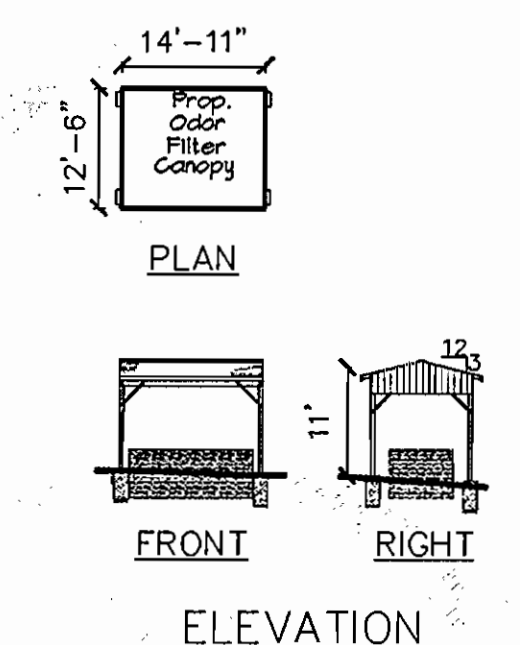


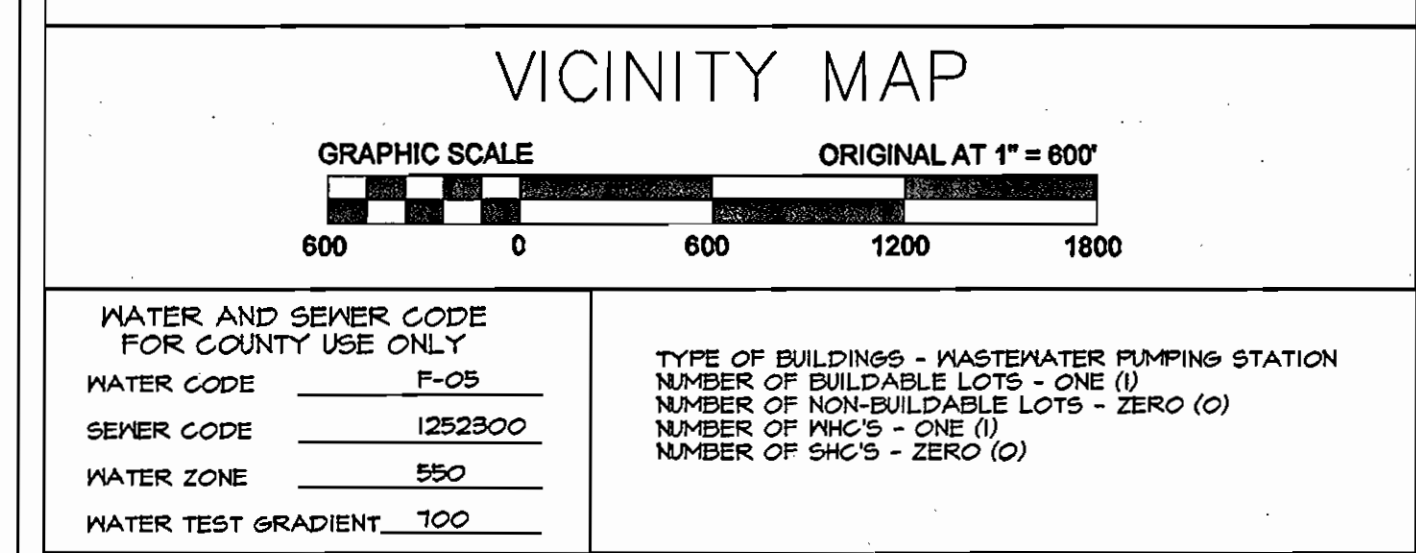
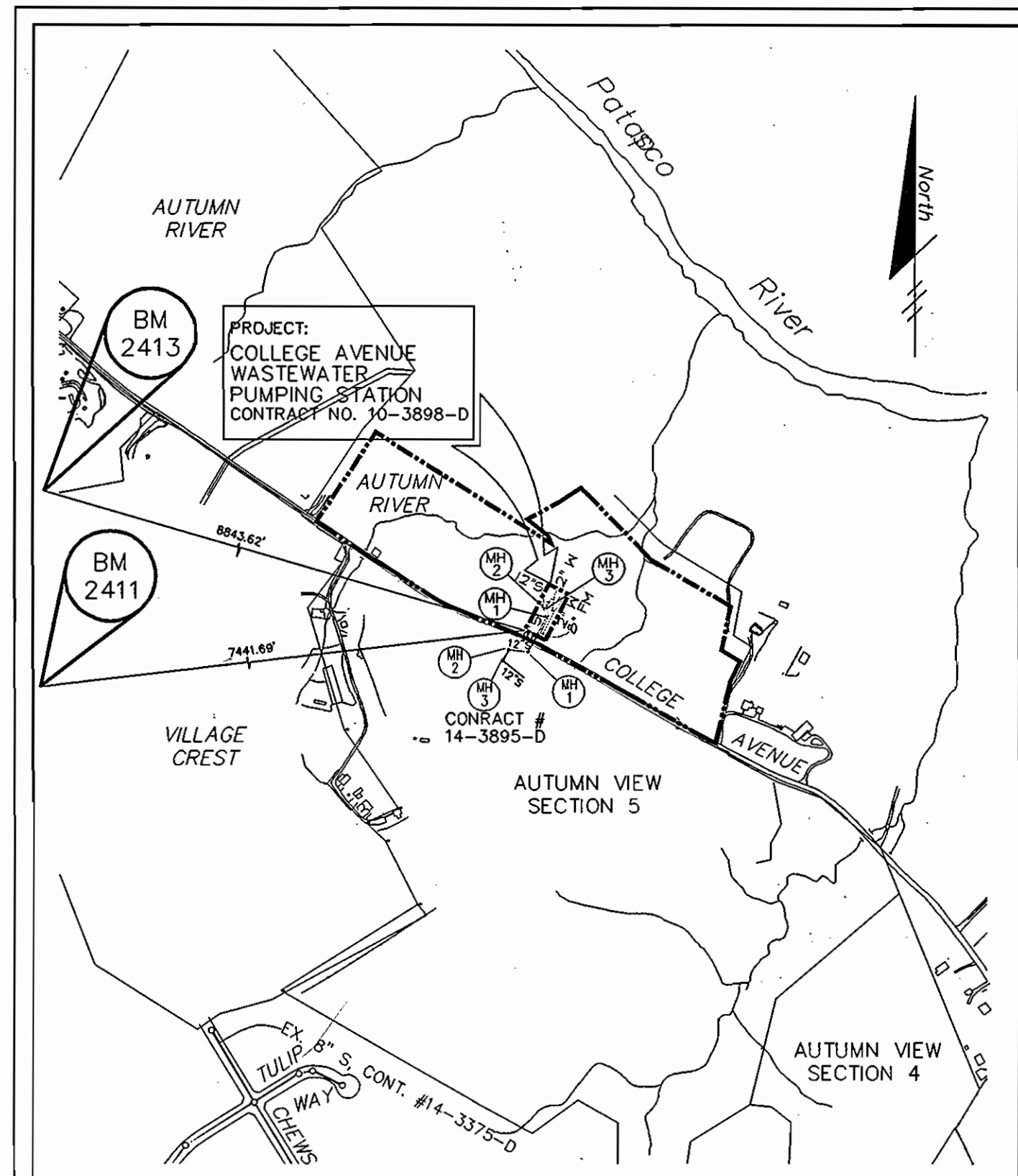
COLLEGE AVENUE WASTEWATER PUMPING STATION CONTRACT NO. 10-3898-D



GENERAL SITE NOTES:

- SUBJECT PROPERTY IS LOCATED ON TAX MAP NO. 25, GRID 21, PARCEL 112, AND IS DESIGNATED AS OPEN SPACE LOT #4 ON THE PLAT PREPARED UNDER F-01-08.
- PRESENT ZONING IS R-ED (RESIDENTIAL, ENVIRONMENTAL DEVELOPMENT), PER 10/18/93 COMPREHENSIVE ZONING PLAN.
- TOTAL AREA OF PROPERTY: 0.48 AC. or 2111 S.F.
- PROPERTY REFERENCE: PARENT TRACT DEED REFERENCE: 3889/125
- PARKING DATA:
 - INTENDED USE OF STRUCTURE: WASTEWATER PUMPING STATION
 - NUMBER OF SPACES REQUIRED: 2 PER HOWARD COUNTY DESIGN MANUAL, VOLUME II, SECTION 5.2, ITEM 2
 - NUMBER OF SPACES PROVIDED: 2 REGULAR SPACES (4' x 10')
- BUILDING COVERAGE OF SITE: 0.01 AC. or 2.08% OF GROSS AREA.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/DIVISION OF CONSTRUCTION INSPECTION AT (410) 318-1800 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-251-7111 AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO ANY EXCAVATION WORK.
- SEE THIS SHEET FOR SCHEMATIC BUILDING PROFILES.
- ALL EXTERIOR LIGHTING OF BUILDING WILL BE DIRECTED DOWNWARD.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS & SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS & SPECIFICATIONS IF APPLICABLE AND SHALL COMPLY WITH SECTION 184 OF THE ZONING REGULATIONS.
- PLAN DIMENSIONS ARE TYPICALLY TO FACE OF BUILDING, CENTERLINE OF PERIMETER CURB, CENTERLINE OF PIPES, OR TO THE PROPERTY LINE.
- THE EXISTING TOPOGRAPHY IS TAKEN FROM FIELD SURVEY WITH TWO (2) FOOT CONTOUR INTERVALS PREPARED BY FISHER, COLLINS & CARTER INC. PERFORMED ON OR ABOUT AUGUST 1999.
- EXISTING UTILITIES ARE BASED ON INFORMATION AND PLANS PROVIDED BY MILDENBERG, BOENDER & ASSOC., INC.
- THERE ARE NO TIDAL NOR NON-TIDAL WETLANDS ON THIS SITE AS DETERMINED BY CHEESAPEAKE ENVIRONMENTAL IN MARCH 1995 AND SHOWN ON S-18-16.
- COLLEGE AVENUE IS CLASSIFIED AS A SCENIC ROAD AND ALL SPECIFICATIONS AND REQUIREMENTS HAVE BEEN ADHERED TO ACCORDING TO RESOLUTION NO. 101-1984, AMENDMENTS TO THE DESIGN MANUAL STANDARDS FOR IMPROVEMENTS TO SCENIC ROADS PER VOL. III HOWARD COUNTY ROADS & BRIDGES DESIGN MANUAL.
- REQUIRED SETBACKS FOR R-ED ZONING HAVE BEEN ADDRESSED AS FOLLOWS:

FRONT SETBACK: REQUIRED = 75' PROVIDED:	SIDE SETBACK: REQUIRED = 75' PROVIDED: 81' (35.5' L, 39' R)	REAR SETBACK: REQUIRED = 25' PROVIDED:
130' BUILDING; 75' FENCE	50.5' BUILDING; 25' FENCE	
- SITE CONSISTS OF SOIL CLASSIFICATIONS B' (NoC2) and C' (MsD, MsF) TYPE SOILS: NoC2- NESHAMINY SILT LOAM, 8 TO 15 PERCENT SLOPES, MODERATELY ERODED MID-MONTALTO AND RELAY VERY STONEY SILT LOAMS, 3 TO 25 PERCENT SLOPES MsF-MONTALTO AND RELAY VERY STONEY SILT LOAMS, 25 TO 60 PERCENT SLOPES.
- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.
- REFERENCE HOWARD COUNTY FILE NUMBERS: S-98-16, P-99-16, F-00-181, P.B. 325, F-01-08.
- ANY REFUSE AND DEBRIS FOUND ON THE SITE WILL BE EXCAVATED AND REMOVED FROM THE SITE TO AN APPROVED LANDFILL PRIOR TO PERFORMING ANY OTHER GRADING OPERATIONS.
- SDP-02-85 WILL ADDRESS SPM PER THE MDE 2000 MANUAL. GRASS SMALES IN COMBINATION WITH DRY SMALES WILL BE UTILIZED TO TREAT THE STORMWATER DRAINING FROM THE PROPOSED DEVELOPMENT. THESE EMPS ARE PUBLICLY OWNED AND MAINTAINED. THE MAINTNANCE SCHEDULE IS AS SHOWN ON SHEET 4.
- THE FOREST CONSERVATION HAS BEEN ADDRESSED ON F-01-08. FOREST CONSERVATION OBLIGATIONS FOR OPEN SPACE OF LOT 4 ARE BEING MET BY A PROVIDED FOREST CONSERVATION EASEMENT OF 0.28 ACRES ON BULK PARCEL "B"
- NO CLEARINGS, GRADINGS, OR CONSTRUCTION IS PERMITTED WITHIN WETLANDS, STREAMS, OR THEIR BUFFERS, AND FOREST CONSERVATION EASEMENT AREAS.



NUMBER	NORTH	EAST	ELEVATION
2411	175,960.9842 m.	416,380.5461 m.	487.419 ft.
2413	176,982.1419 m.	416,045.0472 m.	404.518 ft.

GENERAL WATER AND SEWER NOTES:

- APPROXIMATE LOCATIONS OF EXISTING MAINS OR POTENTIALLY CONCURRENT WORK BY OTHERS IS SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING OR CONSTRUCTED MAINS AND SERVICES AND TO MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE TO EXISTING OR CONSTRUCTED MAINS SHALL BE IMMEDIATELY REPAIRED TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
- ALL HORIZONTAL CONTROLS ARE BASED ON MARYLAND STATE COORDINATES, NAD 83, PER A SURVEY BY FISHER, COLLINS & CARTER, INC., GEODETIC CONTROL STATIONS NO. 2411 AND NO. 2413.

STA. 2411	N 175960.9842	E 416380.5461 (Meters)
STA. 2413	N 176982.1419	E 416045.0472 (Meters)
- FOR DETAILED RECOVERY INFO, SEE DRAWINGS FOR CONTRACT NO. 14-8420-D OR CONTACT FISHER, COLLINS & CARTER AT 410-461-2855.
- ALL VERTICAL CONTROLS ARE BASED ON NAVD 29 PER THE TRAVERSE POINTS NOTED IN ITEM 2 ABOVE.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS UNLESS OTHERWISE NOTED ON THE PLANS.
- CLEAR ALL UTILITIES BY A MINIMUM OF 12". CLEAR ALL POLES BY A MINIMUM OF 5'-0" OR TUNNEL AS REQUIRED UNLESS OTHERWISE NOTED. THE OWNER HAS NOT MADE ARRANGEMENTS FOR BRACING OF ANY POLES. IN THE EVENT THE CONTRACTOR'S WORK REQUIRES THE BRACING OF POLES, ANY COST INCURRED BY THE OWNER FOR THE BRACING OF POLES OR DAMAGES SHALL BE DEDUCTED FROM MONIES OWED THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES TO SCHEDULE THE BRACING OF THE POLES.
- FOR DETAILS NOT SHOWN ON THE DRAWINGS, AND FOR MATERIALS AND CONSTRUCTION METHODS, USE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (LATEST EDITION). THE CONTRACTOR SHALL HAVE A COPY OF VOLUME IV ON THE JOB.
- NO TEST FITS HAVE BEEN MADE ON EXISTING UTILITIES. EXISTING UTILITIES IN THE VICINITY OF THE PROPOSED WORK FOR WHICH TEST FITS HAVE NOT BEEN DUG SHALL BE LOCATED BY THE CONTRACTOR TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS AT HIS OWN EXPENSE.
- THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS.

AT&T	1-800-526-2000
BSE (CONTRACTOR SERVICES)	410-850-4620
BSE (UNDERGROUND DAMAGE CONTROL)	410-181-1068
BUREAU OF UTILITIES	410-318-4400
BELL ATLANTIC MARYLAND, INC.	1-800-621-9400
COLONIAL PIPELINE CO.	410-745-1340
MISS UTILITY	1-800-251-7111
STATE HIGHWAY ADMINISTRATION	410-591-5588
- TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO THE MAXIMUM EXTENT POSSIBLE. TREES AND SHRUBS LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR WITHOUT GIVING NOTIFICATION TO HOWARD COUNTY DEPARTMENT OF ZONING PLANNING DEVELOPMENT ENGINEERING DIVISION.
- THE CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG THE LINE OF EXCAVATION. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONSTRUCTION OF THE MAIN.
- THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT (410) 318-1450 AT LEAST FIVE WORKING DAYS BEFORE OPEN CUTTING OR BORING/LACKING OF ANY COUNTY ROAD FOR LAYING WATER/SEWER MAINS OR HOUSE CONNECTIONS. THE APPROVAL OF THESE DRAWINGS WILL CONSTITUTE COMPLIANCE WITH DPM REQUIREMENTS PER SECTION 18.114(a) OF THE HOWARD COUNTY CODE.

GENERAL WATER NOTES:

- ALL WATER MAINS SHALL BE D.I.P. CLASS 52 UNLESS OTHERWISE NOTED.
- TOPS OF ALL WATER MAINS SHALL HAVE A MINIMUM OF 3'-6" OF COVER UNLESS OTHERWISE NOTED.
- VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
- ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS UNLESS OTHERWISE PROVIDED FOR ON THE DRAWINGS.
- THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.

GENERAL SEWER NOTES:

- ALL SEWER MAINS SHALL BE D.I.P. UNLESS OTHERWISE NOTED.
- ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
- FORCE MAINS SHALL BE D.I.P. ONLY.

ITEMS	ESTIMATED QUANTITIES		AS-BUILT		
	QUANTITY	UNIT	QUANTITIES	TYPE	MANUF./SUPPLIER
PUMPING STATION COMPLETE AND IN-PLACE	1	EACH	1 EA.		
SOIL ODOR FILTER	1	EACH	1 EA.		
8" SEWER D.I.P.	322	LF	322 LF.		ARMSTEAD
8" GATE VALVE	3	EACH	3 EA.		U.S. PIPE
4" MANHOLE	1	EACH	1 EA.		ATLANTIC
5" MANHOLE	2	EACH	2 EA.		ATLANTIC
6" F.H. ASSEMBLY W/VALVE		EACH	1 EA.		MUELLER
2" WHC	183	LF	183 LF.		K. COPPER
2" VALVE	3	EACH	3 EA.		U.S. PIPE
3/4" WATER	50	LF	50 LF.		K. COPPER
4" PVC	68	LF	68 LF.		J. M.

NAME OF UTILITY CONTRACTOR
SURVEY AND DRAFTING DIVISION AS-BUILT DATE:

OWNER/DEVELOPER INFORMATION

OWNER:
AUTUMN RIVER CORPORATION
4100 COLLEGE AVENUE
ELLICOTT CITY, MARYLAND 21043-0388

DEVELOPER:
LAND DESIGN & DEVELOPMENT
8000 MAIN STREET
ELLICOTT CITY, MD 21043
ATTN: DONALD R. REUMER

ENGINEER'S CERTIFICATION

"I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT 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 M. SELL
DATE: 1/10/03

DEVELOPER'S CERTIFICATION

"WE HEREBY CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINED PROGRAM FOR SEDIMENT AND EROSION CONTROL BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY. SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY DESIGN MANUAL AND STANDARDS & SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS AS SHOWN ON THESE PLANS."

DONALD R. REUMER
DATE: 2/10/03

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

DIRECTOR: Mark D. Layton
DATE: 5/17/03

CHIEF, DIVISION OF LAND DEVELOPMENT: Cindy Hermit
DATE: 5/14/03

CHIEF, DEVELOPMENT ENGINEERING DIVISION: [Signature]
DATE: 3/16/03

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

U.S.D.A. - NATURAL RESOURCES CONSERVATION SERVICE: Jim Murray
DATE: 2/16/03

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

HOWARD SOIL CONSERVATION DISTRICT: [Signature]
DATE: 2/16/03

PROJECT	SECTION/AREA	LOT NO.	LOT/PARCEL #	STREET ADDRESS			
AUTUMN RIVER - OPEN SPACE LOT 4	N/A	OPEN SPACE LOT 4					
COLLEGE AVE. WASTEWATER PUMPING STATION							
PLAT NO.	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.	LOT/PARCEL #	STREET ADDRESS
15794-15795	21	R-ED	25	2nd	6027	OPEN SPACE LOT 4 P/O, PARCEL 112	4297 COLLEGE AVENUE
WATER CODE	SEWER CODE						
001	1253100						

RECORD DRAWING

This record drawing has been prepared, in part, based upon information furnished by others. While this information is believed to be reliable, the Engineer cannot assure its accuracy, and thus is not responsible for the accuracy of this record drawing or for any errors or omissions which may have been incorporated hereon as a result. Those relying on this record drawing are advised to obtain verification of its accuracy before relying thereon for any purpose.

By: [Signature]
Date: 12/12/02

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE: 12/12/2002

McCRONE
ENGINEERING & ENVIRONMENTAL SCIENCES
LAND PLANNING & SURVEYING & CONSTRUCTION SERVICES
20 ROCHELLE AVENUE
ANNAPOLIS, MARYLAND 21401
(410) 387-8821
ANNAPOLIS-CENTREVILLE-SALISBURY-ELKTON-PRINCE FREDERICK

DRN: J. Slenke					
DES: J. Walker					
CHK: R. Sell					
DATE: 5/7/02	BY: No.	REVISION	DATE		

COVER SHEET

SITE DEVELOPMENT PLAN
COLLEGE AVENUE WASTEWATER PUMPING STATION
AUTUMN RIVER
OPEN SPACE LOT 4
CONTRACT NO. 10-3898-D
GRID 21
P/O PARCEL 172
HOWARD COUNTY, MARYLAND

TAX MAP 25
SECOND ELECTION DISTRICT

SCALE: AS SHOWN
SDP SHEET 1 OF 7

STAKEOUT TABLES

SEWER MANHOLE LOCATION DATA		
SMH	NORTHING	EASTING
1	578228.0945	1373542.2210
2	578258.6045	1373532.3494
3	578256.6704	1373546.6192

8" FORCE MAIN LAYOUT		
DESCRIPTION	NORTHING	EASTING
INTO BLDG.	578267.8009	1373552.3078
45' HB	578249.1380	1373542.7696
45' HB	578227.4888	1373549.7744
8" PLUG	578142.3411	1373506.2571

2" WATER		
DESCRIPTION	NORTHING	EASTING
WATER CONNECTION "A"		
2" TAP	578116.1930	1373506.3248
2" VALVE	578118.2488	1373507.3994
2" X 2" TEE	578236.4032	1373567.7618
2" VALVE	578240.5574	1373569.8849
WATER CONNECTION "B"		
2" VALVE	578238.2895	1373564.0182
INTO BLDG.	578269.6592	1373548.6718

BUILDING LAYOUT		
CORNER*	NORTHING	EASTING
N	578305.3363	1373560.1675
S	578263.2755	1373561.8875
E	578295.9282	1373578.5726
W	578272.6836	1373543.4793

8" SEWER LAYOUT		
DESCRIPTION	NORTHING	EASTING
INTO WET WELL	578277.9169	1373542.2196
TIE-IN (SMH2)**	578273.2744	1373503.6419
TIE-IN (SMH1)**	578145.5092	1373500.0131

*NOTE: Based on Building Walls

**NOTE: Point Taken @ Property Line

OWNER/DEVELOPER INFORMATION

OWNER:
AUTUMN RIVER CORPORATION
4100 COLLEGE AVENUE
ELLCOTT CITY, MARYLAND 21043-0396

DEVELOPER:
LAND DESIGN & DEVELOPMENT
8000 MAIN STREET
ELLCOTT CITY, MD 21043
ATTN: DONALD R. REUWER

ENGINEER'S CERTIFICATION

"I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT 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."



DEVELOPER'S CERTIFICATION

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"SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 210 OF THE HOWARD COUNTY DESIGN MANUAL AND STANDARDS & SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS AS SHOWN ON THESE PLANS."

Donald R. Reuwer
DONALD R. REUWER
2/10/03
DATE

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

Masha J. Cayle
DIRECTOR
5/19/02
DATE

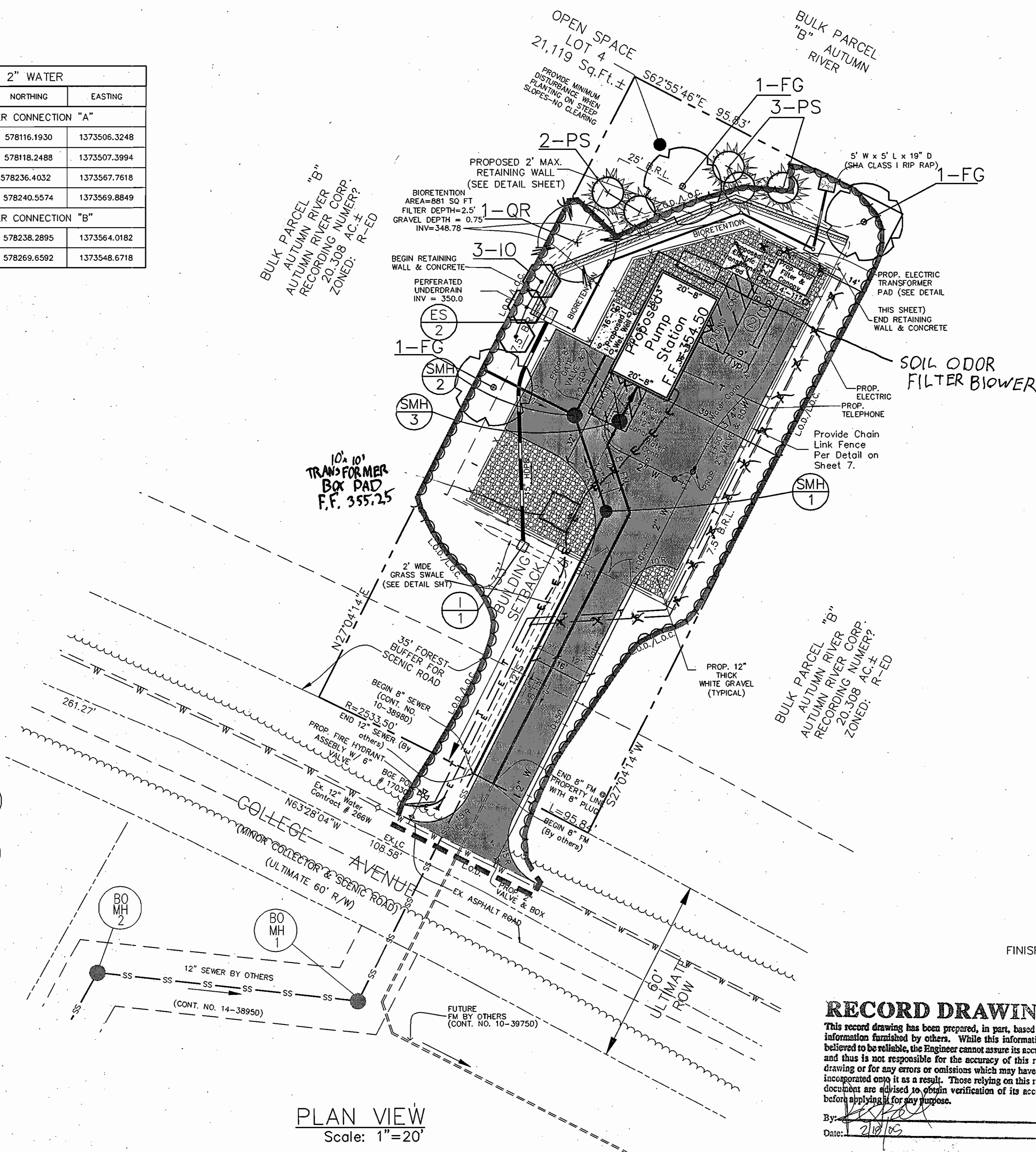
Cindy Hamat
CHIEF, DIVISION OF LAND DEVELOPMENT
5/19/02
DATE

Robert M. Sell
CHIEF, DEVELOPMENT ENGINEERING DIVISION
2/10/03
DATE

PROJECT		SECTION/AREA	LOT NO.		
AUTUMN RIVER - OPEN SPACE LOT 4 COLLEGE AVE. WASTEWATER PUMPING STATION		N/A	OPEN SPACE LOT 4		
PLAT NO.	BLOCK NO.	ZONE	TAXZONE	ELEC. DIST.	CENSUS TR.
15794-15795	21	R-ED	25	2nd	8027
WATER CODE		SEWER CODE			
G01		1253100			

LEGEND

- Existing Woods
- Existing Utility Pole
- Existing Pavement
- Existing Centerline of Road
- Proposed Building
- Proposed Sewer
- Proposed Sewer by Others
- Proposed Water
- Proposed Fence
- Proposed Pavement
- Proposed Gravel
- Proposed Treat/Limit of Disturbance
- Proposed Limit of Disturbance



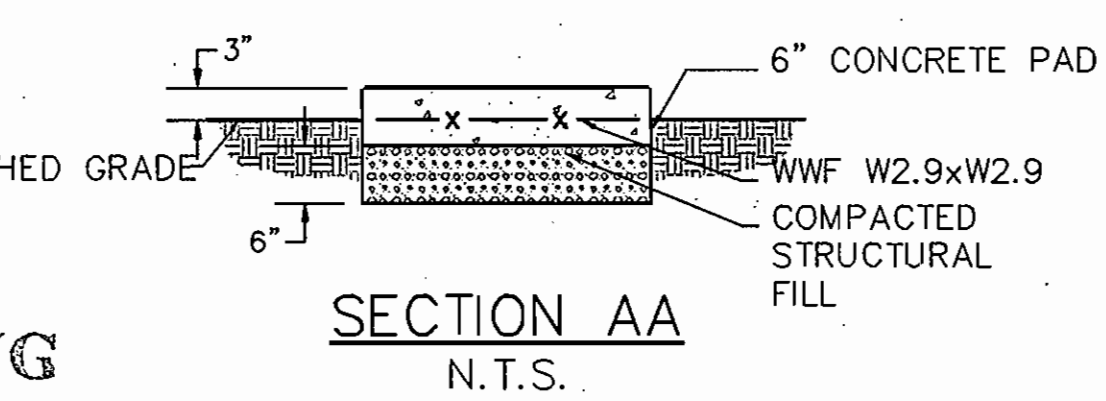
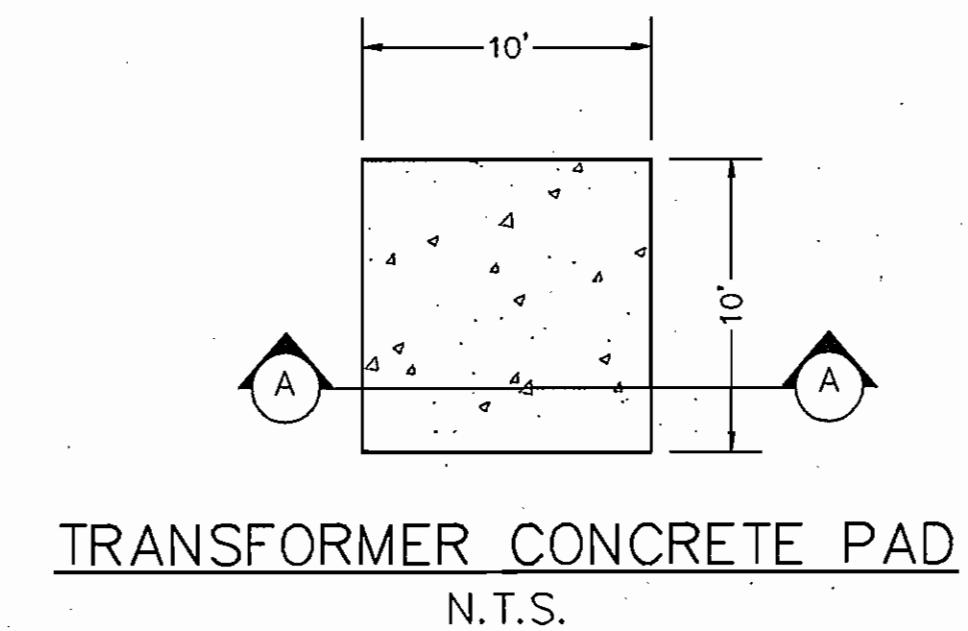
PLAN VIEW
Scale: 1"=20'

RECORD DRAWING

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By: *Robert M. Sell*
Date: 2/10/03

NOTE:
FOR PROPOSED GRADES AND SPOT ELEVATIONS SEE SHEET 3 OF 7



APPROVED
PLANNING BOARD
of HOWARD COUNTY

DATE 12/12/2002

PLOTTED: Feb 07, 2003 - 2:07pm

33000010

McCRONE
ENGINEERING & ENVIRONMENTAL SCIENCES
LAND PLANNING & SURVEYING & CONSTRUCTION SERVICES
20 ROBESY AVENUE
ANNAPOLIS, MARYLAND 21401
(410) 287-8521



DRN: J. Slenke					
DES: J. Walker					
CHK: R. Sell					
DATE: 5/7/02	BY	No.	REVISION	DATE	

SITE & UTILITY PLAN

SITE DEVELOPMENT PLAN
COLLEGE AVENUE WASTEWATER PUMPING STATION
AUTUMN RIVER
OPEN SPACE LOT 4
CONTRACT NO. 10-3898-D
GRID 21
P/O PARCEL 172
HOWARD COUNTY, MARYLAND

TAX MAP 25
SECOND ELECTION DISTRICT

SCALE
1"=20'
SDP SHEET
2 OF 7

SDP-02-85

1000033-SITE -XREFS/IMAGES
CADD FILE: G:\1000033 - College Avenue\Drawings\CollegeAve-SDPBIO SDP -Submittal.dwg

ELEV.	SOIL DESCRIPTION	STRA. DEPTH	DEPTH SCALE	CON.	SAMPLE BLOWS #	NO.	REC.	BORING & SAMPLING NOTES
	Gray, moist, silty, sandy silt, trace roometer (M)	0.0			1	43-10	1	7" Topsoil
	Orange Brown/black, moist, medium dense to very dense, silty sand, little mica and rock fragments (S4)	5.0			2	4-10-18	2	No groundwater encountered while drilling
		10.0			3	10-9-11	3	Caved in at 8.0' at Completion
		15.0			4	10-17-44	4	
	Brown/Gray, dry, very dense, silty sand with some rock fragments (GM)	20.0			5	500	5	
	Decomposed Rock				6	504	6	
	Rock core - kyanite, very poor quality amphibole				7	500	7	

BORING #1
N.T.S.

ELEV.	SOIL DESCRIPTION	STRA. DEPTH	DEPTH SCALE	CON.	SAMPLE BLOWS #	NO.	REC.	BORING & SAMPLING NOTES
	Gray, moist, medium silty sandy silt, trace roometer (M)	0.0			1	2-3-3	1	14" 7" Topsoil
	Orange Brown, moist, medium dense micaceous silty sand (S4)	5.0			2	6-7-9	2	No groundwater encountered while drilling
		10.0			3	4-7-0	3	Caved in at 16.0' at Completion
	Green/Gray, moist, medium dense to very dense, silty sand, little mica and weathered rock (SM)	15.0			4	7-9-12	4	Caved in at 15' after 24 hours
		20.0			5	6-13-16	5	Backfilled after 24 hours
					6	10-15-17	6	
					7	7-10-14	7	

BORING #2
N.T.S.

ELEV.	SOIL DESCRIPTION	STRA. DEPTH	DEPTH SCALE	CON.	SAMPLE BLOWS #	NO.	REC.	BORING & SAMPLING NOTES
	Gray, moist, medium silty sandy silt, trace roometer (M)	0.0			1			7" Topsoil
	Orange Brown, moist, medium dense micaceous silty sand (S4)	5.0						No groundwater encountered while drilling
	Green/Gray, moist, medium dense to very dense, silty sand, little mica and weathered rock (SM)	10.0						
	End boring	11.0						

BORING #3
N.T.S.

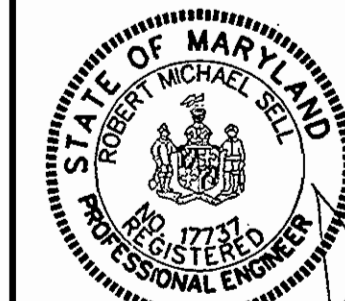
OWNER/DEVELOPER INFORMATION

OWNER:
AUTUMN RIVER CORPORATION
4100 COLLEGE AVENUE
ELICOTT CITY, MARYLAND 21043-0398

DEVELOPER:
LAND DESIGN & DEVELOPMENT
8000 MAIN STREET
ELICOTT CITY, MD 21043
ATTN: DONALD R. REUMER

ENGINEER'S CERTIFICATION

"I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT 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 M. SELL
DATE: 2/10/03

DEVELOPER'S CERTIFICATION

"I HEREBY CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR SEDIMENT AND EROSION CONTROL BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY. SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 210 OF THE HOWARD COUNTY DESIGN MANUAL AND STANDARDS & SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS AS SHOWN ON THESE PLANS."

Donald R. Reumer
DONALD R. REUMER
DATE: 2/10/03

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

Frank D. Cagle
DIRECTOR
DATE: 5/13/02

Craig H. Smith
CHIEF, DIVISION OF LAND DEVELOPMENT
DATE: 4/14/02

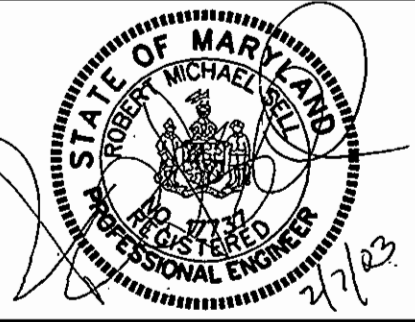
Michael J. ...
CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE: 2/14/03

LEGEND

- Existing Woods
- Existing Utility Pole
- Existing Pavement
- Existing Centerline of Road
- Existing 10 Foot Contour
- Existing 2 Foot Contour
- Existing Soil Boundary
- Existing 15-25% Slopes
- Existing 25% & Greater Slopes
- Proposed Building
- Proposed Sewer
- Proposed Sewer by Others
- Proposed Water
- Proposed Fence
- Proposed Pavement
- Proposed Gravel
- Proposed 10 Foot Contour
- Proposed 2 Foot Contour
- Proposed Treatise/Limit of Disturbance
- Proposed Limit of Disturbance

PROJECT	SECTION/AREA	LOT NO.			
AUTUMN RIVER - OPEN SPACE LOT 4 COLLEGE AVE. WASTEWATER PUMPING STATION	N/A	OPEN SPACE LOT 4			
PLAT NO.	BLOCK NO.	ZONE	TAXZONE	ELEC. DIST.	CENSUS TR.
15714-15715	21	R-ED	25	2nd	0027
WATER CODE	SEWER CODE				
G01	1263100				

McCRONE
ENGINEERING & ENVIRONMENTAL SCIENCES
LAND PLANNING & SURVEYING & CONSTRUCTION SERVICES
20 RIDGELY AVENUE
ANNAPOLIS, MARYLAND 21401
(410) 297-8621

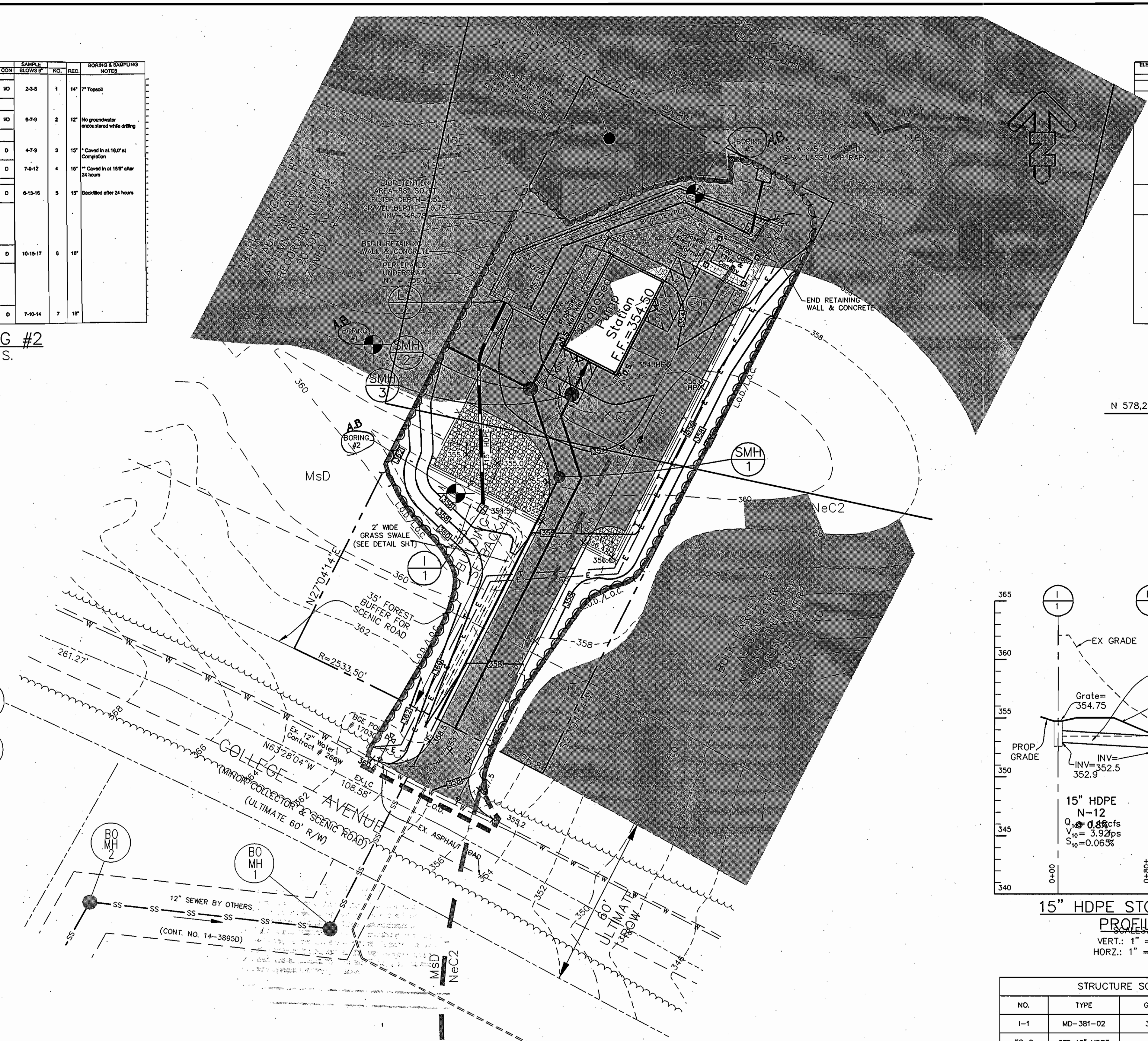


DRN:	DES:	CHK:	DATE:	BY:	No.	REVISION	DATE:
J. Slenke	J. Walker	R. Sell	5/7/02				

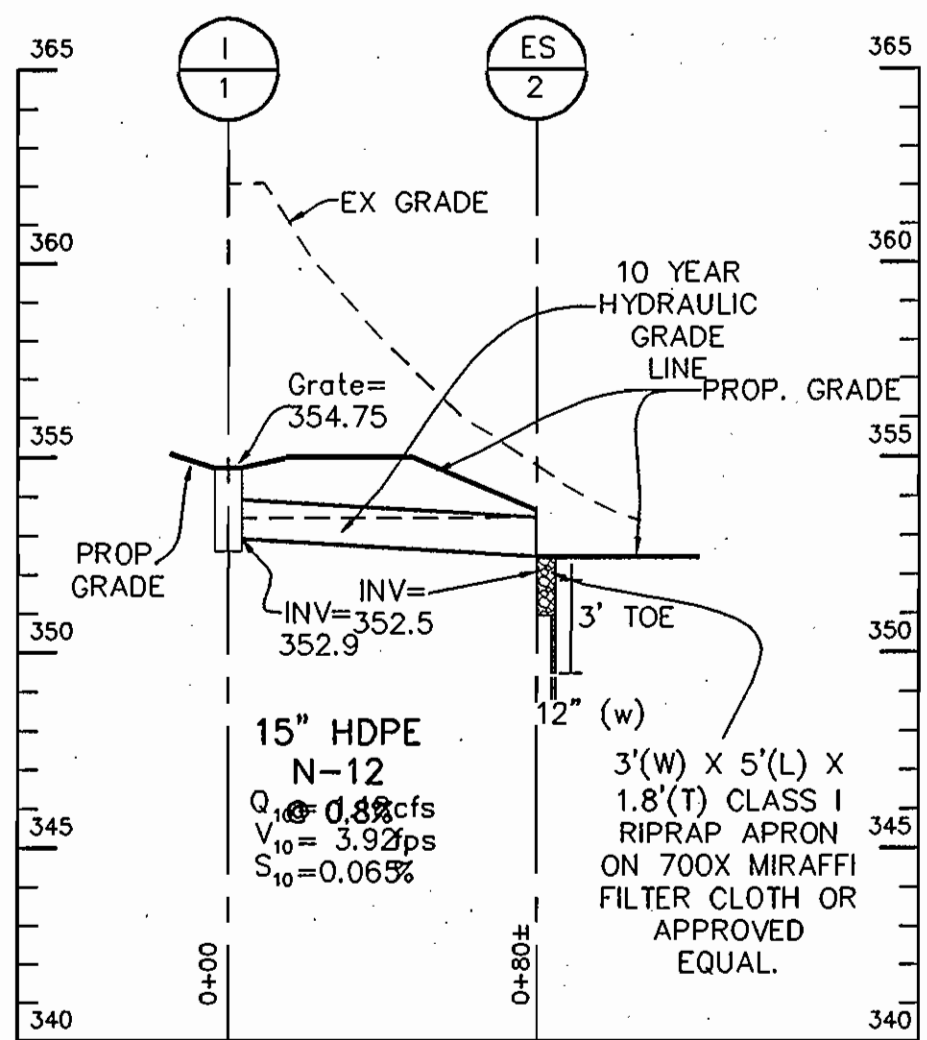
RECORD DRAWING

"This record drawing has been prepared, in part, based upon information furnished by others. While this information is believed to be reliable, the Engineer cannot assure its accuracy, and thus is not responsible for any errors or omissions which may have been incorporated herein as a result. Those relying on this record document are advised to obtain verification of its accuracy before applying it for any purpose."

By: *Robert M. Sell*
DATE: 2/18/05



PLAN VIEW
Scale: 1"=20'



15" HDPE STORMDRAIN PROFILE

VERT.: 1" = 5'
HORIZ.: 1" = 50'

STRUCTURE SCHEDULE			
NO.	TYPE	GRATE	INV. OUT
I-1	MD-381-02	354.5	352.5
ES-2	STD 15" HDPE		352.0
END SECTION			

APPROVED
PLANNING BOARD
OF HOWARD COUNTY

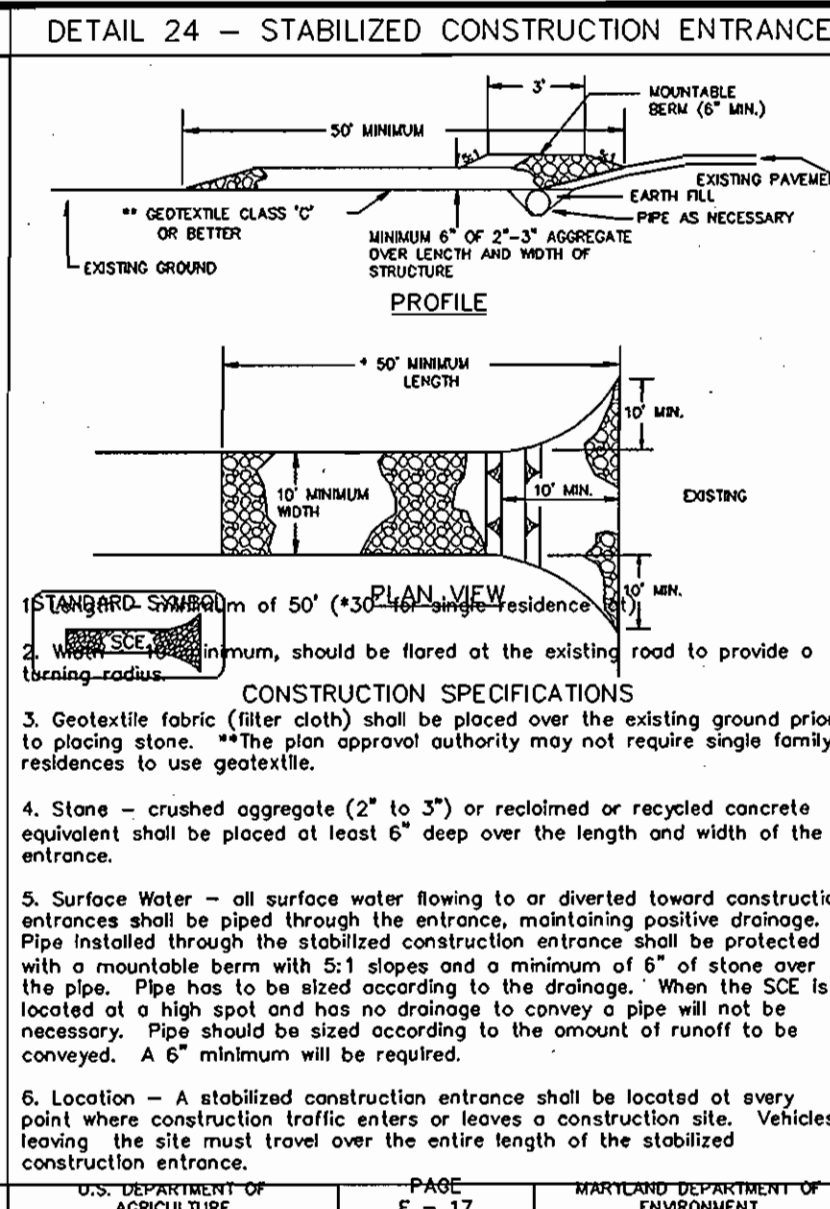
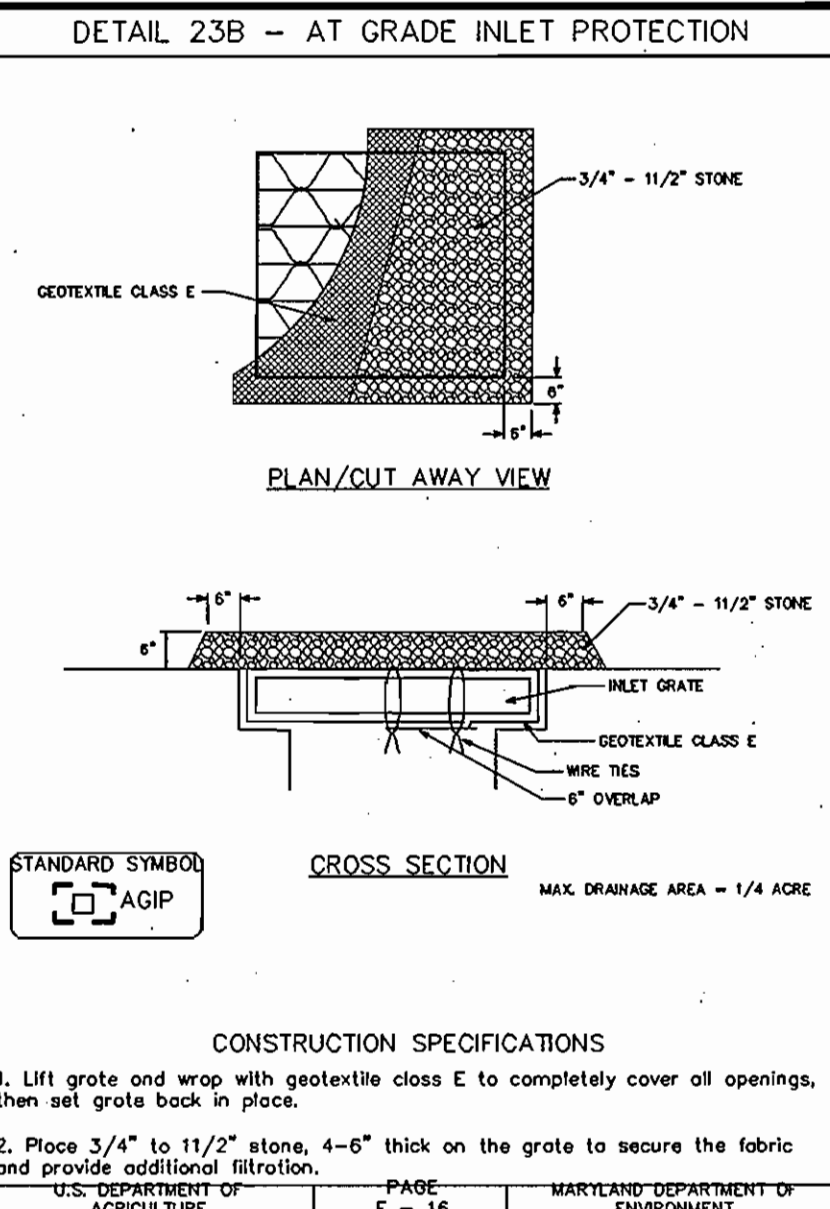
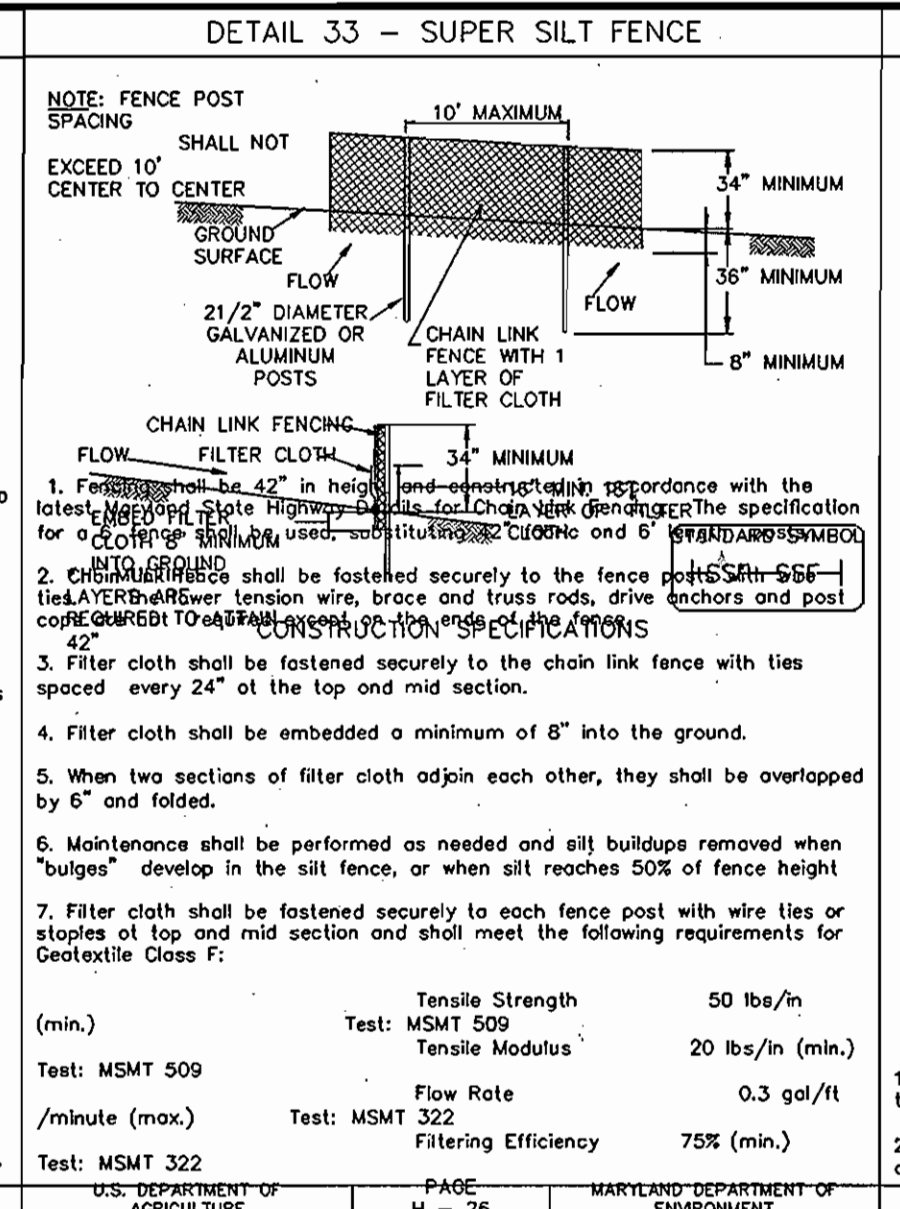
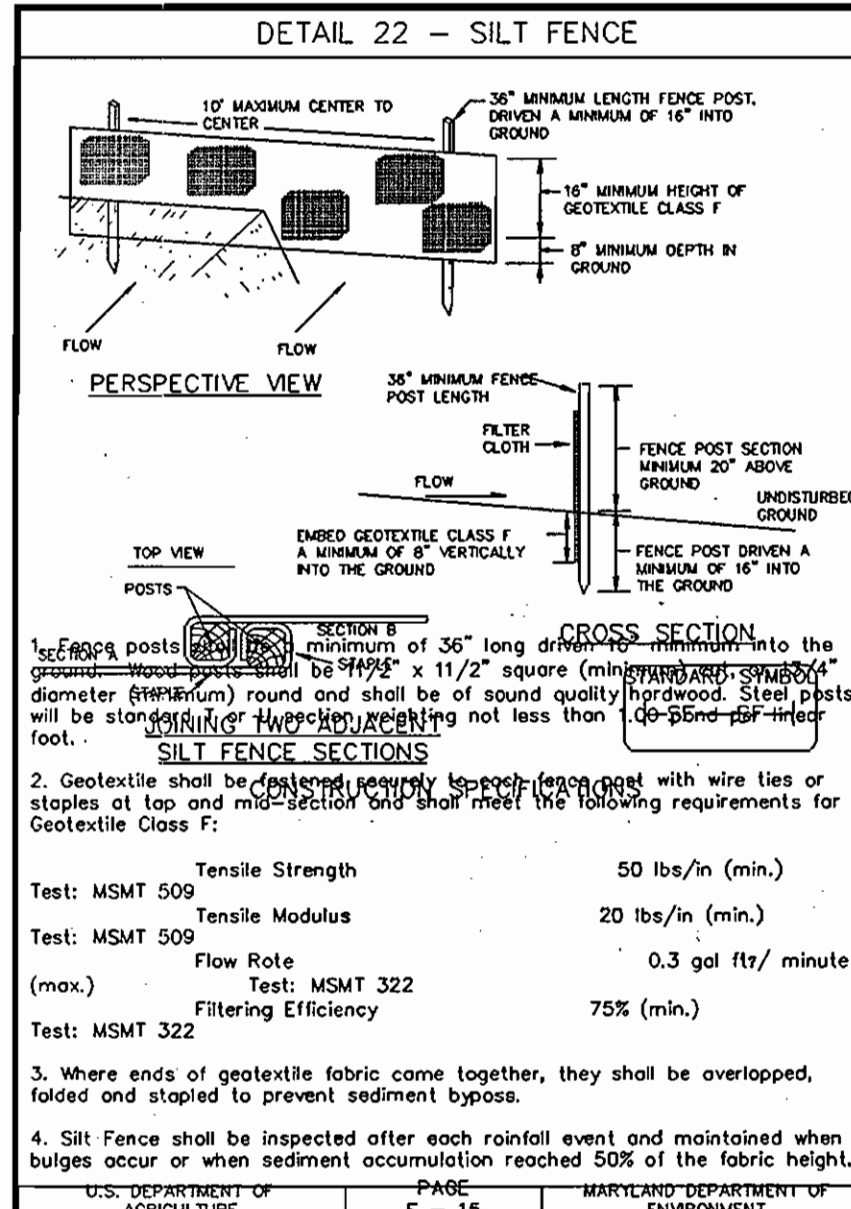
DATE: 12/12/2002

GRADING PLAN

SITE DEVELOPMENT PLAN
COLLEGE AVENUE WASTEWATER PUMPING STATION
AUTUMN RIVER
OPEN SPACE LOT 4
CONTRACT NO. 10-3888-D
GRID 21
P/O PARCEL 172
HOWARD COUNTY, MARYLAND

TAX MAP 25
SECOND ELECTION DISTRICT

SCALE
1"=20'
SHEET
3 OF 7



SEQUENCE OF WORK

- OBTAIN GRADING PERMIT. (2 WEEKS)
- CLEAR FOR AND INSTALL STABILIZED CONSTRUCTION ENTRANCE (SCE), SILT FENCE (SF), EARTH DIKE (A-1) & TREE PROTECTION FENCE (TPF) AS SHOWN ON PLAN. (1 DAY)
- THE CONTRACTOR SHALL INSPECT & PROVIDE NECESSARY MAINTENANCE ON THE SEDIMENT & EROSION CONTROL STRUCTURES SHOWN HEREON, AFTER EACH RAINFALL & ON A DAILY BASIS.
- REMOVE SEDIMENT FROM ROADWAY & DRESS STONE CONSTRUCTION ENTRANCE AS REQUIRED. (1 DAY)
- CLEAR & GRUB SITE; GRADE TO SUBGRADE. (3 DAYS)
- CONSTRUCT UTILITIES; PUMPING STATION; APPURTENANCES, AND STORM DRAIN. (6 MONTHS)
- INSTALL CURB AND FENCE POSTS. (3 DAYS)
- PAVE DRIVEWAY AND PLACE WHITE STONE. (1 WEEK)
- FINE GRADE PERIMETER AREAS AND INSTALL STORMWATER MANAGEMENT BIORETENTION AREA. (5 DAYS)
- STABILIZE ALL REMAINING DISTURBED AREAS W/ PERMANENT SEEDING MIXTURE & STRAW MULCH. (2 DAYS)
- AFTER PERMISSION HAS BEEN GIVEN BY THE SEDIMENT CONTROL INSPECTOR, REMOVE SEDIMENT CONTROL MEASURES & STABILIZE REMAINING DISTURBED AREA W/ PERMANENT SEEDING MIXTURE & STRAW MULCH. (1 DAY)

OPERATION AND MAINTENANCE SCHEDULE FOR BIORETENTION AREAS (F6)

- Annual maintenance of plant material, mulch layer and soil is required. Maintenance of mulch and soil is limited to correcting areas of erosion or wash out. Any mulch replacement shall be done in the spring. Plant material shall be checked for disease and insect infestation and maintenance will address dead material and pruning.
- Schedule of plant inspection will be twice a year in spring and fall. This inspection will include removal of dead and diseased vegetation considered beyond treatment, treatment of all diseased trees and shrubs and replacement of all deficient stakes and wires.
- Mulch shall be inspected each spring. Remove previous mulch layer before applying new layer once every 2 to 3 events.
- Soil erosion to be addressed on an as needed basis, with a minimum of once per month and after heavy storm events.

LEGEND

- Existing Woods
- Existing Utility Pole
- Existing Pavement
- Existing Centerline of Road
- Existing 10 Foot Contour
- Existing 2 Foot Contour
- Existing Soil Boundary
- Existing 15-25% Slopes
- Existing 25% & Greater Slopes
- Proposed Silt Fence
- Proposed Super Silt Fence
- Proposed Stabilized Construction Entrance
- Proposed Building
- Proposed Sewer
- Proposed Sewer by Others
- Proposed Water
- Proposed Fence
- Proposed Pavement
- Proposed Gravel
- Proposed 10 Foot Contour
- Proposed 2 Foot Contour
- Proposed Tree Line
- Proposed Limit of Disturbance

PERMANENT SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE PERMANENT LONG-LIVED VEGETATIVE COVER IS NEEDED.

SEEDING PREPARATION: Loosen upper three inches of soil by raking, disking or other acceptable means before seeding. If not previously loosened.

SOIL AMENDMENTS: In lieu of soil test recommendations, use one of the following schedules:

- Prefered-Apply 2 tons per acre dolomitic limestone (42 lbs/1000 sq ft) and 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft) before seeding. Harrow or disc into upper three inches of soil. At the time of seeding, apply 600 lbs per acre 50-0-0 ureaform fertilizer (4 lbs/1000 sq ft).
- Acceptable-Apply 2 tons per acre dolomitic limestone (42 lbs/1000 sq ft) and 1200 lbs per acre 10-10-10 fertilizer (28 lbs/1000 sq ft) before seeding. Harrow or disc into upper three inches of soil.

SEEDING: For the periods March 1 thru April 30 and August 1 thru October 15, seed with 60 lbs per acre Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs Kentucky 31 Tall Fescue per acre and 2 lbs per acre (28 lbs/1000 sq ft) of seeding lovegrass. During the period of October 16 thru February 28, seed with 2 lbs per acre per acre well anchored straw mulch and seed as soon as possible in the spring. Option (2) like seed, Option (3) seed with 20 lbs per acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw.

MULCHING: Apply 1 1/2 to 2 tons per acre (70 to 140 lbs/1000 sq ft) of untreated small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 200 gallons per acre (8 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes 5 feet or higher, use 240 gallons per acre (8 gal/1000 sq ft) for anchoring.

MAINTENANCE: Inspect all seeded areas and make needed repairs, replacements and reseeding.

ENGINEER'S CERTIFICATION

I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT 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 M. SELL
DATE: 2/10/03

SEDIMENT CONTROL NOTES

- A minimum of 48 hours notice must be given to the Howard County Department of Inspection, License and Permits Sediment Control Division prior to the start of any construction (20-10-25).
- All vegetation and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1984 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, and revisions thereto.
- Following initial soil disturbance or redistribution, permanent or temporary stabilization shall be completed within (a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes, and all slopes greater than 5:1, (b) 14 days as to all other disturbed or graded areas on the project site.
- All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. I, Chapter 7, HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
- All disturbed areas must be stabilized within the time period specified above in accordance with the 1984 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, and revisions thereto. Temporary seeding, soil, temporary seeding and mulching (Sec. 6), temporary stabilization with mulch alone shall be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
- All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.

TEMPORARY SEEDING NOTES

SEEDING PREPARATION: Loosen upper three inches of soil by raking, disking or other acceptable means before seeding. If not previously loosened.

SOIL AMENDMENTS: Apply 600 lbs. per acre 10-10-10 fertilizer (14 lbs/1000 sq ft).

SEEDING: For periods March 1 thru April 30 and from August 1 thru November 15, seed with 2 1/2 tons per acre of annual ryegrass (52 lbs/1000 sq ft). For the period May 1 thru August 15, seed with 5 lbs. per acre of seeding lovegrass (27 lbs/1000 sq ft). For the period of October 16 thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use seed.

MULCHING: Apply 1 1/2 to 2 tons per acre (70 to 140 lbs/1000 sq ft) of untreated small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 200 gallons per acre (8 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes 5 feet or higher, use 240 gallons per acre (8 gal/1000 sq ft) for anchoring.

REFER TO THE 1984 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

RECORD DRAWING

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By: [Signature]
Date: 2/10/03

DEVELOPER'S CERTIFICATION

I HEREBY CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR SEDIMENT AND EROSION CONTROL BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY. I AGREE TO ACCEPT THE COSTS OF SUCH INSPECTIONS AND TO MAINTAIN RECORD MEASUREMENTS FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 210 OF THE HOWARD COUNTY DESIGN MANUAL AND STANDARDS & SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS AS SHOWN ON THESE PLANS.

DONALD R. REUWER
DATE: 2/10/03

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

Reviewed for HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

OWNER/DEVELOPER INFORMATION

OWNER:
AUTUMN RIVER CORPORATION
4100 COLLEGE AVENUE
ELICOTT CITY, MARYLAND 21043-0398

DEVELOPER:
LAND DESIGN & DEVELOPMENT
8000 MAIN STREET
ELICOTT CITY, MD 21043
ATTN: DONALD R. REUWER

PROJECT	SECTION/AREA	LOT NO.
AUTUMN RIVER - OPEN SPACE LOT 4	N/A	OPEN SPACE LOT 4
PLAT NO.	BLOCK NO.	ZONE
15714-15715	21	R-ED
WATER CODE	SEWER CODE	ELEC. DIST.
G01	1253100	2nd
CENSUS TR.		6027

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE: 12/12/2002

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

OWNER/DEVELOPER INFORMATION

OWNER:
AUTUMN RIVER CORPORATION
4100 COLLEGE AVENUE
ELICOTT CITY, MARYLAND 21043-0398

DEVELOPER:
LAND DESIGN & DEVELOPMENT
8000 MAIN STREET
ELICOTT CITY, MD 21043
ATTN: DONALD R. REUWER

PROJECT	SECTION/AREA	LOT NO.
AUTUMN RIVER - OPEN SPACE LOT 4	N/A	OPEN SPACE LOT 4
PLAT NO.	BLOCK NO.	ZONE
15714-15715	21	R-ED
WATER CODE	SEWER CODE	ELEC. DIST.
G01	1253100	2nd
CENSUS TR.		6027

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE: 12/12/2002

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

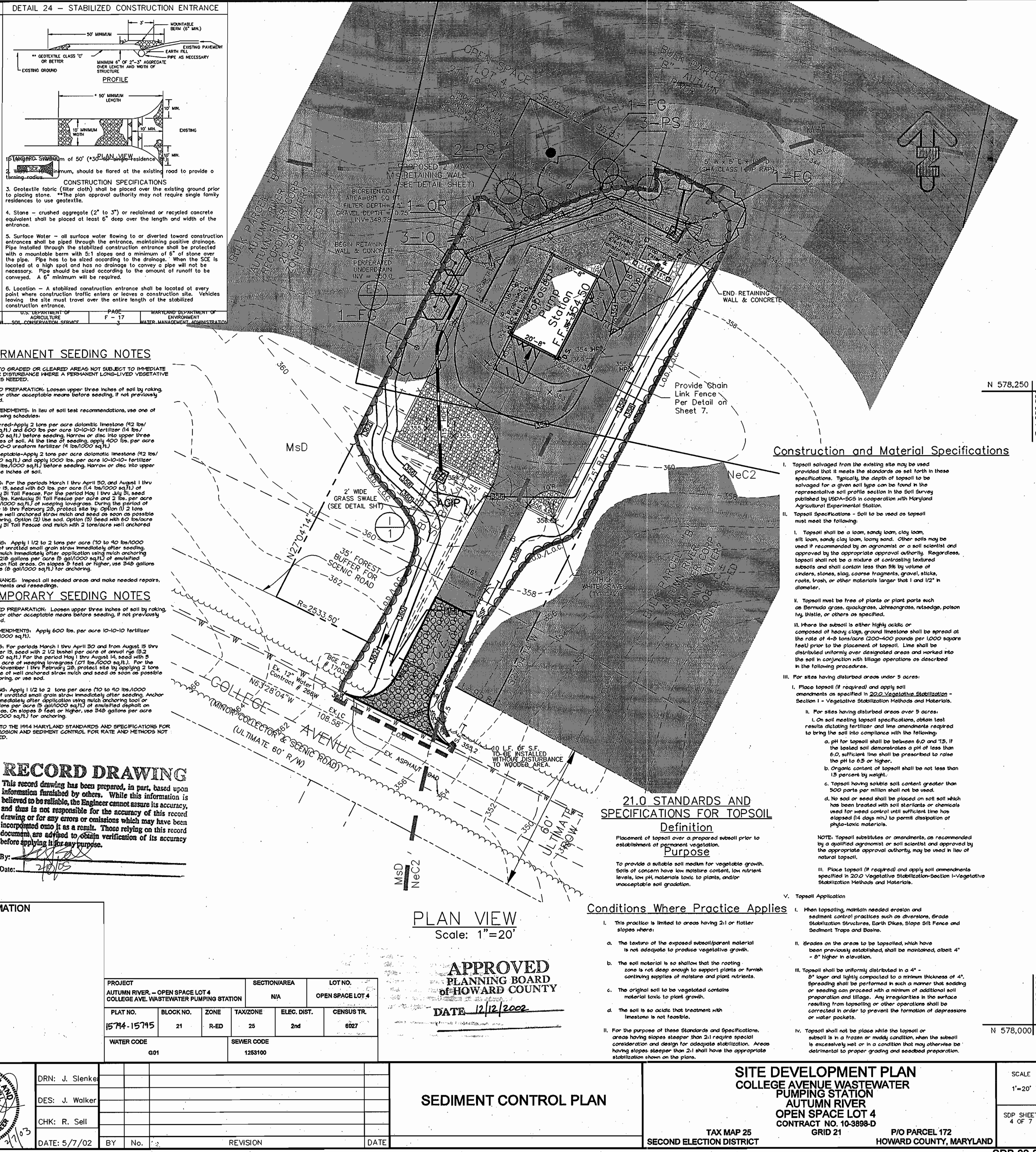
REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

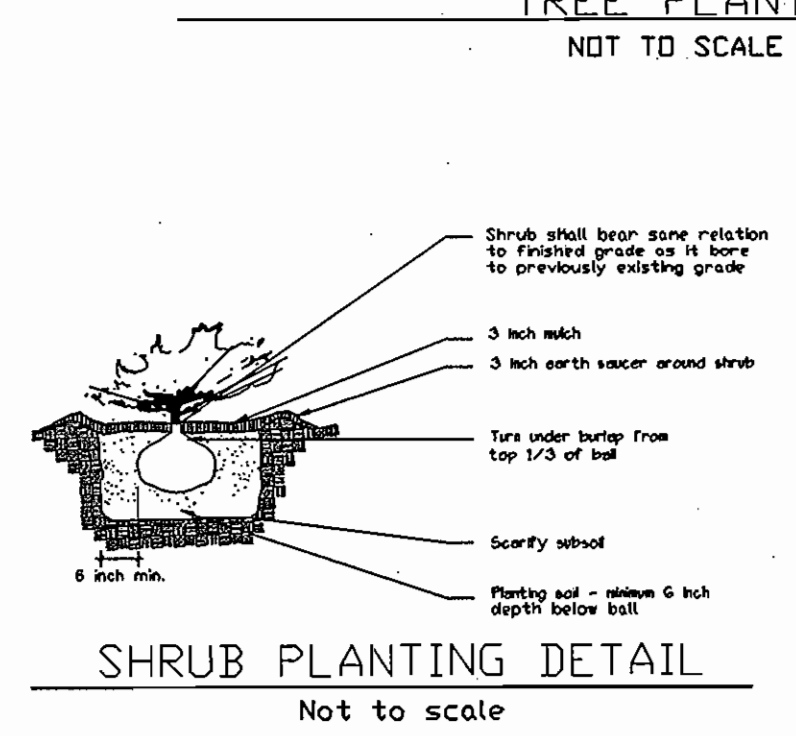
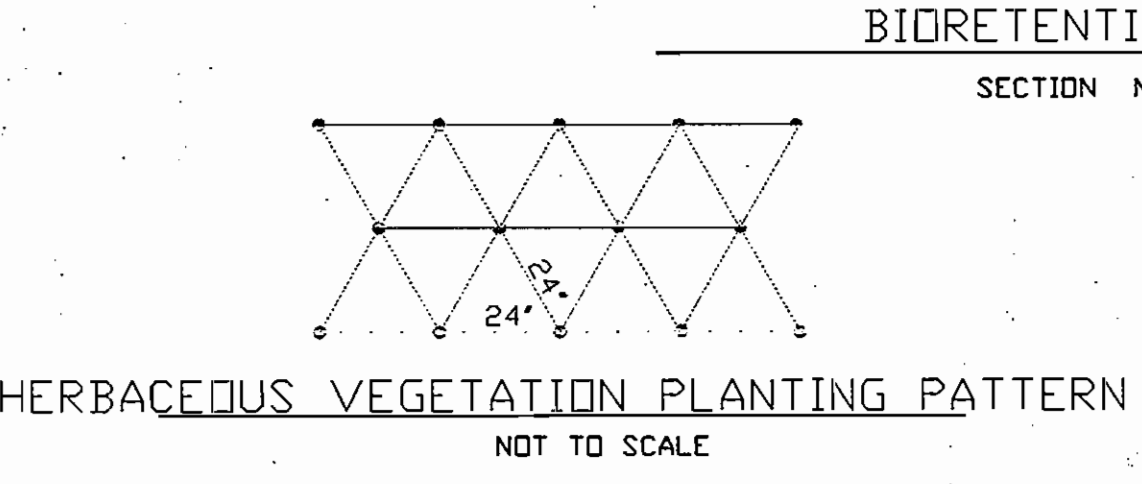
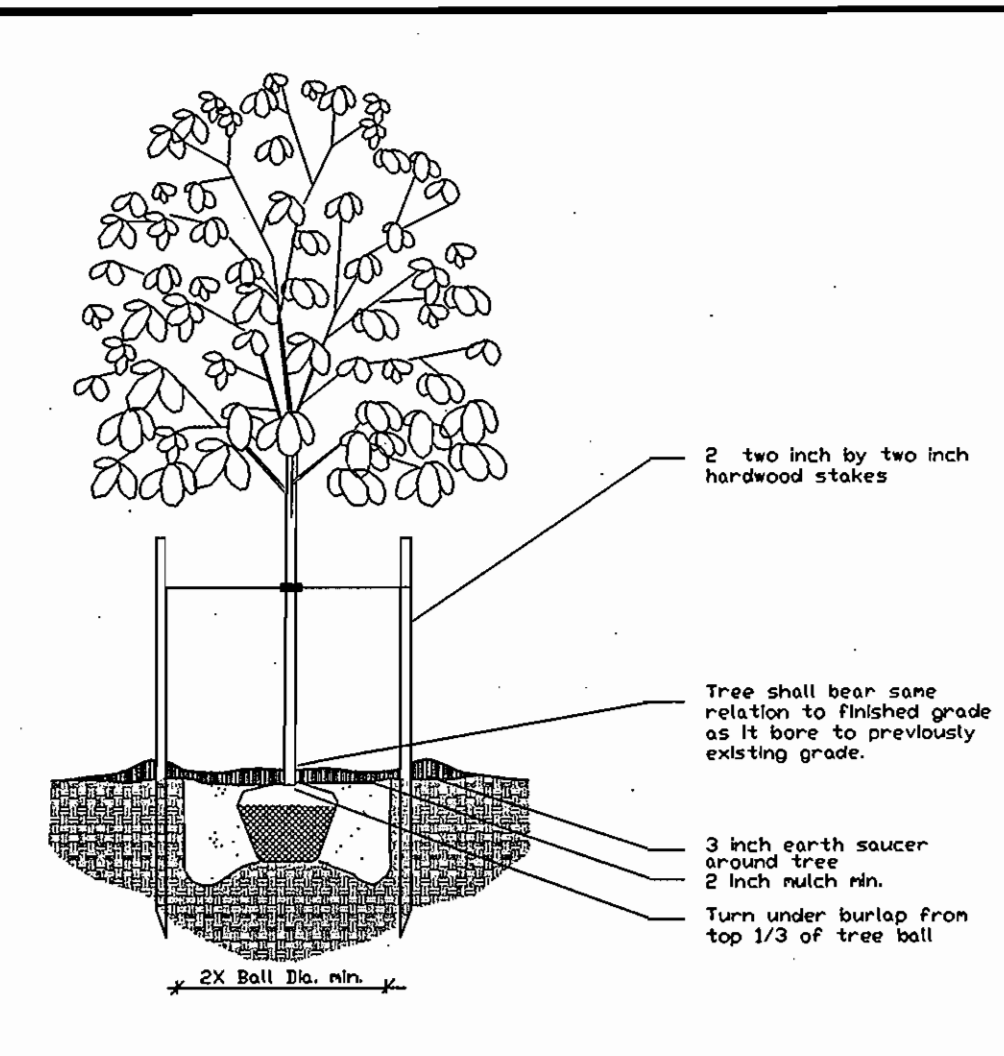
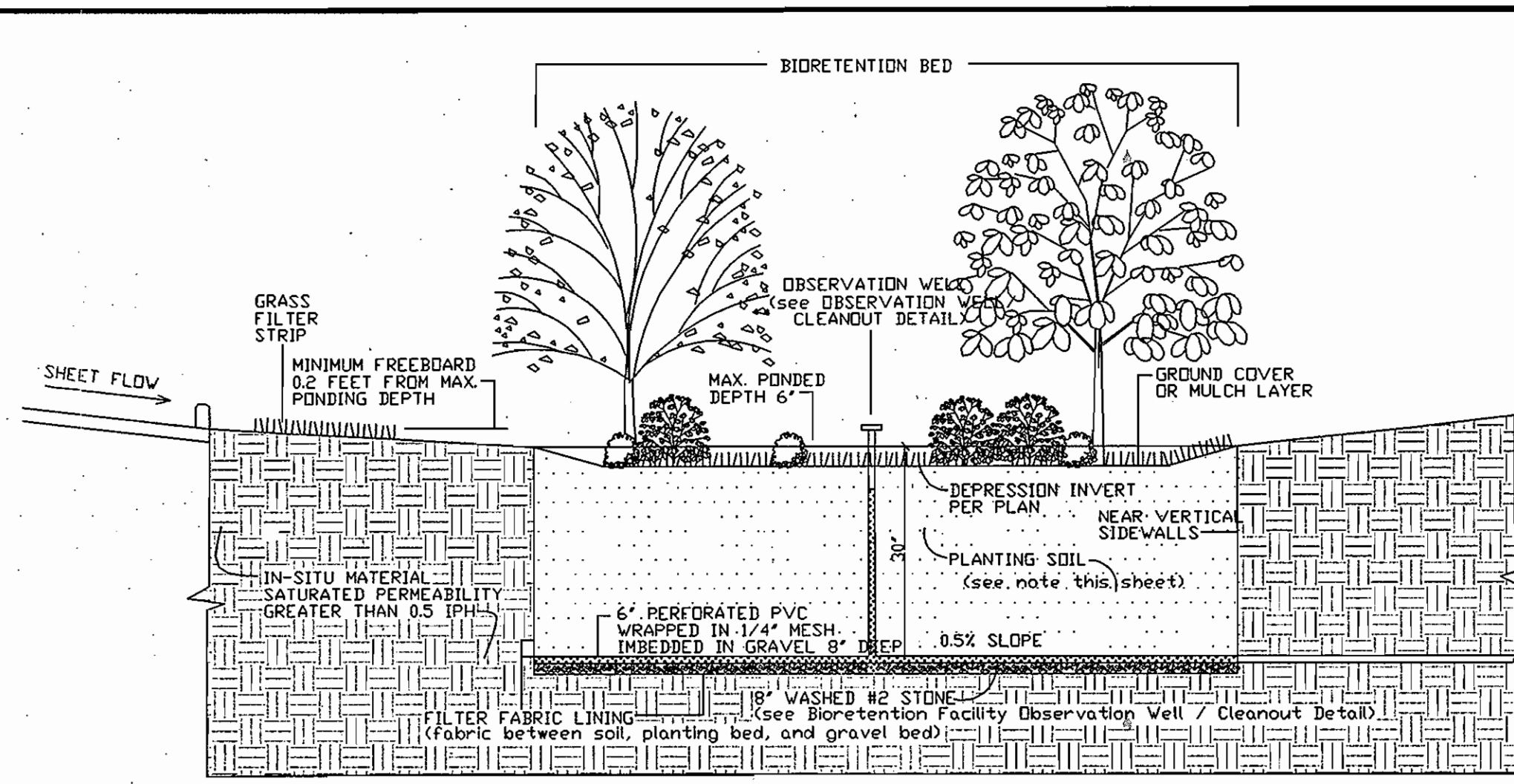
OWNER/DEVELOPER INFORMATION

OWNER:
AUTUMN RIVER CORPORATION
4100 COLLEGE AVENUE
ELICOTT CITY, MARYLAND 21043-0398

DEVELOPER:
LAND DESIGN & DEVELOPMENT
8000 MAIN STREET
ELICOTT CITY, MD 21043
ATTN: DONALD R. REUWER

PROJECT	SECTION/AREA	LOT NO.
AUTUMN RIVER - OPEN SPACE LOT 4	N/A	OPEN SPACE LOT 4
PLAT NO.	BLOCK NO.	ZONE
15714-15715	21	R-ED
WATER CODE	SEWER CODE	ELEC. DIST.
G01	1253100	2nd
CENSUS TR.		6027





OWNER/DEVELOPER INFORMATION

OWNER:
AUTUMN RIVER CORPORATION
4100 COLLEGE AVENUE
ELICOTT CITY, MARYLAND 21043-0396

DEVELOPER:
LAND DESIGN & DEVELOPMENT
8000 MAIN STREET
ELICOTT CITY, MD 21043
ATTN: DONALD R. REUMER

ENGINEER'S CERTIFICATION

"I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT 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."

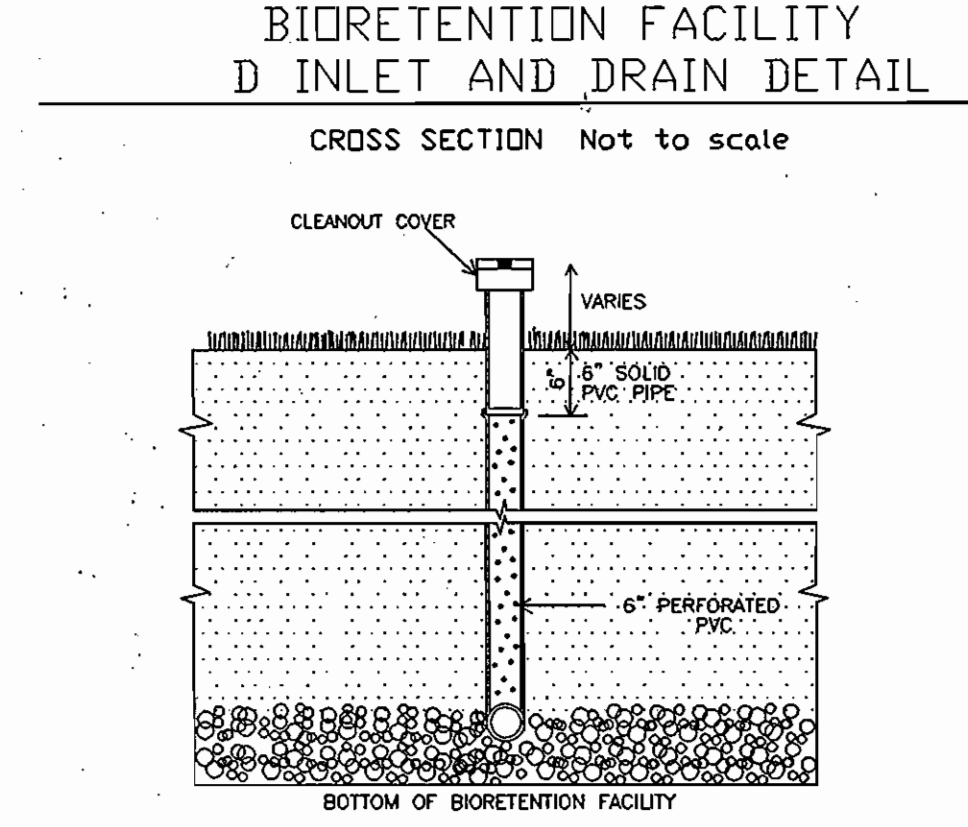
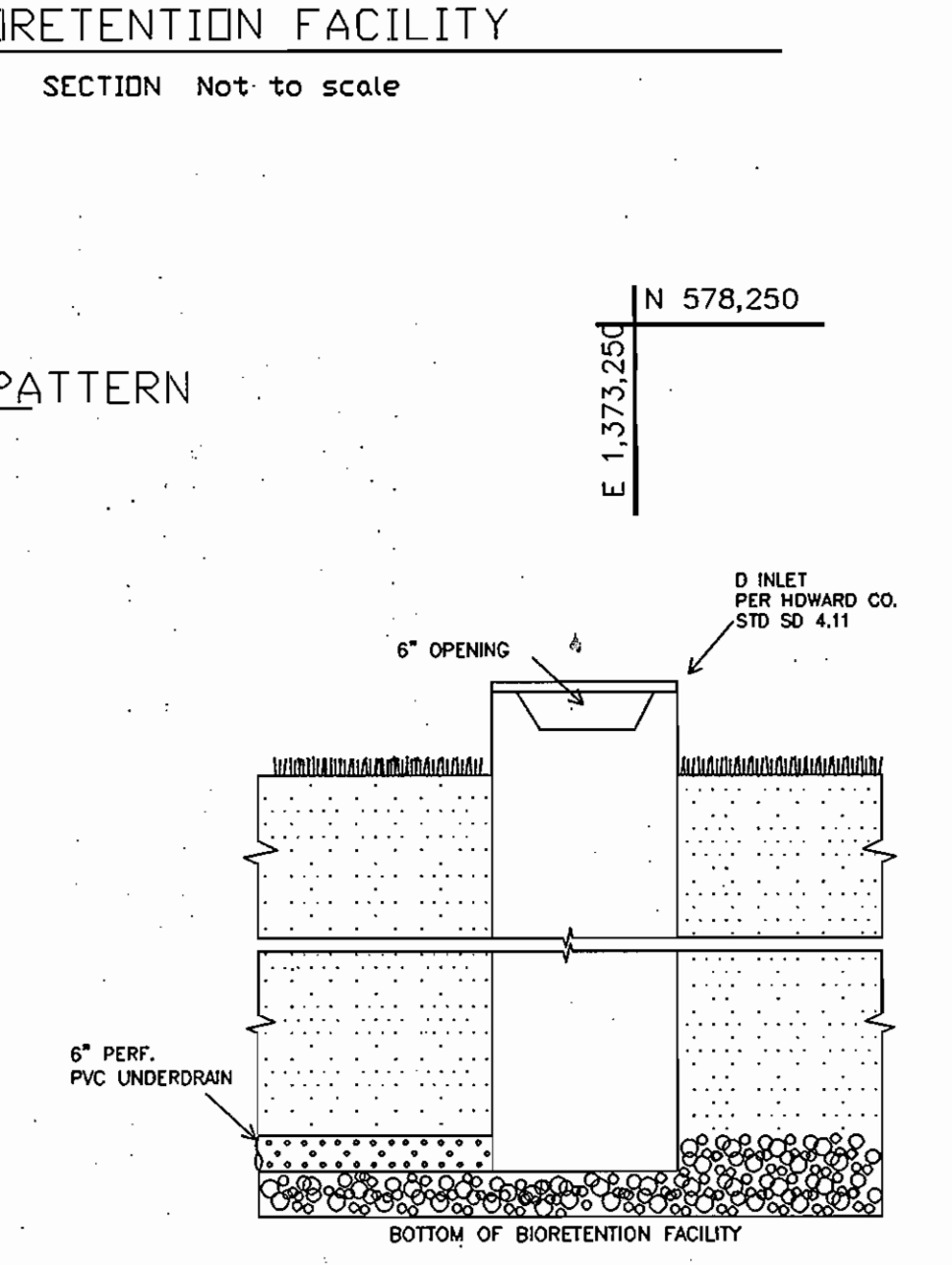
DEVELOPER'S CERTIFICATION

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"SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY DESIGN MANUAL AND STANDARDS & SPECIFICATIONS FOR SOIL, EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS AS SHOWN ON THESE PLANS."

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

DATE: 2/10/03



SCHEDULE A PERIMETER LANDSCAPE EDGE

CATEGORY	ADJACENT TO ROADS		ADJACENT TO PERIMETER PROPERTIES		TOTALS
	A	B	C	D	
Perimeter/Frontage Designation	1	2	3	4	
Landscape Type	1	2	3	4	
Linear Feet of Roadway Frontage/Perimeter	24 L.F.	54 L.F.	221 L.F.	94 L.F.	220 L.F.
Credit for Existing Vegetation (Yes, No, Linear Feet Describe below if needed)	Yes 24 L.F.	Yes 40 L.F.	Yes 101 L.F.	Yes 40 L.F.	Yes 60 L.F.
Credit for Wall, Fence or Berm (Yes, No, Linear Feet Describe below if needed)	No	No	No	No	No
Number of Plants Required					
Shade Trees	1:50 0	1:50 1	1:40 3	1:40 2	1:40 4
Evergreen Trees	1:40 0	1:40 1	1:20 6	1:20 3	1:20 8
Shrubs	0	0	0	0	0
Number of Plants Provided					
Shade Trees	0	2	3	2	4
Evergreen Trees	0	2	3	3	8
Other Trees (2:1 Substitution)	0	0	0	0	0
Shrubs (10:1 Substitution)	0	0	0	0	0
Describe Plant Substitution Credits Below if needed	0	0	0	0	0



PLAN VIEW
Scale: 1"=20'

RECORD DRAWING

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By: [Signature]
Date: 2/10/03

LANDSCAPE SCHEDULE

KEY	QUAN.	BOTANICAL NAME	SIZE	CAT
CR	6	Quercus Rubra Red Oak	2 1/2"-3" Cal.	B & B
FG	4	Fagus grandifolia American Beech	2 1/2"-3" Cal.	B & B
IO	7	Ilex opaca American Holly	5'-6" Ht.	B & B
PS	14	Pinus strobus Eastern White Pine	6'-8" Ht.	B & B
NS	1	Nyssa sylvatica Black Gum	spacing as shown	B & B
RV	4	Rhododendron viscosum Swamp Azalea	spacing as shown	B & B
MC	3	Myrica cerifera Southern Bayberry	spacing as shown	B & B
EH	9	Baccharis holmifolia Eastern False Willow	spacing as shown	B & B
LC	5 flats	Lobelia cardinalis L. Cardinal Flower	plugs, 2" o.c.	B & B
LS	1/2 flat	Lobelia siphilitica L. Great Lobelia	plugs, 2" o.c.	B & B
VH	3 flats	Verbena hastata Blue vervain	plugs, 2" o.c.	B & B

PROJECT
AUTUMN RIVER - OPEN SPACE LOT 4
COLLEGE AVE. WASTEWATER PUMPING STATION

SECTION/AREA
N/A

LOT NO.
OPEN SPACE LOT 4

PLAT NO.	BLOCK NO.	ZONE	TAXZONE	ELEC. DIST.	CENSUS TR.
157A-157A5	21	R-ED	25	2nd	6027

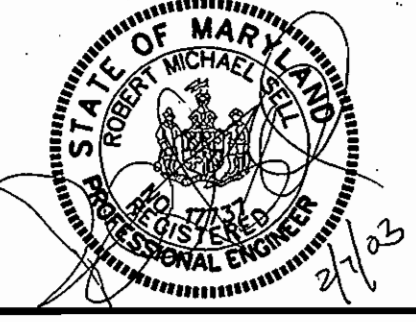
WATER CODE
G01

SEWER CODE
1253100 A

1. This plan has been prepared in accordance with the provisions of section 16.124 of the Howard County code and the landscape manual.

2. Financial Surety for the required landscaping must be posted as part of the Grading Permit in the amount of \$5,700 (\$5,000.00 for shade trees, and \$700.00 for 10 evergreen trees).

McCRONE
ENGINEERING & ENVIRONMENTAL SCIENCES
LAND PLANNING & SURVEYING & CONSTRUCTION SERVICES
20 REDELY AVENUE
ANNAPOLIS, MARYLAND 21401
(410) 291-8622



DRN: J. Slenker				
DES: J. Walker				
CHK: R. Sell				
DATE: 5/7/02	BY: No.	REVISION	DATE	

LANDSCAPE PLAN

SITE DEVELOPMENT PLAN
COLLEGE AVENUE WASTEWATER PUMPING STATION
AUTUMN RIVER
OPEN SPACE LOT 4
GRID 21
TAX MAP 25
SECOND ELECTION DISTRICT

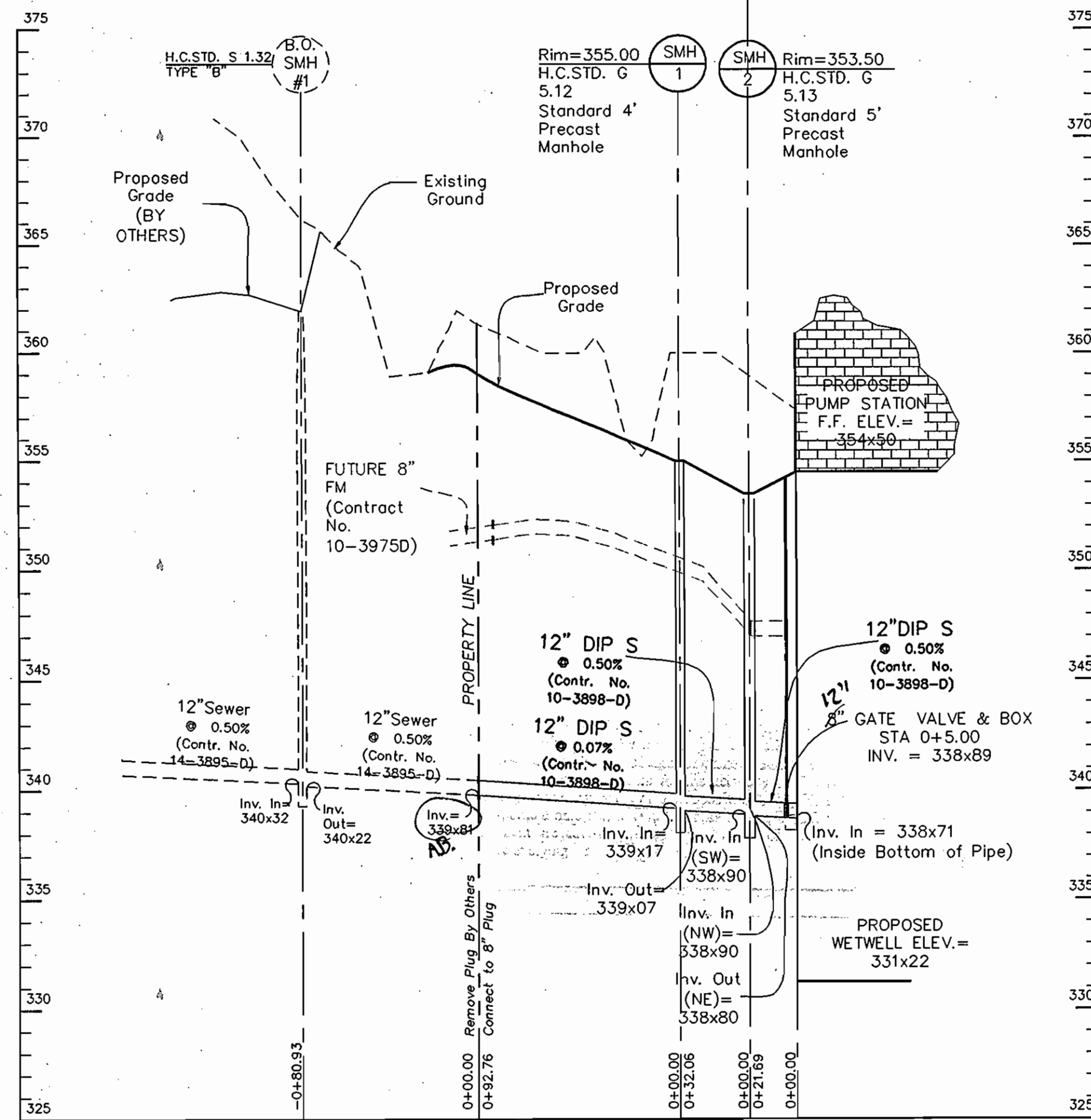
P/O PARCEL 172
HOWARD COUNTY, MARYLAND

SCALE: 1"=20'
SDP SHEET 5 OF 7

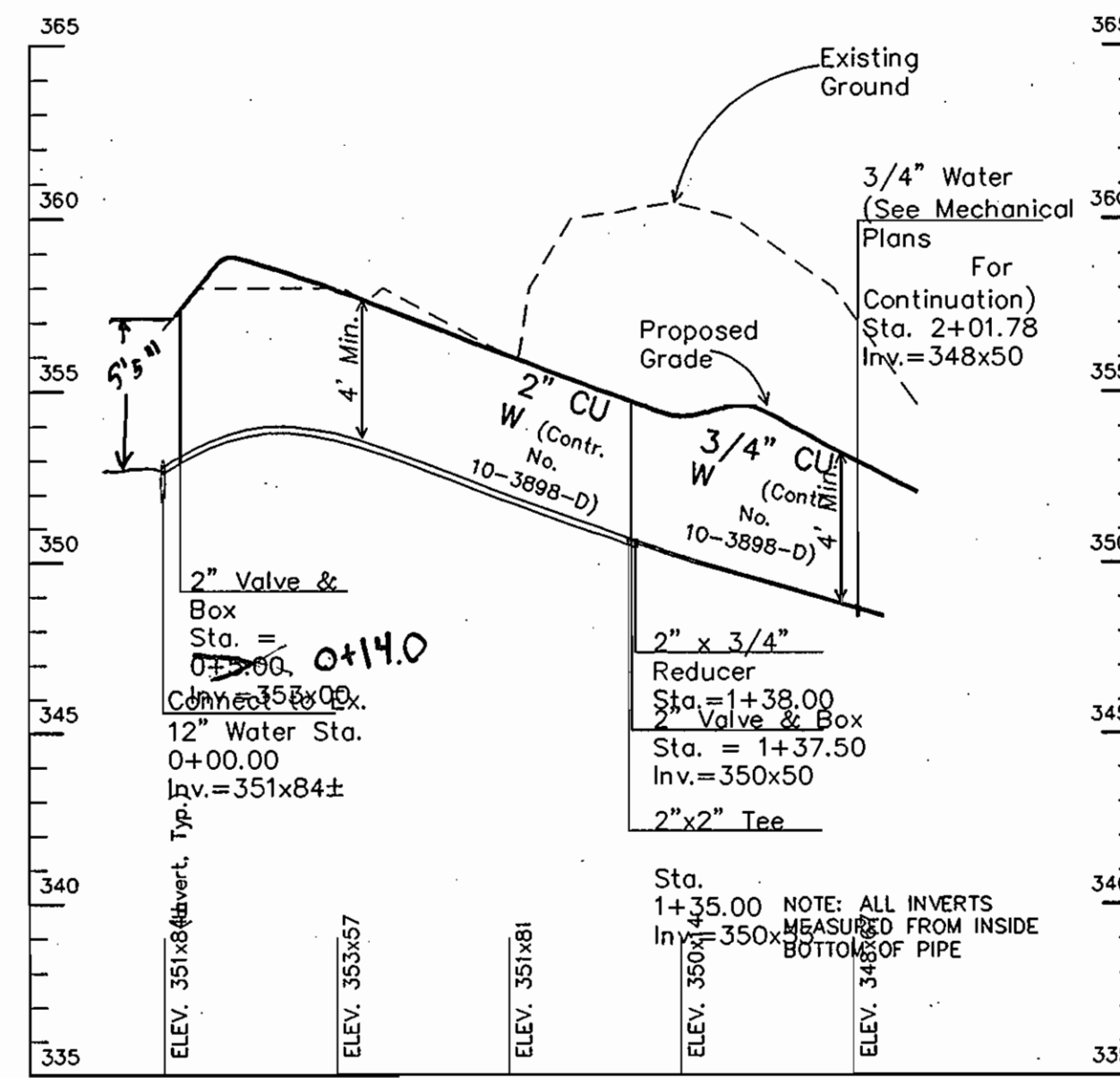
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PLOTTED: Feb 07, 2003 - 2:11pm

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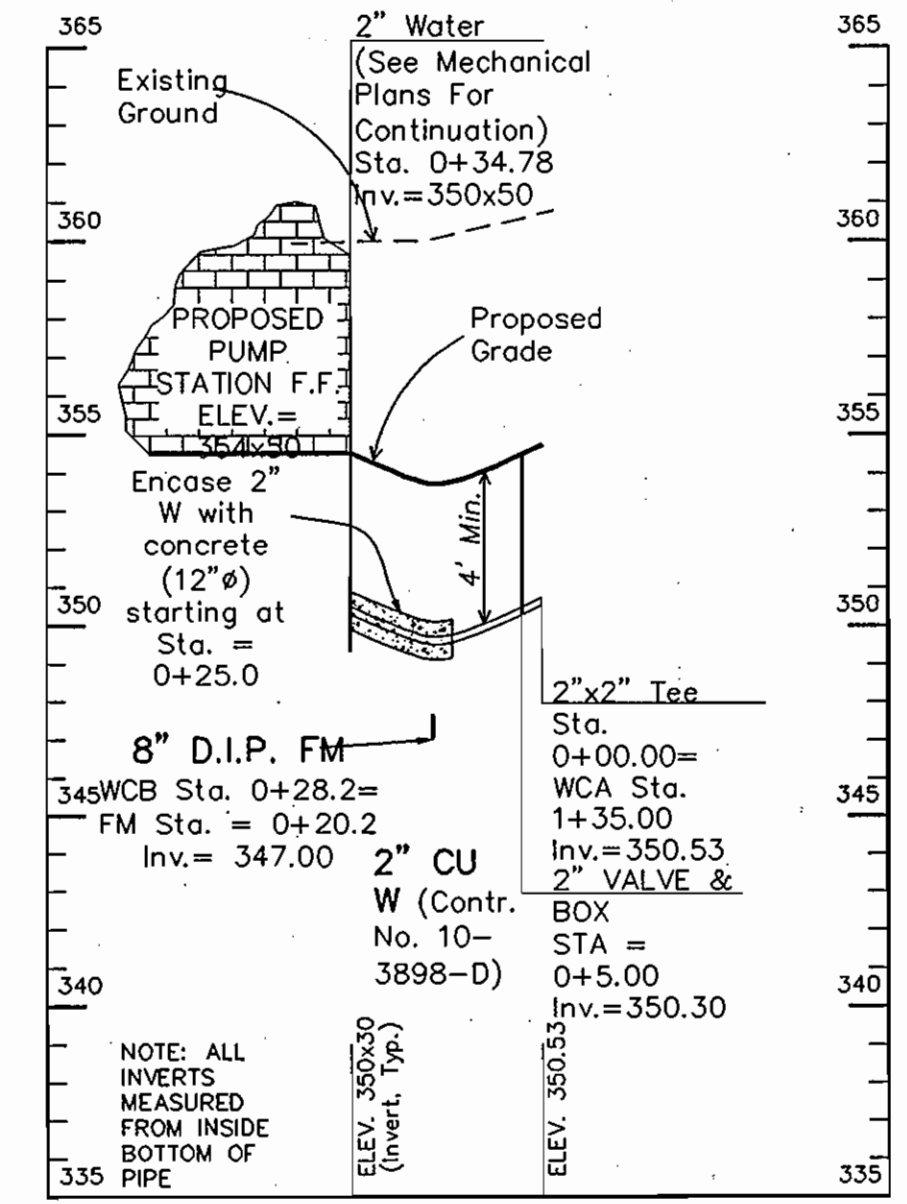


12" GRAVITY SEWER PROFILE
 VERT.: 1" = 5'
 HORZ.: 1" = 50'



WATER CONNECTION 'A' PROFILE

SCALES:
 VERT.: 1" = 5'
 HORZ.: 1" = 50'



WATER CONNECTION 'B' PROFILE

SCALES:
 VERT.: 1" = 5'
 HORZ.: 1" = 50'

APPROVED
 PLANNING BOARD
 OF HOWARD COUNTY
 DATE: 12/12/2002

OWNER/DEVELOPER INFORMATION

OWNER:
 AUTUMN RIVER CORPORATION
 4100 COLLEGE AVENUE
 ELLICOTT CITY, MARYLAND 21043-0396

DEVELOPER:
 LAND DESIGN & DEVELOPMENT
 8000 MAIN STREET
 ELLICOTT CITY, MD 21043
 ATTN: DONALD R. REUWER

ENGINEER'S CERTIFICATION

"I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT 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."



DEVELOPER'S CERTIFICATION

"I HEREBY CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR SEDIMENT AND EROSION CONTROL BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY."

"SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 216 OF THE HOWARD COUNTY DESIGN MANUAL AND STANDARDS & SPECIFICATIONS FOR SOIL, EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS AS SHOWN ON THESE PLANS."

Donald R. Reuwer 2/16/03
 DONALD R. REUWER DATE

DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY, MARYLAND

Mark A. Leizer 5/19/03
 DIRECTOR DATE

Cindy Harant 5/14/03
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Robert M. Sell 2/16/03
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

PROJECT AUTUMN RIVER - OPEN SPACE LOT 4 COLLEGE AVE. WASTEWATER PUMPING STATION		SECTION/AREA N/A	LOT NO. OPEN SPACE LOT 4		
PLAT NO. 1574-15745	BLOCK NO. 21	ZONE R-ED	TAX/ZONE 25	ELEC. DIST. 2nd	CENSUS TR. 6027
WATER CODE 001		SEWER CODE 1253100			

RECORD DRAWING

This record drawing has been prepared, in part, based upon information furnished by others. While this information is believed to be reliable, the Engineer cannot assure its accuracy, and thus is not responsible for the accuracy of this record drawing or for any errors or omissions which may have been incorporated onto it as a result. Those relying on this record document are advised to obtain verification of its accuracy before applying it for any purpose.

By: *Robert M. Sell*
 Date: 2/16/03



LAND PLANNING & SURVEYING & CONSTRUCTION SERVICES
 20 ROGELY AVENUE
 ANNAPOLIS, MARYLAND 21401
 (410) 297-8921



DRN: J. Slenker			
DES: J. Walker			
CHK: R. Sell			
DATE: 5/7/02	BY No.	REVISION	DATE

WATER & SEWER PROFILES

SITE DEVELOPMENT PLAN
 COLLEGE AVENUE WASTEWATER PUMPING STATION
 AUTUMN RIVER
 OPEN SPACE LOT 4
 CONTRACT NO. 10-3898-D

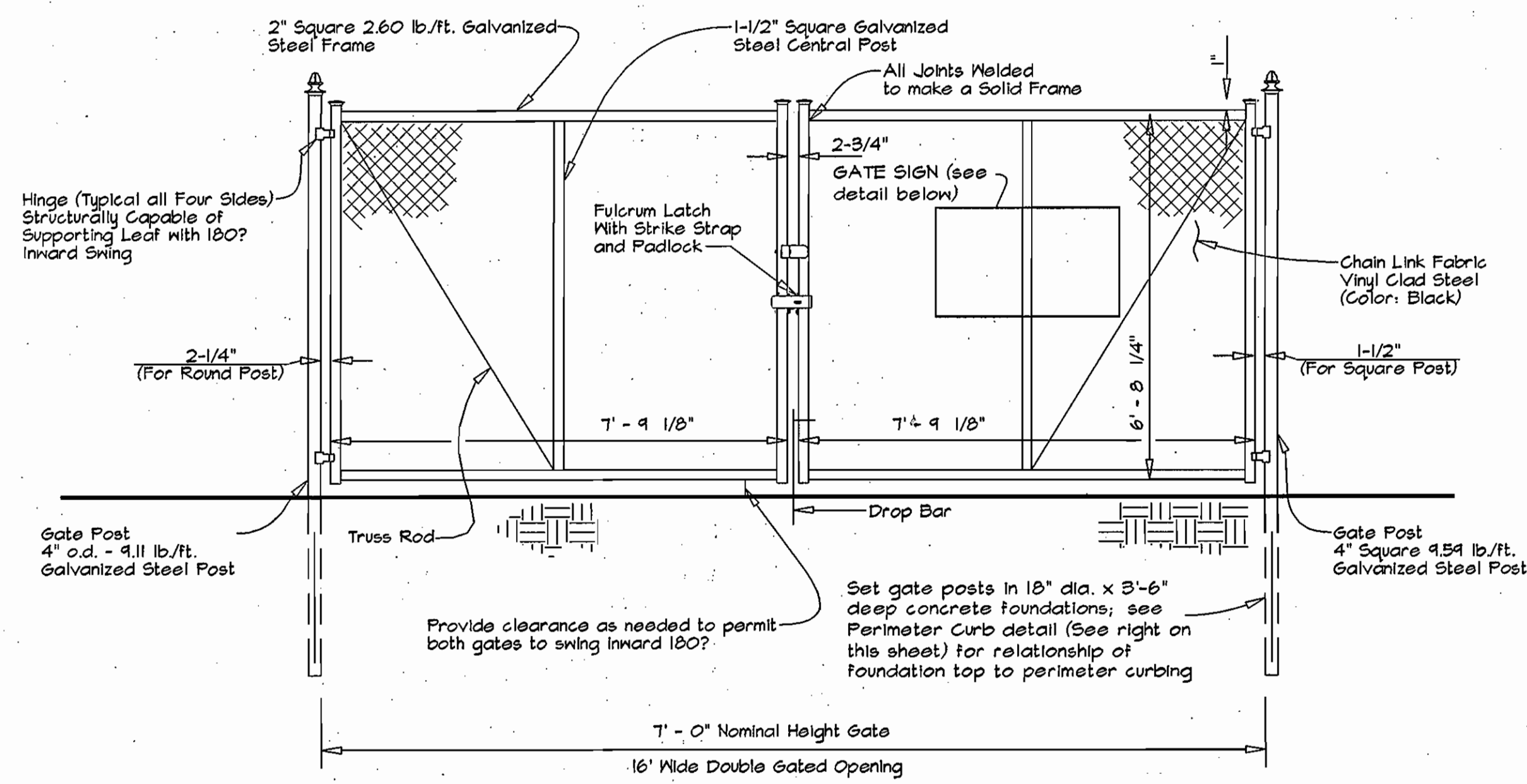
TAX MAP 25
 SECOND ELECTION DISTRICT

P/O PARCEL 172
 HOWARD COUNTY, MARYLAND

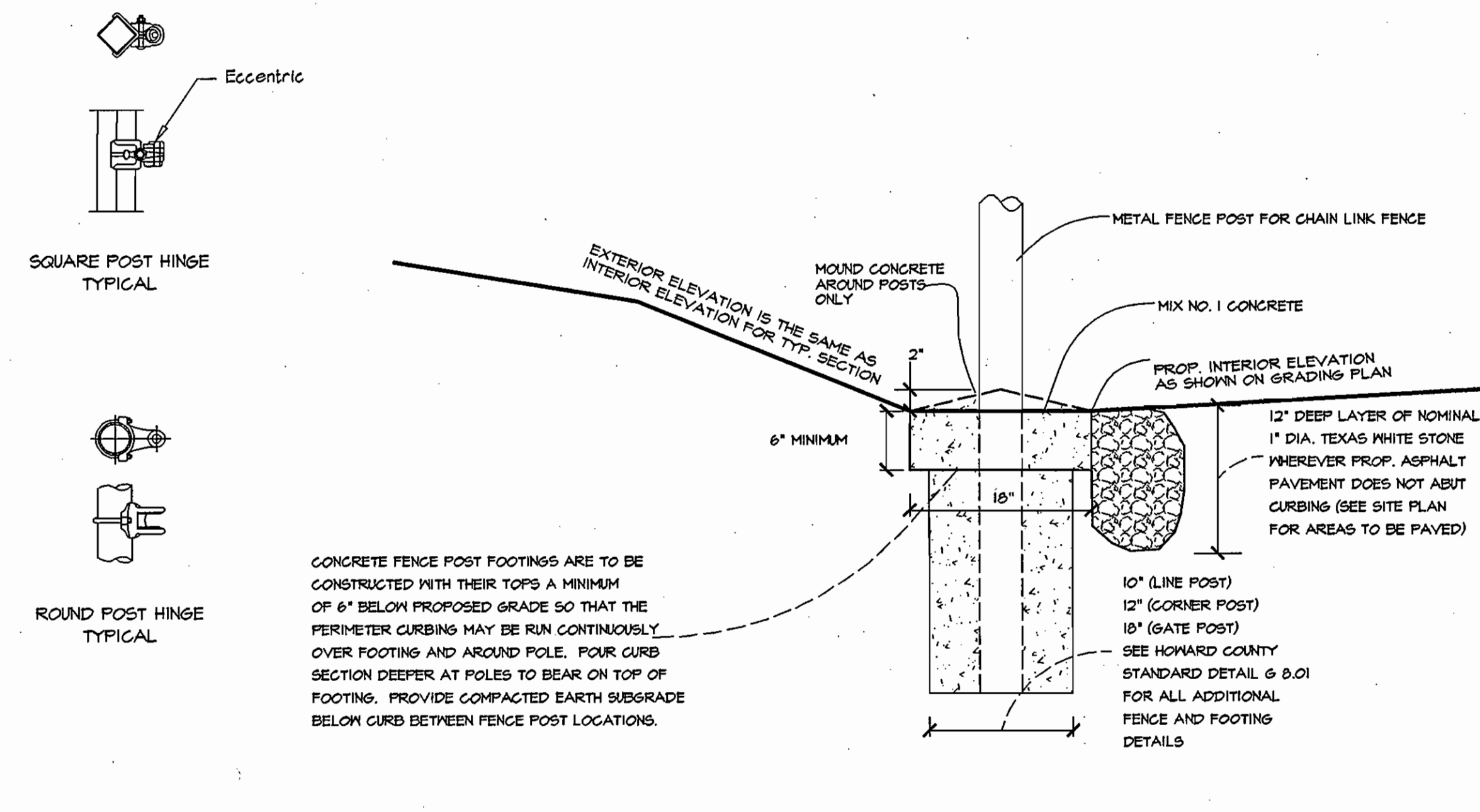
SCALE AS SHOWN
 SDP SHEET 6 OF 7

SDP-02-85

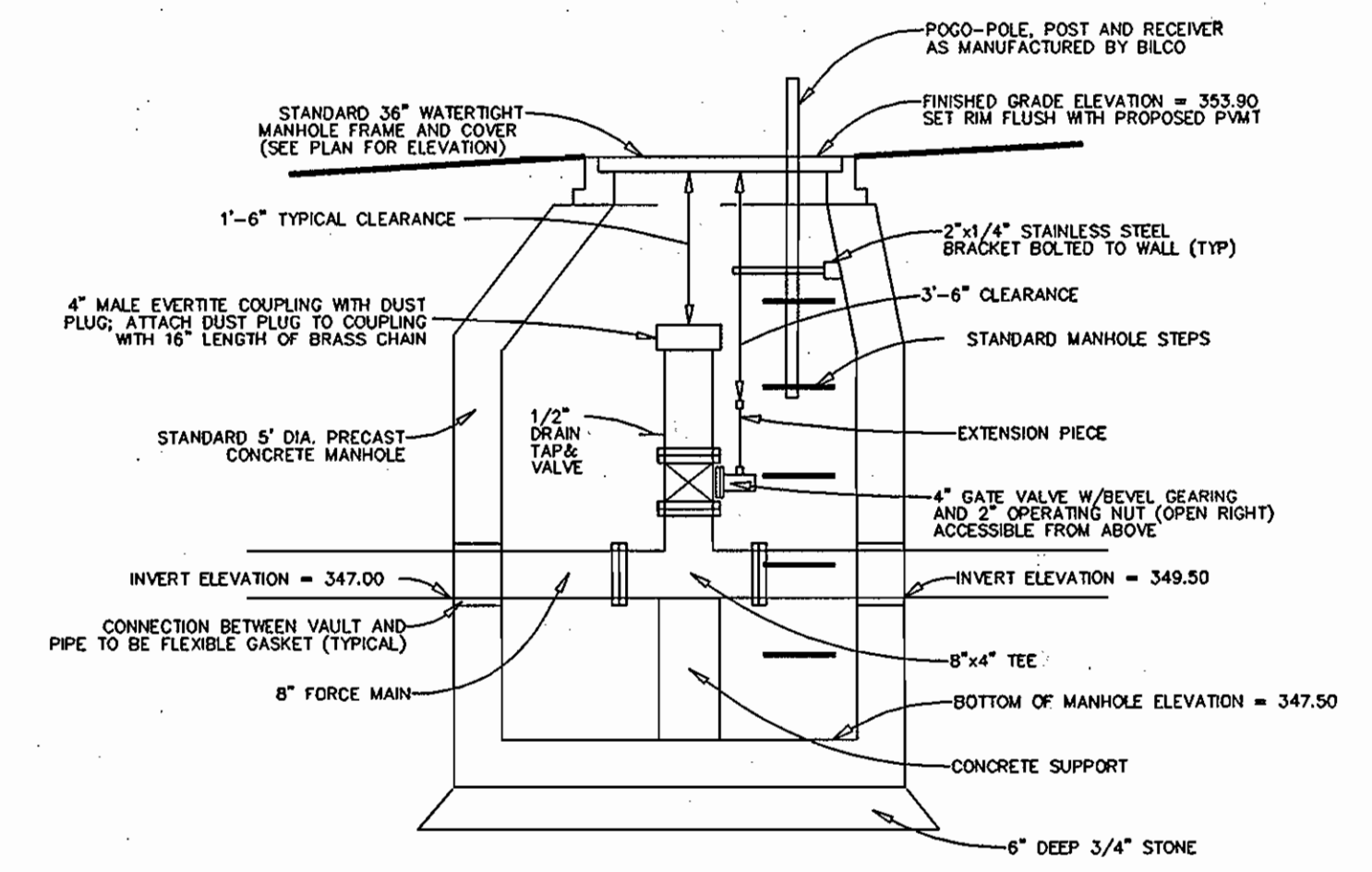
APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE 12/12/2002



CHAIN LINK FENCE DOUBLE GATE DETAIL
N.T.S.



TYPICAL PERIMETER CURB DETAIL
N.T.S.



NOTE: FOR GATE VALVE LOCATIONS
SEE SITE PLAN SHEET 2 OF 7 AND
PROFILE 6 OF 7.
BYPASS PUMPING MANHOLE
N.T.S.

OWNER/DEVELOPER INFORMATION

OWNER:
AUTUMN RIVER CORPORATION
4100 COLLEGE AVENUE
ELLCOTT CITY, MARYLAND 21043-0398

DEVELOPER:
LAND DESIGN & DEVELOPMENT
8000 MAIN STREET
ELLCOTT CITY, MD 21043
ATTN: DONALD R. REUVER

ENGINEER'S CERTIFICATION

"I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT 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 M. SELL
DATE 2/7/03

DEVELOPER'S CERTIFICATION

"I HEREBY CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR SEDIMENT AND EROSION CONTROL BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS DEEMED NECESSARY."

"SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY DESIGN MANUAL AND STANDARDS & SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS AS SHOWN ON THESE PLANS."

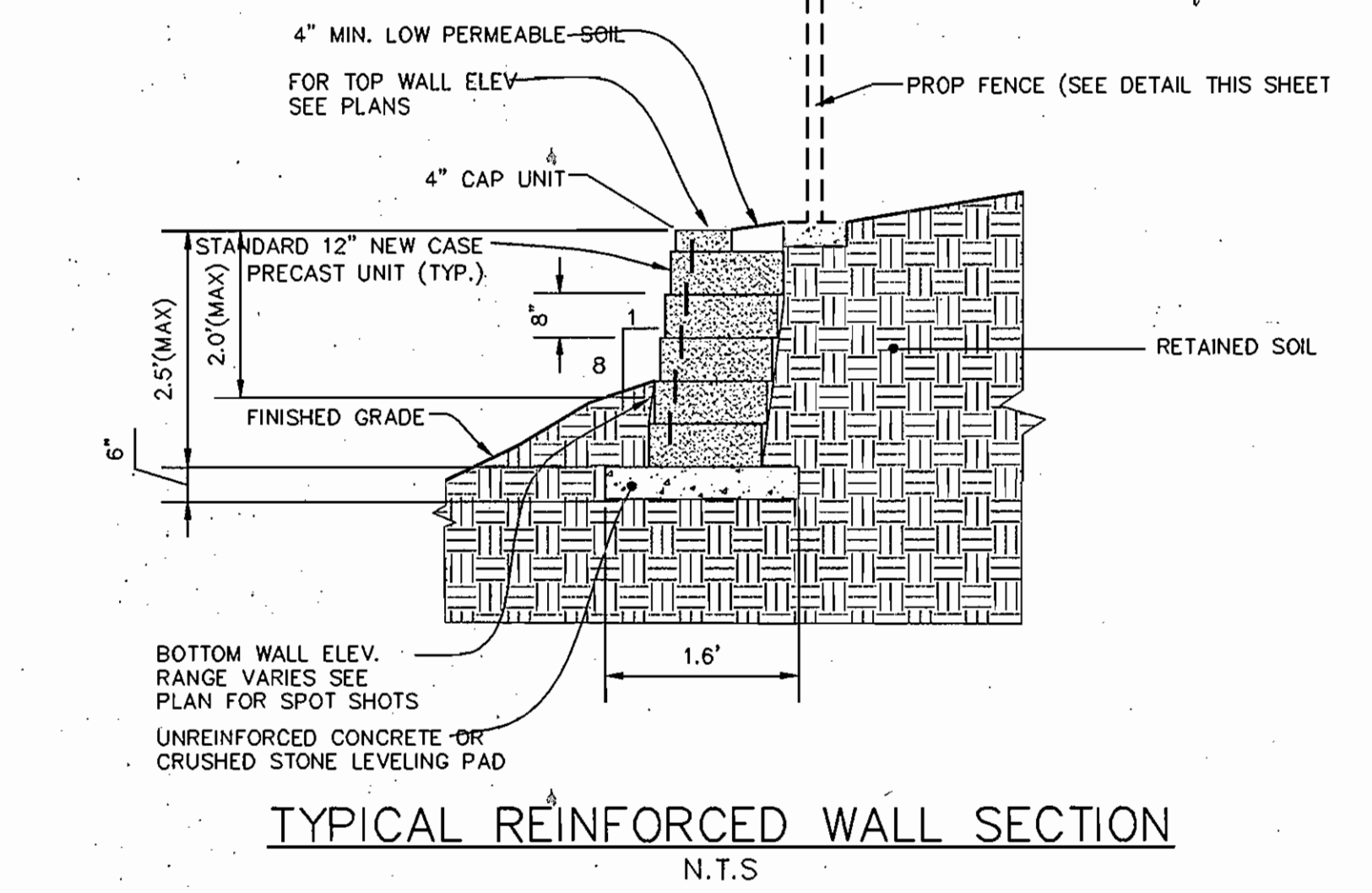
DONALD R. REUVER
DATE 02/10/03

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

DIRECTOR: [Signature] DATE 5/19/02

CHIEF, DIVISION OF LAND DEVELOPMENT: [Signature] DATE 5/14/02

CHIEF, DEVELOPMENT ENGINEERING DIVISION: [Signature] DATE 3/16/03

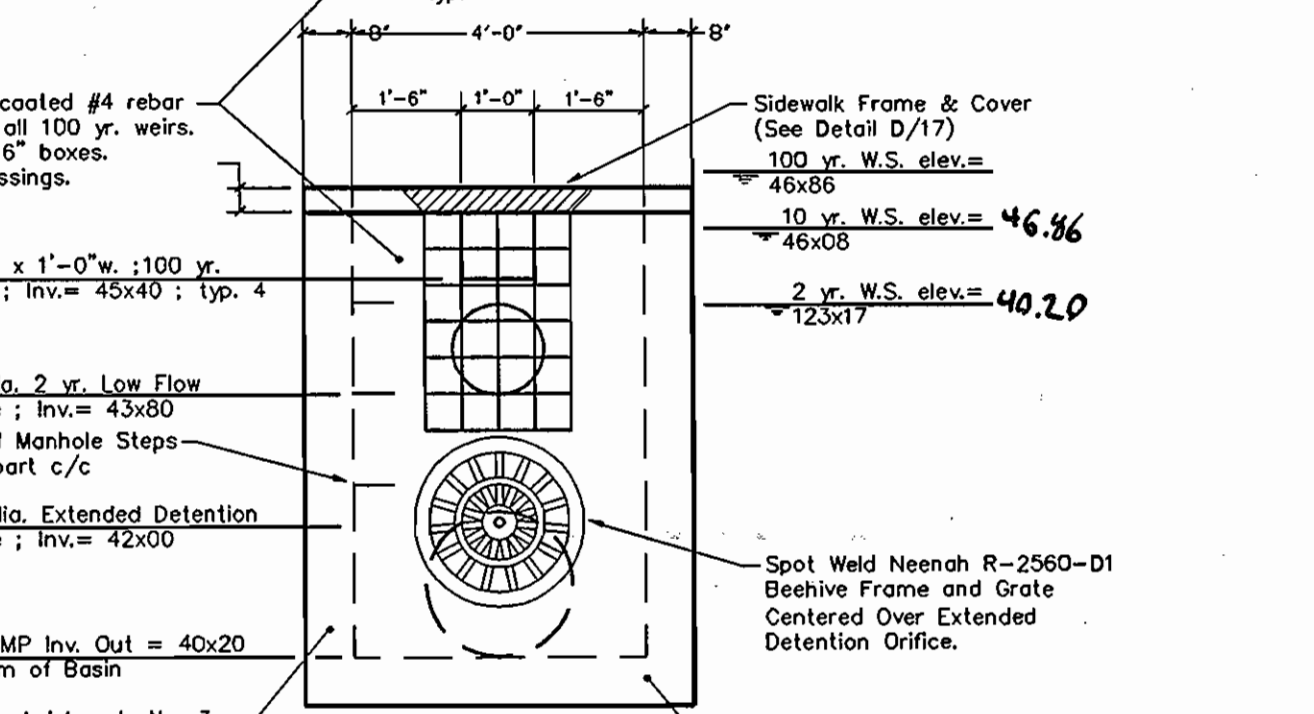
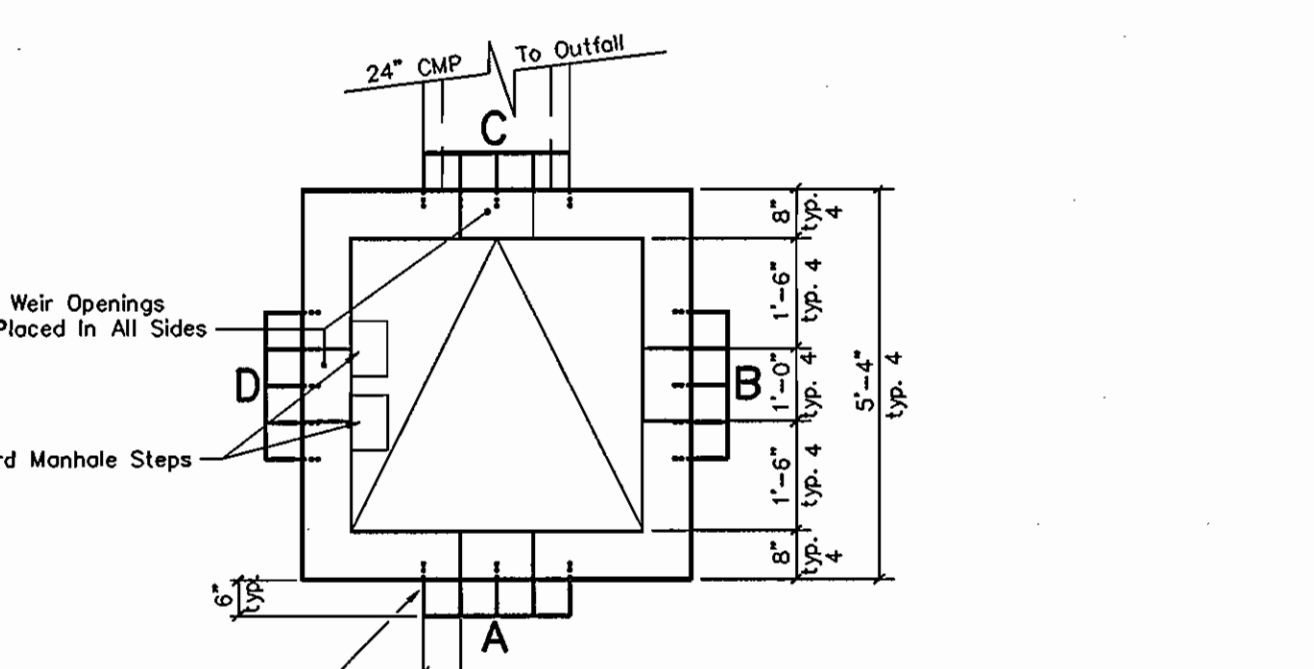
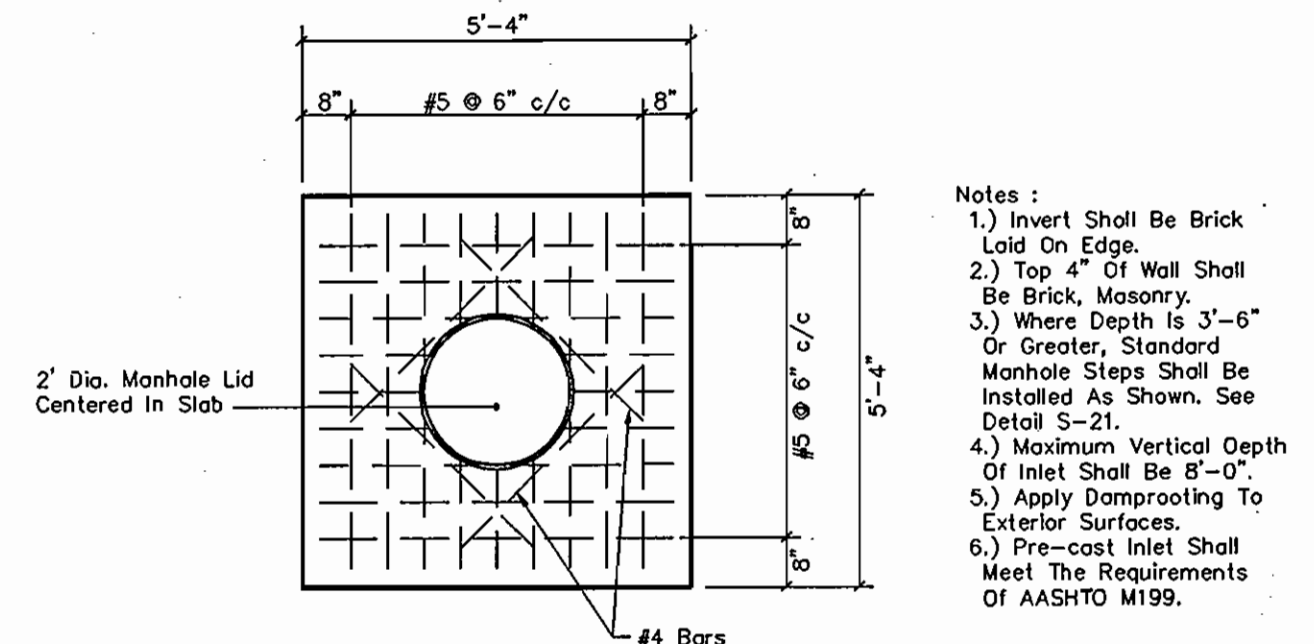


TYPICAL REINFORCED WALL SECTION
N.T.S.

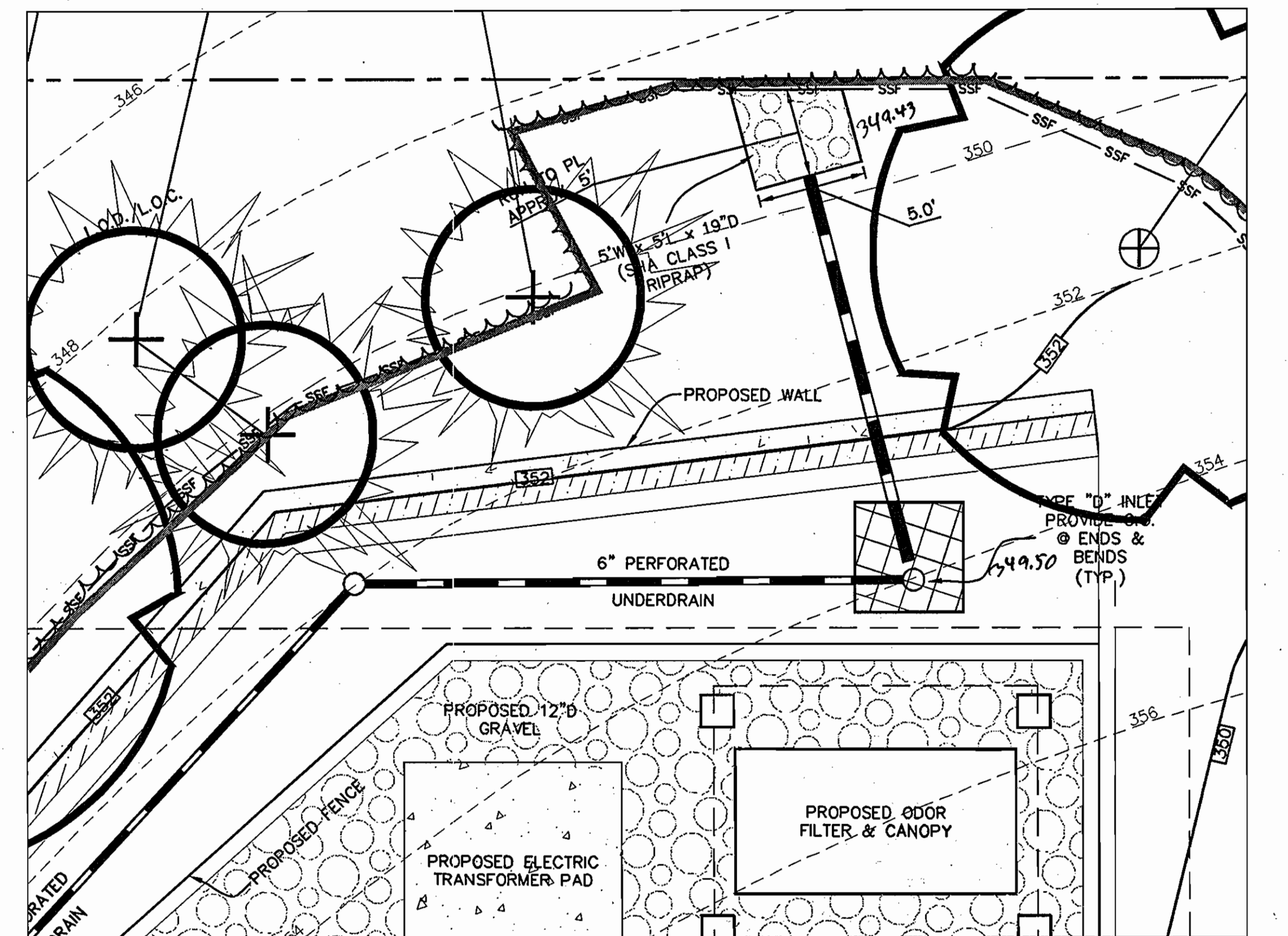
RECORD DRAWING

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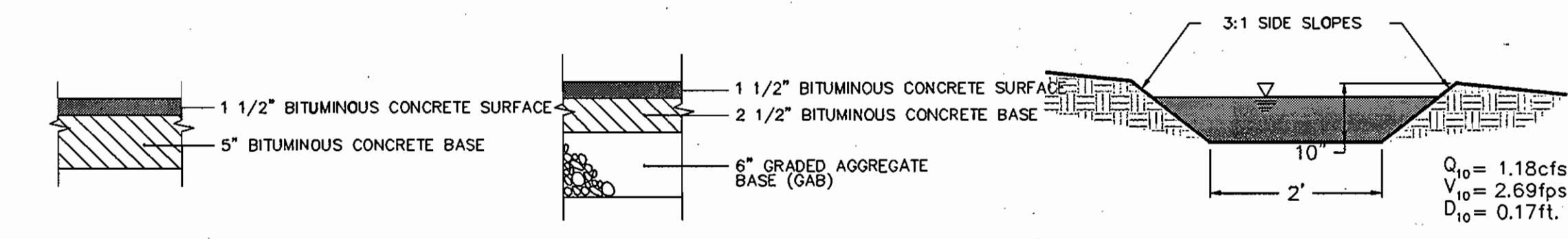
By: [Signature]
Date: 2/18/03



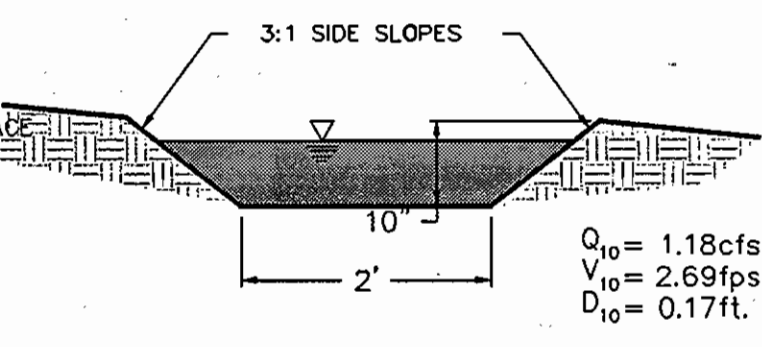
SIDES B & D
MODIFIED TYPE "D" INLET
N.T.S.



BIORETENTION OUTFALL PLAN
SCALE: 1" = 5'



FULL DEPTH BITUMINOUS CONCRETE ALTERNATE
P-2 LIGHT DUTY PAVING SECTION
N.T.S.



TYPICAL GRASS SWALE
N.T.S.

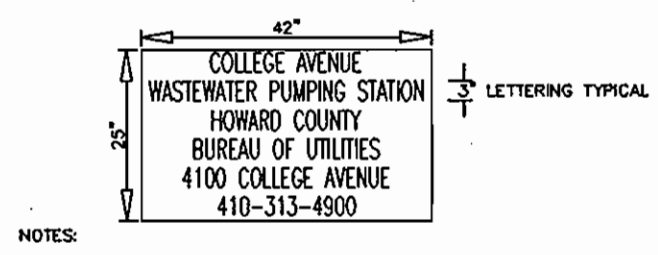
DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

CHIEF, BUREAU OF UTILITIES: [Signature] DATE 2-11-03

PROJECT	SECTION/AREA	LOT NO.
AUTUMN RIVER - OPEN SPACE LOT 4	N/A	OPEN SPACE LOT 4

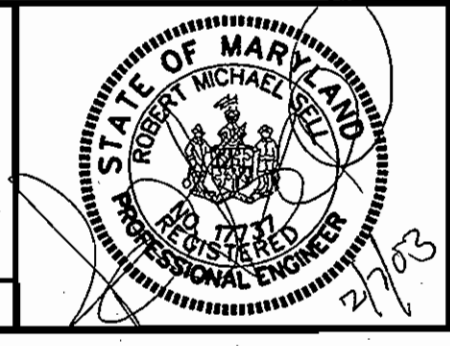
PLAT NO.	BLOCK NO.	ZONE	TAXZONE	ELEC. DIST.	CENSUS TR.
15714-15715	21	R-ED	25	2nd	6027

WATER CODE	SEWER CODE
G01	1283100



GATE SIGN DETAIL
N.T.S.

McCRONE
ENGINEERING & ENVIRONMENTAL SCIENCES
LAND PLANNING & SURVEYING & CONSTRUCTION SERVICES
30 RIDGELY AVENUE
ANNAPOLIS, MARYLAND 21401
(410) 287-8921



DRN:	DES:	CHK:	DATE:	BY:	No.	REVISION	DATE:
J. Slenke	J. Walker	R. Sell	5/7/02				

SITE DETAILS

SITE DEVELOPMENT PLAN
COLLEGE AVENUE WASTEWATER PUMPING STATION
AUTUMN RIVER OPEN SPACE LOT 4
CONTRACT NO. 10-3898-D
GRID 21
P/O PARCEL 172
HOWARD COUNTY, MARYLAND

TAX MAP 25
SECOND ELECTION DISTRICT

SCALE AS SHOWN
SDP SHEET 7 OF 7

SDP-02-B5

CADD FILE: G:\10000333 - College Avenue\Drawings\CollegeAve-SDPBIO-SDP-Submittal.dwg