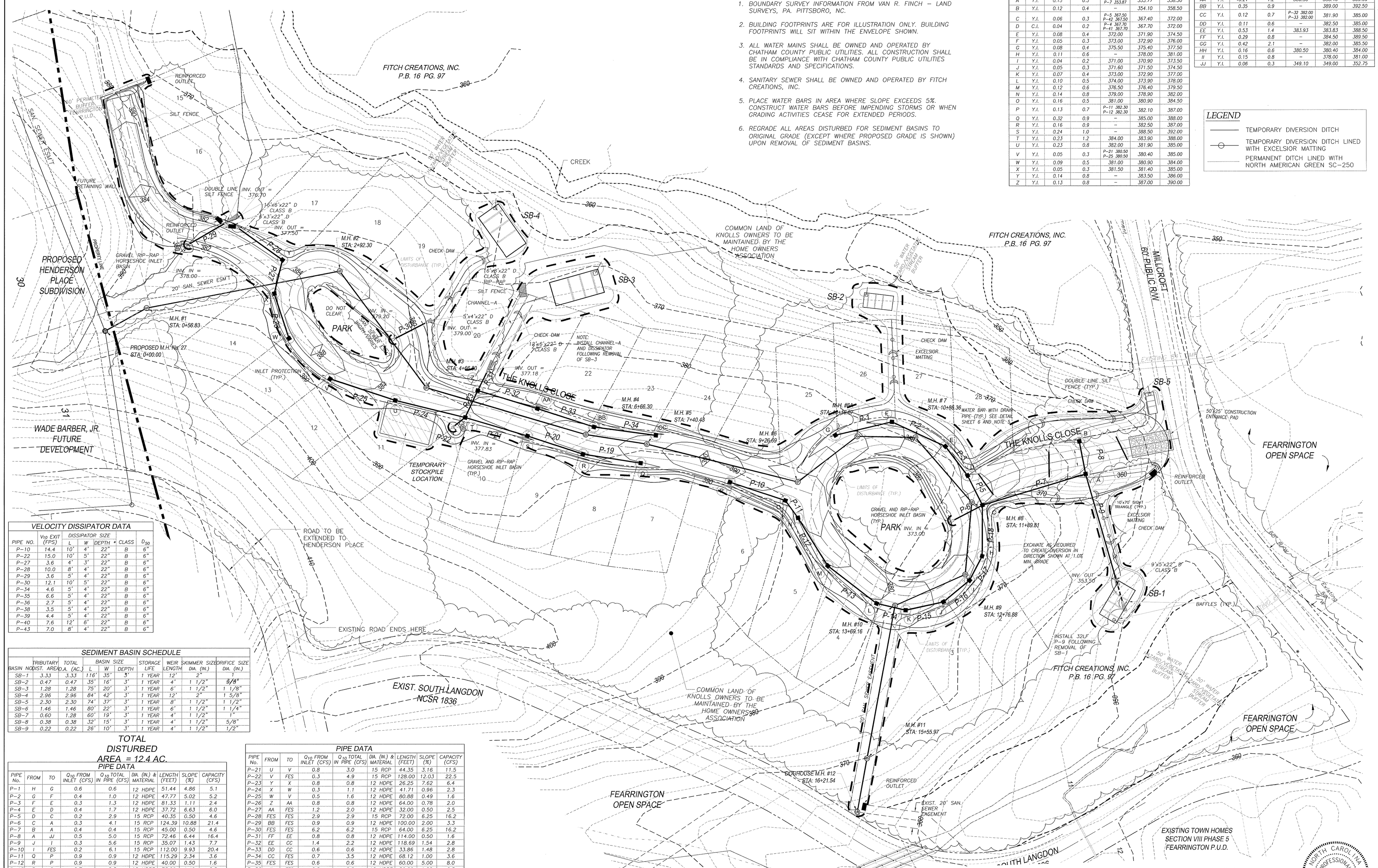
GENERAL NOTES:

1. BOUNDARY SURVEY INFORMATION FROM VAN R. FINCH – LAND SURVEYS, PA. PITTSBORO, NC.
2. BUILDING FOOTPRINTS ARE FOR ILLUSTRATION ONLY. BUILDING FOOTPRINTS WILL SIT WITHIN THE ENVELOPE SHOWN.
3. ALL WATER MAINS SHALL BE OWNED AND OPERATED BY CHATHAM COUNTY PUBLIC UTILITIES. ALL CONSTRUCTION SHALL BE IN COMPLIANCE WITH CHATHAM COUNTY PUBLIC UTILITIES STANDARDS AND SPECIFICATIONS.
4. SANITARY SEWER SHALL BE OWNED AND OPERATED BY FITCH CREATIONS, INC.
5. PLACE WATER BARS IN AREA WHERE SLOPE EXCEEDS 5%. CONSTRUCT WATER BARS BEFORE IMPENDING STORMS OR WHEN GRADING ACTIVITIES CEASE FOR EXTENDED PERIODS.
6. REGRADE ALL AREAS DISTURBED FOR SEDIMENT BASINS TO ORIGINAL GRADE (EXCEPT WHERE PROPOSED GRADE IS SHOWN) UPON REMOVAL OF SEDIMENT BASINS.



EROSION CONTROL PLAN

SCALE: 1' = 50'

INLET DATA

INLET No.	TYPE	DRAINAGE AREA (AC.)	Q10 INTO INLET	INVERT IN	INVERT OUT	TOP
A	Y.I.	0.15	0.5	P–5 353.87 P–7 353.87	353.77	358.50
B	Y.I.	0.12	0.4	–	354.10	358.50
C	Y.I.	0.06	0.3	P–5 367.50 P–42 367.50	367.40	372.00
D	C.I.	0.04	0.2	P–4 367.70 P–41 367.70	367.70	372.00
E	Y.I.	0.08	0.4	372.00	371.90	374.50
F	Y.I.	0.05	0.3	373.00	372.90	376.00
G	Y.I.	0.08	0.4	375.50	375.40	377.50
H	Y.I.	0.11	0.6	–	378.00	381.00
I	Y.I.	0.04	0.2	371.00	370.90	373.50
J	Y.I.	0.05	0.3	371.60	371.50	374.50
K	Y.I.	0.07	0.4	373.00	372.90	377.00
L	Y.I.	0.10	0.5	374.00	373.90	378.00
M	Y.I.	0.12	0.6	376.50	376.40	379.50
N	Y.I.	0.14	0.8	379.00	378.90	382.00
O	Y.I.	0.16	0.5	381.00	380.90	384.50
P	Y.I.	0.13	0.7	P–11 382.30 P–12 382.30	382.10	387.00
Q	Y.I.	0.32	0.9	–	385.00	388.00
R	Y.I.	0.16	0.9	–	382.50	387.00
S	Y.I.	0.24	1.0	–	388.50	392.00
T	Y.I.	0.23	1.2	384.00	383.90	388.00
U	Y.I.	0.23	0.8	382.00	381.90	385.00
V	Y.I.	0.05	0.3	P–21 380.50 P–25 380.50	380.40	385.00
W	Y.I.	0.09	0.5	381.00	380.90	384.00
X	Y.I.	0.05	0.3	381.50	381.40	385.00
Y	Y.I.	0.14	0.8	–	383.50	386.00
Z	Y.I.	0.13	0.8	–	387.00	390.00

INLET DATA

INLET No.	TYPE	DRAINAGE AREA (AC.)	Q10 INTO INLET	INVERT IN	INVERT OUT	TOP
AA	Y.I.	0.07	1.2	386.50	386.40	389.00
BB	Y.I.	0.35	0.9	–	389.00	392.50
CC	Y.I.	0.12	0.7	P–33 382.00 P–33 382.00	381.90	385.00
DD	Y.I.	0.11	0.6	–	382.50	385.00
EE	Y.I.	0.53	1.4	383.93	383.83	388.50
FF	Y.I.	0.29	0.8	–	384.50	389.50
GG	Y.I.	0.42	2.1	–	382.00	385.50
HH	Y.I.	0.16	0.6	380.50	380.40	384.00
II	Y.I.	0.15	0.8	–	378.00	381.00
JJ	Y.I.	0.06	0.3	349.10	349.00	352.75

LEGEND

- TEMPORARY DIVERSION DITCH
- TEMPORARY DIVERSION DITCH LINED WITH EXCELSIOR MATTING
- PERMANENT DITCH LINED WITH NORTH AMERICAN GREEN SC–250

VELOCITY DISSIPATOR DATA

PIPE NO.	V_{10} EXIT (FPS)	DISSIPATOR SIZE L	W	DEPTH	CLASS	D_{50}
P–10	14.4	10'	4'	22"	B	6"
P–22	15.0	10'	5'	22"	B	6"
P–27	3.6	4'	3'	22"	B	6"
P–28	10.0	8'	4'	22"	B	6"
P–29	3.6	5'	4'	22"	B	6"
P–30	12.1	10'	5'	22"	B	6"
P–34	4.6	5'	4'	22"	B	6"
P–35	6.6	5'	4'	22"	B	6"
P–36	2.7	5'	4'	22"	B	6"
P–38	3.5	5'	4'	22"	B	6"
P–39	4.4	5'	4'	22"	B	6"
P–40	7.6	12'	6'	22"	B	6"
P–43	7.0	8'	4'	22"	B	6"

SEDIMENT BASIN SCHEDULE

BASIN NO.	TRIBUTARY DIST. AREA	TOTAL DIA. (AC.)	BASIN SIZE L	W	DEPTH	STORAGE LIFE	WEIR LENGTH	SKIMMER SIZE DIA. (IN.)	ORIFICE SIZE DIA. (IN.)
SB–1	3.33	3.33	116'	35'	3'	1 YEAR	12'	2"	1
SB–2	0.47	0.47	35'	16'	3'	1 YEAR	4'	1 1/2"	5/8"
SB–3	1.28	1.28	75'	20'	3'	1 YEAR	6'	1 1/2"	1 1/8"
SB–4	2.96	2.96	84'	42'	3'	1 YEAR	12'	2"	1 5/8"
SB–5	2.30	2.30	74'	37'	3'	1 YEAR	8'	1 1/2"	1 1/2"
SB–6	1.46	1.46	80'	22'	3'	1 YEAR	6'	1 1/2"	1 1/4"
SB–7	0.60	1.28	60'	19'	3'	1 YEAR	4'	1 1/2"	1"
SB–8	0.38	0.38	32'	15'	3'	1 YEAR	4'	1 1/2"	5/8"
SB–9	0.22	0.22	26'	10'	3'	1 YEAR	4'	1 1/2"	1/2"

TOTAL DISTURBED AREA = 12.4 AC.

PIPE DATA

PIPE No.	FROM	TO	Q_{10} FROM INLET (CFS)	Q_{10} TOTAL IN PIPE (CFS)	DIA. (IN.) & MATERIAL	LENGTH (FEET)	SLOPE (%)	CAPACITY (CFS)
P–1	H	G	0.6	0.6	12 HDPE	51.44	4.86	5.1
P–2	G	F	0.4	1.0	12 HDPE	47.77	5.02	5.2
P–3	F	E	0.3	1.3	12 HDPE	81.33	1.11	2.4
P–4	E	D	0.4	1.7	12 HDPE	37.72	6.63	6.0
P–5	D	C	0.2	2.9	15 RCP	40.35	0.50	4.6
P–6	C	A	0.3	4.1	15 RCP	124.39	10.88	21.4
P–7	B	A	0.4	0.4	15 RCP	45.00	0.50	4.6
P–8	A	JJ	0.5	5.0	15 RCP	72.46	6.44	16.4
P–9	J	I	0.3	5.6	15 RCP	35.07	1.43	7.7
P–10	I	FES	0.2	6.1	15 RCP	112.00	9.93	20.4
P–11	Q	P	0.9	0.9	12 HDPE	115.29	2.34	3.6
P–12	R	P	0.9	0.9	12 HDPE	40.00	0.50	1.6
P–13	P	O	0.7	2.5	12 HDPE	73.99	1.49	2.8
P–14	O	N	0.5	3.0	12 HDPE	69.28	2.74	3.8
P–15	N	M	0.8	3.8	12 HDPE	63.44	3.78	4.5
P–16	M	L	0.6	4.4	15 RCP	55.14	4.35	13.5
P–17	L	K	0.5	4.9	15 RCP	36.15	2.49	10.2
P–18	K	J	0.4	5.3	15 RCP	60.28	2.16	9.5
P–19	S	T	1.0	1.0	12 HDPE	171.89	2.62	3.8
P–20	T	U	1.2	2.2	15 RCP	69.82	2.72	10.7

PIPE DATA

PIPE No.	FROM	TO	Q_{10} FROM INLET (CFS)	Q_{10} TOTAL IN PIPE (CFS)	DIA. (IN.) & MATERIAL	LENGTH (FEET)	SLOPE (%)	CAPACITY (CFS)
P–21	U	V	0.8	3.0	15 RCP	44.35	3.16	11.5
P–22	V	FES	0.3	4.9	15 RCP	128.00	12.03	22.5
P–23	Y	X	0.8	0.8	12 HDPE	26.25	7.62	6.4
P–24	X	W	0.3	1.1	12 HDPE	41.71	0.96	2.3
P–25	W	V	0.5	1.6	12 HDPE	80.88	0.49	1.6
P–26	Z	AA	0.8	0.8	12 HDPE	64.00	0.78	2.0
P–27	AA	FES	1.2	2.0	12 HDPE	32.00	0.50	2.5
P–28	FES	FES	2.9	2.9	15 RCP	72.00	6.25	16.2
P–29	BB	FES	0.9	0.9	12 HDPE	100.00	2.00	3.3
P–30	FES	FES	6.2	6.2	15 RCP	64.00	6.25	16.2
P–31	FF	EE	0.8	0.8	12 HDPE	114.00	0.50	1.6
P–32	EE	CC	1.4	2.2	12 HDPE	118.69	1.54	2.8
P–33	DD	CC	0.6	0.6	12 HDPE	33.86	1.48	2.8
P–34	CC	FES	0.7	3.5	12 HDPE	68.12	1.00	3.6
P–35	FES	FES	0.6	0.6	12 HDPE	60.00	5.00	8.0
P–36	II	FES	0.8	0.8	12 HDPE	50.00	1.00	2.3
P–37	GG	HH	2.1	2.1	12 HDPE	34.86	4.30	4.8
P–38	HH	FES	0.6	2.7	12 HDPE	48.00	1.35	2.7
P–39	FES	FES	0.6	0.6	12 HDPE	64.00	2.08	5.2
P–40	FES	FES	15.4	15.4	24 RCP	40.00	1.00	22.7
P–41	FES	D	1.0	1.0	15 RCP	40.00	8.25	18.6
P–42	FES	C	0.9	0.9	15 RCP	40.00	8.75	19.2
P–43	JJ	FES	–	5.3	15 RCP	136.00	1.56	8.1

JOB NO. –
DESIGN ARK
DRAWN MAT
CHECKED ARK
SCALE 1"= 50'
FILE Knolls at Fearrington
PLOT DATE 6/22/09
REVISIONS:

DIEHL & PHILLIPS, P.A.
CONSULTING ENGINEERS
CARY, N.C. • (919) 467-9972

THE KNOLLS
FEARRINGTON P.U.D.
CHATHAM COUNTY, NORTH CAROLINA

PHASE 1 CLEARING LIMITS

SHEET 2 OF 7