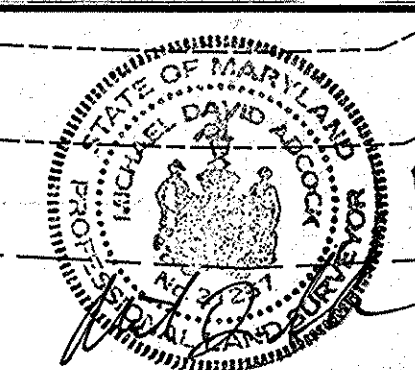


DATE	BY	REVISIONS (CON'T)	DATE	BY	REVISIONS (CON'T)
12-14-78	MCR	REMOVE 20 PUBLIC WATER AND UTILITY EASEMENT TO BE HANDICAPPED 1' SIDEWALK RELOCATE PRIVATE WATER LINE; REVISE LOT LAYOUT & AREAS	4-13-06	EBA	ADD 2 MONUMENT SIGNS AND 5' FENCE ADR 2 CANOPY & BUILDINGS
10-24-03	MCR	REVISE ENTRANCE AT BLDG 2; MOVE DUMP PAD & ADD 2 PARKING SPACES TO BLDG. 3.	5-06-15	AA	ADD FOYER IN FRONT OF THE HANDICAP ENTRANCE TO EXISTING BUILDING #1'S; REVISE CANOPY

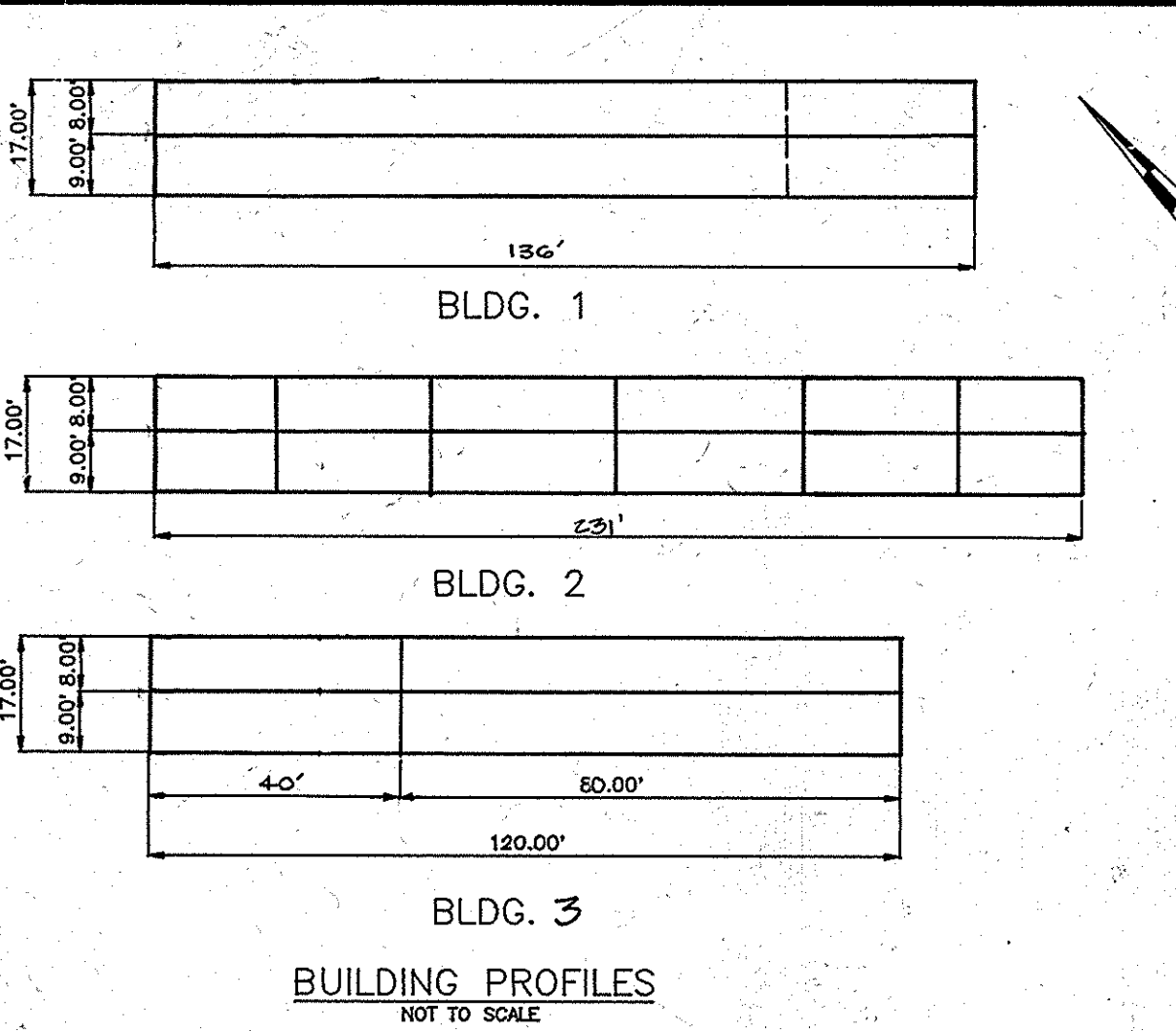
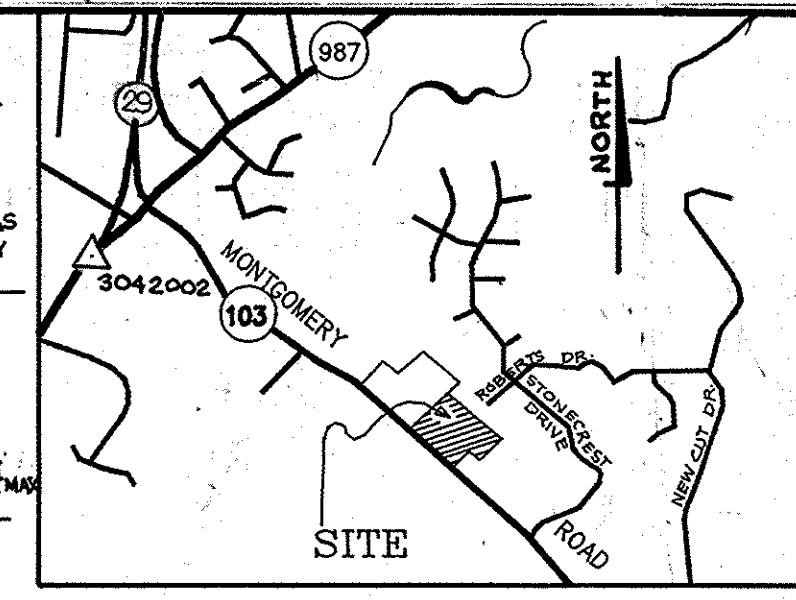


GENERAL NOTES (CON'T)

1) THIS PLAN IS SUBJECT TO BA CASE #10-216 APPROVED NOV. 14, 1990 TO INCREASE ENROLLMENT OF A PRIVATE ACADEMIC SCHOOL FROM 40 TO 150 STUDENTS LOCATED ON A 150 AC. SITE AND IS APPROVED NOV. 14, 1990 TO REVISE THE LOT SIZE FOR THE GROUP CARE FACILITY TO 85,000 SF, WHICH IS A MODIFICATION TO THE APPROVAL GRANTED AS BA CASE #14-162.

2) PREVIOUS PLANNING AND ZONING FILE NUMBERS: F-13-11, LP-10-12, BA-81-11, BA-81-12, BA-81-13, BA-81-14, BA-81-15, BA-81-16, BA-81-17, BA-81-18, BA-81-19, BA-81-20, BA-81-21, BA-81-22, BA-81-23, BA-81-24, BA-81-25, BA-81-26, BA-81-27, BA-81-28, BA-81-29, BA-81-30, BA-81-31, BA-81-32, BA-81-33, BA-81-34, BA-81-35, BA-81-36, BA-81-37, BA-81-38, BA-81-39, BA-81-40, BA-81-41, BA-81-42, BA-81-43, BA-81-44, BA-81-45, BA-81-46, BA-81-47, BA-81-48, BA-81-49, BA-81-50, BA-81-51, BA-81-52, BA-81-53, BA-81-54, BA-81-55, BA-81-56, BA-81-57, BA-81-58, BA-81-59, BA-81-60, BA-81-61, BA-81-62, BA-81-63, BA-81-64, BA-81-65, BA-81-66, BA-81-67, BA-81-68, BA-81-69, BA-81-70, BA-81-71, BA-81-72, BA-81-73, BA-81-74, BA-81-75, BA-81-76, BA-81-77, BA-81-78, BA-81-79, BA-81-80, BA-81-81, BA-81-82, BA-81-83, BA-81-84, BA-81-85, BA-81-86, BA-81-87, BA-81-88, BA-81-89, BA-81-90, BA-81-91, BA-81-92, BA-81-93, BA-81-94, BA-81-95, BA-81-96, BA-81-97, BA-81-98, BA-81-99, BA-81-100.

2) DECISION AND ORDER FOR BA-99036 APPROVED ON SEPTEMBER 30, 1999, FOR A 2-STORY 30'x40' ADDITION.



LANDSCAPE SCHEDULE

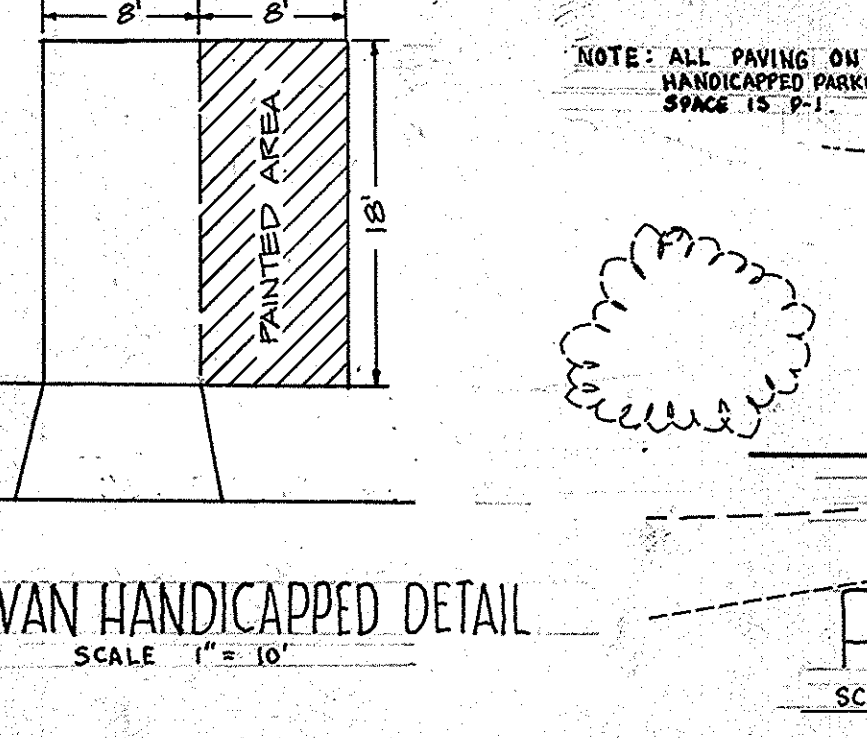
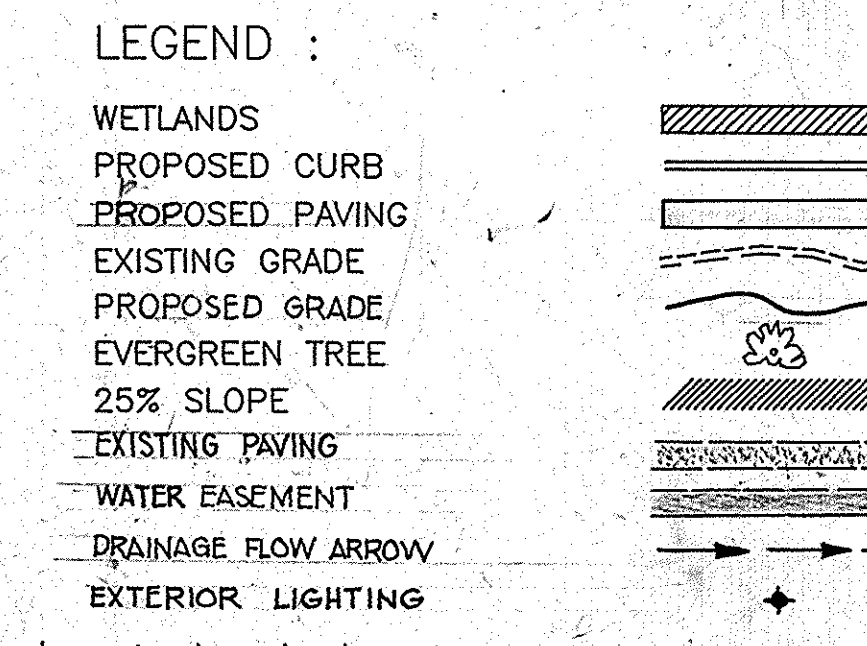
BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY
ACER RUBRUM	RED MAPLE	2 1/2 cal.	16
PINUS STRIBUS	WHITE PINE	2 1/2 cal.	135
PICEA ADIES	NORWAY SPRUCE	2 1/2 cal.	3
PINUS STRUBUS	EVERGREEN	2 1/2 cal.	10
ACER	MAPLE	2 1/2 cal.	17

INDEX

1	SITE DEVELOPMENT PLAN
2	DRAINAGE AREA MAP, DETAILS
3	DETAILS
4	DRAINAGE, WATER & SEWER PROFILE
5	SWM FOND DETAILS
6	GENERAL NOTES FOR POND
7	SEDIMENT CONTROL PLAN
8	SEDIMENT CONTROL NOTES & DETAILS

WETLAND PLANTING SCHEDULE

BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY
ACER RUBRUM	RED MAPLE	2 1/2 cal.	4
CORNUS STOLONIFERA	DOGWOOD	24" - 30"	12

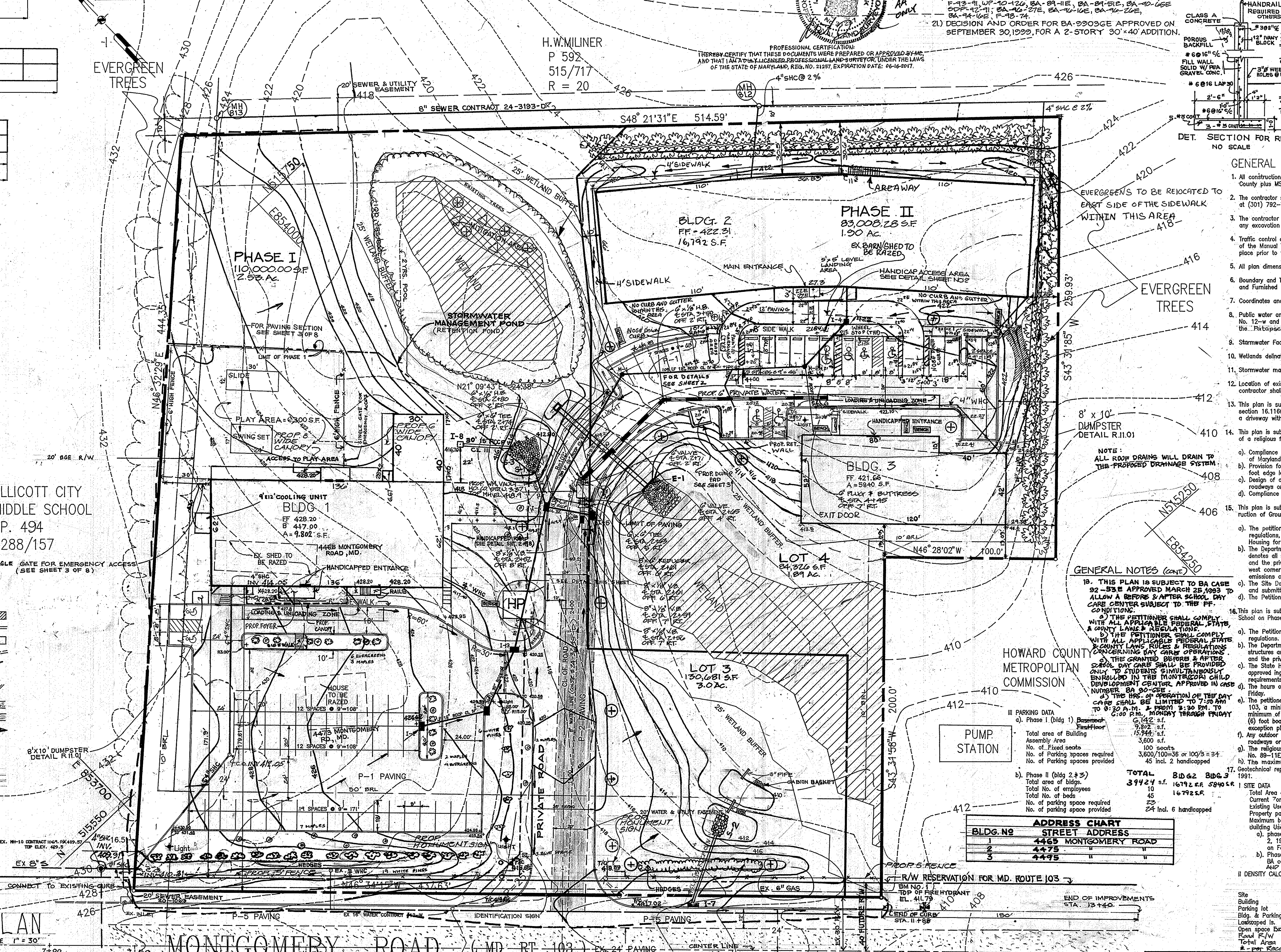


APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICER: [Signature] DATE: 4-2-93

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
 PLANNING DIRECTOR: [Signature] DATE: 4/6/93

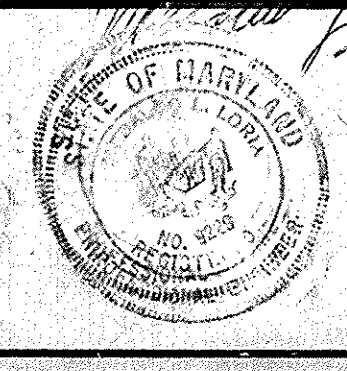
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE,
 STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DIRECTOR: [Signature] DATE: 3/24/93

CHIEF, BUREAU OF ENGINEERING
 DATE: 3-25-93



REVISIONS

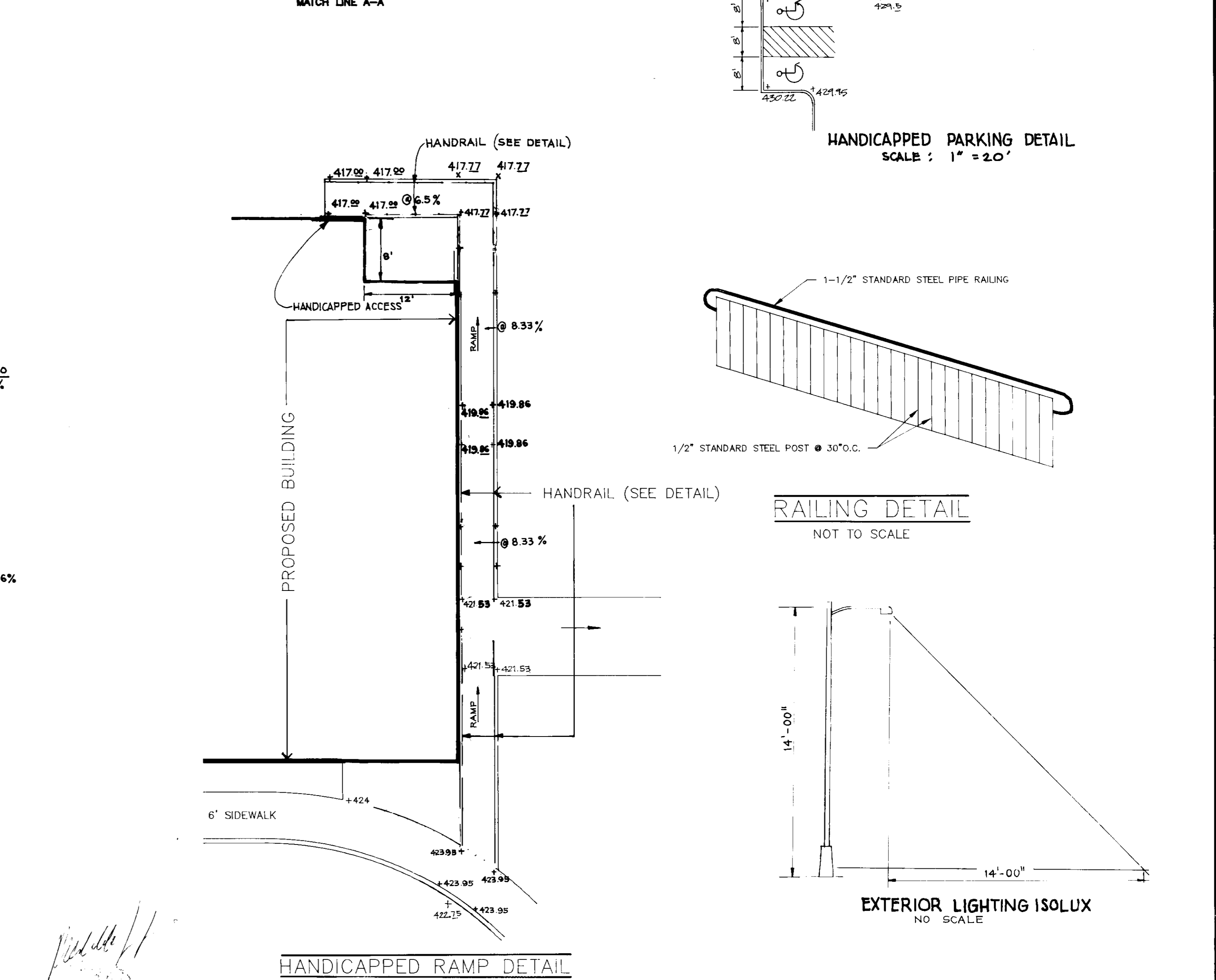
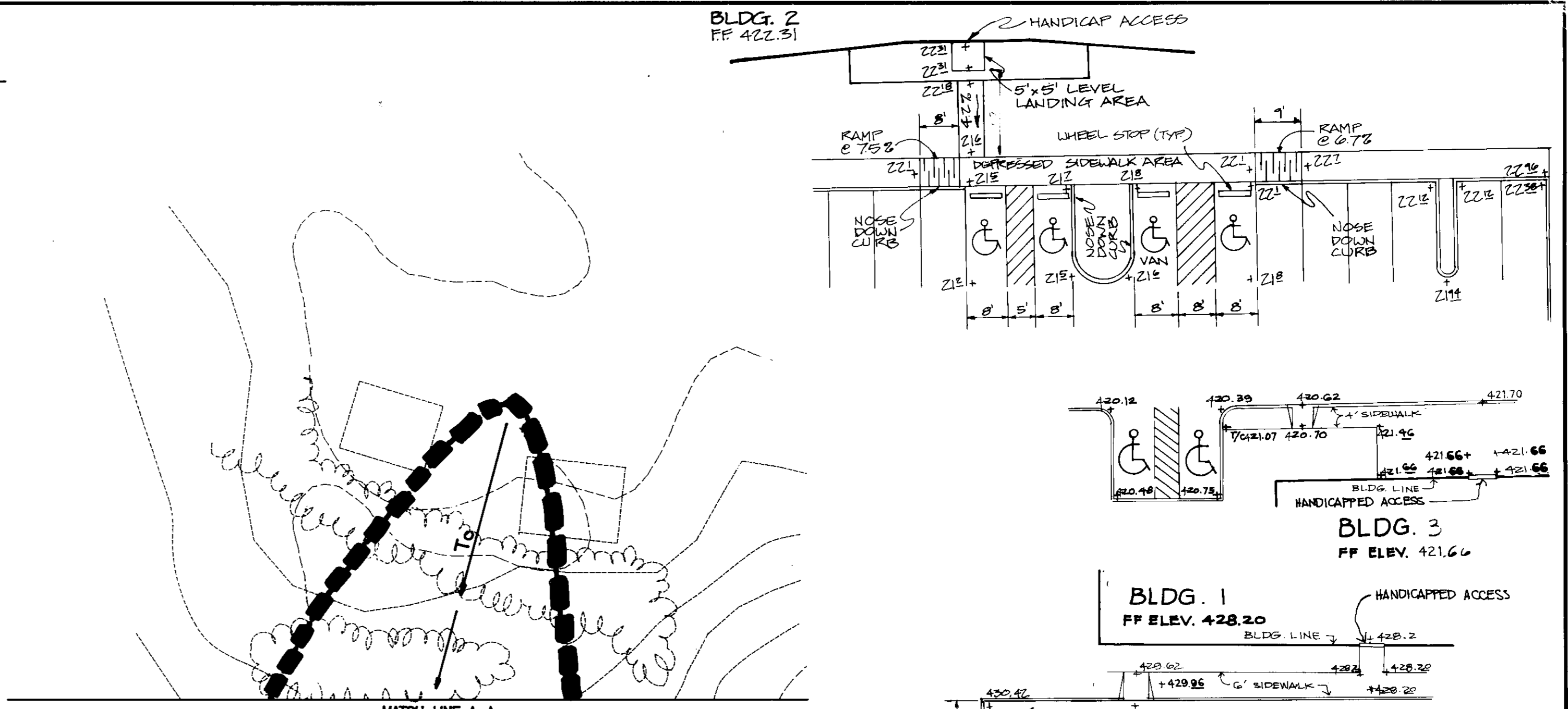
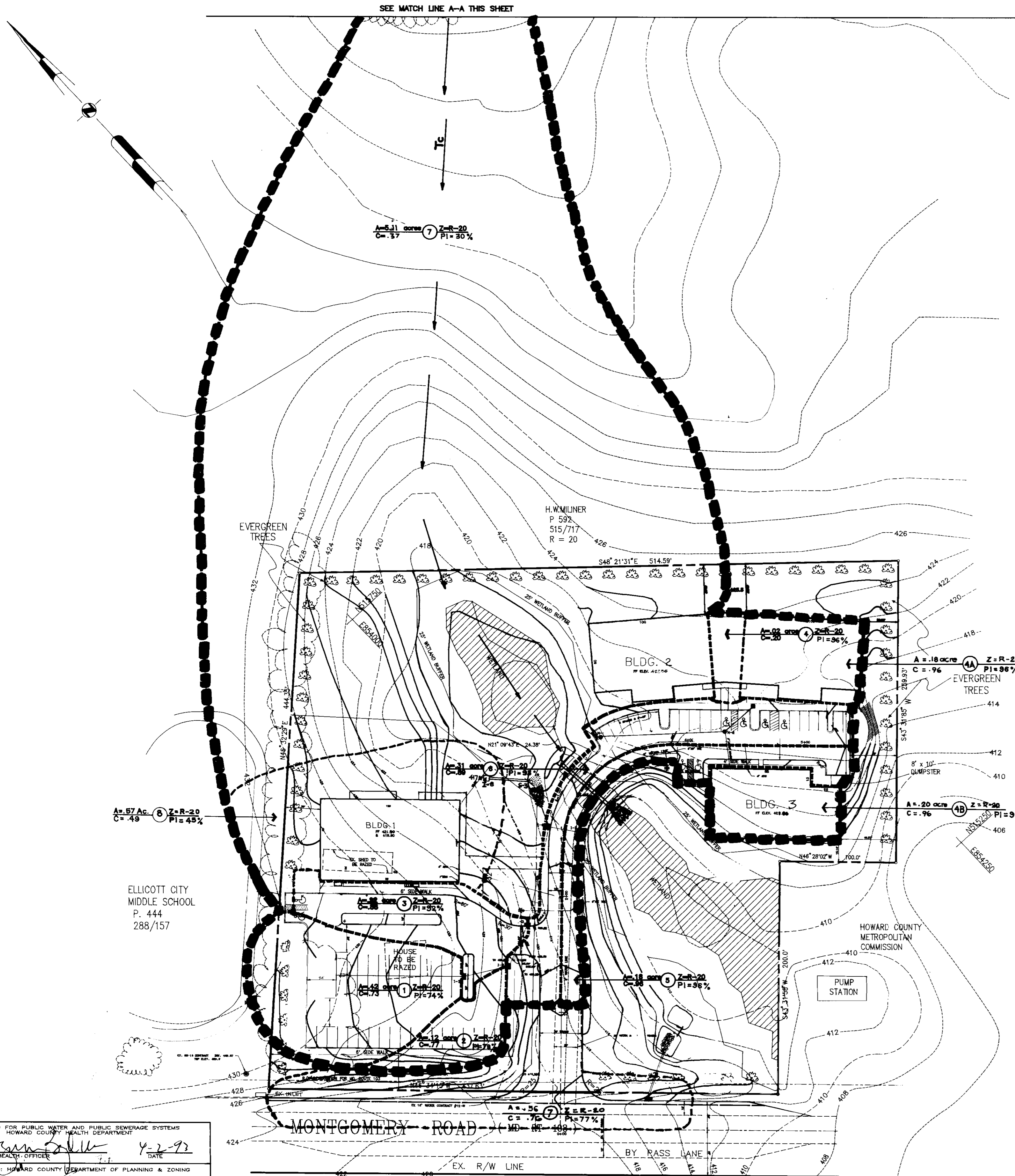
DATE	BY	DESCRIPTIONS
12-1-92	JNC	COUNTY COMMENTS
7-8-93	JNC	REV. ON BLDG. 1; RET. WALL
5-18-95	DTA	REV. ON LANDSCAPING; HANDICAP PARKING; ACCESS TO BLDG. 1
8-0-97	MCR	REV. BLDG. 2 FF & LOCATION; REV. CALC.; REV. PHASE LINES
10-27-97	MCR	



oria engineering inc.
 CONSULTING ENGINEERS & LAND PLANNERS & SURVEYORS
 3230 BETHANY LANE, SUITE 4
 ELLICOTT CITY, MARYLAND 21043
 TEL. (301) 465-0400

SHANGRILA
 MONTESSORI SCHOOL, RELIGIOUS FACILITY & ELDERLY HOUSING
 TAX MAP 30, 31 PARCEL 579 HOWARD COUNTY, MARYLAND
 OWNER: DEVELOPMENT PLANNERS, INC.
 1045 FAIR OAKS COLUMBIA, MD. 21044

DESIGNED	SCALE
MLL	1" = 30'
DRAWN	DRAWING
AVG	1 OF 8
CHECKED	JOB NO.
MLL	
DATE	FILE NO.
7-7-92	



APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT
COUNTY HEALTH OFFICER

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
PLANNING DIRECTOR

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR

DATE: 4-2-93

DATE: 4/6/93

DATE: 3/25/93

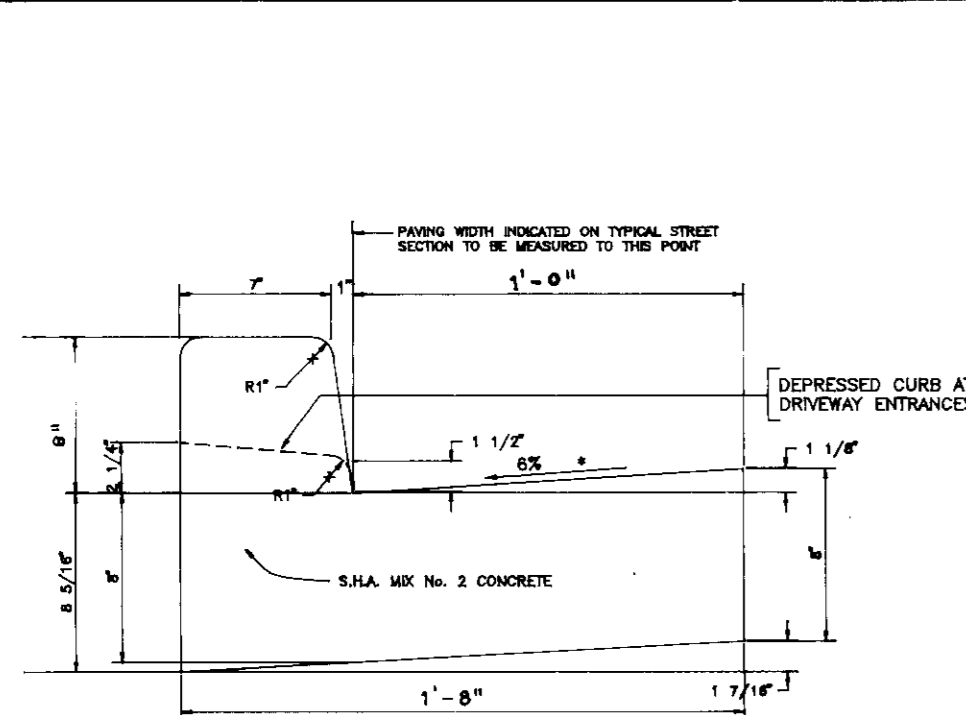
DATE: 3-25-93

DATE	BY	REVISIONS
8-6-97	MCR	REV. BLDG. 1, COMBINE BLDGS. 2 & 3; REV. INLET PUMP STATION; REV. PARK SPACES; MOVE I-4
10-27-97	MCR	REV. ENTRANCE DETAIL BLDG. 2

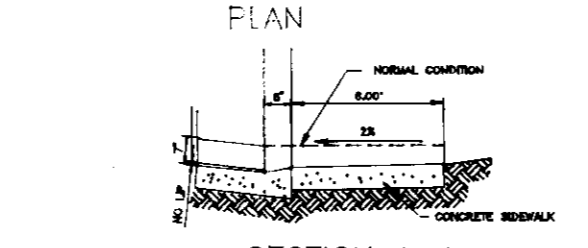
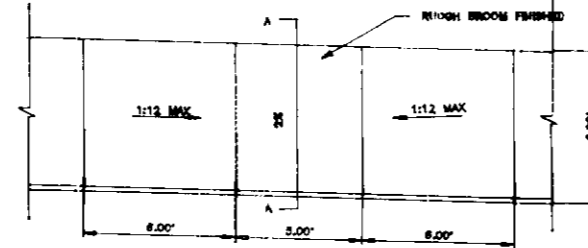
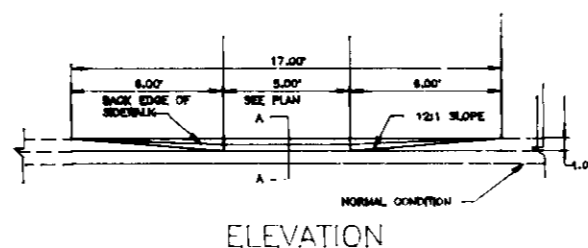
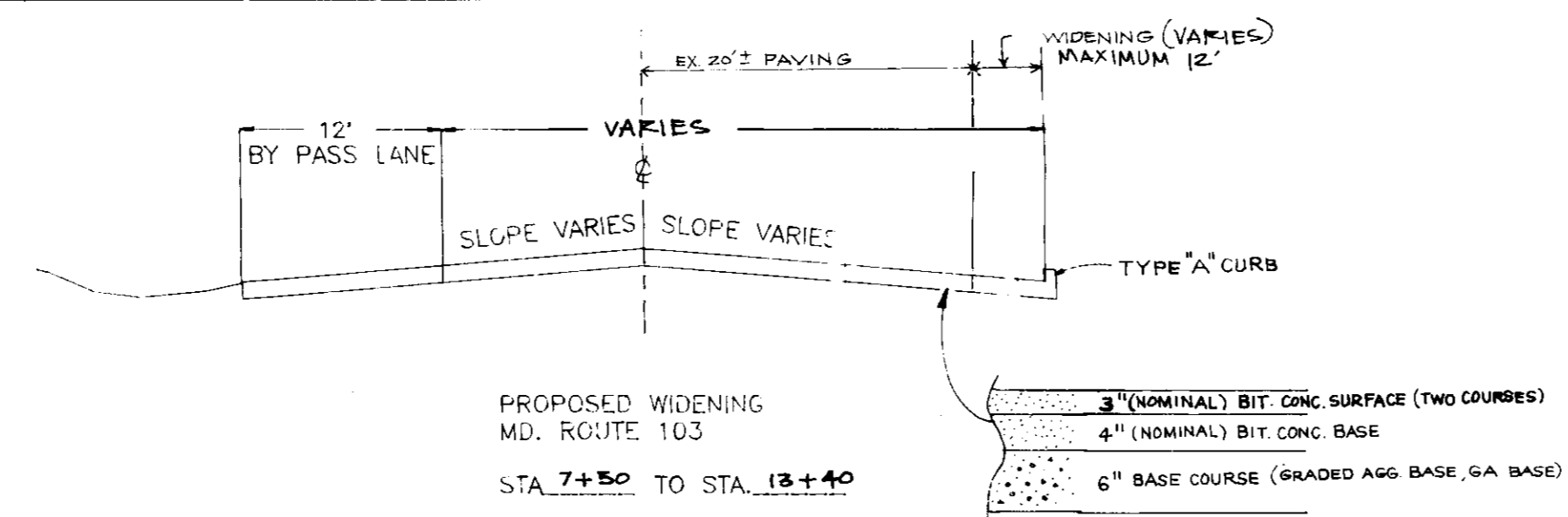
oria engineering inc.
CONSULTING ENGINEERS & LAND PLANNERS & SURVEYORS
3230 BETHANY LANE, SUITE 4
ELLICOTT CITY, MARYLAND 21043
TEL. (301) 465-0400

DRAINAGE AREA MAP DETAILS

SUBDIVISION NAME		SECTION/AREA	PARCEL NO.
		R-20	579
PLAT NO.	BLOCK NO.	TAX/ZONE	ELECT. DIST.
		30,31	2nd
WATER CODE:		SEWER CODE:	
F-10		1400520	
DESIGNED	SHANGRILA		SCALE
MLL			1" = 50'
DRAWN			DRAWING
AVG			2 OF 8
CHECKED	TAX MAP 30, 31 PARCEL 579 HOWARD COUNTY, MARYLAND		JOB NO.
MLL	OWNER: DEVELOPMENT PLANNERS, INC. 10495 FAIR OAKS COLUMBIA, MD 21044		
DATE			FILE NO.
7-7-92			



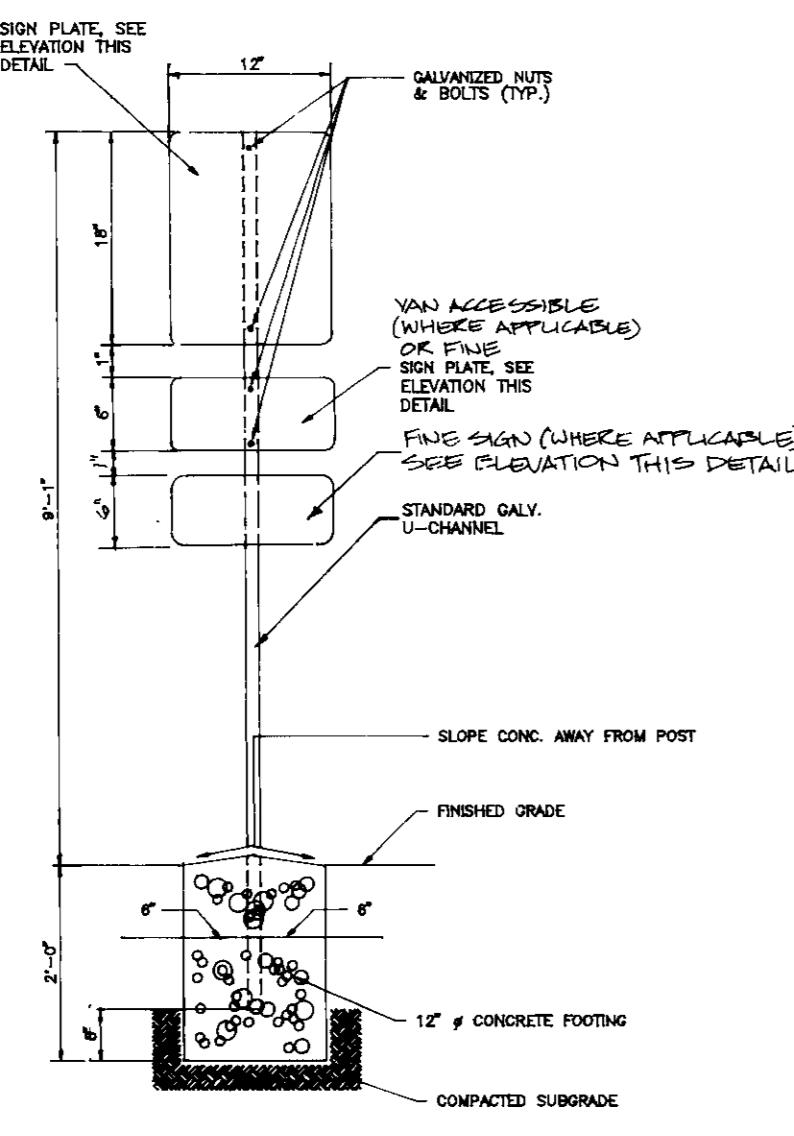
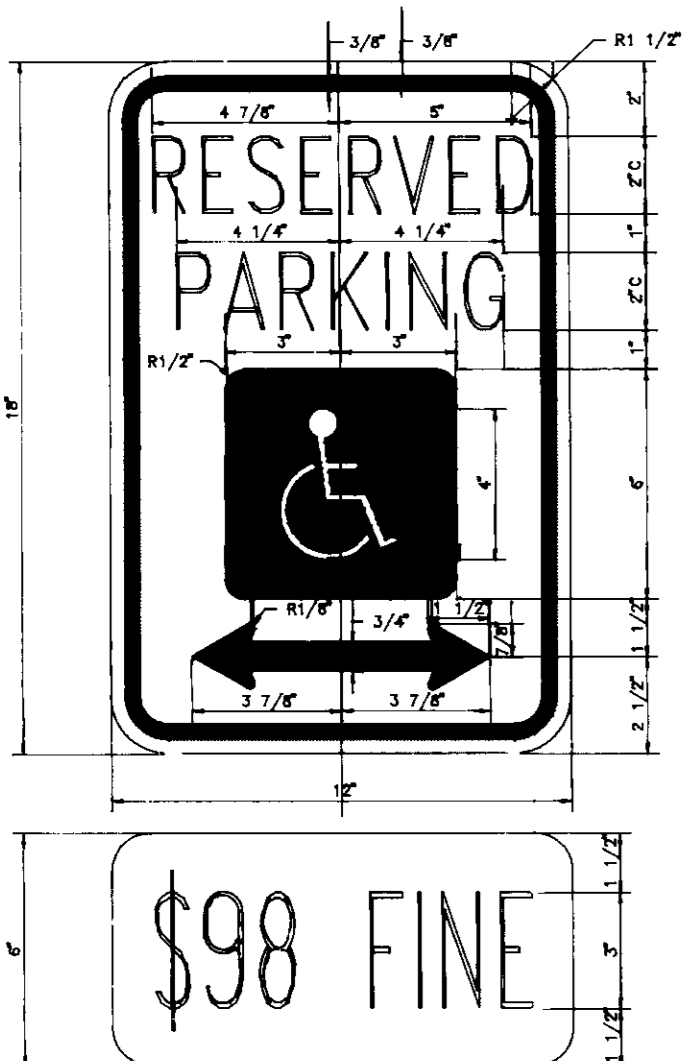
STD. TYPE "A" CONC. COMBINATION CURB & GUTTER
NOT TO SCALE



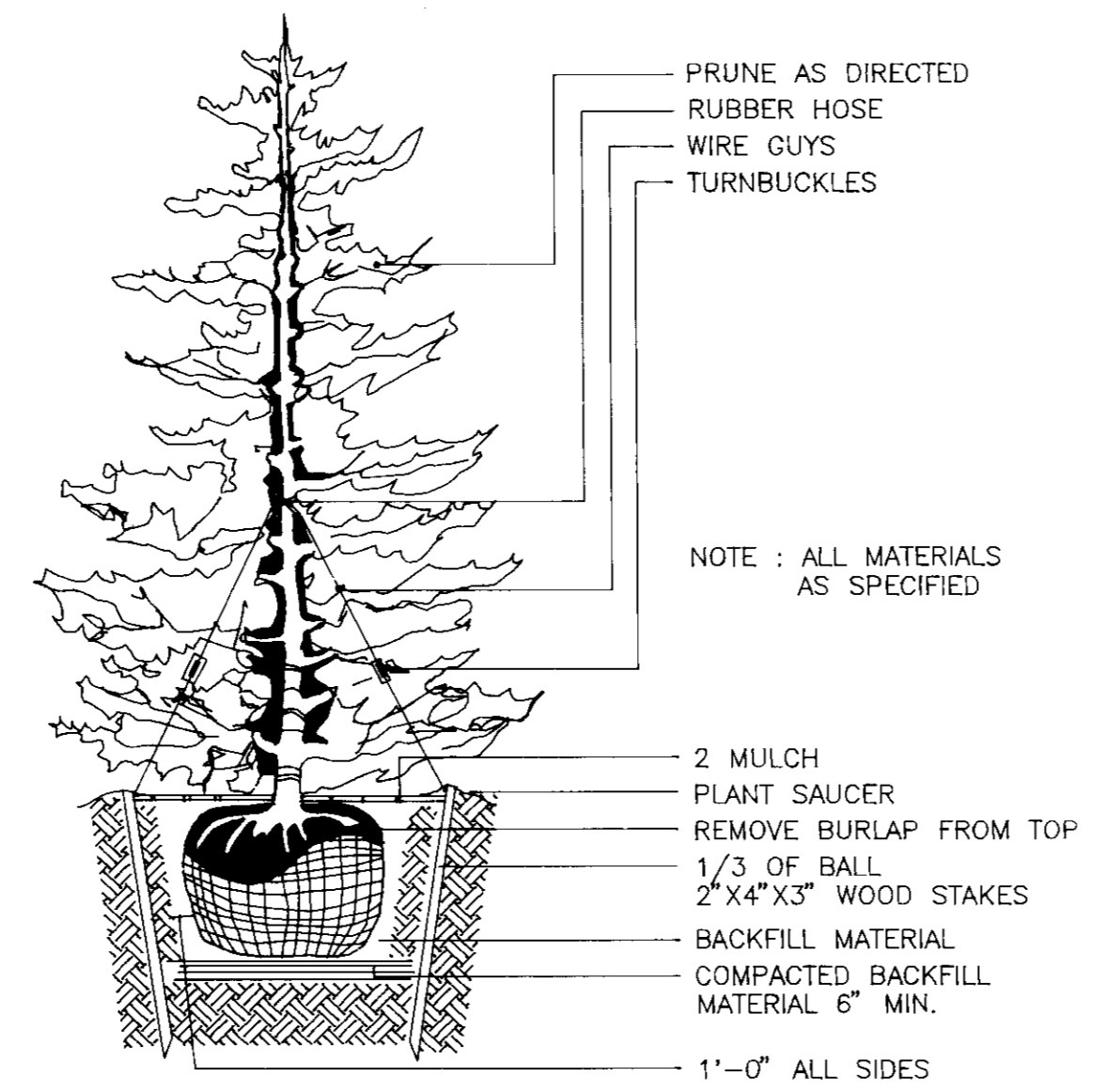
SECTION A-A
PEDESTRIAN RAMP
NOT TO SCALE

SECTION NUMBER	ROAD AND STREET CLASSIFICATION	PAVEMENT MATERIALS	
		FULL DEPTH BIT. CONC. ALTERNATE	GRAVEL BASE ALTERNATE
P-1	PARKING AREAS, APARTMENTS AND COMMERCIAL INDUSTRIAL ZONES WITH NO HEAVY TRUCKS	1" BIT. CONC. SURFACE 2" BIT. CONC. BASE	1" BIT. CONC. SURFACE 2" BIT. CONC. BASE
P-2	RESIDENTIAL ZONES, LOCAL DR.-OR-SAC STS. ALLEYS AND PARKING AREAS SERVING RESIDENTIAL TRAFFIC	1 1/2" BIT. CONC. SURFACE 2" BIT. CONC. BASE	1 1/2" BIT. CONC. SURFACE 2" BIT. CONC. BASE
P-5	TRAVELWAYS AND COMMERCIAL INDUSTRIAL ZONES WITH NO MORE THAN 10 HEAVY TRUCKS PER DAY	4 1/2" BIT. CONC. SURFACE 1 1/2" BIT. CONC. BASE	4 1/2" BIT. CONC. SURFACE 1 1/2" BIT. CONC. BASE

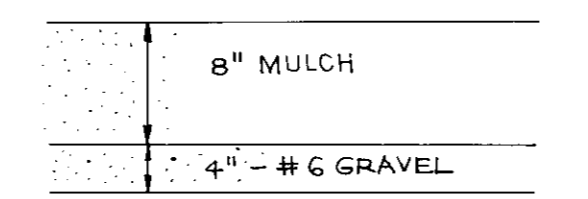
PROPOSED PAVING SECTIONS



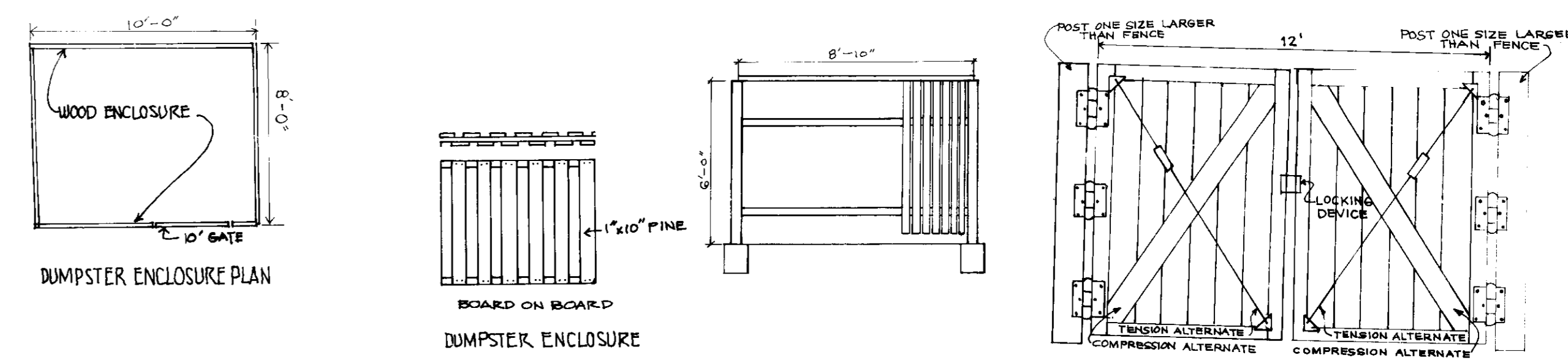
HANDICAPPED SIGNS AND POST
NOT TO SCALE



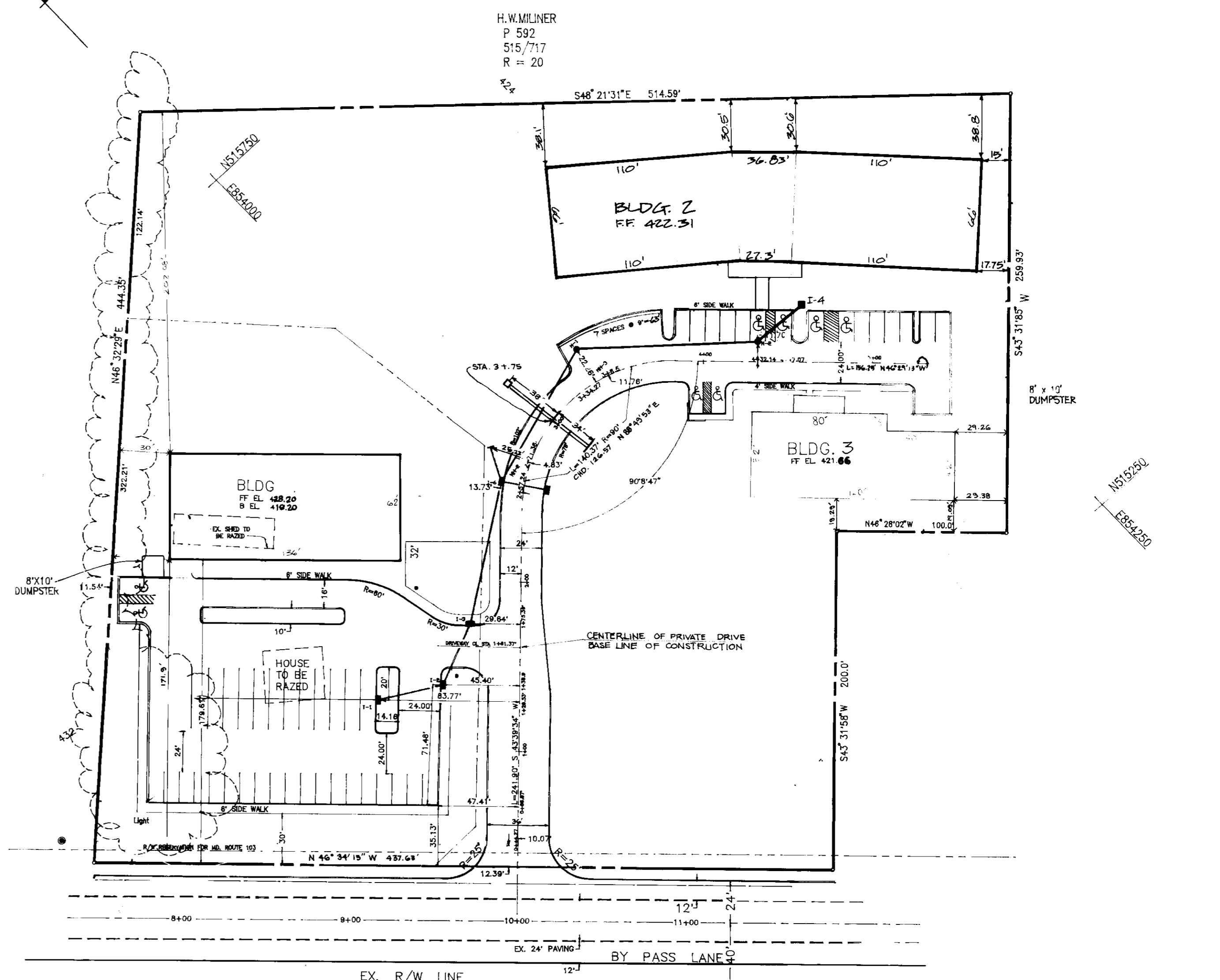
TYPICAL TREE PLANTING DETAIL
NOT TO SCALE



PLAY AREA PAVING SECTION
NO SCALE



NOTE: FENCE AROUND DUMPSTER WILL BE THE SAME MATERIAL AS THE REGULAR FENCE.
FENCE DETAIL NO SCALE
DOUBLE GATE DETAIL NO SCALE



MONTGOMERY ROAD (MD. RT. 103)

UTILITY LAYOUT PLAN
SCALE: 1" = 50'

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT
COUNTY HEALTH OFFICER: [Signature] DATE: 4-2-93

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
PLANNING DIRECTOR: [Signature] DATE: 4/6/93

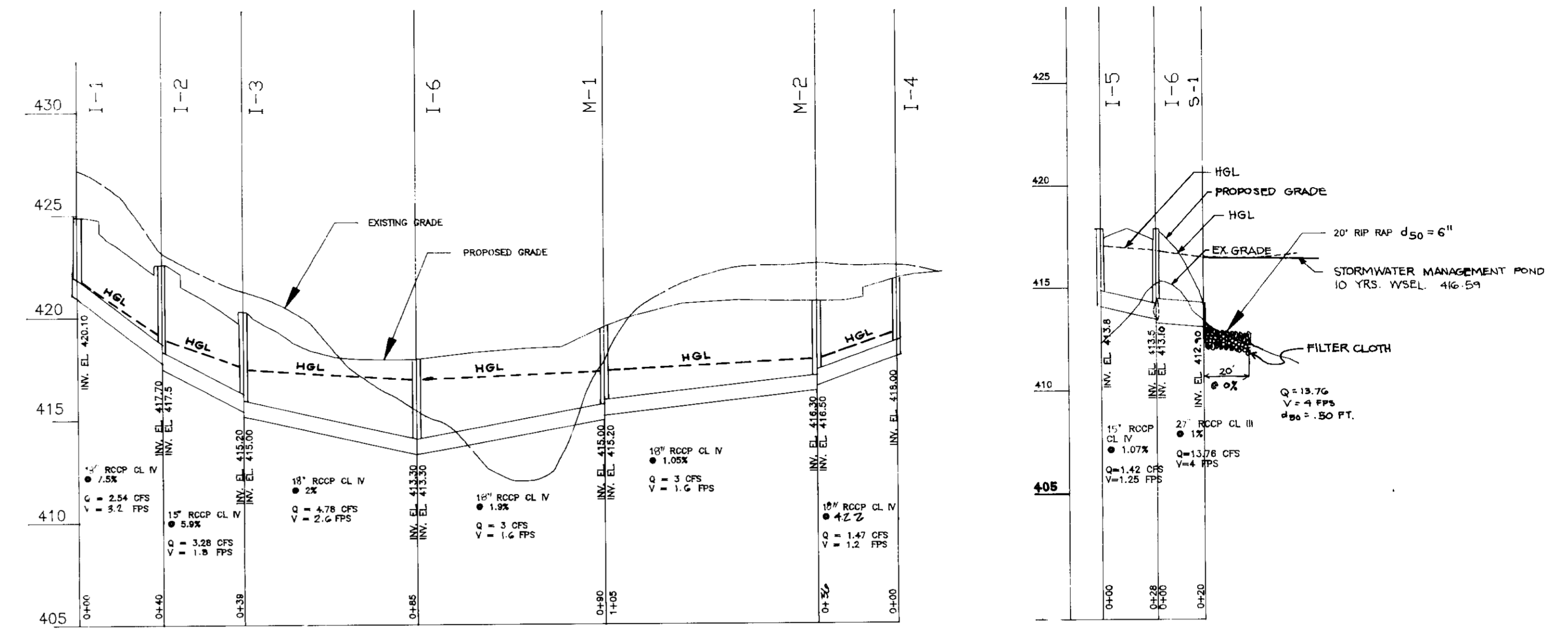
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR: [Signature] DATE: 3-25-93

Shangrila engineering inc.
Consulting Engineers, Land Planners, Surveyors
3230 Bethany Lane, Suite 4, Ellicott City, Maryland
301-465-0400

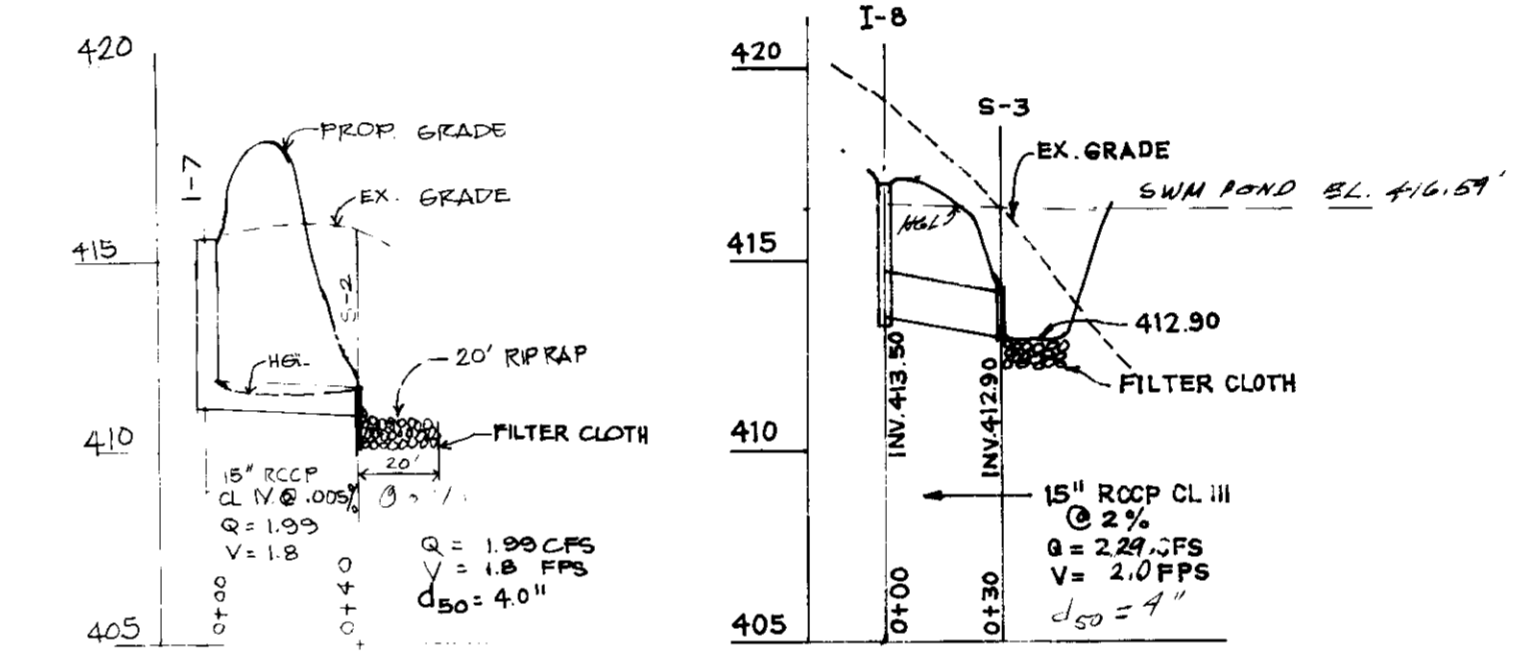
DETAILS

REVISIONS				DESIGNED MLL	DRAWN AVG	CHECKED MLL	DATE 7-7-92	SCALE AS SHOWN DRAWING 3 OF 8 JOB NO. FILE NO.
DATE	BY	DESCRIPTIONS						
8-6-97	MGR	REV. BLDG. 1 & 2 LOCATION						
10-27-97	MGR	REV. BLDG. 2 FF # LOCATION						

OWNER: DEVELOPMENT PLANNERS, 10495 FAIROAKS COLUMBIA, MD. 21044

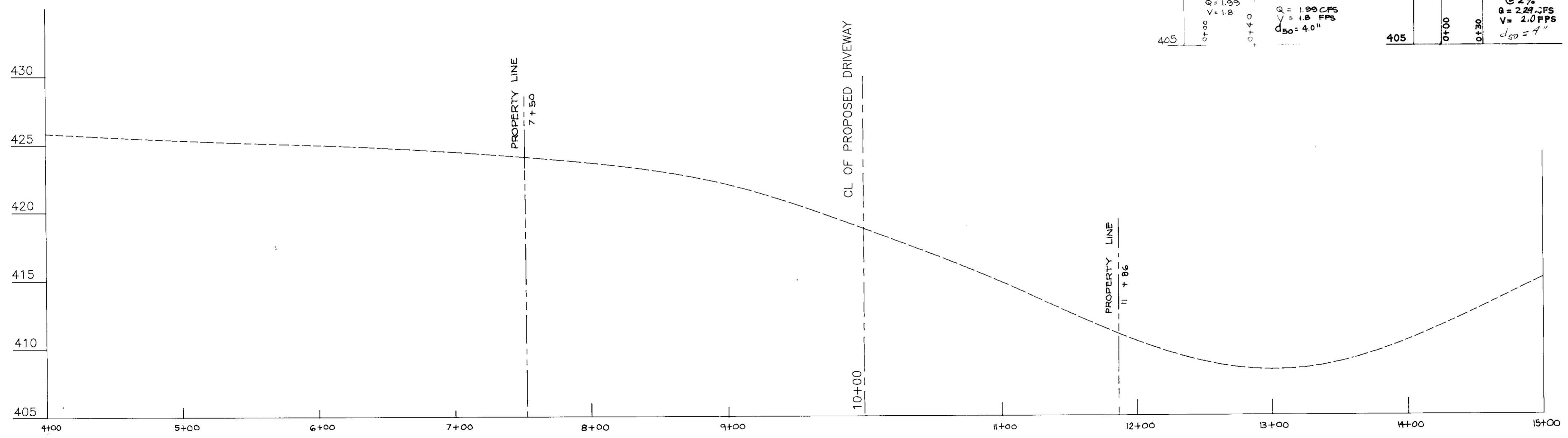


DRAINAGE PROFILE
SCALE 1" = 50' HORIZONTAL
1" = 5' VERTICAL

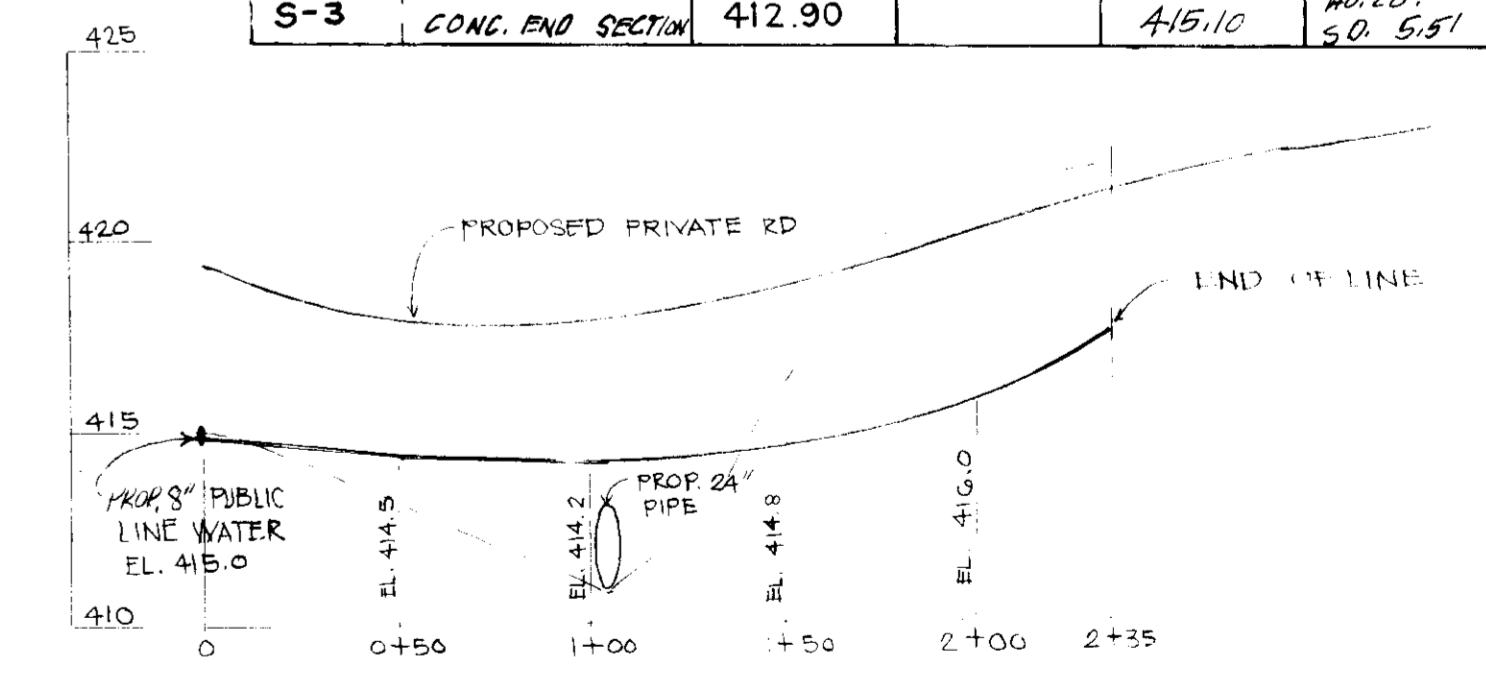


STRUCTURE SCHEDULE

NO.	TYPE	INVERT IN	INVERT OUT	TOP EL.	REMARKS
I-1	A-1	420.10	425.0		HOWARD COUNTY SD. 4.40
I-2	A-10	417.70	417.5	422.76	HOWARD COUNTY SD. 4.41
I-3	A-10	415.2	415.0	420.28	HOWARD COUNTY SD. 4.41
I-4	YARD INLET		418.0	421.20	HOWARD COUNTY SD. 4.40
I-5	A-5		413.80	419.12	HOWARD COUNTY SD. 4.40
I-6	A-5	413.30E 413.30W 413.50S	413.10	419.12	HOWARD COUNTY SD. 4.40
S-1	CONCRETE END SECTION	412.90		415.10	HOWARD COUNTY SD. 5.51
M-1	STD. PRECAST MANHOLE	415.20	415.00	418.20	HOWARD COUNTY G. 9.12
M-2	STD. PRECAST MANHOLE	416.50	416.30	420.56	HOWARD COUNTY SD. 4.41
I-7	A-10		411.1	415.60	HOWARD COUNTY SD. 5.51
S-2	CONCRETE END SECTION	410.90		412.15	HOWARD COUNTY SD. 5.11
E-1	TYPE-A HEADWALL	410.0		413.75	HOWARD COUNTY SD. 4.43
I-8	K-INLET		413.50	417.00	HOWARD COUNTY SD. 4.43
S-3	CONC. END SECTION	412.90		415.10	HOWARD COUNTY SD. 5.51



PROFILE OF OLD MONTGOMERY ROAD
SCALE 1" = 50' HORIZONTAL
1" = 5' VERTICAL



PROFILE OF 2" PRIVATE WATER LINE
SCALE: HOR. 1" = 50'
VER. 1" = 5'

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT
COUNTY HEALTH OFFICER
DATE 4/2/93

APPROVED HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
PLANNING DIRECTOR
DATE 4/6/93

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR
DATE 3/25/93

Shangrila engineering inc.
Consulting Engineers, Land Planners, Surveyors
3230 Bethany Lane, Suite 4, Ellicott City, Maryland
301-465-0400

PROFILES

REVISIONS		
DATE	BY	DESCRIPTIONS
8-0-97	MCR	REV. DRAINAGE PROFILE M2 TO I-4

DESIGNED MLL
DRAWN AVG
CHECKED MLL
DATE 3-30-92

SHANGRILA
MONTESSORI SCHOOL, RELIGIOUS FACILITY & ELDERLY HOUSING
TAX MAP 30, 31 PARCEL 579 HOWARD COUNTY, MARYLAND
OWNER: DEVELOPMENT PLANNERS, INC.
10495 FAIROAKS
COLUMBIA, MD. 21044

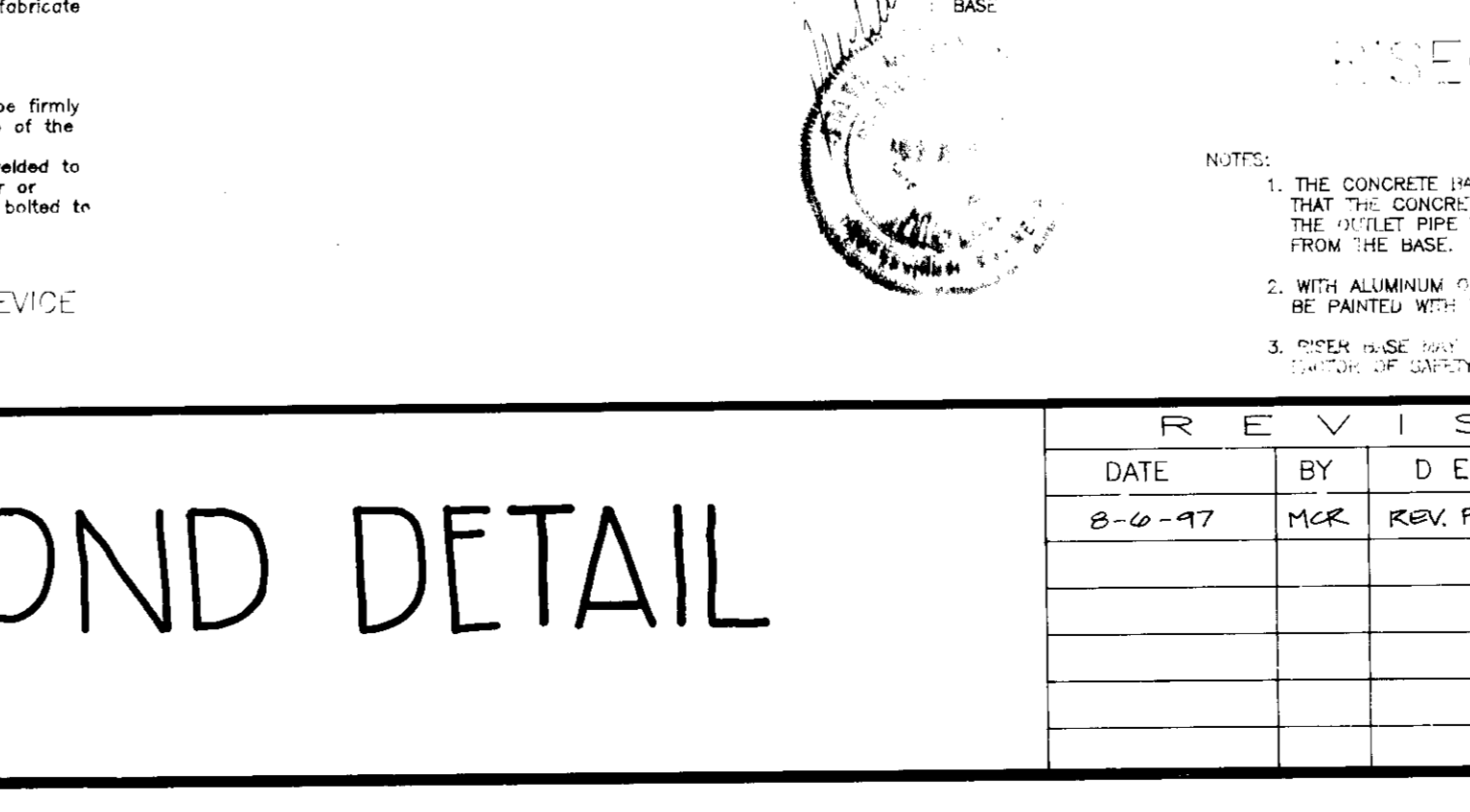
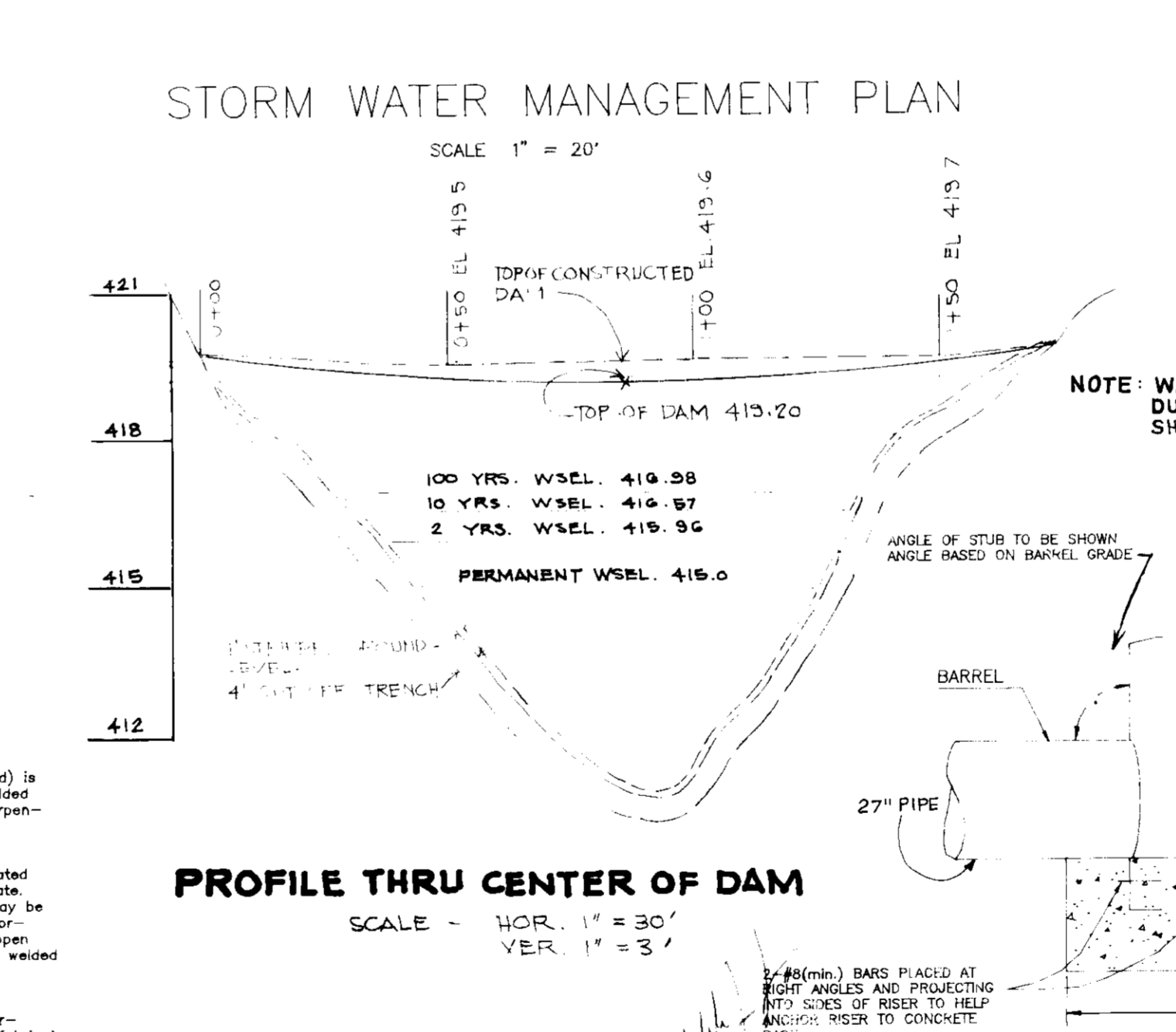
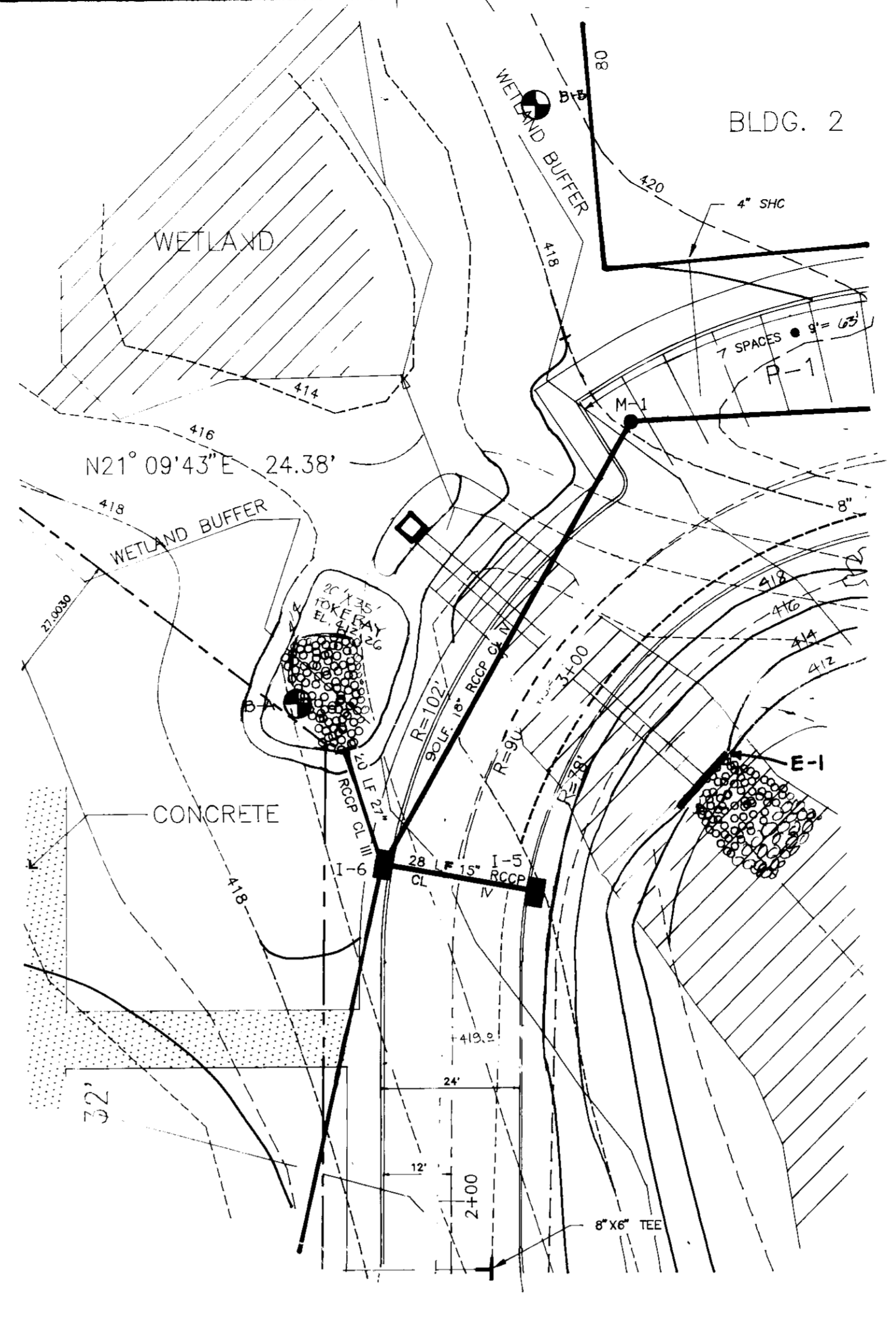
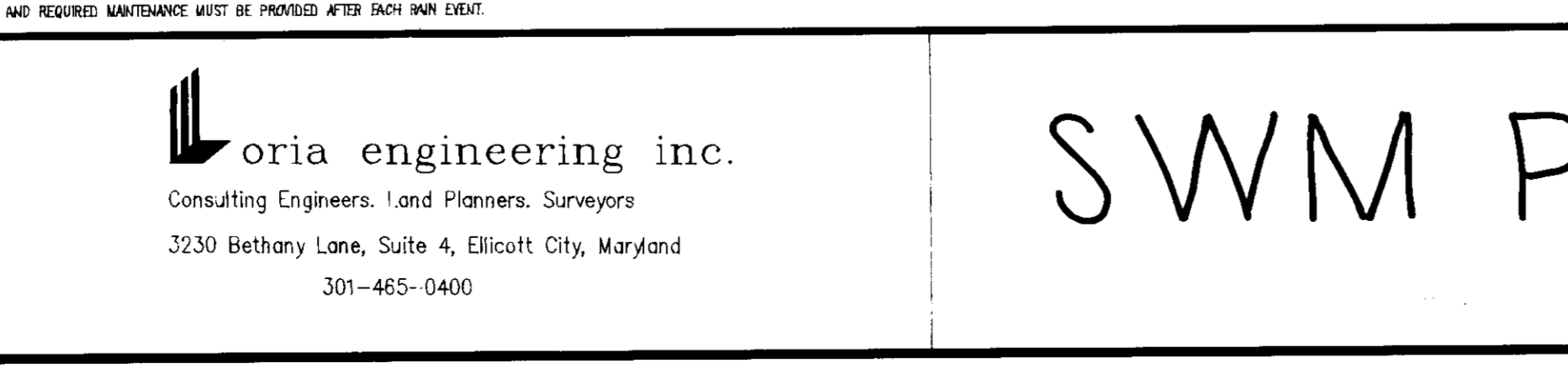
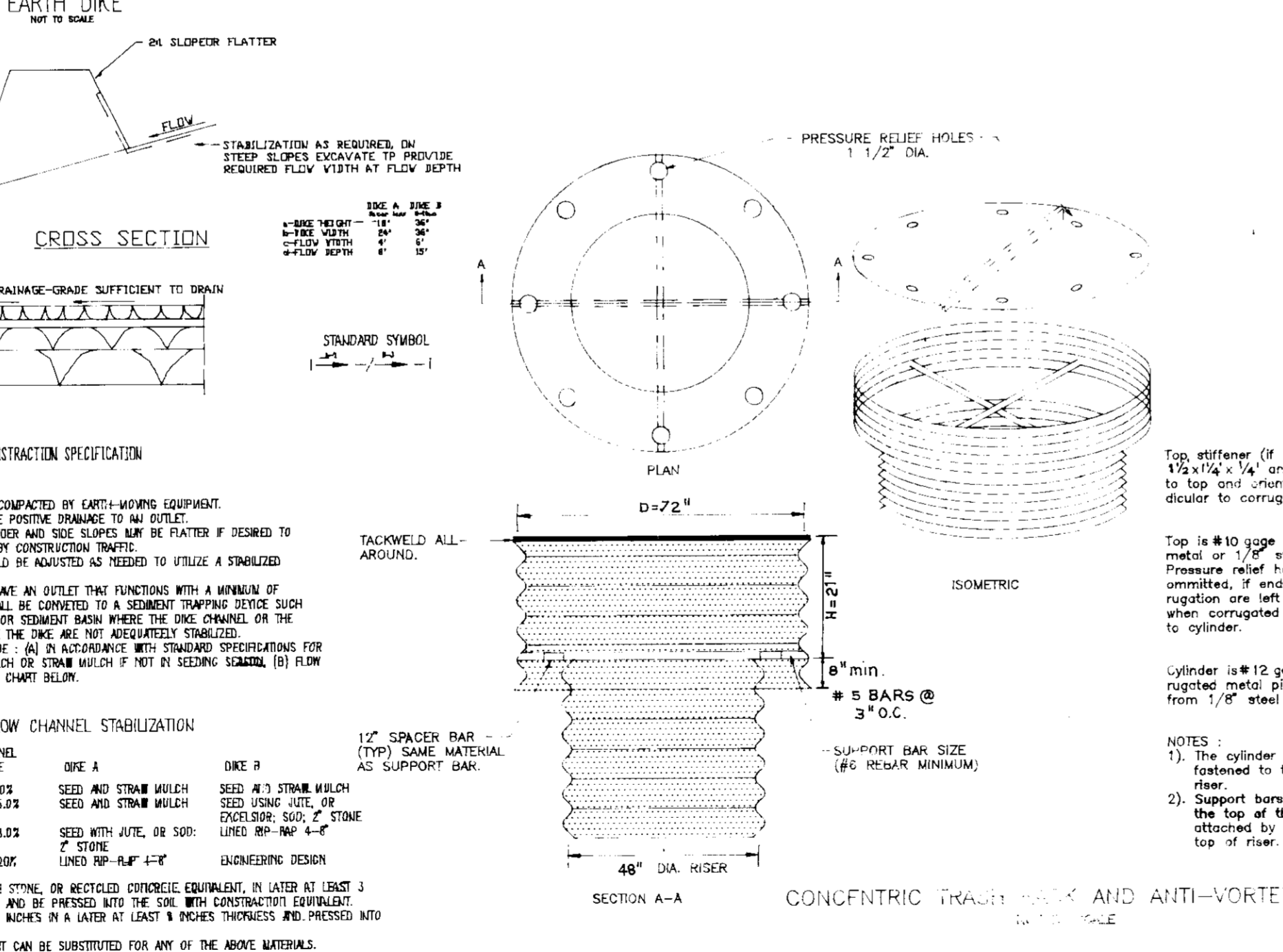
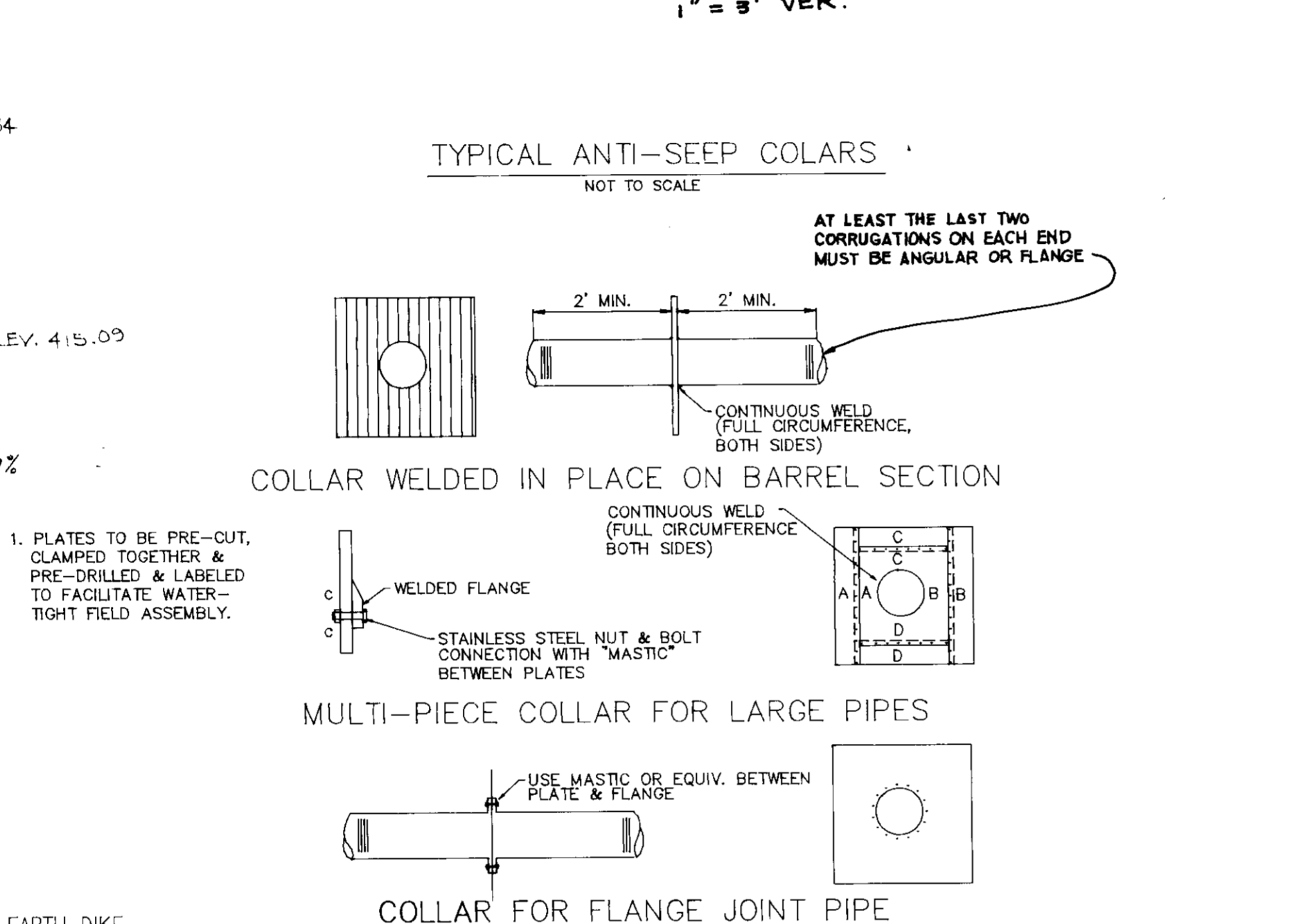
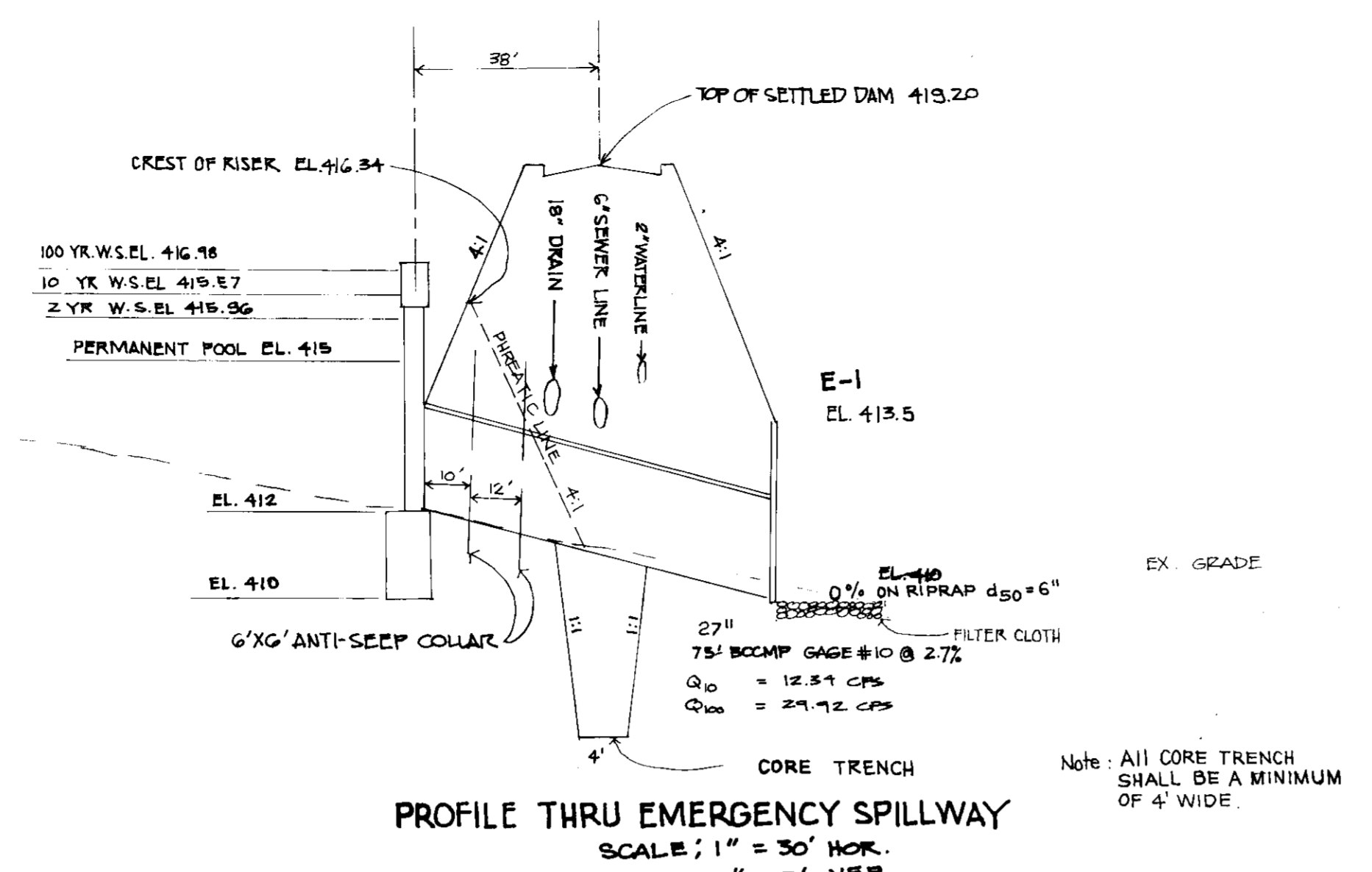
SCALE AS SHOWN
DRAWING 4 OF 8
JOB NO.
FILE NO.

ELEV.	SOIL DESCRIPTION (COLOR, MOISTURE, TEXTURE, GRAIN PROPORTIONS)	DEPTH SCALE	SAMPLE			BORING & SAMPLING NOTES
			CONDITION	BLOWS/6"	NUMBER	
	GREENISH BROWN, MOIST LOOSE TO MEDIUM DENSE MICACEOUS SILT WITH SOME SAND, LITTLE CLAY, TRACE WEATHERED ROCK (ML)	1	2-2-2	1	DS	14
		5	3-4-5	2	DS	16
		9.0'	2-4-7	3	DS	18
		10	3-7-8	4	DS	18
	GREEN, RUST, AND BROWN MOIST, MEDIUM DENSE MICACEOUS SILT WITH SOME FINE SAND, TRACE WEATHERED ROCK (ML)	15	4-8-10	5	DS	18
		20.0'	3-5-9	6	DS	18
		25	3-6-7	7	DS	18
	BOTTOM OF TEST BORING AT 20.0'					

SAMPLE TYPE: DS - DRIVEN SPOUT SPOON
 SAMPLE CONDITIONS: 1 - INTACT
 GROUND WATER DEPTH: AT COMPLETION 14.12 FT AFTER 22HRS. 5.5 FT.

ELEV.	SOIL DESCRIPTION (COLOR, MOISTURE, TEXTURE, GRAIN PROPORTIONS)	DEPTH SCALE	SAMPLE			BORING & SAMPLING NOTES
			CONDITION	BLOWS/6"	NUMBER	
	LIGHT BROWN, MOIST SOFT MICACEOUS SILT WITH SOME CLAY, TRACE FINE SAND AND WEATHERED ROCK (ML)	1	2-2-4	1	DS	10
		5	3-3-5	2	DS	18
	BR. AND GREEN MOIST MEDIUM DEN. MICACEOUS SANDY SILT, TRACE WEATHERED ROCK (ML)	10	3-5-5	3	DS	18
		15	5-15-14	4	DS	18
	LIGHT TEN, MOST VERY DENSE SAND AND GRAVEL, TRACE WEATHERED ROCK (SP)	1	6-9-12	5	DS	15
		15	6-8-10	7	DS	12
	GREENISH BROWN, MOIST MEDIUM DENSE MICACEOUS SANDY SILT (ML)	20.0'	40-50/6	6	DS	16
	BOTTOM OF TEST BORING AT 20.0'					

SAMPLE TYPE: DS - DRIVEN SPOUT SPOON
 SAMPLE CONDITIONS: 1 - INTACT
 GROUND WATER DEPTH: AT COMPLETION 14.12 FT AFTER 22HRS. 5.5 FT.



DEVELOPER'S CERTIFICATE

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 NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I WILL 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 INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

Patrick Ziehn
DEVELOPER'S SIGNATURE

ENGINEER'S CERTIFICATE

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 MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

William H. ...
ENGINEER'S SIGNATURE

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements for small pond construction. Soil and Sediment Control.

Jonathan A. ... 5-26-93
U.S. Soil Conservation Service Date

Patrick Ziehn 5-26-93
Howard Soil Conservation District Date

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT

Joseph ... 4-22-93
DATE

APPROVED HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

... .. 4/6/93
DATE

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE,
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

... .. 3/25/93
DATE

... .. 3-25-93
DATE

Shangrila engineering inc.
Consulting Engineers, Land Planners, Surveyors
3230 Bethany Lane, Suite 4, Ellicott City, Maryland
301-465-0400

SWM POND DETAIL

DATE	BY	DESCRIPTIONS	DESIGNED
8-0-97	MCR	REV. PARKING SPACES	MLL
			DRAWN
			AVG
			CHECKED
			MLL
			DATE
			3-30-92

SCALE AS SHOWN DRAWING 5 OF 8

JOB NO.

FILE NO.

SHANGRILA
MONTESSORI SCHOOL, RELIGIOUS FACILITY & ELDERLY HOUSING
TAX MAP 30, 31 PARCEL 579 HOWARD COUNTY, MARYLAND
OWNER: DEVELOPMENT PLANNERS, INC.
10495 FAIROAKS
COLUMBIA, MD. 21044

SDP-92-91

SOIL CONSERVATION SERVICE MARYLAND
CONSTRUCTION SPECIFICATIONS AND FOR PONDS

THIS SPECIFICATION ARE APPROPRIATE TO PONDS WITHIN THE SCOPE OF THE STANDARD FOR PRACTICE 378.

I. SITE PREPARATION

AREAS UNDER THE BORROW AREAS, EMBANKMENT, AND STRUCTURAL WORKS SHALL BE CLEARED, GRUBBED AND THE TOP SOIL STRIPPED TO REMOVE ALL TREES, VEGETATION, ROOTS OR THE OTHER OBJECTIONABLE MATERIAL. CHANNEL BANKS, AND SHARP BREAKS SHALL BE SLOPED TO NO STEEPER THAN 1:1.

AREAS COVERED BY THE POND OR RESERVOIR WILL BE CLEARED OF ALL TREES, BRUSH, LOGS, FENCES, RUBBISH AND OTHER OBJECTIONABLE MATERIAL UNLESS OTHERWISE DESIGNATED ON THE PLANS. TREES, BRUSH AND STUMPS SHALL BE CUT APPROXIMATELY LEVEL WITH THE GROUND SURFACE.

ALL CLEARED AND GRUBBED MATERIAL SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE DAM AND RESERVOIR AS DIRECTED BY THE OWNER OR HIS AUTHORIZED REPRESENTATIVE. WHEN SPECIFIED, A SUFFICIENT QUANTITY OF TOPSOIL WILL BE STOCKPILED IN A SUITABLE LOCATION FOR USE ON THE EMBANKMENT AND OTHER DESIGNATED AREAS.

II. EARTH FILL

MATERIAL

THE FILL MATERIAL SHALL BE TAKEN FROM APPROVED DESIGNATED BORROW AREA OR AREAS. IT SHALL BE FREE OF ROOTS, STUMPS, WOOD, RUBBISH, OVER-SIZE STONES, FROZEN OR OTHER OBJECTIONABLE MATERIALS. THE EMBANKMENT SHALL BE CONSTRUCTED TO AN ELEVATION WHICH PROVIDES FOR ANTICIPATED SETTLEMENT TO THE DESIGN ELEVATION. THE FILL HEIGHT ALL ALONG THE LENGTH OF THE EMBANKMENT SHALL BE INCREASED ABOVE THE DESIGN ELEVATION (INCLUDING FREEBOARD) AS SHOWN ON THE PLANS.

PLACEMENT

AREA ON WHICH FILL IS TO BE PLACED SHALL BE SCARIFIED PRIOR TO PLACEMENT OF FILL. FILL MATERIALS SHALL BE PLACED IN 8-INCH MAXIMUM THICKNESS (BEFORE COMPACTION) LAYERS WHICH ARE TO BE CONTINUOUS OVER THE ENTIRE LENGTH OF THE FILL. THE MOST POROUS MATERIAL SHALL BE PLACED IN THE DOWNSTREAM PORTIONS OF THE EMBANKMENT.

COMPACTION

THE MOVEMENT OF THE HAULING AND SPREADING EQUIPMENT OVER THE FILL SHALL BE CONTROLLED SO THAT THE ENTIRE SURFACE OF EACH LIFT SHALL BE TRAVERSED BY NOT LESS THAN ONE TRACK OF THE EQUIPMENT OR COMPACTION SHALL BE ACHIEVED BY ALUMINUM OF FOUR COMPLETE PASSES OF A SHEEPPOOT, RUBBER TIED OR VIBRATORY ROLLER. FILL MATERIALS SHALL CONTAIN SUFFICIENT MOISTURE SUCH THAT THE REQUIRED DEGREE OF COMPACTION CAN BE OBTAINED WITH THE EQUIPMENT USED.

CUTOFF TRENCH

WHERE SPECIFIED, A CUTOFF TRENCH SHALL BE EXCAVATED ALONG OR PARALLEL TO THE CENTERLINE OF THE EMBANKMENT AS SHOWN ON THE PLANS. THE BOTTOM WIDTH OF THE TRENCH SHALL BE GOVERNED BY THE EQUIPMENT USED FOR EXCAVATION. WIDTH THE MINIMUM WIDTH BEING FOUR FEET. THE DEPTH SHALL BE AT LEAST FOUR FEET OR AS SHOWN ON THE PLANS. THE SIDE SLOPES OF THE TRENCH SHALL 1:1 OR FLATTER. THE BACKFILL MATERIAL FOR THE CUTOFF TRENCH SHALL BE THE MOST IMPERVIOUS MATERIAL MAXIMUM DENSITY AND MINIMUM PERMEABILITY.

III. STRUCTURAL BACKFILL

BACKFILL MATERIAL SHALL BE OF THE TYPE AND QUALITY CONFORMING TO THAT SPECIFIED FOR THE ADJOINING FILL MATERIAL. THE FILL SHALL BE PLACED IN HORIZONTAL LAYERS NOT TO EXCEED FOUR INCHES IN THICKNESS AND COMPACTED BY HAND TAMPERS OR OTHER COMPACTION EQUIPMENT. THE MATERIAL NEEDS TO FILL COMPLETELY ALL SPACES UNDER ADJACENT TO THE PIPE. AT NO TIME DURING THE BACKFILLING OPERATION SHALL DRIVEN EQUIPMENT BE ALLOWED TO OPERATE CLOSER THAN FOUR FEET, MEASURED HORIZONTALLY, TO ANY PART OF A STRUCTURE. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR DRIVE EQUIPMENT OVER ANY PART OF A CONCRETE STRUCTURE OR PIPE UNLESS THERE IS A COMPACTED FILL OF TWENTY-FOUR INCHES OR GREATER OVER THE STRUCTURE OR PIPE.

IV. PIPE CONDUITS

A. CORRUGATED METAL PIPE

1. MATERIALS - (STEEL PIPE) - THIS PIPE AND ITS APPURTENANCES SHALL BE GALVANIZED AND FULLY BITUMINOUS COATED AND SHALL CONFORM TO THE REQUIREMENTS OF AASHTO SPECIFICATION M-190 TYPE A WITH WATER-TIGHT COUPLING BANDS. ANY BITUMINOUS COATING DAMAGED OR OTHERWISE REMOVED SHALL BE PLACED WITH COLD APPLIED BITUMINOUS COMPOUND.
2. MATERIALS - (ALUMINUM PIPE) - THIS PIPE AND ITS APPURTENANCES SHALL CONFORM TO THE REQUIREMENTS OF AASHTO SPECIFICATION M-196 OR M-211 WITH WATER-TIGHT COUPLING BANDS. COUPLING BANDS, ANTI-SEEP COLLARS, END SECTIONS, ETC. MUST BE COMPOSED OF THE SAME MATERIAL AS THE PIPE. METALS MUST BE INSULATED FROM DISSIMILAR MATERIALS WITH USE OF RUBBER OR PLASTIC INSULATING MATERIALS AT LEAST 24 MILS IN THICKNESS. ALUMINUM SURFACES THAT ARE TO BE IN CONTACT WITH CONCRETE SHALL BE PAINTED WITH ONE COAT OF ZINC CHROMATE PRIMER. HOT DIP GALVANIZED BOLTS MAY BE USED FOR CONNECTIONS. THE OF THE SURROUNDING SOILS SHALL BE LESS THAN 9 AND GREATER THAN 4.

HELICALLY CORRUGATED PIPE IN ADDITION TO THE REQUIREMENTS ABOVE SHALL HAVE EITHER CONTINUOUSLY SEAMS OR HAVE LOCK SEAMS WHICH ARE CAULKED, DURING FABRICATION, WITH A NEOPRENE BEAD.

2. CONNECTIONS - ALL CONNECTIONS WITH PIPES MUST BE COMPLETELY WATER-TIGHT. THE DRAIN PIPE OR BARREL CONNECTION TO THE RISER SHALL BE WELDED ALL AROUND WHEN THE PIPE AND RISER ARE METAL. WATER-TIGHT COUPLING BANDS SHALL BE USED AT ALL JOINTS. ANTI-SEEP COLLARS SHALL BE CONNECTED TO THE PIPE IN SUCH A MANNER AS TO BE COMPLETELY WATER-TIGHT.
3. BEDDING - THE PIPE SHALL BE FIRMLY AND UNIFORMLY BEDDED THROUGHOUT ITS ENTIRE LENGTH. WHERE ROCK OR SOFT, SPONGY OR OTHER UNSTABLE SOIL IS ENCOUNTERED, ALL SUCH MATERIAL SHALL BE REMOVED AND REPLACED WITH SUITABLE EARTH COMPACTED TO PROVIDE ADEQUATE SUPPORT.
4. LAYING PIPE - THE PIPE SHALL BE PLACED WITH INSIDE CIRCUMFERENTIAL LAPS POINTING DOWNSTREAM AND WITH THE LONGITUDINAL LAPS AT THE SIDES.
5. BACKFILLING SHALL CONFORM TO STRUCTURAL BACKFILL AS SHOWN ABOVE.
6. OTHER DETAILS (ANTI-SEEP COLLARS, VALVES, ETC.) SHALL BE AS SHOWN ON THE DRAWINGS.

B. REINFORCED CONCRETE PIPE

1. MATERIALS - REINFORCED CONCRETE PIPE SHALL HAVE A RUBBER GASKET JOINT AND SHALL EQUAL OR EXCEED ASTM SPECIFICATION C-361. APPROVED EQUIVALENTS ARE AWWA SPECIFICATION C-300, 301, AND 302.
2. BEDDING - ALL REINFORCED CONCRETE PIPE CONDUITS SHALL BE LAID IN A CONCRETE BEDDING FOR THE ENTIRE LENGTH. THIS BEDDING SHALL CONSIST HIGH SLUMP CONCRETE PLACED UNDER THE PIPE AND UP THE SIDES OF THE PIPE AT LEAST 10% OF ITS DIAMETER WITH A MINIMUM THICKNESS OF 3", OR AS SHOWN ON THE DRAWINGS.
3. LAYING PIPE - BELL AND SPIGOT PIPE SHALL BE PLACED WITH THE BELL END UPSTREAM. JOINTS SHALL BE MADE IN ACCORDANCE WITH RECOMMENDATIONS OF THE MANUFACTURER OF THE MATERIAL. AFTER THE JOINTS ARE SEALED FOR THE ENTIRE LINE, THE BEDDING SHALL BE PLACED SO THAT ALL SPACES UNDER THE PIPE ARE FILLED. CARE SHALL BE EXERCISED TO PREVENT ANY DEVIATION FROM THE ORIGINAL LINE AND GRADE OF THE PIPE.
4. BACKFILLING SHALL CONFORM TO STRUCTURAL BACKFILL AS SHOWN ABOVE.
5. OTHER DETAILS (ANTI-SEEP COLLARS, VALVES, ETC.) SHALL BE SHOWN ON THE DRAWINGS.

V. CONCRETE

1. MATERIALS
 - a. CEMENT - NORMAL PORTLAND CEMENT SHALL CONFORM TO THE LATEST ASTM SPECIFICATION C-150.
 - b. WATER - THE WATER USED IN CONCRETE SHALL BE CLEAN, FREE FROM OIL, ACID, ALKALI, SCALE, ORGANIC MATTER OR OTHER OBJECTIONABLE SUBSTANCES.
 - c. SAND - THE SAND USED IN CONCRETE SHALL BE CLEAN, HARD, STRONG, AND DURABLE, AND SHALL BE WELL GRADED WITH 100 PERCENT PASSING A ONE-QUARTER INCH SIEVE. LIMESTONE SAND SHALL NOT BE USED.
 - d. COARSE AGGREGATE - THE COARSE AGGREGATE SHALL BE CLEAN, HARD, STRONG AND DURABLE, AND FREE FROM CLAY OR DIRT. IT SHALL BE WELL GRADED WITH A MAXIMUM SIZE OF 1 1/2 INCHES.
 - e. REINFORCING STEEL - THE REINFORCING STEEL SHALL BE DEFORMED BARS OF INTERMEDIATE GRADE BILLET SHALL OR RAIL STEEL CONFORMING TO ASTM SPECIFICATION A-815.
2. DESIGN MIX - THE CONCRETE SHALL BE MIXED IN THE FOLLOWING PROPORTIONS, MEASURED BY WEIGHT. THE WATER-CEMENT RATIO SHALL BE 5-1/2 TO 6 U.S. GALLONS OF WATER PER 94 POUND BAG OF CEMENT. THE PROPORTION OF MATERIALS FOR THE MIX SHALL BE 1:2:3-1/2. THE COMBINATION OF AGGREGATES MAY BE ADJUSTED TO PROCEDURE HARSHNESS IN PLACING OR HONEYCOMBING THE STRUCTURE.
3. MIXING - THE CONCRETE INGREDIENTS SHALL BE MIXED IN BATCH MIXERS UNTIL THE MIXTURE IS HOMOGENEOUS AND OF UNIFORM CONSISTENCY. THE MIXING OF EACH BATCH SHALL CONTINUE FOR NOT LESS THAN ONE AND ONE-HALF MINUTES AFTER ALL THE INGREDIENTS, EXCEPT THE FULL AMOUNT OF WATER, ARE IN THE MIXER. THE MINIMUM MIXING TIME IS PREDICTED ON PROPER CONTROL OF THE SPEED OF ROTATION OF THE MIXER AND OF THE INTRODUCTION OF THE MATERIALS, INCLUDING WATER, INTO THE MIXER. WATER SHALL BE ADDED PRIOR TO, DURING TO, AND FOLLOWING THE MIXER CHARGING OPERATIONS. EXCESSIVE OVERMIXING REQUIRING THE ADDITION OF WATER TO PRESERVE THE REQUIRED CONCRETE CONSISTENCY SHALL NOT BE PERMITTED. TRUCK MIXING WILL BE ALLOWED PROVIDED THAT THE USE OF THIS METHOD SHALL CAUSE NO VIOLATION OF ANY APPLICABLE PROVISIONS OF THE SPECIFICATIONS GIVEN HERE.

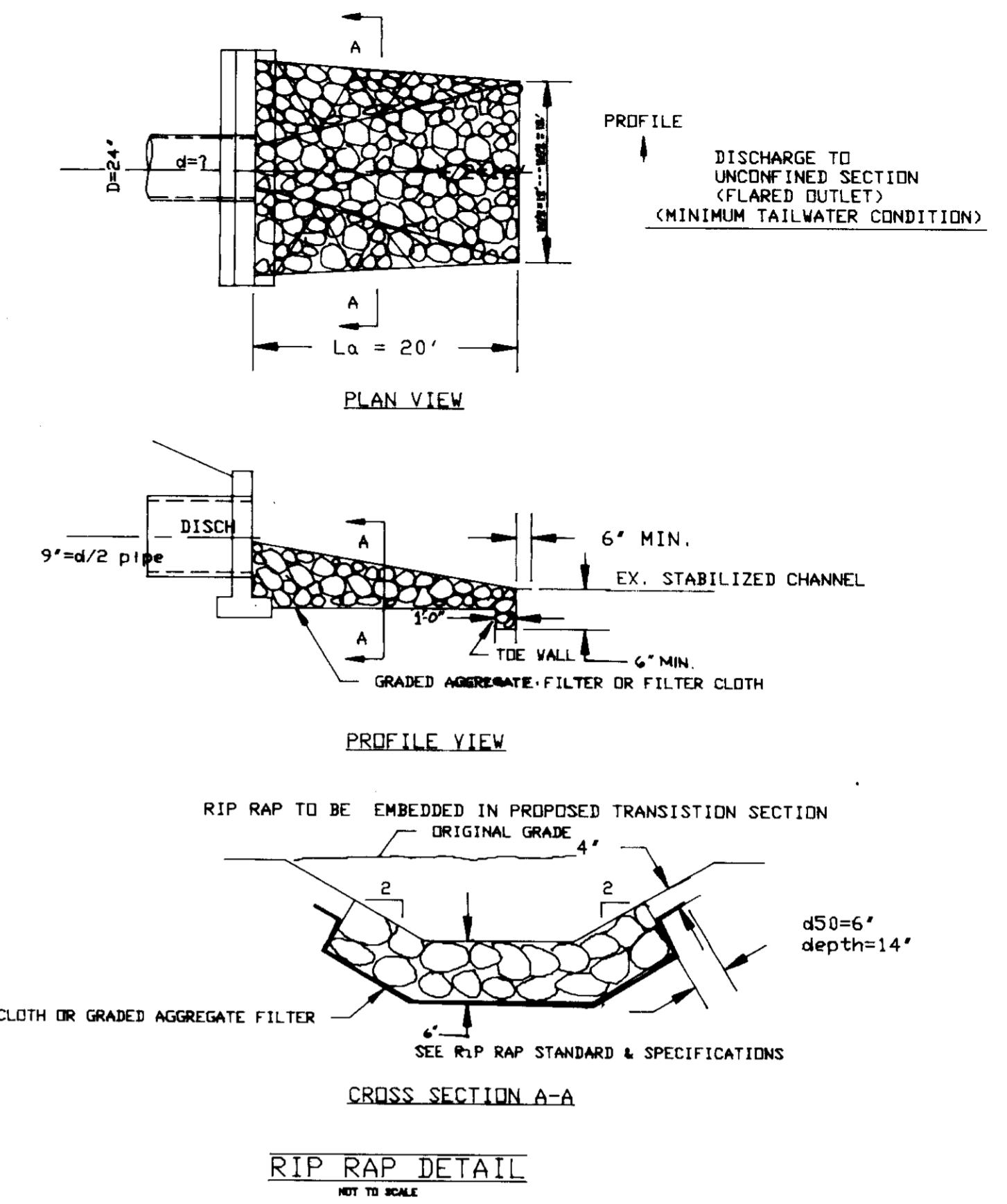
4. FORMS - THE FORMS SHALL HAVE SUFFICIENT STRENGTH AND RIGID TO HOLD THE CONCRETE AND TO WITHSTAND THE NECESSARY PRESSURE TAMPING, AND VIBRATION WITHOUT DEFLECTION FROM THE PRESCRIBED LINES. THEY SHALL BE MORTAR-TIGHT AND CONSTRUCTED SO THAT THEY CAN BE REMOVED WITHOUT HAMMERING OR PRYING AGAINST THE CONCRETE.

THE INSIDE OF THE FORMS SHALL BE OILED WITH A NON STAINING MINERAL OIL OR THOROUGHLY WETTED BEFORE CONCRETE IS PLACED. FORMS MAYBE REMOVED 24 HOURS AFTER THE PLACEMENT OF CONCRETE ALL WIRE TIES AND OTHER DEVICES USED SHALL BE RECESSED FROM THE SURFACE OF THE CONCRETE.

5. REINFORCING STEEL - ALL REINFORCING MATERIAL SHALL BE FREE OF DIRT, RUST, SCALE, OIL, PAINT OR ANY OTHER COATINGS. THE STEEL SHALL BE ACCURATELY PLACED AND SECURELY TIED AND WILL OCCUR DURING PLACEMENT OF CONCRETE.
6. CONSOLIDATING - CONCRETE SHALL BE CONSOLIDATED WITH INTERNAL TYPE MECHANICAL VIBRATORS. VIBRATIONS SHALL BE SUPPLEMENTED BY SPANDING AND HAND TAMPING AS NECESSARY TO INSURE SMOOTH AND DENSE CONCRETE ALONG FORM SURFACES, IN CORNERS, AND AROUND EMBEDDED ITEMS.
7. FINISHING - DEFECTIVE CONCRETE, HONEYCOMBED AREAS, VOIDS LEFT BY THE REMOVAL OF THE RODS, RIDGES ON ALL CONCRETE SURFACES PERMANENTLY EXPOSED TO VIEW OR EXPOSED TO WATER ON THE FINISHED STRUCTURE, SHALL BE REPAIRED IMMEDIATELY AFTER THE REMOVAL OF FORMS. ALL VOIDS SHALL BE REAMED AND COMPLETELY FILLED WITH DRY-PATCHING MORTAR.
8. PROTECTION AND CURING - EXPOSED SURFACES OF CONCRETE SHALL BE PROTECTED FROM THE DIRECT REYS OF THE SUN FOR AT LEAST THE FIRST THREE (3) DAYS. ALL CONCRETE SHALL BE KEPT CONTINUOUSLY MOIST FOR AT LEAST TEN (10) DAYS AFTER BEING PLACED. MOISTURE MAYBE APPLIED BY SPRAYING OR SPRINKLING AS NECESSARY TO PREVENT THE CONCRETE FROM DRYING. CONCRETE SHALL NOT BE EXPOSED TO FREEZING DURING THE CURING PERIOD. CURING COMPOUNDS MAY ALSO BE USED.
9. PLACING TEMPERATURE - CONCRETE MAY NOT BE PLACED AT TEMPERATURES BELOW 37° F WITH THE TEMPERATURES FALLING, OR 34° WITH THE TEMPERATURE RISING.

VI. STABILIZATION

ALL BORROW AREAS SHALL BE GRADED TO PROVIDE PROPER DRAINAGE AND LEFT IN A SLIGHTLY CONDITIONS. ALL EXPOSED SURFACES OF THE EMBANKMENT, SPILLWAY, SPOIL AND BORROW AREAS, AND BERMS SHALL BE STABILIZED BY SEEDING FERTILIZING AND MULCHING (IF REQUIRED) IN ACCORDANCE WITH THE VEGETATIVE TREATMENT SPECIFICATIONS SHOWN ON OR ACCOMPANYING THE DRAWINGS.



APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HEALTH DEPARTMENT
DATE: 4-2-93

APPROVED FOR PLANNING AND ZONING
DATE: 4/6/93

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE
DATE: 3-25-93

oria engineering inc.
CONSULTING ENGINEERS + LAND PLANNERS + SURVEYORS
3230 BETHANY LANE, SUITE 4
ELLICOTT CITY, MARYLAND 21043
TEL. (301) 465-0400

These plans have been reviewed for the
Howard Soil Conservation District and meet
the technical requirements for small pond
construction and sediment control.
DATE: 5/26/93

These plans for soil and sediment control
meet the requirements of the Howard
Soil Conservation District.
DATE: 5/26/93

ENGINEER'S CERTIFICATE

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

SIGNATURE OF ENGINEER: [Signature]
DATE: 4-9-93

DEVELOPER'S/BUILDER'S CERTIFICATE

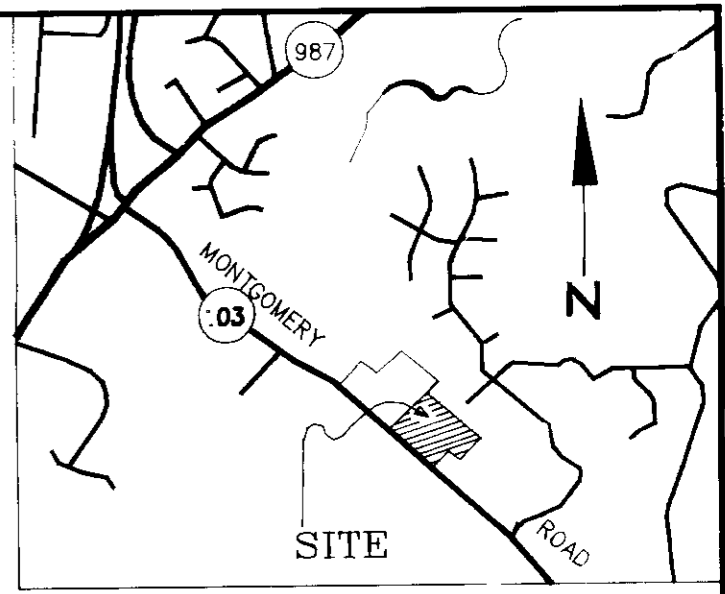
I/We certify that all development and construction will
be done in accordance with this plan, and that any
responsible personnel involved in the construction will
have a Certificate of Attendance at the Department of
the Environment Approved Training Program for the Control
of Sediment before beginning the project. I also authorize
periodic inspection by the Howard Soil Conservation Service.

BUILDER/DEVELOPER: [Signature]
DATE: 4-1-93

SHANGRILA
GENERAL NOTES FOR PONDS

owner :	DEVELOPMENT PLANNERS, INC. 10495 FAIROAKS COLUMBIA, MD. 21044
SCALE :	N/A
DATE :	MARCH 30, 1992
DESIGNED :	MLL
DRAWN :	AVG
CHECKED :	MLL
SHEET :	6 OF 6

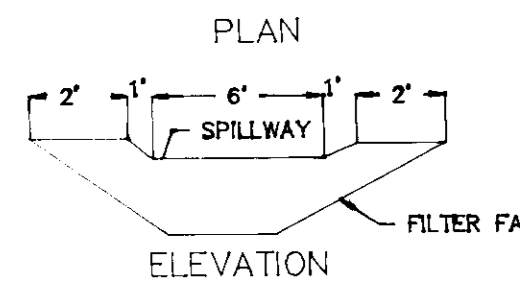
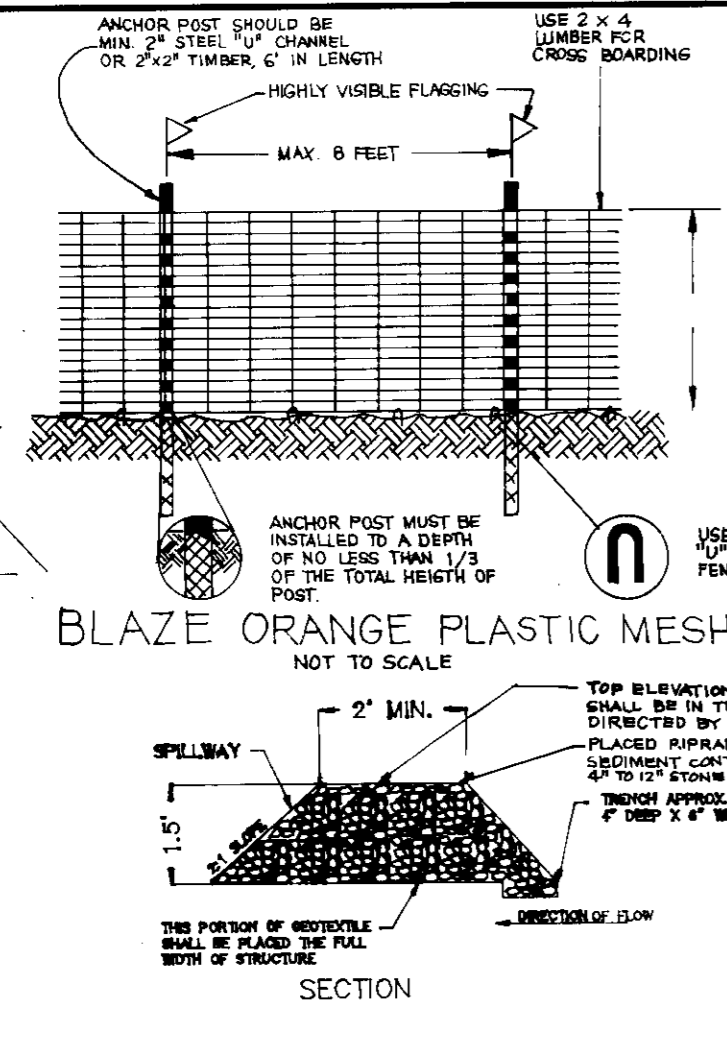
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NOTE: WATER ENCOUNTER DURING CONSTRUCTION WILL BE PUMPED.

- SEQUENCE OF CONSTRUCTION, PHASE II
- RESUBMIT RED LINED REVISION OF SITE DEVELOPMENT PLANS BY REMOVING THE HATCHED LINES
 - OBTAIN GRADING PERMIT
 - INSTALL TRAP NO. 3 & ALL SEDIMENT CONTROL MEASURES WITHIN PHASE I
 - INSTALL ORANGE BLAZE PROTECTION FENCE SHOWN WITHIN PHASE I
 - INSTALL DRAINAGE FROM M-1 TO I-4 & ALL SEWER HOUSE CONNECTIONS TO BLDG. 2, 3 & 4
 - CONSTRUCT PARKING LOTS & BUILDINGS (AFTER OBTAINING BUILDING PERMIT)
 - STABILIZE ALL DISTURBED AREAS. SEDIMENT CONTROL MEASURES MAY BE REMOVED UPON PERMISSION FROM HOWARD COUNTY SEDIMENT CONTROL INSPECTOR
 - CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING ANY SEDIMENT FROM SWM POND ATTRIBUTED TO HIS/HER CONSTRUCTION.

- NOTES:
- FOREST PROTECTION DEVICE ONLY
 - RESTRICTION AREA WILL BE SET AS PART OF THE REVIEW PROCESS
 - BOUNDARIES OF RESTRICTION AREA SHOULD BE SPARK AND FLAGGED PRIOR TO INSTALLATION
 - ROOT DAMAGE SHOULD BE AVOIDED
 - PROTECTIVE SHAWLS MAY ALSO BE USED
 - DEVICE SHOULD BE MAINTAINED THROUGHOUT CONSTRUCTION



TEMPORARY STONE OUTLET STRUCTURE NOT TO SCALE

- For location of outlet structures refer to construction plans.
- The outlet structures shall be inspected after each rain, and the stone shall be replaced when the outlet structure ceases to function as intended due to sediment, construction traffic, damage, silt accumulation among the stone, etc. However, in any case, the silt shall be cleaned out when it reaches 50% of the height of the structures.
- Temporary stone outlet structures shall be removed when they have served their usefulness as an outlet to block or trap storm flow or drainage. In all cases it shall always be removed, and the site (less than 20 feet) as directed by the Engineer. It will not be removed in steeper than 20 foot fills.
- This device is to be used only as a velocity check; it is not intended to trap sediment runoff.

TRAP NO. 1

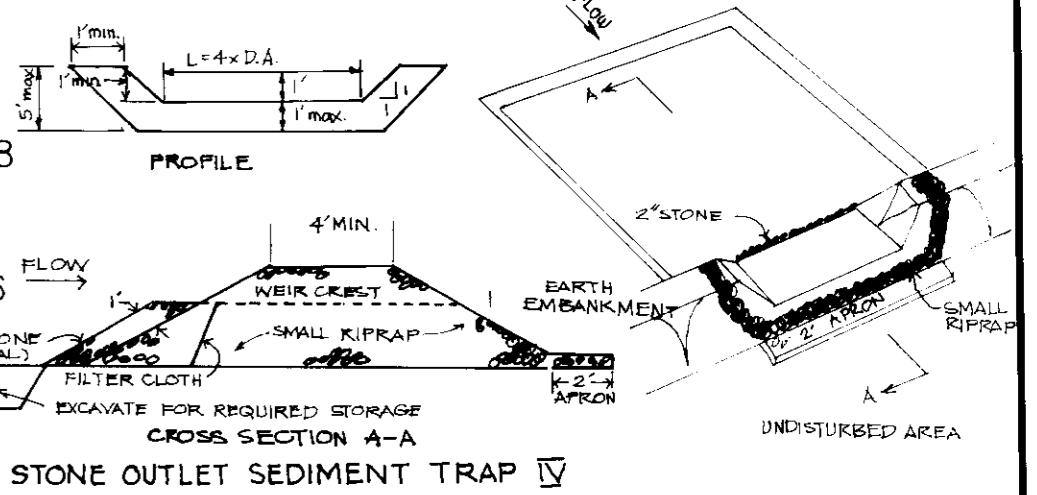
TYPE	STONE OUTLET
DRAINAGE AREA	1.4 ACRES
STORAGE REQUIRED	2,520 CU. FT.
STORAGE PROVIDED	2,799 CU. FT.
BOTTOM DIMENSION	30 X 25
BOTTOM ELEVATION	412'
CREST ELEVATION	415'
TOP ELEVATION	416'
SIDE SLOPE	1 : 1
DEPTH	4'
CLEAN OUT EL.	413.5'

TRAP 2

TYPE	STONE OUTLET
DRAINAGE AREA	.96 ACRES
STORAGE REQUIRED	1,520 CU. FT.
STORAGE PROVIDED	1,662 CU. FT.
BOTTOM DIMENSION	48' X 52' X 32'
BOTTOM ELEVATION	+08'
CREST ELEVATION	411'
TOP ELEVATION	412'
SIDE SLOPE	1 : 1
DEPTH	11'
CLEAN OUT EL.	409.5'

TRAP NO. 3

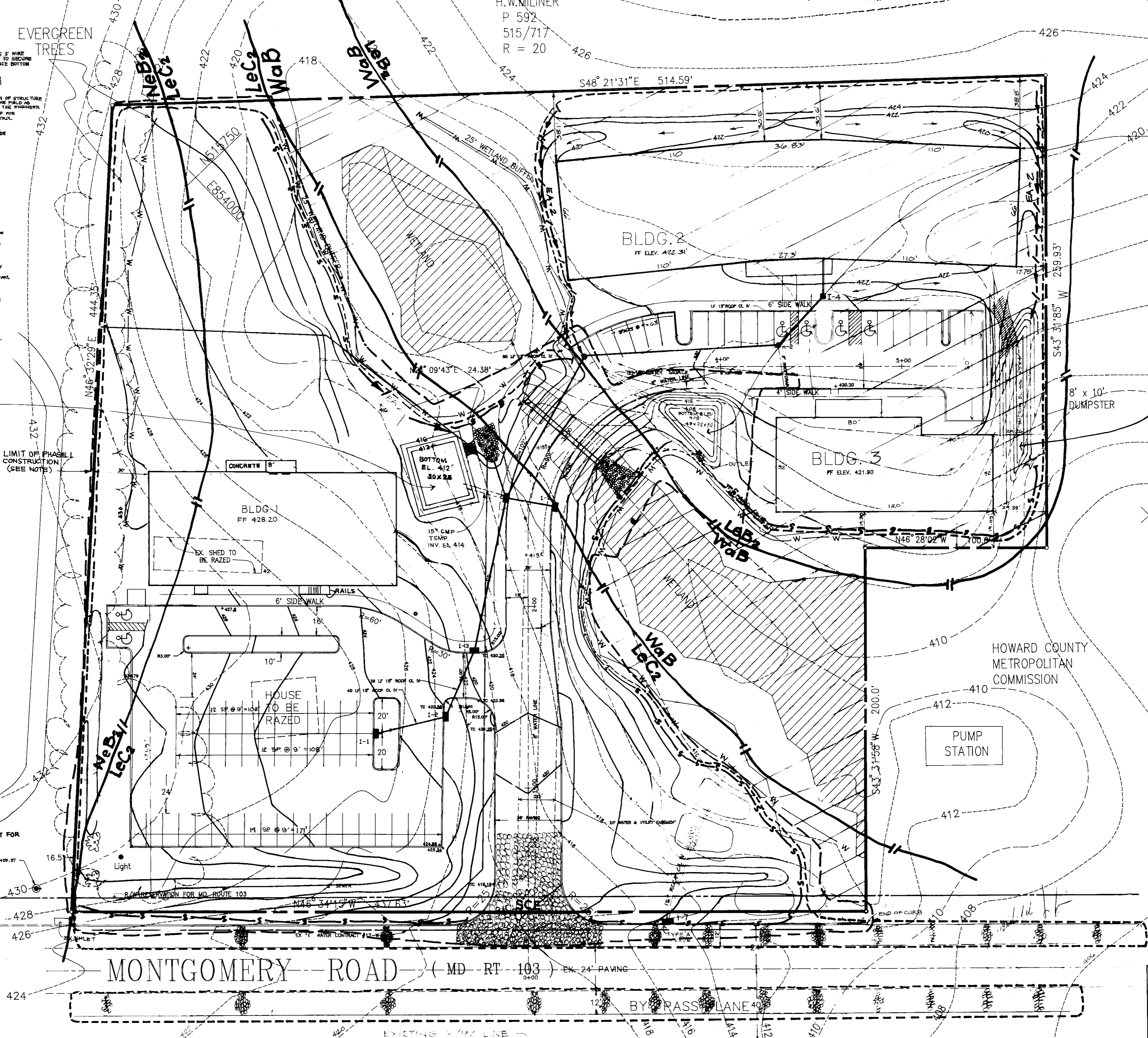
TYPE	STONE OUTLET
DRAINAGE AREA	.80 ACRES
STORAGE REQUIRED	1,440 CU. FT.
STORAGE PROVIDED	1,524 CU. FT.
BOTTOM DIMENSION	30 X 25
BOTTOM ELEVATION	406'
CREST ELEVATION	409'
TOP ELEVATION	410'
SIDE SLOPE	1 : 1
DEPTH	4'
CLEAN OUT EL.	407.5'



- LEGEND:
- WETLANDS
 - PROPOSED CURB
 - EXISTING GRADE
 - 25% SLOPE
 - EARTH DIKE
 - STABILIZED CONST. ENTRANCE
 - SILT FENCE
 - LIMIT OF DISTURBANCE
 - TEMPORARY SWALE
 - BLAZE ORANGE PROTECTION FENCE

SEQUENCE OF CONSTRUCTION, PHASE I

- OBTAIN GRADING PERMIT
- INSTALL ALL SEDIMENT CONTROL MEASURES SUCH AS TRAP NO. 1 & TRAP NO. 2 AND ALL SILT FENCES & DIKES SHOWN WITHIN PHASE I
- INSTALL ORANGE BLAZE PROTECTION SHOWN IN THE PLAN. CONSTRUCT STORMWATER MANAGEMENT FACILITY
- PAVE ACCESS ROAD TO STA. 2+70 BUT GRADE TO STA. 3+50. CONSTRUCT PARKING LOT FOR BUILDING 1. PUBLIC WATER SYSTEM & ALL WATER & SEWER HOUSE CONNECTIONS. CONSTRUCT PROPOSED DRAINAGE SYSTEM UP TO M-1
- OBTAIN BLDG. PERMIT FOR BUILDING 1 & CONSTRUCT THE BUILDING
- STABILIZE ALL DISTURBED AREAS. SEDIMENT CONTROL MEASURES MAY BE REMOVED UPON PERMISSION FROM HOWARD CO. SEDIMENT CONTROL INSPECTOR. REMOVE BLOCK FROM I-C TO S-1 & PERMANENTLY BURY THE 15' CAMP WITH CONCRETE
- CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING ANY SEDIMENT FROM SWM POND ATTRIBUTED TO HIS/HER CONSTRUCTION.



APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

REVISIONS

DATE	BY	DESCRIPTIONS
8-6-97	MCR	REV. BLDG 1; CORRECTING BLDG 2 & 3; REV. PARKING SPACES; MOVE I-A
10-27-97	MCR	REV. BLDG 2 FF. & LOCATION

orio engineering inc.
CONSULTING ENGINEERS + LAND PLANNERS + SURVEYORS
3230 BETHANY LANE, SUITE 4
ELICOTT CITY, MARYLAND 21043
TEL. (301) 465-0400

SEDIMENT CONTROL PLAN

DEVELOPER'S/BUILDER'S CERTIFICATE

I/We certify that all development and construction will be done in accordance with this plan, and that any responsible personnel involved in the construction will have a Certificate of Attendance at the Department of the Environment Approved Training Program for the collection of Sediment before beginning the project. I also authorize periodic inspection by the Howard Soil Conservation Service.

BUILDER/DEVELOPER DATE

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements for small pond construction, Soil and Sediment Control.

John A. Smith 5/26/93
U.S. Soil Conservation Service Date

These plans for Soil and Sediment Control meet the requirements of the Howard County Soil Conservation District.

Robert J. Zehn 5/26/93
Howard Soil Conservation District Date

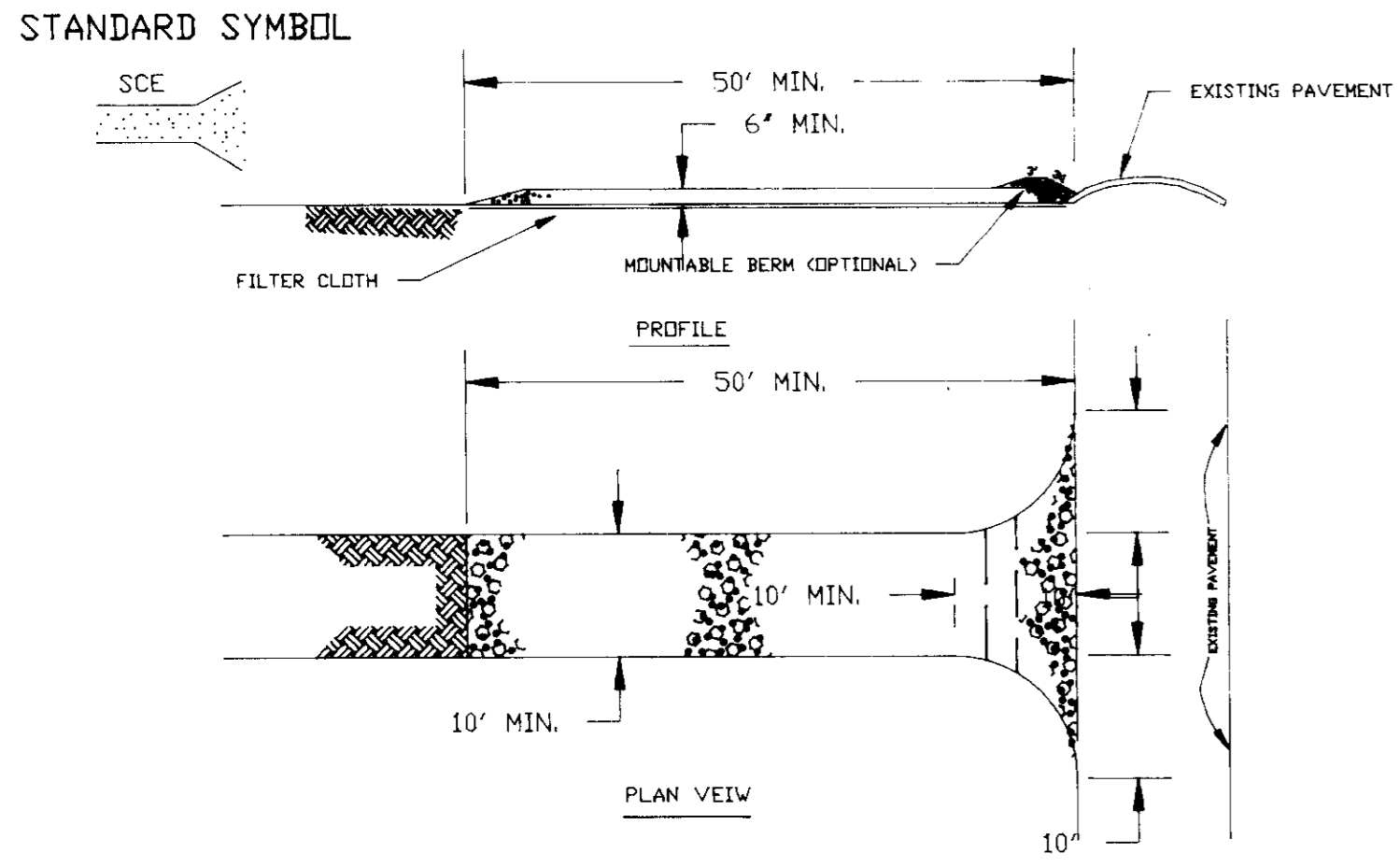
ENGINEER'S CERTIFICATE

I hereby 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 and conditions and it was prepared in accordance with the requirements of Howard Soil Conservation District.

SIGNATURE OF ENGINEER DATE

SUBDIVISION NAME		SECTION/AREA	PARCEL NO.
PLAT NO.		BLOCK NO.	ZONE
TAX/ZONE		ELECT. DIST.	CENSUS TRAC
WATER CODE:		SEWER CODE:	
DESIGNED	MLL	SCALE	
DRAWN	AVG	1" = 30'	
CHECKED	MLL	DRAWING	
DATE	7-7-92	7 OF 8	
TAX MAP 30, 31		JOB NO.	
PARCEL 579		FILE NO.	
HOWARD COUNTY, MARYLAND		OWNER: DEVELOPMENT PLANNERS, INC.	
10495 FAIROAKS		COLUMBIA, MD. 21044	

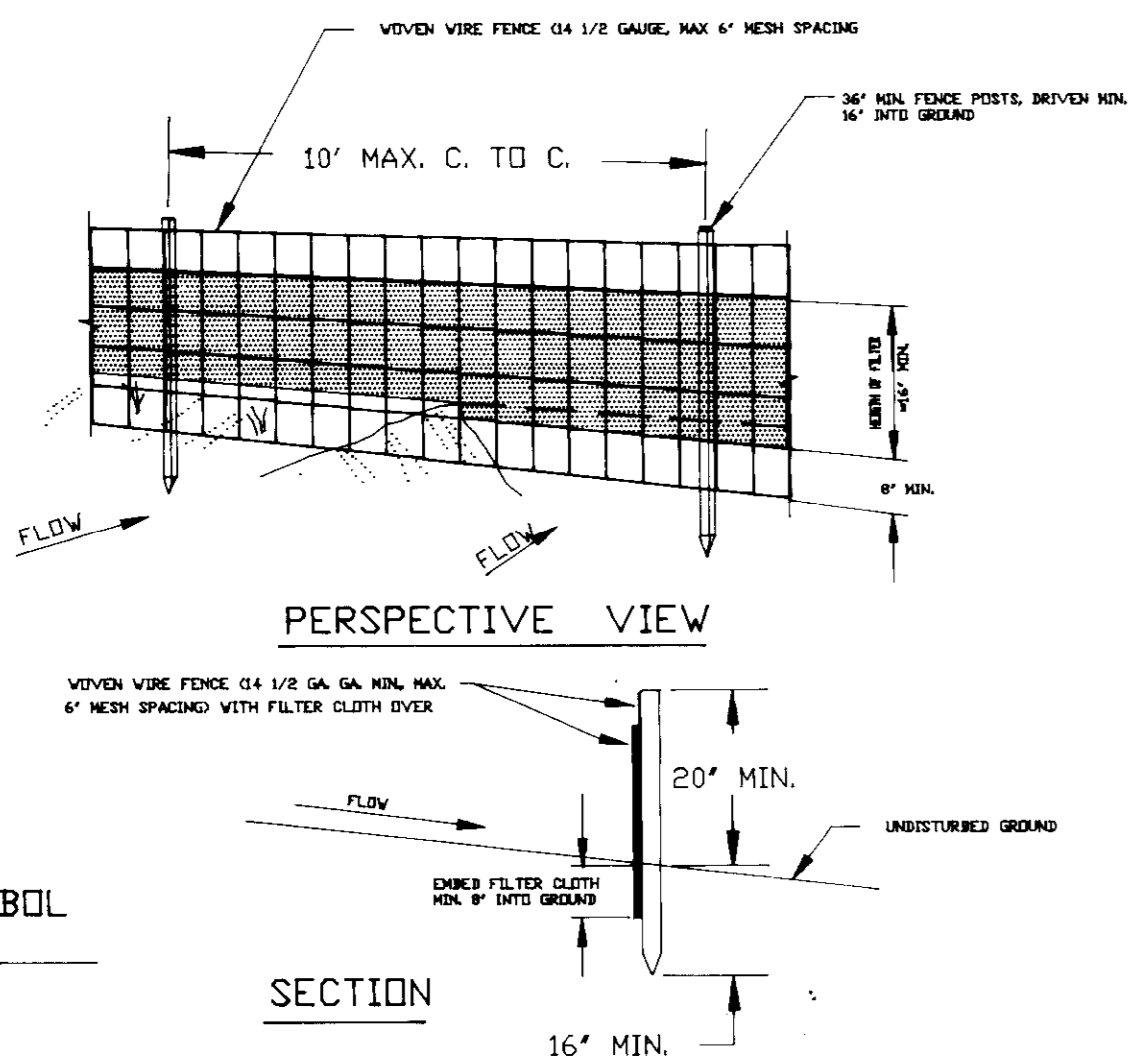
STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE



CONSTRUCTION SPECIFICATION

- STONE SIZE - USE 2" STONE OR RECYCLED CONCRETE EQUIVALENT.
- LENGTH - AS REQUIRED, BUT NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30' MINIMUM LENGTH WOULD APPLY).
- THICKNESS - NOT LESS THAN SIX (6) INCHES.
- WIDTH - TEN (10) FOOT MINIMUM, BUT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
- FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE. FILTER WILL NOT BE REQUIRED ON A SINGLE FAMILY RESIDENCE LOT.
- SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5% SLOPES WILL BE PERMITTED.
- MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS - OF - WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS - OF - WAY MUST BE REMOVED IMMEDIATELY.
- WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS - OF - WAY. WHEN IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
- PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

SILT FENCE



STANDARD SYMBOL

CONSTRUCTION NOTES FOR FABRICATION SILT FENCE

- WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
- FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
- WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
- MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN BULGES DEVELOP IN THE SILT FENCE.

PERMANENT SEEDING NOTES

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

SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, UNLESS PREVIOUSLY LOOSENED.

SOIL AMENDMENTS: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING SCHEDULES:

- PREFERRED - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 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 TIME OF SEEDING, APPLY 400 LBS PER ACRE 30-0-0 UREAFORM FERTILIZER (9 LBS/1000 SQ FT).
- ACCEPTABLE - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SQ FT) AND 1000 LBS PER ACRE 10-10-10 FERTILIZER (23 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 (14 LBS/1000 SQ FT) OF 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 (0.5 LBS/1000 SQ FT) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THRU FEBRUARY 28, PROTECT SITE BY: OPTION (1) 2 TONS PER ACRE OF WELL-ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING. OPTION (2) USE SOD. OPTION (3) SEED WITH 60 LBS/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 90 LBS/1000 SQ FT) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GALLONS PER ACRE (5 GAL/1000 SQ FT) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FEET OR HIGHER, USE 348 GALLONS PER ACRE (8 GAL/1000 SQ FT) FOR ANCHORING.

MAINTENANCE - INSPECT ALL SEEDED AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

TEMPORARY SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.

SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, UNLESS 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 15 THRU NOVEMBER 15, SEED WITH 2 1/2 BUSHEL PER ACRE OF ANNUAL RYE (32 LBS/1000 SQ FT). FOR THE PERIOD MAY 1 THRU AUGUST 14, SEED WITH 3 LBS PER ACRE OF WEEPING LOVEGRASS (0.7 LBS/1000 SQ FT). FOR THE PERIOD NOVEMBER 16 THRU FEBRUARY 28, PROTECT SITE BY APPLYING 2 LBS PER ACRE OF WELL-ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OR USE SOD.

MULCHING: APPLY 1 1/2 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SQ FT) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GAL PER ACRE (5 GAL/1000 SQ FT) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES, 8 FT OR HIGHER, USE 348 GAL PER ACRE (8 GAL/1000 SQ FT) FOR ANCHORING.

REFER TO THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

STANDARD AND SPECIFICATION FOR VEGETATIVE STABILIZATION WITH SOD

- CLASS OF TURFGRASS SOD SHALL BE MARYLAND OR VIRGINIA STATE CERTIFIED, OR MARYLAND OR VIRGINIA STATE APPROVED SOD.
- SOD SHALL BE MACHINE CUT AT A UNIFORM SOIL THICKNESS OF 3/4 INCH, PLUS OR MINUS 1/4 INCH, AT THE TIME OF CUTTING. MEASUREMENT FOR THICKNESS SHALL EXCLUDE TOP GROWTH AND THATCH.
- STANDARD SIZE SECTIONS OF SOD SHALL BE STRONG ENOUGH TO SUPPORT THEIR OWN WEIGHT AND RETAIN THEIR SIZE AND SHAPE WHEN SUSPENDED VERTICALLY WITH A FIRM GRASP ON THE UPPER 10 PERCENT OF THE SECTION.
- INDIVIDUAL PIECES OF SOD SHALL BE CUT TO THE SUPPLIER'S WIDTH AND LENGTH. MAXIMUM ALLOWABLE DEVIATION FROM STANDARD WIDTHS AND LENGTHS SHALL BE 5 PERCENT. BROKEN PADS AND TORN OR UNEVEN ENDS WILL NOT BE ACCEPTABLE.
- SOD SHALL NOT BE HARVESTED OR TRANSPLANTED WHEN MOISTURE CONTENT (EXCESSIVELY DRY OR WET) MAY ADVERSELY AFFECT ITS SURVIVAL.
- SOD SHALL BE HARVESTED, DELIVERED AND INSTALLED WITHIN A PERIOD OF 36 HOURS. SOD NOT TRANSPLANTED WITHIN THIS PERIOD SHALL BE INSPECTED AND APPROVED PRIOR TO ITS INSTALLATION.

1. SITE PREPARATION

FERTILIZER AND LIME APPLICATION RATES SHALL BE DETERMINED BY SOIL TESTS. UNDER UNUSUAL CIRCUMSTANCES WHERE THERE IS UNSUFFICIENT TIME FOR A COMPLETE SOIL TEST, FERTILIZER AND LIME MATERIALS MAY BE APPLIED IN AMOUNTS SHOWN UNDER B, BELOW.

- PRIOR TO SODDING, THE SURFACE SHALL BE CLEARED OF ALL TRASH, DEBRIS, AND OF ALL ROOTS, BRUSH, WIRE, GRADE STAKES, AND OTHER OBJECTS WHICH WOULD INTERFERE WITH PLANTING, FERTILIZING OR MAINTENANCE OPERATIONS.
- WHERE THE SOIL IS ACID OR COMPOSED OF HEAVY CLAYS, GROUND LIMESTONE SHALL BE SPREAD AT THE RATE OF 2 TONS/ACRE OR 100 POUNDS PER 1000 SQUARE FEET. IN ALL SOILS 1000 POUNDS PER ACRE OR 25 POUNDS PER 1000 SQUARE FEET OF 10-10-10 FERTILIZER OR EQUIVALENT SHALL BE UNIFORMLY APPLIED AND MIXED INTO THE TOP 3 INCHES OF SOIL WITH THE REQUIRED LIME.
- ALL AREAS RECEIVING SOD SHALL BE UNIFORMLY FINE GRADED. HARD-PACKED EARTH SHALL BE SCARIFIED PRIOR TO PLACEMENT OF SOD.

1) A MINIMUM OF 24 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY OFFICE OF INSPECTION AND PERMITS PRIOR TO THE START OF ANY CONSTRUCTION. (992-2437)

- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
- FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, 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 3:1, 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 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDINGS (SEC. 51) SOD (SEC. 54), TEMPORARY SEEDING (SEC. 50) AND MULCHING (SEC. 52). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY 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.

7. SITE ANALYSIS:	
TOTAL AREA OF SITE	5.99 ACRES
AREA DISTURBED	3.58 ACRES
AREA TO BE ROOFED OR PAVED	1.86 ACRES
AREA TO BE VEGETATIVELY STABILIZED	1.72 ACRES
TOTAL CUT	3,000 CU. YDS
TOTAL FILL	3,000 CU. YDS
OFFSITE WASTE/BORROW AREA LOCATION	N.A.

- ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY DPW SEDIMENT CONTROL INSPECTOR.
- ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.

GENERAL NOTES

- REFER TO 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR STANDARD DETAILS AND DETAILED SPECIFICATIONS OF EACH PRACTICE SPECIFIED HEREIN.
- WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, MINOR FIELD ADJUSTMENTS CAN AND WILL BE MADE TO INSURE THE CONTROL OF ANY SEDIMENT. CHANGES IN SEDIMENT CONTROL PRACTICES REQUIRE PRIOR APPROVAL OF THE SEDIMENT CONTROL INSPECTOR AND THE COUNTY SOIL CONSERVATION DISTRICT.
- AT THE END OF EACH WORKING DAY, ALL SEDIMENT CONTROL PRACTICES WILL BE INSPECTED AND LEFT IN OPERATIONAL CONDITION.
- FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: A) SEVEN CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES GREATER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1) AND (B) FOURTEEN DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- ANY CHANGE TO THE GRADING PROPOSED ON THIS PLAN REQUIRES RE-SUBMISSION TO COUNTY SOIL CONSERVATION DISTRICT FOR APPROVAL.
- DUST CONTROL WILL BE PROVIDED FOR ALL DISTURBED AREAS. REFER TO 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, PP 62.01 AND 62.02 FOR ACCEPTABLE METHODS AND SPECIFICATIONS FOR DUST CONTROL.
- ANY VARIATION FROM THE SEQUENCE OF OPERATIONS STATED ON THIS PLAN REQUIRES THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR AND THE COUNTY SOIL CONSERVATION DISTRICT PRIOR TO THE INITIATION OF THE CHANGE.
- EXCESS CUT OR BORROW MATERIAL SHALL GO TO OR COME FROM, RESPECTIVELY, A SITE WITH AN APPROVED SEDIMENT CONTROL PLAN.
- THE FOLLOWING ITEM MAY BE USED AS APPLICABLE:
- REFER TO MARYLAND'S GUIDELINES TO WATERWORKS CONSTRUCTION BY THE WATER RESOURCES ADMINISTRATION (WRA), DATED JANUARY, 1986 FOR STANDARD DETAILS AND DETAILED SPECIFICATIONS OF EACH PRACTICE SPECIFIED HEREIN FOR WATERWAY CONSTRUCTION.

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT
[Signature] 4-2-93
COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
[Signature] 4/6/93
PLANNING DIRECTOR DATE

CHIEF, DIVISION OF COMMUNITY PLANNING &
LAND DEVELOPMENT
[Signature] 4/6/93
DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE,
STORM DRAINAGE SYSTEMS AND PUBLIC UTILITIES
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
[Signature] 3/26/93
DIRECTOR DATE

[Signature] 3-25-93
CHIEF, BUREAU OF ENGINEERING DATE

oria engineering inc.
CONSULTING ENGINEERS • LAND PLANNERS • SURVEYORS
3030 METHUEN LANE, SUITE 4
FOLKLOTT CITY, MARYLAND 21044
TEL. (301) 485-0400

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements for small pond construction, soil and sediment control.

[Signature] 5/26/93
Soil Conservation Service DATE

These plans for soil and sediment control meet the requirements of the Howard Soil Conservation District.

[Signature] 5/26/93
Howard Soil Conservation District DATE

ENGINEER'S CERTIFICATE

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

[Signature] 4/1/92
SIGNATURE OF ENGINEER DATE

DEVELOPER'S/BUILDER'S CERTIFICATE

I/We certify that all development and construction will be done in accordance with this plan, and that any responsible personnel involved in the construction will have a Certificate of Attendance at the Department of the Environment Approved Training Program for the Control of Sediment before beginning the project. I also authorize periodic inspection by the Howard Soil Conservation Service.

[Signature] 4-1-92
BUILDER/DEVELOPER DATE

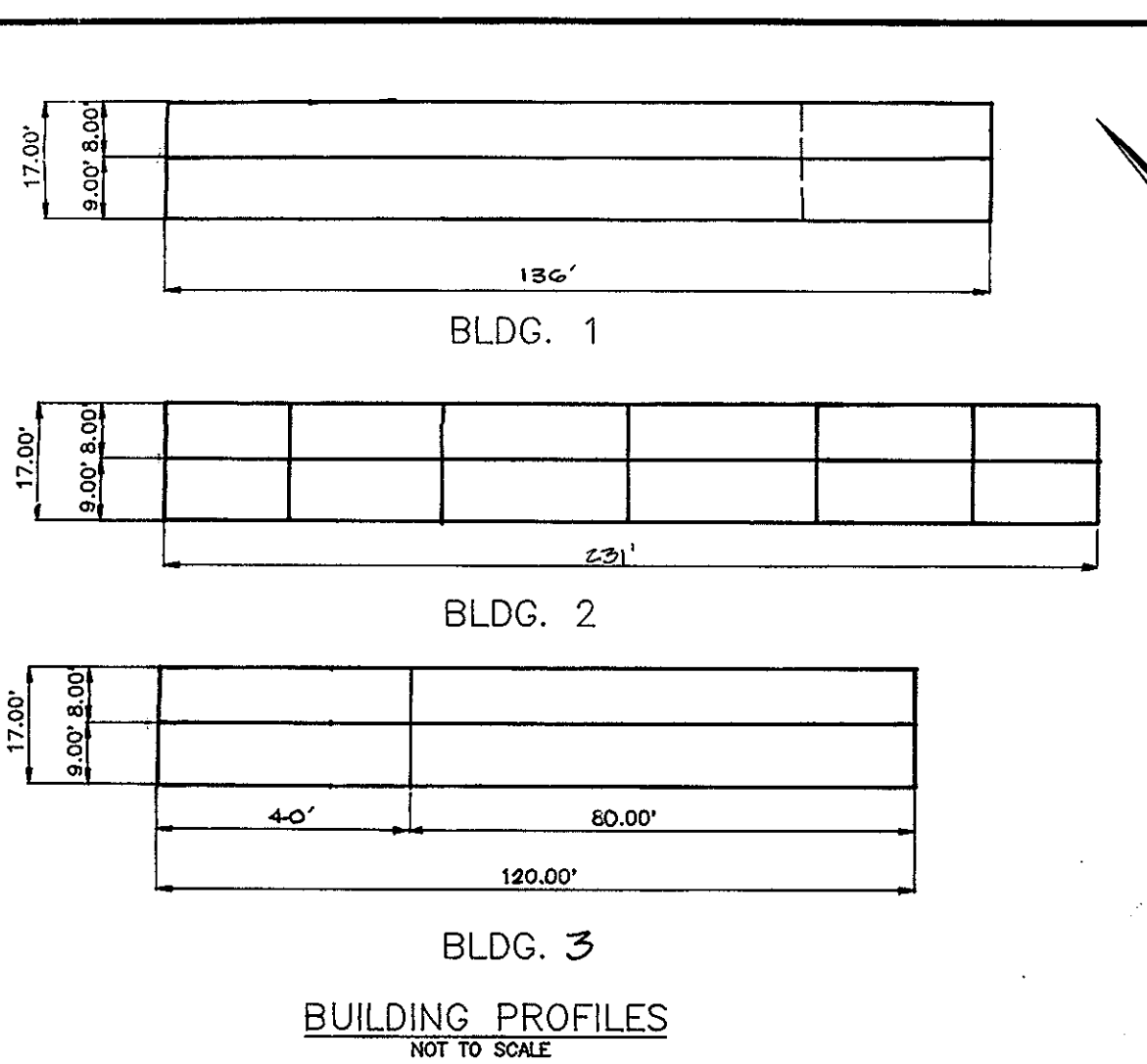
CHANGSILLA

SEDIMENT AND EROSION CONTROL DETAILS

owner: DEVELOPMENT PLANNERS, INC.
10495 FAIROAKS
COLUMBIA, MD. 21044

SCALE: N/A DATE: MARCH 30, 1992 SHEET: 8 OF 8
DESIGNED: MLL DRAWN: AVG CHECKED: MLL

SPP-92-91



LANDSCAPE SCHEDULE

BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY
ACER RUBRUM	RED MAPLE	2 1/2 cal.	16
PINUS STRUBUS	WHITE PINE	2 1/2 cal.	135
PICEA ABIES	NORWAY SPRUCE	2 1/2 cal.	3
PINUS STRUBUS	EVERGREEN	2 1/2 cal.	10
ACER	MAPLE	2 1/2 cal.	17

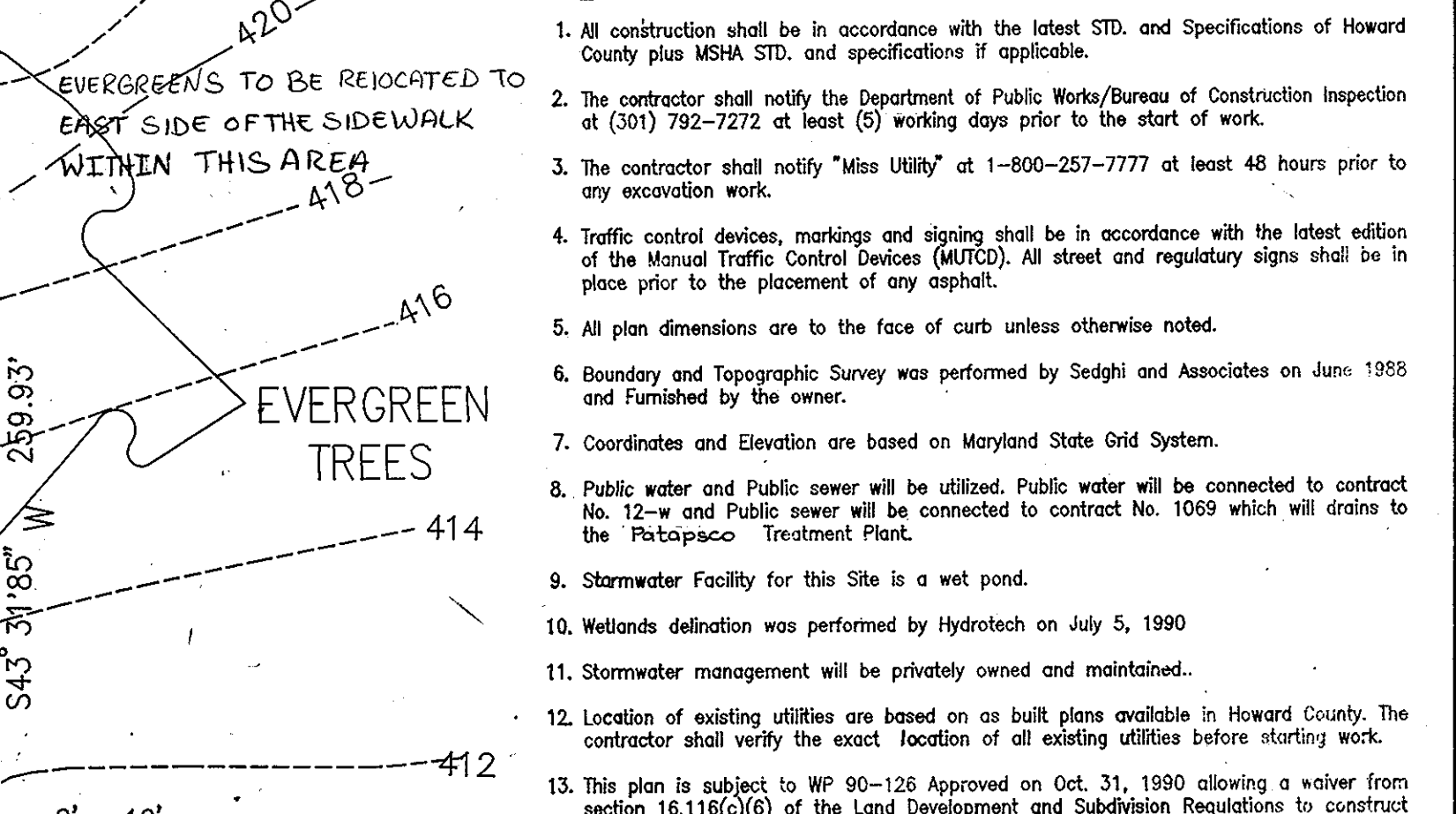
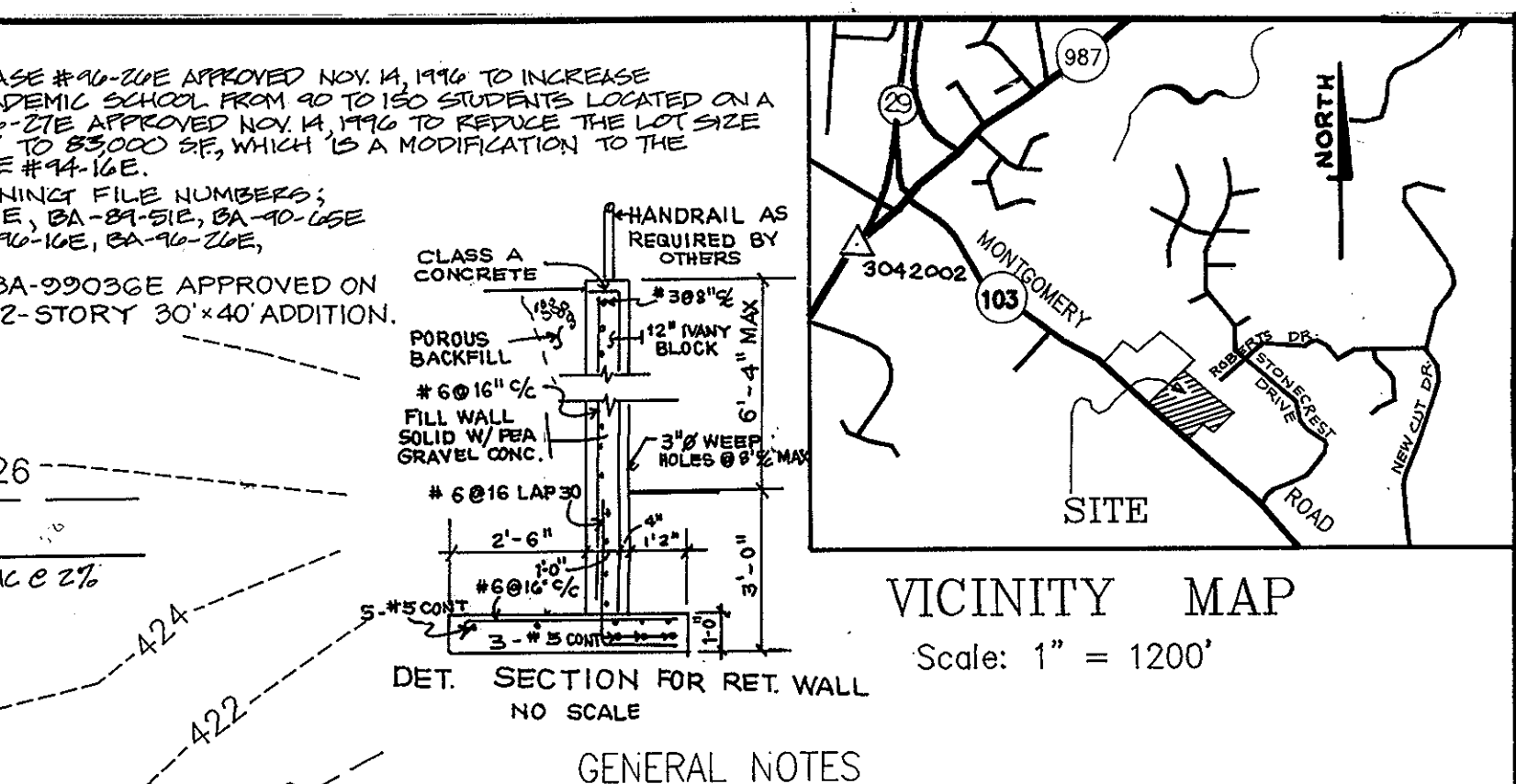
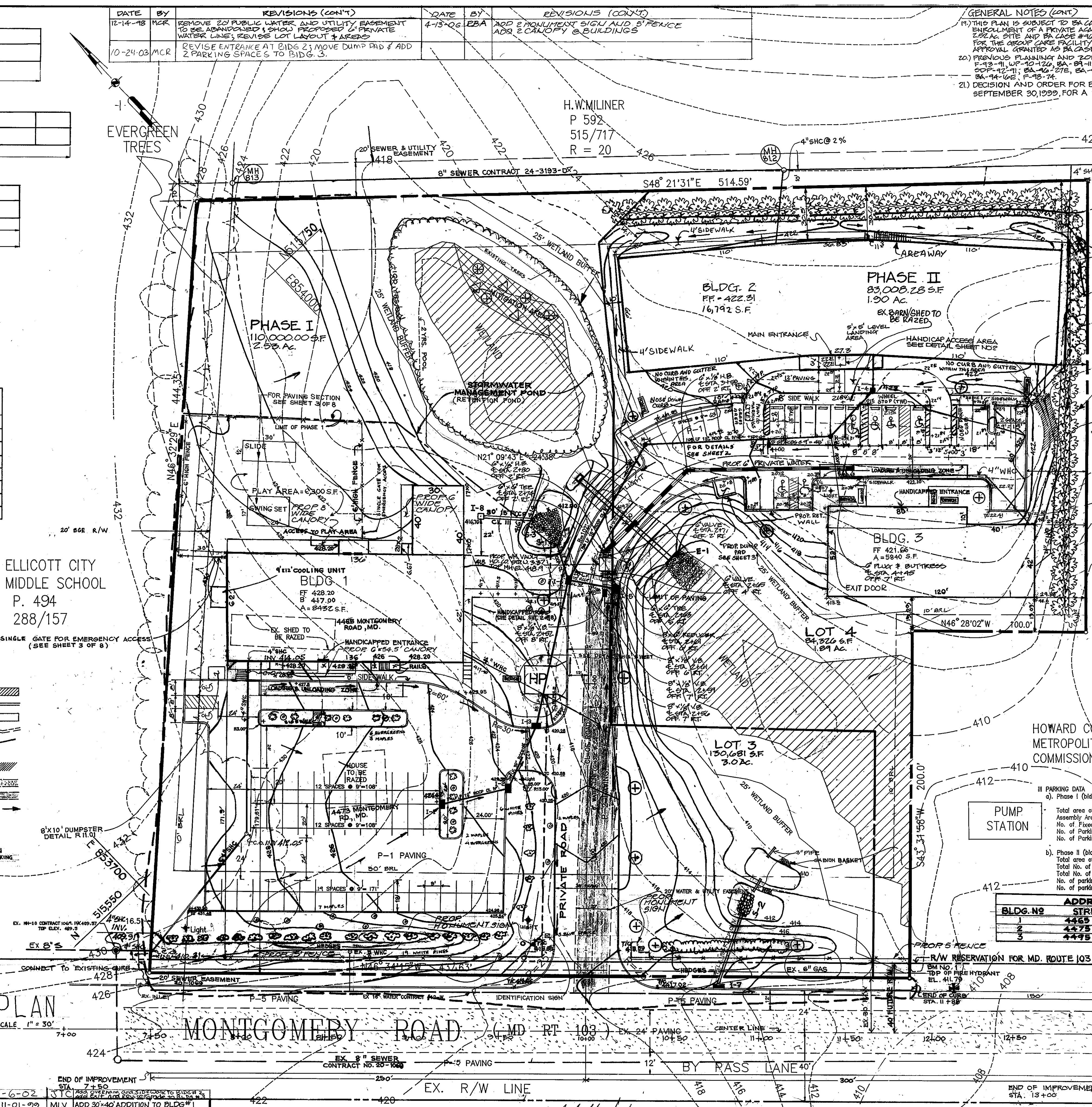
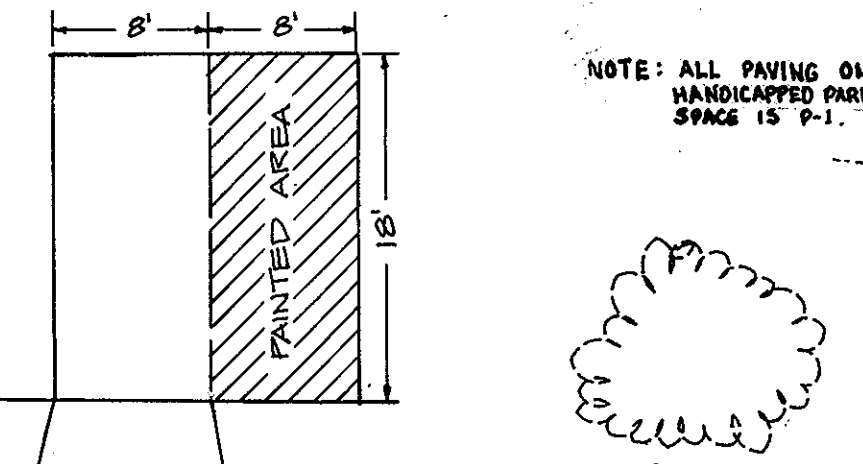
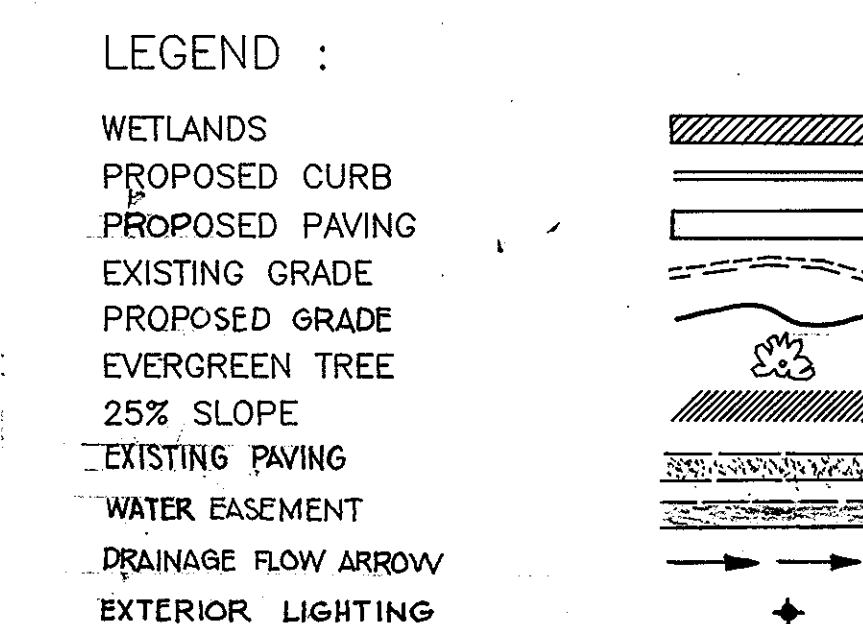
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1	SITE DEVELOPMENT PLAN
2	DRAINAGE AREA MAP, DETAILS
3	DETAILS
4	DRAINAGE, WATER & SEWER PROFILE
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6	GENERAL NOTES FOR POND
7	SEDIMENT CONTROL PLAN
8	SEDIMENT CONTROL NOTES & DETAILS

WETLAND PLANTING SCHEDULE

BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY
ACER RUBRUM	RED MAPLE	2 1/2 CAL.	4
CORNUS STOLONIFERA	DOGWOOD	24" - 30"	12

ELlicott CITY
MIDDLE SCHOOL
P. 494
288/157



- GENERAL NOTES**
- All construction shall be in accordance with the latest STD. and Specifications of Howard County plus MSHA STD. and specifications if applicable.
 - The contractor shall notify the Department of Public Works/Bureau of Construction Inspection at (301) 782-7272 at least (5) working days prior to the start of work.
 - The contractor shall notify "Miss Utility" at 1-800-257-7777 at least 48 hours prior to any excavation work.
 - Traffic control devices, markings and signing shall be in accordance with the latest edition of the Manual Traffic Control Devices (MUTCD). All street and regulatory signs shall be in place prior to the placement of any asphalt.
 - All plan dimensions are to the face of curb unless otherwise noted.
 - Boundary and Topographic Survey was performed by Sedgill and Associates on June 1988 and Furnished by the owner.
 - Coordinates and Elevation are based on Maryland State Grid System.
 - Public water and Public sewer will be utilized. Public water will be connected to contract No. 12-w and Public sewer will be connected to contract No. 1069 which will drain to the Patapsco Treatment Plant.
 - Stormwater Facility for this Site is a wet pond.
 - Wetlands delineation was performed by Hydrotech on July 5, 1990
 - Stormwater management will be privately owned and operated.
 - Location of existing utilities are based on as built plans available in Howard County. The contractor shall verify the exact location of all existing utilities before starting work.
 - This plan is subject to WP 90-126 Approved on Oct. 31, 1990 allowing a waiver from section 16.11(b)(6) of the Land Development and Subdivision Regulations to construct a driveway within wetlands, wetland buffer and stream bank buffer.
 - This plan is subject to BA case 89-11 approved on Nov. 2 1989 allowing the construction of a religious facility on this Site. Subject to :
 - Compliance with the requirements of the State Highway Administration for improvements of Maryland 103.
 - Provision for minimum 30 foot landscaped edge along Maryland 103, a minimum 20 foot edge along the other property lines.
 - Design of any outdoor lighting so that it does not shine or reflect on the adjacent roadways or properties.
 - Compliance with all County, State, and Federal laws.
 - This plan is subject to BA case 89-51E approved on Nov. 13, 1990 allowing the construction of Group Care facilities for the Eggerly on this Site. Subject to :
 - The petitioner shall comply with all applicable Federal, State and County laws and regulations, including, but not limited to, the regulations concerning Group Sheltered Housing for the Elderly in the Code of Maryland Regulations.
 - The Department of Planning and Zoning shall approve a Site Development Plan which details all structures and uses on the site including, but not limited to, loading areas and the private storm water management underground infiltration trench in the south western corner of the site, in order to insure that no sounds, smells, or other noxious emissions can be detected from beyond the lot lines.
 - The Site Development Plan shall conform to the Variance Plan dated April 2, 1990 and submitted to the board.
 - The Petitioner shall connect the Site to public water and sewer.
 - This plan is subject to BA case 90-65E allowing the construction of a private Montessori School on Phase I approved Feb. 27, 1992. Subject to :
 - The Petitioner shall comply with all applicable Federal, State and County laws and regulations.
 - The Department of Planning and Zoning shall approve a Site Development Plan for all structures and uses on the site including, but not limited to, parking and loading areas and the private access road.
 - The State Highway Administration of the Maryland Department of Transportation shall approve ingress and egress onto Maryland 103 and the Petitioner shall comply with all requirements imposed by such agency.
 - The hours of operation shall be restricted to 8:30 a.m. to 3:30 p.m. Monday through Friday.
 - The Petitioner shall provide a minimum of thirty (30) foot landscaped edge along MD 103, a minimum of thirty (30) foot landscaped edge along the private entry drive, a minimum of ten (10) foot landscaped edge along the northeastern boundary and a six (6) foot board on board wood fence around the play area; all as shown on the special exception plan.
 - Any outdoor lighting shall be designed so that it does not shine or reflect on adjacent roadways or properties.
 - The religious facility use approved for the Site by the Board of Appeals in BA case 89-51E shall not operate concurrently with the private Montessori School.
 - The maximum number of students is 100.
 - Geotechnical report was prepared by the Engineering Technologies Association on Jan. 2, 1991.

GENERAL NOTES (CONT)

18. THIS PLAN IS SUBJECT TO BA CASE 92-53E APPROVED MARCH 28, 1993 TO ALLOW A BEFORE & AFTER SCHOOL DAY CARE CENTER SUBJECT TO THE FOLLOWING:

- THE PETITIONER SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE AND COUNTY LAWS, REGULATIONS AND ORDINANCES CONCERNING DAY CARE OPERATIONS.
- THIS CENTER SHALL BE PROVIDED ONLY TO STUDENTS SIMULTANEOUSLY ENROLLED IN THE MONTESSORI CHILD DEVELOPMENT CENTER APPROVED IN CASE NUMBER BA 90-65E.
- THE HOURS OF OPERATION OF THE DAY CARE SHALL BE LIMITED TO 7:30 AM TO 6:00 PM MONDAY THROUGH FRIDAY.

(6) PARKING DATA

a) Phase I (Bldg 1) Basement	6,142 s.f.
Assembly Area	9,716 s.f.
Total area of bldg.	15,810 s.f.
No. of Fixed seats	3,800 seats or 100/3 = 34
No. of parking spaces required	45 incl. 2 handicapped
No. of parking spaces provided	3,800 s.f.

(7) Phase II (Bldg 2 & 3)

Total area of bldg.	3,942 s.f.
Total No. of employees	10
Total No. of beds	45
No. of parking spaces required	15 incl. 2 handicapped
No. of parking spaces provided	24 incl. 6 handicapped

TOTAL BLDG 2 BLDG 3
3,942 s.f. 16,712 s.f. 5,940 s.f.
10 45 110

ADDRESS CHART

BLDG. NO.	STREET ADDRESS
1	4475 MONTGOMERY ROAD
2	4472
3	4475

DENSITY CALCULATION

PHASE I	PHASE II	PHASE III	TOTAL
Area	10,000	83,008	217,380
Site	9,716	8,874	18,590
Building	28,786	11,846	40,632
Parking lot	38,308	2,155	40,463
Landscaped is.	1,180	1,100	2,280
Open space excl. landscaped is.	7,222	43,848	51,070
Total Area	43,371	120,001	217,380
# - per Record Plat No. 10740			

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT
DATE: 4-2-93

APPROVED FOR PLANNING & ZONING
DATE: 4/6/93

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DATE: 3/25/93

REVISIONS

DATE	BY	DESCRIPTIONS
5-6-02	STC	ADD STAIRS AND STAIRS TO BLDG #1
11-01-99	MLV	ADD 30"x40" ADDITION TO BLDG #1
12-1-92	JNC	COUNTY COMMENTS
7-8-93	JNC	REV. ON BLDG. 1; RET. WALL
5-18-95	DTA	REV. ON LANDSCAPING HANDICAP
8-6-97	MCR	REV. BLDG. 2 FF & LOCATIONS
10-27-97	MCR	REV. CALC. 3 FF & LOCATIONS

Shangrila engineering inc.
CONSULTING ENGINEERS & LAND PLANNERS & SURVEYORS
3230 BETHANY LAKE, SUITE 4
ELlicott CITY, MARYLAND 21043
TEL. (301) 485-0400

SITE DEVELOPMENT PLAN

SUBDIVISION NAME
SHANGRILA

SECTION/AREA
ONE

PARCEL NO.
579

PLAT NO.	BLOCK NO.	ZONE	TAX/30	ELECT. DIST.	CENSUS TRAC
13213	1	R-20	30/31	2nd	6024

WATER CODE: F-10

SEWER CODE: 1400520

DESIGNED MLL

DRAWN AVG

CHECKED MLL

DATE 7-7-92

SCALE 1" = 30'

DRAWING 1 OF 8

JOB NO.

FILE NO.