







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. Carr* 12/12/06  
 PLAN PREPARER DATE:  
 JOHN M. CARRNEY FOR BENCHMARK ENGINEERING, INC.  
 APPROVED: FOR PRIVATE WATER AND SEWER SYSTEMS  
 HOWARD COUNTY HEALTH DEPARTMENT

*Robert Weber* 12/12/06  
 COUNTY HEALTH OFFICER DATE:

TENTATIVELY APPROVED  
 DEPARTMENT OF PLANNING AND ZONING  
 HOWARD COUNTY

*Paul H. Wolfe* 1/1/07  
 PLANNING DIRECTOR DATE:

**BENCHMARK**  
 ENGINEERS & LAND SURVEYORS & PLANNERS

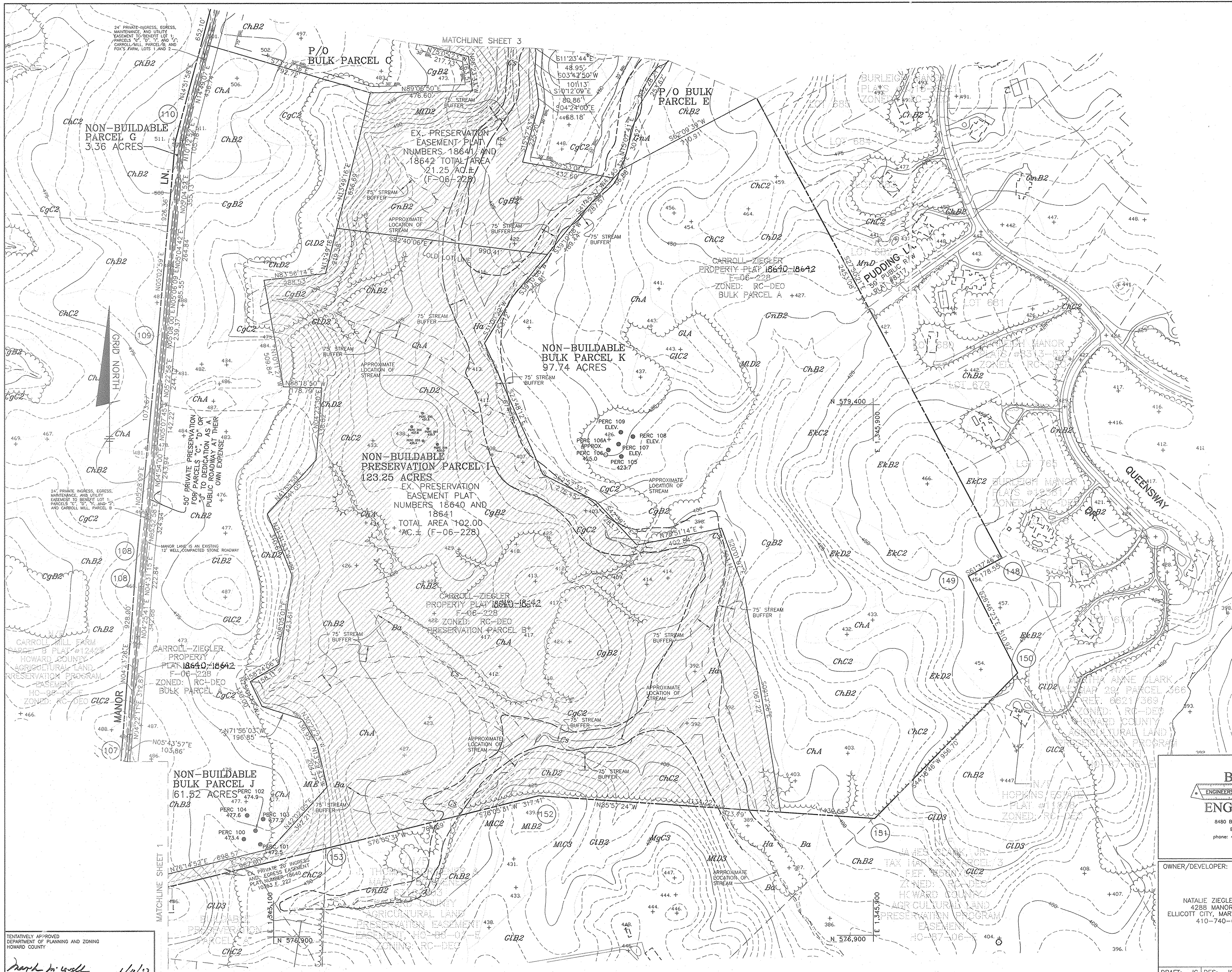
**ENGINEERING, INC.**

8480 BALTIMORE NATIONAL PIKE & SUITE 418  
 ELLICOTT CITY, MARYLAND 21043  
 phone: 410-465-6105 & fax: 410-465-6644  
 email: Benchmark@ecis.com

*Robert Weber*  
 PROFESSIONAL ENGINEER  
 12/12/06

|   |   |
|---|---|
| OWNER/DEVELOPER:<br><br>NATALIE ZIEGLER ET AL<br>4288 MANOR LANE<br>ELLICOTT CITY, MARYLAND 21042<br>410-740-6880 | PROJECT:<br><b>CARROLL/ZIEGLER<br/>BULK PARCEL SUBDIVISION</b><br>LOT 1; BUILDABLE BULK PARCEL C; NON-BUILDABLE BULK PARCELS D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z; AND NON-BUILDABLE PRESERVATION PARCEL A, A RESUBDIVISION OF BUILDABLE BULK PARCEL A AND NON-BUILDABLE PRESERVATION PARCEL B |
|   | LOCATION: TAX MAP: 23, GRID: 10,11,12,17,18,21 THRU 24<br>AND TAX MAP 28, GRID Nos. 3 AND 4.<br>P/O PARCELS: 330<br>SECOND AND THIRD ELECTION DISTRICTS<br>HOWARD COUNTY, MARYLAND  |
| TITLE: PRELIMINARY EQUIVALENT SKETCH PLAN AND PERCOLATION CERTIFICATION PLAN                                      |   |
| DATE: JULY, 2006  | PROJECT NO. NA  |
| DRAFT: JC DES: JC CK: DAM   | SCALE: 1" = 200'  |
| SHEET 3 OF 8  |   |





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* 12/12/06  
 PLAN PREPARER (DATE)  
 JOHN M. CARNEY FOR BENCHMARK ENGINEERING, INC.  
 APPROVED: FOR PRIVATE WATER AND SEWER SYSTEMS  
 HOWARD COUNTY HEALTH DEPARTMENT  
*Robert J. Walker* 12/12/06  
 COUNTY HEALTH OFFICER (DATE)

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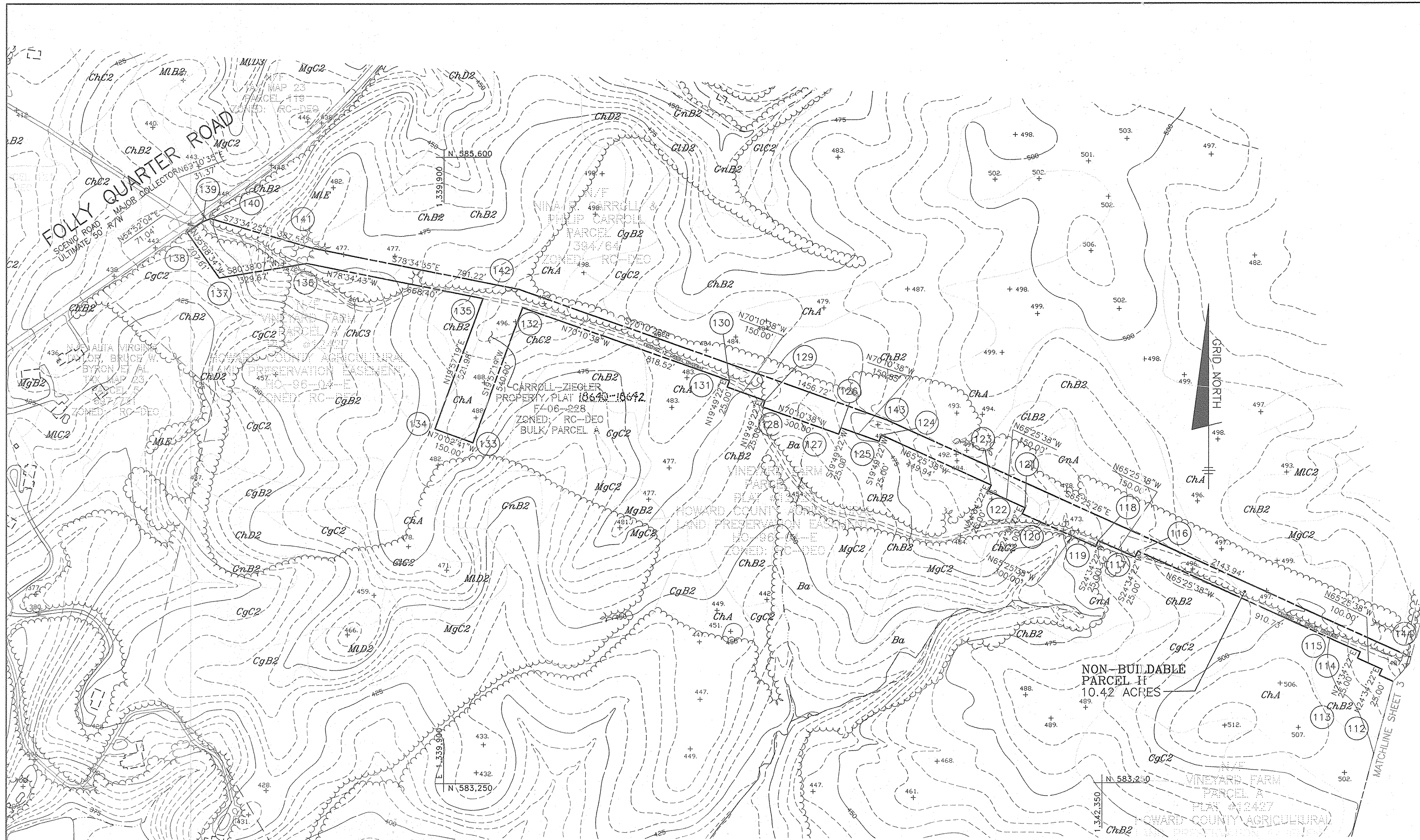
*Donald Macon* 12/13/06  
 PROFESSIONAL ENGINEER

|   |   |   |                  |
|---|---|---|------------------|
| OWNER/DEVELOPER:  | PROJECT: <b>CARROLL/ZIEGLER BULK PARCEL SUBDIVISION</b>   |   |                  |
| NATALIE ZIEGLER ET AL<br>4288 MANOR LANE<br>ELLICOTT CITY, MARYLAND 21042<br>410-740-6880 | LOT 1; BUILDABLE BULK PARCEL 'C'; NON-BUILDABLE BULK PARCELS 'D' THRU 'H'; AND 'I'; AND NON-BUILDABLE PRESERVATION PARCEL 'A'. A RESUBDIVISION OF BUILDABLE BULK PARCEL 'A' AND NON-BUILDABLE PRESERVATION PARCEL 'B' |   |                  |
|   | LOCATION:   | TAX MAP: 23, GRID: 10,11,12,17,18,21 THRU 24 AND TAX MAP 29, GRID Nos. 3 AND 4. |                  |
|   |   | P/O PARCEL 30<br>SECOND AND THIRD ELECTION DISTRICTS<br>HOWARD COUNTY, MARYLAND |                  |
|   | TITLE:  | PRELIMINARY EQUIVALENT SKETCH PLAN AND PERCOLATION CERTIFICATION PLAN           |                  |
|   | DATE:   | JULY, 2006  | PROJECT NO. NA   |
|   | DRAFT:  | JC DES: JC CK: DAM  | SCALE: 1" = 200' |
|   |   |   | SHEET 2 OF 8     |

TENTATIVELY APPROVED  
 DEPARTMENT OF PLANNING AND ZONING  
 HOWARD COUNTY

*David M. Wylie* 1/1/07  
 PLANNING DIRECTOR (DATE)





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* 12/26/06  
 PLAN PREPARER DATE:  
 JOHN M. CARNEY FOR BENCHMARK ENGINEERING, INC.

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

*Robert A. Weber* 12/26/06  
 COUNTY HEALTH OFFICER DATE: *MAF*

**BENCHMARK**  
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**ENGINEERING, INC.**

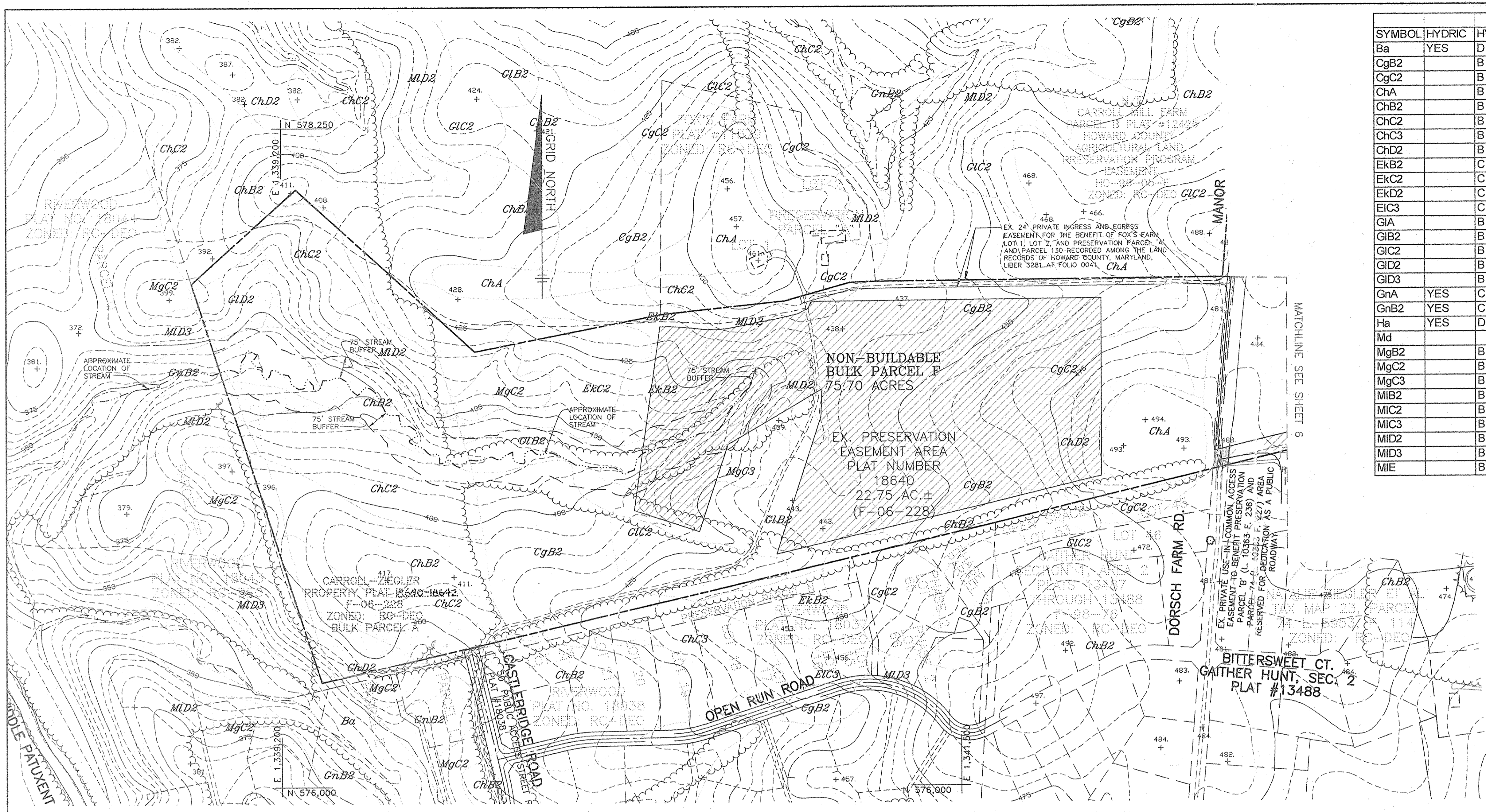
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 ELLICOTT CITY, MARYLAND 21043  
 phone: 410-465-6105 & fax: 410-465-6844  
 email: Benchmark@ccis.com

|   |  |
|---|--|
| OWNER/DEVELOPER:<br><br>NATALIE ZIEGLER ET AL<br>4288 MANOR LANE<br>ELLICOTT CITY, MARYLAND 21042<br>410-740-6822 | PROJECT:<br>CARROLL/ZIEGLER<br>BULK PARCEL SUBDIVISION<br>LOT 1; BUILDABLE BULK PARCEL 'C'; NON-BUILDABLE BULK PARCELS 'D' THRU 'H', 'I', AND 'K'; AND NON-BUILDABLE PRESERVATION PARCEL 'J'. A RESUBDIVISION OF BUILDABLE BULK PARCEL 'A' AND NON-BUILDABLE PRESERVATION PARCEL 'B' |
|   | LOCATION: TAX MAP 23, GRID: 10,11,12,17,18,21 THRU 24 AND TAX MAP 29, GRID Nos. 3 AND 4. P/O PARCELS 130 SECOND AND THIRD ELECTION DISTRICTS HOWARD COUNTY, MARYLAND   |
| TITLE: PRELIMINARY EQUIVALENT SKETCH PLAN AND PERCOLATION CERTIFICATION PLAN                                      |  |
| DATE: JULY, 2006  | PROJECT NO. NA   |
| DRAFT: JC DES: JC CK: DAM   | SCALE: 1" = 200'   |
| SHEET 4 OF 8  |  |

TENTATIVELY APPROVED  
 DEPARTMENT OF PLANNING AND ZONING  
 HOWARD COUNTY

*Frank A. ...* 1/2/07  
 PLANNING DIRECTOR DATE





| SOILS CHART |        |                  |  |
|-------------|--------|------------------|--|
| SYMBOL      | HYDRIC | HYDROLOGIC GROUP | NAME   |
| Ba          | YES    | D                | BAILE SILT LOAM  |
| CgB2        |        | B                | CHESTER GRAVELLY SILT LOAM, 3 TO 8 PERCENT SLOPES MODERATELY ERODED  |
| CgC2        |        | B                | CHESTER GRAVELLY SILT LOAM, 8 TO 15 PERCENT SLOPES MODERATELY ERODED |
| ChA         |        | B                | CHESTER SILT LOAM, 0 TO 3 PERCENT SLOPES                             |
| ChB2        |        | B                | CHESTER SILT LOAM, 3 TO 8 PERCENT, MODERATELY ERODED                 |
| ChC2        |        | B                | CHESTER SILT LOAM, 8 TO 15 PERCENT SLOPES, MODERATELY ERODED         |
| ChC3        |        | B                | CHESTER SILT LOAM, 8 TO 15 PERCENT SLOPES, SEVERELY ERODED           |
| ChD2        |        | B                | CHESTER SILT LOAM, 15 TO 25 PERCENT SLOPES, MODERATELY ERODED        |
| EKB2        |        | C                | ELIOAK SILT LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED           |
| EKC2        |        | C                | ELIOAK SILT LOAM, 8 TO 15 PERCENT SLOPES, MODERATELY ERODED          |
| EKD2        |        | C                | ELIOAK SILT LOAM, 15 TO 25 PERCENT SLOPES, MODERATELY ERODED         |
| EIC3        |        | C                | ELIOAK SILTY CLAY LOAM, 8 TO 15 PERCENT SLOPES, SEVERELY ERODED      |
| GIA         |        | B                | GLENELG LOAM, 0 TO 3 PERCENT SLOPES                                  |
| GIB2        |        | B                | GLENELG LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED               |
| GIC2        |        | B                | GLENELG LOAM, 8 TO 15 PERCENT SLOPES, MODERATELY ERODED              |
| GID2        |        | B                | GLENELG LOAM, 15 TO 25 PERCENT SLOPES, MODERATELY ERODED             |
| GID3        |        | B                | GLENELG LOAM, 15 TO 25 PERCENT SLOPES, SEVERELY ERODED               |
| GnA         | YES    | C                | GLENVILLE SILT LOAM, 0 TO 3 PERCENT SLOPES                           |
| GnB2        | YES    | C                | GLENVILLE SILT LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED        |
| Ha          | YES    | D                | HATBORO SILT LOAM  |
| Md          |        |                  | MADE LAND  |
| MgB2        |        | B                | MANOR GRAVELLY LOAM, 3 TO 8 PERCENT, MODERATELY ERODED               |
| MgC2        |        | B                | MANOR GRAVELLY LOAM, 8 TO 15 PERCENT SLOPES, MODERATELY ERODED       |
| MgC3        |        | B                | MANOR GRAVELLY LOAM, 8 TO 15 PERCENT SLOPES, SEVERELY ERODED         |
| MIB2        |        | B                | MANOR LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED                 |
| MIC2        |        | B                | MANOR LOAM, 8 TO 15 PERCENT SLOPES, MODERATELY ERODED                |
| MIC3        |        | B                | MANOR LOAM, 8 TO 15 PERCENT SLOPES, SEVERELY ERODED                  |
| MID2        |        | B                | MANOR LOAM, 15 TO 25 PERCENT SLOPES, MODERATELY ERODED               |
| MID3        |        | B                | MANOR LOAM, 15 TO 25 PERCENT SLOPES, SEVERELY ERODED                 |
| MIE         |        | B                | MANOR LOAM, 25 TO 45 PERCENT SLOPES                                  |

TENTATIVELY APPROVED  
DEPARTMENT OF PLANNING AND ZONING  
HOWARD COUNTY

*Natalie Ziegler*  
PLANNING DIRECTOR

1/10/05  
DATE

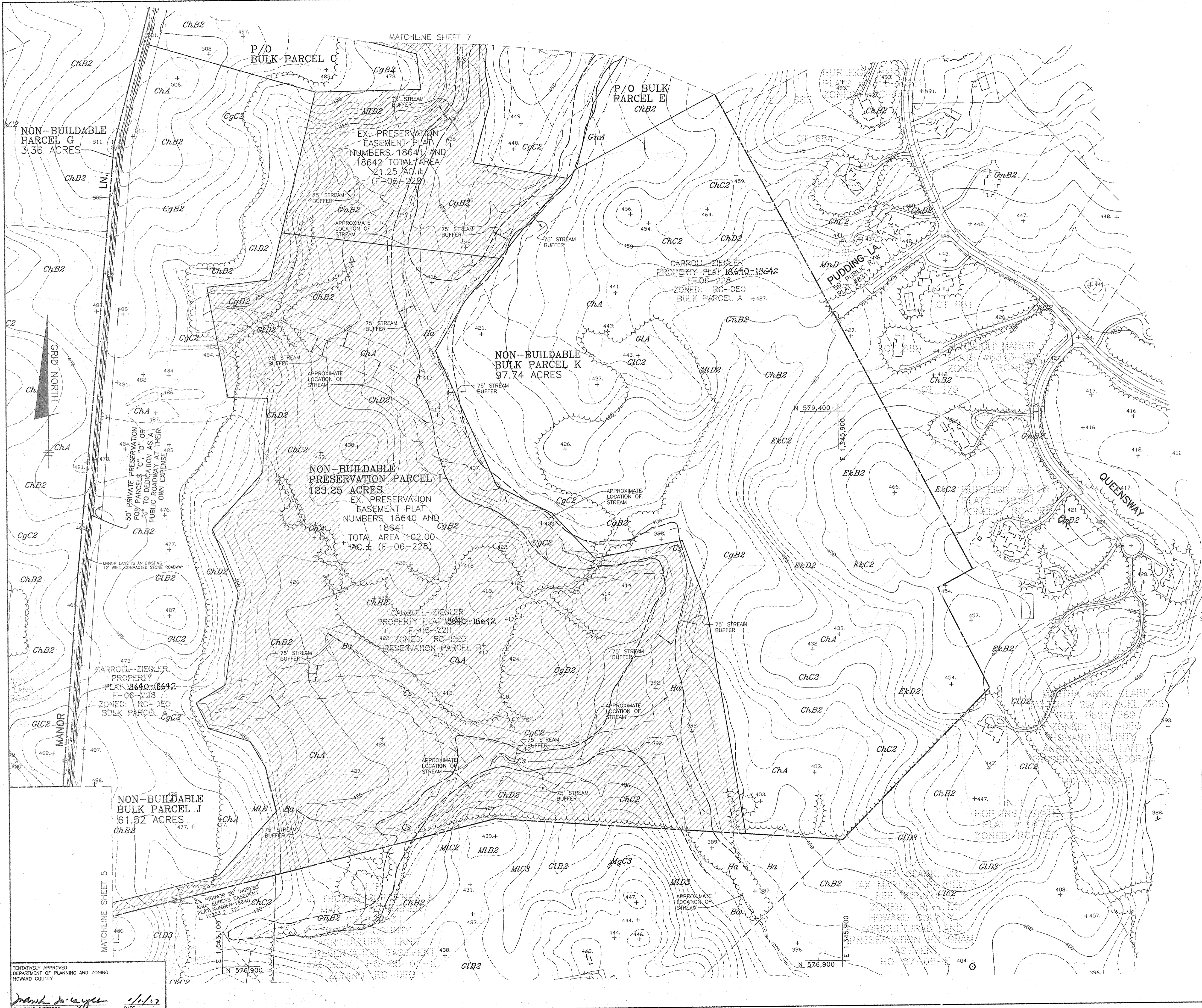
**BENCHMARK**  
ENGINEERS & LAND SURVEYORS & PLANNERS  
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EMAIL: Benchmark@ccis.com



|   |  |
|---|--|
| OWNER/DEVELOPER:<br><br>NATALIE ZIEGLER ET AL<br>4288 MANOR LANE<br>ELLICOTT CITY, MARYLAND 21042<br>410-740-6880         | PROJECT:<br>CARROLL/ZIEGLER<br>BULK PARCEL SUBDIVISION<br>LOT 1; BUILDABLE BULK PARCEL 'C'; NON-BUILDABLE BULK PARCELS 'D' THRU 'H', 'J', AND 'K'; AND NON-BUILDABLE PRESERVATION PARCEL 'A' AND NON-BUILDABLE PRESERVATION PARCEL 'B' |
|   | LOCATION:<br>TAX MAP: 23; GRID: 10.11, 12.17, 18.21 THRU 24 AND TAX MAP 29, GRID Nos. 3 AND 4, 7/0 PARCELS 135 SECOND AND THIRD ELECTION DISTRICTS HOWARD COUNTY, MARYLAND   |
| TITLE:<br>PRELIMINARY GRADING, SEDIMENT & EROSION CONTROL PLAN, NOTES AND DETAILS; EXISTING CONDITIONS PLAN AND SOILS MAP | DATE:<br>JULY, 2006  |
| DRAFT: JC   DES: JC   CK: DAM   | PROJECT NO. NA<br>SCALE: 1" = 200'<br>SHEET 5 OF 8   |





TENTATIVELY APPROVED  
DEPARTMENT OF PLANNING AND ZONING  
HOWARD COUNTY

*Frank J. Laugel*  
PLANNING DIRECTOR

DATE: 7/1/06

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**ENGINEERING, INC.**

8480 BALTIMORE NATIONAL PIKE & SUITE 418  
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PHONE: 410-465-6105 • FAX: 410-465-6644  
EMAIL: Benchmark@eol.com

*Natalie Ziegler*  
PROFESSIONAL ENGINEER  
12/13/06

|  |   |
|--|---|
| OWNER/DEVELOPER:<br><br>NATALIE ZIEGLER ET AL<br>4288 MANOR LANE<br>ELLICOTT CITY, MARYLAND 21042<br>410-740-6880  | PROJECT:<br>CARROLL/ZIEGLER<br>BULK PARCEL SUBDIVISION  |
|  | LOT 1; BUILDABLE BULK PARCEL 'C'; NON-BUILDABLE BULK PARCELS 'D' THRU 'J'; AND 'K'; AND NON-BUILDABLE PRESERVATION PARCEL 'I'; A RESUBDIVISION OF BUILDABLE BULK PARCEL 'A' AND NON-BUILDABLE PRESERVATION PARCEL 'B' |
| LOCATION:<br>TAX MAP: 23, GRID: 10, 11, 12, 17, 18, 21 THRU 24<br>AND TAX MAP 29, GRID Nos. 3 AND 4.<br>P/O PARCEL 130<br>SECOND AND THIRD ELECTION DISTRICTS<br>HOWARD COUNTY, MARYLAND | TITLE:<br>PRELIMINARY GRADING, SEDIMENT &<br>EROSION CONTROL PLAN, NOTES AND DETAILS;<br>EXISTING CONDITIONS PLAN AND SOILS MAP   |
| DATE: JULY, 2006   | PROJECT NO. NA  |
| DRAFT: JC DES: JC CK: DAM  | SCALE: 1" = 200'  |
|  | SHEET 6 OF 8  |

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TENTATIVELY APPROVED  
 DEPARTMENT OF PLANNING AND ZONING  
 HOWARD COUNTY

*Natalie Ziegler*  
 PLANNING DIRECTOR

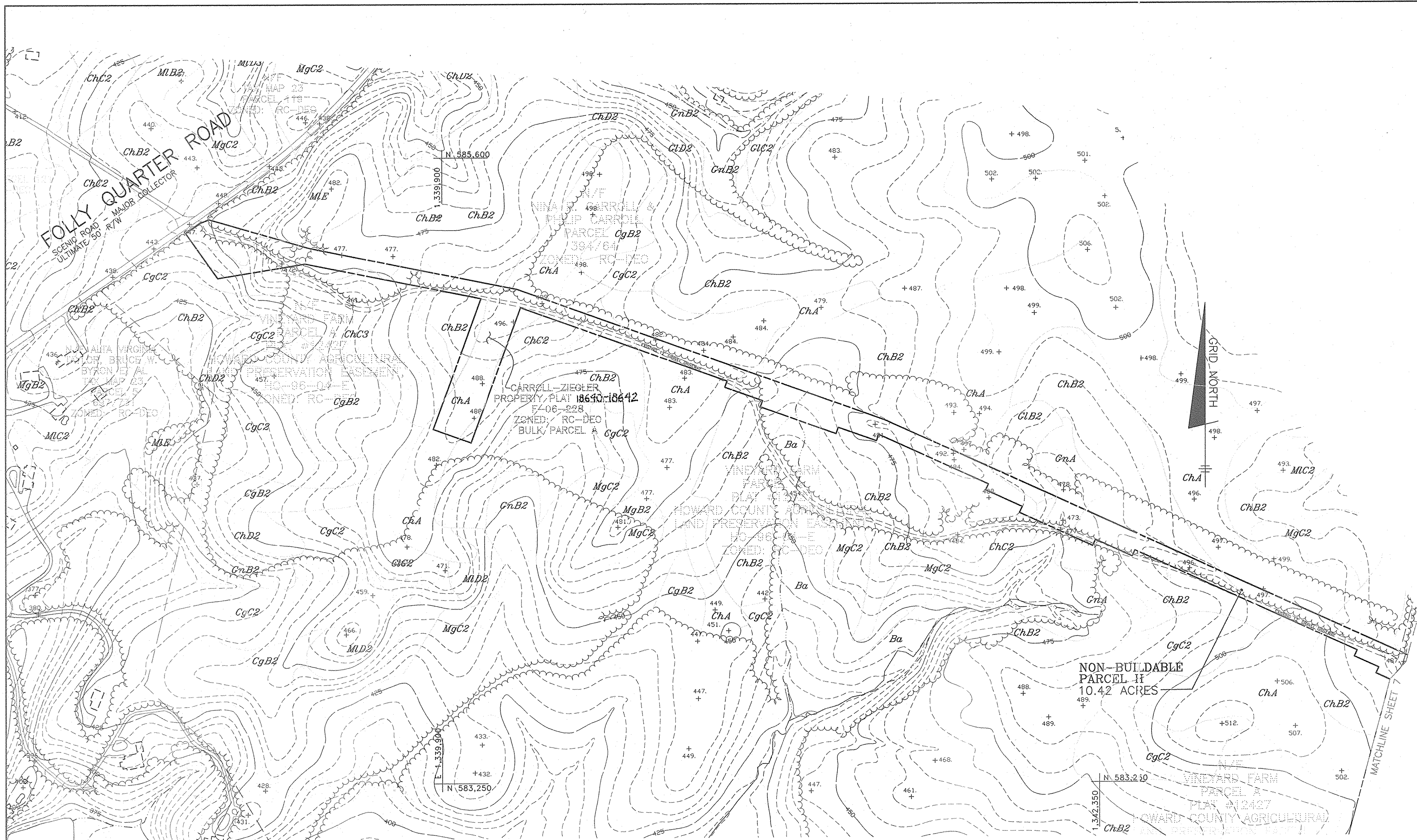
1/11/07  
 DATE

**BENCHMARK**  
 ENGINEERS & LAND SURVEYORS & PLANNERS  
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|  |  |
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| OWNER/DEVELOPER:<br><br>NATALIE ZIEGLER ET AL<br>4288 MANOR LANE<br>ELLICOTT CITY, MARYLAND 21042<br>410-740-6880  | PROJECT:<br><b>CARROLL/ZIEGLER BULK PARCEL SUBDIVISION</b><br>LOT 1; BUILDABLE BULK PARCEL 'C'; NON-BUILDABLE BULK PARCELS 'D' THRU 'H', 'J', AND 'K'; AND NON-BUILDABLE PRESERVATION PARCEL 'I'. A RESUBDIVISION OF BUILDABLE BULK PARCEL 'A' AND NON-BUILDABLE PRESERVATION PARCEL 'B' |
| LOCATION: TAX MAP: 23, GRID: 10,11,12,17,18,21 THRU 24 AND TAX MAP 28, GRID Nos. 3 AND 4.<br>P/O PARCEL: 130<br>SECOND AND THIRD ELECTION DISTRICTS<br>HOWARD COUNTY, MARYLAND |  |
| TITLE: PRELIMINARY GRADING, SEDIMENT & EROSION CONTROL PLAN, NOTES AND DETAILS; EXISTING CONDITIONS PLAN AND SOILS MAP   |  |
| DATE: JULY, 2006 PROJECT NO. NA  |  |
| DRAFT: JC DES: JC CK: DAM SCALE: 1" = 200' SHEET 7 OF 8  |  |





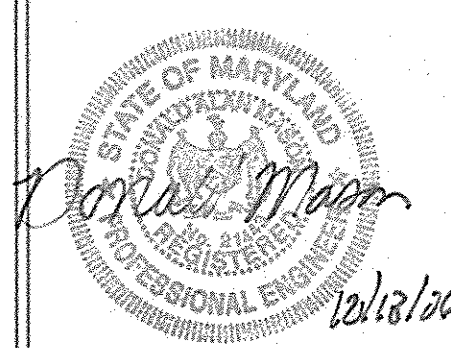
TENTATIVELY APPROVED  
 DEPARTMENT OF PLANNING AND ZONING  
 HOWARD COUNTY

*Dawn A. Coyne* 1/11/03  
 PLANNING DIRECTOR DATE

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|   | LOT 1: BUILDABLE BULK PARCEL 'C'; NON-BUILDABLE BULK PARCELS 'D' THRU 'J', 'L' AND 'K'; AND NON-BUILDABLE PRESERVATION PARCEL 'I', A RESUBDIVISION OF BUILDABLE BULK PARCEL 'A' AND NON-BUILDABLE PRESERVATION PARCEL 'B' |
|   | LOCATION: TAX MAP 23, GRID: 10,11,12,17,18,21 THRU 24 AND TAX MAP 23, GRID Nos. 3 AND 4.<br>P/O PARCEL: 130<br>SECOND AND THIRD ELECTION DISTRICTS<br>HOWARD COUNTY, MARYLAND   |
|   | TITLE: PRELIMINARY GRADING, SEDIMENT & EROSION CONTROL PLAN, NOTES AND DETAILS; EXISTING CONDITIONS PLAN AND SOILS MAP  |
| DATE: JULY, 2006  | PROJECT NO. NA  |
| DRAFT: JC DES: JC CK: DAM   | SCALE: 1" = 200'  |
|   | SHEET 8 OF 8  |