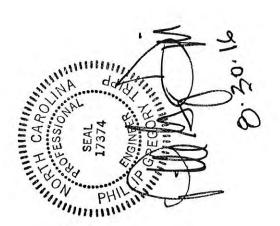
Burnt Mill Business Park Lot 22 Yr and 50 Yr Storm Pipe Calculations

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	3 50 Yr	
-	10 Yr and	
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	5	

08/30/2016 MLV

10-year																	
LOCA	LOCATION	Ą	AREA	RUNOFF	RAIN	INCREMENTAL FLOW	TOTAL					PIPE	PIPE DATA				
FROM	01	SUB	TOTAL	COEFF.	- 1 - 1	Q=CIA (C.F.S.	Q=CIA (C.F.S.	TYPE	z	LENGTH	% S	SIZE	VEL.	Q AVAIL.	Ξ Ņ.	LOW INV.	RIM ELEV.
		(June 1	(Jane)		(111/1111)	מאפע ה	עבא ח)			(π)		(III)	(tps)	(cts)			Œ
CI No. 2	CI No. 1	0.61	0.61	0.80	7.23	3.53	3.53	RCP	0.013	180	0.56%	15	2.9	4.83	23.00	22.00	26.00
CI No. 1	CI No. 1 SDMH No. 2 0.73	0.73	1.34	0.80	7.23	4.22	7.75	RCP	0.013	80	1.25%	18	4.4	11.78	22.00	21.00	26.00
SDMH No. 2	SDMH No. 2 SDMH No. 1	00.00	1.34	0.80	7.23	00.00	7.75	RCP	0.013	75	1.33%	18	4.4	12.16	21.00		28.00
SDMH No. 1	Ex. CI	0.00	1.34	0.80	7.23	00.00	7.75	RCP	RCP 0.013	15	3.33%	18	4.4	19.23	20.00	19.50	26.80
											1						

20-3081									1								
CI No. 2	CI No. 1	0.61	0.61	0.80	8.87	4.33	4.33	RCP	RCP 0.013	180	0.56%	15	3.5	4.83	23.00	23.00 22.00 26.00	26.00
															200	2011	20.02
CI No. 1 SD	SDMH No. 2 0.73	0.73	1.34	0.80	8.87	5.18	9.51	RCP	RCP 0.013	80	1 25%	200	5.4	11 78 22 00 24 00 26 00	22.00	21.00	28.00
											200		1	0	44.00	20.17	20.00
SDMH No. 2 SDMH No. 1	_	0.00	1.34	0.80	8.87	00.00	9.51	RCP	0.013	RCP 0.013 75	1.33%	48	4 5	54 1216 2100 2000 2800	21.00	20.00	28.00
														2	20.14	20.02	40.00
SDMH No. 1	Ex. C	00.0	1.34	0.80	8.87	0.00	9.51	RCP	RCP 0 013	7.	3 33%	ζ,	4	10.23	20.00	20 00 19 50 26 90	00 90
									2	2	0.00.0	2		0.40	20.00	3.50	20.00
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FOR REGISTRATION REGISTER OF DEEDS
NEW HANOVER COUNTY. NC
2008 APR 29 03:28:00 PM
8K:5307 PG: 1652-1655 FEE: \$20.00

INSTRUMENT # 2008018634

HIGH DENSITY COMMERCIAL SUBDIVISIONS DEED RESTRICTIONS & PROTECTIVE COVENANCES

RETURN TO

Nurvon Brailstord

High Density Commercial Subdivisions **Deed Restrictions & Protective Covenances**

In accordance with Title 15 NCAC 2H.1000, the Management Regulations, deed restrictions and protective covenants are required for High Density Commercial Subdivisions where lots will be subdivided and sold and runoff will be treated in an engineered stormwater control facility. Deed restrictions and protective covenants are necessary to ensure that the development maintains a built-upon area consistent with the design criteria used to size the stormwater control facility.

BRAILFORD

NORMAN

ļ	, <u>, , , , , , , , , , , , , , , , , , </u>	JORMAN	BRAILSFO	RD	, ack	nowledge,	affirm an	d agree by	my signa	iture below, that
I) IIIW aidtiu	ause the f	ollowing d	eed restri	ictions and d	covenants	to be rec	orded prior	to the sa	iture below, that le of any lot
٧	Ylu jii i	me brolec	CKHOWH B	5 <u>Bu</u>	RNT MILL	PREINES	S PARK	<u>'</u>		:
/1	1.	The follo	wing cove	nants are	intended to	ensure on	going co	mpliance w	ith State	Stormwater
		- wanager	nent Perm CAC 2H.10	III IYUMDA	r 548 9	<u>50107</u> ,	as issue	d by the Di	vision of	Water Quality
1 2	2.	The State	of North	ioo. Carolina	ls made a b	eneticiary i	of these i	covenants t	n the evi	ent necessary to
ł		main(ain	compiland	e with thi	e stormwate	ir manader	nant nen	nit.		
13	3.	under the	m.				-		-	ties claiming
14	‡ .	The cove written co	nants pen Insent of t	talning to he State	stormwater of North Ca	may not be	e altered sion of W	or rescinde leter Quality	d withou	t the express
\ 5	ī.	Alteration	i of the dra	ainage as	shown on t of Water Qu	he approve	ed plan m	ay not take	place w	ithout the
$\setminus \epsilon$	š.	The maxi	mum allov	vable bui	it-upon area	per lot is		sauare	feet. (O	R. if the
\		proposed	bullt-upor	пагеа ре	r lot will van	y, please ū	se the fo	llowing form	nat & lan	R, if the guage (in bold):
		The max	imum bul	lt-upon e	area per lot	, in square	feet, is	as listed b	elow:	
		Lot# B		Lot#		Lot#	BUA	Lot	# BUA	
ζ.		(SEE AT	FACHED 7	AB <u>le)</u>						-
]		This allot	ted amour	it include	s any bullt-u	ipon area d	onstructe	ed within th	e lot proj	erty boundaries
1		and that p	portion of t	he nght-c	of-way betw	een the fro	nt lot line	and the eq	lan of the	novement Buill
1		coauina e	nd parkini	, oucis no a areas. I	but does noi	structures, t include re	. aspnaπ, ised one	CONCrete, g an wood de	jravel, bi ekina or	ick, stone, slate,
_	_	surfaçe o	t swimmin	a pools.					_	
7	•	All runoff	from the b	uilt-upon	areas on th	e lot must	drain into	the permit	ted syste	m. This may be
		accompiis aradina ti	ne lot to di	ıyrı a varı Bin towar	ety of mean rd the street	s including : or aradina	roor arai nerimet	in guπers w Per swales to	nich drai 2 collect	n to the street, the lot runoff
\		and direc	ting them .	into a cor	nponent of t	the stormw	ater colle	ection syste.	m intsi	hat will naturally
\ 8	}	The owns	the syster	n are not Int. whos	required to	provide the	ese addit	ional meas	ures.	
\ \	•	separate	stormwate	r Dennit i	e owneranip epplication t	o the Divis	ineu by (ion of W:	ne permitte ater Quality	e, is requ and rece	uired to submit a aive a permit
/	_	prior to co	onstruction		0-			aco, quanty	4	a perim
	·	Signature		Mari	13	an Topa	P. /	Date:_	11/2	0/00
		0.g.,/	The Car					Date,	7/6	7/00
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		State of _	$ \lambda$			County	of	3runs	<u> </u>	<u>/</u> <
		do hereby	certify the		Orman	13 rai	1/s fo	pe	rsonally :	appeared
		before me	this the _	29	day of	1+p	11	, 20_	<u>08</u> , ar	nd acknowledge
		the due ex	xecution o	f the fore	going instru	ment. Witn	ess my h	and and of	ficial sea	l,
		۶	~),	8:	2/00			annin in	WAFAL	
		Signature			/ 100 00			MILLIANA	TARON	<u>.</u>
		My Comm	ilssion exp	oires	12/201	109		BAUZINA E	482 100	
F	orm D	RPC-1 Re	v.1		Page 1 of	f 1		E A	- /s) <u> </u>
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								MAN CHE	$OO_{L_{\alpha}}$	

Lots draining to pond permitted under SW8 950107 Burnt Mill Business Park

	Lot A	Area	Built Upon Area (BUA)	
Lot Name	Acres	Sq. Ft.	Sq. Ft.	
Lot 12R (3205 Randali Parkway)	1.80	78,500	60,400	
Lot 11R (3240 Burnt Mill Drive)	2.47	107,600	76,000	
Lot 9 (3311 Burnt Mill Drive)	1.43	62,300	47,500	
Lot 22 (3305 Jaeckie Drive)	2,09	91,100	63,400	
Lot 20 (3340 Jaeckle Drive)	3.74	163,000	77,000	
Lot 8 (Austin Property)	2.02	88,000	66,000	* Assumed
Lot 19	2.55	111,100	008,88	
Lot 21	2.10	91,500	66,600	
Lot 10 (Pond Site)	1.55	67,600		
Rights-of-Way/Sidewalk	3.01	131,200	99,900	
Subtotal	22.76	991,500	642,100	
Future	,, o	04.,000	62,400	
Total Allowable Impervious permi	ltted under S	W8 950107	704,500	

Stormwater Drainage System & Erosion Control Narrative

Burnt Mill Business Park Lot 22 3333 Jaeckle Drive, Wilmington, NC

The Burnt Mill Business Park (BMBP) Lot 22 project is located on Jaeckle Drive in Wilmington, NC, New Hanover County, parcel ID # R05505-004-026-000. BMBP Lot 22 is being developed by Abinto Corporation. The site is approximately 2.09 acres of land, of which 2.2 acres is proposed for disturbance. The BMBP Lot 22 facility will be serviced by CFPUA for public water and sewer systems. No wetlands exist on the project site.

Abinto Corporation is proposing to build an 11,730 sf 1-story office building and a 6,250 sf 1-story building to include 1,500 sf restaurant with the remaining square footage being office, parking, sidewalks and landscape areas. Proposed impervious area for this project is 63,400 sf, which includes on-site, off-site and future BUA. Total impervious area within the property is 62,570 sf or 68.6% of the total project area.

The proposed BMBP Lot 22 project is located within the Burnt Mill Business Park subdivision and is permitted to drain to an Offsite Stormwater System. The existing NCDENR stormwater permit number for Burnt Mill Business Park is SW8 950107. BMBP Lot 22 was previously permitted with both the City and State stormwater. The existing City of Wilmington stormwater permit number is 2008023 and the existing NCDENR stormwater permit number is SW8 080509. We will be modifying the aforementioned existing stormwater permits to match the proposed improvements. The proposed stormwater system will tie into the existing piped stormwater system that discharges into the existing offsite stormwater pond. The outflow from the existing pond will drain to Burnt Mill Creek; classification C-Sw, index No. 19-74-63-2), in the Cape Fear River Basin. All built upon areas (BUA's) will be collected and routed through the existing pipe system and into the existing off-site wet detention basin.

Prior to clearing of the site, one construction entrance and temporary silt fence will be installed. After clearing of the project site, the parking areas and building locations will then be graded. Underground utilities, including the stormwater drainage system will be installed and inlet protection put into place. The proposed buildings will be constructed followed by paving, sidewalk installation, final site grading, stabilization of the site and landscaping. Temporary erosion control measures will remain in-place until such time as areas are stabilized. Permanent measures include permanent stands of grass. Specific measures and directions to the contractor are noted on the plans. Please refer to Sheet C4 for detailed erosion control measures and construction sequence.

