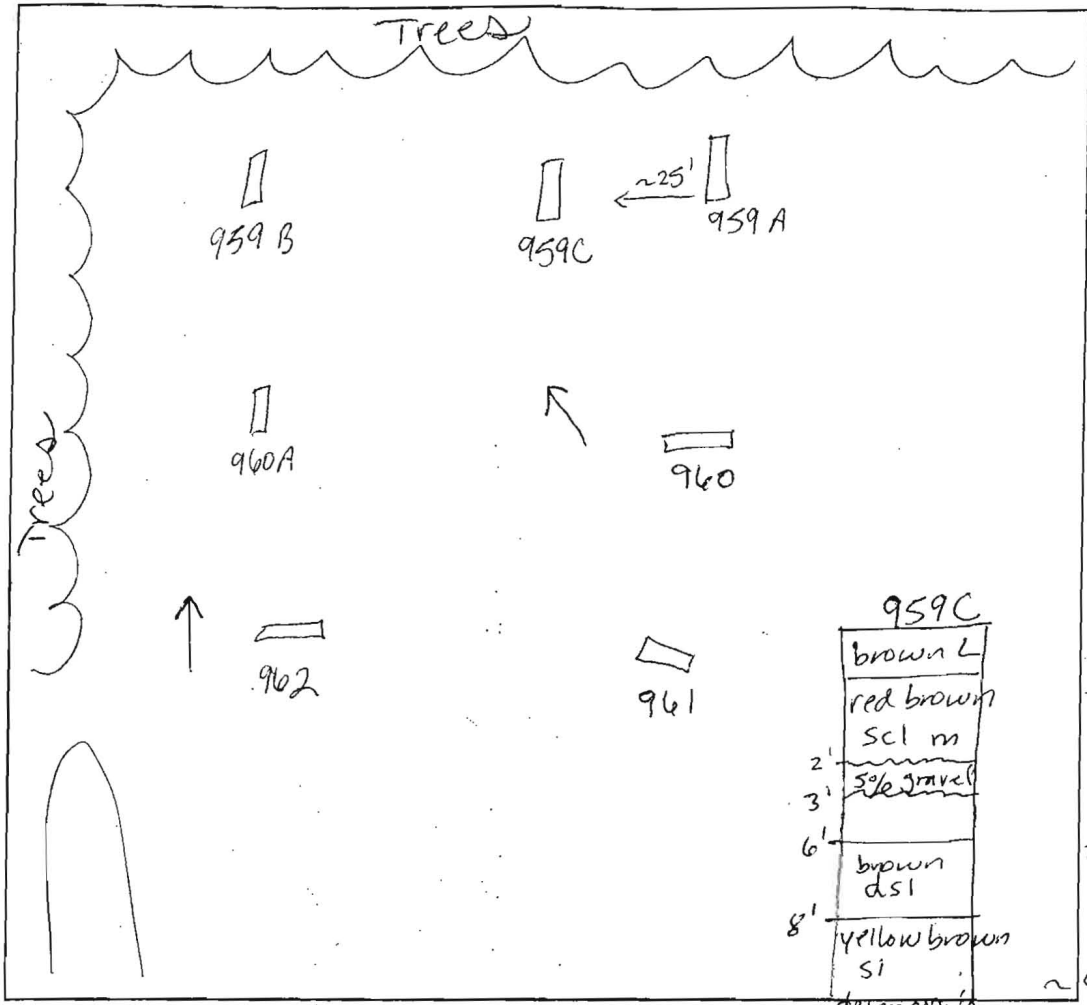


lot 93 / 51



959A
 1' brown L
 1' red brown sil m micaceous
 10' yellow orange sil micaceous
 14'

961
 7" brown L
 orange red brown sil micaceous
 4' orange brown dsil coarse micaceous
 4 1/2' orange brown gray fsil sg micaceous
 6' gray dsil sg micaceous

962
 6 1/2" brown L
 yellow brown sil m
 3' orange brown dsil coarse micaceous
 5' orange brown sil sg
 10' 1s rocky 5% gravel block
 13'

960A
 6" brown L
 25" brown sil bk micaceous
 brown dsil coarse micaceous
 4' brown sil
 8' brown fls sg micaceous

960
 7" brown L 5% gravel
 red brown sil sbk micaceous
 25" orange brown dsil sg
 68" yellow brown fls sg

959B
 brown L
 red brown sil m micaceous
 34" red brown dsil well compacted micaceous
 7' brown 1s sg

959C
 brown L
 red brown sil m
 2' 5% gravel
 3' 5% gravel
 6' brown dsil
 8' yellow brown sil
 15' decomposed rock

DATE	TEST #	DEPTH	START	BREAK 1" DROP	STOP 2" DROP	TIME OF 2nd INCH	P/F/H
10/13/05	961	6' / 12'	11:18 ²²	11:22	11:28 ⁰⁹	6	P
	962	6' / 13'	11:27	11:32	11:37	5	P
	960A	6' / 13'	11:40	11:45	11:53	8	P
	960	5' / 14'	11:48	11:55	12:04	9	P
	959B	6' / 13'	11:55	12:00	12:08	8	P
	959A	10' / 14'	12:07	too deep	desp clay		F
	959C	8' / 15'					VP

REMARKS: 959C no sidewall available - effective area starts @ 8'
 SANITARIAN: SF
 BACKHOE: Mike J (AEC)
 OTHERS: Bob Sheehey
 TEST HOLES USED IN SDA: _____
 AVG. PERC TIME: 7.2
 SQ. FT/BR: _____

TRENCH WIDTH: _____ INLET DEPTH: _____ MAX. BOT DEPTH: _____ EFFECTIVE S/W: _____

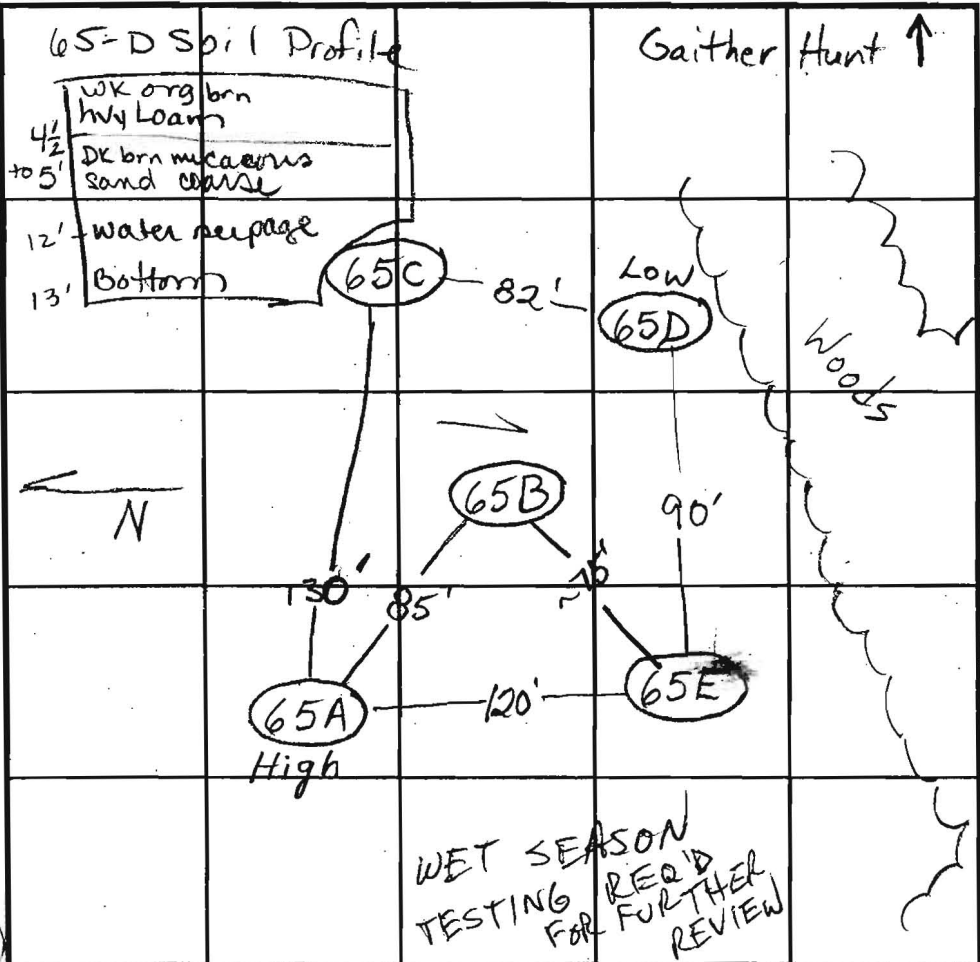
516084

COUNTY #

SOIL PROFILE
 0' 65E
 1' 7dbm hvy Lm Clay skin Loam micaceous
 2' Loam micaceous org ybrn
 3 1/2' 14 brn white org black ybrn
 micaceous SAND
 moist SOIL

E 65B W
 2' 10" CLLM
 Surface boulders
 Rx 85% 5-10%
 3 1/2' hvy SLM
 micaceous SAND
 14 brn ybrn like
 65E
 moist SOIL

65A
 Red Br Heavy Loam
 5.5' Or Br Loam
 6'-6.5' Light Red Br Sa Loam
 5% Rock strong yellow w/ large mottles
 Siltiy - m...
 15'

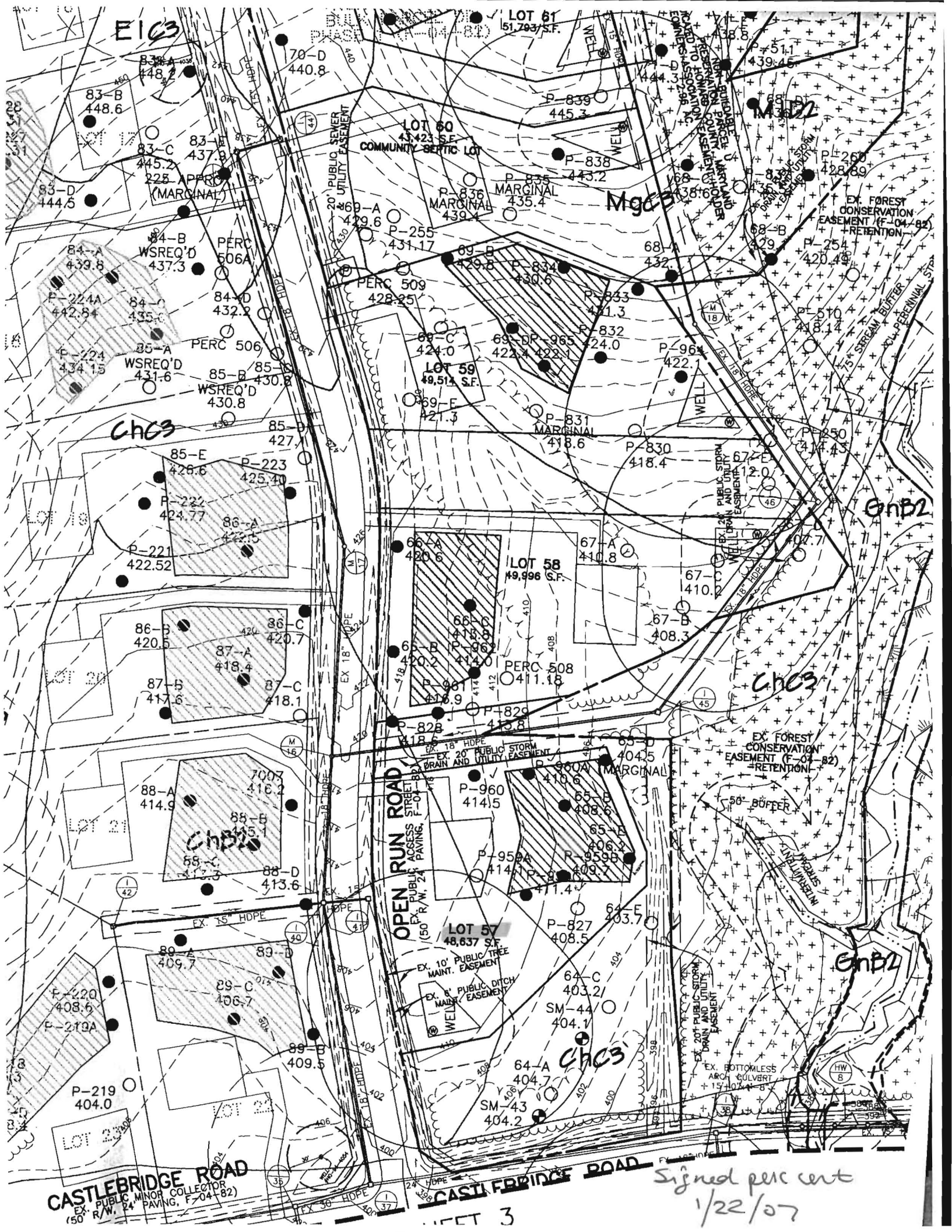


SOIL PROFILE
 0' 65-C
 DK ybrn hvy Lm CLLM
 3 1/2' Loamy SAND coarse micaceous
 Rx < 5%
 black soil mottled
 14 1/2' wet soil

INDICATE NORTH - NAME ADJOINING ROADWAY AS BASE LINE.

DATE	TEST NO.	DEPTH	PRE-WET		TEST - 1" DROP		TIME	
			START	STOP	START	STOP		
7-16-02	65E	4' 2" / 6' / 13' V	8:40 TO 8:40	SLOW 9:00	9:40:50	8:40:50	8:41:30	40 sec WS
		12x12 6'	8:46	8:47:30	8:47:30	8:50:30	3 min	
	65-B	4' 10" / 7' / 13'	9:00 / 8:59	9:25 / 9:01	9:25 / 9:01	~7/8" in	30	slow / 1 1/2" OK
	65-A	8' / 15' V	9:10	9:10:30	9:10:30	9:11:30	1 min	Retes
		6' 5"	9:13	9:30	9:30	~3/4 in	30	slow
	65-C	7.5' / 14.5'	9:34	9:34:40	9:34:40	9:35:30	~1 min	
		6.5'	9:34:15	9:35:30	9:35:30	9:37:00	1 1/2 min	WS
		7 1/2' 12x12	9:41:45	9:44:50	9:44:50	9:47:50	3 min	
	65-D	6'	9:56	9:57:20	9:57:20	9:59	~2	WS
		7' after 15 min - open	10:00	10:04	10:04	10:09	5 min	

REMARKS: H₂O @ 12 1/2' @ 12:05 65B, D+E are Wet Season
 TYPE OF SOIL: Holes Dug Per Plan
 TESTED BY: B. Baker / K. Noonan ALSO PRESENT: Hatfields
 TRENCH DESIGN DATA: AVERAGE PERCOLATION TIME _____ TRENCH WIDTH _____
 INLET DEPTH _____ MAXIMUM BOTTOM DEPTH _____ SQ. FT./BEDROOM _____



E1C3

LOT 61
51,793 S.F.

LOT 60
43,423 S.F.
COMMUNITY BERTIC LOT

Mgc3

M1D2

Chc3

Enb2

Chc3

Chb2

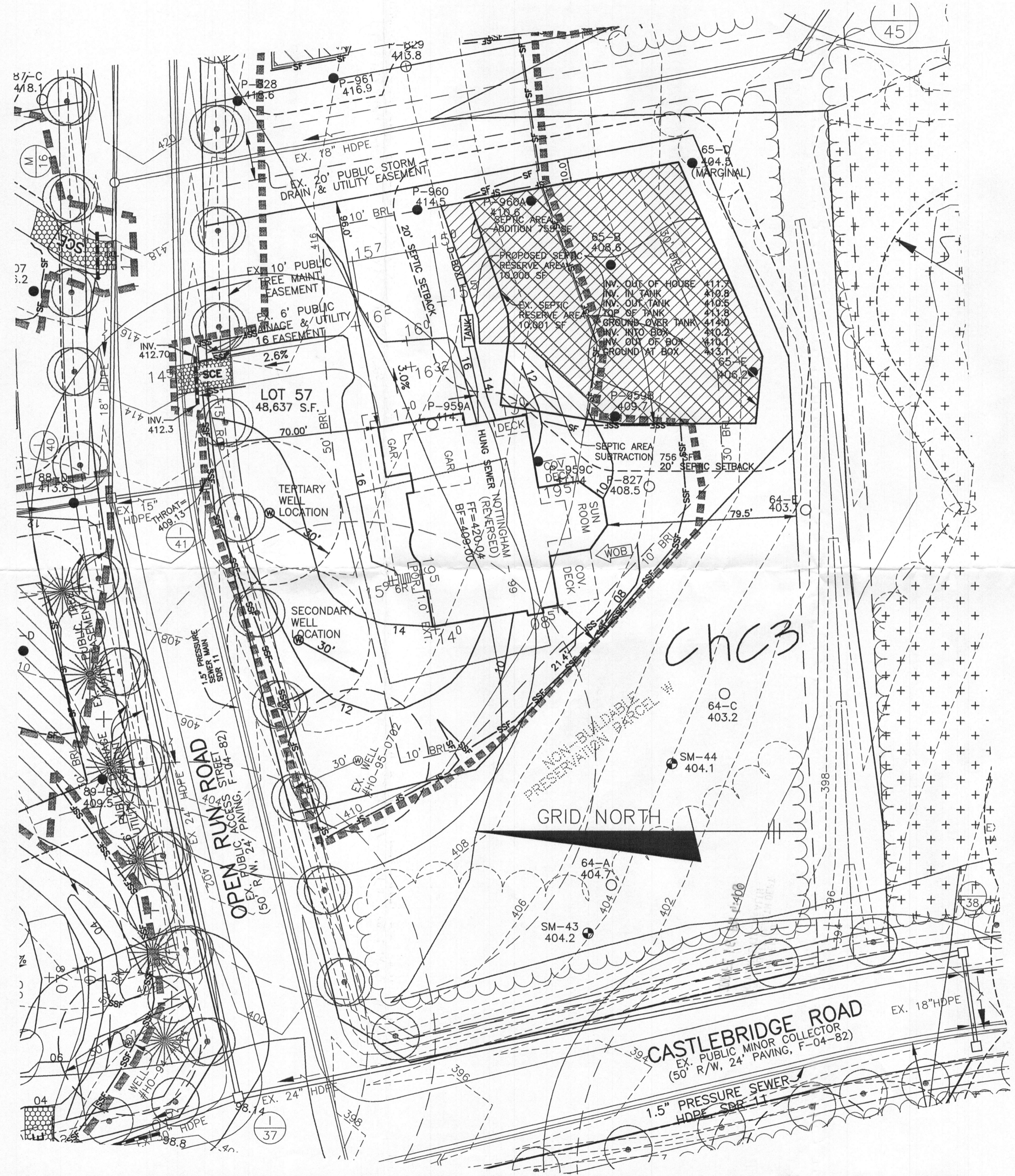
Chc3

Enb2

CASTLEBRIDGE ROAD
EX. PUBLIC MINOR COLLECTOR
(50' R/W, 24' PAVING, F-04-82)

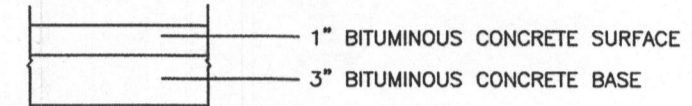
CASTLEBRIDGE ROAD

Signed perc cert
1/22/07



NOTES:

1. THE LOT SHOWN HEREON WAS RECORDED ON THE PLAT FOR RIVERWOOD, PHASE 2, PLAT No. 19723. REFER TO THE PLAT FOR LOT DIMENSIONS, LOT AREAS AND ALL EASEMENTS.
2. THIS AREA DESIGNATES A PRIVATE SEWERAGE EASEMENT OF 10,000 SQUARE FEET AS REQUIRED BY THE STATE DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWERAGE DISPOSAL. IMPROVEMENTS OF ANY NATURE IN THIS AREA IS RESTRICTED UNTIL PUBLIC SEWER IS AVAILABLE. THIS EASEMENT SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWERAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWERAGE EASEMENT. ANY CHANGES TO A PRIVATE SEWERAGE EASEMENT SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN. RECORDATION OF A MODIFIED SEWERAGE EASEMENT PLAT SHALL NOT BE NECESSARY.
3. SEDIMENT AND EROSION CONTROLS WERE APPROVED BY HOWARD SOIL CONSERVATION DISTRICT UNDER GP-05-31 AND MODIFIED FOR THIS SPECIFIC HOUSE.
4. TOPOGRAPHY SHOWN HEREON IS TAKEN FROM THE APPROVED ROAD CONSTRUCTION PLANS.
5. EXACT LENGTH OF SEPTIC TRENCHES ARE BE DETERMINED BY THE HEALTH DEPARTMENT AT THE TIME OF TRENCH LAYOUT AND INSPECTION.
6. SPOIL FROM THE TRENCHING OF THE SEPTIC AREA IS TO BE PLACED ON THE UPHILL SIDE OF THE EXCAVATION FOR EACH INDIVIDUAL LOT.
7. ALL SEDIMENT AND EROSION CONTROL FEATURES USED ON THIS SITE SHALL COMPLY WITH 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
8. ALL DRAINAGE AND STORMWATER MANAGEMENT FEATURES USED ON THIS SITE MUST COMPLY WITH THE APPROVED ROAD CONSTRUCTION PLANS.
9. SEPTIC TANK FOR THIS LOT TO BE 2,000 GALLONS.
10. THE EXISTING WELL SHOWN ON THIS PLAN, HO-95-0702, HAS BEEN FIELD LOCATED BY BENCHMARK ENGINEERING, INC. AND IS ACCURATELY SHOWN.



FULL DEPTH BITUMINOUS CONCRETE
PAVING SECTION
 NOT TO SCALE

LEGEND

- EXISTING CONTOURS ESTABLISHED UNDER F-04-082
- FIELD SURVEYED WELL LOCATION
- PASSED PERCOLATION TEST PER TEST NOTES
- FAILED PERCOLATION TEST PER TEST NOTES
- EXISTING APPROVED SEPTIC RESERVE AREA
- PROPOSED RESERVED SEPTIC RESERVE AREA

I CERTIFY THAT THE INFORMATION SHOWN HEREON IS BASED ON FIELD WORK PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION, AND IS CORRECT, TO THE BEST OF KNOWLEDGE AND BELIEF.

John M. Carney 2/5/10
 PLAN PREPARER
 JOHN M. CARNEY FOR BENCHMARK ENGINEERING, INC.

APPROVED:
 FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS
 HOWARD COUNTY HEALTH DEPARTMENT

Bridgette P. Beilenson 2/25/10
 COUNTY HEALTH OFFICER
 rcb 2/25/10 DATE

BENCHMARK ENGINEERING, INC.
 ENGINEERS ▲ LAND SURVEYORS ▲ PLANNERS

8480 BALTIMORE NATIONAL PIKE ▲ SUITE 418
 ELLICOTT CITY, MARYLAND 21043
 PHONE: 410-465-6105 ▲ FAX: 410-465-6644
 EMAIL: benchmrk@ccais.com

OWNER/BUILDER:
 CAMBERLEY HOMES, INC.
 6905 ROCKLEDGE DRIVE
 SUITE 800
 BETHESDA, MD 20817
 PHONE: 301-803-4800
 FAX: 301-803-4929

PROJECT:
RIVERWOOD LOT 57

LOCATION: 12071 OPEN RUN ROAD
 ELLICOTT CITY, MD 21042
 TAX MAP No. 29 - BLOCK Nos. 3, 4, 9 & 10 - PARCEL No. 20
 3rd ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

TITLE: **PLOT PLAN AND REVISED PERCOLATION CERTIFICATION PLAN**

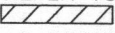
HOUSE TYPE: **NOTTINGHAM-99**

DATE: JUNE 15, 2009
 FEBRUARY 05, 2010 PROJECT NO. 1950

DESIGN: JMC DRAFT: JMC

SCALE: 1" = 30' DRAWING 1 OF 1

NOTES:

1. THE LOT SHOWN HEREON WAS RECORDED ON THE PLAT FOR RIVERWOOD, PHASE 1, PLAT Nos. 18031 - 18045 OR PHASE 2, PLAT Nos. 19720 - 19726. REFER TO THE PLAT FOR LOT DIMENSIONS, LOT AREAS AND ALL EASEMENTS.
2.  THIS AREA DESIGNATES A PRIVATE SEWERAGE EASEMENT OF 10,000 SQUARE FEET AS REQUIRED BY THE STATE DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWERAGE DISPOSAL. IMPROVEMENTS OF ANY NATURE IN THIS AREA IS RESTRICTED UNTIL PUBLIC SEWER IS AVAILABLE. THIS EASEMENT SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWERAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWERAGE EASEMENT. ANY CHANGES TO A PRIVATE SEWERAGE EASEMENT SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN. RECORDATION OF A MODIFIED SEWERAGE EASEMENT PLAT SHALL NOT BE NECESSARY.
3. TOPOGRAPHY SHOWN HEREON IS TAKEN FROM THE APPROVED ROAD CONSTRUCTION PLANS.
4. SEPTIC TANK FOR THIS LOT TO BE 2,000 GALLONS.
5. THE EXISTING WELL SHOWN ON THIS PLAN, HO-95-0702, HAS BEEN FIELD LOCATED BY BENCHMARK ENGINEERING, INC. AND IS ACCURATELY SHOWN.



I CERTIFY THAT THE INFORMATION SHOWN HEREON IS BASED ON FIELD WORK PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION, AND IS CORRECT, TO THE BEST OF KNOWLEDGE AND BELIEF.

John M. Carney 7/15/08
 PLAN PREPARER
 JOHN M. CARNEY FOR BENCHMARK ENGINEERING, INC.

APPROVED:
 FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS
 HOWARD COUNTY HEALTH DEPARTMENT

Michael J. Davis 8/6/08
 COUNTY HEALTH OFFICER DATE

LEGEND

-  EXISTING CONTOURS ESTABLISHED UNDER F-04-082
-  FIELD SURVEYED WELL LOCATION
- 7001A ● PASSED PERCOLATION TEST PER CERTIFICATION PLANS
- 402.8 ● PASSED PERCOLATION TEST PER CERTIFICATION PLANS
- 62-A ○ FAILED PERCOLATION TEST PER CERTIFICATION PLANS
- 397.1 ○ FAILED PERCOLATION TEST PER CERTIFICATION PLANS
- SM-32 ● FAILED SAND MOUND TEST PER CERTIFICATION PLANS
- 397.1 ● FAILED SAND MOUND TEST PER CERTIFICATION PLANS



BENCHMARK ENGINEERS ▲ LAND SURVEYORS ▲ PLANNERS ENGINEERING, INC.		RIVERWOOD LOT 57	
8480 BALTIMORE NATIONAL PIKE ▲ SUITE 418 ELLCOTT CITY, MARYLAND 21043 PHONE: 410-465-6105 FAX: 410-465-6644 www.bei-civilengineering.com		12071 OPEN RUN ROAD, ELLICOTT CITY, MD 21042 TAX MAP 29, GRIDS 3, 4, 9 & 10 - PARCEL 20 3rd ELECTION DISTRICT HOWARD COUNTY, MARYLAND	
BUILDER: CAMBERLEY HOMES, INC. 6905 ROCKLEDGE DRIVE SUITE 800 BETHESDA, MARYLAND 20817 301-803-4929		REVISED PERCOLATION CERTIFICATION PLAN	
DATE:	JULY 15, 2008	PROJECT NO.	1950
SCALE:	1" = 50'	DRAWING	1 OF 1