



WERT INDUSTRIAL PARK.

Section 32; Township 21S; Range 26E
Minneola, Lake County, Florida

STORMWATER MANAGEMENT STUDY

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McA Project No. 16-010

May 2020

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WERT INDUSTRIAL PARK

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STORMWATER MANAGEMENT STUDY

PROJECT:

WERT INDUSTRIAL PARK

Section 32, Township 21, Range 26E; Minneola, Lake County, Florida
(McA Project# 16-010)

A. PROJECT INTRODUCTION

A1. GENERAL

The proposed Wert Industrial Park is a 13.22 +/- acre project located in Section 32 of Township 21S, Range 26E in the City of Minneola. The project site is bound by the Florida Turnpike and the City of Minneola Wastewater Treatment Facility (WWTF) to the north; unpaved Sullivan Road to the south; both a Sumter Electric Cooperative (SECO) and a Duke Energy transfer substation to the west and a vacant agricultural parcel to the east. Both substations and the eastern parcel are still in unincorporated Lake County, Florida. For the purposes of this report, the term "project site" refers to the Wert Industrial Park, Lake County Property Appraiser's Alternate Key Number #1065127 (Parcel # 32-21-26-000300001100).

The project site is zoned Industrial by the City of Minneola and has an underlying Future Land Use Designation of Industrial. Sullivan Road provides the primary access to the project site, but it is still an unpaved, County-maintained clay-based roadway. The project site will eventually be subdivided into three or more commercial/industrial lots after City infrastructure is extended to the area and becomes available for the Park. In the meantime, temporary drinking water supply and sewage disposal services are being provided by the City of Minneola for Phase One.

Phase One of the project site is currently being utilized as a 2.23 acre storage area and work base for IMS, LLC. IMS has an agreement with the land owner to develop the first phase of the project until the City infrastructure services are available and the Park can be fully developed and subdivided. Phase One on-site access for the IMS operations will be provided by a 50 ' foot wide road right-of-way / easement with a 20 ' foot wide paved roadway and an open drainage swale. The water retention area, drainage swales and drainage piping will be privately owned, operated and maintained by the land owner until Phases Two and Three are developed.

Except for the IMS operations, the rest of the project site is vacant and predominantly vegetated with native grasses and weeds. The project site is sand ridge uplands with no hydrologically sensitive areas. The peak elevation of the project site is located at the northwest property corner of the site adjacent to the WWTF at an elevation of about 220 feet NGVD. From the peak elevation, the rolling topography drops to a low elevation of 183 feet NGVD located at about the midpoint of the eastern property line. There are no flood plains on the project site.

A Paintball Facility was once operated on the project site in the past. The site was graded and sculpted to accommodate the playing fields. A rough-graded dry retention pond was constructed during the paintball earthwork operations at the location of the Water Retention Area (WRA) proposed by this permit application. There is no evidence of any storm water discharge from the project site since the berm was constructed on the eastern property line to create the makeshift retention pond.

The natural drainage divide across the project site creates a single on-site drainage basin labeled as Pre-Development Drainage Basin "A". There is also approximately 23.94+/- acres off-site drainage area to the west that flows across the adjacent SECO property and onto this project site. The overall drainage basin flows easterly across the vacant property to the east and eventually discharges into a dry, land-locked depressional area on the west side of the turnpike. There is no flood plain on the project site. The FEMA FIRM Map Panel #12069C-0580E, effective date 12-18-2012, lists the 100-yr flood stage of the nearest water body, Grassy Lake, at elevation 85.4 ft. NGVD.

The drainage basin is on the western edge of the Lake Apopka Hydrologic Basin, (LAHB), as defined by the District. The project site is subject to the LAHB additional treatment volume requirements to limit the post-development discharge of phosphorous and nitrogen to pre-development discharge rates. The on-site dry WRA has been sized to provide compliance with the LAHB requirements.

In the proposed Post-Development condition, the 23.94+/- acres of off-site drainage basin area will be intercepted and conveyed across the project site in a 24" by-pass line, piped under the WRA, and will be discharged to the vacant eastern property at the pre-development low point at pre-development rates. The WRA overflow structure will discharge into the off-site by-pass line. Due to the LAHB standards and the highly permeable on-site soils, the post-development discharge rates from the project site are projected to be substantially below pre-development rates.

The stormwater runoff from the entrance roadway and Phase One will sheet flow from the buildings and pavement into drainage inlets and will be piped to the dry WRA. The WRA has been sized to accommodate an estimated 75% ISR, (Impervious Surface Ratio), for the future commercial / industrial lots. No construction or the placement of any impervious surfaces for Phase Two or Three are proposed under this permit application. When the remainder of the project site is developed, additional grading and drainage plans must be developed and submitted to the District for a permit modification. The future plans must demonstrate compliance with the ISR design assumptions of this report including the grading and drainage details of how the storm water runoff will be conveyed to the dry WRA.

A2. SOILS

The on-site soils, listed in Table A2 below, were obtained from the Lake County SCS Soil Survey, Index sheet numbers 51-52. Table A2 includes the soil designation symbol, the slope of the soil, a brief description, the depth to the seasonal high ground water table, soil permeabilities and the Hydrological Soil Group classification.

Table A2.1 SCS Soil Survey Classification of the On-Site Soils						
Soil Series	Designation Symbol	Slope	Description	Depth to SHGWT	Permeability (in/hr.)	Hydrological Soil Group
Candler (Astatula)	AtD (16)	5%-12%	Very rapidly permeable, excessively drained soil	> 120"	> 20.0	A
Candler (Astatula)	AtF (17)	12-40%	Very rapidly permeable, excessively drained soil	> 120"	> 20.0	A
Lake	LaB (28)	0%-5%	Very rapidly permeable, excessively drained soil	> 120"	> 20.0	A
Lake	LaD (30)	5%-12%	Very rapidly permeable, excessively drained soil	> 120"	> 20.0	A

A3. SOIL INFILTRATION RATES AND PERMEABILITIES

The Lake County SCS Soils Survey estimates the permeability of Astatula series sands to be in excess of 20 in/hour. Cavin Geotechnical & Environmental, LLC investigated the project site by drilling auger borings within the proposed stormwater retention/detention areas, installing shallow piezometer in the auger holes, conducting field hydraulic conductivity tests using the piezometer and conducting a visual stratification of soil samples collected. All detailed information concerning the auger borings and hydraulic conductivity tests is presented in **Appendix "B"**.

A4. S.W.M. CRITERIA

The primary objectives of this report are to demonstrate that the stormwater management system for the project complies with the following criteria.

- The SJRWMD 40C-42 required water-quality treatment volume will be provided.
- The peak discharge volume for the Post Development condition will not exceed that of the Pre-Development condition for the Mean Annual 2.3yr-24hr storm event with 4.2" of rainfall;
- The peak discharge volume for the Post Development condition will not exceed that of the Pre-Development condition for the 10 years - 2-hour storm event, (Minneola LDR Sec. 114-302).
- The peak discharge volume for the Post Development condition will not exceed that of the Pre-Development condition for the 50 years - 24-hour storm event, (Minneola LDR Sec. 114-302);

B. PROJECT STATISTICS

B1. PROJECT DATA

1. PRE-DEVELOPMENT

	<u>ON-SITE</u>	<u>OFF-SITE</u>	<u>TOTALS</u>
BASIN "A"	13.22 ac	23.94 ac	37.16 ac
TOTALS	13.22 ac	23.94 ac	37.16 ac

Total On-Site Drainage Area	13.22 ac.
Total Off-Site Drainage Area	23.94 ac.
TOTAL PROJECT DRAINAGE AREA	37.16 ac.

2. POST-DEVELOPMENT

	<u>ON-SITE</u>	<u>OFF-SITE</u>	<u>TOTALS</u>
BASIN "A"	13.22 ac	23.94 ac (Bypass)	37.16 ac
TOTALS	13.22 ac	23.94 ac (Bypass)	37.16 ac

B2. PROPOSED IMPERVIOUS AREAS

An Impervious Areas Summary Table can be found on the following page (Table B2.1). The table summarizes the basin areas and estimated impervious area per each phase. A calculated, weighted Runoff Curve Number for each post-development basin is presented in the table. An example calculation of the composite CN is presented below.

$$\begin{aligned}CN_{post} &= (\% \text{ impervious}) (98) + (1 - \% \text{ imp.}) (39) \\CN_{post} &= (0.7504) (98) + (0.2496) (39) = 83.28 \\USE \ CN_{post} &= 83\end{aligned}$$

IMPERVIOUS AREAS SUMMARY TABLE

PRE AND POST-DEVELOPMENT

Table B2.1

DRAINAGE BASIN ID	BASIN AREA		IMPERVIOUS AREAS							TOTAL IMPERV. AREA			CN
	(ft ²)	(ac.)	EST. IMP. AREAS		Bldgs	Roadways		Pavement	Sidewalk	(ft ²)	(ac)	(%)	
			(sf)	(ac)	(sf)	Eq. Length	Width	(sf)	(sf)				
PRE-DEVELOPMENT													
Basin A	575,969	13.222	0	0.00				-	-	0	0.00	0.00%	49.00
Off Site(ByPass)	1,042,744	23.938	0	0.00				-	-	0	0.00	0.00%	49.00
	1,618,713	37.161	0	0.00						-	-	0.00%	49.00
POST-DEVELOPMENT													
Phase 1	97,305	2.234	72,979	1.68				-	-	72,979	1.68	75.00%	83.25
50' Ingrass Easement	38,519	0.884	28,889	0.66						28,889	0.66	75.00%	83.25
Retention Area	89,756	2.061	0	0.00						-	0.00	0.00%	39.00
Phase 2	69,135	1.587	51,851	1.19						51,851	1.19	75.00%	83.25
Phase 3	281,254	6.457	210,941	4.84						210,941	4.84	75.00%	83.25
SUB TOTAL	575,969	13.222	432,225	9.923						432,225	9.92	75.04%	83.28
Off Site (By Pass)	1042744	23.938	0	0.00				-	-	-	0.00	0.00%	39.00
TOTALS	1,618,713	37.161	432,225	9.923						432,225	9.92	75.04%	83.28

Note: Post-Development CN = $98(A_{imp}) + 39(1 - A_{imp})$
Post-Development CN = $98(0.7504) + 39(0.2496) = (83.28)$
= 83

Below is the calculation for the SJRWMD Water Quality Treatment volume. Based on **40C-42.026(1)(a)(2)**, the required SJRWMD treatment volume is the volume created from either 0.5" of runoff over the total basin area or 1.25" of runoff from the impervious area, whichever is greater, plus an additional 0.5" of runoff for an on-line system.

BASIN "A"

$$\begin{aligned}\text{Total Area} &= 575,969 \text{ ft}^2 = 13.222 \text{ ac.} \\ 75\% \text{ Impervious Area} &= 432,225 \text{ ft}^2 = 9.922 \text{ ac.} \\ \text{Pervious Area} &= 144,075 \text{ ft}^2 = 3.30 \text{ ac.}\end{aligned}$$

40C-42.026(1)(a)2., F.A.C.

Runoff Volume from 0.5 inch of Rainfall over the Total Area:

$$\begin{aligned}V_{0.5"} &= (0.5"/12) * (A_{\text{total}}) \\ V_{0.5"} &= (0.5"/12) * 575,969 \text{ ft}^2 \\ V_{0.5"} &= 23,999 \text{ ft}^3 = 0.55 \text{ ac-ft}\end{aligned}$$

40C-42.026(1)(a)2., F.A.C.

Runoff Volume from 1.25 inches of Rainfall over the Impervious Area:

$$\begin{aligned}V_{1.25"} &= (1.25"/12) * A_{\text{imp.}} \\ V_{1.25"} &= (1.25"/12) * 432,225 \text{ ft}^2 \\ V_{1.25"} &= 45,023 \text{ ft}^3 = 1.03 \text{ ac-ft}\end{aligned}$$

Total Required Treatment Volume:

40C-42.026(1)(a)2., F.A.C.

$$\begin{aligned}V_r &= [V_{0.5"} + V_{0.5"}] && \text{If, } V_{0.5"} > V_{1.25"} \\ V_r &= [V_{0.5"} + V_{1.25"}] && \text{If, } V_{1.25"} > V_{0.5"} \\ V_r &= 23,999 + 45,023 \rightarrow 69,022 \text{ ft}^3 = 1.58 \text{ ac-ft.}\end{aligned}$$

The City of Minneola stormwater retention requirements were determined using the SCS Runoff Curve Number Methodology. A summary table for the City of Minneola stormwater retention requirements is provided on the following page. An example calculation for the City of Minneola water quality treatment volume requirements is presented below.

Storm Events:

10yr - 2hr: 3.5 inches of rainfall
50yr - 24hr: 9.0 inches of rainfall

SCS Runoff Equation:

$$Q = (P - 0.2S)^2 / (P + 0.8S)$$

$$S = (1000 / CN) - 10$$

$$V = Q \times A$$

Runoff Volume from the MEAN ANNUAL (2.3yr-24hr) Storm Event:

(Pre-Development)

$$Q = [(4.2 \text{ in}) - 0.2(10.41 \text{ in})]^2 / [(4.2 \text{ in}) + 0.8(10.41)] = 0.36 \text{ in.}$$

$$V = (\{0.36 \text{ in.}\} / 12) \text{ ft.} \times (\{13.222 \text{ ac.}\} \times 43,560) \text{ ft}^2 = \mathbf{17,195 \text{ ft}^3 = 0.40 \text{ ac-ft}}$$

Runoff Volume from the MEAN ANNUAL (2.3yr-24hr) Storm Event:

(Post-Development – Basin "A")

$$Q = [(4.2 \text{ in}) - 0.2(2.01 \text{ in})]^2 / [(4.2 \text{ in}) + 0.8(2.01)] = 2.48 \text{ in.}$$

$$V = (\{2.48 \text{ in.}\} / 12) \text{ ft.} \times (13.222 \text{ ac.}) \times 43,560 \text{ ft}^2 = \mathbf{119,242 \text{ ft}^3 = 2.34 \text{ ac-ft}}$$

$$\text{Post-Pre-Volume} = 119,242 \text{ ft}^3 - 17,195 \text{ ft}^3 = 102,047 \text{ ft}^3 = \mathbf{2.34 \text{ ac-ft} \Leftarrow \text{CONTROLS}}$$

Runoff Volume from the 10yr - 2hr storm event: (Post Development – Basin "A")

$$Q = [(3.5 \text{ in}) - 0.2(2.01 \text{ in})]^2 / [(3.5 \text{ in}) + 0.8(2.01 \text{ in})] = 1.88 \text{ in.}$$

$$V = (\{1.88 \text{ in.}\} / 12) \text{ ft.} \times (\{13.222 \text{ ac.}\} \times 43,560) \text{ ft}^2 = \mathbf{90,215 \text{ ft}^3 = 2.07 \text{ ac-ft.}}$$

Runoff Volume from the 50yr - 24hr storm event: (Pre-Development)

$$Q = [(9.0 \text{ in}) - 0.2(10.41 \text{ in})]^2 / [(9.0 \text{ in}) + 0.8(10.41)] = 2.76 \text{ in.}$$

$$V = (\{2.76 \text{ in.}\} / 12) \text{ ft.} \times (\{13.222 \text{ ac.}\} \times 43,560) \text{ ft}^2 = \mathbf{132,597 \text{ ft}^3 = 3.04 \text{ ac-ft}}$$

Runoff Volume from the 50yr - 24hr storm event: (Post-Development – Basin "A")

$$Q = [(9.0 \text{ in}) - 0.2(2.01 \text{ in})]^2 / [(9.0 \text{ in}) + 0.8(2.01)] = 6.97 \text{ in.}$$

$$V = (\{6.97 \text{ in.}\} / 12) \text{ ft.} \times (13.222 \text{ ac.}) \times 43,560 \text{ ft}^2 = \mathbf{334,544 \text{ ft}^3 = 7.68 \text{ ac-ft}}$$

$$\text{Post-Pre-Volume} = 334,544 \text{ ft}^3 - 132,597 \text{ ft}^3 = \mathbf{201,948 \text{ ft}^3 = 4.64 \text{ ac-ft.} \Leftarrow \text{CONTROLS}}$$

LAHB-Pollution Abatement:

The Lake Apopka Hydrologic Basin retention volume for the project is calculated below:

$$\begin{aligned}\text{Total Area of the Project} &= 575,969 \text{ ft}^2 = 13.222 \text{ ac (On site)} \\ \text{Offsite Area (Bypass).} &= 1,042,744 \text{ ft}^2 = 23.938 \text{ ac (Bypass)} \\ \text{Total Area} &= 575,969 \text{ ft}^2 = 13.222 \text{ ac}\end{aligned}$$

$$\text{Retention Depth} = 3.5 \text{ in}$$

Total Retention Volume Required:

$$V_R = \text{Retention Depth (in)} \times \text{Total Area of the Project (ft}^2) / 12$$

$$= 3.5'' \times 575,969 \text{ ft}^2 / 12$$

$$V_R = 167,991 \text{ ft}^3 = 3.856 \text{ ac-ft.}$$

Total LAHB Retention Volume Elevation = 188.16 ft. (NGVD)

TREATMENT VOLUME REQUIREMENTS (ON-LINE SYSTEM)

Table B3.1

Basin I.D.	WRA I.D.	Total Drainage Area		Impervious Area			V _{0.5"}	V _{1.25"}	V _R	
		(sf)	(ac)	(sf)	(ac)	(%)	(cf)	(cf)	(cf)	(ac-ft)
PRE-DEVELOPMENT										
Basin A	A	575,969	13.22	-	0.00	0.00%	23,999	0	23,999	0.55
Off Site(ByPass)	O.S	1,042,744	23.94	-	0.00	0.00%	43,448	0	43,448	1.00
		1,618,713	37.161	-	0.00	0.00%	67,446	0	67,446	1.55
POST DEVELOPMENT										
Phase 1	A	97,305	2.23	72,979	1.68	75.00%	4,054	7,602	11,656	0.27
50' Ingrass Easement	B	38,519	0.88	28,889	0.66	75.00%	1,605	3,009	4,614	0.11
Retention Area	C	89,756	2.06	-	0.00	0.00%	3,740	0	3,740	0.09
Phase 2	D	69,135	1.59	51,851	1.19	75.00%	2,881	5,401	8,282	0.19
Phase 3	E	281,254	6.46	210,941	4.84	75.00%	11,719	21,973	33,692	0.77
SUB TOTAL		575,969	13.222	432,225	9.92	75.04%	23,999	45,023	69,022	1.58
Off Site (By Pass)	O.S	1,042,744	23.94	-	0.00	0.00%	43,448	0	43,448	1.00
TOTALS		1,618,713	37.161	432,225	9.923	26.70%	67,446	45,023	112,470	2.58

Where:

V_{0.5"} is the runoff volume from one half-inch of runoff over the total area.

$$V_{0.5"} = (0.5/12) \times A_{\text{total}}$$

V_{1.25"} is the runoff volume from 1.25 inches of runoff over the impervious areas.

$$V_{1.25"} = (1.25/12) \times A_{\text{imp.}}$$

V_R is the required treatment volume.

$$V_R = V_{0.5"} + V_{0.5"} \text{ (for } A_{\text{imp}} < 40\%) \text{ 40C-42.026(1)(a)2.}$$

$$V_R = V_{0.5"} + V_{1.25"} \text{ (for } A_{\text{imp}} > 40\%) \text{ 40C-42.026(1)(a)2.}$$

B4. TREATMENT & RETENTION VOLUME PROVISIONS

Stormwater retention and water quality treatment for the project will be provided by Water Retention Area (WRA). The retention volume provided in the WRA was calculated using the final grade contours indicated on the Drainage Plan. Surface areas at the bottom and the top elevations were digitized from the CAD data file. A spreadsheet program was used to calculate the storage volumes at incremental depths using an average-end-area volume equation. The Stage-Storage summary table is provided on the following page.

B5. TREATMENT VOLUME DRAWDOWN CALCULATIONS

Drawdown calculations were obtained using the "PONDS" groundwater mounding computer program, (Version 3.3.0276) by Devo Seereeram, Ph. D, P.E., and the soil boring test field data provided by Cavin Geotechnical and Environmental. The results of the soil boring tests, presented in the Cavin geotechnical report, included as **Appendix "B"** of this stormwater study, were input into the PONDS program to demonstrate that the WRA will recover for the treatment volume within the required 72-hour period and will be totally recovered within the 14-day period required for dry retention areas. The design parameters input into the PONDS computer program for the drawdown analyses are presented in the table below. Please refer to the **Appendix "C"** for the complete detailed results of the PONDS computer analysis.

Table B5.1 Design Input Parameters for PONDS Drawdown Analysis	
WRA I.D.	WRA "A"
Elevation of WRA Bottom (ft. MSL)	184.00
Elevation of Aquifer Base (ft. MSL)	164.00
Elevation of Seasonal High Groundwater Table (ft. MSL)	164.50
Horizontal Hydraulic Conductivity (ft/day)	20
Vertical Hydraulic Conductivity (ft/day)	15
Safety Factor (Vertical Conductivity)	2.0
Storage Coefficient	0.22
Design High Water Elevation (ft. MSL)	189.00
Storage Volume below HW Elev. (ft ³)	211,625
Mean Annual Runoff Volume (ft ³)	102,047
LAHB Pollution Abatement 3.5 inches Runoff volume (ft³)	167,991
14 Day Drawdown (days)	1.13 (27-Hrs)
40C-42 Treatment Volume (ft ³)	69,022
Treatment Volume Elevation (ft. MSL)	185.95
72 Hour Drawdown (hours)	5
72 Hour Drawdown (hours) LAHB	18

STORMWATER RETENTION AREA
STAGE-STORAGE-DISCHARGE CALCULATIONS

PROJECT: J M MINNEOLA INVISTMENTS, LLC
 Sec. 32; Twp. 20S; Rng. 26E, Minneola, Lake County, Florida
 Project #16-010

DATE: February 19th, 2018

LOCATION: WRA "A"

INPUT REQUIRED:

1. Top Elevation of WRA,	El _T = 190.00 MSL
2. Top Surface Area of WRA,	A _T = 58,317 sf
3. Bottom Surface Area of WRA,	A _B = 30,938 sf
4. Ave. Width at Top,	W _T = 144 feet
5. Ave. Width at Bottom,	W _B = 88 feet
6. Total Depth of WRA,	D = 6.00 feet
7. Stage Increments,	d = 1.00 feet

METHODOLOGY:

AVERAGE END AREA EQUATION:

[$V = d/3(A_t + A_b + \text{SQRT}(A_t \cdot A_b))$]

Where: V = VOLUME, (cf)

d = DEPTH INCREMENT, (feet)

A_t = TOP SURFACE AREA, (sf)

A_b = BOTTOM SURFACE AREA, (sf)

ELEV. (MSL)	EQUIV. WIDTH (ft)	EQUIV. LENGTH (ft)	AREA		VOLUME (cf)	CUM. VOLUME	
			(sf)	(ac)		(cf)	(ac-ft)
184.00	88.0	351.6	30,938	0.710	-	-	0.000
185.00	97.3	364.7	35,501	0.815	33,193	33,193	0.762
186.00	106.7	375.6	40,064	0.920	37,760	70,953	1.629
187.00	116.0	384.7	44,628	1.025	42,325	113,279	2.601
188.00	125.3	392.5	49,191	1.129	46,891	160,169	3.677
189.00	134.7	399.2	53,754	1.234	51,455	211,625	4.858
190.00	144.0	405.0	58,317	1.339	56,020	267,645	6.144

<u>Note:</u>	Mean Ann Vol	=	102,047 ft ³	@	Elevation	186.73 ft.(NGVD)
	Weir Elevation	=	211,625 ft ³	@	Elevation	189.00 ft.(NGVD)
	Treatment Volume	=	69,022 ft ³	@	Elevation	185.95 ft.(NGVD)
	50Yr-24Hr Post-Pre	=	201,948 ft ³	@	Elevation	188.81 ft.(NGVD)
	LAHB Retention Vol	=	167,991 ft ³	@	Elevation	188.16 ft.(NGVD)

C. PROJECT SUMMARY

The preceding analysis demonstrates that the stormwater retention volumes for this project will meet or exceed the volumes required for the pollution abatement criteria and the Mean Annual storm event. When constructed as designed, this project will be consistent with the objectives and policies of the St. Johns River Water Management District and the City of Minneola. Below is a summary of the design parameters and final results.

Table D.1					
Water Retention Area Design Summary					
					WRA
Top of Pond Elevation (ft. NGVD)					190.00
Overflow Structure Type					FDOT Type "D"
Overflow Structure Elevation (ft. NGVD)					189.00
Mean Annual Peak Stage Elevation (ft. NGVD) <i>(Without infiltration)</i>					188.28
Water Quality Treatment Volume (ac-ft)					1.58
Water Quality Treatment Volume El. (ft. NGVD)					185.95
LAHB Peak Stage Elevation (ft NGVD)					188.16
Table D.2					
Discharge Summary					
Mean Annual (2.3yr - 24hr) Storm Event					
Outfall	Pre-Development		Post Development		Peak Elev.
WRA "A"	cfs	ac-ft	cfs	ac-ft	ft
Discharge Rate/Volume (cfs)/(ac-ft)	1.53	0.39	0.00	0.00	188.28
<i>(No infiltration Allowed)</i>					
10yr - 2hr Storm Event					
(Minneola LDR Sec. 114-302)					
Outfall	Pre-Development		Post Development		Peak Elev.
WRA "A"	cfs	ac-ft	cfs	ac-ft	ft
Discharge Rate/Volume (cfs)/(ac-ft)	2.24	0.19	0.00	0.00	185.67
<i>(No infiltration Allowed)</i>					
50yr - 24hr Storm Event					
(Minneola LDR Sec. 114-302)					
Outfall	Pre-Development		Post Development		Peak Elev.
WRA "A"	cfs	ac-ft	cfs	ac-ft	ft
Discharge Rate/ Volume(cfs) /(ac-ft)	20.79	3.05	0.00	0.00	185.89
<i>(Infiltration Allowed)</i>					