SAME	SAME
AIRPORT ELEVATION		74.54'	73.49'	78.00'
NAVIGATIONAL AIDS		NDB, GPS	SAME	SAME

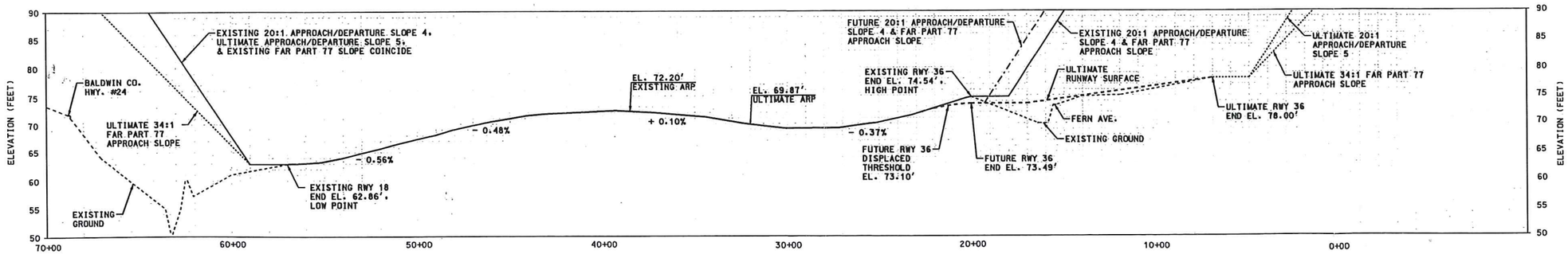
RUNWAY DATA 1836				
		EXISTING	FUTURE	ULTIMATE
AIRPORT REFERENCE CODE		B-II	SAME	SAME
CRITICAL AIRCRAFT		BEECH SUPER KING AIR B200	SAME	CITATION III
APPROACH VISIBILITY MINIMUMS		720' & 1 MI.	SAME	400' & 1 MI.
RUNWAY LENGTH		3,700'	SAME	5,000'
RUNWAY WIDTH		75'	SAME	SAME
APPROACH SLOPE		20:1/20:1	SAME	SAME
APPROACH TYPE		GPS, NDB-18 NON-PRECISION	SAME	SAME
MARKINGS		NON-PRECISION	SAME	SAME
LIGHTING		MIRL, MITL	SAME	SAME
APPROACH AIDS		PVASI	PAPI	PAPI/REIL
% WIND COVERAGE (10 KNOTS)		94.7%	SAME	SAME
% WIND COVERAGE (13 KNOTS)		97.9%	SAME	SAME
% WIND COVERAGE (16 KNOTS)		99.9%	SAME	SAME
% WIND COVERAGE (20 KNOTS)		100.0%	SAME	SAME
TRUE RUNWAY BEARING		N00°02'59"E	SAME	SAME
EFFECTIVE GRADIENT		0.32%	0.29%	0.30%
PAVEMENT CONSTRUCTION		ASPHALT	SAME	SAME
PAVEMENT STRENGTH		28,000 LBS.	SAME	60,000 LBS.
RUNWAY END COORDINATES (NAD 83 WEST)	RWY 18	N30°25'57.94" W87°42'03.45"	SAME	SAME
	RWY 36	N30°25'21.33" W87°42'03.48"	N30°25'22.56" W87°42'03.49"	N30°25'08.46" W87°42'03.49"
RUNWAY END ELEVATIONS	RWY 18	62.86'	SAME	SAME
	RWY 36	74.54'	73.49'	78.00'

LEGEND		
	EXISTING	ULTIMATE
GRADE CONTOURS	70	NOT SHOWN
AIRPORT PROPERTY LINE		PPL
EASEMENT		SAME
BUILDING RESTRICTION LINE (BRL)	BRL	SAME
FENCE LINE		SAME
THRESHOLD LIGHTS		
REIL		
PVASI		N/A
PAPI	N/A	
BUILDING		
PAVEMENT		
PECAN TREE		SAME
WOODS		SAME

EXISTING DECLARED DISTANCE TABLE				
	TORA	TODA	ASDA	LDA
RWY 18	3700'	3700'	3700'	3700'
RWY 36	3700'	3700'	3700'	3700'

FUTURE DECLARED DISTANCE TABLE				
	TORA	TODA	ASDA	LDA
RWY 18	3575'	3575'	3700'	3700'
RWY 36	3700'	3700'	3700'	3575'





RUNWAY 18-36 PROFILE

SCALE: HORIZ.: 1"=300'
VERT.: 1"=10'

SPONSOR APPROVAL

NO.	DATE	DESCRIPTION	BY
1	11/14	MODIFIED FOR PROJECT 036016.07	B.R.O.

REVISIONS

DESIGNED: M.J.C. CHECKED: B.R.O.
DETAILED: J.R.C. CHECKED: G.B.M.
SCALE: AS NOTED DATE: 01/04/13

VOLKERT

FOLEY MUNICIPAL AIRPORT
FOLEY, ALABAMA

AIRPORT LAYOUT PLAN

AIRPORT DRAINAGE STUDY

PROJECT NO. 036016.10
SHEET NO.

A.I.P. NO.	PROJECT NO.	SHEET NO.
3-01-0031-012-2014	036016.07	

GRAPHIC SCALE
50 0 50 100 200
(IN FEET)

MATCH LINE

EXISTING TAXIWAY

EXISTING APRON

EXISTING DETENTION POND

SEE ENLARGED PLAN

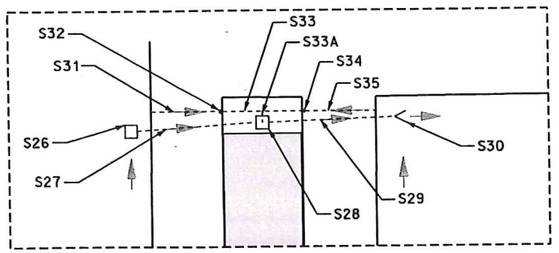
EXISTING HANGAR

HICKORY ST.

FERN AVE.

AIRPORT DRIVE

S16 S17 S18 S19 S20 S21 S22 S23 S24 S25 S36 S37 S38 S57



ENLARGED PLAN

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

DESIGNED: G.B.M. CHECKED: H.Z.E.
DETAILED: J.R.C. CHECKED: G.B.M.
SCALE: AS NOTED DATE: 11/00/14

VOLKERT

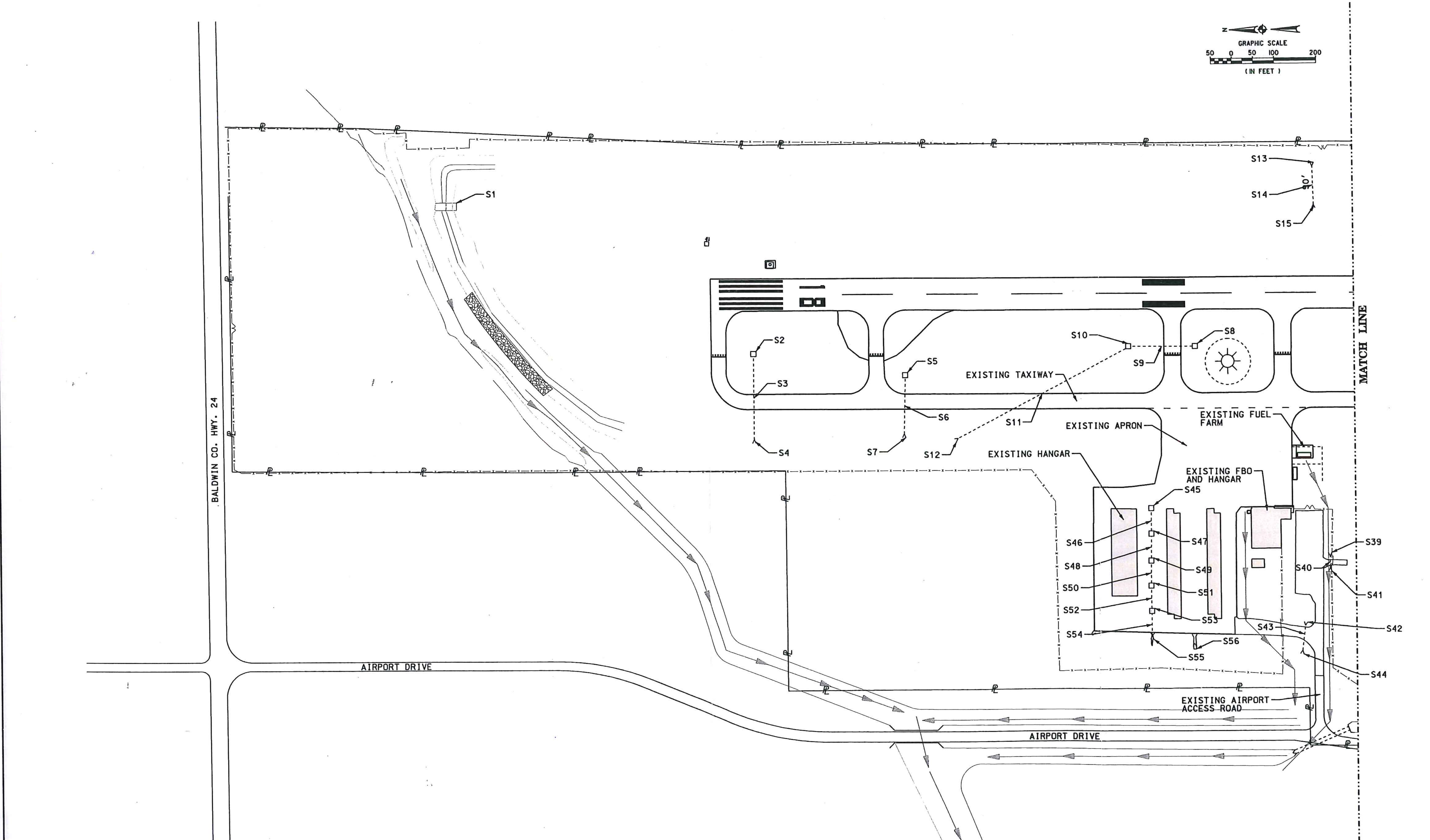
FOLEY MUNICIPAL AIRPORT
FOLEY, ALABAMA

PROJECT LAYOUT
SHEET 2 OF 2

AIRPORT DRAINAGE STUDY

PROJECT NO. 036016.07
SHEET NO.

A.I.P. NO.	PROJECT NO.	SHEET NO.
3-01-0031-012-2014	036016.07	



NO.	DATE	DESCRIPTION	BY
		REVISIONS	

DESIGNED: G.B.M.	CHECKED: H.Z.E.
DETAILED: J.R.C.	CHECKED: G.B.M.
SCALE: AS NOTED	DATE: 11/00/14

VOLKERT

FOLEY MUNICIPAL AIRPORT
FOLEY, ALABAMA

PROJECT LAYOUT
SHEET 1 OF 2

AIRPORT DRAINAGE STUDY

PROJECT NO. 036016.07
SHEET NO.