

APPLICATION 1719

MANAGEMENT AND STORAGE OF SURFACE WATERS INDIVIDUAL APPLICATION ASSIGNMENT SHEET

Reviewer: ABOODI JOHNSON

Office: ORLANDO

Date Received: $\frac{11/17/97}{400}$ Date Processed: $\frac{11/18/97}{4000}$
40-069-0196AMZ-ERP Application Number: -4-069-0326AM5-ERP
Related Application Number: 4-069-0326AM2-ERP
Owner: LENNAR ACTIVE ADULT COMMUNITIES
Applicant: LENNAR ACTIVE ADULT COMMUNITIES
Consultant/Engineer: FARNER, BARLEY AND ASSOCIATES, INC.
Project Name: SUTHERLAND AT KINGS RIDGE
THE FOLLOWING INFORMATION IS NEEDED TO ADMINISTRATIVELY COMPLETE THIS APPLICATION:
Signatures
Authorization from Owner for Agent
Individual/Firm Preparing Specifications
Name in which Permit is to be Issued
Entity Responsible for Maintenance Statement
Bound Reports (No. Received: 5)
Plans (No. Received: 5)
Calculations (No. Received: 5)
Notice of Receipt of Application
Adequate Map Coordinates
Fee: 1000.00 Receipt Number: 21654
Comments:
Application is adminstratively complete? YES SA
RAI must be mailed by: 12/15/97 Regulatory Meeting: 3/10/98



MOV 17 1997 4-06 9-0326AM5-ERP ORLANDO SJR WIND

VIA CERTIFIED MAIL RETURN RECEIPT NO. P 178 130 863

November 14, 1997

Mr. Alex Aboodi ST. JOHNS RIVER WATER MANAGEMENT DISTRICT 618 E. South Street Orlando, Florida 32801

RE: <u>SUTHERLAND AT KINGS RIDGE</u> (FBA #941216.058)

Dear Alex:

Enclosed please find the following with regards to the above-referenced project:

- 1. Original and five (5) copies of the ERP stormwater permit application.
- 2. Five sets of construction drawings (signed and sealed).
- 3. Five (5) sets of Stormwater Calculations (signed and sealed).
- 4. Five (5) Notice and Receipt Forms.
- 5. Check in the amount of \$1,000.00.

Mr. Alex Aboodi Page Two November 14, 1997

This application is for a modification of an existing permit, therefore the Declarations, Covenants and Restrictions have already been submitted and are on file. Should you have any questions with regards to this matter, please feel free to contact our office.

Sincerely,

FARNER, BARLEY & ASSOCIATES, INC.

Duane K. Booth, P.E. Project Engineer

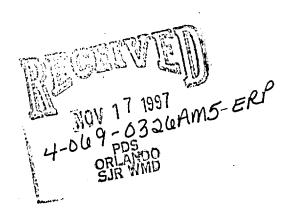
DKB/am

Enclosures

cc: Mr. Rob Ahrens, Lennar Homes, Inc. (w/out encl.)

VIIVIENSIIV VICINITY MAP Haraman Z SITHILFLAND SCALE IN FEET 1" = 2000 2000

SUTHERLAND @ KINGS RIDGE STORMWATER CALCULATIONS



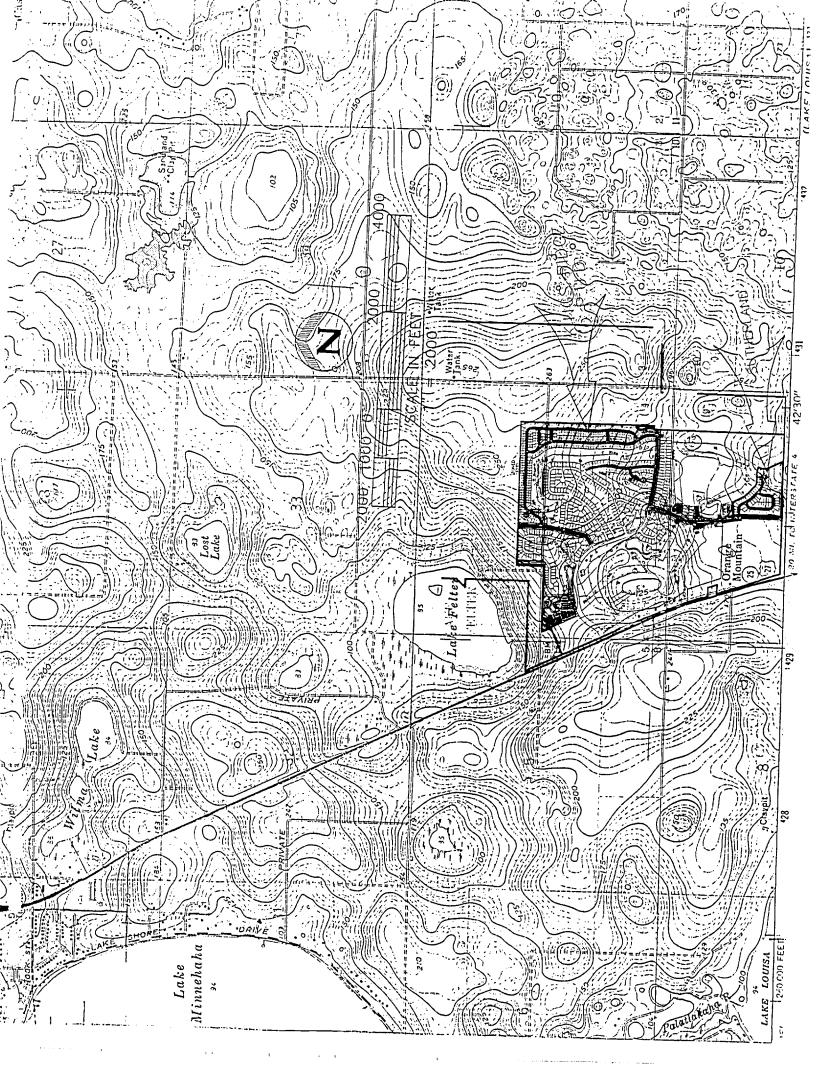
Farner, Barley & Associates, Inc. 350 North Sinclair Avenue Tavares, Florida 32778

By:

Duane K. Booth, P.E.

NOV 7 # 1997

Date:



VIIVIERSIN TAKE VShior SUTHERLAND SCALE IN FEET 1'' = 2000'

SUTHERLAND @ KINGS RIDGE PROJECT SUMMARY

Sutherland consists of 62 lots, approximately 2,263 linear feet of road with the associated stormwater collection and conveyance system. This project lies within the Kings Ridge Planned Unit Development for which a master stormwater plan has been previously permitted and constructed as part of Kings Ridge Phase IV to which a St. Johns individual permit was issued. Permit No. 4-069-0326M-ERP. The developed site condition summary shows that the actual curve number to date including this project is lower than the curve numbers assumed for build-out within these stormwater calculations permitted under the above referenced project.

SUTHERLAND @ KINGS RIDGE 62 LOTS DEVELOPED SITE CONDITION

Project Area

= 16.51 Ac.

Impervious Area

4.79 Ac. (28.98%)

CN'

= 28.98% x 98 (Impervious)

= 71.02% x 39 (Grass Good Condition 'A' Soils)

Weighted CN

56

Basin CN

26.67% x 98 (Impervious)

= 73.33% x 39 (Pervious)

= 55 Basin CN 75% Complete

Project within Previously Permitted Basin

3-D

BASIN SUMMARY

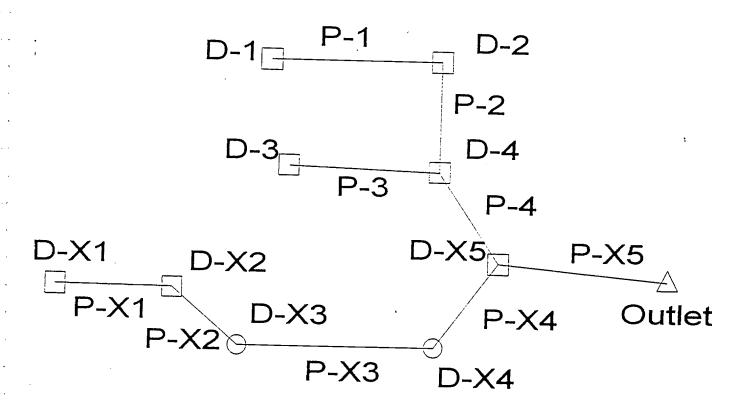
BASIN	AREA (Ac)	CN (Permitted)	CN (Actual) including this page	BASIN STATUS
3-D	21.21	79	55	75% Complete

STORM SEWER TABULATIONS

Structures D-x1 through D-x5 are part of Project previously calculated (Danbury Mill Boulevard Extension).

Structures D-x1 through D-x14 are part of pond reach as previously calculated. See Kings Ridge Phase IV Storm Calcualtions in back of book.

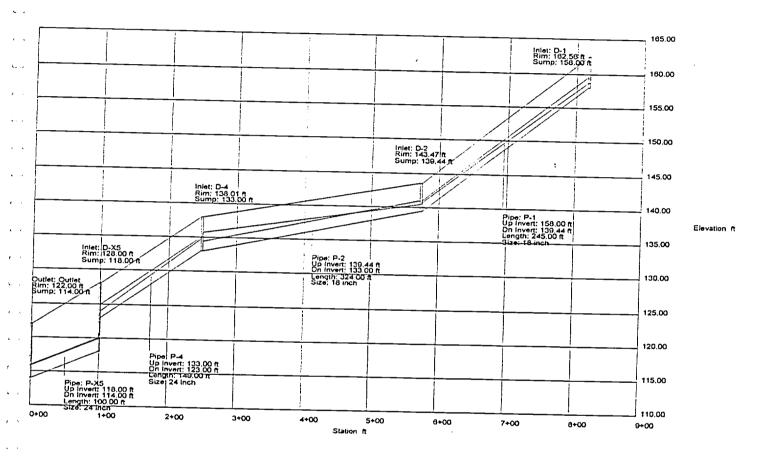
Structures D-1 through D-4 and D-6 through D-7 can be found on the following pages.

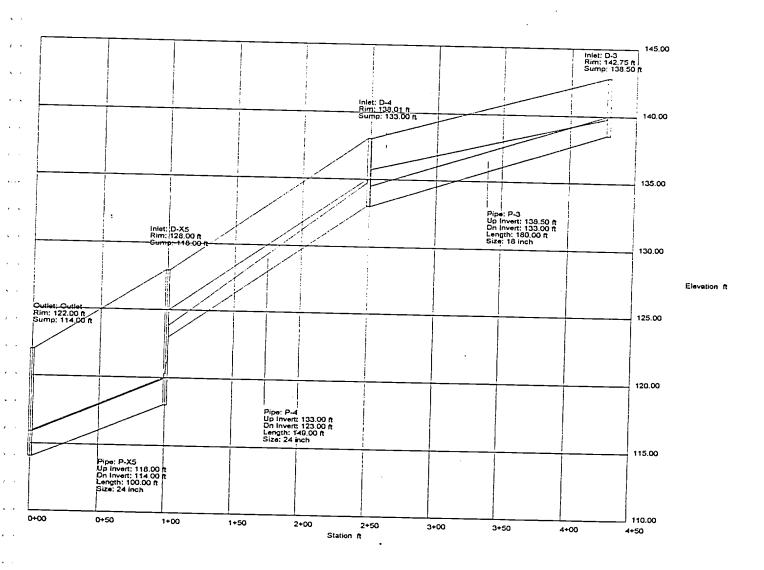


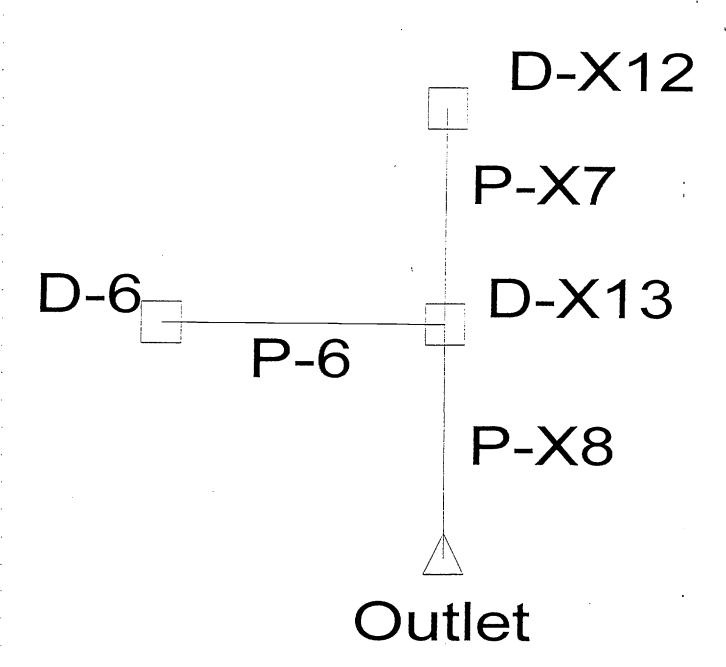
Inlets D-x1 - D-x5 are existing storm conveyance system for Danbury NOTE: Mill Boulevard.

DOT Report

Pipe	-Node- Upstream Downstream	Inlet Area (acres)	Inlet CA (acres)	Total CA (acres)	-Ground- Upstream Downstream (ft)	-HGL- Upstream Downstream (ft)	-Slope- Energy Constructed (ft/ft)	-Section- Discharge Capacity (cfs)	-Section- Shape Size	Length (ft)	Average Velocity (ft/s)	Description
P-3	D-3	2.79	1.36	1.36	142.75	139.72	0.023219	10.04	Circular	180.00	6,10	
}	D-4				138.01	135.70	0.030556	18.36	18 inch			1
P-1	D-1	0.73	0.36	0.36	162.56	158.62	0.074008	2.67	Circular	245.00	2.79	·
}	D-2				143.47	140.68	0.075755	28.91	18 inch			1
P-2	D-2	1.12	0.54	0.90	143.47	140.42	0.015254	6.41	Circular	324.00	4.44	}
-	D-4				138.01	135.70	0.019877	14.81	18 inch			
P-4	D-4	2.59	1.21	3.48	138.01	134.74	0.047167	24.05	Circular	149.00	13.02	1
[D-X5				128.00	123.89	0.067114	58.60	24 inch			į
P-X1	D-X1	1.27	0.71	0.71	150.44	145.32	0.002897	5.24	Circular	38.00	3.93	{
1	D-X2				150.44	145.44	0.011579	11.30	18 inch			1
P-X2	D-X2	0.81	0.49	1.20	150.44	145.15	0.027779	8.82	Circular	43.00	8.70	į
	D-X3	ļ			148.75	142.53	0.050000	23.49	18 inch	ļ	ļ	ļ
P-X3	D-X3	N/A	N/A	1.20	148.75	142.91	0.064253	· 8.81	Circular	239.00	9.51	1
	D-X4	1	<u> </u>		131.75	125.01	0.072594	60.95	24 inch	ļ		į
P-X4	D-X4	N/A	N/A	1.20	131.75	125.55	0.032667	8.72	Circular	130.00	3.99	l
	D-X5	}	· .		128.00	121.61	0.050000	50.58	24 inch	ĺ		{
P-X5	D-X5	0.88	0.27	4.95	128.00	119.91	0.040000	34.06	Circular	100.00	11.01	l
	Outlet	}			122.00	115.91	0.040000	45.24	24 inch			







NOTE: D-X12 - Outlet is exisitng.

Project Title: wellington c:\haestad\stmc\941216d.stm 10/22/97 04:17:07 PM

FARNER BARLEY & ASSOC.

Project Engineer: FARNER BARLEY & ASSOC.

StormCAD v1.0

Haestad Methods, Inc. 37 Brookside Road Waterbury, CT 06708 (203) 755-1666

Page 1 of 1

DOT Report

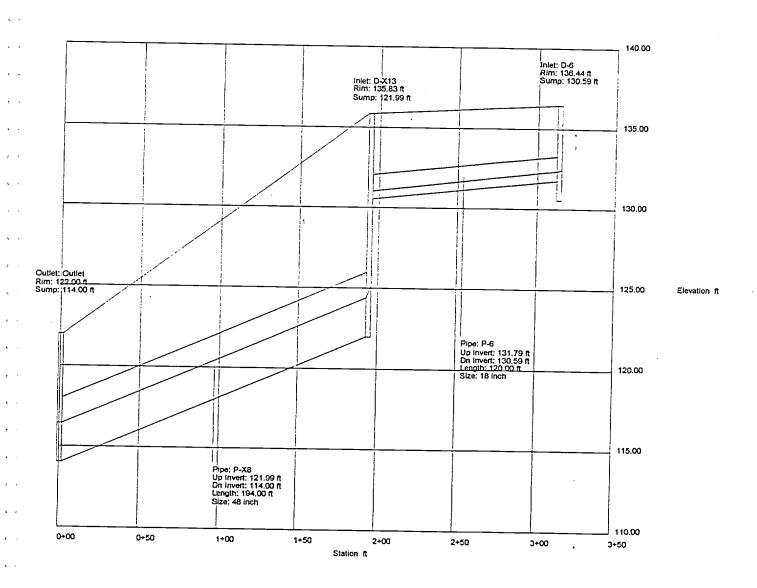
Pipe	-Node- Upstream Downstream	Inlet Area (acres)	Inlet CA (acres)	Total CA (acres)	-Ground- Upstream Downstream (ft)	-HGL- Upstream Downstream (ft)	-Slope- Energy Constructed (ft/ft)	-Section- Discharge Capacity (cfs)	-Section- Shape Size	Length (ft)	Average Velocity (ft/s)	Description
P-6	D-6	0.54	0.31	0.31	136.44	132.36	0.009648	2.25	Circular	120.00	4.21	
	D-X13				135.83	131.06	0.010000	10.50	18 inch			
P-X7	D-X12	27.98	8.28	8.28	136.00	130.35	0.038834	60.94	Circular	146.00	6.82	j
1	D-X13				135.83	125.15	0.041164	291.42	48 inch			Ĭ
P-X8	D-X13	0.89	0.39	8.98	135.83	124.43	0.041186	65.36	Circular	194.00	8.14	ļ
	Outlet				122.00	116.44	0.041186	291.50	48 inch		_	

Project Title: wellington c:\haestad\stmc\941216d.stm 10/22/97 04:16:19 PM

Project Engineer: FARNER BARLEY & ASSOC. StormCAD v1.0 Page 1 of 1

FARNER BARLEY & ASSOC.

Haestad Methods, Inc. 37 Brookside Road Waterbury, CT 06708 (203) 755-1666



INLET SPREAD CALCULATIONS

```
PAVEMENT DRAINAGE PROGRAM - HEC-12
Licensed to: Farner Barley & Assoc Inc., Tavares, PL 32778
Project : SUTHERLAND
Sta 14+49
                            INPUT
Intens. = 7.33 C1=0.49 A1= 0.73 Qadd = 0.0 Slope1= 0.0300 Gutter= 0.01 Area =12.00
CB ID = D1 C2=0.00 A2= 0.00 Orunoff= 2.6 Slope2= 0.0200 a = 0.50 Perim = 14.00
Grt P-1-7/8 C3=0.00 A3= 0.00 Grade = 0.0306 Slope3= 0.0200 W = 3.00 Length= 4.00
.....
                             OUTPUT
'Flowby= 0.0 Ototal= 2.6 Oint= 2.6 Flowby dn= 0.1 Depth=0.14 Spread= 7.00 Veloc= 3.24
!Sta 16+95
                             INPUT
!Intens. = 7.33 C1=0.48 A1= 1.12 Qadd = 0.0 Slope1= 0.0300 Gutter= 0.01 Area =12.00;
CB ID = D2 C2=0.00 A2= 0.00 Qrunoff= 4.0 Slope2= 0.0200 a = 0.50 Perin =14.00;
Grt P-1-7/8 C3=0.00 A3= 0.00 Grade = 0.0750 Slope3= 0.0200 W = 3.00 Length= 4.00
Plowby= 0.1 Qtotal= 4.0 Qint= 3.9 Plowby dn= 0.1 Depth=0.14 Spread= 6.90 Veloc= 5.10
!Sta 19+37
                   INPUT
Intens. = 7.33 C1=0.57 A1= 0.54 Qadd = 0.0 Slope1= 0.0300 Gutter= 0.01 Area =12.00
CB ID = D6 C2=0.00 A2= 0.00 Orunoff= 2.3 Slope2= 0.0200 a = 0.50 Perin =14.00
Grt P-1-7/8 C3=0.00 A3= 0.00 Grade = 0.0050 Slope3= 0.0200 W = 3.00 Length= 4.00
OUTPUT
Flowby= 0.1 Qtotal= 2.4 Qint= 2.3 Flowby dn= 0.1 Depth=0.19 Spread= 9.40 Veloc= 1.62
· _____
!Sta 20+57
!Intens.= 7.33 C1=0.44 A1= 0.89 Qadd = 0.0 Slope1= 0.0300 Gutter= 0.01 Area =12.00
CB ID = D13 C2=0.00 A2= 0.00 Qrunoff= 2.9 Slope2= 0.0200 a = 0.50 Perim =14.00
OUTPUT
!Flowby= 0.1 Qtotal= 3.0 Qint= 3.0 Flowby dn= 0.0 Depth=0.20 Spread= 10.03 Veloc= 0.00
Runoff computed by Rational Method Manning's n Gutter=0.016 Manning's n Pavement=0.022;
Clogging Factors in Sag Location:
|----- Curb Opening= 1.25 Grate= 1.25 Slotted Drain= 1.25 Comb-Curb= 1.25 Comb-Grate= 1.25
Clogging Pactors on Continuous Grade:
----- Curb Opening= 1.25 Grate= 1.25 Slotted Drain= 1.25 Comb-Curb= 1.25 Comb-Grate= 1.25
                                     Checked by:
Prepared by:
             Date: 10/23/97 Time: 11:22:04
Pavement Drainage Program (C), 1991 Copyright by SMF Engineering Corporation, Phoenix, AZ;
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	PAVEMENT DRAINAGE PROGRAM - HEC-12 Page 1
•	Licensed to: Farner Barley & Assoc Inc., Tavares, FL 32778
r ·	Project : SUTHERLAND
	Sta 16+80 INPUT
	Intens. = 4.20 C1=0.49 A1= 2.79 Qadd = 0.0 Slope1= 0.0300 Gutter= 0.01 Area =12.00
	CB ID = D3 C2=0.00 A2= 0.00 Qrunoff= 5.8 Slope2= 0.0200 a = 0.50 Perin =14.00
S - 4	Grt P-1-7/8 C3=0.00 A3= 0.00 Grade = 0.0485 Slope3= 0.0200 W = 6.00 Length= 4.00
7 3	OUTPUT
•	Flowby= 0.0 Qtotal= 5.8 Qint= 5.8 Flowby dn= 0.0 Depth=0.17 Spread= 8.60 Veloc= 4.70
, ,	Sta 18+62 INPUT
	Intens. = 4.30 C1=0.47 A1= 2.59 Qadd = 0.0 Slope1= 0.0300 Gutter= 0.01 Area = 12.00
1	CB ID = D4 C2=0.00 A2= 0.00 Qrunoff= 5.3 Slope2= 0.0200 a = 0.50 Perim =14.00
, ,	Grt P-1-7/8 C3=0.00 A3= 0.00 Grade = 0.0000 Slope3= 0.0200 W = 4.00 Length= 4.00
	OUTPUT
1	Flowby= 0.0 Qtotal= 5.3 Qint= 5.3 Plowby dn= 0.0 Depth=0.29 Spread= 14.57 Veloc= 0.00
F	
	CRITERIA : Runoff computed by Rational Method Manning's n Gutter=0.016 Manning's n Pavement=0.022;
	Runoff computed by Rational Method Manning's n Gutter=0.016 Manning's n Pavement=0.022; Clogging Factors in Sag Location:
, .	Curb Opening= 1.25 Grate= 1.25 Slotted Drain= 1.25 Comb-Curb= 1.25 Comb-Grate= 1.25
	Clogging Factors on Continuous Grade:
, , , , , , , , , , , , , , , , , , ,	Curb Opening= 1.25 Grate= 1.25 Slotted Drain= 1.25 Comb-Curb= 1.25 Comb-Grate= 1.25
X	Prepared by: Date:10/23/97 Time:14:05:13 Checked by: Date:
N	Pavement Drainage Program (C), 1991 Copyright by SMF Engineering Corporation, Phoenix, AZ
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V .

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400	FOR AGENCY USE ONLY 40-069-0196AM2, -ER Application #SJR Application #SJR Application #
	Application # SJR Application # VG9 - V52 6 AM 5 - EC- Application Received 17-17-97
	Application Received Date Application Received
	sed Project Long " Fee Receipt # \(\lambda \)
	Date Received Project Use Codes
	Assigned ReviewersReviewer#'s
	SECTION A
Are a	any of the activities described in this application proposed to occur in, on, or over wetlands or other surface waters?yesX_no
A.	Type of Environmental Resource Permit Requested (check at least one)
	Noticed General - include information requested in Section B.
	_ Standard General (Single Family Dwelling) - include information requested in Sections C and D.
<u>X_</u>	Standard General (all other projects) - include information requested in Sections C and E.
	_ Individual (Single Family Dwelling) - include information requested in Sections C and D.
	Individual (all other projects) - include information requested in Sections C and E. Conceptual - include information requested in Sections C and E.
	Mitigation Bank Permit (construction) - include information requested in Sections C and F.
	(If the proposed mitigation bank involves the construction of a surface water management system requiring
	another permit defined above, check the appropriate box and submit the information requested by the
	applicable section.)
	Mitigation Bank (conceptual) - include information requested in Sections C and F Standard General Stormwater - include information requested in Sections C and H
	Individual Stormwater - include information requested in Sections C and H Individual Stormwater - include information requested in Sections C and H
B.	Type of activity for which you are applying (check at least one)
	(onstruction and operation of a new system including dredging or filling in, on or over wetlands and other
	surface waters.)
	Alteration and operation of an existing system which was not previously permitted by a WMD or DEP.
<u> </u>	Modifiction of a system previously permitted by a WMD or DEP. Provide previous permit numbers:
	Alteration and operation of a system Extension of permit duration
	Abandonment of a system X_ Construction and operation of additional phases of Removal of a system a system
C.	Are you requesting authorization to use State Owned Submerged Lands?yesX_ no
	(If yes, include the information requested in Section G.)
D.	For activities in, on or over wetlands or other surface waters, check type of federal dredge and fill permit requested:
	Individual Programmatic General
	General Nationwide
E.	Are you claiming to qualify for an exemption? yesX no
	If yes provide rule number if known
	FORM NUMBER 40C-4.900(1) Pg 1 of 4
	22 _{NOV 1} 7 1997
	114.1

PDS ORLANDO SJR WMD

OWNER(S) OF LAND	ENTITY TO RECEIVE PERMIT (IF OTHER THAN OWNER)
NAME	NAME Same
ROBERT AHRENS	
ADDRESS 7600 NOB HILL	ADDRESS
CITY, STATE, ZIP TAMARAC, FLORIDA 33321	CITY, STATE, ZIP
COMPANY AND TITLE LENNAR ACTIVE ADULT COMMUNITIES	COMPANY AND TITLE
TELEPHONE (407) 682-9291 FAX (352) 343-8495	TELEPHONE () FAX ()
AGENT AUTHORIZED TO SECURE PERMIT (IF AN AGENT IS USED)	CONSULTANT (IF DIFFERENT FROM AGENT)
NAME	NAME Duane K. Booth, P.E.
COMPANY AND TITLE	COMPANY AND TITLE Farner, Barley & Associates, Inc.
ADDRESS	ADDRESS 350 North Sinclair Avenue
CITY, STATE, ZIP	CITY, STATE, ZIP Tavares, Florida 32778
TELEPHONE () FAX ()	TELEPHONE (352) 343-8481 FAX (352) 343-8495
Name of project, including phase if applicable:S Is this application for part of a multi-phase project? Total applicant-owned area contiguous to the project Total project area for which a permit is sought Impervious area for which a permit is sought What is the total area (metric equivalent for federallyN/A acres so If a docking facility, the number of proposed new slip Project location (use additional sheets, if needed) County(ies) Lake Section(s) 9 Township(s) Section(s) 9 Township(s)	
Land Grant name, if applicableN/A	s) Range(s)
Tax Parcel Identification Number	
Street address, road, or other location KINGS RID	
City, Zip Code if applicableCLERMON	I, FLORIDA

Describe, in (general terms, the p	proposed project, system or activity.	
Cons	struction of roads,	, utilities and drainage facilities suffici	ent for a 62 unit single family development.
If there have location(s), a	been any pre-applic nd names of key sta	cation meetings, including at the project s aff and project representatives.	site, with regulatory staff, please list the date(s),
N/A			
Please identil location and a	ify by number any M any related enforcer	ISSW/Wetland Resource/ERP/ACOE per ment actions.	rmits pending, issued or denied for projects at the
Agency	Date	No.\Type of Application	Action Taken(Pending/Issued/Denied)
SJRWMD	<u>8/12/96</u>	ERP INDIVIDUAL	_ISSUED
		4-069-0326M2-ERP	
			
<u>waters that n</u> provide the n	need a federal dred names ,addresses a	<u>dge and fill permit and/or authorization</u> and zip codes of property owners whos	occur in, on or over wetlands or other surface on to use state owned submerged lands. Please se property directly adjoins the project (excluding
applicant). Pla necessary.	ease attach a plan	view showing the owner's names and ac	djoining property lines. Attach additional sheets if
1		2	·
		_	
3		4	

By signing and submitting this application form, I am applying, or I am applying on bould for the applicant, for the permit and any proprietary authorizations identified above, according to the supporting data and other incidental information filed with this application. I am familier with the information contained in this application, and represent that such information is true complete and accurate. I understand this is an application and not a permit, and work prior to approval is a violation. I understand that this application and any permit issued or proprietary authorization issued pursuant thereto, does not relieve me of any obligation for obtaining any other required federal, state, water management district or local permit prior to commencement of construction. I agree, or I agree on behalf of my corporation, to operate and maintain the permitted system unless the permitting agency authorizes transfer of the permit to a responsible operation entity. I understand that knowingly making any false statement or representation in this application is a violation of Section 373.430, F.S., and 18 U.S.C. Section 1001.

ROBERT AHRENS		
Typed/Printed Name of Applicant (If no Agent is used) or	Agent (If one is so authori	rized below)
		1-2/60
Signature of Applicant/Agent	m	
		2 4.0
VICE-PRESIDENT		
(Corporate Title if applicable)		
AN AGENT MAY SIGN ABOVE ONLY IF, THE APPLICA	NT COMPLETES THE F	OLLOWING:
I hereby designate and authorize the agent listed above to the processing of this application for the permit and/or pro supplemental information in support of the application. In me, or my corporation, to perform any requirement which i above. I understand that knowingly making any false state 373.430, F.S., and 18 U.S.C. Section 1001.	prietary authorization indi addition, I designate and may be necessary to proc	licated above; and to furnish, on reque I authorize the above-listed agent to bit cure the permit or authorization indicate
Typed/Printed Name of Applicant	Signature of Appli	licant Date
(Corporate Title if applicable)		
Please note: The applicant's original signature (not a	copy) is required above	<u>.</u>
PERSON AUTHORIZING ACCESS TO THE PROPERTY	MUST COMPLETE THE	E FOLLOWING:
I either own the property described in this application or I hafter receiving prior notification, to any site visit on the proper Protection, the Water Management District and the U.S. And the proposed project specified in this application. I authorizes may be necessary to make such review and inspection, or personnel to monitor permitted work if a permit is granter ROBERT AHRENS	erty by agents or personne my Corps of Engineers ne ze these agents or person Further, Lagree toprovide	el from the Department of Environment ecessary for the review and inspection nnel to enter the property as many time
Typed/Printed Name	Signatura	June 1904/1
Typoun filmou frame	Signature	Date
VICE-PRESIDENT		
Corporate Title if applicable)		

FORM NUMBER 40C-4.900(1) Pg 4 of 4

GIS/ADMINISTRATIVE MSSW APPLICATION TRACKING SHEET 40-069-0196AM2-ERP Application Number: 4-069-0326AM5-ERP Reviewer(s): ABOODI JOHNSON Date Received: <u>11/17/97</u> Applicant: <u>LENNAR ACTIVE ADULT COMMUNITIES</u> Project Name: <u>SUTHERLAND AT KINGS RIDGE</u> MAPPING INFORMATION: Acceptable as Received: YES Hydrologic Basin: OKLAWAHA BASIN MAP NUMBER QUAD 41 CLERMONT-E Date Application Entered: _// Date Application Mapped: 11/25/97 Initials: AR Request for Additional Information must be mailed by: 12/15/97Regulatory Meeting Date if determined technically/administratively Complete: _3/10/98 INFORMATION PROVIDED BY REVIEWING STAFF: Date 1st RAI sent: _____ Date 1st Resp. received: Date 2nd RAI sent: _____ Date 2nd Resp. received: Date 3rd RAI sent: _____ Date 3rd Resp. received: Date 4th RAI sent: _ _____ Date 4th Resp. received: Date Application Complete: Schedule for _ Regulatory Meeting (Approval/Denial)

^{**} NOTE: PLEASE RETURN WITH THE TSR FOLDER.