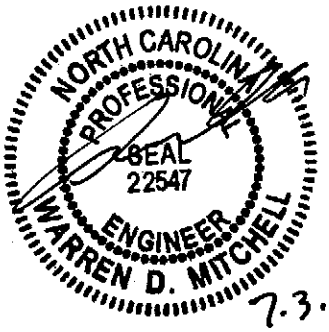
STORMWATER MANAGEMENT PLAN

FOR

Space Station Self-Storage
Boat+RV Storage, Boat Sales

Chatham County, NC



Submitted by:

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July 3, 2014

COMPLIANCE STATEMENT

The design of all stormwater management facilities and practices will control and treat the runoff from the 1 year- 1 hour storm over the total drainage area for the proposed development and provide the same level of treatment for some of the existing facility that will drain to the new – proposed wet ponds. The designs and plans are sufficient to comply with applicable standards and policies found in the NCDENR Stormwater BMP Design Manual, and that the designs and plans ensure compliance with the County's Stormwater Ordinance.

INTRODUCTION

This report is being prepared to satisfy the requirements of the Chatham County Stormwater Ordinance for the Conditional Use Rezoning of Countyline Self Storage. This property consists of 2 parcels. One is 29.24 acres and the other is 16.45 acres. Both parcels are being designed and rezoned together. The streams on the property drain to Beaver Creek which drains to Jordan Lake. There are ephemeral streams, intermittent streams and perennial streams on the property. There is no existing impervious surface on the property. Timber was cut from the property approximately 20 years ago. The maximum impervious surface allowed by Chatham County is 36% of the total lot area.

The proposal includes a 3-story and a 1-story self storage building. There will also be boat and RV garages + surface parking. There will be a boat sales/garage facility. The proposed impervious surface is 9.5 acres or 21% of the 46 acre parcel. The parcel is currently zoned R1. We are proposing to change the zoning to CD-RB. Self-storage, boat storage, and boat sales are all uses allowed in this zoning district.

SITE ANALYSIS

Stormwater runoff drains from north to south. There will be several stormwater management ponds on the site because the streams divide the site. This property is in the Jordan Lake Watershed – Lower New Hope Section.

PROPOSED DRAINAGE DESIGN

The stormwater basin was designed to meet the minimum requirements of the NCDENR BMP manual. It will perform water quality and quantity mitigation. The stormwater basin was designed to capture 90% TSS from the site.

The stormwater conveyance network will consist of drainage pipes + inlets and sheet flow runoff. The runoff from the new impervious area approved in August 2013 must also meet nitrogen and phosphorous limits set in the new Jordan Lake nutrient loading requirements. These standards are specified in article 4 of the County stormwater ordiance.

JORDAN LAKE NUTRIENT LOADING REQUIREMENTS

This property is in the Jordan Lake Watershed – Lower New Hope section. The total allowable Nitrogen Load is 2.2 pounds per acre per year. The total allowable Phosphorous Load is 0.82 pounds per acre per year. We used the Jordan / Falls Lake Stormwater Nutrient Load Accounting Tool to compute the total Nitrogen and Phosphorous loading from the developed site. Using the site data, the accounting tool produced the following results:

Nitrogen loading - Post-Development Conditions	4.66 lbs/ac/yr
Nitrogen Post Dev with BMPs - total	**3.48 lbs/ac/yr**
Phosphorus loading – Post-Development Conditions	0.60 lbs/ac/yr
Phosphorous Post Dev with BMPs – total	**0.42 lbs/ac/yr**

The total nitrogen is 3.48 lbs/ac/yr and the limit is 4.4 lbs for the Lower New Hope basin. The total phosphorous is 0.42 lbs/ac/yr and the limit is 0.78 lbs. Both Nitrogen and Phosphorous are lower than the target so an offset payment will not be needed / required.

Wet Pond Design

Pond # 1

Drainage Area	8.54 acres
Impervious Area	5.29 acres
Percent Impervious	5.29/8.54 = 62% (pond drainage area only)
2" Orifice Elevation	280.0
Outlet Structure Elevation	279.0
Area bottom of shelf	20,485 sf
Area bottom of pond	6,754 sf
Area of Permanent Pool	24,566 sf
Depth	10 feet

Permanent Pool average depth calculation:

Dav = [0.25 x (1 +A bot shelf / A perm pool)]+[(A bot shelf + A bot pond /2) x (Depth/A bot shelf)]
Dav = [0.25 x (1 + 20,485/24,566)]+[((20,485 + 6754)/2) x (10 / 20,485)]

Dav = 7.10 feet

Use Table 10-3 (90% TSS)

SA/DA = 1.9

Therefore

372,002 sf (drainage area) x 0.019 = 7,068 square feet - Minimum size of Permanent Pool

Actual size of Permanent Pool = 24,566 square feet.

Pond #2

Drainage Area	5.85 acres
Impervious Area	3.52 acres
Percent Impervious	3.52/5.85 = 60% (pond drainage area only)
2" Orifice Elevation	292.0
Outlet Structure Elevation	290.0
Area bottom of shelf	13,119 sf
Area bottom of pond	6,036 sf
Area of Permanent Pool	15,979 sf
Depth	8 feet

Permanent Pool average depth calculation:

Dav = [0.25 x (1 +A bot shelf / A perm pool)]+[(A bot shelf + A bot pond /2) x (Depth/A bot shelf)]

Dav = [0.25 x (1 + 13,119/15,979)]+[((13,119+ 6036)/2) x (8 / 13,119)]

Dav = 6.30 feet

Use Table 10-3 (90% TSS)

SA/DA = 2.15

Therefore

254,826 sf (drainage area) x 0.0215 = 5,479 square feet - Minimum size of Permanent Pool

Actual size of Permanent Pool = 15,979 square feet.

Pond #3

Drainage Area	2.69 acres
Impervious Area	1.13 acres
Percent Impervious	1.13/2.69 = 42% (pond drainage area only)
2" Orifice Elevation	297.0
Outlet Structure Elevation	295.0
Area bottom of shelf	4642 sf
Area bottom of pond	1224 sf
Area of Permanent Pool	6728 sf
Depth	6 feet

Permanent Pool average depth calculation:

Dav = [0.25 x (1 +A bot shelf / A perm pool)]+[(A bot shelf + A bot pond /2) x (Depth/A bot shelf)]

Dav = [0.25 x (1 + 4642/6728)]+[((4642+ 1224)/2) x (6 / 4642)]

Dav = 4.21 feet

Use Table 10-3 (90% TSS)

SA/DA = 2.0

Therefore

117,176 sf (drainage area) x 0.020 = 2,343 square feet - Minimum size of Permanent Pool

Actual size of Permanent Pool = 6,728 square feet.

Physiographic/Geologic Region:	**Piedmont**
Soil Hydrologic Group	**C**
Precipitation location:	**Raleigh**

Total Development Area (ft^2):	**1,990,692**
Development Name:	Space Station - US 64
Model Prepared By:	Warren D Mitchell, PE

COLUMN 1 -- NON-RESIDENTIAL LAND USES

	TN EMC (mg/L)	TP EMC (mg/L)	Pre-Development (ft^2)	Post-Development (ft^2)
COMMERCIAL				
Parking lot	1.44	0.16		284,426
Roof	1.08	0.15		148,560
Open/Landscaped	2.24	0.44		252,460
INDUSTRIAL				
Parking lot	1.44	0.39		
Roof	1.08	0.15		
Open/Landscaped	2.24	0.44		
TRANSPORTATION				
High Density (interstate, main)	3.67	0.43		
Low Density (secondary, feeder)	1.4	0.52		
Rural	1.14	0.47		
Sidewalk	1.4	1.16		
PERVIOUS				
Managed pervious	3.06	0.59		
Unmanaged (pasture)	3.61	1.56		
Forest	1.47	0.25	1,543,595	788,149
JURISDICTIONAL LANDS*				
Natural wetland	--	--		
Riparian buffer	--	--	447,097	447,097
Open water	--	--		
LAND TAKEN UP BY BMPs	1.08	0.15		70,000

*Jurisdictional land uses are not included in nutrient/flow calculations.

COLUMN 2 -- RESIDENTIAL LAND USES

	Custom Lot Size (ac)	Age (yrs)	TN EMC (mg/L)	TP EMC (mg/L)	Pre-Development (ft^2)	Post-Development (ft^2)
PART A						
⅛-ac lots	--		--	--		
¼-ac lots	--		--	--		
½-ac lots	--		--	--		
1-ac lots	--		--	--		
2-ac lots	--		--	--		
Multi-family	--		--	--		
Townhomes	--		--	--		
Custom Lot Size			--	--		
PART B						
Roadway		--	1.4	0.52		
Driveway		1.0	1.44	0.39		
Parking lot		--	1.44	0.39		
Roof		--	1.08	0.15		
Sidewalk/Patio		--	1.4	1.16		
Lawn		--	2.24	0.44		
Managed pervious		--	3.06	0.59		
Forest		--	1.47	0.25		
Natural wetland*		--	--	--		
Riparian buffer*		--	--	--		
Open water*		--	--	--		
LAND TAKEN UP BY BMPs		--	1.08	0.15		

LAND USE AREA CHECK	
Total Development Area Entered (ft^2):	**1,990,692**
Total Pre-Development Calculated Area (ft^2):	**1,990,692**

	CATCHMENT 1			CATCHMENT 2			CATCHMENT 3	
	BMP #1	BMP #2	BMP #3	BMP #1	BMP #2	BMP #3	BMP #1	BMP #2
Type of BMP:	Wet Detention Pond			Wet Detention Pond			Wet Detention Pond	
If BMP is undersized, indicate the BMP's size relative to the design size required to capture the designated water quality depth (i.e. 0.75 = BMP is 75% of required design size):								
*For water harvesting BMP, enter percent volume reduction in decimal form.								
							Does BMP accept the outflow from another Catchment? If so, indicate which	
Catchment 1:	--	--	--	no	no	no	no	no
Catchment 2:	no	no	no	--	--	--	no	no
Catchment 3:	no	no	no	no	no	no	--	--
Catchment 4:	no	no	no	no	no	no	no	no
Catchment 5:	no	no	no	no	no	no	no	no
Catchment 6:	no	no	no	no	no	no	no	no
Drainage Area Land Use	Area Treated by BMP (ft^2)	Area treated by BMP #2 that is not treated by BMP #1 (ft^2)	Area treated by BMP #3 that is not treated by BMPs #1 or #2 (ft^2)	Area Treated by BMP (ft^2)	Area treated by BMP #2 that is not treated by BMP #1 (ft^2)	Area treated by BMP #3 that is not treated by BMPs #1 or #2 (ft^2)	Area Treated by BMP (ft^2)	Area treated by BMP #2 that is not treated by BMP #1 (ft^2)
COMMERCIAL								
Parking lot	158,376			92,812			33,238	
Roof	71,850			60,710			16,000	
Open/Landscaped	88,105			82,044			57,335	
INDUSTRIAL								
Parking lot								
Roof								
Open/Landscaped								
TRANSPORTATION								
High Density (interstate, main)								
Low Density (secondary, feeder)								
Rural								
Sidewalk								
MISC. PERVIOUS								
Managed pervious								
Unmanaged (pasture)								
Forest								
RESIDENTIAL								
2-ac lots (New)								
2-ac lots (Built after 1995)								
2-ac lots (Built before 1995)								
1-ac lots (New)								
1-ac lots (Built after 1995)								
1-ac lots (Built before 1995)								
½-ac lots (New)								
½-ac lots (Built after 1995)								
½-ac lots (Built before 1995)								
¼-ac lots (New)								
¼-ac lots (Built after 1995)								
¼-ac lots (Built before 1995)								
⅛-ac lots (New)								
⅛-ac lots (Built after 1995)								
⅛-ac lots (Built before 1995)								
Townhomes (New)								
Townhomes (Built after 1995)								
Townhomes (Built before 1995)								
Multi-family (New)								
Multi-family (Built after 1995)								
Multi-family (Built before 1995)								
Custom Lot Size (New)								
Custom Lot Size (Built after 1995)								
Custom Lot Size (Built before 1995)								
Roadway								
Driveway								
Parking lot								
Roof								
Sidewalk								
Lawn								
Managed pervious								
Forest								
LAND TAKEN UP BY BMP	37,000			22,000			11,000	
TOTAL AREA TREATED BY BMP (ft^2):	355,331	0	0	257,566	0	0	117,573	0
TOTAL AREA TREATED BY SERIES (ft^2):	355,331			257,566			117,573	

	CATCHMENT 4			CATCHMENT 5			CATCHMENT 6			
BMP #3	BMP #1	BMP #2	BMP #3	BMP #1	BMP #2	BMP #3	BMP #1	BMP #2	BMP #3	
h one(s). (Land use areas entered below are in addition to the watershed areas treated by contributing catchment(s).)										
no	no	no	no	no	no	no	no	no	no	
no	no	no	no	no	no	no	no	no	no	
--	no	no	no	no	no	no	no	no	no	
no	--	--	--	no	no	no	no	no	no	
no	no	no	no	--	--	--	no	no	no	
no	no	no	no	no	no	no	--	--	--	
Area treated by BMP #3 that is not treated by BMPs #1 or #2 (ft^2)	Area Treated by BMP (ft^2)	Area treated by BMP #2 that is not treated by BMP #1 (ft^2)	Area treated by BMP #3 that is not treated by BMPs #1 or #2 (ft^2)	Area Treated by BMP (ft^2)	Area treated by BMP #2 that is not treated by BMP #1 (ft^2)	Area treated by BMP #3 that is not treated by BMPs #1 or #2 (ft^2)	Area Treated by BMP (ft^2)	Area treated by BMP #2 that is not treated by BMP #1 (ft^2)	Area treated by BMP #3 that is not treated by BMPs #1 or #2 (ft^2)	Total Land Use Area Treated By All BMPs (ft^2)
										284,426
										148,560
										227,484
										0
										0
										0
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										70,000
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		0			0			0		

Development:	**Space Station - US 64**
Prepared By:	Warren D Mitchell, PE
Date:	July 7, 2014

WATERSHED SUMMARY

REGION:	Piedmont		
TOTAL DEVELOPMENT AREA (ft^2):	1,990,692		
	Pre-Development Conditions	**Post-Development Conditions**	**Post-Development w/ BMPs**
Percent Impervious (%)	#VALUE!	32.6%	32.6%
Annual Runoff Volume (c.f.)	#VALUE!	2,005,106	1,831,900
Total Nitrogen EMC (mg/L)	#VALUE!	1.32	1.08
Total Nitrogen Loading (lb/ac/yr)	#VALUE!	4.66	3.48
Total Phosphorus EMC (mg/L)	#VALUE!	0.17	0.13
Total Phosphorus Loading (lb/ac/yr)	#VALUE!	0.60	0.42

Percent Difference Between:

	Pre-Dev. & Post-Dev. without BMPs	**Pre-Development & Post-Development with BMPs**	**Post-Dev without BMPs & Post-Dev with BMPs**
Percent Impervious (%)	#VALUE!	#VALUE!	0%
Annual Runoff Volume (c.f.)	#VALUE!	#VALUE!	-9%
Total Nitrogen EMC (mg/L)	#VALUE!	#VALUE!	-18%
Total Nitrogen Loading (lb/ac/yr)	#VALUE!	#VALUE!	-25%
Total Phosphorus EMC (mg/L)	#VALUE!	#VALUE!	-23%
Total Phosphorus Loading (lb/ac/yr)	#VALUE!	#VALUE!	-30%

*Negative percent difference values indicate a decrease in runoff volume, pollutant concentration or pollutant loading. Positive values indicate an increase.

BMP VOLUME REDUCTIONS/EFFLUENT CONCENTRATIONS

	Volume Reduction (%)	**TN Effluent Concen. (mg/L)**	**TP Effluent Concen. (mg/L)**
Bioretention with IWS	50%	0.95	0.12
Bioretention without IWS	35%	1.00	0.12
Dry Detention Pond	0%	1.20	0.20
Grassed Swale	0%	1.21	0.26
Green Roof	50%	1.08	0.15
Level Spdr, Filter Strip	40%	1.20	0.15
Permeable Pavement*	0%	1.44	0.39
Sand Filter	5%	0.92	0.14
Water Harvesting	user defined	1.08	0.15
Wet Detention Pond	10%	1.01	0.11
Wetland	20%	1.08	0.12

*if treating commercial parking lot, TP effluent concentration = 0.16 mg/L

Development:	Space Station - US 64
Prepared By:	Warren D Mitchell, PE
Date:	July 7, 2014

BMP SUMMARY

	CATCHMENT 1			CATCHMENT 2			CATCHMENT 3			CATCHMENT 4			CATCHMENT 5	
	BMP 1	BMP 2	BMP 3	BMP 1	BMP 2	BMP 3	BMP 1	BMP 2	BMP 3	BMP 1	BMP 2	BMP 3	BMP 1	BMP 2
	Wet Detention Pond	--	--	Wet Detention Pond	--	--	Wet Detention Pond	--	--	--	--	--	--	--
Total Area Treated (ac)	8.16	--	--	5.91	--	--	2.70	--	--	--	--	--	--	--
Total Inflow Volume (c.f.)	984,337	--	--	650,680	--	--	229,483	--	--	--	--	--	--	--
Percent Volume Reduced (%)	10%	--	--	10%	--	--	10%	--	--	--	--	--	--	--
Inflow Nitrogen EMC (mg/L)	1.31	--	--	1.29	--	--	1.32	--	--	--	--	--	--	--
Total Inflow Nitrogen (lb/ac/yr)	9.85	--	--	7.93	--	--	5.98	--	--	--	--	--	--	--
Inflow Phosphorus EMC (mg/L)	0.161	--	--	0.162	--	--	0.169	--	--	--	--	--	--	--
Total Inflow Phosphorus (lb/ac/yr)	1.21	--	--	0.98	--	--	0.75	--	--	--	--	--	--	--
BMP Outflow Nitrogen (lbs/ac/yr)	7.06	--	--	6.43	--	--	4.98	--	--	--	--	--	--	--
BMP Outflow Phosphorus (lbs/ac/yr)	0.80	--	--	0.73	--	--	0.57	--	--	--	--	--	--	--
Catchment Outflow Nitrogen EMC (mg/L)	1.04			1.04			1.04			--			--	
Catchment Outflow Total Nitrogen (lb/ac/yr)	7.06			6.43			4.98			--			--	
Percent Reduction in Nitrogen Load (%)	28%			17%			16%			--			--	
Catchment Outflow Phosphorus EMC (mg/L)	0.118			0.118			0.119			--			--	
Catchment Outflow Total Phosphorus (lb/ac/yr)	0.800			0.731			0.568			--			--	
Percent Reduction in Phosphorus Load (%)	34%			3%			24%			--			--	

Table 10-3

Surface Area to Drainage Area Ratio for Permanent Pool Sizing to Achieve *90 Percent* TSS Pollutant Removal Efficiency in the *Mountain and Piedmont* Regions, Adapted from Driscoll, 1986

Percent Impervious Cover	Permanent Pool Average Depth (ft)												
	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0
10%	0.9	0.8	0.8	0.7	0.6	0.6	0.5	0.5	0.5	0.5	0.4	0.4	0.4
20%	1.5	1.3	1.1	1.0	1.0	0.9	0.9	0.9	0.8	0.8	0.8	0.7	0.7
30%	1.9	1.8	1.7	1.5	1.4	1.4	1.3	1.1	1.0	1.0	1.0	0.9	0.9
40%	2.5	2.3	2.0	1.9	1.8	1.7	1.6	1.6	1.5	1.4	1.3	1.2	1.1
50%	3.0	2.8	2.5	2.3	2.0	1.9	1.9	1.8	1.7	1.6	1.6	1.5	1.5
60%	3.5	3.2	2.8	2.7	2.5	2.4	2.2	2.1	1.9	1.9	1.8	1.8	1.7
70%	4.0	3.7	3.3	3.1	2.8	2.7	2.5	2.4	2.2	2.1	2.0	2.0	1.9
80%	4.5	4.1	3.8	3.5	3.3	3.0	2.8	2.7	2.6	2.4	2.3	2.1	2.0
90%	5.0	4.5	4.0	3.8	3.5	3.3	3.0	2.9	2.8	2.7	2.6	2.5	2.4

Table 10-4

Surface Area to Drainage Area Ratio for Permanent Pool Sizing to Achieve *90 Percent* TSS Pollutant Removal Efficiency in the *Coastal Region*, Adapted from Driscoll, 1986

Percent Impervious Cover	Permanent Pool Average Depth (ft)									
	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5'
10%	1.3	1.0	0.8	0.7	0.6	0.5	0.4	0.3	0.2	0.1
20%	2.4	2.0	1.8	1.7	1.5	1.4	1.2	1.0	0.9	0.6
30%	3.5	3.0	2.7	2.5	2.2	1.9	1.6	1.3	1.1	0.8
40%	4.5	4.0	3.5	3.1	2.8	2.5	2.1	1.8	1.4	1.1
50%	5.6	5.0	4.3	3.9	3.5	3.1	2.7	2.3	1.9	1.5
60%	7.0	6.0	5.3	4.8	4.3	3.9	3.4	2.9	2.4	1.9
70%	8.1	7.0	6.0	5.5	5.0	4.5	3.9	3.4	2.9	2.3
80%	9.4	8.0	7.0	6.4	5.7	5.2	4.6	4.0	3.4	2.8
90%	10.7	9.0	7.9	7.2	6.5	5.9	5.2	4.6	3.9	3.3
100%	12	10.0	8.8	8.1	7.3	6.6	5.8	5.1	4.3	3.6

The engineering design of a wet detention basin must include a 10-foot-wide (minimum) vegetated shelf around the full perimeter of the basin. The inside edge of the shelf shall be no deeper than 6" below the permanent pool level, and the outside edge shall be 6" above the permanent pool level. For a 10' wide shelf, the resulting slope is 10:1. With half the required shelf below the water (maximum depth of 6 inches), and half the required shelf above the water, the vegetated shelf will provide a location for a diverse population of emergent wetland vegetation that enhances biological pollutant removal, provides a habitat for wildlife, protects the shoreline from erosion, and improves sediment trap efficiency. A 10' wide shelf also provides a safety feature prior to the deeper permanent pool.

Short-circuiting of the stormwater must be prevented. The most direct way of minimizing short-circuiting is to maximize the length of the flow path between the inlet and the outlet: basins with long and narrow shapes can maximize the length of the flow path. Long and narrow but irregularly shaped wet detention basins may appear more

Hydrograph Return Period Recap

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2009 by Autodesk, Inc. v6.066

Hyd. No.	Hydrograph type (origin)	Inflow Hyd(s)	Peak Outflow (cfs)								Hydrograph description
			1-Yr	2-Yr	3-Yr	5-Yr	10-Yr	25-Yr	50-Yr	100-Yr	
1	Rational	----	7.475	8.941	------	10.55	11.77	13.03	13.95	14.73	Pre Developed - Basin 1
2	Rational	----	31.94	38.05	------	43.51	48.13	52.69	55.80	58.80	Post Developed - Basin 1
3	Reservoir	2	0.067	0.075	------	0.081	0.085	0.090	0.093	0.096	Pond #1
5	Rational	----	4.517	5.408	------	6.409	7.163	7.956	8.531	9.025	Pre Developed - Basin #2
6	Rational	----	21.43	25.53	------	29.29	32.42	35.50	37.62	39.61	Post Developed - Basin #2
7	Reservoir	6	0.047	0.051	------	0.055	0.058	0.061	0.062	0.064	Pond #2
9	Rational	----	2.234	2.666	------	3.106	3.452	3.795	4.040	4.252	Pre Developed - Basin 3
10	Rational	----	8.001	9.532	------	10.90	12.06	13.20	13.98	14.73	Post Developed - Basin 3
11	Reservoir	10	0.016	0.018	------	0.019	0.020	0.021	0.022	0.022	Pond #3

Hydrograph Summary Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2009 by Autodesk, Inc. v6.066

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph description
1	Rational	7.475	1	20	8,970	——	------	------	Pre Developed - Basin 1
2	Rational	31.94	1	6	11,499	——	------	------	Post Developed - Basin 1
3	Reservoir	0.067	1	12	8,043	2	280.50	11,473	Pond #1
5	Rational	4.517	1	23	6,233	——	------	------	Pre Developed - Basin #2
6	Rational	21.43	1	7	9,000	——	------	——	Post Developed - Basin #2
7	Reservoir	0.047	1	14	6,057	6	290.68	8,977	Pond #2
9	Rational	2.234	1	13	1,743	——	------	------	Pre Developed - Basin 3
10	Rational	8.001	1	6	2,880	——	------	------	Post Developed - Basin 3
11	Reservoir	0.016	1	12	2,012	10	296.41	2,874	Pond #3