

GENERAL NOTES

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS, IF APPLICABLE.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
- THE CONTRACTOR IS TO NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE DAYS BEFORE STARTING WORK ON THESE DRAWINGS:
 MISS UTILITY 1-800-257-7777
 VERIZON 725-9976
 HOWARD COUNTY BUREAU OF UTILITIES: 313-2366
 AT&T CABLE LOCATION DIVISION: 393-3553
 B.G.&E. CO. CONTRACTOR SERVICES: 850-4620
 B.G.&E. CO. UNDERGROUND DAMAGE CONTROL: 787-4620
 STATE HIGHWAY ADMINISTRATION: 531-5533
- THE SUBJECT PROPERTY IS ZONED R-12 AS PER THE 10/18/93 COMPREHENSIVE ZONING PLAN.
- SITE ANALYSIS:
 TOTAL PROJECT AREA: 4.07 AC
 AREA OF REQUIRED RECREATIONAL OPEN SPACE: 0.02 AC. (795.73 SF)
 NET PROJECT AREA: 4.05 AC.
 PRESENT ZONING: R-12
 TOTAL NUMBER OF REQUIRED PARKING SPACES: 2 SPACES PER DWELLING UNIT X 22 UNITS = 44
 TOTAL NUMBER OF REQUIRED RECREATIONAL OPEN SPACE: 22 SINGLE CAR GARAGES + 22 SPACES ON DRIVEWAYS + 2 COMMUNITY CENTER PARKING SPACES (1 HANDICAP) = 46 SPACES
 AREA OF REQUIRED OPEN SPACE: 1.42 AC. (35% X 4.07 AC.)
 AREA OF PROVIDED OPEN SPACE: 2.71 AC.
 AREA OF PROVIDED RECREATIONAL OPEN SPACE: 22 UNITS X 200 SF PER UNIT = 4400 SF (PHASE I & II)
 AREA OF PROVIDED RECREATIONAL OPEN SPACE: 4430 SF±
 AREA OF PROVIDED BUILDING COVERAGE: 0.83 AC. (1674 SF PER UNIT X 22 UNITS)
 LIMIT OF DISTURBANCE: 4.05 AC.±
 PROPOSED USE OF SITE: AGE RESTRICTED ADULT HOUSING
 TOTAL UNITS RESIDENTIAL UNITS ALL OWED: 24 UNITS (6 UNITS PER NET ACRE X 4.05 AC.)
 TOTAL RESIDENTIAL UNITS PROPOSED: PHASE I-21 UNITS
 PHASE II-1 UNITS
 TOTAL UNITS PROPOSED: 22 RESIDENTIAL UNITS + 1 COMMUNITY CENTER (PHASE I & II)
 MINIMUM REQUIRED SIZE FOR PROPOSED COMMUNITY CENTER: 22 UNITS X 20 SF = 440 SF (PHASE I & II)
 ACTUAL SIZE OF PROPOSED COMMUNITY CENTER: 1080 SF
 TOTAL MODERATE INCOME HOUSING UNITS PROVIDED: 22 UNITS X 10% = 2.2 UNITS (PHASE I & II)
 TOTAL MODERATE INCOME HOUSING UNITS PROVIDED: 3 UNITS (14%)
- PROJECT BACKGROUND:
 LOCATION: TAX MAP: 47 PARCEL: "143" BLOCK: 6
 ZONING: R-12
 DEED REFERENCE: LIBER 1068/FOLIO 581
 OPZ REFERENCE: BA CASE NO. 03-17C
 THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO START OF WORK.
 ANY DAMAGE TO PUBLIC RIGHTS-OF-WAY, PAVING, OR EXISTING UTILITIES WILL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
 APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN FOR THE CONTRACTOR'S INFORMATION. CONTRACTOR SHALL LOCATE EXISTING UTILITIES WELL IN ADVANCE OF CONSTRUCTION ACTIVITIES AND TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND TO MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE TO THE COUNTY'S RIGHT OF WAY INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
 TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
 ESTIMATES OF EARTHWORK QUANTITIES ARE PROVIDED SOLELY FOR THE PURPOSE OF CALCULATING FEES.
 STORMWATER MANAGEMENT HAS BEEN BY INFILTRATING DRYWELLS, GRASS SWALES AND A POCKET POND TO PROVIDE THE REQUIRED STORAGE FOR THIS SITE. THE SWM FACILITY IS LOCATED ON OPEN SPACE 1 AND WILL BE PRIVATELY OWNED AND MAINTAINED BY THE HOA. THE FACILITY IS HAZARD CLASS 'A'. STORMWATER MANAGEMENT PROVIDED IS FOR PHASE I AND PHASE II.
 STORMWATER MANAGEMENT AND DRYWALL BORINGS FOR THIS SITE ARE BASED ON A GEOTECHNICAL ANALYSIS PREPARED BY REULING ASSOCIATES, INC. DATED AUGUST 2003.
 SOIL COMPACTION SPECIFICATIONS, REQUIREMENTS, METHODS AND MATERIALS ARE TO BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE PROJECT GEOTECHNICAL ENGINEER. GEOTECHNICAL ENGINEER TO CONFIRM ACCEPTABILITY OF PROPOSED PAVING SECTION, BASED ON SOILS TEST.
 COORDINATES AND ELEVATIONS ARE BASED ON HOWARD COUNTY MONUMENT NO'S. 47C4 AND 47R1.
 EXISTING TOPOGRAPHY IS BASED ON TOPOGRAPHICAL SURVEY PREPARED BY FREDERICK WARD ASSOCIATES, DATED MAY 2003.
 THE BOUNDARY IS BASED ON A FIELD RUN MONUMENTED BOUNDARY SURVEY PREPARED BY FREDERICK WARD ASSOCIATES DATED MAY 2003.
 ACCESS TO WATER AND SEWER HAS BEEN PROVIDED UNDER CONTRACT NO. 609A-W&S. WATER AND SEWER FOR THIS PROJECT WILL BE PUBLIC.
 DRIVEWAYS SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR ANY NEW DWELLINGS TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:
 • WIDTH-12' (14' SERVING MORE THAN ONE RESIDENCE)
 • SURFACE-ASPHALT OR COMPACTED CRUSHER W/TAR CHIP COATING (1-1/2" MIN.)
 • GEOMETRY-MAX. 15% GRADE, MAX 10% GRADE CHANGE AND MIN. 45' TURNING RADIUS
 • STRUCTURES (CULVERTS/BRIDGES)-CAPABLE OF SUPPORTING 25 GROSS TONS (H25 LOADING)
 • DRAINAGE-DESIGNED TO CAPABLE OF SAFELY PASSING 100-YEAR FLOOD WITH NO MORE THAN 1' DEPTH OVER DRIVEWAY SURFACE
 • MAINTENANCE-SUFFICIENT TO INSURE ALL WEATHER USE
 NO BURIAL GROUNDS OR CEMETERIES ARE LOCATED ON THIS PROPERTY.
 IN ACCORDANCE WITH SECTION 128 OF THE HOWARD COUNTY ZONING REGULATIONS, BAY WINDOWS, CHIMNEYS, OR EXTERIOR STAIRWAYS NOT MORE THAN 16 FEET IN HEIGHT MAY PROJECT NOT MORE THAN 4 FEET INTO ANY SETBACKS. PORCHES OR DECKS, OPEN OR ENCLOSED MAY PROJECT NOT MORE THAN 10 FEET INTO THE FRONT OR REAR YARD SETBACK OR PROJECT BOUNDARY SETBACK.
 THE REQUIRED INTERIOR AND PERIMETER LANDSCAPING HAS BEEN PROVIDED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING SHALL BE PROVIDED AS FOLLOWS: 90 SHADE TREES X \$300.00 = \$27,000.00 (56 PERIMETER, UNIT PLANTINGS AND SWM PLANTINGS; 25 PRIVATE STREET TREES AND 9 PUBLIC STREET TREES) AND 105 EVERGREEN TREES X \$150.00 = \$15,750.00 (105 PERIMETER AND SWM PLANTINGS). THE TOTAL SURETY REQUIRED TO BE POSTED WITH THE DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$42,750.00. LANDSCAPING HAS BEEN PROVIDED FOR PHASE I AND PHASE II.
 FOREST CONSERVATION OBLIGATIONS AS REQUIRED IN SECTION 16.1200 OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION TO BE FULFILLED BY A FEE-IN-LIEU OF \$35,937.00 FOR THE REQUIRED 1.65 AC. OF REFORESTATION.
 GARAGES SHALL BE USED FOR PARKING PURPOSES ONLY AND ARE NOT PERMITTED TO BE CONVERTED TO OTHER USES PER THE HOWARD COUNTY ZONING REGULATIONS, UNLESS THE 2 OFF-STREET PARKING SPACES ARE PROVIDED WITHIN THE RESIDENTIAL UNIT DRIVEWAY.
 REFUSE COLLECTION FOR THIS SITE WILL BE PRIVATE. THERE WILL BE NO COMMUNITY TRASH DUMPSTERS FOR THIS PROJECT.
 BASED ON A FIELD INVESTIGATION BY FREDERICK WARD ASSOCIATES, THERE ARE NO WETLANDS ON SITE.
 THE HOWARD COUNTY BOARD OF APPEALS HEARING EXAMINER GRANTED APPROVAL OF BOA CASE NO. 03-17C FOR A CONDITIONAL USE FOR AGE RESTRICTED ADULT HOUSING IN AN R-12 ZONING DISTRICT, SIGNED AUGUST 13, 2003. THE CONDITIONAL USE APPLIES ONLY TO THE USES AND STRUCTURES DESCRIBED IN THE PETITION SUBMITTED BY SK PROPERTIES, LTD. AND THE ACCOMPANYING CONDITIONAL USE PLAN.
 THE ARTICLES OF INCORPORATION FOR THE HOMEOWNER'S ASSOCIATION HAS BEEN FILED WITH THE MARYLAND STATE DEPARTMENT OF ASSESSMENTS AND TAXATION, DATED JANUARY 6, 2004. (RECORDING REF. NO. L601, F.002)
 IN ACCORDANCE WITH SECTION 131N.1.n OF THE HOWARD COUNTY ZONING REGULATIONS, 3 UNITS (14%) WILL BE MODERATE INCOME HOUSING UNITS.
 THIS SUBDIVISION IS SUBJECT TO SECTION 131N.1.n OF THE HOWARD COUNTY ZONING REGULATIONS AND UNIVERSAL DESIGN STANDARDS TO FACILITATE EASE OF USE BY THE ELDERLY POPULATION HAVE BEEN INCORPORATED INTO THE DESIGN.
 THIS SUBDIVISION PLAN IS IN COMPLIANCE WITH THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS.
 ALL OUTDOOR LIGHTING FOR THIS SUBDIVISION SHALL BE IN ACCORDANCE WITH SECTION 134 OF THE ZONING REGULATIONS.
 DUE TO THE DATE THAT THE DECISION AND ORDER IN BA CASE NO. 03-17C WAS SIGNED (AUGUST 13, 2003), THIS SITE IS GRANDFATHERED FROM COMPLIANCE WITH THE NEW SETBACK REQUIREMENTS OF SECTION 131N.1.d.(2) OF THE ZONING REGULATIONS AMENDED UNDER COUNCIL BILL 49-2003.
 ANY WELLS ENCOUNTERED DURING SITE GRADING WILL REQUIRED PROPER PROPER ABANDONMENT TO BE SUPERVISED BY THE HEALTH DEPARTMENT.

SITE DEVELOPMENT PLAN

MARY LANE

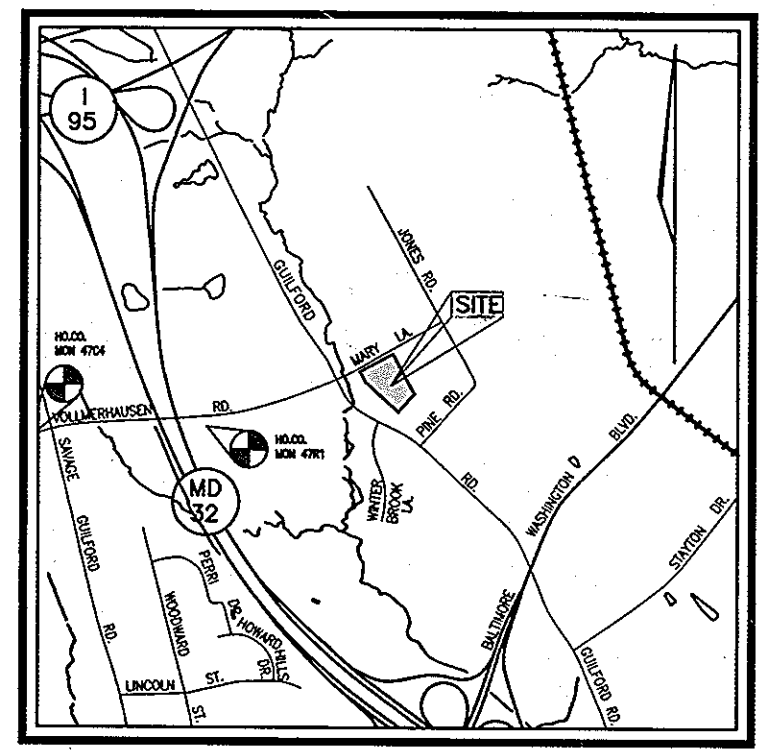
AGE RESTRICTED COMMUNITY

PHASE I & II

UNITS 1-22, COMMUNITY CENTER AND OPEN SPACE LOT 1

HOWARD COUNTY, MARYLAND

BENCHMARK NO. 1: COUNTY MONUMENT #47C4
 TYPICAL HOWARD COUNTY CONCRETE MONUMENT
 N 539,645.6687, E 1,361,379.3637
 ELEV. = 288.845
 BENCHMARK NO. 2: COUNTY MONUMENT #47R1
 TYPICAL HOWARD COUNTY CONCRETE MONUMENT
 N 539,734.5080, E 1,363,098.8714
 ELEV. = 282.440



VICINITY MAP
 SCALE: 1"=2000'

UNIT	STREET ADDRESS	UNIT	STREET ADDRESS
1	8004 JANE GARTH	12	8056 JANE GARTH
2	8006 JANE GARTH	13	8047 JANE GARTH
3	8014 JANE GARTH	14	8045 JANE GARTH
4	8016 JANE GARTH	15	8037 JANE GARTH
5	8024 JANE GARTH	16	8035 JANE GARTH
6	8026 JANE GARTH	17	8027 JANE GARTH
7	8034 JANE GARTH	18	8025 JANE GARTH
8	8036 JANE GARTH	19	8017 JANE GARTH
9	8044 JANE GARTH	20	8015 JANE GARTH
10	8046 JANE GARTH	O.S. Community Center Lot 1 - 8055 Jane Garth	
11	8054 JANE GARTH		

UNIVERSAL DESIGN GUIDELINES
 FOR AGE-RESTRICTED ADULT HOUSING IN HOWARD COUNTY

The Howard County Zoning Regulations allow for "active adult housing" as either a conditional use in residential zoning districts or as a permitted use in the Planned Senior Community, Planned Office Research, Community Center Transition, and Residential Institutional zoning districts. Active adult developments must ensure accessible routes between parking, dwelling units and common areas. Individual dwellings must incorporate universal design features to be adaptable for residents with mobility and functional limitations that often result from aging.

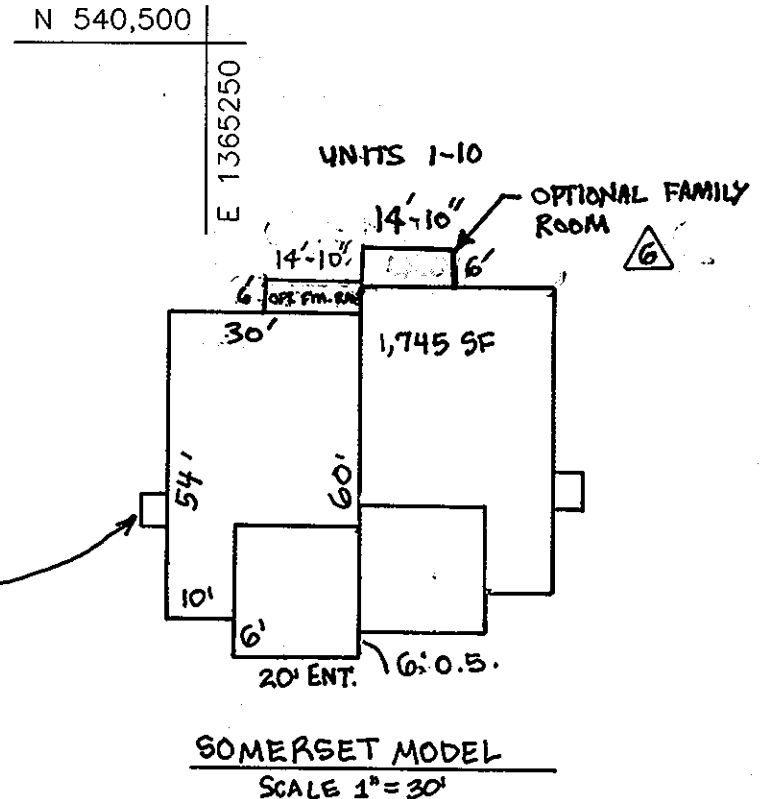
Design standards for site accessibility and usable common areas have been established for multifamily housing by the Americans with Disabilities Act and the Fair Housing Act of 1988. While recognized standards for individual units for older adults have not been established, "Universal Design" is a relatively new, evolving concept that provides some guidance.

Accordingly, the Department of Planning and Zoning met with several senior housing developers, representatives of the Homes for Life Coalition of Howard County, and the Department of Inspections, Licenses, and Permits to discuss minimum requirements. Divergent views were expressed regarding what features should be required or optional. Features vary considerably in cost, relevance for different users, and adaptability to different sites and project types. Developers' chief concerns were that the current market doesn't perceive a need for most universal design features since the oldest boomers are still relatively young and aren't focused on how their needs may change over time. Concern was also expressed about increasing the cost of senior housing if many universal design features are required rather than optional.

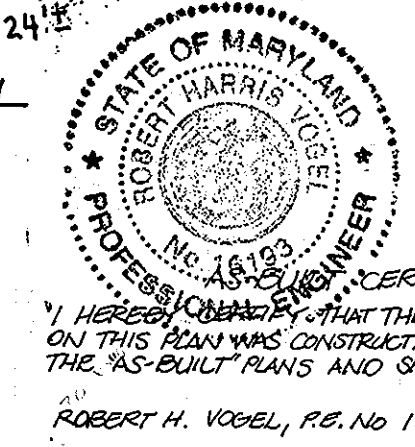
These guidelines reflect a middle position focusing on requiring those features that are relatively inexpensive if part of initial construction, but would require major renovation to retrofit in the future. Items that are relatively less expensive to retrofit in the future are listed as desired or optional.

- REQUIRED**
- For multifamily apartment or condo developments, an accessible path between parking, dwelling units, and common areas that meets ADA standards
 - For single family detached and attached developments, a "no-step" access to the front entrance to the community building and all dwellings (a no-step entrance is desirable, but not required at other entrances)
 - 36" wide front door with exterior lighting of the extra nec
 - All interior doorways at least 32" wide (36" is preferable)
 - Hallways at least 36" wide (40"-42" is preferable)
 - Complete living area including master bedroom & bath on first floor (or elevator access if multi-story rental/condo apartments)

21	8007 JANE GARTH
22	8005 JANE GARTH



ELEVATION
 SCALE: 1"=30'



PERMIT INFORMATION CHART					
PROJECT NAME	SECTION/AREA	PARCEL NUMBER			
MARY LANE	PHASE I & II	665			
DEED REF. 1068/581	BLOCK 6	ZONE R-12	TAX MAP 47	ELECT. DIST. 6TH	CENSUS TR. 6069.02
WATER CODE: B-03		SEWER CODE: 4360000			

SHEET INDEX		
DESCRIPTION	SHEET NO.	
COVER SHEET	1 OF 8	
SITE LAYOUT PLAN AND SITE DETAILS	2 OF 8	
GRADING AND SEDIMENT AND EROSION CONTROL PLAN	3 OF 8	
SEDIMENT AND EROSION CONTROL DETAILS	4 OF 8	
STORM DRAIN DRAINAGE AREA MAP	5 OF 8	
PROFILES	6 OF 8	
STORMWATER MANAGEMENT DETAILS	7 OF 8	
LANDSCAPE AND FOREST CONSERVATION PLAN	8 OF 8	

NO.	REVISION	DATE
7	ADD FIREPLACES TO UNITS 1-12, REV. COMM. CENTER	9-28-07
6	ADD FR. RM. TO UNITS 2,3,6,7,9, ADD DIMENSION OFF FR. RM. TO SOMERSET MODEL	4-14-07
5	REVISE ELEVATIONS FOR HANDICAP ACCESS	3-9-07
4	REPLACED YORKSHIRE TO NEW BEDFORD ELEV B (NO BASEMENT) REVISED SOMERSET W/NO BASEMENT AND 2' GRESS BETWEEN DRIVEWAYS	
2	ADD YORKSHIRE AND SOMERSET MODELS, UNITS 1-22	5-4-06
1	ADD PHASE II, UNITS 2 AND 22	12-2-05

COVER SHEET
MARY LANE
 AGE RESTRICTED COMMUNITY
 PHASE I & PHASE II
 UNITS 1-22, COMMUNITY CENTER AND OPEN SPACE LOT 1
 TAX MAP 47 BLOCK 6 PARCEL '665'
 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 DEED REF.: L. 1068/F. 581, BA CASE NO. 03-17C

ROBERT H. VOGEL ENGINEERING, INC.
 ENGINEERS - SURVEYORS - PLANNERS
 8407 MAIN STREET
 ELLICOTT CITY, MARYLAND 21043
 TEL: 410.461.7666 FAX: 410.461.8961

DESIGN BY: RHW/JT
 DRAWN BY: CMH
 CHECKED BY: RHW
 DATE: JANUARY, 2005
 SCALE: AS SHOWN
 W.O. NO.: 34-21-00

OWNER/DEVELOPER
 SK KING GEORGE LLC
 C/O WILLIAM KNOTT
 15 WEST AYLESBURY ROAD
 TIMONUM, MD 21083
 (410) 308-2710

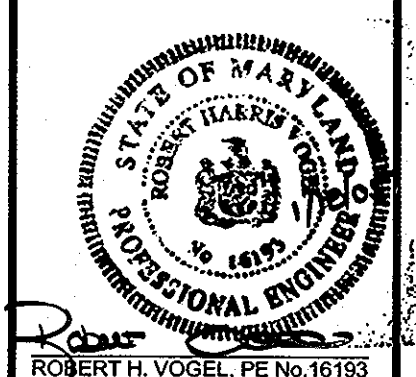
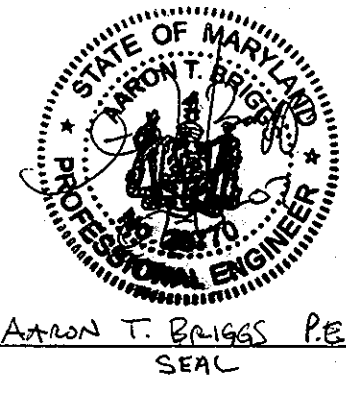
SUMMARY TABLE AREA A

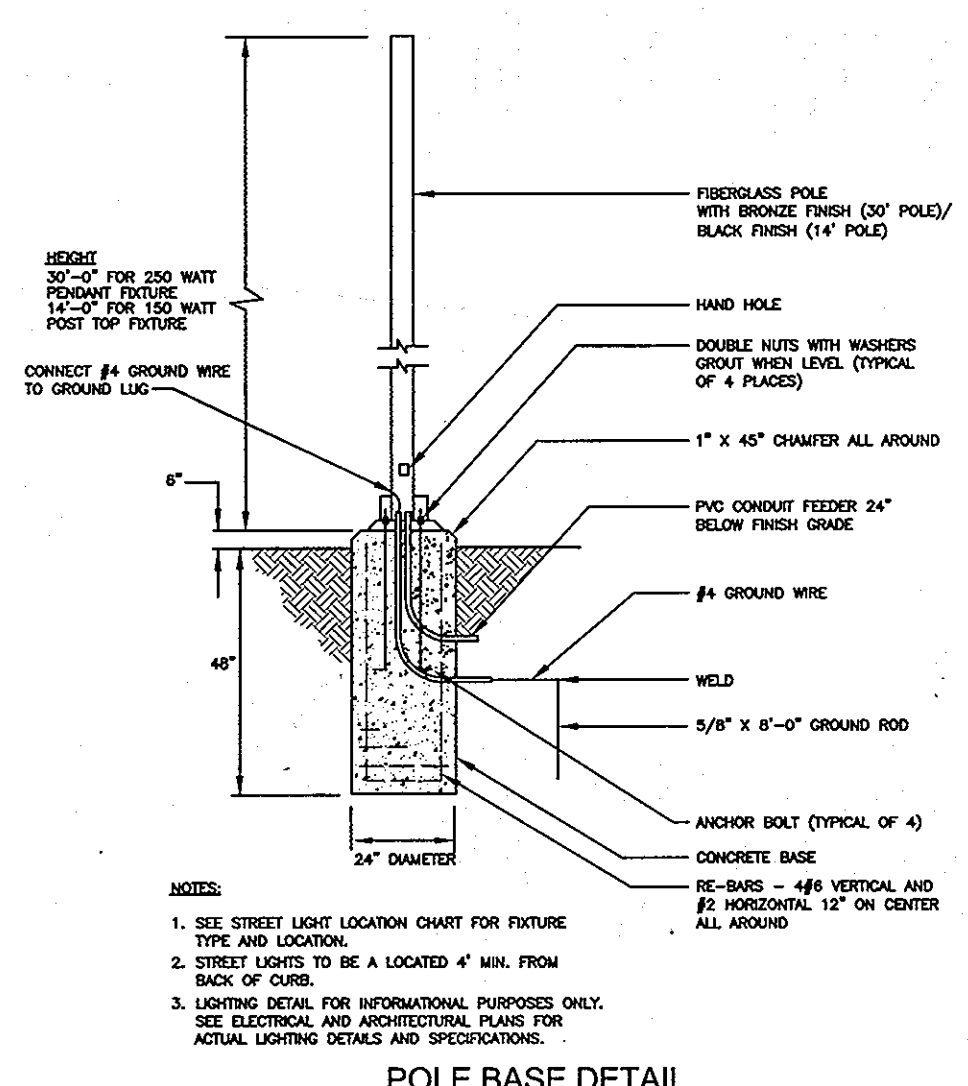
AREA	REQUIREMENT	VOLUME REQUIREMENT W/O CREDITS	CREDITS	VOLUME REQUIREMENT AFTER CREDITS	NOTES
1	WATER QUALITY VOLUME WQV	0.12 AC.FT.	N/A	0.12 AC. FT.	PROVIDED IN POCKET POND 0.06 IN WT 0.06 IN POND
2	RECHARGE VOLUME REV	0.015 AC.FT. 0.12 AC.	0.20 AC. IN GRASS SWALES	0	
3	CHANNEL PROTECTION VOLUME CPV	0.21 AC.FT.	N/A	0.21 AC.FT.	PROVIDED IN POCKET POND
4	OVERHEAD FLOOD PROTECTION, Q10P	N/A	N/A	N/A	
5	EXTREME FLOOD VOLUME, Q100P	N/A	N/A	N/A	

NOTE: SWM PROVIDED BY A POCKET POND (P-5)

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 Robert H. Vogel 2/25/05
 County Health Officer Date
 Howard County Health Department 580

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Cecily Hamden 3/1/05
 Chief, Division of Land Development Date
 William D. Dammann 3/11/05
 Chief, Development Engineering Division Date
 Deborah A. Leager 3/14/05
 Director Date





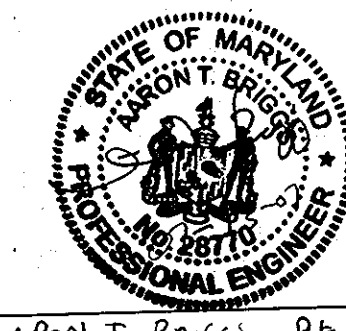
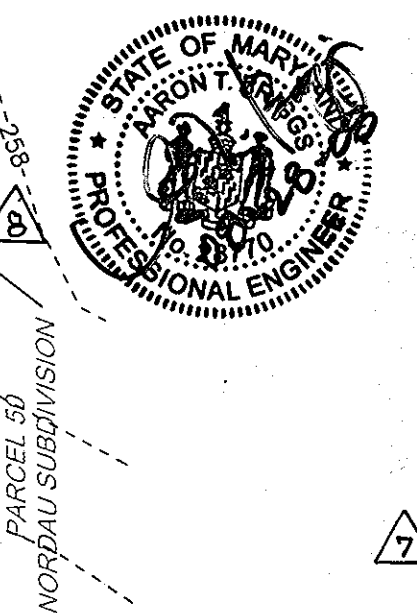
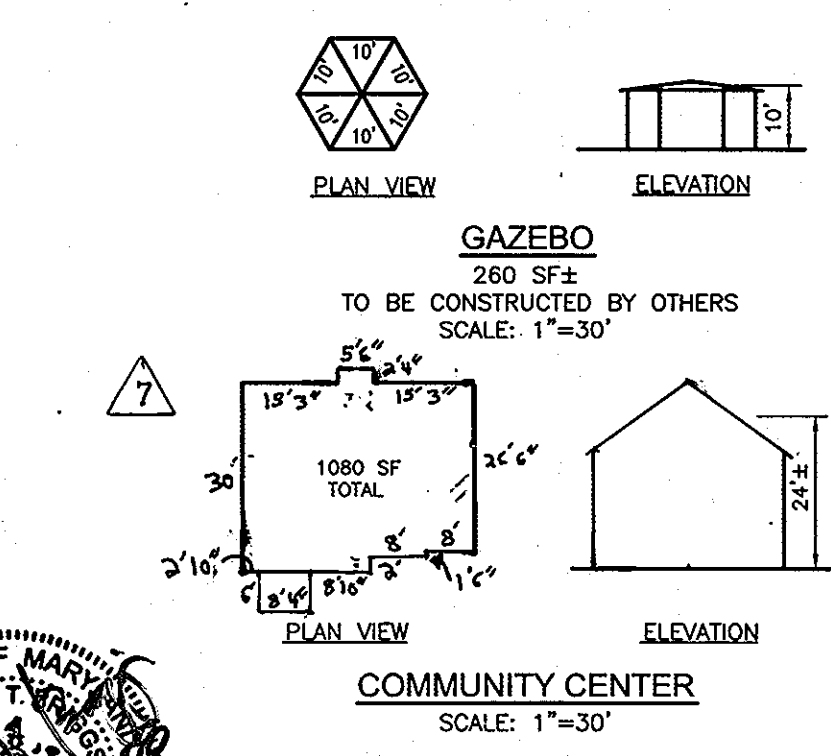
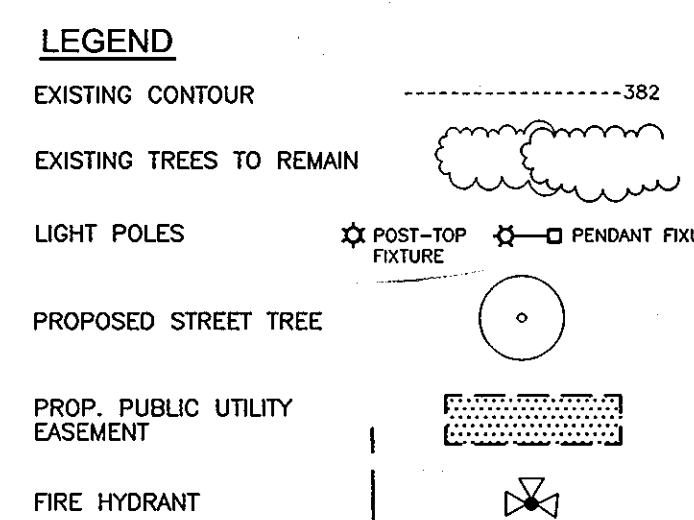
STREET LIGHT LOCATION CHART

STREET NAME	SYMBOL	STATION	OFFSET	FIXTURE/POLE TYPE
JANE GARTH	☉	0+28	25' LEFT	250 WATT HPS VAPOR PENDING FIXTURE (SAG) MOUNTED ON A 30' BRONZE FIBERGLASS POLE USING A 12" ARM
JANE GARTH	☉	4+30	34' LEFT	150 WATT HPS VAPOR PREMIER POST-TOP FIXTURE MOUNTED ON A 14' BLACK FIBERGLASS POLE. NOTE: TO BE PRIVATELY OWNED AND MAINTAINED BY THE HOA. A SEPARATE PRIVATE MAINTENANCE AGREEMENT SHALL BE REQUIRED WITH BGE.

NOTE: A MINIMUM OF 20' IS REQUIRED BETWEEN ANY STREET LIGHT AND ANY TREE

SIGN LOCATION CHART

STREET NAME	STATION	OFFSET	FIXTURE/POLE TYPE
JANE GARTH	0+40	20' LEFT	R1-1 "STOP"
JANE GARTH	0+23	34' LEFT	D3 ST. NAME SIGN ASSEMBLY



REVISIONS

NO.	DESCRIPTION	DATE
11	SHW AS-BUILT	7/7/09
8	REVISE WMC+SK LABELS FOR CURB CUTS TO MATCH LOCATIONS SHOWN ON WATER & SEWER PLAN (CONTRACT NO. 24-1915-22)	8-7-08
7	ADD FIREPLACE UNITS J-1A, REV. COMM. CENTER FOOTPRINT	9-28-07
6	ADD EXT. FIRM RM. TO LOTS 2,3,6,7+9 / ADD DIMENSION FROM LOT 7 NORTH RM. TO FIRE RM.	6-14-07

OWNER/DEVELOPER
SK KING GEORGE LLC
C/O WILLIAM KNOTT
15 WEST AYLESBURY ROAD
TIMONIUM, MD 21093
(410) 308-2710

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
Robert H. Vogel
County Health Officer
Howard County Health Department
Date: 2/25/05

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Cindy Krumholz
Chief, Division of Land Development & Planning
Date: 3/1/05
John J. Williams
Chief, Development Engineering Division
Date: 2/11/05
Mark A. Wagner
Director
Date: 2/14/05

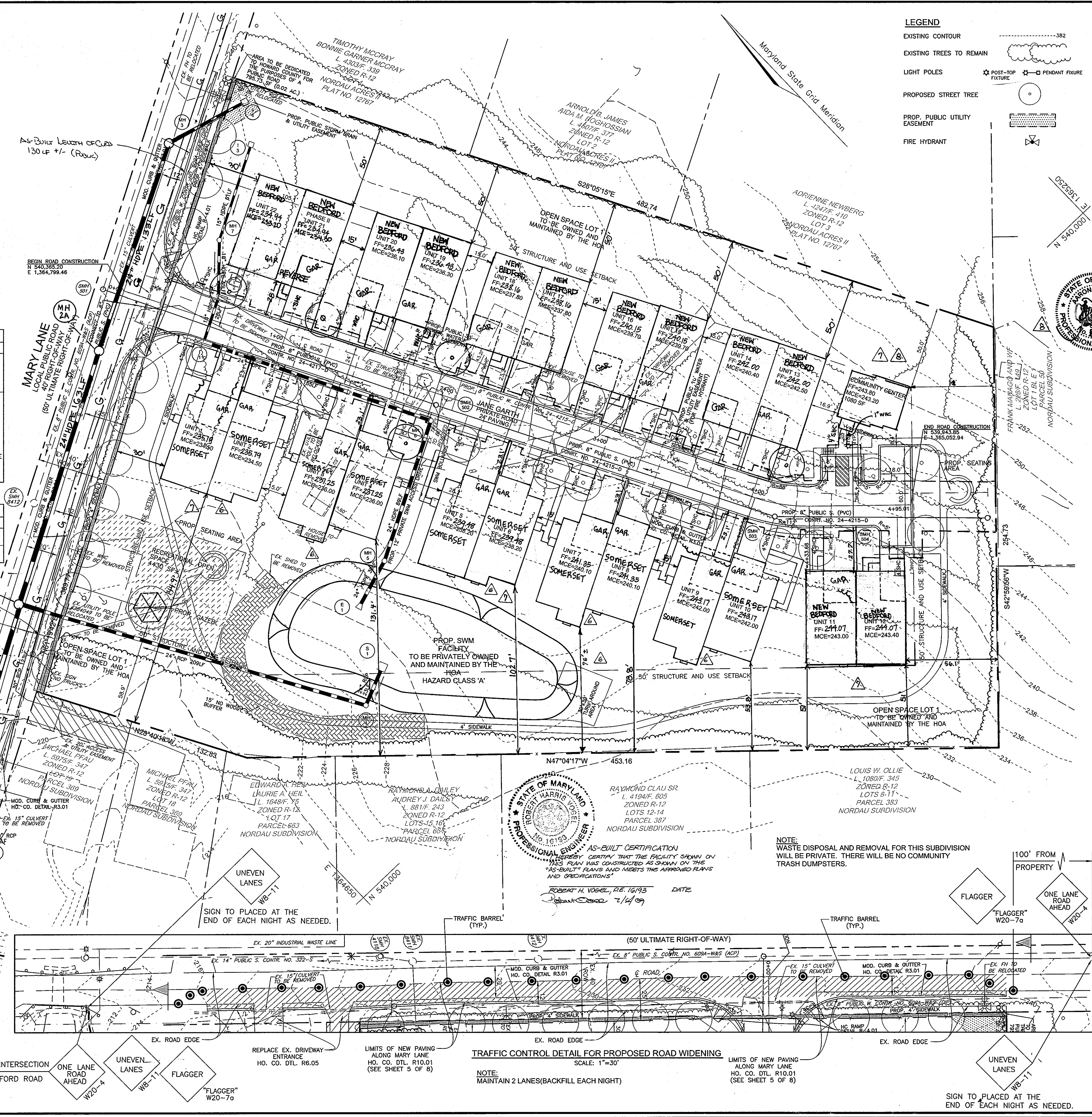
5	REVISE ELEVATIONS FOR HANDICAP ACCESS	2-2-05
4	REPLACED YORKSHIRE TO NEW BEDFORD ELEV B (NO BASEMENT) REVISED SOMERSETS W/ NO BASEMENT + 2' GRASS BELT DRIVES	9-28-06
3	ADD YORKSHIRE AND SOMERSET MODELS TO UNITS 1-22	5-4-06
2	ADD PHASE II UNITS 21 AND 22	12-2-05
1	RELOCATE SD FROM I-4 TO E-2	4-29-05

SITE LAYOUT PLAN AND SITE DETAILS
MARY LANE
AGE RESTRICTED COMMUNITY
PHASE I & PHASE II
UNITS 1-22, COMMUNITY CENTER AND OPEN SPACE LOT 1
TAX MAP 47 BLOCK 6 PARCEL '665'
6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
DEED REF.: L. 1068/F. 581, BA CASE NO. 03-17C

ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS - SURVEYORS PLANNERS
8407 MAIN STREET
ELLCOTT CITY, MARYLAND 21043
TEL: 410.461.7666 FAX: 410.461.8961

DESIGN BY: RHW/JT
DRAWN BY: CMH
CHECKED BY: RHW
DATE: SEPT. 2004
SCALE: 1"=30'
W.O. NO.: 03-21-00

2 SHEET OF 8



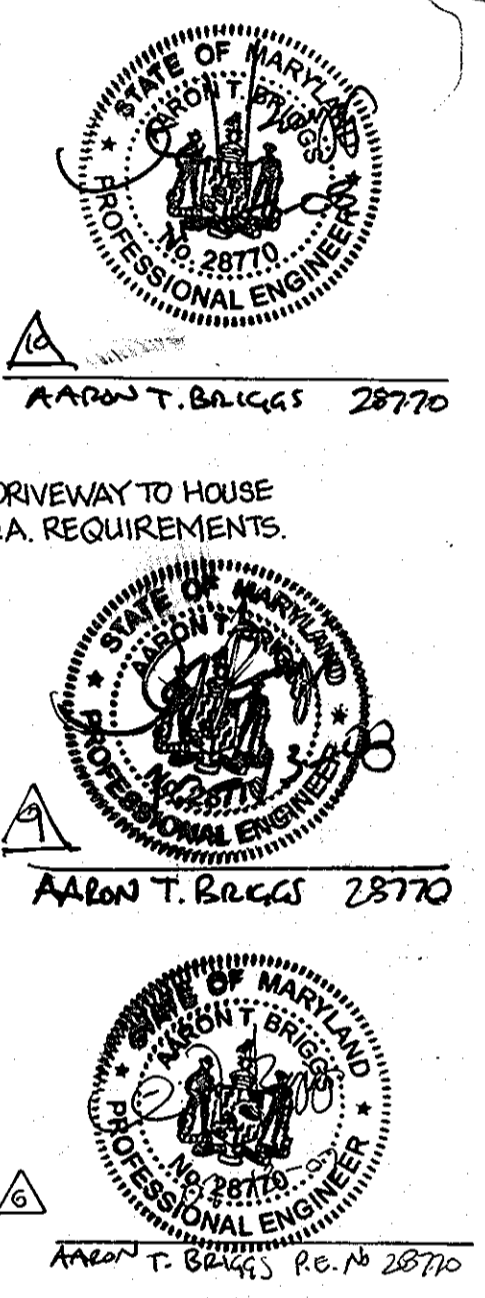
SOILS LEGEND		
SYMBOL	NAME / DESCRIPTION	GROUP
AgC2	AURA GRAVELLY LOAM, 5 TO 10 PERCENT SLOPES, MODERATELY ERODED	B
AgE3	AURA GRAVELLY LOAM, 10 TO 30 PERCENT SLOPES, SEVERELY ERODED	B
BeC2	BELTSVILLE SILT LOAM, 5 TO 10 PERCENT SLOPES, MODERATELY ERODED	C
BeC3	BELTSVILLE SILT LOAM, 5 TO 10 PERCENT SLOPES, SEVERELY ERODED	C
CiC3	CHILLUM GRAVELLY LOAM, 5 TO 10 PERCENT SLOPES, SEVERELY ERODED	B
CiD2	CHILLUM GRAVELLY LOAM, 10 TO 15 PERCENT SLOPES, MODERATELY ERODED	B/D
Fa	FALLSINGTON LOAM	D
Ha	HATBORO SILT LOAM	D
KcC2	KELLY SILT LOAM, 8 TO 15 PERCENT SLOPES, MODERATELY ERODED	C
ScD	SANDY AND CLAYEY LAND, MODERATELY SLOPING	C
SsE	SANDY AND CLAYEY LAND, MODERATELY STEEP	C
SfC2	SASSAFRAS GRAVELLY SANDY LOAM, 5 TO 10 PERCENT SLOPES, MODERATELY ERODED	B

PAGE 34 OF THE HOWARD COUNTY SOIL SURVEY

LEGEND	
EXISTING CONTOUR	---440---
PROPOSED CONTOUR	---412---
SPOT ELEVATION	+82.53
EXISTING TREES TO REMAIN	
LIGHT POLES	POST-TOP FEATURE OVERHEAD FEATURE
PROPOSED STREET TREE	
SOILS	SIB2 SsE
PROP. PUBLIC UTILITY EASEMENT	
SUPER SILT FENCE	SSF
LIMIT OF DISTURBANCE	LOD
EROSION CONTROL MATTING	
EARTHDIKE	
STABILIZED CONSTRUCTION ENTRANCE	
GABION INFLOW PROTECTION	

NOTE: WASTE DISPOSAL AND REMOVAL FOR THIS SUBDIVISION WILL BE PRIVATE. THERE WILL BE NO COMMUNITY TRASH DUMPSTERS.

* NOTE: CONTRACTOR TO CONSTRUCT SIDEWALK FROM DRIVEWAY TO HOUSE IN ORDER TO CONFORM WITH CURRENT ADA REQUIREMENTS.



NO.	REVISION	DATE
11	AS-BUILT	7/7/09
10	REV. FFE AND GRADING ON UNITS 21, 22 PER DRAW SURVEY DATA (10/29/08)	11/7/08
9	REV. GRADES AROUND UNITS 13, 14, 19, 20; WALL OF UNIT 14	10/19/08
8	REV. FFE ON UNITS 13, 14, 19, 20 PER DRAW SURVEY DATA (8-25-08)	10/19/08
7	REV. GRADING ON UNITS 7+8, ADD LOW RET. WALL	3-14-08
6	ADD EXT. FAM. RM. TO UNITS 2, 3, 6, 7, 9 / REV. GRADING	9-28-07
5	REVISE ELEVATIONS FOR HANDICAP ACCESS	6-14-07
4	REPLACED YORKSHIRE TO NEW BEDFORD (NO MESSUREMENT)	3-9-07
3	REVISED SOMERSETES WHO DOORWAYS AND 2 GRASS BETWEEN DRIVES	9-28-06
2	ADD YORKSHIRE AND SOMERSET MODELS TO UNITS 1-22	5-4-06
1	ADD PHASE II, UNITS 21 AND 22	12-2-05
0	RELOCATE STORMDRAIN FROM I-4 TO E-2	7-19-05

POND
PRIVATE POCKET
HAZARD CLASS 'A'
1-YR WSEL=228.19
10-YR WSEL=228.83
100-YR WSEL=229.15
WqV WSEL=225.80
CpV WSEL=227.40
WETPOOL
BOTTOM=222.00

BASIN
DRAINAGE AREA: 3.11 AC
WET STORAGE REQUIRED: 0.13 AC-FT
WET STORAGE PROVIDED: 0.13 AC-FT
DRY STORAGE REQUIRED: 0.13 AC-FT
DRY STORAGE PROVIDED: 0.13 AC-FT
TOTAL STORAGE REQUIRED: 11196 CF
TOTAL STORAGE PROVIDED: 13688 CF
BOTTOM ELEVATION: 224.00
CREST ELEV.: 228.00
WET STORAGE: 224.00-226.10 (2.1 AC-FT)
DRY STORAGE: 226.10-228.00 (1.9 AC-FT)
TOP OF EMBANKMENT: 230.30
CLEAN OUT ELEV.: 225.00
Q₁ (EX.): 2.00 CFS
Q₁ (PROP.): 2.70 CFS

OWNER/DEVELOPER
SK KING GEORGE LLC
C/O WILLIAM KNOTT
15 WEST AYLESBURY ROAD
THOMSON, MD 21093
(410) 308-2710

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
Robert W. Wilson 2/25/05
for County Health Officer Date
Howard County Health Department

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Cindy Henrich 2/1/05
Chief, Division of Land Development Date
David L. Vogel 2/1/05
Chief, Development Engineering Division Date
Director

GRADING AND EROSION AND SEDIMENT CONTROL
MARY LANE
AGE RESTRICTED COMMUNITY
PHASE I & PHASE II
UNITS 1-22, COMMUNITY CENTER AND OPEN SPACE LOT 1
TAX MAP 47 BLOCK 6 PARCEL '665'
6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
DEED REF.: L. 1068/F. 581, BA CASE NO. 03-17C

ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS - SURVEYORS PLANNERS
8407 MAIN STREET
ELLCOTT CITY, MARYLAND 21043
TEL: 410.461.7666 FAX: 410.461.8961

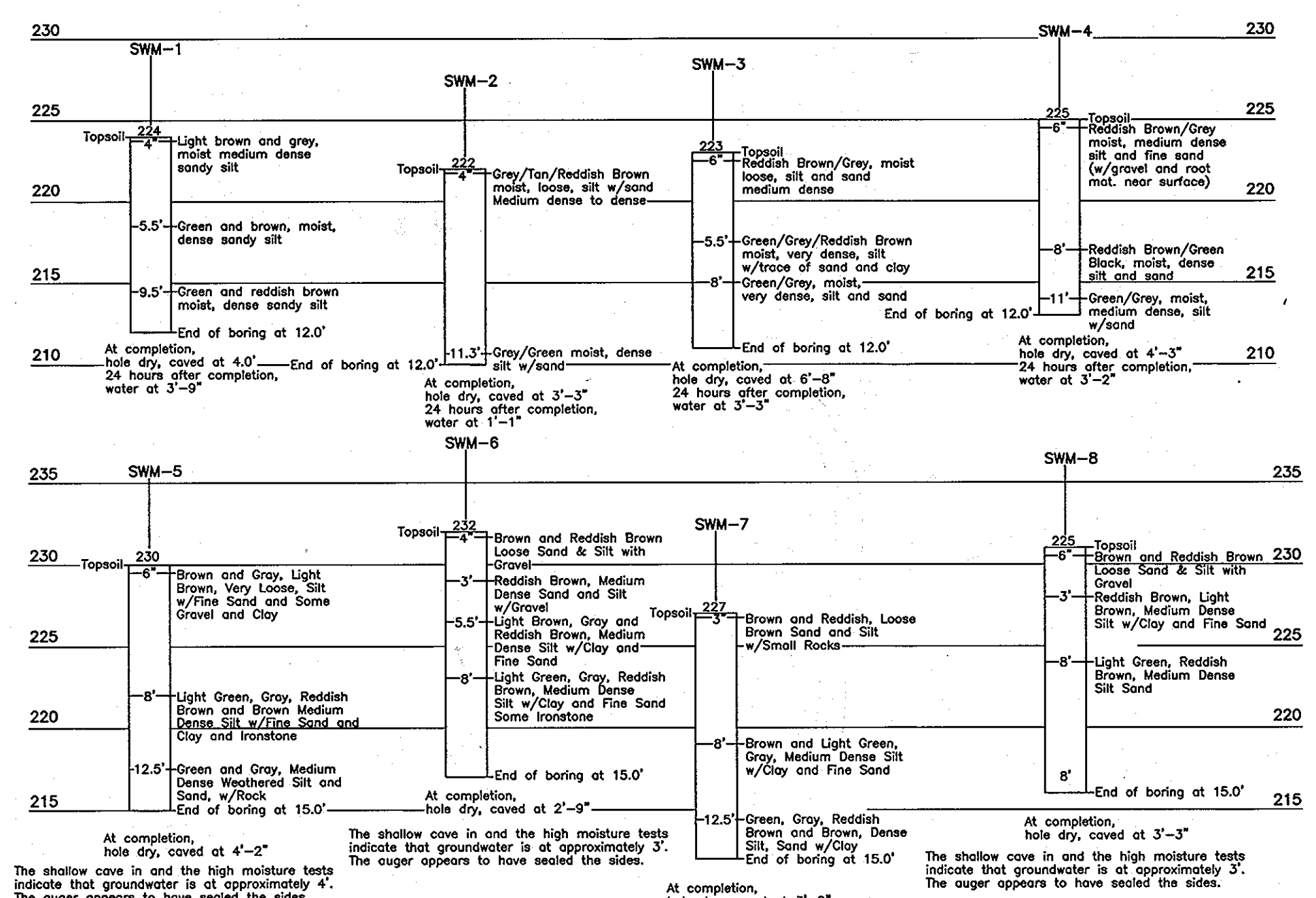
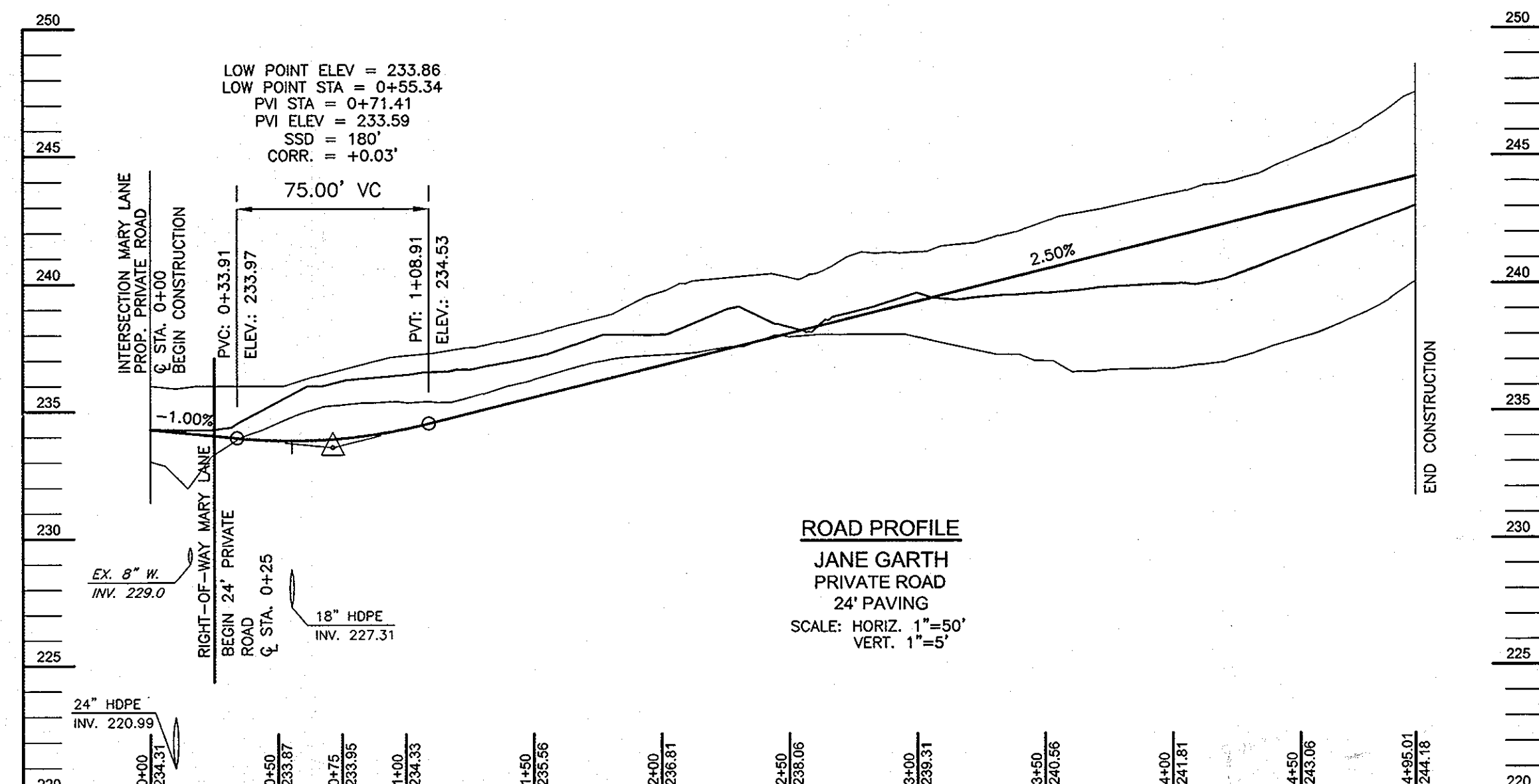
AS-BUILT CERTIFICATE
I HEREBY CERTIFY THAT THE PROVISIONS OF THIS PLAN WAS CONSTRUCTED IN ACCORDANCE WITH THE AS-BUILT PLANS AND MEETS ALL REQUIREMENTS AND SPECIFICATIONS.
ROBERT H. VOGEL, P.E. No. 10193 DATE 7/4/09

ENGINEER'S CERTIFICATE
I hereby certify that this plan for sediment and erosion control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.
Robert H. Vogel 7/4/09
Signature of Engineer Date
Robert H. Vogel

DEVELOPER'S CERTIFICATE
I/We certify that all development and construction will be done according to this plan of development, for sediment and erosion control, and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspections by the Howard Soil Conservation District.
William H. Knott 1/10/05
Signature of Developer (print name below signature) Date
WILLIAM H. KNOTT

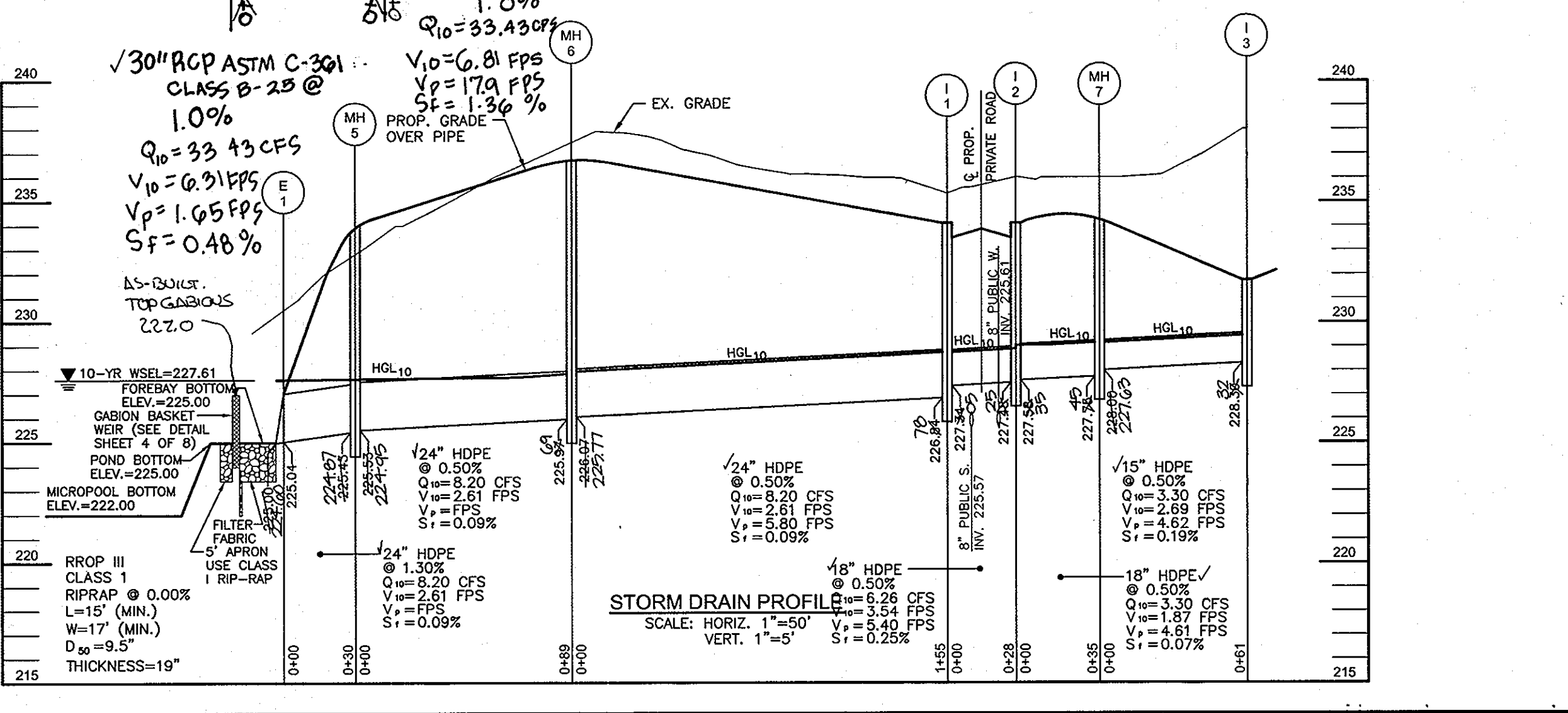
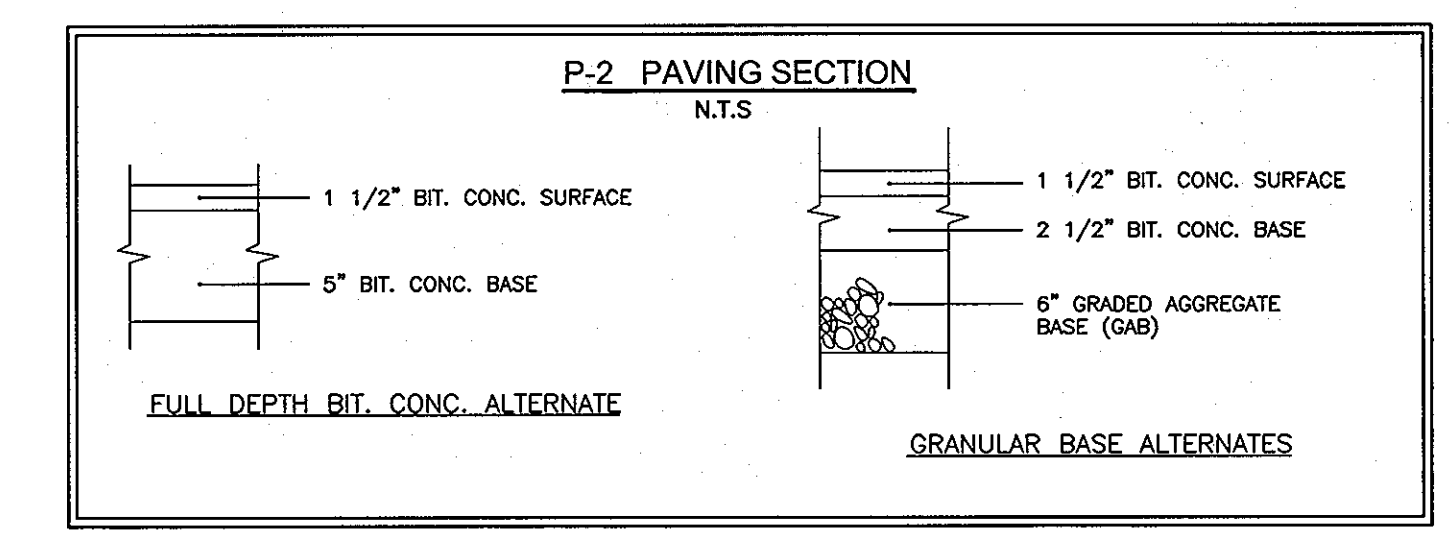
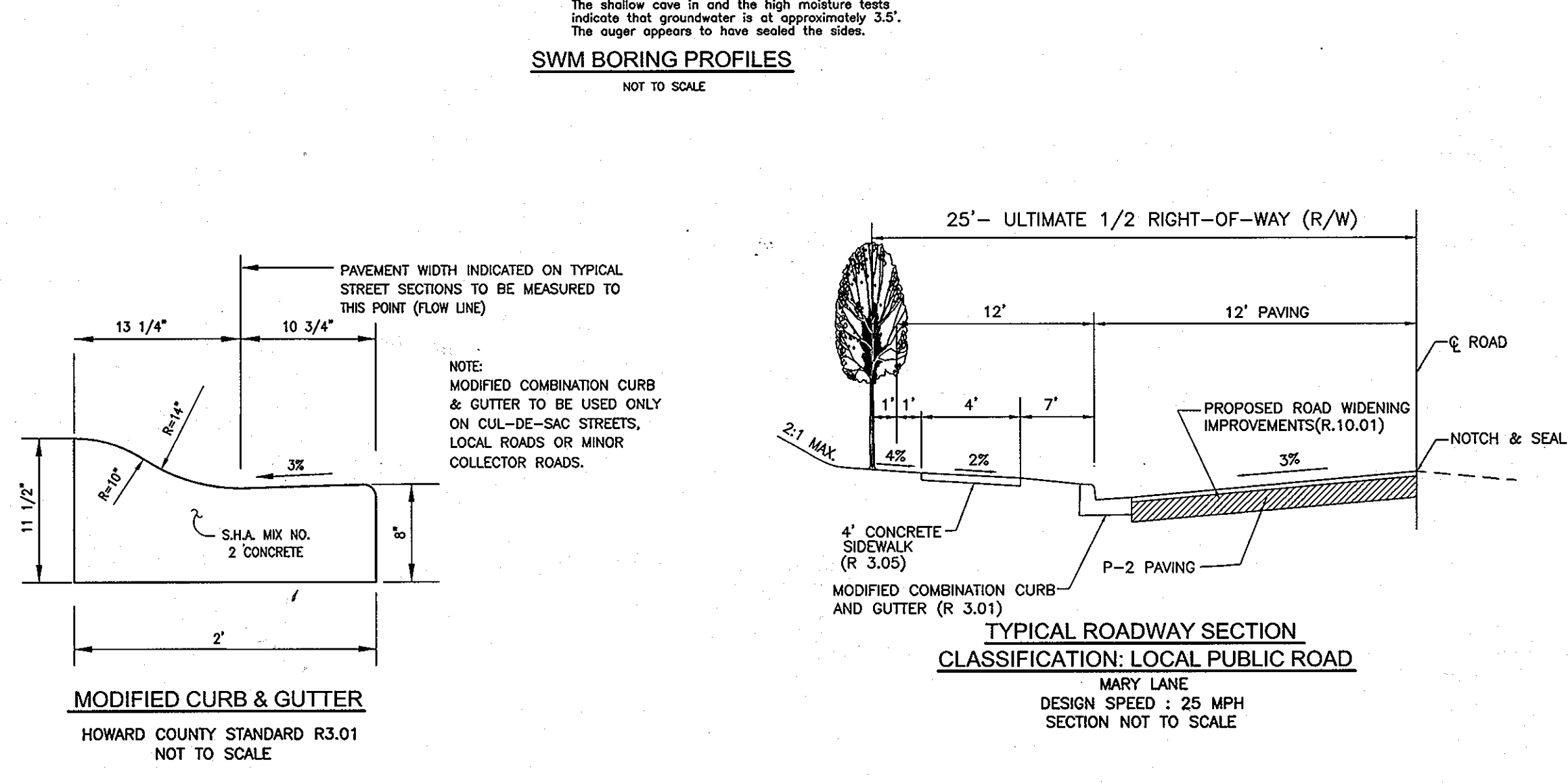
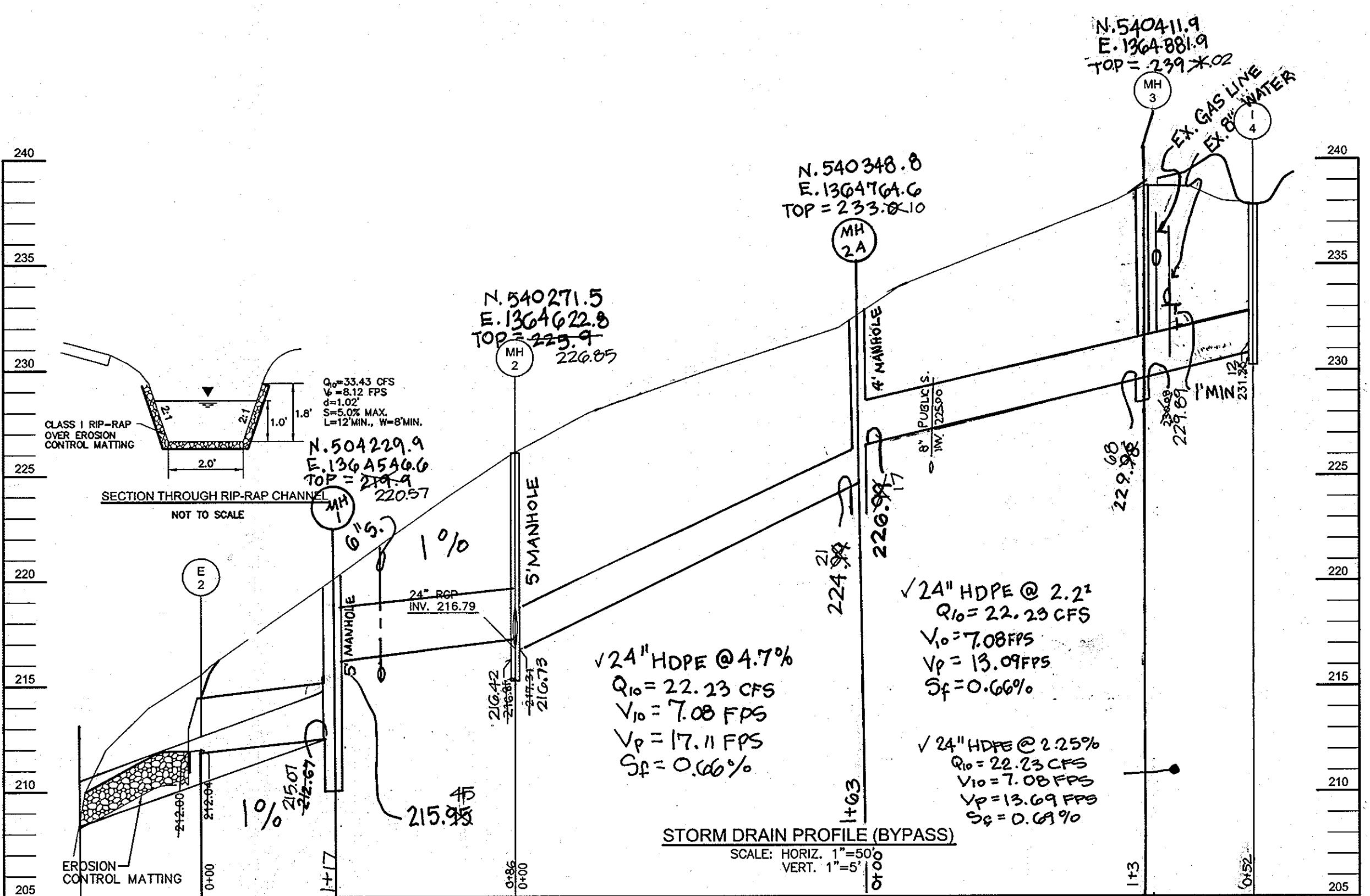
These plans have been reviewed for HOWARD SOIL CONSERVATION DISTRICT and meets technical requirements for soil erosion and sediment control
John R. Robertson 2/10/05
SDA-Natural Resources Conservation Service Date
Howard SCD

DESIGN BY: RHW/JT
DRAWN BY: CMH
CHECKED BY: RHW
DATE: JANUARY, 2005
SCALE: 1"=30'
W.O. NO.: 03-21.00
3 SHEET OF 8



STRUCTURE SCHEDULE							
NO.	TYPE	WIDTH	LOCATION	TOP ELEV.	INV IN	INV OUT	REMARKS
E-1	24" METAL END SECTION	-	N 540129.51, E 1364771.91	227.00	24"	225.00	SD 5.61
E-2	30" METAL END SECTION	-	N 540184.68, E 1364502.09	214.50	30"	212.04	SD 5.61
I-1	TYPE 'A'-10' INLET	10' I-1	CL STA. 0+55.34-12.43' RT.	234.10	18"	227.34	24" 226.84 SD 4.41
I-2	TYPE 'A'-10' INLET	10' I-1	CL STA. 0+55.34-12.43' LT.	234.10	18"	227.58	18" 227.48 SD 4.41
I-3	YARD INLET	2'	N 540376.31, E 1364916.04	231.80	-	15"	228.30 SD 4.14
I-4	TYPE 'K' INLET	3' I-1	N 540398.68, E 1364932.17	237.00	-	24"	231.15 SD 4.12
MH-1	STANDARD MANHOLE	5'	N 540195.11 E 1364512.06	216.40	30"	212.40	30" 212.30 G 5.13
MH-2	STANDARD MANHOLE	5'	N 540260.77 E 1364629.03	225.90	24"	216.79	30" 216.26 G 5.13
MH-3	STANDARD MANHOLE	4'	N 540407.78 E 1364898.05	239.10	24"	230.08	24" 223.14 G 5.12
MH-4	STANDARD MANHOLE	4'	N 540083.00 E 1364731.52	228.60	24"	222.88	24" 222.78 G 5.12
MH-5	STANDARD MANHOLE	4'	N 540138.50 E 1364800.09	233.00	24"	225.53	24" 225.43 G 5.12
MH-6	STANDARD MANHOLE	4'	CL STA. 2+10.32-16.98' RT.	236.55	24"	226.07	24" 225.97 G 5.12
MH-7	STANDARD MANHOLE	4'	N 540347.68 E 1364862.33	235.70	15"	228.00	18" 227.75 G 5.12
S-1	CONTROL STRUCTURE	SEE DETAIL SHEET 7 OF 8	N 540093.84 E 1364756.80	229.00	225.80	30"	223.00 SEE DETAIL SHEET 7 OF 8

PIPE SCHEDULE		
PIPE SIZE	TYPE	TOTAL LENGTH
15"	HDPE	61 LF
18"	HDPE	190 LF
24"	HDPE	824 LF
24"	RCP ASTM C-361	23 LF
30"	RCP ASTM C-361	149 LF



AS-BUILT CERTIFICATION
 I HEREBY CERTIFY THAT THE WORK SHOWN ON THIS PLAN WAS CONSTRUCTED ACCORDING TO THE AS-BUILT PLANS AND SPECIFICATIONS.
 ROBERT H. VOGEL, P.E. No. 16193
 PROFESSIONAL ENGINEER

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 Robert H. Vogel 2/25/05
 County Health Officer
 Howard County Health Department

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Linda Hamilton 3/1/05
 Chief, Division of Land Development
 Date
 [Signature] 2/11/05
 Chief, Development Engineering Division
 Date
 [Signature] 3/1/05
 Director

OWNER/DEVELOPER
 SK KING GEORGE LLC
 C/O WILLIAM KNOTT
 15 WEST AYLESBURY ROAD
 TIMONUM, MD 21083
 (410) 308-2710

NO.	REVISION	DATE
11	SWM AS-BUILT	7/7/09
2	ADD PHASE II, UNITS 21 AND 22	12.2.05
1	REVISE STORM DRAIN FROM E-2 TO I-4	7.20.05

PROFILES
 MARY LANE
 AGE RESTRICTED COMMUNITY
 PHASE I & PHASE II
 UNITS 1-22, COMMUNITY CENTER AND OPEN SPACE LOT 1
 TAX MAP 47 BLOCK 6 PARCEL '665'
 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 DEED REF.: L. 1068/F. 581, BA CASE NO. 03-17C

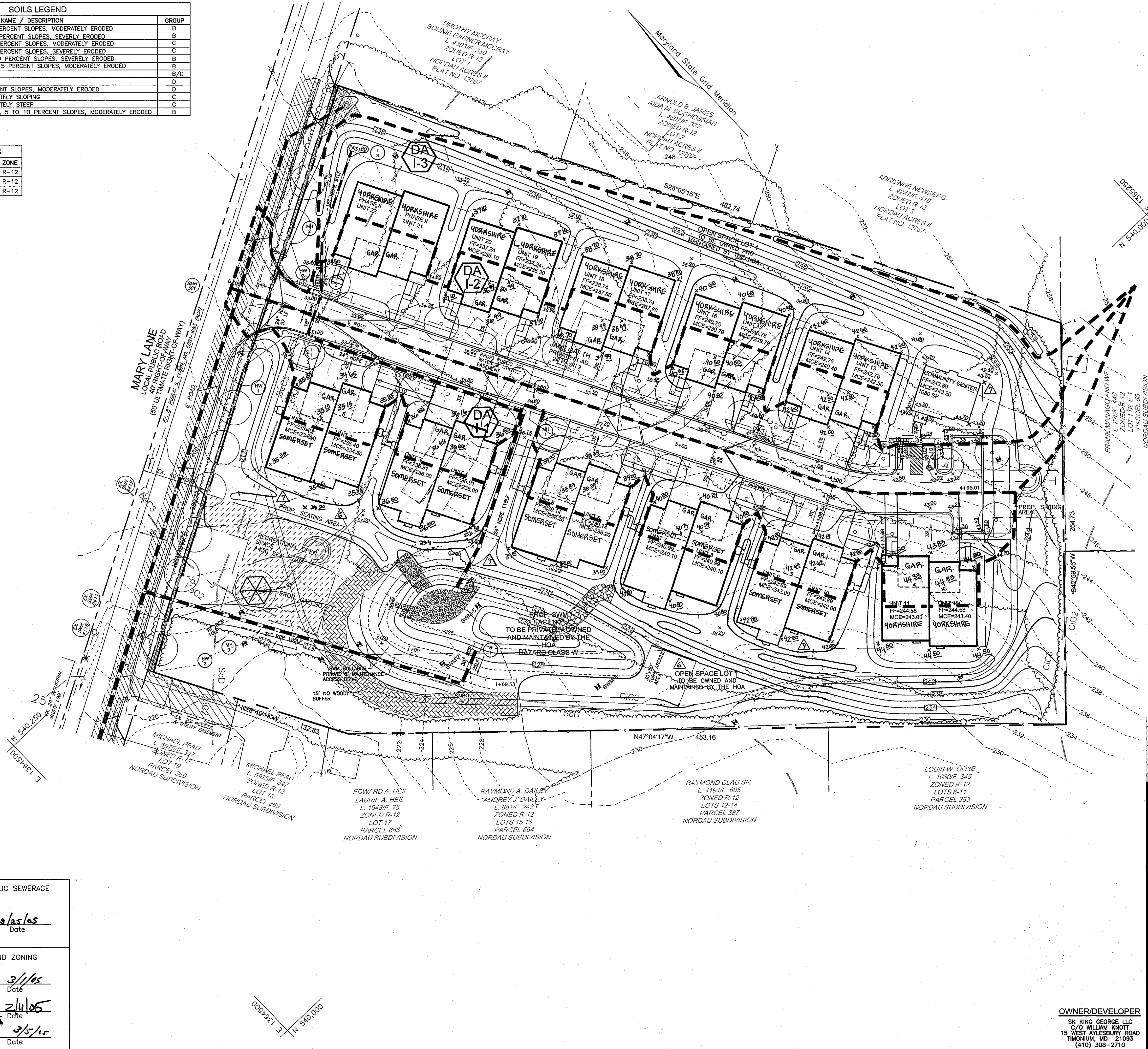
ROBERT H. VOGEL ENGINEERING, INC.
 ENGINEERS - SURVEYORS PLANNERS
 8407 MAIN STREET
 ELICOTT CITY, MARYLAND 21043
 TEL: 410.461.7666 FAX: 410.461.8961

DESIGN BY: RHV/JT
 DRAWN BY: CMH
 CHECKED BY: RHV
 DATE: JANUARY, 2005
 SCALE: AS SHOWN
 W.O. NO.: 03-21.00
 5 SHEET OF 8

SOILS LEGEND		
SYMBOL	NAME / DESCRIPTION	GROUP
AgC2	AURA GRAVELLY LOAM, 5 TO 10 PERCENT SLOPES, MODERATELY ERODED	B
AgC3	AURA GRAVELLY LOAM, 10 TO 30 PERCENT SLOPES, SEVERELY ERODED	B
BcC2	BELTSVILLE SILT LOAM, 5 TO 10 PERCENT SLOPES, MODERATELY ERODED	C
BcC3	BELTSVILLE SILT LOAM, 5 TO 10 PERCENT SLOPES, SEVERELY ERODED	C
CiC3	CHILLUM GRAVELLY LOAM, 5 TO 10 PERCENT SLOPES, SEVERELY ERODED	B
CiD2	CHILLUM GRAVELLY LOAM, 10 TO 15 PERCENT SLOPES, MODERATELY ERODED	B
Fg	FALLSINGTON LOAM	B/D
Hs	HATBORO SILT LOAM	D
KkC2	KELLY SILT LOAM, 8 TO 15 PERCENT SLOPES, MODERATELY ERODED	D
SdD	SANDY AND CLAYEY LAND, MODERATELY SLOPING	C
SsE	SANDY AND CLAYEY LAND, MODERATELY STEEP	C
SfC2	SASSAFRAS GRAVELLY SANDY LOAM, 5 TO 10 PERCENT SLOPES, MODERATELY ERODED	B

PAGE 34 OF THE HOWARD COUNTY SOIL SURVEY

DRAINAGE AREA TABULATIONS					
NO.	AREA	"C"	% IMP.	SOIL TYPE	ZONE
I-1	0.67 AC.	0.85	70%	B/C	R-12
I-2	0.67 AC.	0.62	66%	B/C	R-12
I-3	0.83 AC.	0.32	24%	B/C	R-12



LEGEND	
EXISTING CONTOUR	---440---
PROPOSED CONTOUR	---[417]---
SPOT ELEVATION	+82.53
EXISTING TREES TO REMAIN	
LIGHT POLES	☆ POST-TOP ○ OVERHEAD
PROPOSED STREET TREE	
SOILS	SIB2 S5E
PROP. PUBLIC UTILITY EASEMENT	
PROPOSED DRYWELL	
DRAINAGE DIVIDE	---[dashed]---



Robert H. Vogel, P.E. No. 28770

NO.	REVISION	DATE
7	Add Fireplace To Units 1-12, Rev. Comm. Center	
6	ADD FAMILY RM. TO UNITS 3, 3, 6, 7, 9 / ADJ. GRADING	6-14-07
2	ADD YORKSHIRE AND SOMERSET MODELS TO UNITS 1-22	5-4-06
1	ADD PHASE II, UNITS 21 AND 22	12-2-02

STORM DRAIN DRAINAGE AREA MAP
MARY LANE
 AGE RESTRICTED COMMUNITY
 PHASE I & PHASE II
 UNITS 1-22, COMMUNITY CENTER AND OPEN SPACE LOT 1
 TAX MAP 47 BLOCK 6 PARCEL '665'
 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 DEED REF.: L. 1068/F. 581, BA CASE NO. 03-17C

ROBERT H. VOGEL ENGINEERING, INC.
 ENGINEERS • SURVEYORS • PLANNERS

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 TEL: 410.461.7666 FAX: 410.461.8961

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS

Robert J. Wala 2/25/05
 County Health Officer Date
 Howard County Health Department

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Cindy Hamilton 3/1/05
 Chief, Division of Land Development Date

John D. ... 2/11/05
 Chief, Development Engineering Division Date

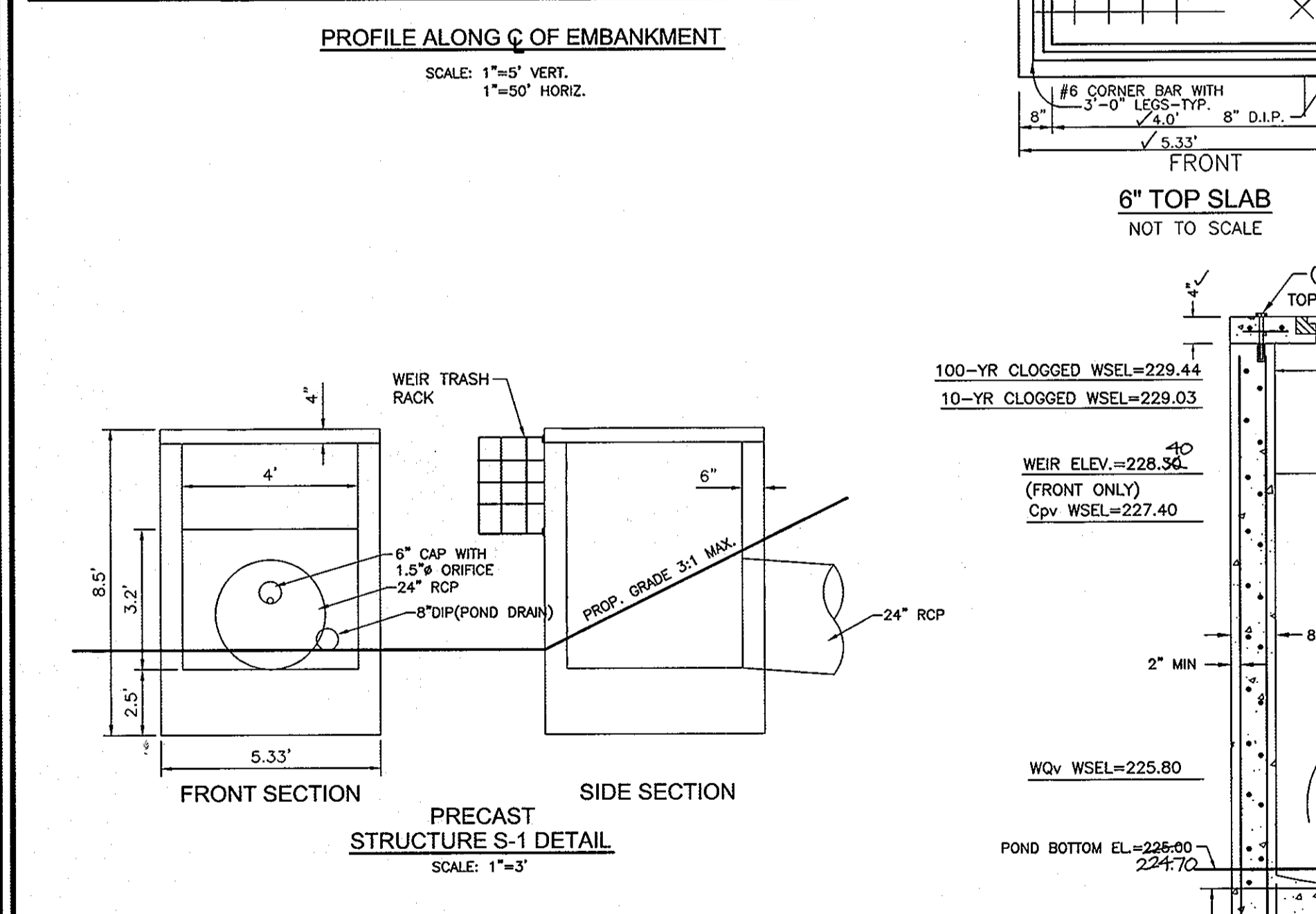
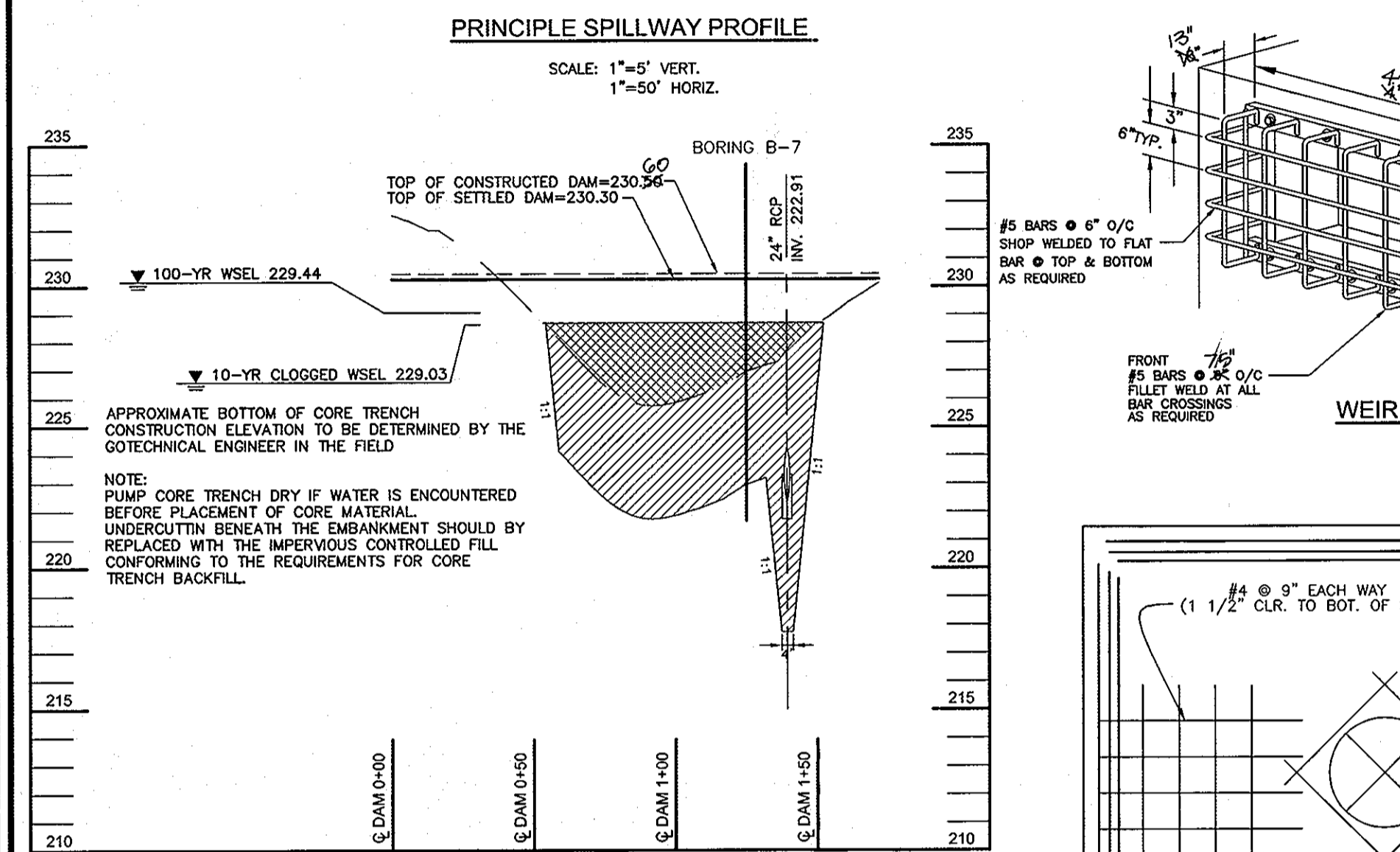
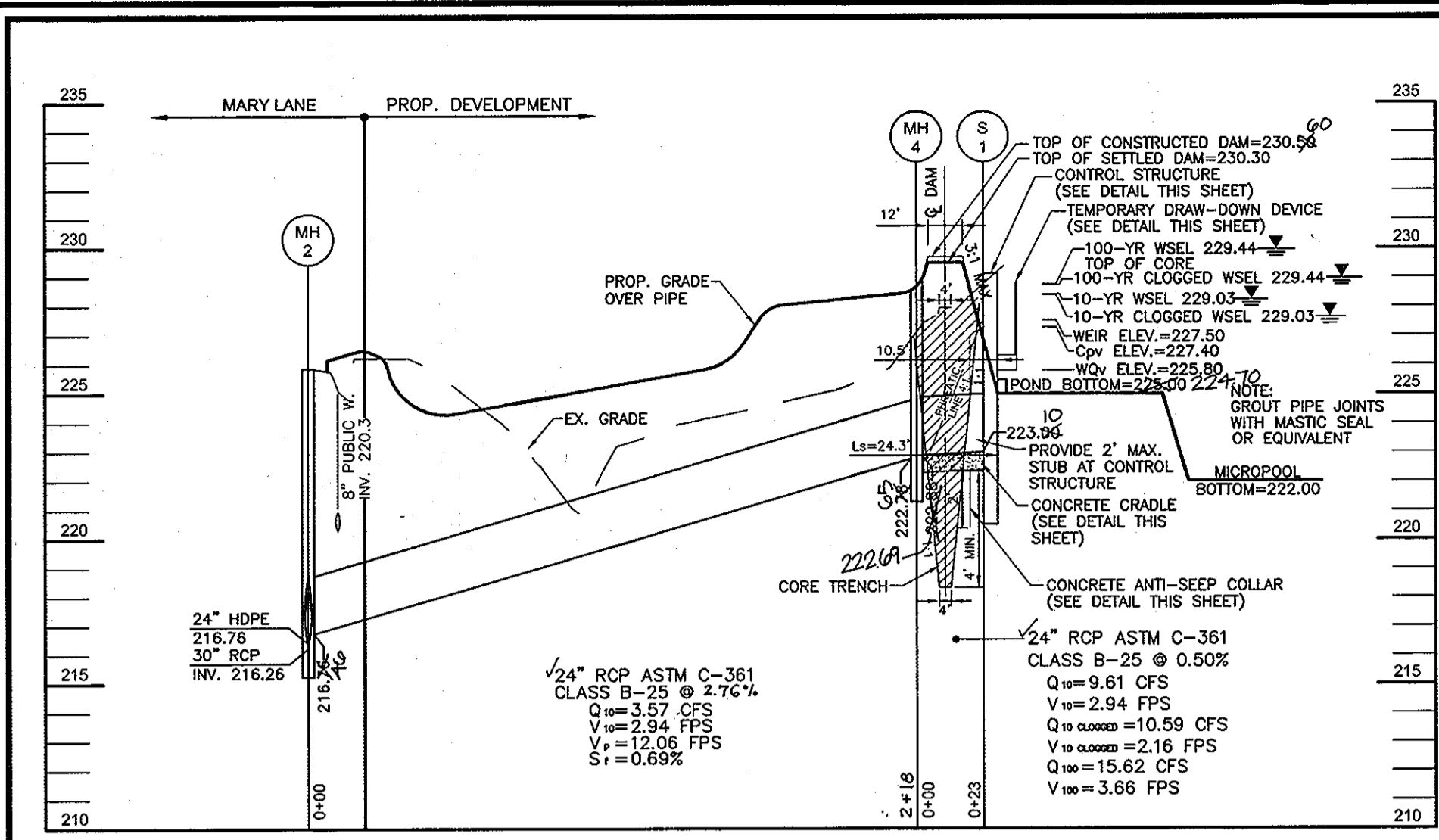
Mark L. ... 2/5/10
 Director Date

OWNER/DEVELOPER
 SK KING GEORGE LLC
 C/O WILLIAM KNOTT
 15 WEST AVESBURY ROAD
 TIMONIUM, MD 21083
 (410) 308-2710

DESIGN BY: RHV/JT
 DRAWN BY: CMH
 CHECKED BY: RHV
 DATE: SEPT. 2004
 SCALE: 1"=30'
 W.O. NO.: 03-21.00

6 SHEET OF 8

As Built SDP-04-85



APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS

Robert H. Vogel 2/25/05
County Health Officer
Howard County Health Department

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Christa Hamstra 2/16/05
Chief, Division of Land Development

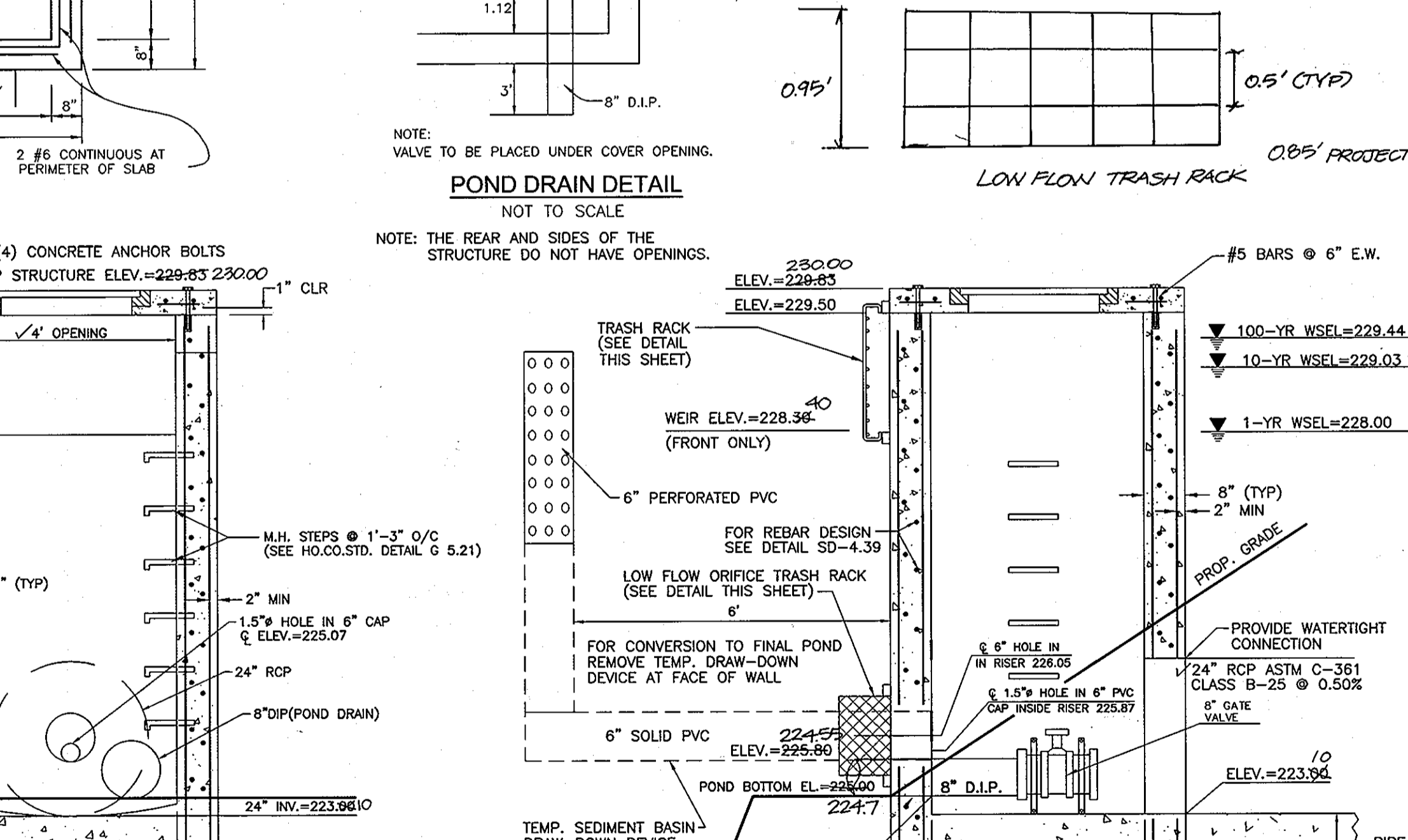
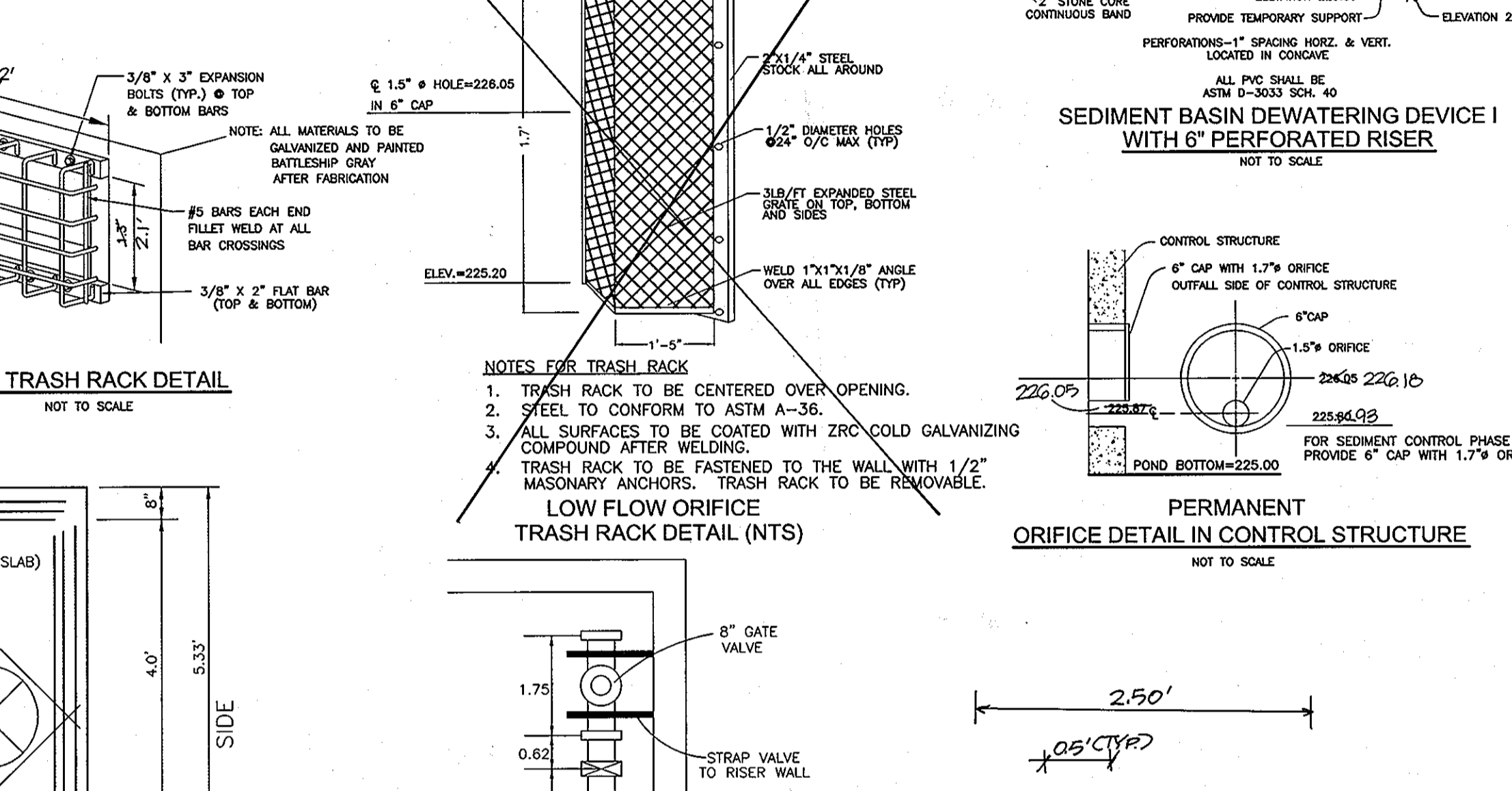
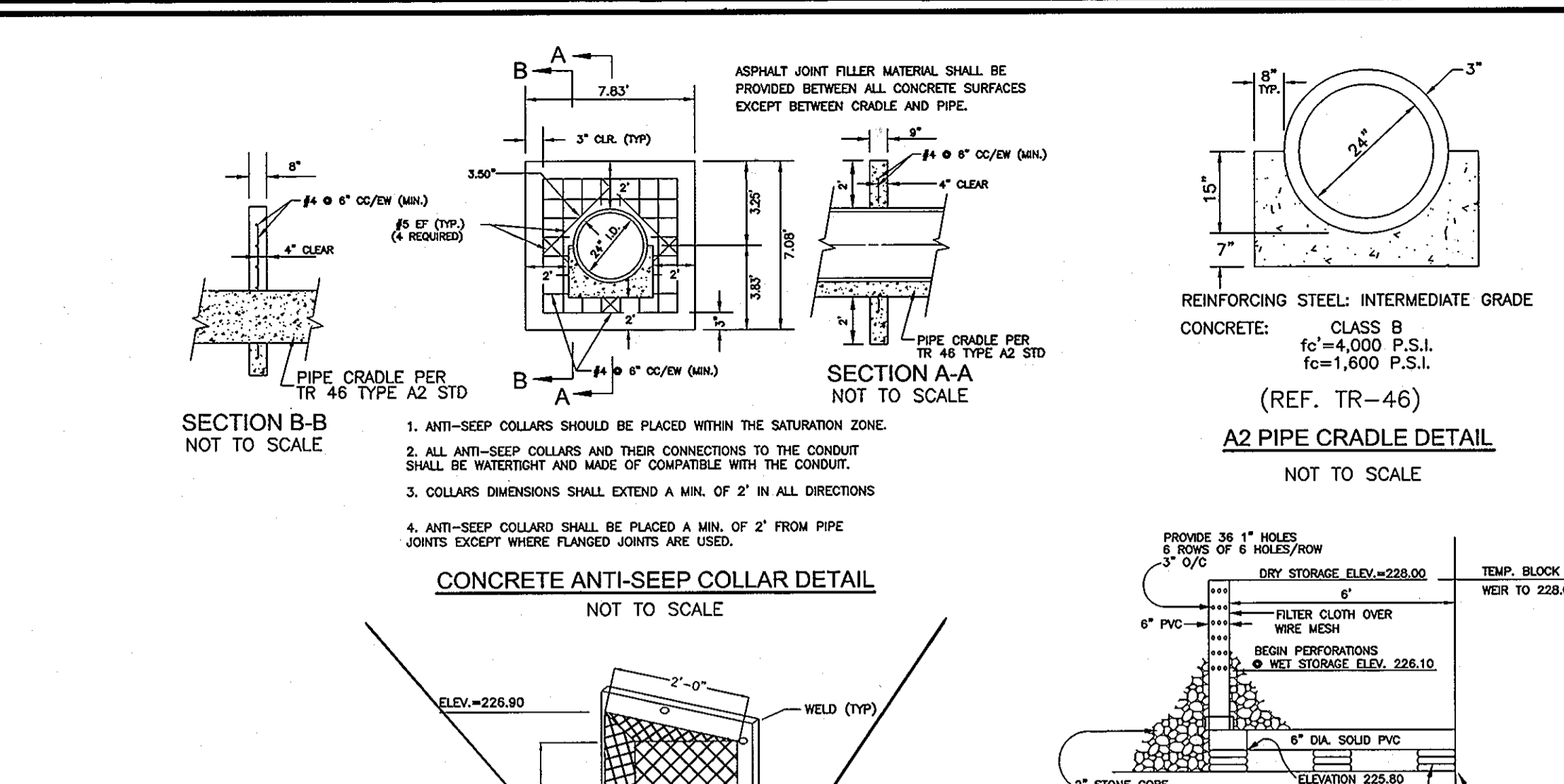
Michael Damman 2/11/05
Chief, Development Engineering Division

Frank A. Woych 2/14/05
Director

ENGINEER'S CERTIFICATE

I hereby certify that this plan for sediment and erosion control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

Robert H. Vogel 1/12/05
Signature of Engineer
Robert H. Vogel



APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS

Robert H. Vogel 2/25/05
County Health Officer
Howard County Health Department

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Christa Hamstra 2/16/05
Chief, Division of Land Development

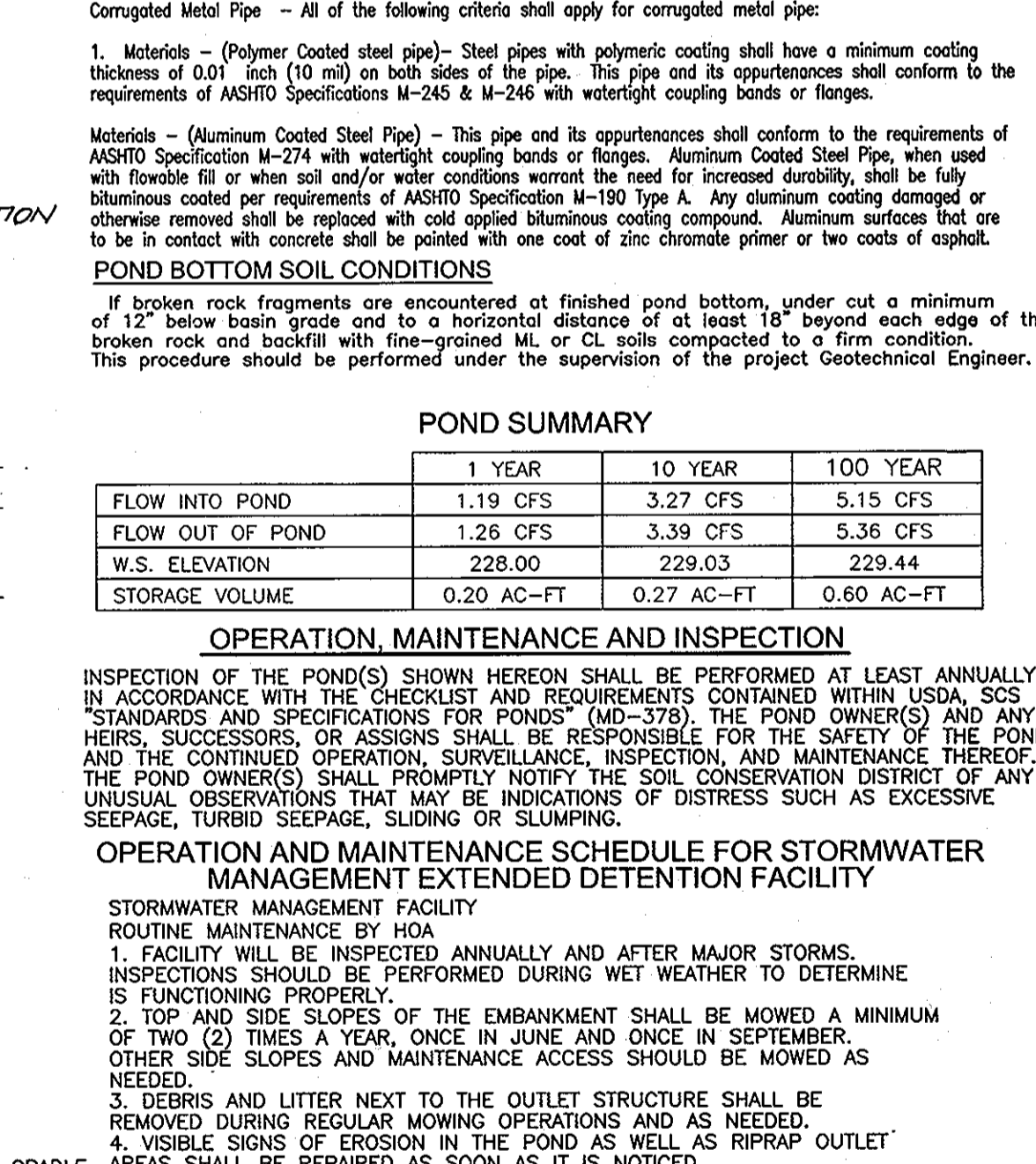
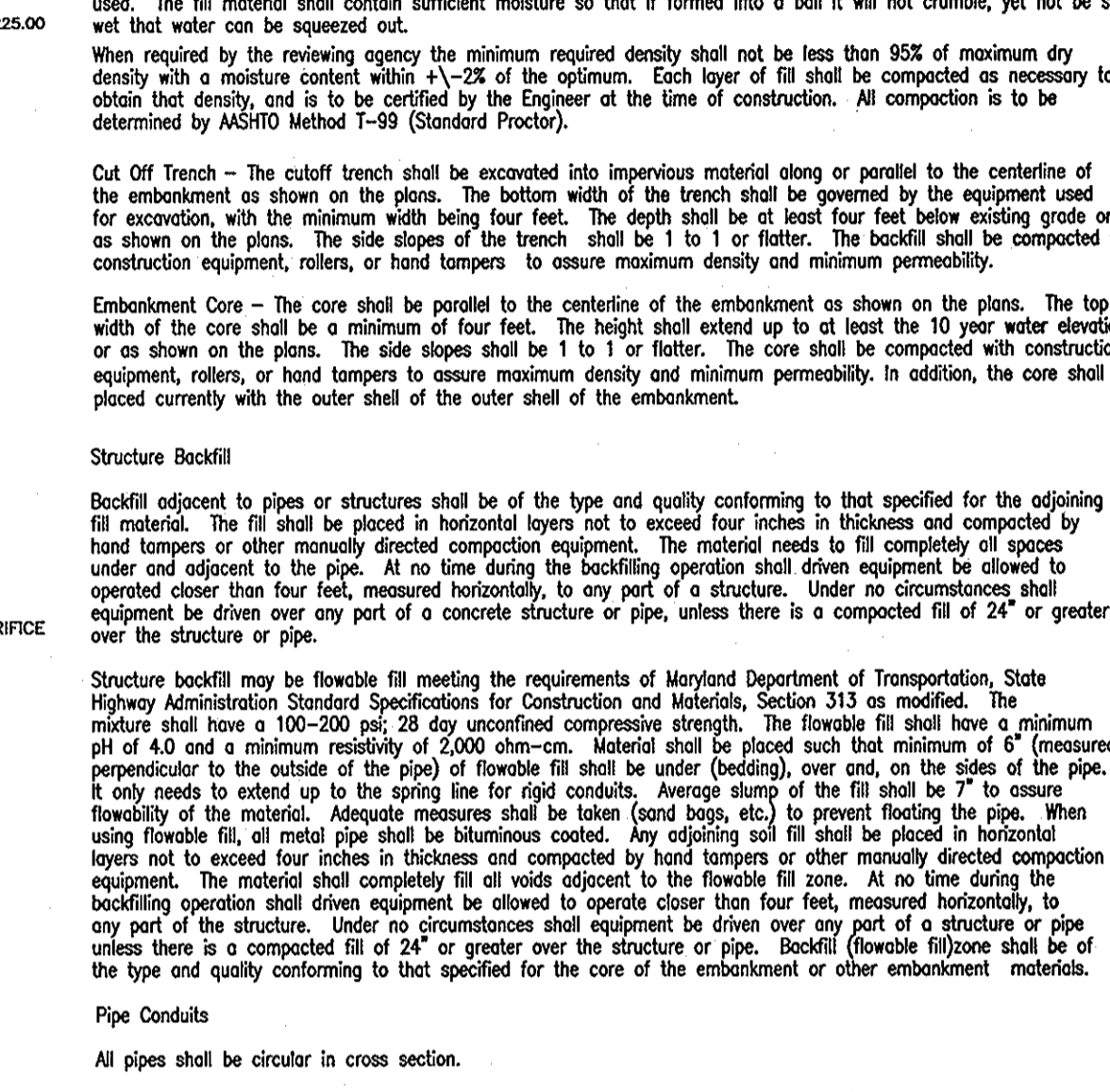
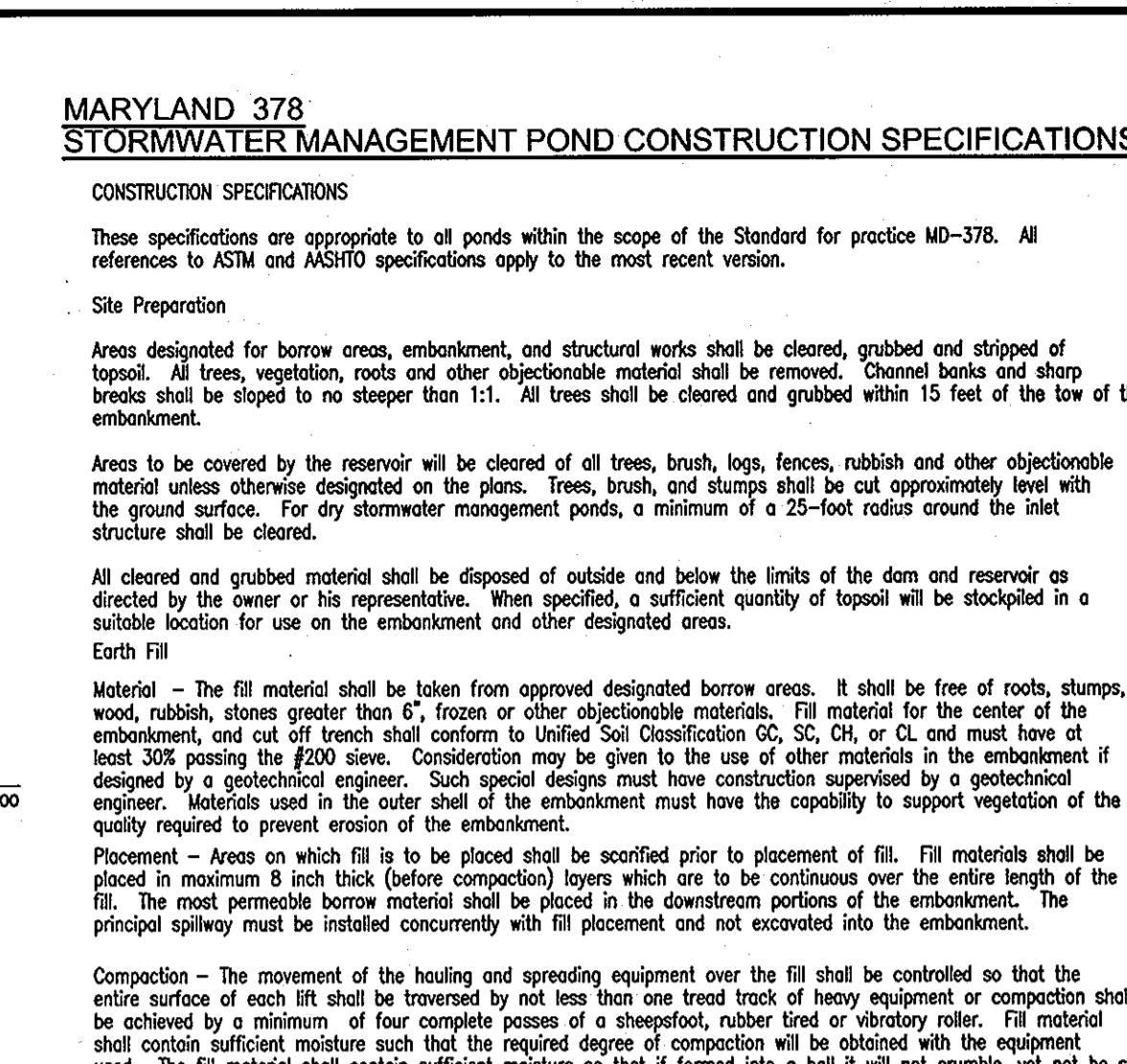
Michael Damman 2/11/05
Chief, Development Engineering Division

Frank A. Woych 2/14/05
Director

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Robert H. Vogel 1/12/05
Signature of Engineer
Robert H. Vogel



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County Health Officer
Howard County Health Department

APPROVED: DEPARTMENT OF PLANNING AND ZONING

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Robert H. Vogel 1/12/05
Signature of Engineer
Robert H. Vogel

MARYLAND 378 STORMWATER MANAGEMENT POND CONSTRUCTION SPECIFICATIONS

CONSTRUCTION SPECIFICATIONS

These specifications are appropriate to all ponds within the scope of the Standard for practice MD-378. All references to ASTM and ASHSTO specifications apply to the most recent version.

Site Preparation

Areas designated for borrow areas, embankment, and structural works shall be cleared, grubbed and stripped of topsoil. All trees, vegetation, roots and other objectionable material shall be removed. Channel banks and sharp berms shall be sloped to no steeper than 1:1. All trees shall be cleared and grubbed within 15 feet of the low of the embankment.

Areas to be covered by the reservoir will be cleared of all trees, brush, logs, fence, rubbish and other objectionable material unless otherwise designated on the plans. Trees, brush, and stumps shall be cut approximately level with the ground surface. For dry stormwater management ponds, a minimum of a 25-foot radius around the inlet structure shall be cleared.

All cleared and grubbed material shall be disposed of outside and below the limits of the dam and reservoir as specified by the owner or his representative. When available, a sufficient quantity of topsoil will be stockpiled in a suitable location for use on the embankment and other designated areas.

Material - The fill material shall be taken from approved designated borrow areas. It shall be free of roots, stumps, wood, rubbish, stones greater than 6\"/>

POND SUMMARY

	1 YEAR	10 YEAR	100 YEAR
FLOW INTO POND	1.19 CFS	3.27 CFS	5.15 CFS
FLOW OUT OF POND	1.26 CFS	3.39 CFS	5.36 CFS
W.S. ELEVATION	228.00	229.03	229.44
STORAGE VOLUME	0.20 AC-FT	0.27 AC-FT	0.60 AC-FT

OPERATION, MAINTENANCE AND INSPECTION

INSPECTION OF THE POND(S) SHOWN HEREON SHALL BE PERFORMED AT LEAST ANNUALLY, IN ACCORDANCE WITH THE CHECKLIST AND REQUIREMENTS CONTAINED WITHIN USDA, SCS "STANDARDS AND SPECIFICATIONS FOR PONDS" (MD-378). THE POND OWNER(S) AND ANY HEIRS, SUCCESSORS, OR ASSIGNS SHALL BE RESPONSIBLE FOR THE SAFETY OF THE POND AND THE CONTINUED OPERATION, SURVEILLANCE, INSPECTION, AND MAINTENANCE THEREOF. THE POND OWNER(S) SHALL PROMPTLY NOTIFY THE SOIL CONSERVATION DISTRICT OF ANY UNUSUAL OBSERVATIONS THAT MAY BE INDICATIONS OF DISTRESS SUCH AS EXCESSIVE SEEPAGE, TURBID SEEPAGE, SLIDING OR SLUMPING.

OPERATION AND MAINTENANCE SCHEDULE FOR STORMWATER MANAGEMENT EXTENDED DETENTION FACILITY

STORMWATER MANAGEMENT FACILITY

ROUTINE MAINTENANCE BY HOA

1. FACILITY WILL BE INSPECTED ANNUALLY AND AFTER MAJOR STORMS. INSPECTIONS SHOULD BE PERFORMED DURING WET WEATHER TO DETERMINE IS FUNCTIONING PROPERLY.
2. TOP AND SIDE SLOPES OF THE EMBANKMENT SHALL BE MOWED A MINIMUM OF TWO (2) TIMES A YEAR, ONCE IN JUNE AND ONCE IN SEPTEMBER. OTHER SIDE SLOPES AND MAINTENANCE ACCESS SHOULD BE MOWED AS NEEDED.
3. DEBRIS AND LITTER NEXT TO THE OUTLET STRUCTURE SHALL BE REMOVED DURING REGULAR MOWING OPERATIONS AND SHALL BE DISPOSED IN A MANNER AND TO THE EXTENT THAT MAINTAINS STABILITY OF THE EMBANKMENT AND BOTTOM REQUIRED EXCELLENT PERFORMANCE OF ALL CONSTRUCTION OPERATIONS. DURING THE PLOTTING AND EXCAVATION OF MATERIAL IN REQUIRED LOCATIONS, THE WATER LEVEL AT THE LOCATIONS BEING RETRIEVED SHALL BE MAINTAINED BELOW THE BOTTOM OF THE EXCAVATION AT SUCH LOCATIONS WHICH MAY REQUIRE DRAINING THE WATER PUMPS FROM WHICH THE WATER SHALL BE PUMPED.

Stabilization

All borrow areas shall be graded to provide proper drainage and left a slightly concave. All exposed surfaces of the embankment, spillway, spoil and borrow areas, and berms shall be stabilized by seeding, liming, fertilizing and mulching in accordance with the Natural Resources Conservation Service Standards and Specifications for Onsite Area Planting (MD-342) or as shown on the accompanying drawings.

Erosion and Sediment Control

Construction operations will be carried out in such a manner that erosion will be controlled and water and air pollution minimized. State and local laws concerning pollution abatement will be followed. Construction plans

STORMWATER MANAGEMENT DETAILS

MARY LANE

AGE RESTRICTED COMMUNITY

PHASE I & PHASE II

UNITS 1-22, COMMUNITY CENTER AND OPEN SPACE LOT 1

TAX MAP 47 BLOCK 6 PARCEL '665'

6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

DEED REF.: L. 1068/F. 581, BA CASE NO. 03-17C

ROBERT H. VOGEL ENGINEERING, INC.

ENGINEERS • SURVEYORS • PLANNERS

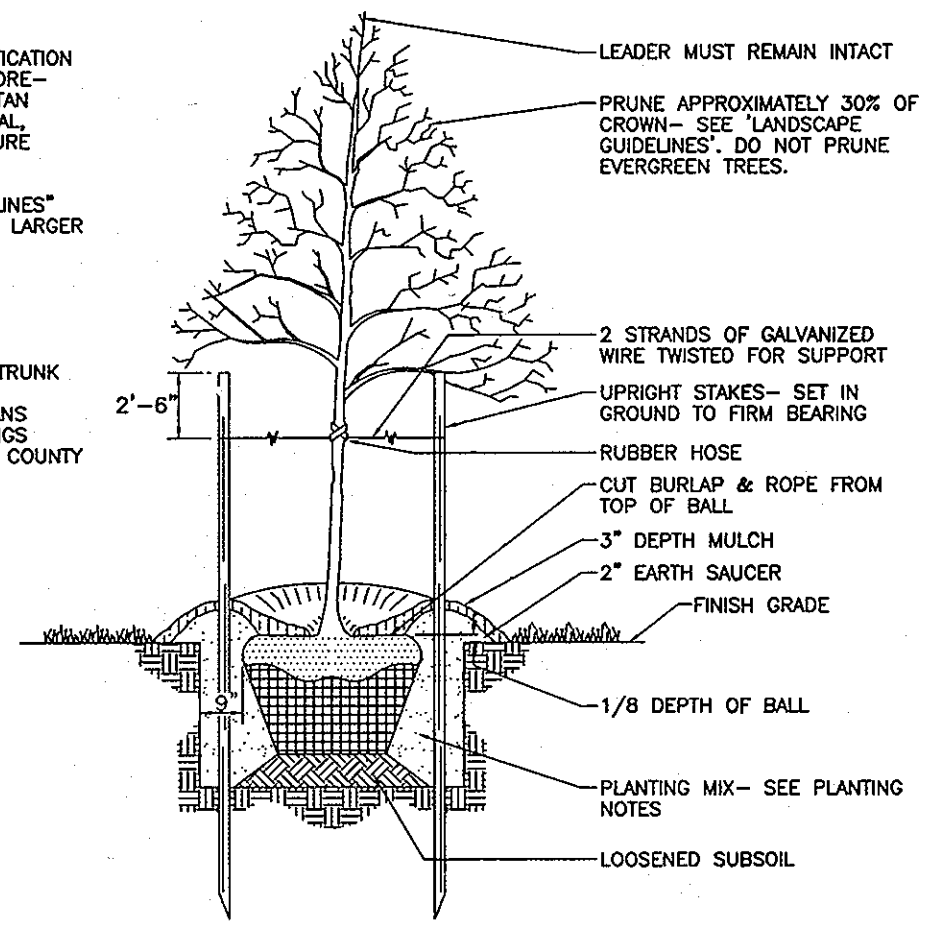
8407 MAIN STREET
ELLCOTT CITY, MARYLAND 21043
TEL: 410.461.7666 FAX: 410.461.8961

DESIGN BY: RHW/JCO
DRAWN BY: CMH
CHECKED BY: RHW
DATE: JANUARY, 2005
SCALE: AS SHOWN
W.O. NO.: 03-21-00

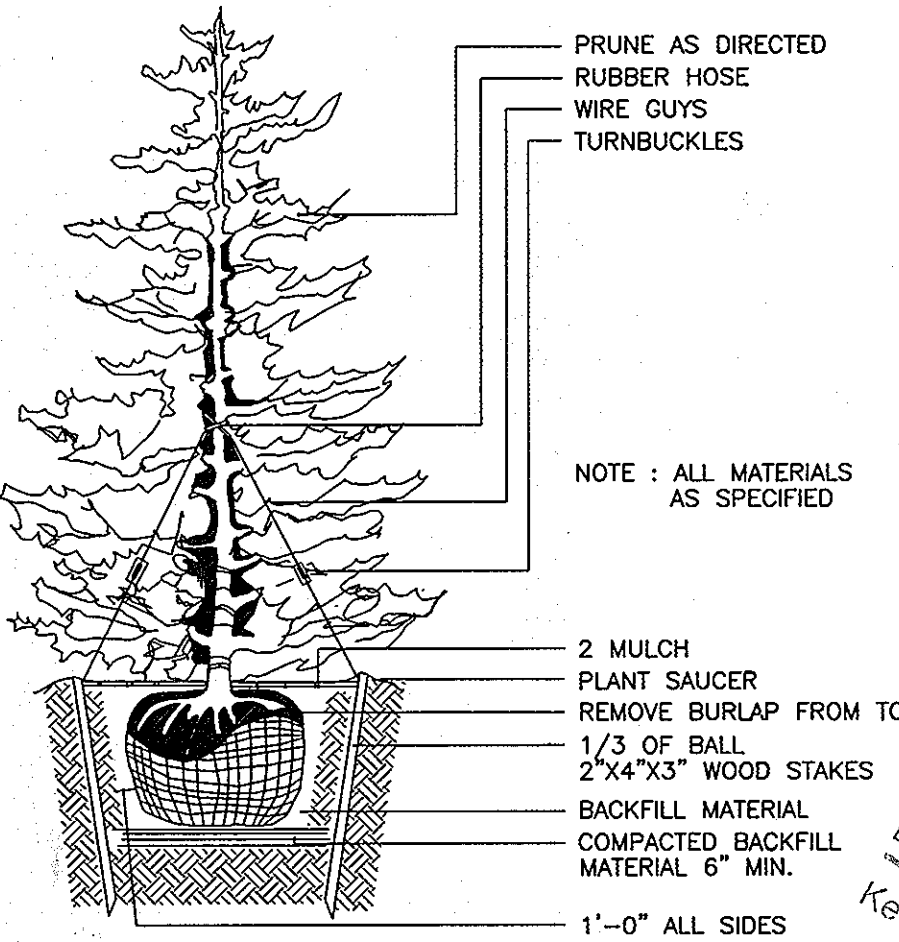
7 SHEET OF 8

SDP-04-85

- NOTES**
- SEE "LANDSCAPE SPECIFICATION GUIDELINES FOR BALTIMORE-WASHINGTON METROPOLITAN AREAS" FOR ALL MATERIAL, PRODUCT, AND PROCEDURE SPECIFICATIONS.
 - SEE "LANDSCAPE GUIDELINES" FOR SUPPORTING TREES LARGER THAN 2-1/2" CALIPER.
 - PLACE UPRIGHT STAKES PARALLEL TO WALKS & BUILDINGS.
 - KEEP MULCH 1" FROM TRUNK.
 - SEE ARCHITECTURAL PLANS FOR ADDITIONAL PLANTINGS WHICH EXCEED HOWARD COUNTY MINIMUM REQUIREMENTS.
 - TREES ARE NOT TO BE PLANTED OVER PRIVATE SEWER EASEMENT.



TREE PLANTING AND STAKING
DECIDUOUS TREES UP TO 2-1/2" CALIPER
NOT TO SCALE



TYPICAL EVERGREEN TREE PLANTING DETAIL
NOT TO SCALE

LEGEND

- EXISTING CONTOUR
- EXISTING TREES TO REMAIN
- LIGHT POLES

NOTE:
A MINIMUM OF 20% IS REQUIRED BETWEEN ANY STREET LIGHT AND ANY TREE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS

Robert J. White 2/25/05
County Health Officer
Howard County Health Department

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Candy Hamilton 3/1/05
Chief, Division of Land Development

Mark A. Coyle 2/11/05
Director

OWNER/DEVELOPER
SK KING GEORGE LLC
C/O WILLIAM KNOTT
15 WEST AYLESBURY ROAD
TIMONIUM, MD 21093
(410) 308-2710

STREET TREE CALCULATIONS

STREET NAME	LINEAR FEET	NO. REQUIRED	NO. PROVIDED
JANE GARTH	990/40	25	25
MARY LANE	336/40	9	9

STREET TREE SCHEDULE

KEY	QUAN.	BOTANICAL NAME	SIZE	REM.
○	25	FRAXINUS AMERICANA 'WHITE ASH'	2 1/2"-3" CAL.	B & B
+	9	QUERCUS RUBRA 'NORTHERN RED OAK'	2 1/2"-3" CAL.	B & B

SOILS LEGEND

SYMBOL	NAME / DESCRIPTION	GROUP
AgC2	AURA GRAVELLY LOAM, 5 TO 10 PERCENT SLOPES, MODERATELY ERODED	B
AgE3	AURA GRAVELLY LOAM, 10 TO 30 PERCENT SLOPES, SEVERELY ERODED	B
BcC2	BELTSVILLE SILT LOAM, 5 TO 10 PERCENT SLOPES, MODERATELY ERODED	C
BcC3	BELTSVILLE SILT LOAM, 5 TO 10 PERCENT SLOPES, SEVERELY ERODED	C
CiC3	CHILLUM GRAVELLY LOAM, 5 TO 10 PERCENT SLOPES, SEVERELY ERODED	B
CiD2	CHILLUM GRAVELLY LOAM, 10 TO 15 PERCENT SLOPES, MODERATELY ERODED	B
Fa	FALLSINGTON LOAM	B/D
Ha	HATBORO SILT LOAM	D
KcC2	KELLY SILT LOAM, 8 TO 15 PERCENT SLOPES, MODERATELY ERODED	D
Sd	SANDY AND CLAYEY LAND, MODERATELY SLOPING	C
SaE	SANDY AND CLAYEY LAND, MODERATELY STEEP	C
SiC2	SASSAFRAS GRAVELLY SANDY LOAM, 5 TO 10 PERCENT SLOPES, MODERATELY ERODED	B

PAGE 34 OF THE HOWARD COUNTY SOIL SURVEY

SCHEDULE D: STORMWATER MANAGEMENT AREA LANDSCAPING-TYPE 'B' BUFFER

LINEAR FEET OF PERIMETER	385 LF
CREDIT FOR EXISTING VEGETATION (NO, YES AND LINEAR FEET)	NO
CREDIT FOR OTHER LANDSCAPING (NO, YES AND %)	NO
NUMBER OF TREES REQUIRED SHADE TREES 1:50 EVERGREEN TREES 1:40	8 SHADE TREES 10 EVERGREEN TREES
NUMBER OF TREES PROVIDED SHADE TREES EVERGREEN TREES - SHRUBS	8 SHADE TREES 10 EVERGREEN TREES

*EXISTING WOODS TO REMAIN

SCHEDULE C: RESIDENTIAL DEVELOPMENT INTERNAL LANDSCAPING

NUMBER OF DWELLING UNITS	22
NUMBER OF TREES REQUIRED (1-DU SFA; 1:3 DU APTS)	22
NUMBER OF TREES PROVIDED SHADE TREES OTHER TREES (2:1 SUBSTITUTION) SHRUBS (10:1 SUBSTITUTION)	12 20*

*20 EVERGREENS ARE SUBSTITUTED FOR 10 REQUIRED SHADE TREES. DUE TO STREET TREE PLANTINGS, INTERNAL LANDSCAPING HAS BEEN RELOCATED TO THE REAR OF THE UNITS ALONG THE PROJECT PERIMETERS TO INSURE HEALTHY SURVIVAL RATES OF PLANT MATERIALS.

LANDSCAPE SCHEDULE

KEY	QUAN.	BOTANICAL NAME	SIZE	REM.
AR	32	ACER RUBRUM 'OCTOBER GLORY' OCTOBER GLORY RED MAPLE	2 1/2"-3" Cal.	B & B
FP	24	FRAXINUS PENNSYLVANICA GREEN ASH	6' - 8' HL.	B & B
PA	47	PICEA ABIES NORWAY SPRUCE	6' - 8' HL.	B & B
PS	58	PINUS STROBUS EASTERN WHITE PINE	6' - 8' HL.	B & B

1. ALL PLANT MATERIALS SHALL BE FULL AND HEAVY; BE WELL FORMED AND SYMMETRICAL, CONFORM TO THE MOST CURRENT AN SPECIFICATIONS AND BE INSTALLED IN ACCORDANCE WITH LCAW PLANTING SPECIFICATIONS.
2. CONTRACTOR SHALL VERIFY LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO DIGGING.
3. FINAL LOCATION OF PLANT MATERIAL MAY VARY TO MEET FINAL FIELD CONDITIONS. TREES SHALL NOT BE PLANTED IN THE BOTTOM OF DRAINAGE SWALES.
4. CONTRACTOR SHALL VERIFY PLANT QUANTITIES PRIOR TO BIDDING. IF PLAN DIFFERS FROM LANDSCAPE SCHEDULE, THE PLAN SHALL GOVERN.

FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING SHALL BE PROVIDED AS FOLLOWS: 90 SHADE TREES X \$300.00 = \$27,000.00 (56 PERIMETER, UNIT PLANTINGS AND SWM PLANTINGS); 25 PRIVATE STREET TREES AND 9 PUBLIC STREET TREES AND 105 EVERGREEN TREES X \$150.00 = \$15,750.00 (105 PERIMETER AND SWM PLANTINGS). TOTAL SURETY REQUIRED TO BE POSTED WITH THE DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$42,750.00.

SCHEDULE A: PERIMETER LANDSCAPE EDGE

CATEGORY	ADJACENT TO ROADWAYS	ADJACENT TO PERIMETER PROPERTIES
PERIMETER/FRONTAGE DESIGNATION	1	2
LANDSCAPE TYPE	C	C
LINEAR FEET OF ROADWAY FRONTAGE/PERIMETER	199'	96'
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET DESCRIBE BELOW IF NEEDED)	NO	NO
CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET DESCRIBE BELOW IF NEEDED)	NO	NO
NUMBER OF PLANTS REQUIRED (IF REMAINING)	1:40 5	1:40 2
SHADE TREES	1:20 10	1:20 5
EVERGREEN TREES	1:20 24	1:20 12
SHRUBS	1:40 6	1:40 13
NUMBER OF PLANTS PROVIDED	5	2
SHADE TREES	10	5
EVERGREEN TREES	12	24
OTHER TREES (2:1 SUBSTITUTION) SHRUBS (10:1 SUBSTITUTION) DESCRIBE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED	24	13
	11	23

*EXISTING WOODS TO REMAIN

HOWARD COUNTY FOREST CONSERVATION WORKSHEET

ZONED R-20

NET TRACT AREA:
A. TOTAL TRACT AREA = 4.07 AC
B. AREA WITHIN 100 YEAR FLOODPLAIN = 0.00 AC
C. AREA TO REMAIN IN AGRICULTURAL PRODUCTION = 0.00 AC
D. NET TRACT AREA = 4.07 AC

LAND USE CATEGORY

INPUT THE NUMBER "1" UNDER THE APPROPRIATE LAND USE ZONING, AND LIMIT TO ONLY ONE ENTRY. ZONED R-ED.

	ARA	MDR	IDA	HDR	MPD	CIA
	0	0	0	1	0	0

E. AFFOREST THRESHOLD = 15% X D = 0.61 AC
F. CONSERVATION THRESHOLD = 20% X D = 0.81 AC

EXISTING FOREST COVER (EXCLUDING FLOODPLAIN) = 0.91 AC
G. AREA OF FOREST ABOVE AFFORESTATION THRESHOLD = 0.30 AC
H. AREA OF FOREST ABOVE CONSERVATION THRESHOLD = 0.10 AC

BREAK EVEN POINT:
(0.2 x I) + F = BREAK EVEN POINT (0.83 AC)
J. FOREST RETENTION WITH NO MITIGATION = 0.83 AC
K. CLEARING PERMITTED WITHOUT MITIGATION = 0.08 AC
L. TOTAL AREA OF FOREST TO BE CLEARED = 0.91 AC
M. TOTAL AREA OF FOREST TO BE RETAINED = 0.00 AC
N. REFORESTATION FOR CLEARING ABOVE CONSERVATION THRESHOLD = 0.02 AC
O. REFORESTATION FOR CLEARING BELOW CONSERVATION THRESHOLD = 1.63 AC
P. CREDIT FOR RETENTION ABOVE CONSERVATION THRESHOLD = 0.00 AC
Q. TOTAL REFORESTATION REQUIRED (N+P-Q) = 1.65 AC
R. TOTAL REFORESTATION REQUIRED (N+P-Q) = 0.00 AC
S. TOTAL AFFORESTATION REQUIRED = 1.65 AC
T. TOTAL REFORESTATION AND AFFORESTATION REQUIRED = 1.65 AC

OBLIGATION TO BE FULFILLED BY FEE-IN-LIEU FOR THE REQUIRED 1.65 AC (71,874 SF) OF REFORESTATION IN THE AMOUNT OF \$35,937.00 (71,874 x 0.50)

NOTES

- THE PROPERTY OUTLINE IS BASED ON A BOUNDARY SURVEY PREPARED BY FREDERICK WARD ASSOCIATES IN MAY 2003.
- THE EXISTING FEATURES AND CONTOURS SHOWN HEREON ARE BASED ON A TOPOGRAPHICAL SURVEY PREPARED BY FREDERICK WARD ASSOCIATES, DATED MAY 2003.

7	ADD REPLACEMENT UNITS 1-12, Rest Comm. Center	
6	ADD EXIST. FARM RM. TO UNITS 2, 3, 6, 7, + 9	6-14-07
4	REPLACED YORKSHIRE TO NEW BEDFORD ELEY B (NO BASEMENT)	
	REMOVED SOMERSET WIND BASEMENT AND 2' GRASS BETWEEN DRIVE 9 28 06	
2	ADD YORKSHIRE AND SOMERSET MODELS TO UNITS 1-22	5-4-06
1	ADD PHASE II UNITS 21 AND 22	12-2-05
NO.	REVISION	DATE

LANDSCAPE AND FOREST CONSERVATION PLAN
MARY LANE
AGE RESTRICTED COMMUNITY
PHASE I & PHASE II
UNITS 1-22, COMMUNITY CENTER AND OPEN SPACE LOT 1
TAX MAP 47 BLOCK 6 PARCEL '665'
6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
DEED REF.: L. 1068/F. 581, BA CASE NO. 03-17C

ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS • SURVEYORS PLANNERS
8407 MAIN STREET
ELLCOTT CITY, MARYLAND 21043
TEL: 410.461.7666 FAX: 410.461.8961

DESIGN BY: RHV/JT
DRAWN BY: CMH
CHECKED BY: RHV
DATE: JANUARY, 2005
SCALE: 1"=30'
W.O. NO.: 03-21.00

8 SHEET OF 8



LANDSCAPE CERTIFICATE

I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 18.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION, A LETTER OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE(1) YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

Developer's Name: *William H. Knott*
Date: *1/10/05*