

SITE DATA

Project Name Applicant (NB Nove Ralay) Durban Inc. Applicant Contect Name Contect Timal Contect Timal Contect Timal Contect Name Municipal Jurisdiction (Select from dropstown memory Less Updated Fridays Applicant SCOS Total Sile Area (Ac) Estating Label Pond Area (Ac) Proposed Desidented Area (Ac) Imperations Silertae Area (Ac) Imperations Silertae Area (Ac) Imperations Silertae Area (Ac) Imperations Silertae Area (Ac) Project Desidented Area (BA) Project Desidented Area (BA) Project Desidented Area (BA) Project Desidented Area (BA) Project Silertae (BA) Proje	Project Information					
Applicant Contact Number		Project Name:	Faison Tract			
Applicant Contact Number 919-768-7976		Applicant:	KB Home Raleigh Durham Inc.			
Municipal Jurisdiction (Select from dropdown menu): Zebulon		Applicant Contact Name:	Roman Acosta			
Municipal Jurisdiction (Select from dropdown menu):		Applicant Contact Number:	919-768-7976			
Last Updated: Friday, August 8, 2025		Contact Email:	racosta@kbhome.com			
Site Data:		Municipal Jurisdiction (Select from dropdown menu):	Zebulon			
Total Site Area (Ac): Existing Lake/Pond Area (Ac): Proposed Disturbed Area (Ac): Proposed Disturbed Area (Ac): Impervious Surface Area (acre): Type of Development (Select from Dropdown menu): Percent Built Upon Area (BUA): Project Density: Low Is the proposed project a site expansion? No Number of Drainage Areas on Site: 1 1-Year, 24-Hour Storm (inches) (See NOAA Website): 2-Year, 24-Hour Storm (inches) (See NOAA Website): 10-Year, 24-Hour Storm (inches) (See NOAA Website): Total Acreage in Lots: Number of Lots: Average Lot Size (SF): Total Impervious Surface Area Per Lot (SF):		Last Updated:	Friday, August 8, 2025			
Existing Lake/Pond Area (Ac): 2.29			Site Data:			
Proposed Disturbed Area (Ac): 53.00 Impervious Surface Area (acre): 21.27 Type of Development (Select from Dropdown menu): Residential Percent Built Upon Area (BUA): 21% Project Density: Low Is the proposed project a site expansion? No Number of Drainage Areas on Site: 1 1-Year, 24-Hour Storm (inches) (See NOAA Website): 2.86 2-Year, 24-Hour Storm (inches) (See NOAA Website): 3.46 10-Year, 24-Hour Storm (inches) (See NOAA Website): 5.14 Lot Data (if applicable): Total Acreage in Lots: Number of Lots: Average Lot Size (SF): Total Impervious Surface Area on Lots (SF): Average Impervious Surface Area Per Lot (SF):		Total Site Area (Ac):	100.41			
Impervious Surface Area (acre): 21.27		Existing Lake/Pond Area (Ac):	2.29			
Type of Development (Select from Dropdown menu): Percent Built Upon Area (BUA): Project Density: Low Is the proposed project a site expansion? Number of Drainage Areas on Site: 1-Year, 24-Hour Storm (inches) (See NOAA Website): 2-Year, 24-Hour Storm (inches) (See NOAA Website): 10-Year, 24-Hour Storm (inches) (See NOAA Website): 10-Year, 24-Hour Storm (inches) (See NOAA Website): Total Acreage in Lots: Number of Lots: Average Lot Size (SF): Total Impervious Surface Area on Lots (SF): Average Impervious Surface Area Per Lot (SF):		Proposed Disturbed Area (Ac):	53.00			
Percent Built Upon Area (BUA): Project Density: Low Is the proposed project a site expansion? Number of Drainage Areas on Site: 1 1-Year, 24-Hour Storm (inches) (See NOAA Website): 2.86 NOAA 2-Year, 24-Hour Storm (inches) (See NOAA Website): 3.46 10-Year, 24-Hour Storm (inches) (See NOAA Website): 5.14 Lot Data (if applicable): Total Acreage in Lots: Number of Lots: Average Lot Size (SF): Total Impervious Surface Area on Lots (SF): Average Impervious Surface Area Per Lot (SF):		Impervious Surface Area (acre):	21.27			
Project Density: Is the proposed project a site expansion? Number of Drainage Areas on Site: 1 1-Year, 24-Hour Storm (inches) (See NOAA Website): 2.86 NOAA 2-Year, 24-Hour Storm (inches) (See NOAA Website): 3.46 10-Year, 24-Hour Storm (inches) (See NOAA Website): 5.14 Lot Data (if applicable): Total Acreage in Lots: Number of Lots: Average Lot Size (SF): Total Impervious Surface Area on Lots (SF): Average Impervious Surface Area Per Lot (SF):		Type of Development (Select from Dropdown menu):	Residential			
Is the proposed project a site expansion? Number of Drainage Areas on Site: 1 1.Year, 24-Hour Storm (inches) (See NOAA Website): 2.86 NOAA 2.Year, 24-Hour Storm (inches) (See NOAA Website): 3.46 10-Year, 24-Hour Storm (inches) (See NOAA Website): 5.14 Lot Data (if applicable): Number of Lots: Number of Lots: Average Lot Size (SF): Total Impervious Surface Area on Lots (SF): Average Impervious Surface Area Per Lot (SF):		Percent Built Upon Area (BUA):	21%			
Number of Drainage Areas on Site: 1 1-Year, 24-Hour Storm (inches) (See NOAA Website): 2.86 NOAA 2-Year, 24-Hour Storm (inches) (See NOAA Website): 3.46 10-Year, 24-Hour Storm (inches) (See NOAA Website): 5.14 Lot Data (if applicable): Number of Lots: Number of Lots: Average Lot Size (SF): Total Impervious Surface Area on Lots (SF): Average Impervious Surface Area Per Lot (SF):		Project Density:	Low			
1-Year, 24-Hour Storm (inches) (See NOAA Website): 2.86 2-Year, 24-Hour Storm (inches) (See NOAA Website): 3.46 10-Year, 24-Hour Storm (inches) (See NOAA Website): 5.14 Lot Data (if applicable): Total Acreage in Lots: Number of Lots: Average Lot Size (SF): Total Impervious Surface Area on Lots (SF): Average Impervious Surface Area Per Lot (SF):		Is the proposed project a site expansion?	No			
NOAA 2-Year, 24-Hour Storm (inches) (See NOAA Website): 10-Year, 24-Hour Storm (inches) (See NOAA Website): 5.14 Lot Data (if applicable): Total Acreage in Lots: Number of Lots: Average Lot Size (SF): Total Impervious Surface Area on Lots (SF): Average Impervious Surface Area Per Lot (SF):		Number of Drainage Areas on Site:	1			
NOAA 2-Year, 24-Hour Storm (inches) (See NOAA Website): 10-Year, 24-Hour Storm (inches) (See NOAA Website): 5.14 Lot Data (if applicable): Total Acreage in Lots: Number of Lots: Average Lot Size (SF): Total Impervious Surface Area on Lots (SF): Average Impervious Surface Area Per Lot (SF):		1-Year, 24-Hour Storm (inches) (See NOAA Website):	2.86			
Lot Data (if applicable): Total Acreage in Lots: Number of Lots: Average Lot Size (SF): Total Impervious Surface Area on Lots (SF): Average Impervious Surface Area Per Lot (SF):	NOAA	2-Year, 24-Hour Storm (inches) (See NOAA Website):	3.46			
Total Acreage in Lots: Number of Lots: Average Lot Size (SF): Total Impervious Surface Area on Lots (SF): Average Impervious Surface Area Per Lot (SF):		10-Year, 24-Hour Storm (inches) (See NOAA Website):	5.14			
Number of Lots: Average Lot Size (SF): Total Impervious Surface Area on Lots (SF): Average Impervious Surface Area Per Lot (SF):			Lot Data (if applicable):			
Average Lot Size (SF): Total Impervious Surface Area on Lots (SF): Average Impervious Surface Area Per Lot (SF):		Total Acreage in Lots:				
Total Impervious Surface Area on Lots (SF): Average Impervious Surface Area Per Lot (SF):		Number of Lots:				
Average Impervious Surface Area Per Lot (SF):		Average Lot Size (SF):				
		Total Impervious Surface Area on Lots (SF):				
Stormwater Narrative (limit to 1,200 characters - attach additional pages with submittal if necessary):		Average Impervious Surface Area Per Lot (SF):				
		Stormwater Narrative (limit to 1,200	characters - attach additional pages with submittal if necessary):			

SITE DATA Page 1



Project Name:	Faison Tract

DRAINAGE AREA 1 STORMWATER PRE-POST CALCULATIONS

LAND USE & SITE DATA	Р	RE-DEVE	LOPMEN	NT.	POST-DEVELOPMENT					
Drainage Area (Acres)=			0.41).41			
Site Acreage within Drainage=		100	0.41			100).41			
One-year, 24-hour rainfall (in)=	2.86									
Two-year, 24-hour rainfall (in)=				3.	46					
Ten-year, 24-hour storm (in)=				5.	14					
Total Lake/Pond Area (Acres)=		2.	40			4.	51			
Lake/Pond Area not in the Tc flow path (Acres)=		2.	40			4.	51			
Site Land Use (acres):	Α	В	С	D	Α	В	С	D		
Pasture										
Woods, Poor Condition										
Woods, Fair Condition										
Woods, Good Condition		17.78	31.18	23.34		10.60	15.20	11.89		
Open Space, Poor Condition										
Open Space, Fair condition										
Open Space, Good Condition		9.90	7.25	10.24		10.88	14.13	16.44		
Reforestation (in dedicated OS)		0.00	7.20	10.21		10.00	14.10	10.11		
Connected Impervious		0.29	0.09	0.34		6.54	8.49	6.24		
Disconnected Impervious		0.29	0.09	0.54		0.54	0.49	0.24		
SITE FLOW	DR	E-DEVEL	OPMENT	ГТ	POST-DEVELOPMENT Tc					
Sheet Flow	110	L-DLVLL	OI MILIT	· · c	100	JI-DEVE	LOI MILIA	1 10		
Length (ft)=		100	0.00			100	0.00			
Slope (ft/ft)=			060		0.060					
Surface Cover:			ass				ass			
n-value=			240				240			
T _t (hrs)=			162				162			
Shallow Flow		<u> </u>	102			0.1				
Length (ft)=		657	7.00		644.00					
Slope (ft/ft)=)36		0.029					
Surface Cover:			aved		Unpaved					
Average Velocity (ft/sec)=			06		2.75					
T _t (hrs)=			06				07			
Channel Flow 1		0.				<u> </u>				
Length (ft)=		160	0.00			160	0.00			
Slope (ft/ft)=)20			
Cross Sectional Flow Area (ft²)=	0.020									
Wetted Perimeter (ft)=	10.00 9.00				10.00					
Channel Lining:					Grass					
n-value=	Grass 0.035				0.035					
Hydraulic Radius (ft)=			11		5.00					
Average Velocity (ft/sec)=			46		17.60					
T _t (hrs)=			07							
1 _t (1115)-		0.	01		0.03					

DA1 Page 2



Project Name:	Faison Tract

DRAINAGE AREA 1 STORMWATER PRE-POST CALCULATIONS

Channel Flow 2		
Length (ft)=	3600.00	3600.00
Slope (ft/ft)=	0.010	0.010
Cross Sectional Flow Area (ft²)=	140.00	140.00
Wetted Perimeter (ft)=	75.00	75.00
Channel Lining:	Grass	Grass
n-value=	0.035	0.035
Hydraulic Radius (ft)=	1.87	1.87
Average Velocity (ft/sec)=	6.45	6.45
T _t (hrs)=	0.15	0.15
Channel Flow 3		
Length (ft)=		
Slope (ft/ft)=		
Cross Sectional Flow Area (ft ²)=		
Wetted Perimeter (ft)=		
Channel Lining:		
n-value=		
Hydraulic Radius (ft)=		
Average Velocity (ft/sec)=		
T _t (hrs)=		
Tc (hrs)=	0.45	0.41
RESULTS	PRE-DEVELOPMENT	POST-DEVELOPMENT
	FIXE-DEVELOPIVIENT	POST-DEVELOPMENT
Composite Curve Number=	70	76
Disconnected Impervious Adjustment		
Disconnected Impervious Adjustment Disconnected impervious area (acre) =	70	76
Disconnected Impervious Adjustment	70	
Disconnected Impervious Adjustment Disconnected impervious area (acre) = CN _{adjusted (1-year)} = High Density Only	70	76
Disconnected Impervious Adjustment Disconnected impervious area (acre) = CN _{adjusted (1-year)} =	70	76
Disconnected Impervious Adjustment Disconnected impervious area (acre) = CN _{adjusted (1-year)} = High Density Only Volume of runoff from 1" rainfall for DA	70	76 6
Disconnected Impervious Adjustment Disconnected impervious area (acre) = CN _{adjusted (1-year)} = High Density Only Volume of runoff from 1" rainfall for DA HIGH DENSITY REQUIREMENT = (ft ³) =	70	76 6
Disconnected Impervious Adjustment Disconnected impervious area (acre) = CN _{adjusted (1-year)} = High Density Only Volume of runoff from 1" rainfall for DA HIGH DENSITY REQUIREMENT = (ft ³) = 1-year, 24-hour storm (Peak Flow)	70 7 87,	76 6 714
Disconnected Impervious Adjustment Disconnected impervious area (acre) = CN _{adjusted (1-year)} = High Density Only Volume of runoff from 1" rainfall for DA HIGH DENSITY REQUIREMENT = (ft³) = 1-year, 24-hour storm (Peak Flow) Runoff (inches) = Q* _{1-year} =	70 7 87, 0.62 226,191	76 6 714 0.94
Disconnected Impervious Adjustment Disconnected impervious area (acre) = CN _{adjusted (1-year)} = High Density Only Volume of runoff from 1" rainfall for DA HIGH DENSITY REQUIREMENT = (ft³) = 1-year, 24-hour storm (Peak Flow) Runoff (inches) = Q* _{1-year} = Volume of runoff (ft³) =	70 7 87, 0.62 226,191	76 6 714 0.94 343,721
Disconnected Impervious Adjustment Disconnected impervious area (acre) = CN _{adjusted (1-year)} = High Density Only Volume of runoff from 1" rainfall for DA HIGH DENSITY REQUIREMENT = (ft³) = 1-year, 24-hour storm (Peak Flow) Runoff (inches) = Q* _{1-year} = Volume of runoff (ft³) = Volume change (ft³) =	70 7 87. 0.62 226,191	76 66 714 0.94 343,721
Disconnected Impervious Adjustment Disconnected impervious area (acre) = CN _{adjusted (1-year)} = High Density Only Volume of runoff from 1" rainfall for DA HIGH DENSITY REQUIREMENT = (ft³) = 1-year, 24-hour storm (Peak Flow) Runoff (inches) = Q* _{1-year} = Volume of runoff (ft³) = Volume change (ft³) = Peak Discharge (cfs) = Q _{1-year} =	70 7 87. 0.62 226,191	76 66 714 0.94 343,721
Disconnected Impervious Adjustment Disconnected impervious area (acre) = CN _{adjusted (1-year)} = High Density Only Volume of runoff from 1" rainfall for DA HIGH DENSITY REQUIREMENT = (ft³) = 1-year, 24-hour storm (Peak Flow) Runoff (inches) = Q* _{1-year} = Volume of runoff (ft³) = Peak Discharge (cfs)= Q _{1-year} = 2-year, 24-hour storm (LID) Runoff (inches) = Q* _{2-year} = Volume of runoff (ft³) =	70 70 87, 0.62 226,191 117 39.580	76 76 714 0.94 343,721 .530 52.219
Disconnected Impervious Adjustment Disconnected impervious area (acre) = CN _{adjusted (1-year)} = High Density Only Volume of runoff from 1" rainfall for DA HIGH DENSITY REQUIREMENT = (ft³) = 1-year, 24-hour storm (Peak Flow) Runoff (inches) = Q* _{1-year} = Volume of runoff (ft³) = Volume change (ft³) = Peak Discharge (cfs)= Q _{1-year} = 2-year, 24-hour storm (LID) Runoff (inches) = Q* _{2-year} =	70 70 87, 0.62 226,191 117 39.580	76 76 714 0.94 343,721 ,530 52.219
Disconnected Impervious Adjustment Disconnected impervious area (acre) = CN _{adjusted (1-year)} = High Density Only Volume of runoff from 1" rainfall for DA HIGH DENSITY REQUIREMENT = (ft³) = 1-year, 24-hour storm (Peak Flow) Runoff (inches) = Q* _{1-year} = Volume of runoff (ft³) = Volume change (ft³) = Peak Discharge (cfs)= Q _{1-year} = 2-year, 24-hour storm (LID) Runoff (inches) = Q* _{2-year} = Volume of runoff (ft³) = Peak Discharge (cfs)= Q _{2-year} = 10-year, 24-hour storm (DIA)	70 70 87, 0.62 226,191 117 39.580 0.96 350,425	76 76 714 0.94 343,721 .530 52.219 1.36 496,420
Disconnected Impervious Adjustment Disconnected impervious area (acre) = CN _{adjusted (1-year)} = High Density Only Volume of runoff from 1" rainfall for DA HIGH DENSITY REQUIREMENT = (ft³) = 1-year, 24-hour storm (Peak Flow) Runoff (inches) = Q* _{1-year} = Volume of runoff (ft³) = Volume change (ft³) = Peak Discharge (cfs)= Q _{1-year} = Volume of runoff (ft³) = Peak Discharge (cfs)= Q* _{2-year} = Volume of runoff (ft³) = Peak Discharge (cfs)= Q _{2-year} =	70 70 87, 0.62 226,191 117 39.580 0.96 350,425	76 76 714 0.94 343,721 .530 52.219 1.36 496,420
Disconnected Impervious Adjustment Disconnected impervious area (acre) = CN _{adjusted (1-year)} = High Density Only Volume of runoff from 1" rainfall for DA HIGH DENSITY REQUIREMENT = (ft³) = 1-year, 24-hour storm (Peak Flow) Runoff (inches) = Q* _{1-year} = Volume of runoff (ft³) = Volume change (ft³) = Peak Discharge (cfs)= Q _{1-year} = 2-year, 24-hour storm (LID) Runoff (inches) = Q* _{2-year} = Volume of runoff (ft³) = Peak Discharge (cfs)= Q _{2-year} = 10-year, 24-hour storm (DIA)	70 70 87, 0.62 226,191 117 39.580 0.96 350,425 61.319	76 76 714 0.94 343,721 ,530 52.219 1.36 496,420 75.417
Disconnected Impervious Adjustment Disconnected impervious area (acre) = CN _{adjusted} (1-year)= High Density Only Volume of runoff from 1" rainfall for DA HIGH DENSITY REQUIREMENT = (ft³) = 1-year, 24-hour storm (Peak Flow) Runoff (inches) = Q* _{1-year} = Volume of runoff (ft³) = Volume change (ft³) = Peak Discharge (cfs)= Q _{1-year} = 2-year, 24-hour storm (LID) Runoff (inches) = Q* _{2-year} = Volume of runoff (ft³) = Peak Discharge (cfs)= Q _{2-year} = 10-year, 24-hour storm (DIA) Runoff (inches) = Q* _{1-year} =	70 70 87, 0.62 226,191 117 39.580 0.96 350,425 61.319	76 76 714 0.94 343,721 ,530 52.219 1.36 496,420 75.417

DA1 Page 3

Project Name:	Faison T	ra



<u>DA SITE SUMMARY</u> <u>STORMWATER PRE-POST CALCULATIONS</u>

		SITE	SUMMAR	1								
DRAINAGE AREA SUMMARIES	DRAINAGE AREA SUMMARIES											
DRAINAGE AREA:	DA1	DA2	DA3	DA4	DA5	DA6	DA7	DA8	DA9	DA10		
		elopment	(1-year, 24-	hour storr	n)							
Runoff (in) = Q _{pre,1-year} =	0.62											
Peak Flow (cfs)=Q _{1-year} =	39.580											
	Post-Dev	/elopment	(1-year, 24	-hour stor	m)					ı		
Proposed Impervious Surface (acre) =	21.27											
Runoff (in)=Q _{1-year} =	0.94											
Peak Flow (cfs)=Q _{1-year} =	52.219											
Increase in volume per DA (ft ³)_1-yr storm=	117,530											
Minimum Volume to be Managed for DA HIGH DENSITY REQUIREMENT = (ft ³) =	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
TARGET CURVE NUMBER (TCN)												
		Si	ite Data									
		SITE \SOIL	COMPOSI	TION								
HYDROLOGIC SOIL GRO	UP			Site	<u>Area</u>	:	<u>%</u>		Target CN	<u> </u>		
А				0.0	00	C	1%		48			
В				28	.02	2	8%		66			
С				37.	.82	3	8%		78			
D				34.	.57	34	4%		83			
		То	tal Site Area	(acres) =		•	100	0.41				
Percent E	BUA (Include	s Existing	Lakes/Pond	Areas) =	20%							
			Project	Density =	Low							
		Target Curve Number (TCN) =				76						
		CN _{adjusted (1-year)} =			76							
Minimum Volume to be Mana	ged (Total S	Total Site) Per TCN Requirement= ft ³ =					N/A					
	S	ite Nitrog	en Loading	Data								
			TN export			Site			N			
HSG			coefficient (lbs/ac/yr)			Acreage						
Pasture		1.2				0.00			0.00			
Woods, Poor Condition		1.6				0.00			0.00			
Woods, Fair Condition		1.2				0.00			0.00			
Woods, Good Condition		0.8				37.69			30.15			
Open Space, Poor Condition		1.0			0.00			0.00				
Open Space, Fair Condition			0.8			0.00			0.00			
Open Space, Good Condition			0.6			41.45			24.87			
Reforestation (in dedicated OS)			0.6			0.00			0.00			
Impervious			21.2			21.27			450.92			
SITE NITROGEN LOADING RATE	(lbs/ac/yr)=							I				
Nitrogen Lo												
TOTAL SITE NITROGEN TO MITIGATE (lbs/yr)_We	ndell Only=					144.47						
		n Loading	Data For E	xpansions	s Only							
			Existing	•				New				
Impervious(acres)=		NA			NA NA							
"Expansion Area" (acres=)												
Nitrogen Load (lbs/yr)=		NΔ			NIA							
		NA NA				NA NA						
SITE NITROGEN LOADING RATE (lbs/ac/yr)=			NA NA									
Total Site loading rate (lbs/ac/yr)												
TOTAL SITE NITROGEN TO MITIGATE (lbs/yr)=					N/	4						

SITE SUMMARY Page 4

Project Name: Faison Tract



DRAINAGE AREA 1 BMP CALCULATIONS

NORTH CAROLINA											
DRAINAGE AREA 1 - BMP DEVICES AN	ID ADJUSTMENTS										
DA1 Site Acreage=				100.4	1 1						
DA1 Off-Site Acreage=											
Total Required Storage Volume for Site											
TCN Requirement (ft ³)= Total Required Storage Volume for DA1											
1" Rainfall for High Density (ft ³)=											
Will site use underground detention/cistern?		Enter %	of the year v	water will be reused=						ation/details te water usaç	
ENTER ACREAGE FOR ALL SUB-DRAINAGE	AREAS IN DA										
	HSG	(A	DA1(a) Ac)	Sub-D (A	Ac)	(A	DA1(c)	(A	0A1(d) .c)	(A	DA1(e)
Pasture		Site	Off-site	Site	Off-site	Site	Off-site	Site	Off-site	Site	Off-site
Woods, Poor Condition											
Woods, Fair Condition		37.69									
Woods, Good Condition		37.09									
Open Space, Poor Condition											
Open Space, Fair Condition		10.10		2.00		0.40		40.50			
Open Space, Good Condition		16.46		3.28		9.12		12.59			
Reforestation (in dedicated OS)		0.00		0.55		7.00		46 =0			
Impervious Sub-DA1(a) BMP(s)		0.66		2.83		7.08		10.70			
Device Name (As Shown on Plan)	Device Type		er Quality Vo or Sub-DA (ft			Provided Volume that will <u>drawdown 2-5 days</u> (ft ³)		Nitrogen Removal Efficiency	Sub-DA Nitrogen (lbs)	Nitrogen Removed (lbs)	Drawdown Time (hours)
Post POI 1 (Bypass)								0%	69.10	0.00	
7 (7)							0%	69.10	0.00		
			-				0%	69.10	0.00		
							0%	69.10	0.00		
						0%	69.10	0.00			
To	tal Nitrogen remaining leaving the subbasin (lbs):					69	.10				
Sub-DA1(b) BMP(s)											
	If Sub-DA1(b) is connected to upstream subbasin(s), the nitrogen leaving the most upstream subbasin(lbs):										
Device Name (As Shown on Plan)	Device Type		er Quality Vo or Sub-DA (ft			Provided olume that www. 2-5 co. (ft ³)		Nitrogen Removal Efficiency	Sub-DA Nitrogen (lbs)	Nitrogen Removed (lbs)	Drawdown Time (hours)
SCM 1	Wet Detention Basin							25%	61.96	15.49	
								0%	46.47	0.00	
			-		14,129		0%	46.47	0.00		
								0%	46.47	0.00	
								0%	46.47	0.00	
Tot	tal Nitrogen remaining leaving the subbasin (lbs):					46	.47				
Sub-DA1 (c) BMP(s)											
enter t	If Sub-DA1(c) is connected to upstream subbasin(s), the nitrogen leaving the most upstream subbasin(lbs):										
Device Name (As Shown on Plan)	Device Type	Water Quality Volume for Sub-DA (ft ³)		Provided Volume that will <u>drawdown 2-5 days</u> (ft ³)		Nitrogen Removal Efficiency	Sub-DA Nitrogen (lbs)	Nitrogen Removed (lbs)	Drawdown Time (hours)		
SCM 2	Wet Detention Basin							25%	155.57	38.89	
								0%	116.68	0.00	
		-			36,016			00/			
			-			36,016		0%	116.68	0.00	
			-			36,016		0%	116.68	0.00	
			-			36,016					

DA1_BMPs Page 5

Project Name:

Faison Tract



DRAINAGE AREA 1 BMP CALCULATIONS

Sub-DA1(d) BMP(s)						,	
	pasin(s), enter the nitrogen leaving the most upstream subbasin(lbs):						
Device Name (As Shown on Plan)	Device Type	Provided Volume that will <u>drawdown 2-5 days</u> (ft ³)	Nitrogen Removal Efficiency	Sub-DA Nitrogen (lbs)	Nitrogen Removed (lbs)	Drawdown Time (hours)	
SCM 3	Wet Detention Basin			25%	234.39	58.60	
				0%	175.80	0.00	
		-	66,000	0%	175.80	0.00	
				0%	175.80	0.00	
				0%	175.80	0.00	
То	tal Nitrogen remaining leaving the subbasin (lbs):		175.80			,	•
Sub-DA1(e) BMP(s)							
If Sub-DA1(e) is connected to upstream subt	pasin(s), enter the nitrogen leaving the most upstream subbasin(lbs):						
Device Name (As Shown on Plan)	Device Type	Water Quality Volume for Sub-DA (ft³)	Provided Volume that will <u>drawdown 2-5 days</u> (ft ³)	Nitrogen Removal Efficiency	Sub-DA Nitrogen (lbs)	Nitrogen Removed (lbs)	Drawdown Time (hours)
				0%	0.00	0.00	
				0%	0.00	0.00	
		-		0%	0.00	0.00	
				0%	0.00	0.00	
				0%	0.00	0.00	
То	tal Nitrogen remaining leaving the subbasin (lbs):						
	DA	A1 BMP SUMMARY					
	Total Volume Treated (ft ³)=		116,145				
	Nitrogen Mitigated(lbs)=		112.98				
1-year, 24-hour storm							
	Post BMP Volume of Runoff (ft ³) _(1-year) =		227,576				
	Post BMP Runoff (inches) = Q* _(1-year) =		0.62				
	Post BMP CN _(1-year) =		69				
	Post BMP Peak Discharge (cfs)= Q _{1-year} =		33.190				
2-year, 24-hour storm (LID)							
	Post BMP Volume of Runoff (ft3) _(2-year) =		380,275				
	Post BMP Runoff (inches) = Q* _(2-year) =		1.04				
	Post BMP CN _(2-year) =		71				
	Post BMP Peak Discharge (cfs)= Q _(2-year) =		70.750				
10-year, 24-hour storm (DIA)							
	Post BMP Volume of Runoff (ft ³) _(10-year) =		863,186				
	Post BMP Runoff (inches) = $Q^*_{(10-year)}$ =		2.37				
	Post BMP CN(_{10-year})=		89				
	Post BMP Peak Discharge (cfs)= Q _(10-year) =		187.670				

DA1_BMPs Page 6



Project Name:	Faison Tract

DA SITE SUMMARY BMP CALCULATIONS

BMP SUMMARY										
DRAINAGE AREA SUMMARIES										
DRAINAGE AREA:	DA1	DA2	DA3	DA4	DA5	DA6	DA7	DA8	DA9	DA10
Pre-	Pre-Development (1-year, 24-hour storm)									
Runoff (in)=Q* _{1-year} =	0.62									
Peak Flow (cfs)=Q _{1-year} =	39.580									
Post	-Developm	ent (1-yea	r, 24-hour s	storm)						
Target Curve Number (TCN) =					76	i				
Post BMP Runoff (inches) = $Q^*_{(1-year)}$ =	0.62									
Post BMP Peak Discharge (cfs)= Q _{1-year} =	33.190									
Post BMP CN _(1-year) =					69				•	
Post-BMP Nitrogen Loading										
TOTAL SITE NITROGEN MITIGATED (lbs)=					112.	98				
SITE NITROGEN LOADING RATE (lbs/ac/yr)=					3.9	1				
TOTAL SITE NITROGEN LEFT TO MITIGATE_Wendell Only (lbs)=					31.4	19				

BMP SUMMARY Page 7