

SHEET INDEX

COVER SHEET	1
ROAD PLAN AND PROFILE & TYPICAL SECTIONS	2
FILLET PROFILES	3
GRADING AND SEDIMENT CONTROL PLAN	4
EROSION & SEDIMENT CONTROL NOTES AND DETAILS	5
STORM DRAIN PROFILES	6
DRAINAGE AREA MAP	7
STORMWATER MANAGEMENT PLAN, PROFILES AND DETAILS	8
LANDSCAPE PLAN	9
FOREST CONSERVATION PLAN	10

ROAD CONSTRUCTION PLANS RED FOX ESTATE LOTS 3 THRU 12

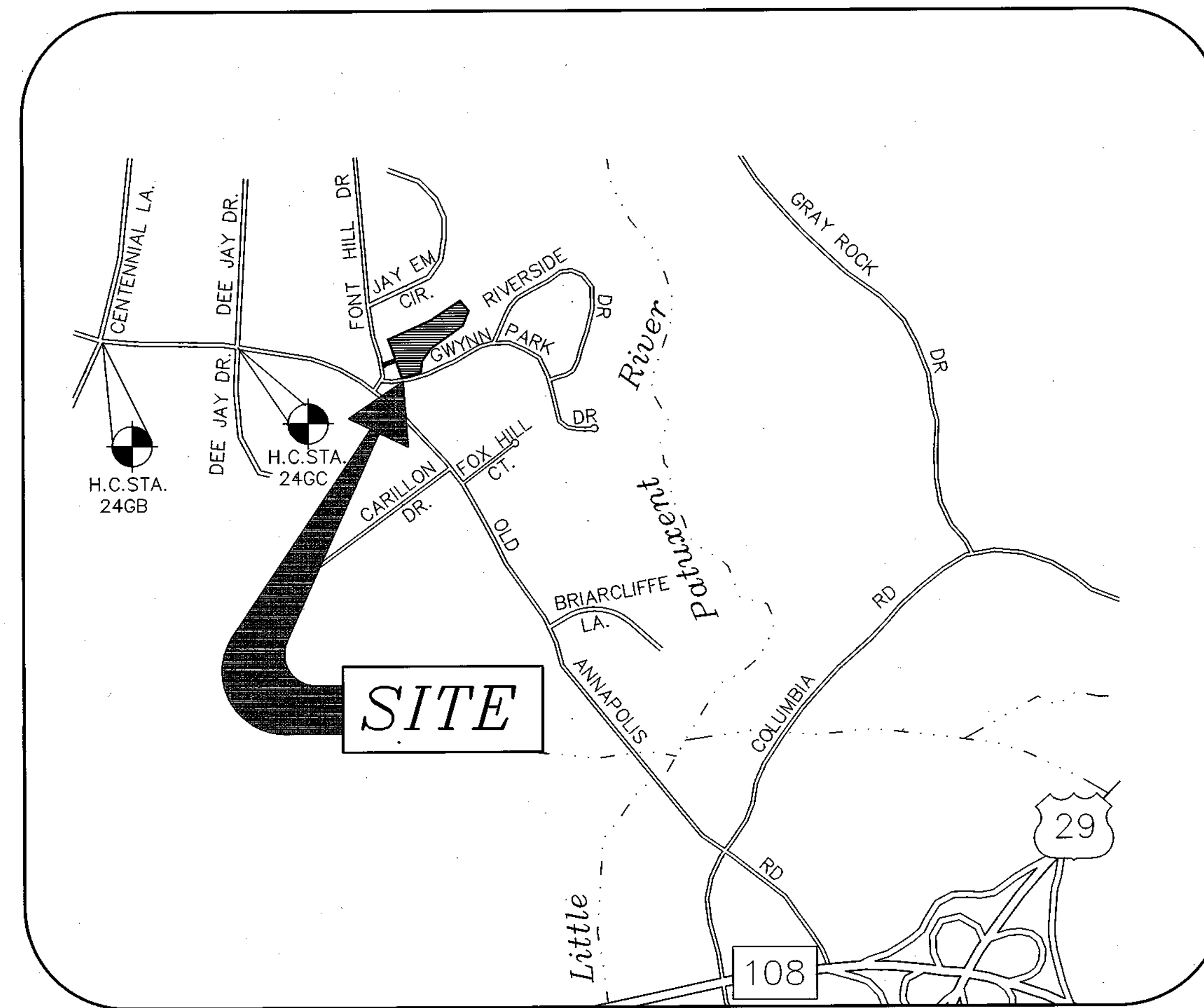
SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

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 THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE (5) DAYS PRIOR TO ANY EXCAVATION WORK:
 - MISS UTILITY 1-800-257-7777
 - AREA TELEPHONE COMPANY (410) 725-9976
 - HOWARD COUNTY BUREAU OF UTILITIES (410) 313-4900
 - AT&T CABLE LOCATION DIVISION (410) 593-3533
 - BALTIMORE GAS & ELECTRIC (410) 685-0123
 - STATE HIGHWAY ADMINISTRATION (410) 531-5533
 - HOWARD COUNTY DEPT. OF PUBLIC WORKS/ CONSTRUCTION INSPECTION DIVISION (410) 313-1880
- TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
- PROJECT BACKGROUND:
 - LOCATION: TAX MAP 24 PARCEL 539 LOT 2
 - ZONING: R-20
 - ELECTION DISTRICT: 2ND
 - DPZ No. S-97-11, WF-97-93 F-97-97
 - WF-99-124 DENIED JULY 27, 1999, P-98-23.
 - DEED REFERENCE: L 4723 F. 267
- AREA TABULATION:
 - (ALL DATA INCLUDE LOT 1 OF RED FOX ESTATE F-97-97).
 - TOTAL TRACT AREA: 6.836 AC ±
 - MINIMUM LOT AREA: 14,000 S.F.
 - AREA OF PROPOSED BUILDABLE LOTS: 4.604 AC ±
 - AREA OF PROPOSED NON-BUILDABLE BULK PARCEL A: 0.042 AC ±
 - REQUIRED OPEN SPACE (30% OF GROSS AREA): 2.08 AC ±
 - PROVIDED OPEN SPACE: 2.29 AC ±
 - NON-CREDITED OPEN SPACE (PAVED): 0.02 AC ±
 - CREDITED OPEN SPACE: 2.270 AC ±
 - NUMBER OF PROPOSED BUILDABLE LOTS: 3
 - NUMBER OF PROPOSED OPEN SPACE LOTS: 1
 - TOTAL NUMBER OF NON-BUILDABLE PARCELS: 1
 - TOTAL NUMBER OF PROPOSED LOTS OR PARCELS: 11
- TOPOGRAPHIC INFORMATION ARE BASED ON FIELD RUN TOPOGRAPHIC SURVEY PERFORMED ON OR ABOUT OCTOBER 1996 BY MILDENBERG, BOENDER AND ASSOCIATES, INC.
- BOUNDARY INFORMATION IS BASED ON A FIELD RUN MONUMENTED BOUNDARY SURVEY PERFORMED ON OR ABOUT OCTOBER 1996 BY MILDENBERG, BOENDER AND ASSOCIATES, INC.
- COORDINATE BASE ON NAD'83 MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS No. 24GB AND 24GC.

STA. No.	24GB	STA. No.	24GC
N	579,069.46821	N	578,868.85416
E	1,350,441.868740	E	1,352,120.6963705
EL.	493.002	EL.	493.59
			439.500
- PROPERTY IS LOCATED WITHIN THE METROPOLITAN DISTRICT. WATER AND SEWER ARE PUBLIC. CONTRACT NO. 24-3831-D, PROPERTY IS LOCATED WITHIN LITTLE PATUXENT DRAINAGE AREA.
- STORMWATER MANAGEMENT WILL BE PRIVATELY OWNED AND MAINTAINED. IT WILL BE PROVIDED BY A DETENTION FACILITY AND STORMCEPTOR.
- EXISTING UTILITIES WERE LOCATED BASED ON HOWARD COUNTY'S AS-BUILT DRAWINGS.
- THERE IS NO FLOODPLAIN ON THIS SITE.
- WETLANDS STUDY AND FOREST STAND DELINEATION BY WILDMAN ENVIRONMENTAL SERVICES, INC. DATED SEPTEMBER 30, 1996.
- NO CEMETERIES OR HISTORIC STRUCTURES EXIST ON SITE.
- COMPACTION IN FILL AREAS TO BE 95% AS DETERMINED PER AASHTO T-180.
- STREET LIGHT PLACEMENT AND THE TYPE OF FIXTURE AND POLE SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME III (1993) AND AS MODIFIED BY "GUIDELINES FOR STREET LIGHTS IN RESIDENTIAL DEVELOPMENTS (JUNE 1993)." A MINIMUM SPACING OF 20' SHALL BE MAINTAINED BETWEEN ANY STREET LIGHT AND ANY TREE. PROVIDE 100-WATT HPS VAPOR "TRADITIONAIRE" POST TOP FIXTURE MOUNTED ON A 14' BLACK FIBERGLASS POLE ON

STREET NAME	STATION	OFFSET	NOTES
RED FOX COURT	0+23	23' RT	
RED FOX COURT	2+55	44' RT	STREET LIGHT REQUIRES PRIVATE AREA LIGHTING AGREEMENT WITH BGE AND IS THE RESPONSIBILITY OF HOA



VICINITY MAP
SCALE: 1"=500'

OWNER/DEVELOPER
RAFAT, INC.
C/O MILDENBERG, BOENDER AND ASSOC., INC.
5072 DORSEY HALL DR. SUITE 202
ELLCOTT CITY, MD 21042
(410) 997-0296

AS-BUILT CERTIFICATION

I HEREBY CERTIFY THAT THE FACILITY SHOWN ON THIS PLAN WAS CONSTRUCTED AS SHOWN ON THE "AS-BUILT" PLANS AND MEETS THE APPROVED PLANS AND SPECIFICATIONS.

M M M P.E. NO. 25405
DATE: 11/27/02

CERTIFY MEANS TO STATE OR DECLARE A PROFESSIONAL OPINION BASED UPON ON-SITE INSPECTIONS AND MATERIAL TESTS WHICH ARE CONDUCTED DURING CONSTRUCTION. THE ON-SITE INSPECTIONS AND MATERIAL TESTS ARE THOSE INSPECTIONS AND TESTS DEEMED SUFFICIENT AND APPROPRIATE COMMONLY ACCEPTED ENGINEERING STANDARDS. CERTIFY DOES NOT MEAN OR IMPLY A GUARANTEE BY THE ENGINEER NOR DOES THE ENGINEER'S CERTIFICATION RELIEVE ANY OTHER PARTY FROM MEETING REQUIREMENTS IMPOSED BY CONTRACT, EMPLOYMENT, OR OTHER MEANS, INCLUDING MEETING COMMONLY ACCEPTED INDUSTRY PRACTICES.

BY THE DEVELOPER:
I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

R. TAAB HIKMAT 5/2/00
DATE
PRINTED NAME OF DEVELOPER
RAFAT, INC.

BY THE ENGINEER:
I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

R. TAAB HIKMAT 5/2/00
DATE
PRINTED NAME OF ENGINEER

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

Deep Serrano 5/10/00
DATE
USDA - NATURAL RESOURCES CONSERVATION SERVICE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

John Robertson 5/10/00
DATE
HOWARD SOIL CONSERVATION DISTRICT

APPROVED: DEPARTMENT OF PUBLIC WORKS
James M. ... 5-16-00
DATE
CHIEF BUREAU OF HIGHWAYS

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Chris Hamata 5/22/00
DATE
CHIEF, DIVISION OF LAND DEVELOPMENT

... 5/18/00
DATE
CHIEF, DEVELOPMENT ENGINEERING DIVISION

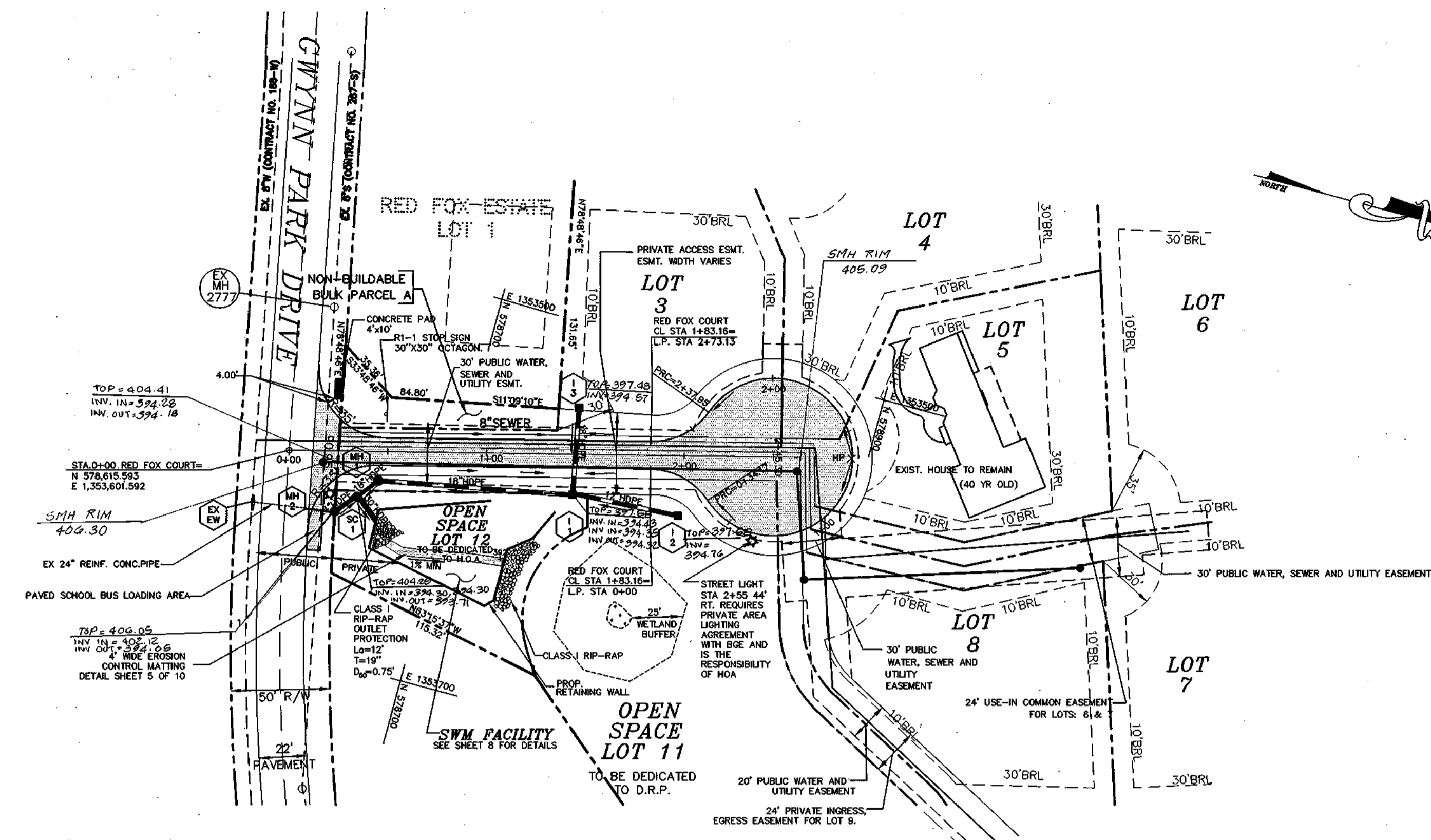


project	96044	date	MAY. 2000
illustration	SAA	engineering	
scale	SAA	approval	
AS SHOWN	RH		

no.		description		date

TAX MAP 24, PARCEL 539
RED FOX ESTATE - LOTS 3-12
& NON-BUILDABLE BULK PARCEL A, A RESUBDIVISION OF LOT 2
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
COVER SHEET

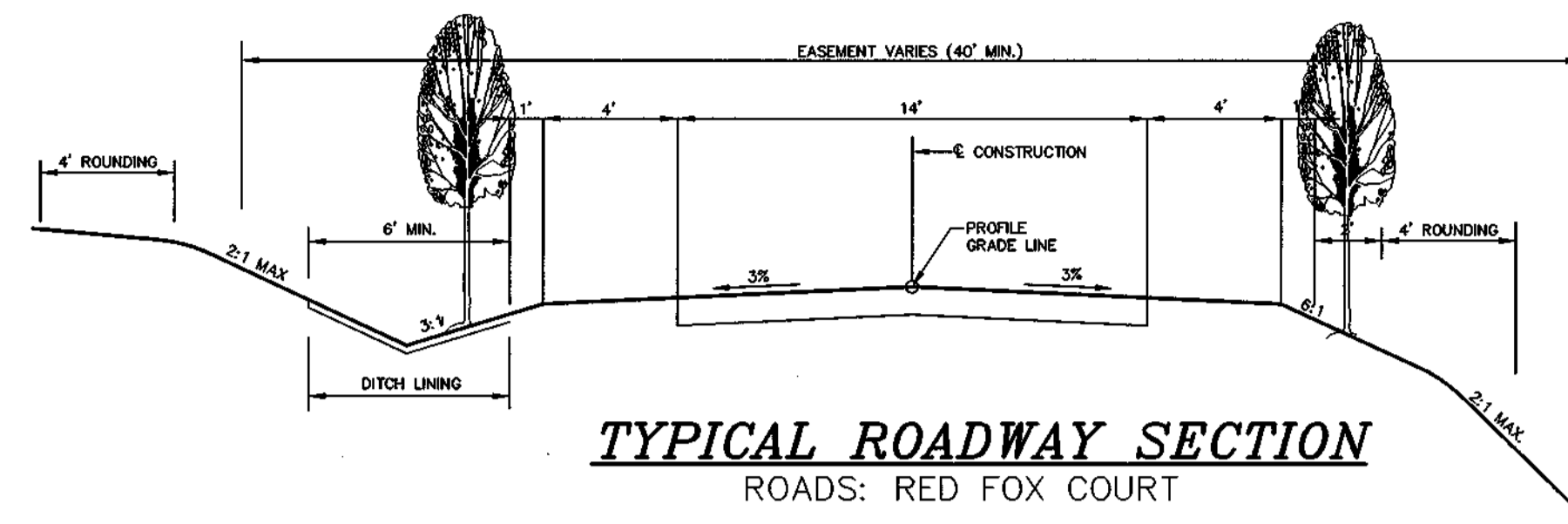
MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
(410) 997-0296 Fax (301) 621-5621 Wash. (410) 997-0288 Fax



RED FOX COURT PLAN VIEW

SCALE: 1"=50'

NOTE: FOR CLARITY PURPOSES, PROPOSED TREES ARE SHOWN ON LANDSCAPE PLAN. TREES USED ON PRIVATE ACCESS PLACE AREA CONSIDERED LANDSCAPE TREES AND ARE BOUNDED AS SUCH. (SEE SHEET 9 OF 10)

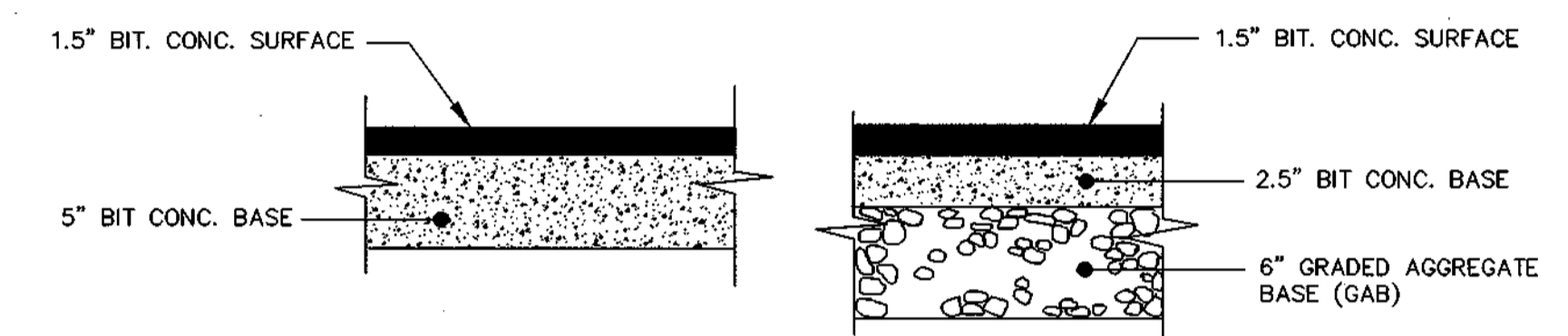


TYPICAL ROADWAY SECTION

ROADS: RED FOX COURT

N.T.S.

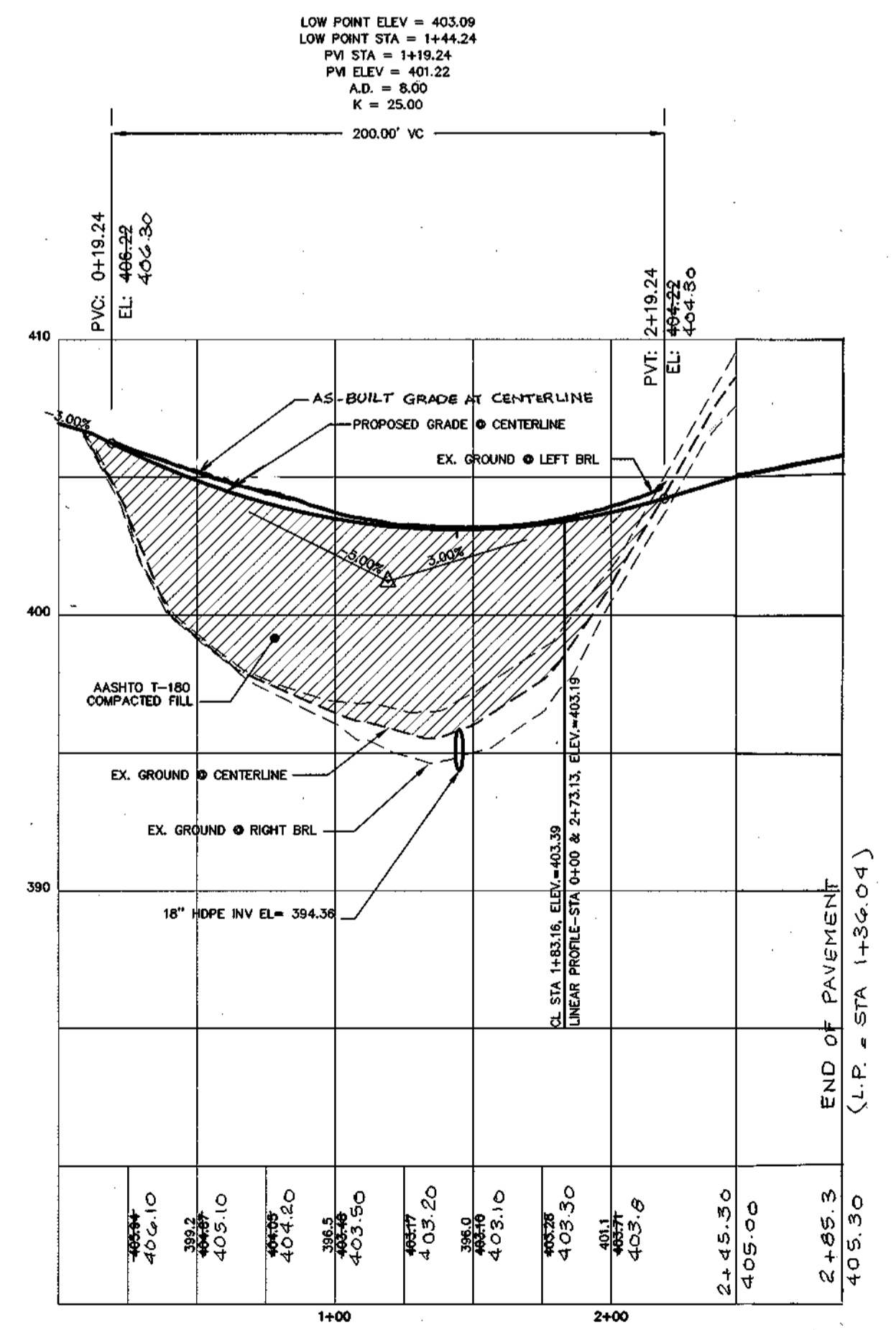
CLASSIFICATION: PRIVATE ACCESS PLACE
DESIGN SPEED LIMIT: 15 MPH



ALTERNATE "A" ALTERNATE "B"

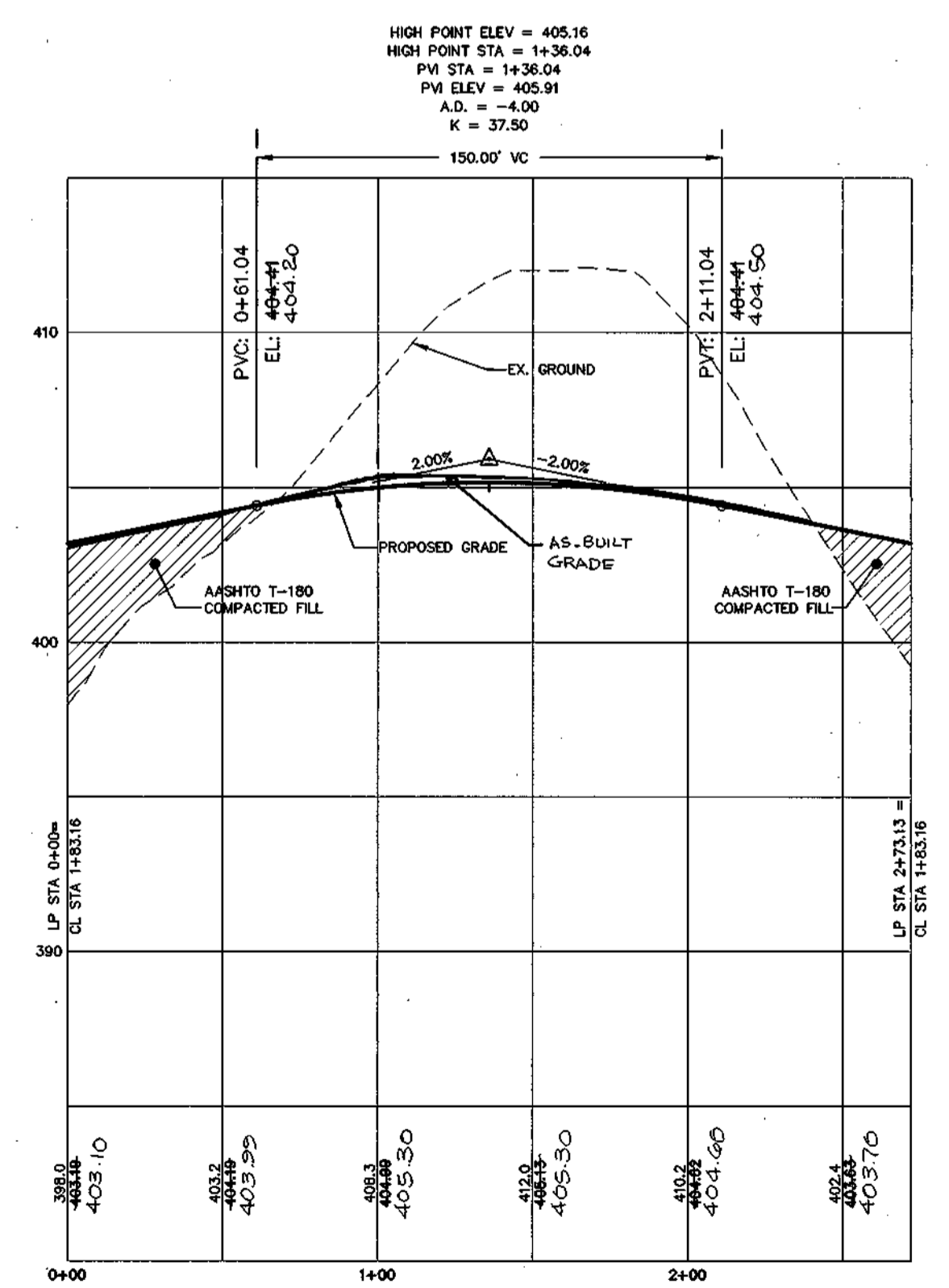
PAVING SECTION P-2

N.T.S.



RED FOX COURT PROFILE

SCALE:
HOR. 1"=50'
VER. 1"=5'



RED FOX COURT LINEAR PROFILE

SCALE:
HOR. 1"=50'
VER. 1"=5'

CLASSIFICATION: PRIVATE ACCESS PLACE



APPROVED: DEPARTMENT OF PUBLIC WORKS
Andrew M. Canally 5-16-00
CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Cindy Hamada 5/23/00
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

John P. ... 5/18/00
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

OWNER
RAFAT INC.
C/O MILDENBERG, BOENDER AND ASSOC., INC.
5072 DORSEY HALL DR. SUITE 202
ELLICOTT CITY, MD 21042
(410) 997-0296

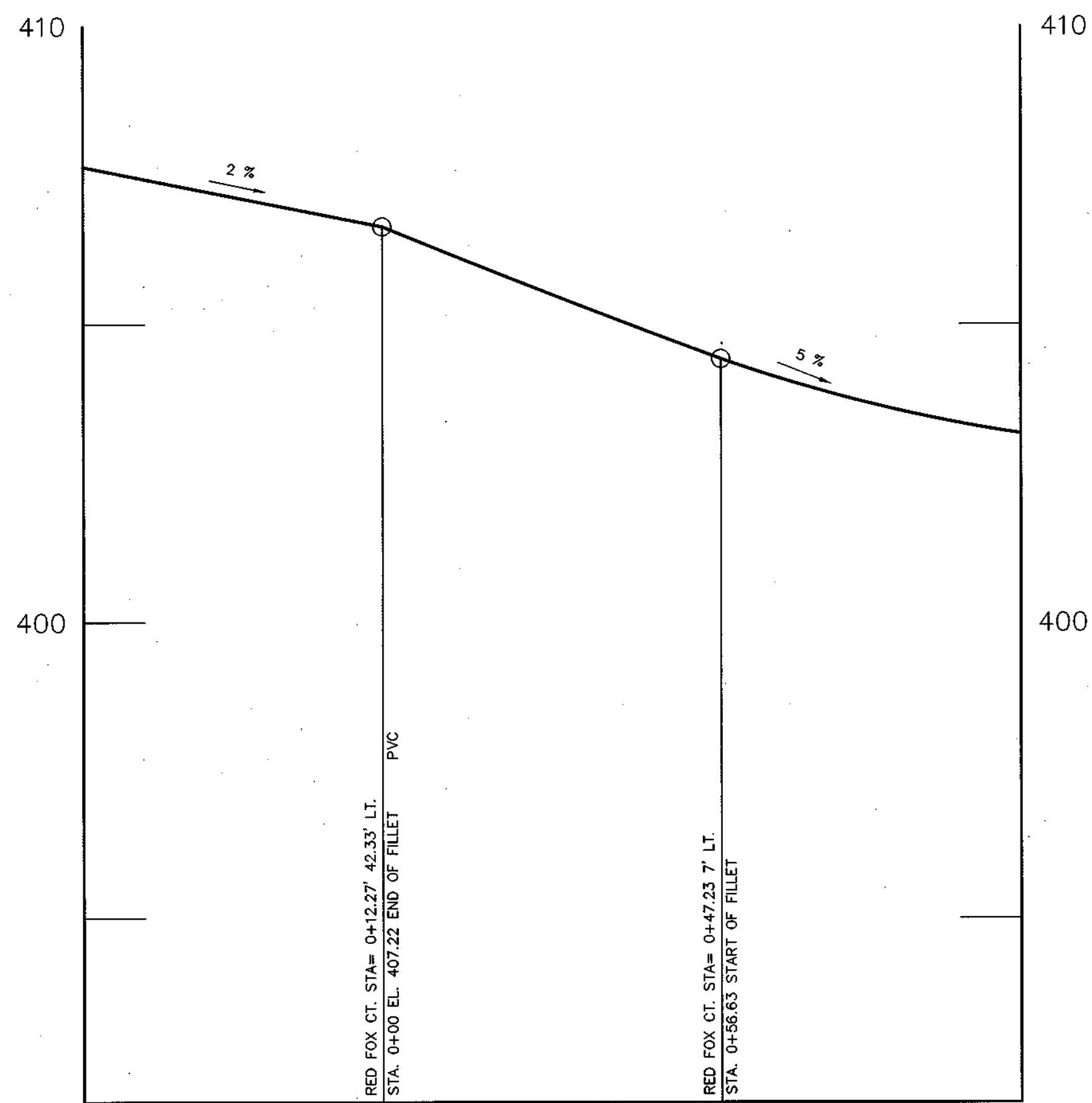
Project	98044	Date	MAY, 2000
Illustration	MJF	Engineering	MJF
Scale	AS SHOWN	Approval	RJH

Revision	1	Date	
Description			
Revisions			

TAX MAP 24, PARCEL 539
RED FOX ESTATE - LOTS 3-12
& NON-BUILDABLE BULK PARCEL A, A RESUBDIVISION OF LOT 2
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

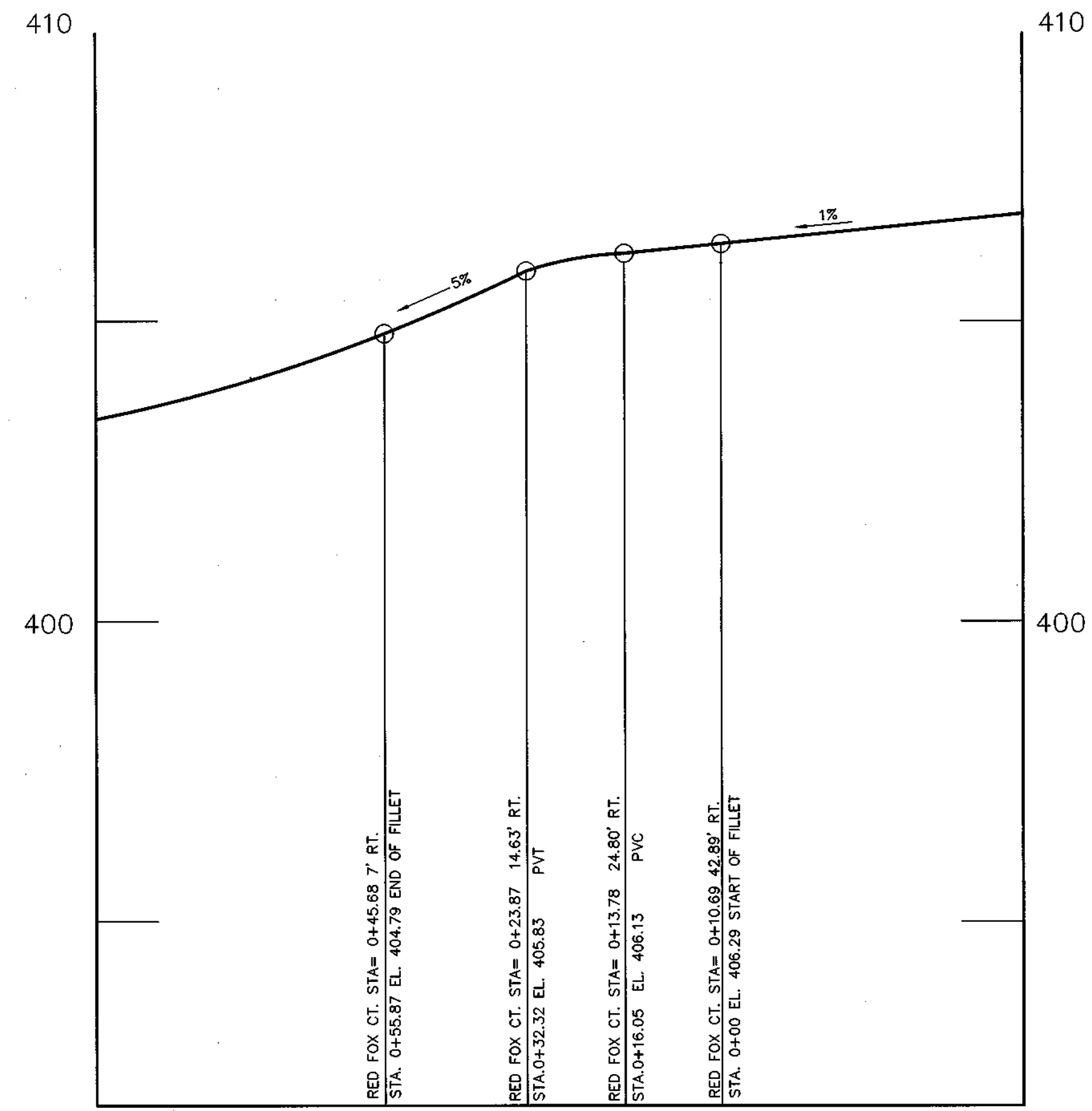
ROAD PLAN AND PROFILE & TYPICAL SECTIONS

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
(410) 997-0296 Fax (301) 621-5621 Wash. (410) 997-0298 Fax.



GWYNN PARK DR. LEFT TURN TO RED FOX CT.

SCALE:
HOR. 1"=20'
VER. 1"=2'



GWYNN PARK DR. RIGHT TURN TO RED FOX CT.

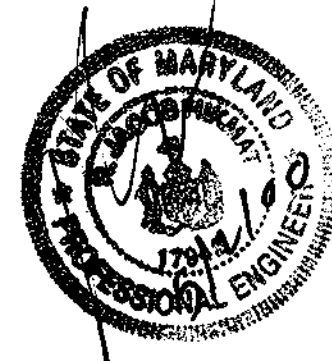
SCALE:
HOR. 1"=20'
VER. 1"=2'

89044\095\FINAL\044-6-FILLET

APPROVED: DEPARTMENT OF PUBLIC WORKS
Andrew M. Danyl 5/16/00
CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Cindy Hamilton 5/23/00
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Mike Dammann 5/18/00
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE



OWNER:
RAFAT INC.
C/O MILDENBERG, BOENDER AND ASSOC., INC.
5072 DORSEY HALL DR. SUITE 202
ELLCOTT CITY, MD 21042
(410) 997-0296

project	96044	date	MAY, 2000
illustration	SA	engineering	SA
scale	AS SHOWN	approval	RAH

no.	description	date

TAX MAP 24, PARCEL 539
RED FOX ESTATE - LOTS 3-12
& NON-BUILDABLE BULK PARCEL A, A RESUBDIVISION OF LOT 2
SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND
FILLET PROFILES

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
(410) 997-0296 Fax (301) 621-5521 Wash. (410) 997-0298 Fax

AS-BUILT CERTIFICATION
 I HEREBY CERTIFY THAT THE FACILITY SHOWN ON THIS PLAN WAS CONSTRUCTED AS SHOWN ON THE "AS-BUILT" PLANS AND MEETS THE APPROVED PLANS AND SPECIFICATIONS.
 SIGNATURE: *MAM* PE. NO: 25405 DATE: 11/27/02

CERTIFY MEANS TO STATE OR DECLARE A PROFESSIONAL OPINION BASED UPON ON-SITE INSPECTIONS AND MATERIAL TESTS WHICH ARE CONDUCTED DURING CONSTRUCTION. THE ON-SITE INSPECTIONS AND MATERIAL TESTS ARE THOSE INSPECTIONS AND TESTS DEEMED SUFFICIENT AND APPROPRIATE COMMONLY ACCEPTED ENGINEERING STANDARDS. CERTIFY DOES NOT MEAN OR IMPLY A GUARANTEE BY THE ENGINEER NOR DOES THE ENGINEER'S CERTIFICATION RELIEVE ANY OTHER PARTY FROM MEETING REQUIREMENTS IMPOSED BY CONTRACT EMPLOYMENT, OR OTHER MEANS, INCLUDING MEETING COMMONLY ACCEPTED INDUSTRY PRACTICES.

BY THE DEVELOPER:
 I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE 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.

SIGNATURE OF DEVELOPER: *R. JACOB HIKMAT* DATE: 5/2/00
 PRINTED NAME OF DEVELOPER: R. JACOB HIKMAT, PRESIDENT, RAFAT, INC.

BY THE ENGINEER:
 I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

SIGNATURE OF ENGINEER: *R. JACOB HIKMAT* DATE: 5/2/00
 PRINTED NAME OF ENGINEER: R. JACOB HIKMAT

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
 SIGNATURE: *Cheryl Simmons* DATE: 5/10/00
 TITLE: NRC - NATURAL RESOURCE CONSERVATION DISTRICT

APPROVED: DEPARTMENT OF PUBLIC WORKS
 SIGNATURE: *Andrew M. Daniels* DATE: 5-16-00
 TITLE: CHIEF BUREAU OF HIGHWAYS

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 SIGNATURE: *Cindy Harriott* DATE: 5/23/00
 TITLE: CHIEF, DIVISION OF LAND DEVELOPMENT

APPROVED: DEPARTMENT OF DEVELOPMENT ENGINEERING DIVISION
 SIGNATURE: *M. Dammann* DATE: 5/10/00
 TITLE: CHIEF DEVELOPMENT ENGINEERING DIVISION



date	MAY 2000
project	96044
illustration	MMP
scale	1"=60'
approval	MMP
revision	RJH

no.	description	date

TAX MAP 24, PARCEL 539
 RED FOX ESTATE - LOTS 3-12
 & NON-BUILDABLE BULK PARCEL A, A RESUBDIVISION OF LOT 2
 SECOND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 GRADING AND SEDIMENT CONTROL PLAN

MILDENBERG, BOENDER & ASSOC., INC.
 Engineers Planners Surveyors
 5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland, 21042
 (410) 997-0296 Fax: (410) 997-0296

HOWARD SOIL CONSERVATION DISTRICT

PERMANENT SEEDING NOTES

APPLY TO GRADES OR CLEAR AREAS LIKELY TO BE REDISTURBED... SEEDING PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING...

TEMPORARY SEEDING NOTES

APPLY TO GRADES OR CLEAR AREAS LIKELY TO BE REDISTURBED... SEEDING PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING...

STANDARD SEDIMENT CONTROL NOTES

- 1) A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS... 2) ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS...

STANDARD AND SPECIFICATIONS FOR TOPSOIL

DEFINITION

PLACEMENT OF TOPSOIL OVER A PREPARED SURFACE PRIOR TO ESTABLISHMENT OF PERMANENT VEGETATION.

PURPOSE

TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH. SOILS OF CONCERN HAVE LOW MOISTURE CONTENT, LOW NUTRIENT LEVELS, LOW pH, MATERIALS TOXIC TO PLANTS, AND/OR UNACCEPTABLE SOIL GRADATION.

BY THE DEVELOPER: I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS...

DATE: 5/14/00

SIGNATURE OF DEVELOPER: R. JACOB HILKAT, PRESIDENT

BY THE ENGINEER: I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS...

DATE: 5/14/00

SIGNATURE OF ENGINEER: R. JACOB HILKAT

APPROVED: DEPARTMENT OF PUBLIC WORKS, CHIEF BUREAU OF HIGHWAYS, DATE: 5/16/00



CONDITIONS WHERE PRACTICE APPLIES

- 1. THIS PRACTICE IS LIMITED TO AREAS HAVING 2:1 OR FLATTER SLOPES WHERE: a. THE TEXTURE OF THE EXPOSED SUBSOIL/PARENT MATERIAL IS NOT ADEQUATE TO PRODUCE VEGETATIVE...

CONSTRUCTION AND MATERIAL SPECIFICATIONS

- 1. TOPSOIL SALVAGED FROM THE EXISTING SITE MAY BE USED PROVIDED THAT IT MEETS THE STANDARDS AS SET FORTH IN THESE SPECIFICATIONS... 2. TOPSOIL SPECIFICATIONS - SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:

PIPE CONDUITS

Corrugated Metal Pipe - All of the following criteria shall apply for corrugated metal pipe... 1. Materials - (Polymer Coated Steel Pipe) - Steel pipes with polymer coatings shall have a minimum coating thickness of 0.01 inch (10 mil) on both sides of the pipe...

CONCRETE

Concrete shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.

POUND SPECIFICATIONS (MD-378 WHERE APPLICABLE)

These specifications are appropriate to all ponds within the scope of the Standard for ponds MD-378. All references to ASTM and AASHTO 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 materials shall be removed...

EARTH FILL

Material - The fill material shall be taken from approved designated borrow areas. It shall be free of rocks, stumps, or other debris... 1. The fill material shall be placed in maximum 8 inch lifts (before compaction) layers which are to be continuous over the entire length of the fill...

STRUCTURE BACKFILL

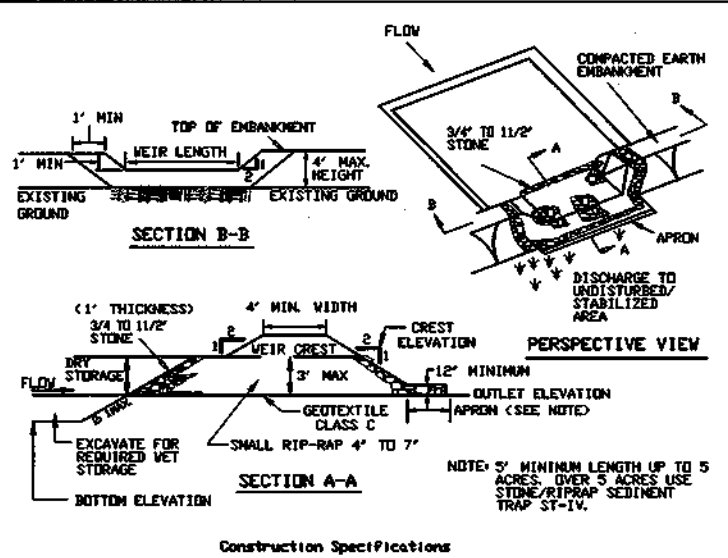
Backfill adjacent to pipes or structures shall be of the type and quality conforming to that specified for the adjoining fill material. The fill shall be placed in maximum 8 inch lifts (before compaction) layers which are to be continuous over the entire length of the fill...

AS-BUILT CERTIFICATION

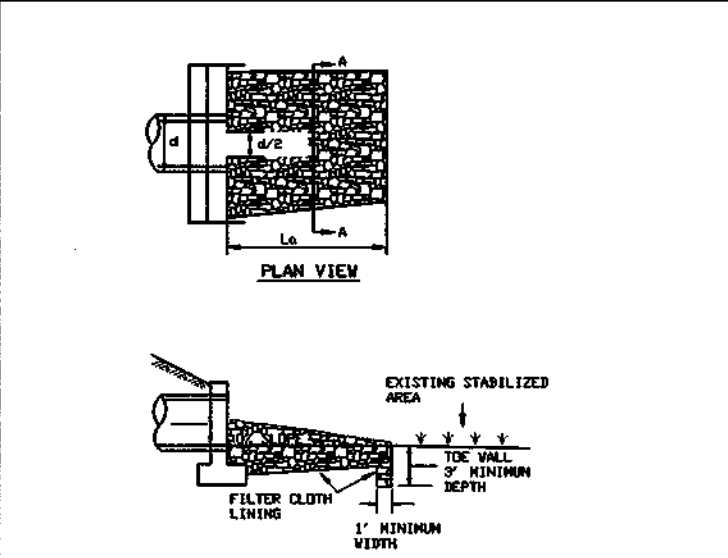
I HEREBY CERTIFY THAT THE FACILITY SHOWN ON THIS PLAN WAS CONSTRUCTED AS SHOWN ON THE "AS-BUILT" PLANS AND MEETS THE APPROVED PLANS AND SPECIFICATIONS.

OWNER: RAFAF INC. C/O MILDENBERG, BOENDER AND ASSOC., INC. 5072 DORSEY HALL DR, SUITE 202 ELLICOTT CITY, MD 21114 (410) 997-0296

DETAIL 9 - STONE OUTLET SEDIMENT TRAP - ST II



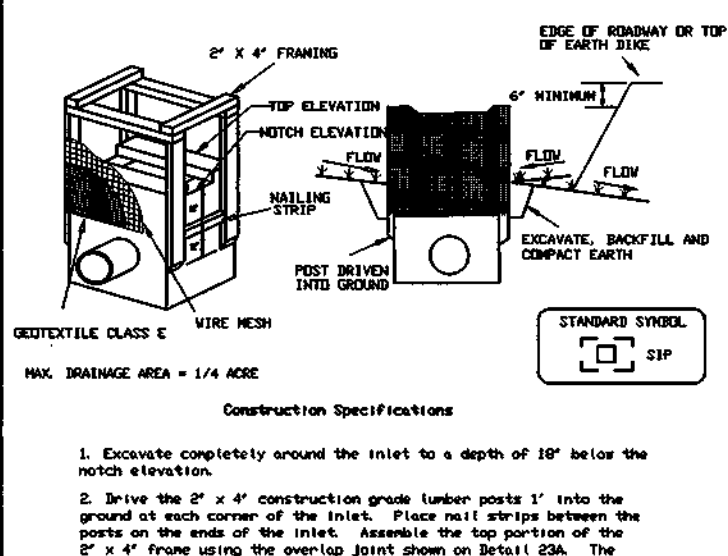
DETAIL 27 - ROCK OUTLET PROTECTION III



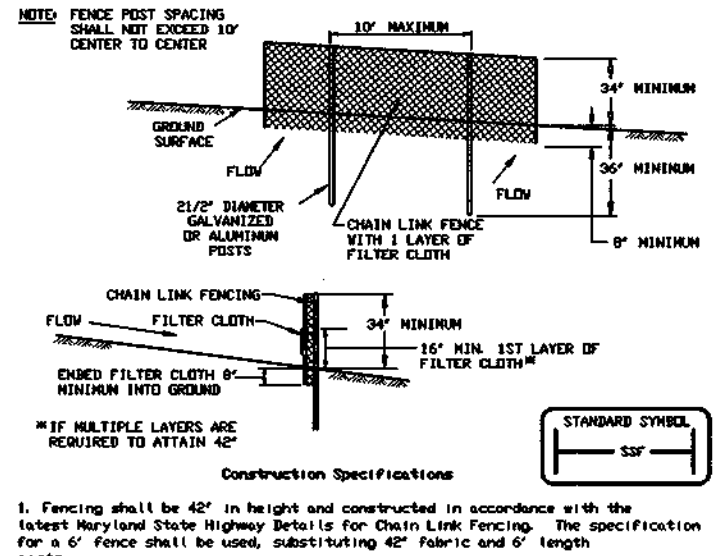
ROCK OUTLET PROTECTION III

CONSTRUCTION SPECIFICATIONS: 1. The magnitude for the filter, riprap, or gabion shall be prepared to the required size and grade... 2. The rock or gabion shall conform to the specified grading limits when installed respectively in the riprap or filter.

DETAIL 23A - STANDARD INLET PROTECTION



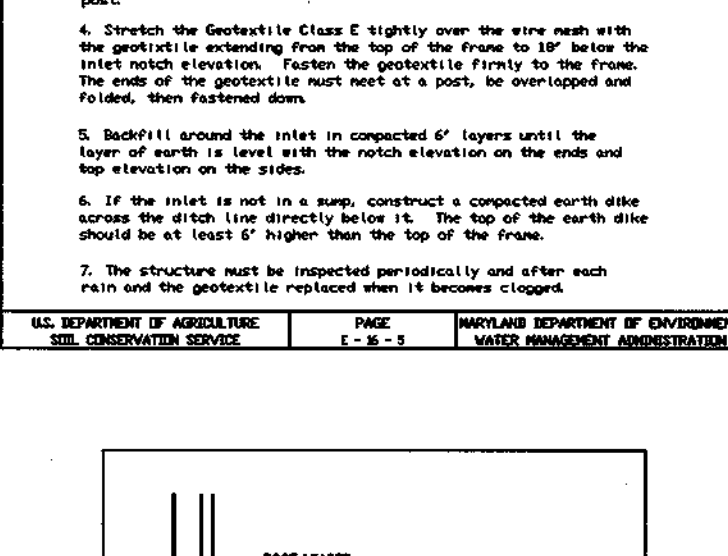
DETAIL 33 - SUPER SILT FENCE



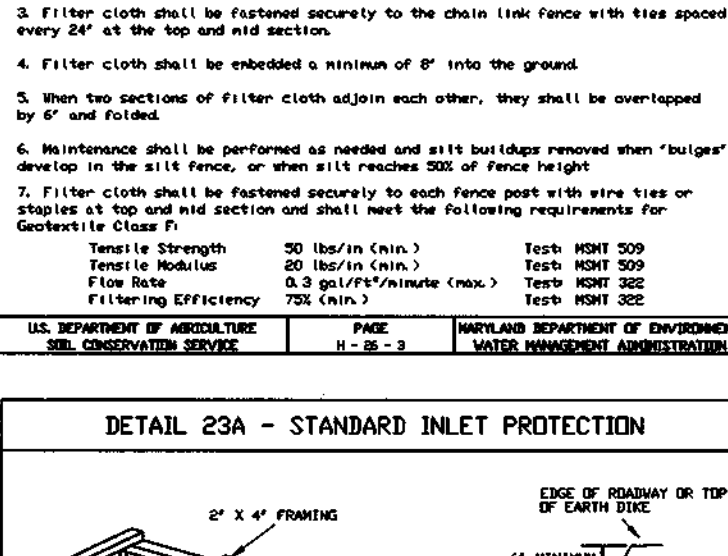
SUPER SILT FENCE

Table with columns: Slope, Slope Steepness, Slope Length (Feet), 216 Feet Length (Feet). Rows show various slope configurations and their corresponding lengths.

DETAIL 23A - STANDARD INLET PROTECTION



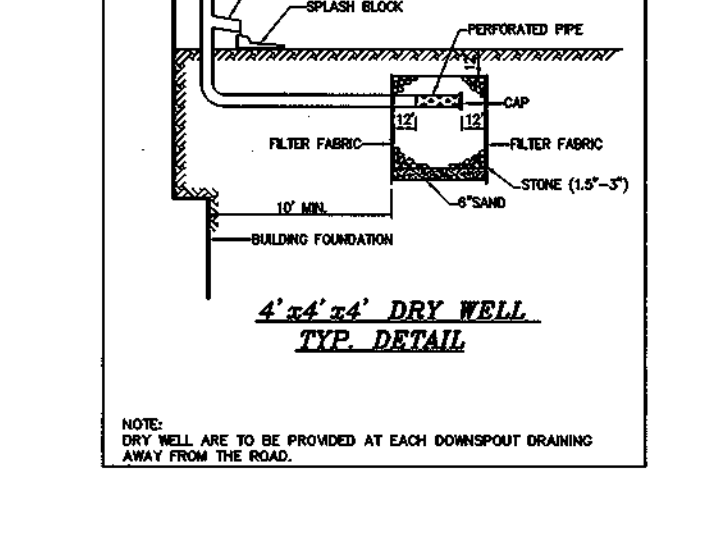
DETAIL 24 - STABILIZED CONSTRUCTION ENTRANCE



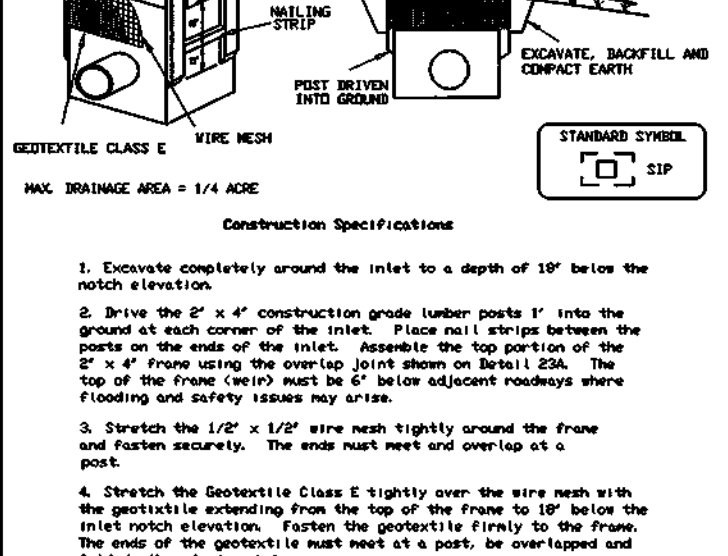
DETAIL 24 - STABILIZED CONSTRUCTION ENTRANCE

CONSTRUCTION SPECIFICATIONS: 1. Length - minimum of 50' (100' for single lane lots). 2. Width - 10' minimum, should be placed at the existing road to provide a turning radius.

DETAIL 23A - STANDARD INLET PROTECTION



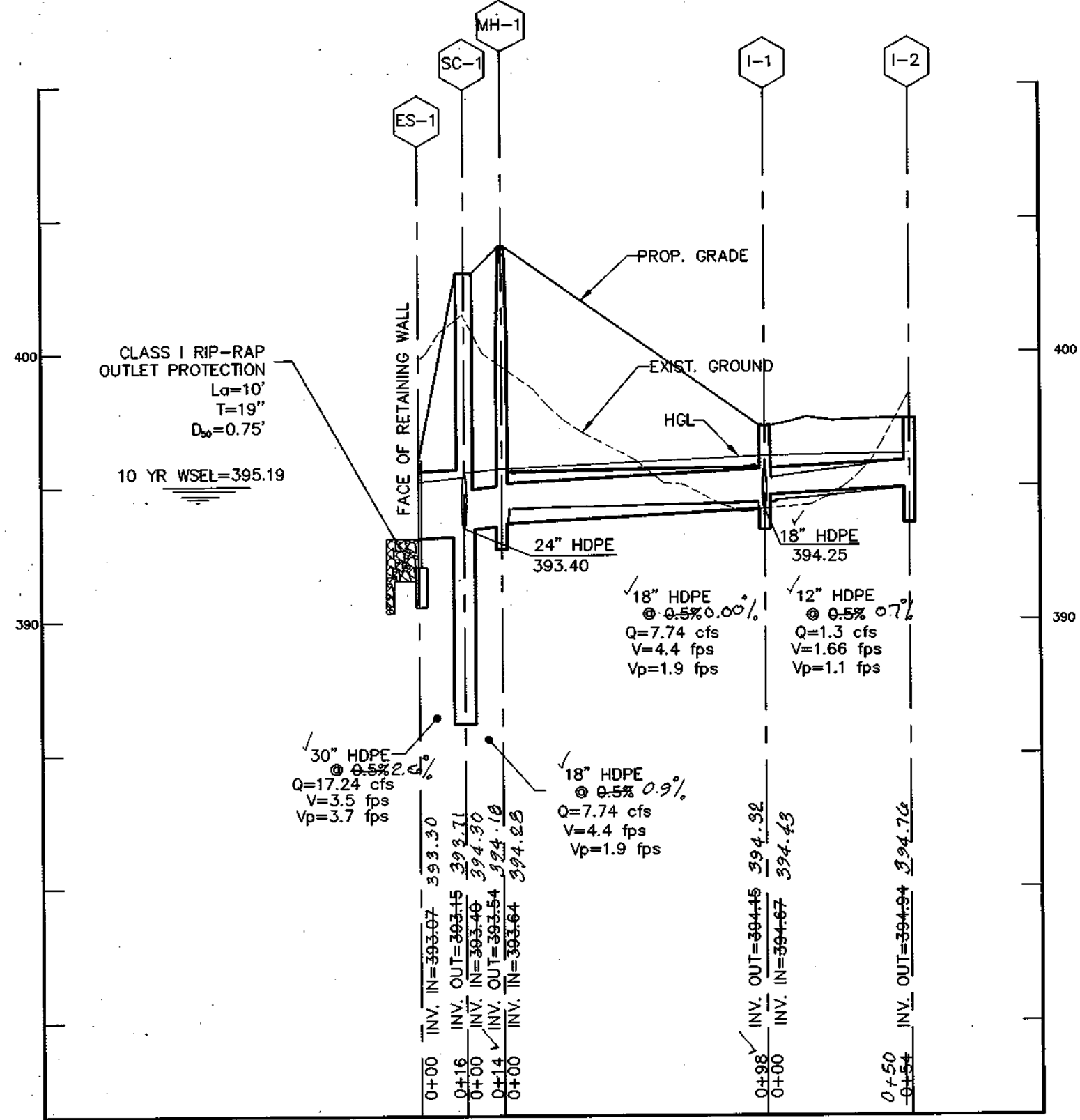
DETAIL 30 - EROSION CONTROL MATTING



DETAIL 30 - EROSION CONTROL MATTING

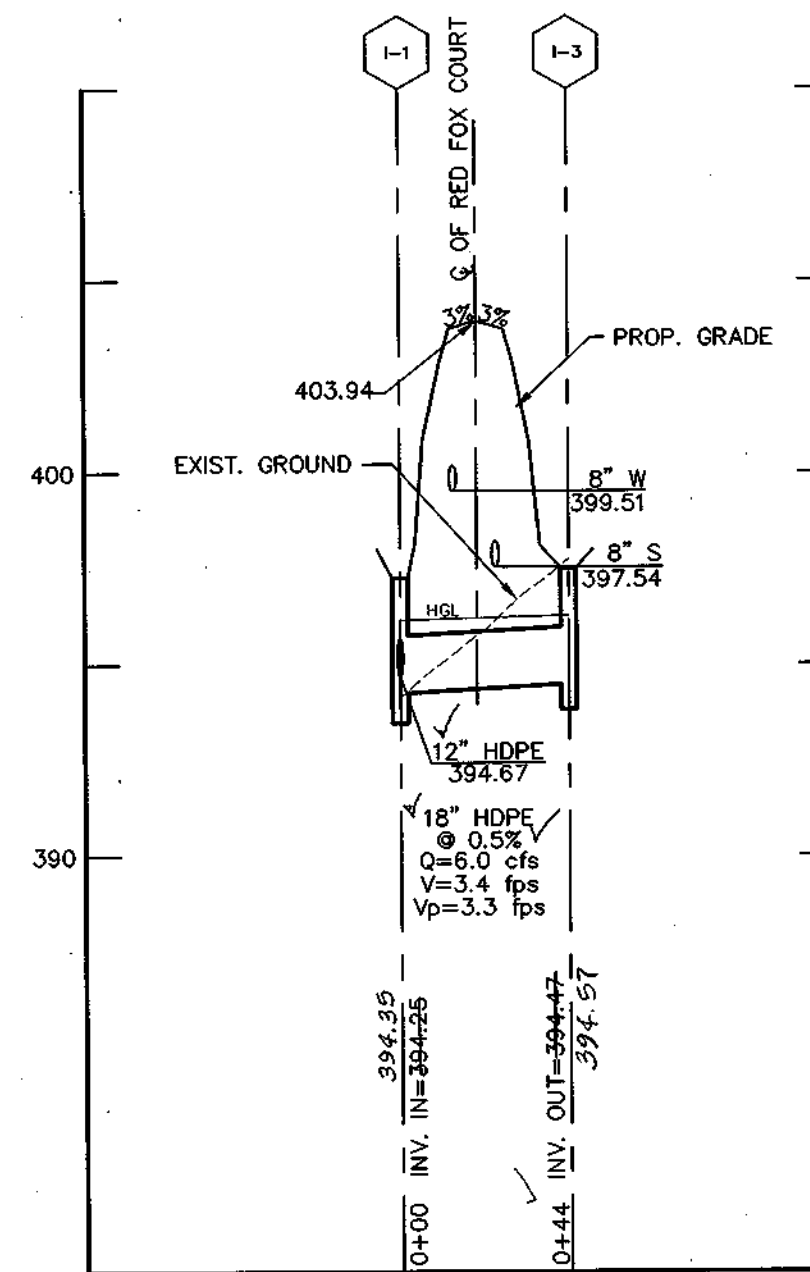
CONSTRUCTION SPECIFICATIONS: 1. Lay the matting by placing the edge of the matting in a narrow trench, 6" in depth. Backfill the trench and tamp firmly to the subgrade... 2. Before stapling the outer edge of the matting, make sure the matting is smooth and in firm contact with the soil.

Vertical sidebar containing project information: date MAY. 2000, project 96044, illustration engineering, MPM, scale NTS, approval RHH, description revisions, no., and project location: TAX MAP 24 - PARCEL 539, RED FOX ESTATE - LOTS 3-12, & NON-BUILDABLE BULK PARCEL A, A RESUBDIVISION OF LOT 2, SECOND ELECTION DISTRICT, HOWARD COUNTY, MARYLAND. EROSION & SEDIMENT CONTROL NOTES AND DETAILS. MILDENBERG, BOENDER & ASSOC., INC. Engineers Planners Surveyors. 5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21114 (410) 997-0296 Fax. 5 OF 10



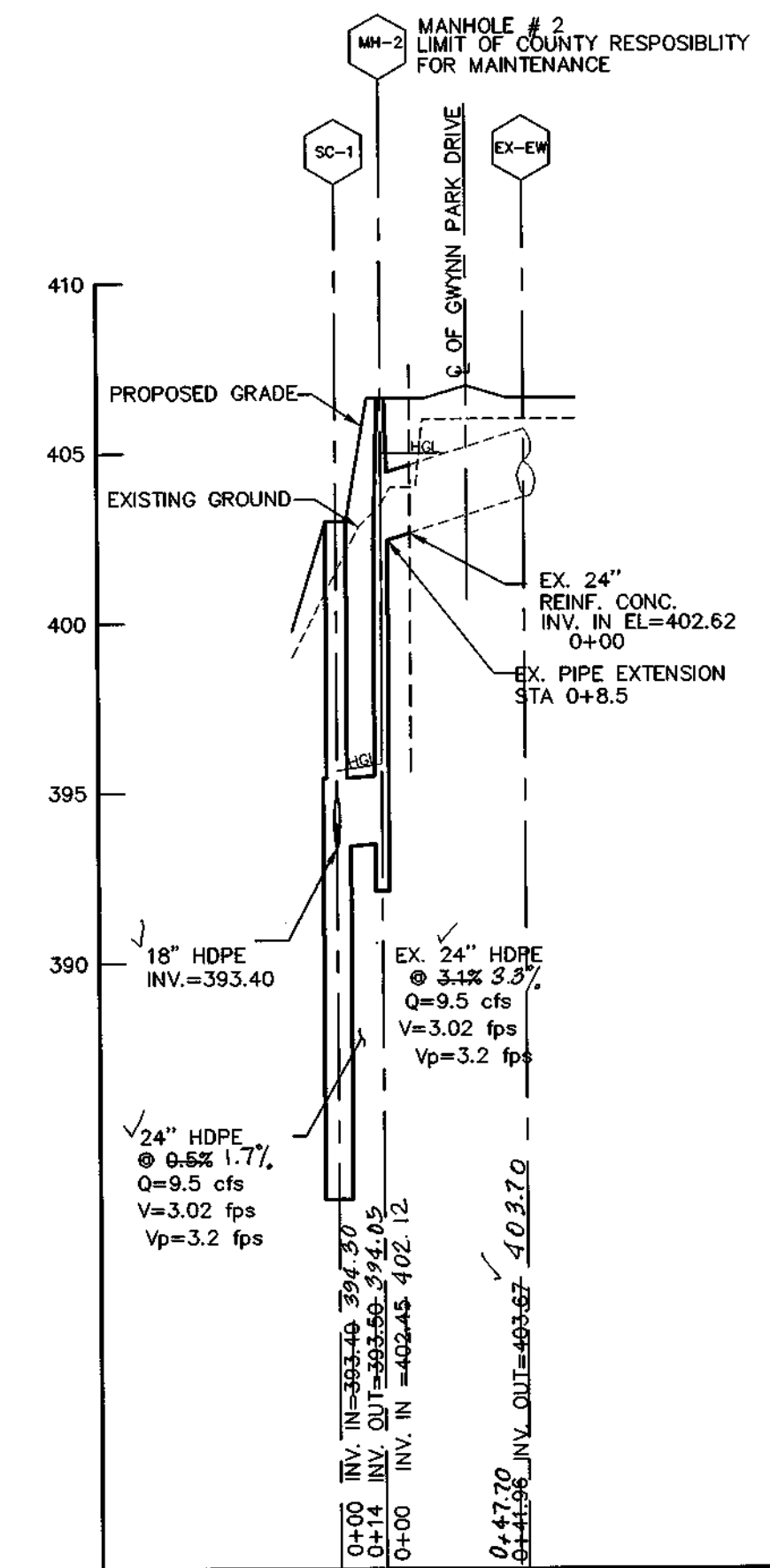
STORM DRAIN PROFILE
WALL TO I-2

SCALE
HOR: 1"=50'
VER: 1"=5'



STORM DRAIN PROFILE
I-1 TO I-3

SCALE
HOR: 1"=50'
VER: 1"=5'



STORM DRAIN PROFILE
SC-1 TO I-EX

SCALE
HOR: 1"=50'
VER: 1"=5'

PIPE SCHEDULE

PIPE SIZE	LENGTH
12"HDPE	54 L.F.
18"HDPE	156 L.F.
24"HDPE	23 L.F.
30"HDPE	16 L.F.

STRUCTURE SCHEDULE

No.	LOCATION	TOP OF STRUCTURE	INVERT IN	INVERT OUT	COMMENTS
SC-1	RED FOX COURT STA. 0+28 RT. 35.53	404.42 404.29	393.40, 393.40	398.71 392.16	SC-2400 SERIES
I-2	RED FOX COURT STA. 1+43 RT. 20.06'	397.25 397.53	394.67, 394.26	394.32 394.16	TYPE "K" INLET STANDARD SD 4.12
I-2	RED FOX COURT STA. 1+97 RT. 33.52'	397.50 397.58	---	394.76 394.94	TYPE "K" INLET STANDARD SD 4.12
I-3	RED FOX COURT STA. 1+43 LT. 23.24'	397.50 397.48	---	394.57 394.47	TYPE "K" INLET STANDARD SD 4.12
MH-1	RED FOX COURT STA. 0+14 RT. 45.69'	404.00 404.41	393.64 394.20	394.18 393.54	BRICK MANHOLE STANDARD G 5.01
MH-2	RED FOX COURT STA. 0+33 RT. 18.05'	406.62 406.05	402.45 402.12	394.05 393.50	BRICK MANHOLE STANDARD G 5.01

Hydro Conduit
6000 Leland Road, Springfield, VA 22150 (703) 871-1900

CSR PRECAST CONCRETE STORMCEPTOR

DR. BY: EPOM
CK. BY: RCH
DATE: 12-17-96
SCALE: 1/4" = 1'-0"
DWG.# CA-0225-05

PLAN
(FRAME AND COVER NOT SHOWN FOR CLARITY)

SECTION

GENERAL NOTES

- STORMCEPTOR SECTIONS SHALL CONFORM TO ASTM C 478, PROFILE CASTED JOINTS CONFORMING TO ASTM C 443.
- MANHOLE STEPS PROVIDED ABOVE INSERT @ 18" O.D. AND SHALL BE COVERED POLYPROPYLENE PLASTIC ENCAPSULATED CR. 60 STEEL.
- MINIMUM CONCRETE STRENGTH (f_c)= 4000 PSI
MINIMUM STEEL STRENGTH (f_y)= 60,000 PSI
- REINFORCEMENT DESIGN SHALL MEET ASTM C 478.
- FLEXIBLE PIPE CONNECTORS SHALL MEET ASTM C 923.
- HANDLING:
A. ALL JOISTS SHALL HAVE 2 EA. 1 1/2" HOLES FOR LIFTING.
B. ALL I.O. SHALL HAVE SCISSOR FLATIRTS, AND REDUCERS TO HAVE LIFT HOODS.
C. DESIGNED FOR AWSD H-20 LOADING.
- FIBERGLASS STORMCEPTOR INSERT REFERENCE DRAWING # CA-0225-01

Stormceptor®

Precast Concrete Order Request Form

CONTRACTOR INFORMATION

Name _____
Address _____
City _____
State _____
Zip Code _____
Contact _____
Phone _____
Fax _____

OWNER INFORMATION

Name _____
Phone _____
Fax _____

IMPERVIOUS DRAINAGE AREA FOR THIS UNIT

Stormceptor® Model	Insert Size	Manhole Number	SC-1
900	22"	Top Elevation (ft)	403.00
1200	32"	Inlet Pipe Invert (ft)	393.40
1800	44"	Outlet Pipe Invert (ft)	393.15
2400	CUSTOM	Manhole Number	---
		Inlet Pipe Inside Diameter (ID)	---
		Inlet Pipe Outside Diameter (OD)	---
		Outlet Pipe Inside Diameter (ID)	30"
		Outlet Pipe Outside Diameter (OD)	---

Project Name: RED FOX ESTATES - LOTS 3-12
Approximate time frame of delivery (weeks) _____
Delivery Address: Street _____ State _____ Zip Code _____
City _____
Designer Company: MILDENBERG, BOENDER & ASSOC., INC.
Designer Contact: J.B.MILDENBERG Phone 410-997-0296 Fax 410-997-0298

PLEASE FILL OUT COMPLETELY AND FAX TO:
ATTN: ED O'MALLEY FAX: (703)922-3659, PHONE: (703)971-1900
FOR TECHNICAL ASSISTANCE PLEASE CALL MIKE BARG, PHONE (703)971-1900

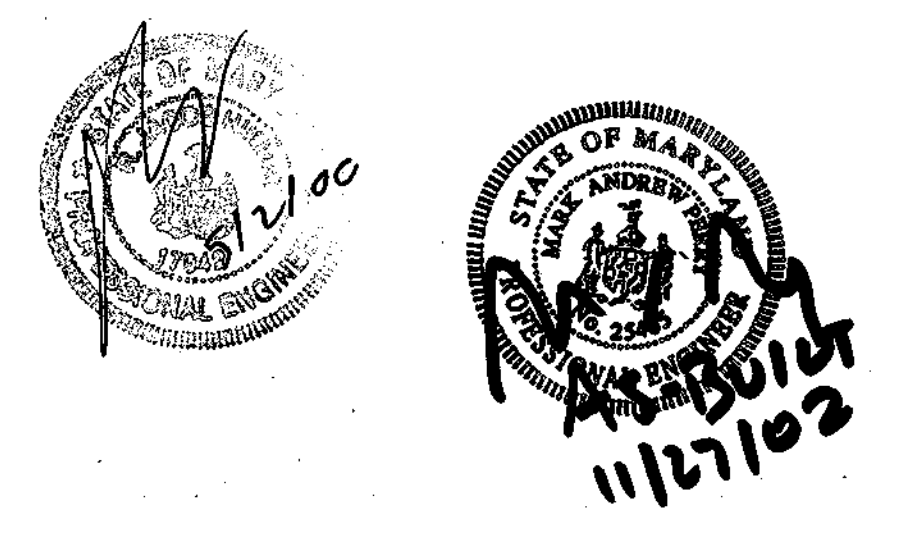
OPERATION AND MAINTENANCE SCHEDULE FOR STORMCEPTOR WATER QUALITY DEVICE

- THE STORMCEPTOR WATER QUALITY STRUCTURE SHALL BE PERIODICALLY INSPECTED AND CLEANED TO MAINTAIN OPERATION AND FUNCTION. THE OWNER SHALL INSPECT THE STORMCEPTOR UNIT YEARLY AT A MINIMUM, UTILIZING THE STORMCEPTOR INSPECTION/MONITORING FORM. INSPECTIONS SHALL BE DONE BY USING A CLEAR PLEXIGLASS TUBE ("SLUDGE JUDGE") TO EXTRACT A WATER COLUMN SAMPLE. WHEN THE SEDIMENT DEPTHS EXCEED THE LEVEL SPECIFIED IN TABLE 6 OF THE STORMCEPTOR TECHNICAL MANUAL, THE UNIT MUST BE CLEANED.
- THE STORMCEPTOR WATER QUALITY STRUCTURE SHALL BE CHECKED AND CLEANED IMMEDIATELY AFTER PETROLEUM SPILLS. THE OWNER SHALL CONTACT THE APPROPRIATE REGULATORY AGENCIES.
- THE MAINTENANCE OF THE STORMCEPTOR UNIT SHALL BE DONE USING A VACUUM TRUCK WHICH WILL REMOVE THE WATER, SEDIMENT, DEBRIS, FLOATING HYDROCARBONS AND OTHER MATERIALS IN THE UNIT. PROPER CLEANING AND DISPOSAL OF THE REMOVED MATERIALS AND LIQUID MUST BE FOLLOWED BY THE OWNER.
- THE INLET AND OUTLET PIPES SHALL BE CHECKED FOR ANY OBSTRUCTIONS AT LEAST ONCE EVERY SIX MONTHS. IF OBSTRUCTIONS ARE FOUND THE OWNER SHALL HAVE THEM REMOVED. STRUCTURAL PARTS OF THE STORMCEPTOR UNIT SHALL BE REPAIRED AS NEEDED.
- THE OWNER SHALL RETAIN AND MAKE THE STORMCEPTOR INSPECTION/MONITORING FORMS AVAILABLE TO THE HOWARD COUNTY OFFICIALS UPON THEIR REQUEST.

APPROVED: DEPARTMENT OF PUBLIC WORKS
Richard M. Casale 5-16-00
CHIEF, BUREAU OF HIGHWAYS

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Carole Hamstra 5/24/00
CHIEF, DIVISION OF LAND DEVELOPMENT

John Demaree 5/10/00
CHIEF, DEVELOPMENT ENGINEERING DIVISION



Project	96044	Date	MAY, 2000
Illustration	SA	Engineering	SA
Scale	AS SHOWN	Approval	RJH

no.	description	date

TAX MAP 24, PARCEL 539
RED FOX ESTATE - LOTS 3-12
& NON-BUILDABLE BULK PARCEL A, A RESUBDIVISION OF LOT 2
HOWARD COUNTY, MARYLAND
SECOND ELECTION DISTRICT
STORM DRAIN PROFILES

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
5072 Dorsey Hall Drive, Suite 202, Beltsville, Maryland, 21042
(410) 997-0296 Fax (301) 621-5521 Wash. (410) 997-0298 Fax

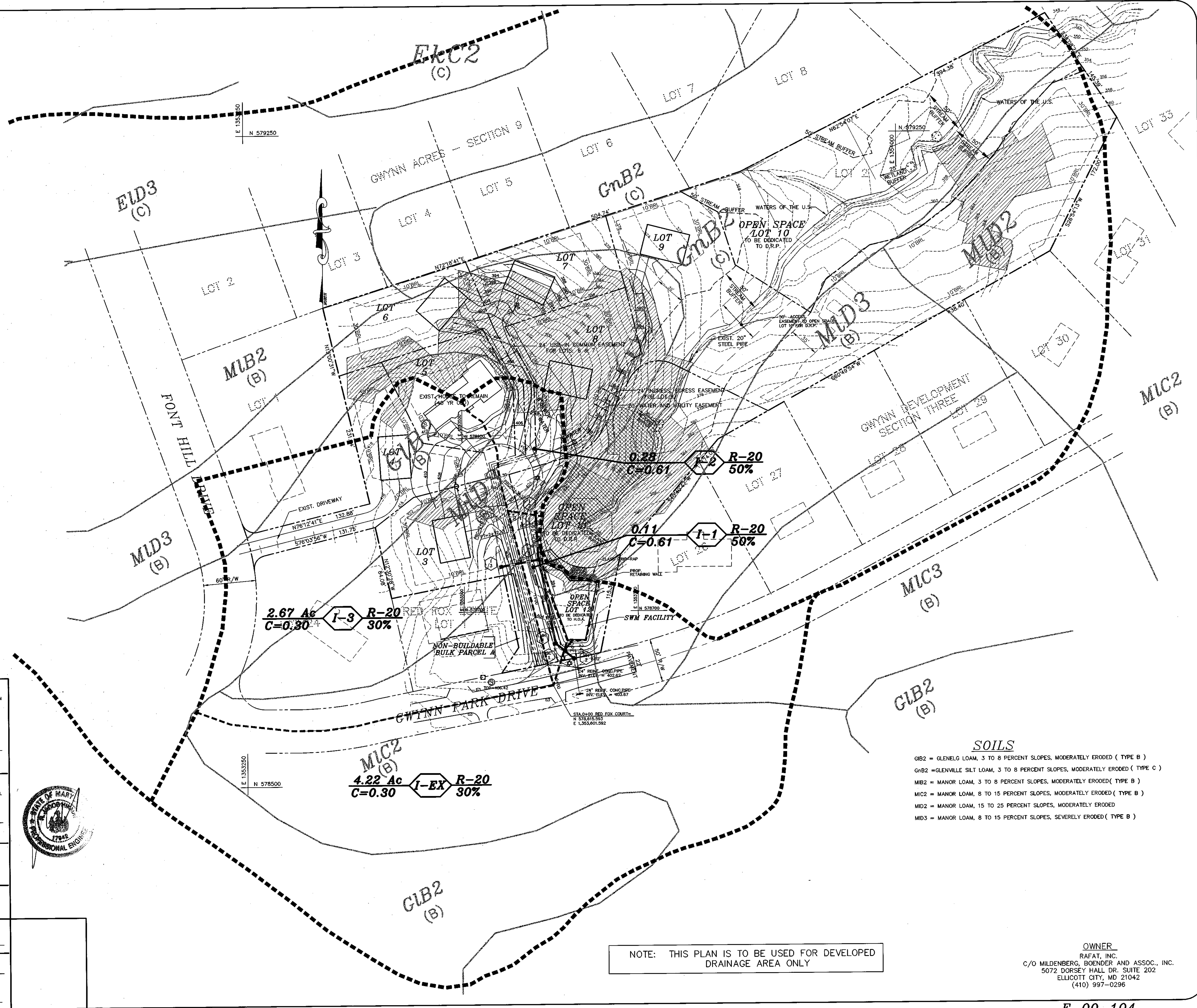
OWNER
RAFAT, INC.
C/O MILDENBERG, BOENDER AND ASSOC., INC.
5072 DORSEY HALL DR. SUITE 202
ELLCOTT CITY, MD 21042
(410) 997-0296

project	98044	date	MAY 2000
illustration	MMP	engineering	MMP
scale	1"=50'	approval	RJH

no.	description	date

TAX MAP 24, PARCEL 539
 RED FOX ESTATE - LOTS 3-12
 & NON-BUILDABLE BULK PARCEL A, A RESUBDIVISION OF LOT 2
 SECOND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 DRAINAGE AREA MAP

MILDENBERG, BOENDER & ASSOC., INC.
 Engineers Planners Surveyors
 5872 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
 (410) 997-0296 Fax (301) 621-5521 Wash. (410) 997-0298 Fax



SOILS
 GIB2 = GLENELG LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED (TYPE B)
 GnB2 = GLENVILLE SILT LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED (TYPE C)
 MIB2 = MANOR LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED (TYPE B)
 MIC2 = MANOR LOAM, 8 TO 15 PERCENT SLOPES, MODERATELY ERODED (TYPE B)
 MID2 = MANOR LOAM, 15 TO 25 PERCENT SLOPES, MODERATELY ERODED
 MID3 = MANOR LOAM, 8 TO 15 PERCENT SLOPES, SEVERELY ERODED (TYPE B)

NOTE: THIS PLAN IS TO BE USED FOR DEVELOPED DRAINAGE AREA ONLY

OWNER
 RAFAT, INC.
 C/O MILDENBERG, BOENDER AND ASSOC., INC.
 5072 DORSEY HALL DR. SUITE 202
 ELLICOTT CITY, MD 21042
 (410) 997-0296

BY THE DEVELOPER:
 I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE 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.

Signature of Developer: *R. JACOB HIKMAT* DATE: 5/2/00
 PRINTED NAME OF DEVELOPER: R. JACOB HIKMAT, PRESIDENT RA FAT, INC.

BY THE ENGINEER:
 I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Signature of Engineer: *R. JACOB HIKMAT* DATE: 5/2/00
 PRINTED NAME OF ENGINEER: R. JACOB HIKMAT

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

Checked by: *Cheal Simmons* DATE: 5/16/00
 NATIONAL RESOURCE CONSERVATION SERVICE

THIS DEVELOPMENT PLAN IS APPROVED FOR THE HOWARD SOIL CONSERVATION DISTRICT.

Checked by: *John R. Whitman* DATE: 5/16/00
 HOWARD SOIL CONSERVATION DISTRICT

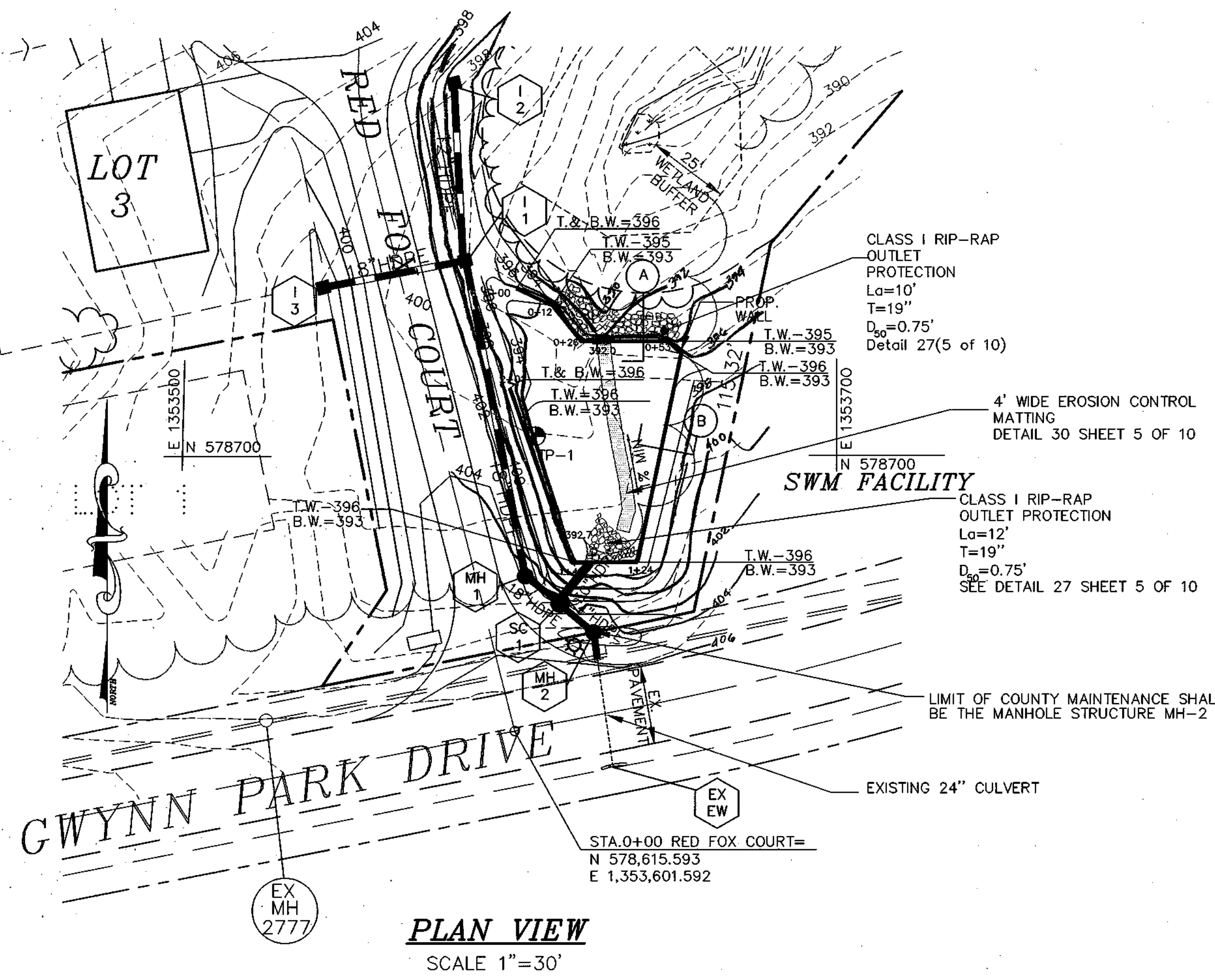
APPROVED: DEPARTMENT OF PUBLIC WORKS
Richard M. Dwyer DATE: 5-16-00
 CHIEF BUREAU OF HIGHWAYS

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Cindy Harmita DATE: 5/24/00
 CHIEF, DIVISION OF LAND DEVELOPMENT

APPROVED: DEPARTMENT OF DEVELOPMENT ENGINEERING DIVISION
Michael Perin DATE: 5/10/00
 CHIEF, DEVELOPMENT ENGINEERING DIVISION



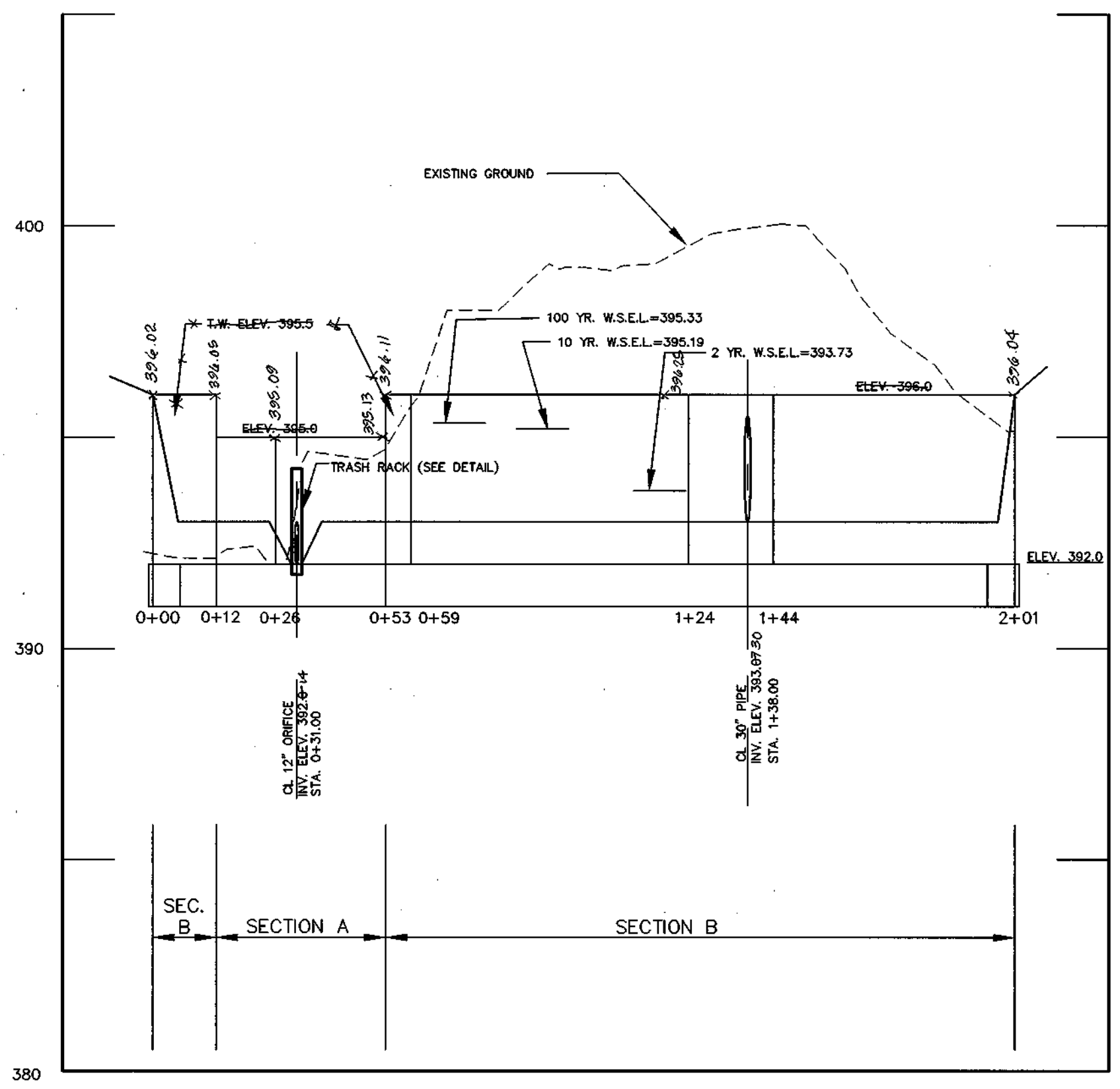
98044.DWG\FINAL 044-R-D.M-1



PLAN VIEW
SCALE 1"=30'

SWM FACILITY DATA

DRAINAGE AREA: 7.2 AC
 PROPOSED RCN: 70
 PROPOSED TC: 0.20
 2 YEAR W.S.E.L.: 393.73 Q=4.1cfs
 10 YEAR W.S.E.L.: 395.19 Q=22.4cfs
 100 YEAR W.S.E.L.: 395.33 Q=34.6cfs
 HAZARD CLASSIFICATION-N/A
 OWNERSHIP- PRIVATE
 MAINTENANCE- PRIVATE (HOA)
 WATER QUALITY- STORMCEPTOR
 WATER QUANTITY- DETENTION



RETAINING WALL PROFILE
SCALE: HOR: 1"=30'
VER.: 1"=3'

HILLIS - CARNES ENGINEERING ASSOCIATES, INC. Page 1 of 1
 RECORD OF SOIL EXPLORATION

Project Name: RED FOX ESTATE
 Location: Howard County, Maryland

DATE	DEPTH	CON	SOILS	NO.	REC.	BOREING & SAMPLING	NOTES
04.28.99	0.0						8" Topsoil
	5.0						
	10.0						
	12.5						Ground water encountered at 13.0'
	14.0						Blockified at completion
	15.0						
	16.5						
	20.0						

SOIL DESCRIPTION: Color, Moisture, Density, Soil Composition, Fragments (SM)

Color: Brown, moist, micaceous silty sand with trace weathered rock and rock fragments (SM)

Color: Brown/tan, very moist to wet, micaceous silty sand with weathered rock (SM)

Bottom of Test Hole at 14.0'

RETAINING WALL SPECIFICATIONS

1. ALL CONCRETE AND REINFORCING STEEL SHALL CONFORM TO HOWARD COUNTY STANDARD SPECIFICATIONS.
2. ALL CONCRETE SHALL BE MSHA MIX NO.3 (FC=2,000 PSI, FY=60,000 PSI)
3. ALL EXPOSED CORNERS OF CONCRETE SHALL BE CHAMFERED (3/4 IN X 3/4 IN) AND AS NEEDED.
4. CONSTRUCTION KEYS SHALL BE A MINIMUM OF 2" X 4" NOMINAL.
5. CONCRETE COVER TO BE 3" TYPICAL.

OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED DETENTION POND

ROUTINE MAINTENANCE

1. FACILITY SHALL BE INSPECTED ANNUALLY AND AFTER MAJOR STORMS. INSPECTIONS SHALL BE PERFORMED DURING WET WEATHER TO DETERMINE IF THE POND IS FUNCTIONING PROPERLY.
2. TOP AND SIDE SLOPES OF THE EMBANKMENT SHALL BE MOWED A MINIMUM OF TWO (2) TIMES PER YEAR, ONCE IN JUNE AND ONCE IN SEPTEMBER. OTHER SIDE SLOPES AND MAINTENANCE ACCESS SHALL BE MOWED AS NEEDED.
3. DEBRIS AND LITTER SHALL BE REMOVED DURING REGULAR MOWING OPERATIONS AND AS NEEDED.
4. VISIBLE SIGNS OF EROSION IN THE POND AS WELL AS THE RIP-RAP OR GABION OUTLET AREA SHALL BE REPAIRED AS SOON AS IT IS NOTICED.

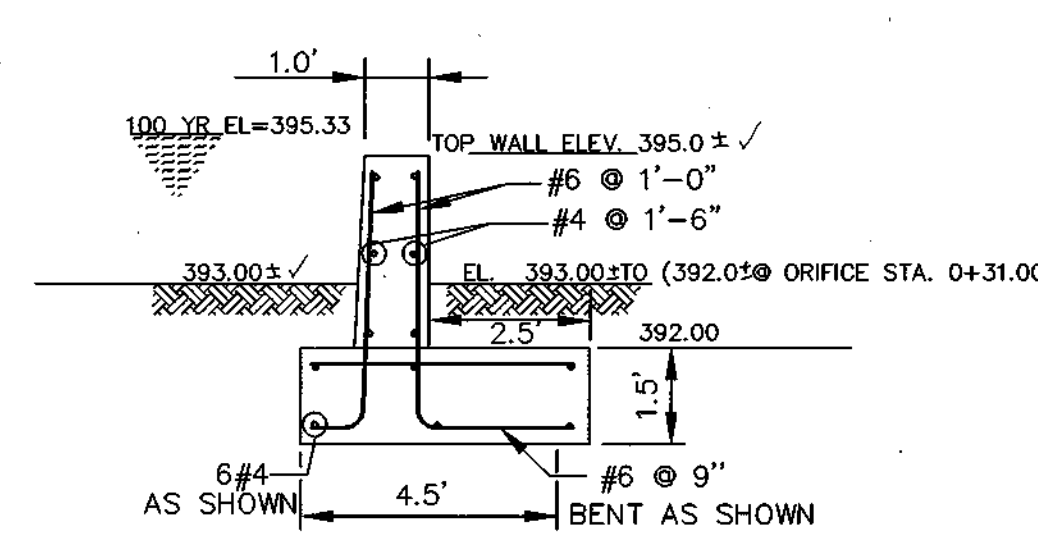
NON-ROUTINE MAINTENANCE

1. STRUCTURAL COMPONENTS OF THE POND SUCH AS THE DAM, THE RISER, AND THE PIPES SHALL BE REPAIRED UPON THE DETECTION OF ANY DAMAGE. THE COMPONENTS SHALL BE INSPECTED DURING ROUTINE MAINTENANCE OPERATIONS.
2. SEDIMENT SHALL BE REMOVED FROM THE POND, AND FOREBAY, NO LATER THAN WHEN THE CAPACITY OF THE POND, OR FOREBAY, IS HALF FULL OF SEDIMENT, OR, WHEN DEEMED NECESSARY FOR AESTHETIC REASONS, UPON APPROVAL FROM THE DEPARTMENT OF PUBLIC WORKS.

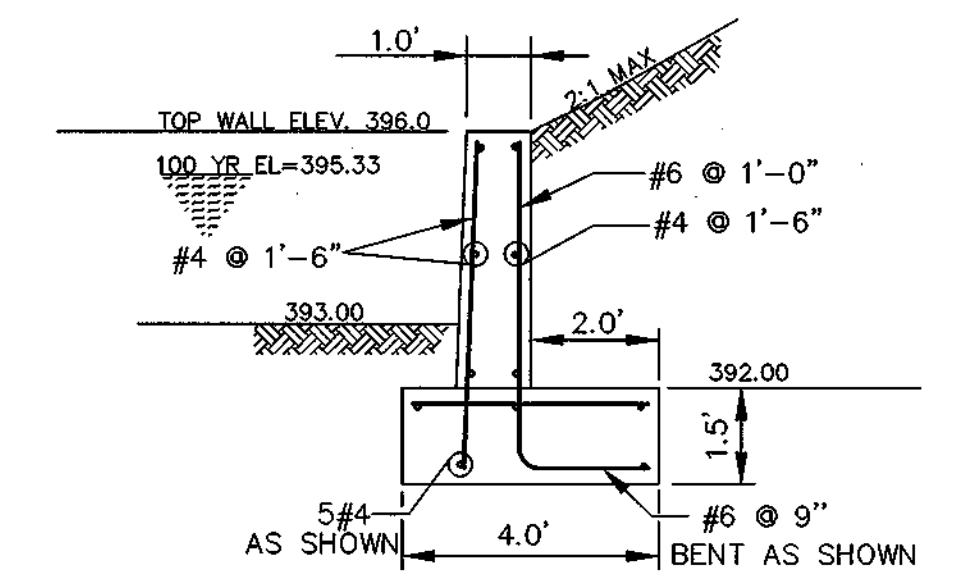
I HEREBY CERTIFY THAT THE FACILITY SHOWN ON THIS PLAN WAS CONSTRUCTED AS SHOWN ON THE "AS-BUILT" PLANS AND MEETS THE APPROVED PLANS AND SPECIFICATIONS.

[Signature] PE. NO. 25405
 DATE: 11/27/02

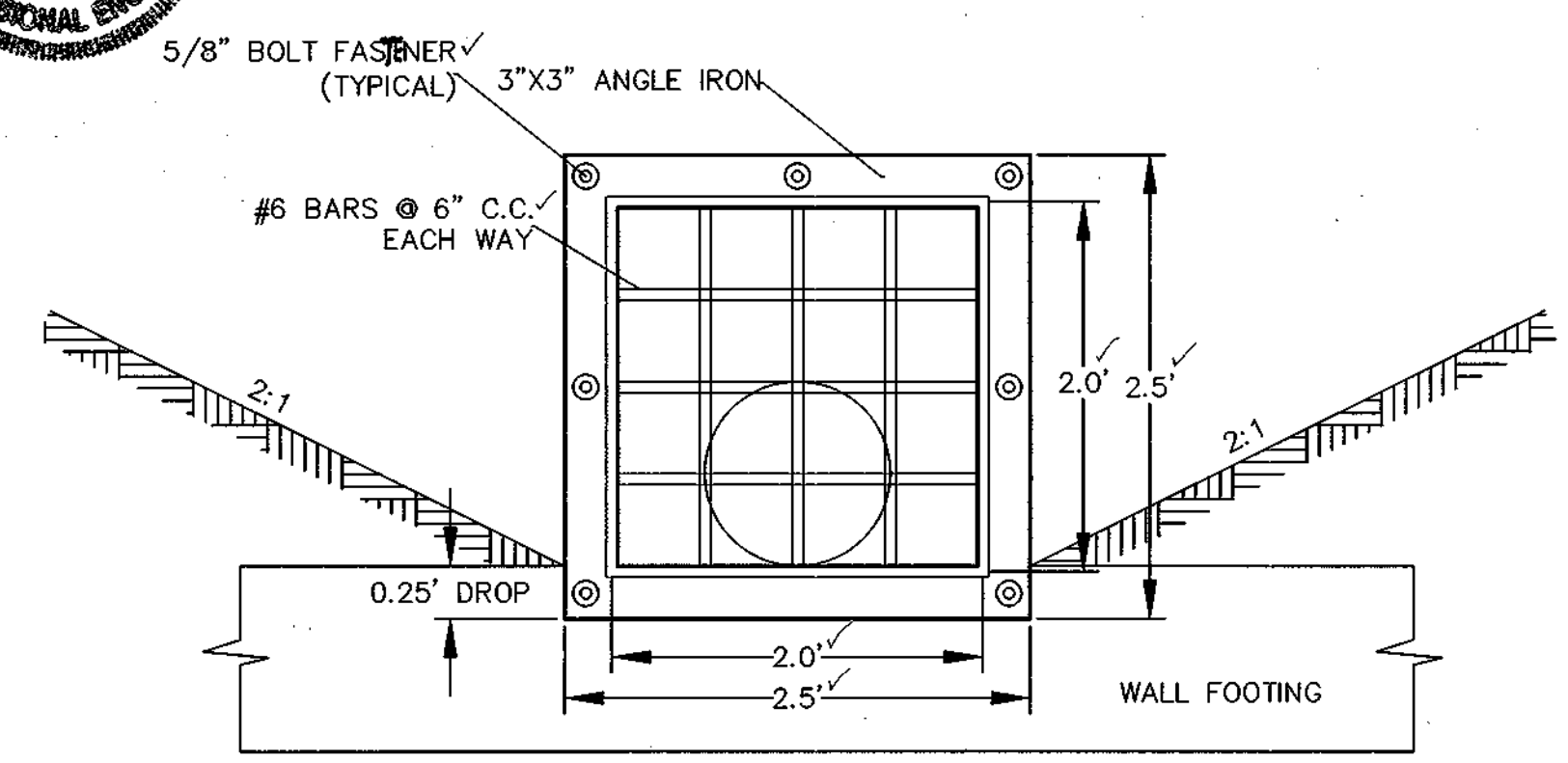
OWNER
 RAFAT INC.
 C/O MILDENBERG, BOENDER AND ASSOC., INC.
 5072 DORSEY HALL DR. SUITE 202
 ELLICOTT CITY, MD 21042
 (410) 997-0296



SECTION A
SCALE: 1"=3'



SECTION B
SCALE: 1"=3'



TRASH RACK DETAIL
SCALE 1"=1'

BY THE DEVELOPER:
 I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

5/2/00
 R. JACOB HIKMAT RAFAAT, INC.
 RAFAAT, INC.

BY THE ENGINEER:
 I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL, REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTICED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

5/2/00
 R. JACOB HIKMAT RAFAAT, INC.
 RAFAAT, INC.

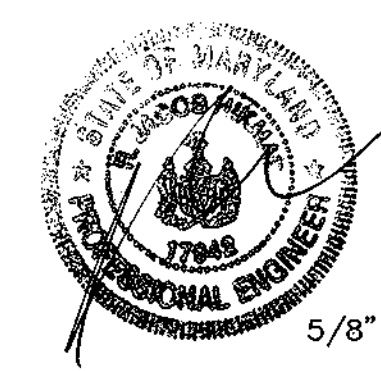
THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
 Chad Simpson 5/10/00
 CHIEF, DIVISION OF LAND DEVELOPMENT

THIS DEVELOPMENT PLAN IS APPROVED FOR THE HOWARD SOIL CONSERVATION DISTRICT.
 John R. Robertson 5/10/00
 CHIEF, DIVISION OF LAND DEVELOPMENT

APPROVED: DEPARTMENT OF PUBLIC WORKS
 Andrew M. Casler 5-10-00
 CHIEF BUREAU OF HIGHWAYS

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Cindy Hamata 5/24/00
 CHIEF, DIVISION OF LAND DEVELOPMENT

APPROVED: DEPARTMENT OF ENGINEERING DIVISION
 5/10/00
 CHIEF, DEVELOPMENT ENGINEERING DIVISION




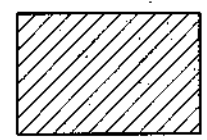

date	MAY. 2000
project	96044
illustration	MMP
scale	MMP
approval	AS SHOWN
no.	
description	
revisions	

date	
no.	
description	
revisions	





TAX MAP 24, PARCEL 539
 RED FOX ESTATE - LOTS 3-12
 & NON-BUILDABLE BULK PARCEL A, A RESUBDIVISION OF LOT 2
 SECOND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 STORMWATER MANAGEMENT PLAN, PROFILES AND DETAILS

MILDENBERG, BOENDER & ASSOC., INC.
 Engineers Planners Surveyors
 5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
 (410) 997-0296 Fax

LEGEND

-  DENOTES PERIMETER LANDSCAPE EDGE
-  DENOTES 15% - 24.99% SLOPES
-  DENOTES SLOPES 25% OR GREATER

LANDSCAPE PLANTING SCHEDULE

QUANTITY	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE
17		ACER RUBRUM 'RED SUNSET'	RED SUNSET RED MAPLE	2 1/2" - 3" CAL.
16		QUERCUS RUBRA	RED OAK	2 1/2" - 3" CAL.
11		PICEA ABIES	NORWAY SPRUCE	6' - 8' HT.
5		TAXUS MEDIA 'HICKSII'	HICKS YEW	2 1/2" - 3" HT.
TOTAL (17 SHADE TREES, 16 STREET TREES, 11 EVERGREENS, 5 SHRUBS)				

NOTE: THIS DRAWING IS TO BE USED FOR LANDSCAPE PLAN PURPOSES ONLY.

- NOTES:**
- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.
 - FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING HAS BEEN POSTED AS PART OF THE DPW DEVELOPERS AGREEMENT IN THE AMOUNT OF \$11,550.00.
 - EVERGREEN SHRUBS HAVE BEEN PROPOSED TO BUFFER THE TRASH PAD AREA.

LANDSCAPE TREE CALCULATIONS

RED FOX COURT (PRIVATE ROAD) - 623 / 40 = 16
 TOTAL TREES REQUIRED = 16 TREES
 TOTAL TREES PROVIDED = 16 TREES

PERIMETER EDGE TYPE

PERIMETER	EDGE TYPE
PERIMETER 1 SFD TO SFD - 84.08 LF EXISTING TREES TO REMAIN	A
PERIMETER 2 SFD TO SFD - 130.00 LF EXISTING TREES TO REMAIN	A
SFD TO SFD - 101.64 LF 1 SHADE TREE / 60 LF	2
PERIMETER 3 SFD TO SFD - 504.74 LF 1 SHADE TREE / 60 LF	8
PERIMETER 4 SFD TO SFD - 394.38 LF EXISTING TREES TO REMAIN	A
PERIMETER 5 SFD TO SFD - 145.39 LF EXISTING TREES TO REMAIN	A
PERIMETER 6 SFD TO SFD - 172.00 LF EXISTING TREES TO REMAIN	A
PERIMETER 7 SFD TO SFD - 438.40 LF EXISTING TREES TO REMAIN	A
PERIMETER 8 OPEN SPACE TO SFD - 174 LF EXISTING TREES TO REMAIN	A
PERIMETER 9 SWM TO SFD - 115.32 LF CREDIT FOR SWM LANDSCAPING	B
PERIMETER 10 OPEN SPACE TO SFD - 120.16 LF 1 SHADE TREE / 60 LF	2
PERIMETER 11 SFD TO SFD - 30 LF EXISTING TREES TO REMAIN	A
SFD TO SFD - 101.65 LF 1 SHADE TREE / 60 LF	2
TOTAL PLANTING OBLIGATION	
SHADE TREES	14
EVERGREEN TREES	0
SHRUBS	0

SCHEDULE D: STORMWATER MANAGEMENT AREA LANDSCAPING

LINEAR FEET OF PERIMETER	360.32 LF
CREDIT FOR EXISTING VEGETATION (NO, YES AND LINEAR FEET)	YES, 90 LF OF EXISTING TREES
CREDIT FOR OTHER LANDSCAPING (NO, YES AND %)	N/A
NUMBER OF TREES REQUIRED	
SHADE TREES	5 SHADE TREES
EVERGREEN TREES	7 EVERGREEN TREES
NUMBER OF TREES PROVIDED	
SHADE TREES	3 SHADE TREES
EVERGREEN TREES	4 EVERGREEN TREES
OTHER TREES (2:1 SUBSTITUTION)	

SCHEDULE A: PERIMETER LANDSCAPED EDGE

CATEGORY	ADJACENT TO PERIMETER PROPERTIES		"STREET TREES" FOR PRIVATE ROAD
	A (PERIMETERS 1 THRU 11)	B (PERIMETER 9)	1 SHADE TREE / 40 LF
LINEAR FEET OF PERIMETER	2396.44 LF	115.32 LF	620 LF
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET)	YES, 1568.25 LF OF EXISTING TREES	NO	NO
CREDIT FOR WALL, FENCE, OR BERM (YES, NO, LINEAR FEET)	NO	YES, 115.32 LF OF CREDIT FOR SWM LANDSCAPING	NO
NUMBER OF PLANTS REQUIRED			
SHADE TREES	14 SHADE TREES	0 SHADE TREES	16 SHADE TREES
EVERGREEN TREES	0 EVERGREEN TREES	0 EVERGREEN TREES	0 EVERGREEN TREES
SHRUBS	0 SHRUBS	0 SHRUBS	0 SHRUBS
NUMBER OF PLANTS PROVIDED			
SHADE TREES	14 SHADE TREES	0 SHADE TREES	16 SHADE TREES
EVERGREEN TREES	0 EVERGREEN TREES	0 EVERGREEN TREES	0 EVERGREEN TREES
OTHER TREES (2:1 SUBSTITUTION)	0 SUBSTITUTION TREES	0 SUBSTITUTION TREES	0 SUBSTITUTION TREES
SHRUBS (10:1 SUBSTITUTION)	0 SHRUBS	0 SHRUBS	0 SHRUBS

SWM PERIMETER EDGE TYPE

SWM PERIMETER A - 115.32 LF	
1 SHADE TREE / 50 LF	2
1 EVERGREEN / 40 LF	3
SWM PERIMETER B - 50 LF	
1 SHADE TREE / 50 LF	1
1 EVERGREEN / 40 LF	1
SWM PERIMETER C - 105 LF	
1 SHADE TREE / 50 LF	2
1 EVERGREEN / 40 LF	3
SWM PERIMETER D - 90 LF	
EXISTING TREES TO REMAIN	B

TOTAL PLANTING OBLIGATION

SHADE TREES	5
EVERGREEN TREES	7
SHRUBS	0

OWNER
 R. JACOB HIKMAT
 C/O MILDENBERG, BOENDER AND ASSOC., INC.
 5072 DORSEY HALL DR. SUITE 202
 ELLICOTT CITY, MD 21042
 (410) 997-0296

APPROVED: DEPARTMENT OF PUBLIC WORKS
Stephen M. Decker 5-16-00
 CHIEF BUREAU OF HIGHWAYS
 DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Conrad Hemminger 5/21/00
 CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE

William J. ... 5/10/00
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE



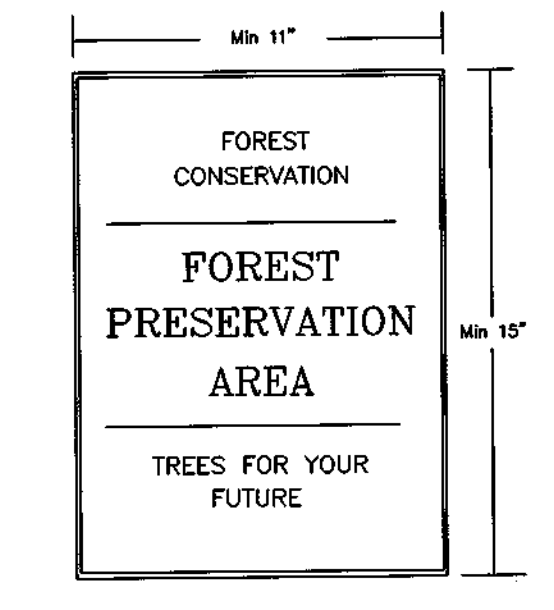
Project	date	description	no.
96044	MAY 2000	engineering	
		MMP/SID	
		scale	1"=50'
		approval	
		RBH	

TAX MAP 24, PARCEL 539
 RED FOX ESTATE - LOTS 3-12
 & NON-BUILDABLE BULK PARCEL A, A RESUBDIVISION OF LOT 2
 SECOND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 LANDSCAPE PLAN

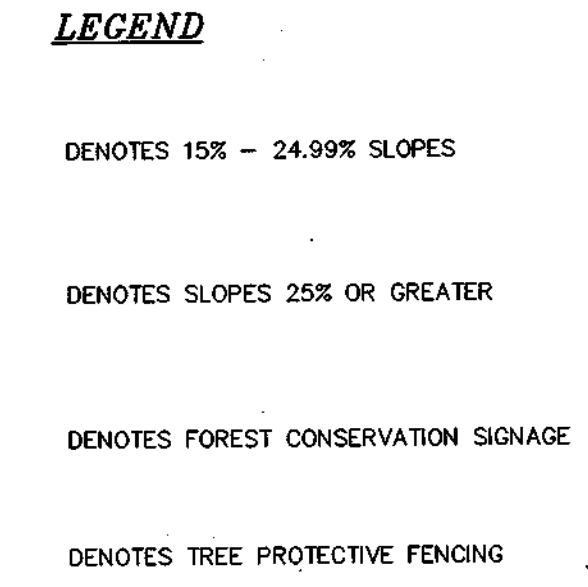
MILDENBERG, BOENDER & ASSOC., INC.
 Engineers Planners Surveyors
 5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
 (410) 997-0296 Fax

BASIC SITE DATA	ACRES
GROSS SITE AREA	6.94
AREA WITHIN 100 YEAR FLOODPLAIN	0.00
NET TRACT AREA	6.94
LAND USE CATEGORY (ZONING) - R-20	
REFORESTATION CALCULATIONS	
A. NET TRACT AREA	6.94
B. FOREST CONSERVATION THRESHOLD (FCT) (20% x A)	1.40
C. AFFORESTATION THRESHOLD (15% x A)	1.04
D. EXISTING FOREST ON NET TRACT AREA	3.00
E. FOREST AREAS TO BE CLEARED	1.28
F. FOREST AREAS TO BE RETAINED	1.72
G. FOREST AREAS CLEARED ABOVE REFORESTATION THRESHOLD	1.28
H. FOREST AREAS CLEARED BELOW REFORESTATION THRESHOLD	0.00
I. FOREST AREAS RETAINED ABOVE REFORESTATION THRESHOLD	0.32
REFORESTATION FOR CLEARING ABOVE THRESHOLD	0.32
CREDIT FOR FOREST AREAS RETAINED ABOVE THRESHOLD	0.32
TOTAL REFORESTATION REQUIRED	0.00
TOTAL REFORESTATION PROVIDED	0.00

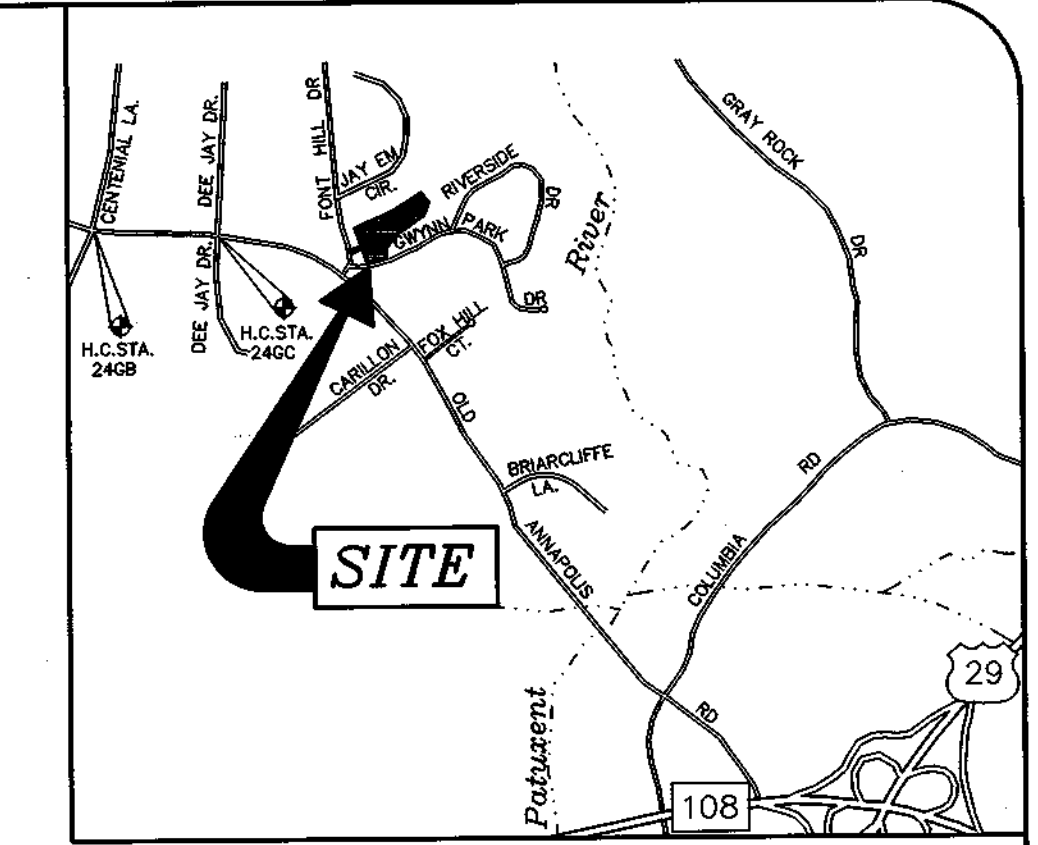
* NOTE: GROSS SITE AREA INCLUDES RED FOX ESTATE, LOT 1 RECORDED UNDER F-97-97, PLAT # 12814. EXISTING FOREST CONSERVATION AREA TO BE BONDED UNDER THIS SUBDIVISION PLAN.



SIGNAGE DETAILS
NOT TO SCALE



NOTE: THIS PLAN IS TO BE USED FOR FOREST CONSERVATION PURPOSES ONLY.



VICINITY MAP
SCALE: 1" = 1000'

GENERAL NOTES

- FOREST PROTECTION**
- ALL FOREST RETENTION AREAS SHALL BE TEMPORARILY PROTECTED BY WELL ANCHORED BLAZE ORANGE PLASTIC MESH FENCING AND SIGNAGE AS INDICATED ON THE PLANS. THE DEVICES SHALL BE INSTALLED ALONG THE FOREST RETENTION BOUNDARY PRIOR TO ANY LAND CLEARING, GRUBBING, OR GRADING ACTIVITIES.
 - THE FOREST PROTECTION DEVICES SHALL BE INSTALLED SUCH THAT THE CRITICAL ROOT ZONES OF ALL TREES WITHIN THE RETENTION AREA NOT OTHERWISE PROTECTED WILL BE WITHIN FOREST PROTECTION DEVICES. ALL PROTECTION DEVICES SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION, INCLUDING SILT FENCE BEING USED AS PROTECTIVE FENCING. ALL DEVICES SHALL REMAIN IN PLACE UNTIL ALL CONSTRUCTION HAS CEASED IN THE IMMEDIATE VICINITY.
 - ATTACHMENT OF SIGNS, OR ANY OTHER OBJECTS TO TREES IS PROHIBITED. NO EQUIPMENT, MACHINERY, VEHICLES, MATERIALS OR EXCESSIVE PEDESTRIAN TRAFFIC SHALL BE ALLOWED WITHIN THESE PROTECTED AREAS. INSTALLATION AND MAINTENANCE OF PROTECTIVE FENCING AND SIGNAGE SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. THE GENERAL CONTRACTOR SHALL TAKE THE UTMOST CARE TO PROTECT TREE ROOT SYSTEMS DURING ALL CONSTRUCTION ACTIVITIES. TREE ROOT SYSTEMS SHALL BE PROTECTED FROM SMOTHERING, FLOODING, EXCESSIVE WETTING FROM DE-WATERING OPERATIONS, OFF-SITE RUN OFF, SPILLAGE AND DRAINING OF MATERIALS THAT MAY BE HARMFUL TO TREES.
 - THE GENERAL CONTRACTOR SHALL PREVENT PARKING OF CONSTRUCTION VEHICLES AND EQUIPMENT, AND THE STORING OF BUILDING SUPPLIES OR STOCKPILING OF EARTH WITHIN FOREST CONSERVATION EASEMENTS. REMOVAL OF TOPSOIL OR ROOT MAT WITHIN THE TREE PRESERVATION AREA SHALL BE PROHIBITED.
 - THE GENERAL CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY TREES DAMAGED OR DESTROYED WITHIN THE FOREST CONSERVATION EASEMENTS. ROOT PRUNING SHALL BE USED AT THE LIMIT OF DISTURBANCE OR LIMIT OF GRADING WITHIN AND ADJACENT TO ALL PRESERVATION AREAS, AS NECESSARY.
- PRE-CONSTRUCTION MEETING**
- AFTER THE BOUNDARIES OF THE FOREST RETENTION AREAS HAVE BEEN FIELD LOCATED AND MARKED, AND AFTER THE FOREST PROTECTION DEVICES HAVE BEEN INSTALLED, BUT BEFORE ANY OTHER DISTURBANCE HAS TAKEN PLACE ON SITE, A PRE-CONSTRUCTION MEETING SHALL TAKE PLACE ON SITE. THE DEVELOPER, CONTRACTOR OR PROJECT MANAGER, AND HOWARD COUNTY INSPECTORS SHALL ATTEND. THE PURPOSE OF THIS MEETING WILL BE:
 - TO IDENTIFY THE LOCATIONS OF THE FOREST RETENTION AREAS, SPECIMEN TREES WITHIN 50 FEET OF THE LIMIT OF DISTURBANCE, LIMITS OF CONSTRUCTION, EMPLOYEE PARKING AREAS AND EQUIPMENT STAGING AREAS;
 - INSPECT ALL FLAGGED BOUNDARIES AND PROTECTION DEVICES;
 - MAKE ALL NECESSARY ADJUSTMENTS;
 - ASSIGN RESPONSIBILITIES AS APPROPRIATE AND DISCUSS PENALTIES.
- CONSTRUCTION MONITORING**
- THE SITE SHALL BE INSPECTED PERIODICALLY DURING THE CONSTRUCTION PHASE OF THE PROJECT. A QUALIFIED PROFESSIONAL SHALL BE RESPONSIBLE FOR IDENTIFYING DAMAGE TO PROTECTED FOREST AREAS OR INDIVIDUAL TREES WHICH MAY HAVE BEEN CAUSED BY CONSTRUCTION ACTIVITIES, SUCH AS SOIL COMPACTION, ROOT INJURY, TRUNK WOUNDS, LIMB INJURY, OR STRESS CAUSED BY FLOODING OR DROUGHT CONDITIONS. ANY SUCH DAMAGE THAT MAY OCCUR SHALL BE REMEDIATED IMMEDIATELY USING APPROPRIATE MEASURES. SEVERE PROBLEMS MAY REQUIRE CONSULTATION WITH A PROFESSIONAL ARBORIST.
 - THE CONSTRUCTION PROCEDURE SHALL NOT DAMAGE AREAS OUTSIDE OF THE LIMITS OF DISTURBANCE AS DESIGNATED ON THE PLANS. ANY DAMAGE SHALL BE RESTORED BY THE CONTRACTOR AT HIS EXPENSE AND TO THE SATISFACTION OF THE DESIGN TEAM OR ENGINEER.

NOTE:
THERE SHALL BE NO CLEARING, GRADING, CONSTRUCTION OR DISTURBANCE OF VEGETATION IN THE FOREST CONSERVATION EASEMENTS EXCEPT AS PERMITTED BY THE HOWARD COUNTY FOREST CONSERVATION PROGRAM.

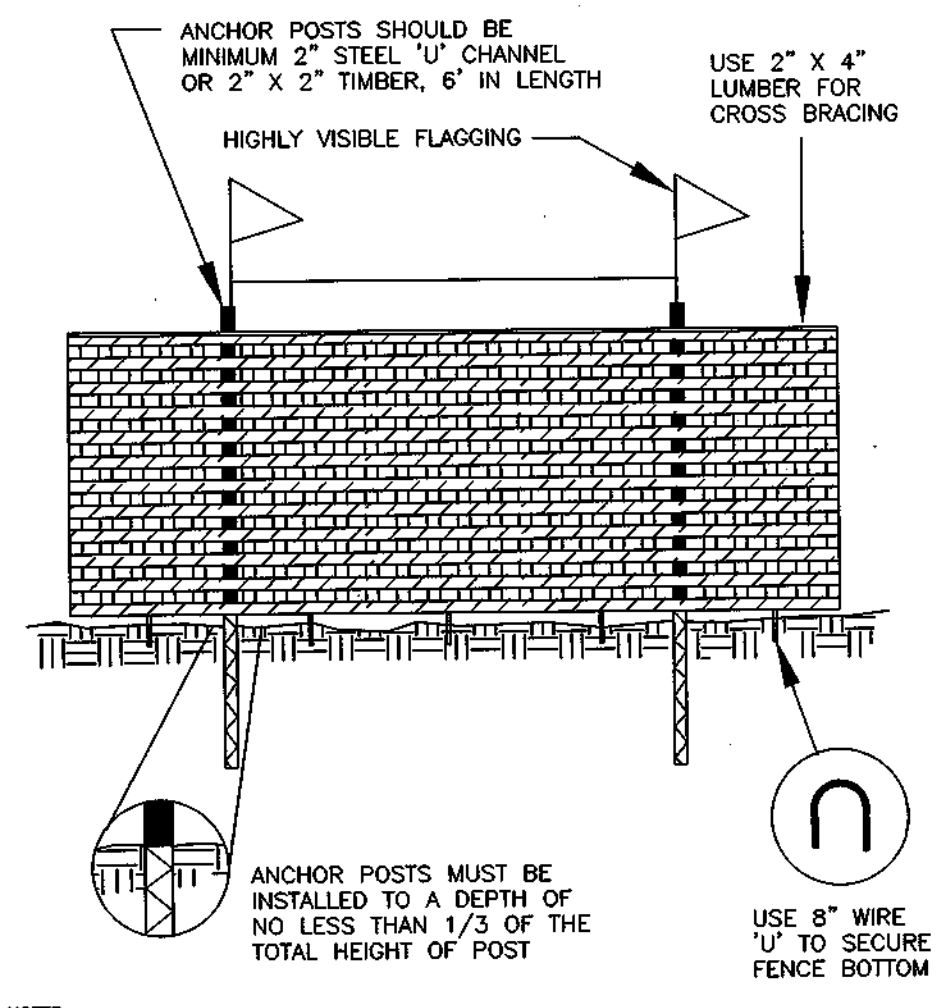
THERE SHALL BE NO CLEARING, GRADING, CONSTRUCTION, SOIL COMPACTION, OR EXCAVATION, INTRODUCTION OF TOXIC CHEMICALS OR OTHER DISTURBANCES DETRIMENTAL TO THE LIVE SPECIMEN TREES OR CRITICAL ROOT ZONES FOR THESE TREES EXCEPT AS PERMITTED BY THE HOWARD COUNTY FOREST CONSERVATION PROGRAM.

Surety = 1.72 ac. x \$7.10/s.f. = \$7,492.30 as part of Developers Agreement.

MD DNR QUALIFIED PROFESSIONAL
Stephanie Demchik 5/3/00
STEPHANIE DEMCHIK

OWNER
RAFAT INC.
C/O MILDENBERG, BOENDER AND ASSOC., INC.
5072 DORSEY HALL DRIVE, SUITE 202, ELLICOTT CITY, MD 21042
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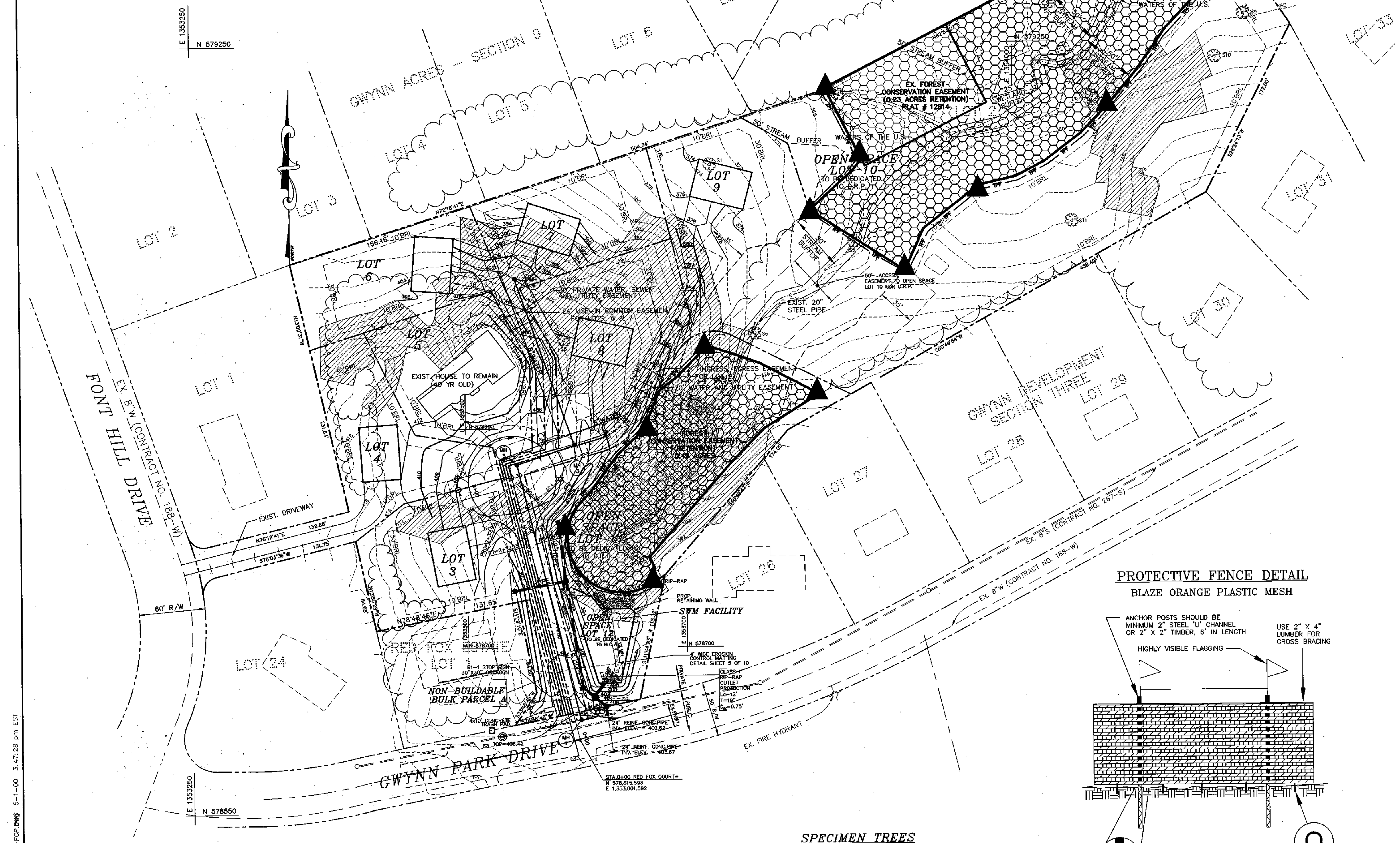
PROTECTIVE FENCE DETAIL
BLAZE ORANGE PLASTIC MESH



- NOTES:**
- FOREST PROTECTION DEVICE ONLY.
 - RETENTION AREA WILL BE SET AS PART OF THE REVIEW PROCESS.
 - BOUNDARIES OF RETENTION AREA SHOULD BE STAKED AND FLAGGED PRIOR TO INSTALLING DEVICE.
 - ROOT DAMAGE SHOULD BE AVOIDED.
 - PROTECTIVE SIGNAGE MAY ALSO BE USED.
 - DEVICE SHOULD BE MAINTAINED THROUGHOUT CONSTRUCTION.

SPECIMEN TREES

SYMBOL	TREE DESCRIPTION
S1	30\"/>



APPROVED: DEPARTMENT OF PUBLIC WORKS
Andrew M. Cavallo 5-16-00
CHIEF BUREAU OF HIGHWAYS

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Cinda Hamilton 5/21/00
CHIEF, DIVISION OF LAND DEVELOPMENT

MDP 5/16/00
CHIEF, DEVELOPMENT ENGINEERING DIVISION

Project: 96044
Date: MAY, 2000
Illustration: MJP/SJD
Scale: 1"=50'
Approval: RJH

TAX MAP 24, PARCEL 539
RED FOX ESTATE - LOTS 3-12
& NON-BUILDABLE BULK PARCEL A, A RESUBDIVISION OF LOT 2
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
FOREST CONSERVATION PLAN

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
(410) 997-0296 Fax: (301) 621-5521 Wash. (410) 997-0298 Fax.