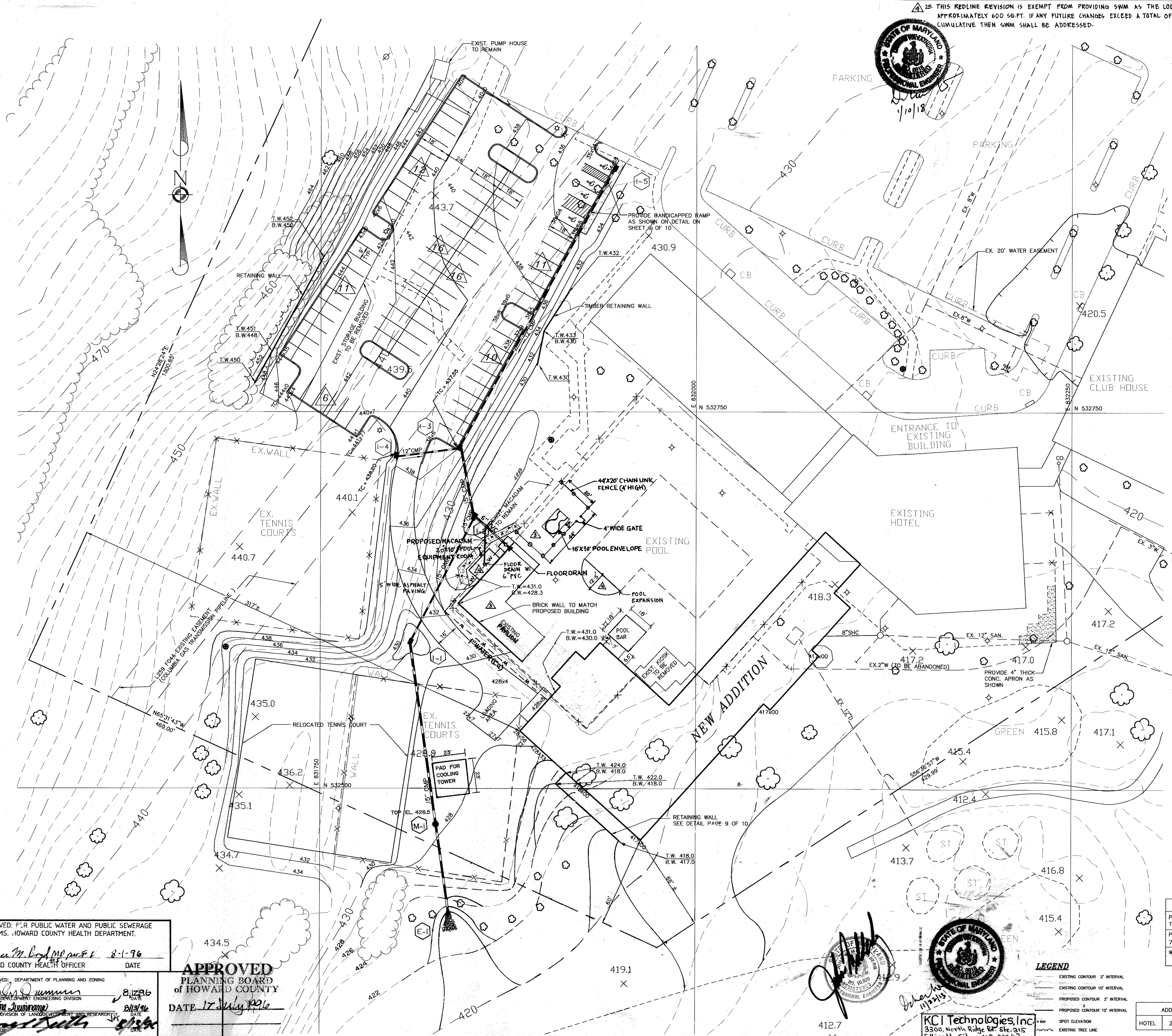
3 THIS REDLINE REVISION IS EXEMPT FROM PROVIDING SWM AS THE LOD IS APPROXIMATELY 600 SQ.FT. IF ANY FUTURE CHANGES EXCEED A TOTAL OF 5,000 S.F. CUMULATIVE THEN SWM SHALL BE ADDRESSED.



APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

Joyce M. Boyd MP per F.E. 8-1-96

HOWARD COUNTY HEALTH OFFICER — DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION — 8/12/96 DATE

CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH — 8/13/96 DATE

DIRECTOR — 8/13/96

APPROVED PLANNING BOARD of HOWARD COUNTY

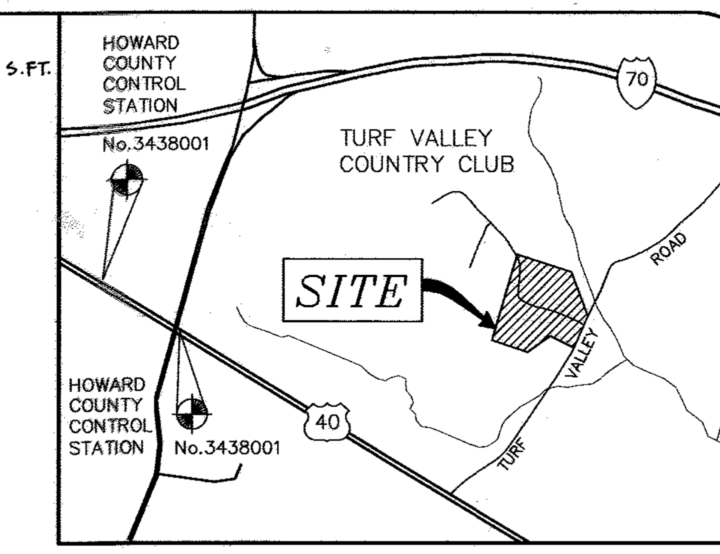
DATE 17 July 1996

LEGEND

EXISTING CONTOUR 2' INTERVAL
EXISTING CONTOUR 10' INTERVAL
PROPOSED CONTOUR 2' INTERVAL
PROPOSED CONTOUR 10' INTERVAL
SPOT ELEVATION
EXISTING TREE LINE

KCI Technologies, Inc. 3300 North Ridge Rd. Ste. 315 Ellicott City, MD 21043

HOWARD COUNTY CONTROL STATION No. 3438001



VICINITY MAP

SCALE: 1"=200'

THIS SDP IS FOR HOTEL ADDITION AND RELATED CONSTRUCTION ONLY.

GENERAL NOTES:

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY, AND MSHA STANDARDS AND SPECIFICATIONS, IF APPLICABLE.
2. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/ CONSTRUCTION INSPECTION DIVISION AT (410)-313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
3. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
4. PROJECT BACKGROUND:
   - LOCATION: TAX MAP 16, 3RD ELECTION DISTRICT, PARCEL 394
   - ZONING: P.G.C.C. (MULTI-USE)
   - AREA: 21.5 AC.
   - REFER TO: SDP 87-30
   - PROPOSED USE: HOTEL ADDITION
   - FLOOR SPACE: GARDEN LEVEL – 15,075 S.F. (POOL, MECHANICAL ROOM, EXERCISE ROOM, GAME ROOM)
     LOBBY LEVEL – 15,075 S.F. (BALLROOMS, MEETING ROOMS)
     3RD,4TH,5TH FLOORS – 15,075 S.F. (HOTEL ROOMS)
   - NO OF EMPLOYEES: – 55
5. PARKING SPACES REQUIREMENTS:
   ENTIRE SITE = 945 (AS DETERMINED BY A SHARED PARKING ANALYSIS PREPARED BY MILDENBERG, BOENDER AND ASSOCIATES DATED JULY 9, 1996).
   PARKING PROVIDED:
   EXISTING PARKING = 959
   PROPOSED PARKING = 82 (INCLUDING 4 HANDICAPPED SPACES)
   TOTAL PARKING PROVIDED = 1041
6. SITE COVERAGE: EXIST. HOTEL & BUILDINGS (SDP-87-30) – 113,121 S.F. (12.1%)
   EXISTING PARKING – 253,908 S.F. (27.1%)
   PROPOSED ADDITION – 15,076 S.F. (1.6%)
   PROPOSED PARKING – 27,600 S.F. (2.9%)
7. TOPOGRAPHY BASED ON AERIAL TOPOGRAPHIC SURVEY BY WINGS AERIAL MAPPING CO.
8. BOUNDARY BASED ON A RECORD PLAT NO. 7074 RECORDED FEBRUARY 2, 1987.
9. SOILS BOUNDARY BASED ON HOWARD COUNTY SOILS SURVEY DATED 1968, SHEET 9 END 15.
10. NO FLOODPLAIN OR WETLANDS EXIST ON SITE.
11. STORMWATER MANAGEMENT WILL BE PROVIDED BY DETENTION. WATER QUALITY WILL BE PROVIDED BY STORMCEPTOR, 1200 SERIES OR EQUIVALENT.
12. MAXIMUM DEPTH OF POND'S EMBANKMENT IS LESS THAN 3'. POND IS NOT REQUIRED TO MEET MD-378 REQUIREMENTS. POND WILL BE PRIVATE.
13. WATER AND SEWER WILL BE PUBLIC.
14. THE TRAFFIC STUDY FOR THIS PROJECT WAS PREPARED BY "THE TRAFFIC GROUP" IN DECEMBER 1992.
15. WATER CONNECTION WILL BE THROUGH EXISTING BUILDING.
16. PROPOSED STREET LIGHTS ARE SHOWN AS ☼ TO MATCH EXISTING FIXTURES.
17. REFER TO SHEET NO. 7 OF 10 FOR PROPERTY BOUNDARY.
18. WETLAND WERE DELINEATED ON SDP-87-30.
19. NO BURIAL GROUNDS EXIST IN THIS PARCEL.
20. REFER TO CONTRACT NOS. 44-1563 D & 20-1177-D FOR WATER AND SEWER SERVICE.
21. COORDINATES BASED ON NAD'27 MARYLAND COORDINATE SYSTES AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS No. 3438001 & 3438002.
    STA. No. 3438001 N 532502.146 E 827774.234 EL. 464.550
    STA. No. 3438002 N 533202.974 E 826871.528 EL. 499.605
22. ALL NEW PAVEMENT TO BE HOWARD COUNTY STD. P-2 (R.2.01)
23. ALL NEW CURB AND GUTTER TO BE HOWARD COUNTY STD. (R-3.01)
24. THE RETAINING WALL CONSTRUCTION MUST BEINSPECTED DURING CONSTRUCTION.

SHEET INDEX	
SHEET	TITLE
1	SITE DEVELOPMENT PLAN
2	EROSION AND SEDIMENT CONTROL PLAN
3	SEDIMENT CONTROL NOTES AND DETAILS
4	STORM DRAIN PROFILES AND DETAILS
5	SWM DETAILS AND SPECIFICATIONS
6	EXISTING CONDITION DRAINAGE AREA MAP
7	PROPOSED CONDITION DRAINAGE AREA MAP
8	LANDSCAPE PLAN
9	MISCELLANEOUS DETAILS
10	PROJECT OUTLINE

PERMIT INFORMATION BLOCK					
PROJECT NAME: TURF VALLEY HOTEL ADDITION			SECTION/AREA: 2	PARCEL #: 394	
PLAT NO.: 7074	BLOCK #: 17	ZONE: PGCC(MULTI-USE)	TAX/ZONE MAP: 16	ELEC. DIST.: THIRD	CENSUS TRACT: 6030
WATER CODE: H06			SEWER CODE: 599-2500		

ADDRESS CHART	
HOTEL	2702 TURF VALLEY ROAD

OWNER

MANGIONE ENTERPRISES OF TURF VALLEY
1205 YORK ROAD – PENTHOUSE
LUTHERVILLE, MARYLAND 21093
(301) 825-8400

project	date
96028	JULY 96
illustration	engineering
MMP	MMP
scale	approval
1"=30'	JBM

no.	description	date
3	ADD POOL EQUIP. ROOM. EXPAND POOL	1/10/18
3	REVISE EX. PAVILION, ADD POOL & POOL EQUIPMENT ROOM	11/08/13
2	DELETE SWMF & REVISE I-3 TO E-I	5/27/97
1	ADD POOL BAR; ROTATE COOLING TOWER PAD; REVISE LOCATION OF RETAINING WALL	10/10/96
	revisions	

TAX MAP 16, PARCEL #394
TURF VALLEY HOTEL ADDITION

THIRD ELECTION DISTRICT — HOWARD COUNTY

SITE DEVELOPMENT PLAN

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

SDP-96-144

HOWARD SOIL CONSERVATION DISTRICT
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 , 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:
1) PREFERRED – APPLY 2 TONS PER ACRES 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 DISK 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.).
2) 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 DISK 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 1.4 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 LOBS. PER ACRE (.05 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 TONE/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 SEEDING 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, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, FOR 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 15 THRU OCTOBER 15, SEED WITH 2-1/2 BUSHEL PER ACRE OF ANNUAL RYE (3.2 LBS./1000 SQ.FT.) FOR THE PERIOD MAY 1 THRU AUGUST 14, SEED WITH 3 LBS. PER ACRE OF WEEPING LOVEGRASS (.07 LBS./1000 SQ.FT.). FOR THE PERIOD NOVEMBER 16 THRU NOVEMBER 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 SOD.

MULCHING: APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 LBS./1000 SQ.FT.) OF UNROTTED WEED FREE 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 FEET OR HIGHER, USE 348 GAL PER ACRE (8 GAL/1000 SQ.FT.) FOR ANCHORING.

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

HOWARD SOIL CONSERVATION DISTRICT
STANDARD SEDIMENT CONTROL NOTES

1) A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF NAY CONSTRUCTION, (313-1855).

2) ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT "MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL", AND REVISIONS THERETO.

3) 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.

4) ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.

5) ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING (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.

6) 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:	21.5	ACRES
AREA DISTURBED:	2.8	ACRES
AREA TO BE ROOFED OR PAVED:	1.2	ACRES
AREA TO BE VEGITATIVELY STABILIZED:	1.6	ACRES
TOTAL CUT:	5,700	CU. YDS.
TOTAL FILL:	5,700	CU. YDS.
TOTAL WASTE/BORROW AREA LOCATION:	–	

8) ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.

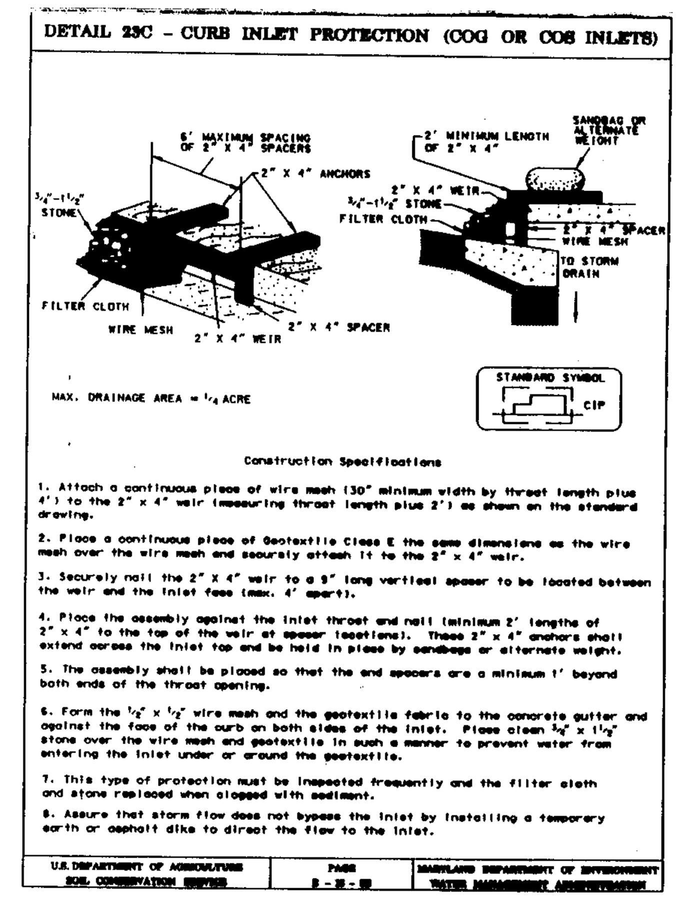
9) ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.

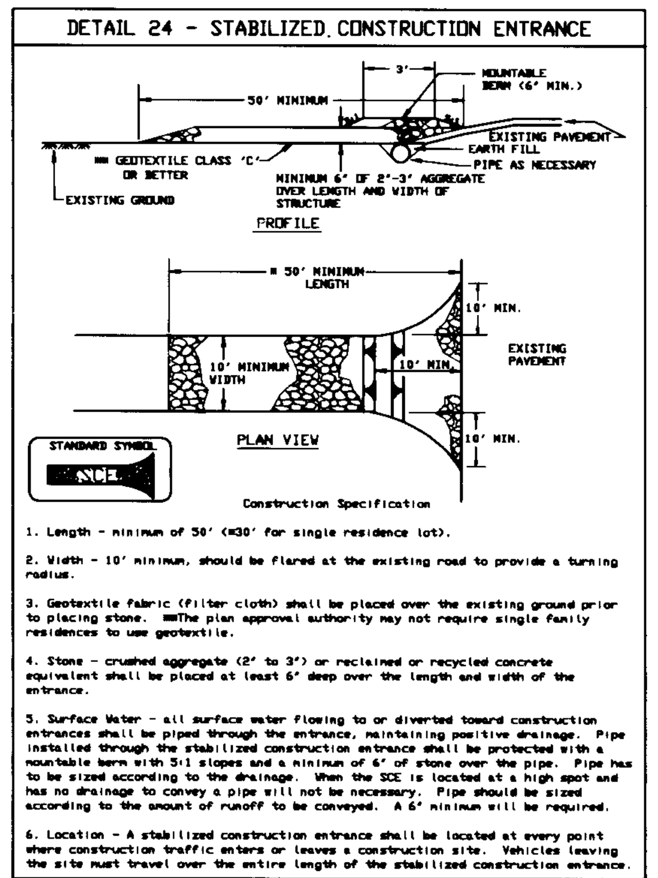
10) ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.

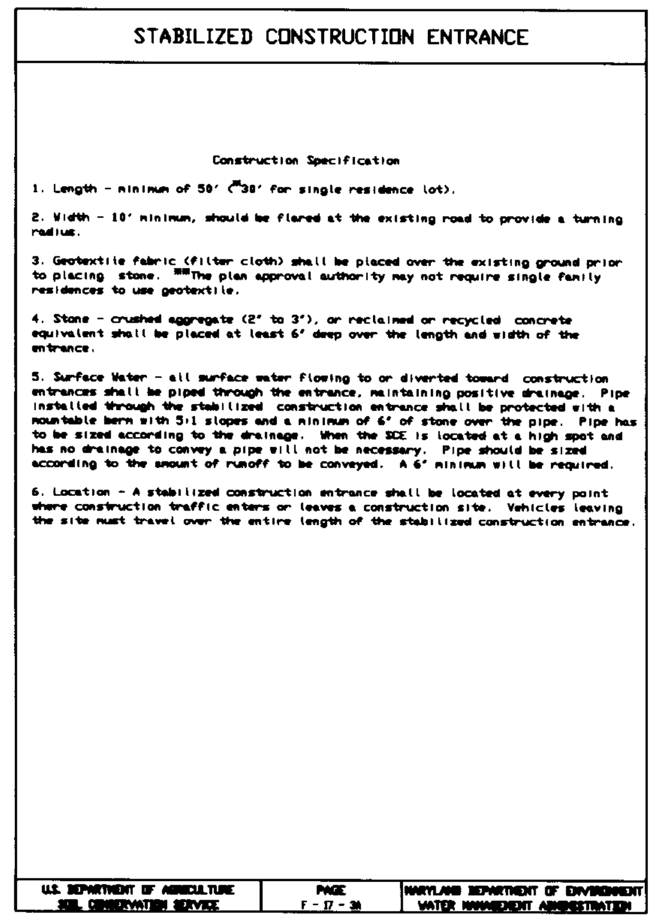
11) TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH CAN BE BACK FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.

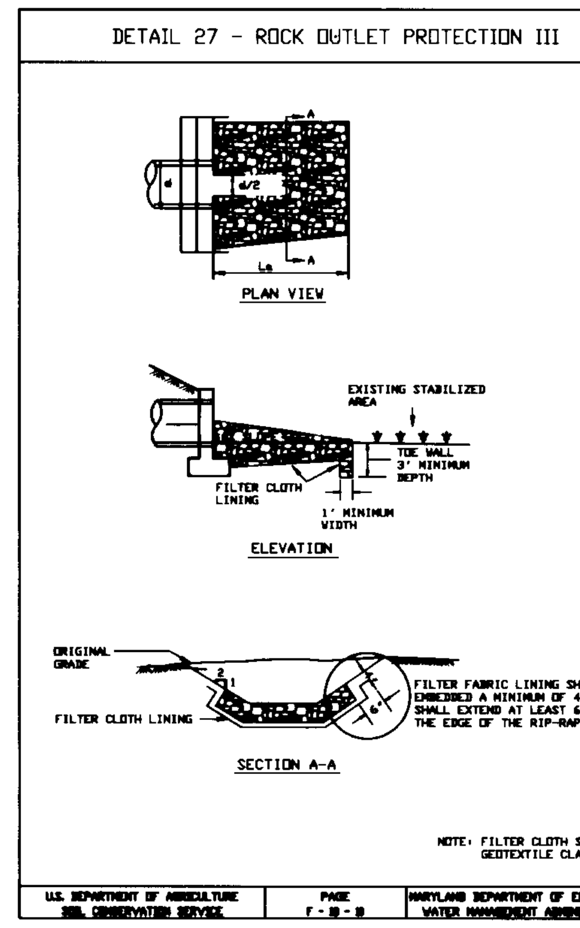
SEQUENCE OF CONSTRUCTION

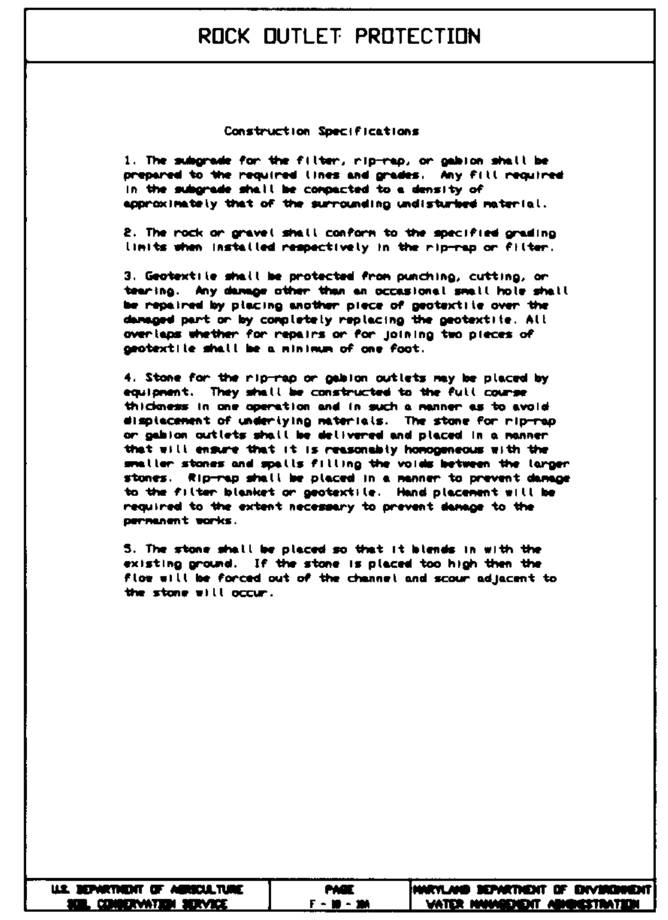
1. OBTAIN GRADING PERMIT
2. INSTALL STABILIZED CONSTRUCTION ENTRANCE WITH MOUNTABLE BERM, AS SHOWN ON PLAN (1 DAY)
3. INSTALL EARTH DIKES (1 DAY)
4. INSTALL SILT FENCES AND SUPER SILT FENCES (1 DAY)
5. BEGIN CONSTRUCTION OF BUILDING. DO NOT BEGIN CONSTRUCTION OF PARKING AREA WHEN BUILDING CONSTRUCTION HAS PROGRESSED SUCH THAT ACCESS TO THE REAR OF THE BUILDING IS NO LONGER REQUIRED FOR HEAVY EQUIPMENT, BEGIN CONSTRUCTION OF PARKING AREA, STORM DRAIN SYSTEM (30 DAYS)
6. UPON COMPLETION OF PARKING AREA, AND STABILIZATION OF ALL CONTRIBUTING DRAINAGE AREAS, REMOVE ACCUMULATED SEDIMENTS WITH SEED AND MULCH OR SOD. (3 DAYS)
7. UPON COMPLETION AND STABILIZATION OF ALL CONTRIBUTING DRAINAGE AREAS AND WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, REMOVE SEDIMENT CONTROL DEVICES AND STABILIZE REMAINING DISTURBED AREAS. (4 DAYS)

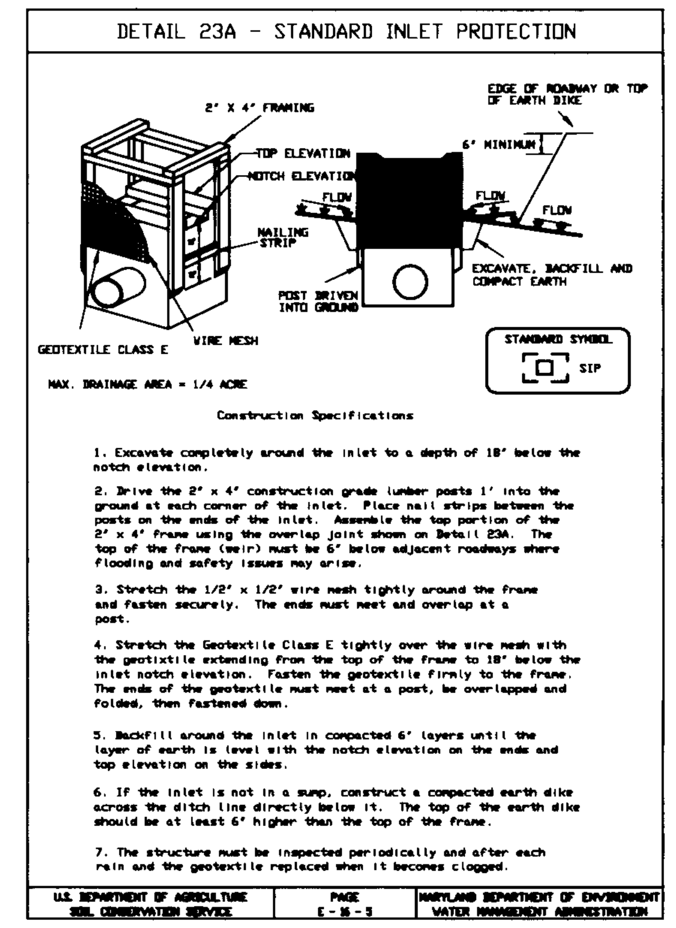


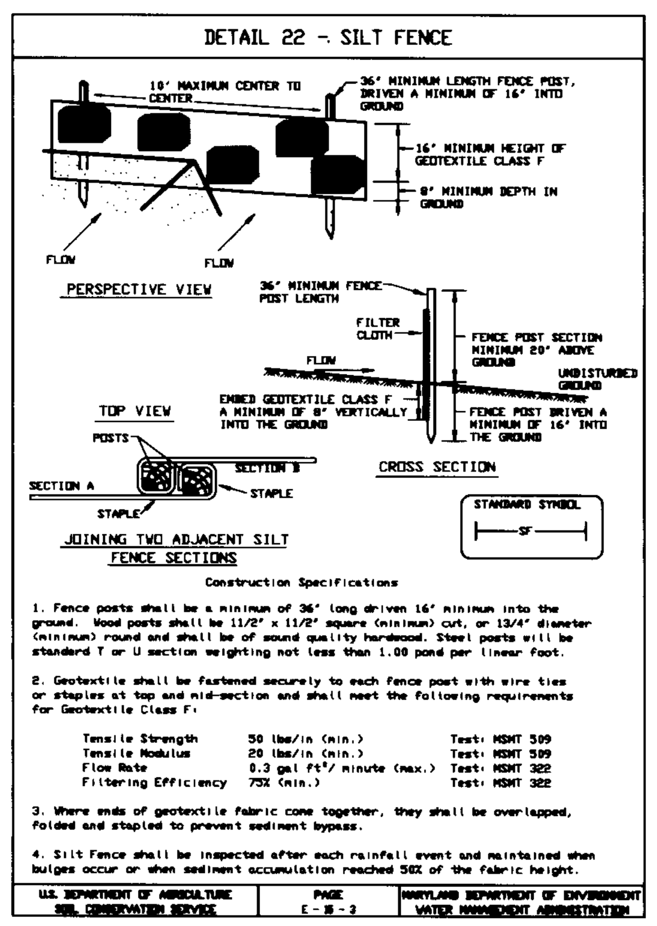


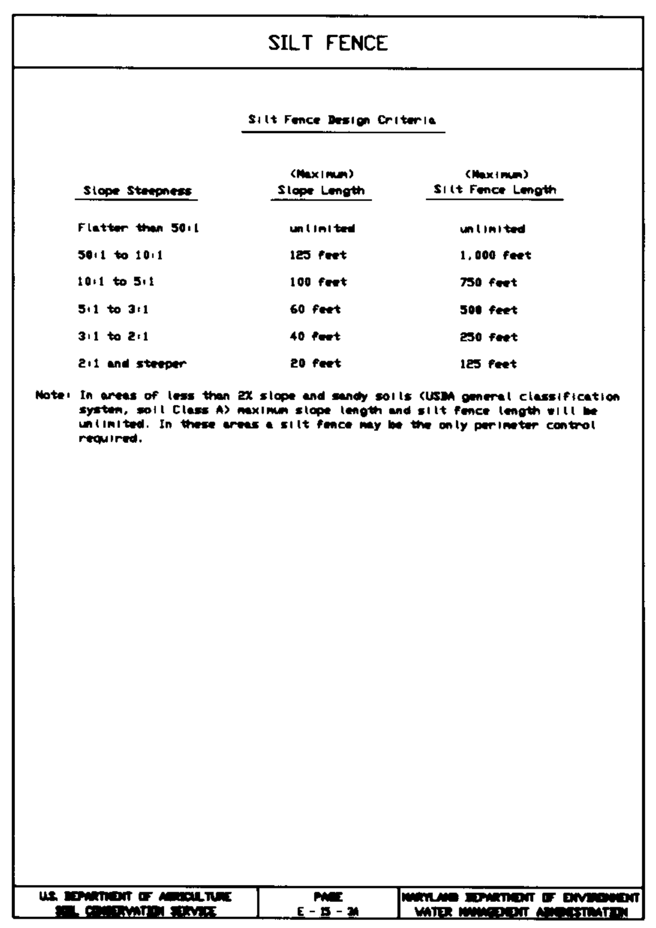


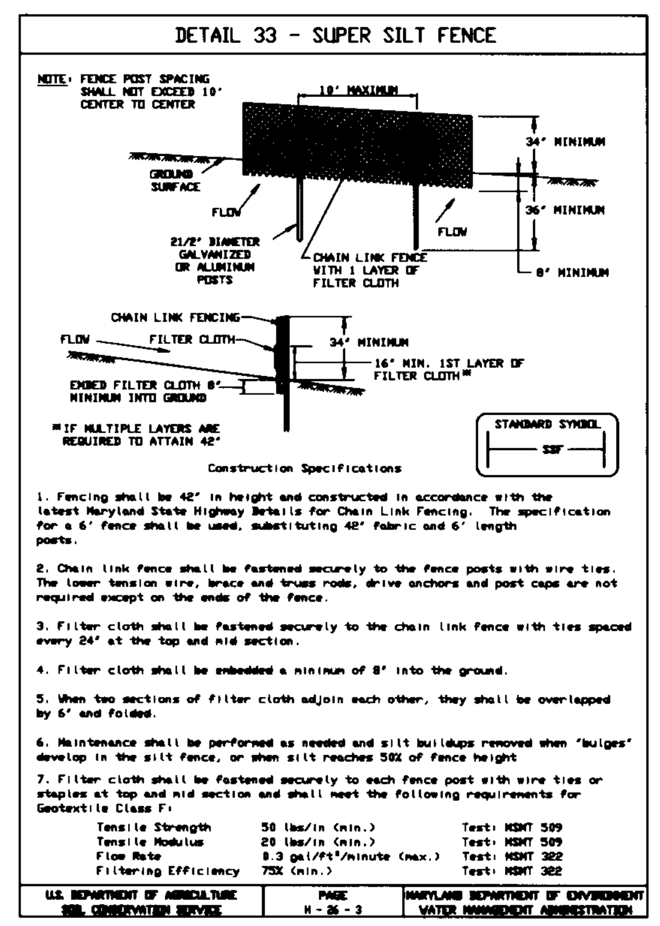


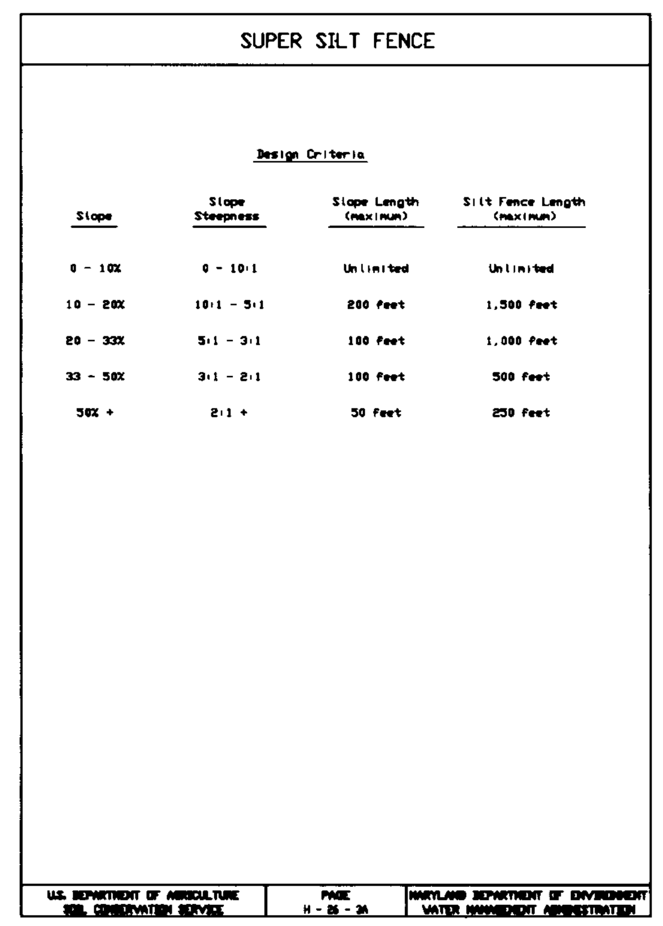


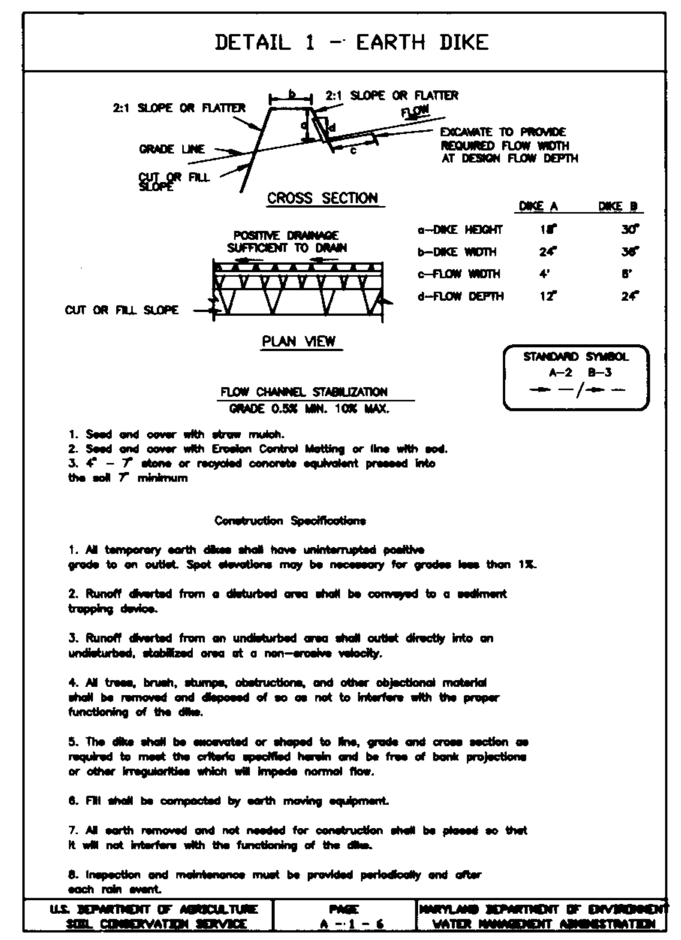












DEVELOPERS CERTIFICATE

I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE NATURAL RESOURCE CONSERVATION SERVICE.

Lois Mangione 7/15/96
SIGNATURE OF DEVELOPER DATE
LOUIS MANGIONE
PRINTED NAME OF DEVELOPER

ENGINEER'S CERTIFICATE

I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWEDGE OF THE SITE CONDTIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE NATURAL RESOURCE CONSERVATION SERVICE.

STATE OF MARYLAND — JOHN B. MILDENBERG — NO. 10,020 — REGISTERED PROFESSIONAL ENGINEER

July 15 '96
SIGNATURE OF ENGINEER DATE
John Mildenberg
PRINTED NAME OF ENGINEER

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

J. G. Warfield 8/1/96
USDA – NATURAL RESOURCE CONSERVATION SERVICE DATE

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

John R. Robertson 8/1/96
HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

8/12/96
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE
8/13/96
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH DATE
8/13/96
DIRECTOR DATE

028-SED

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 17 July 1996

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

Joyce M. Boyd MD 8-1-96
HOWARD COUNTY HEALTH OFFICER DATE

OWNER
MANGIONE ENTERPRISES OF TURF VALLEY
1205 YORK ROAD – PENTHOUSE
LUTHERVILLE, MARYLAND 21093
(301) 825-8400

project	date
96028	JULY 96
illustration	engineering
MMP	MMP
scale	approval
N.T.S.	JBM

no.	description	date
1	DELETE SWMF & REVISE NOTES	5/27/97

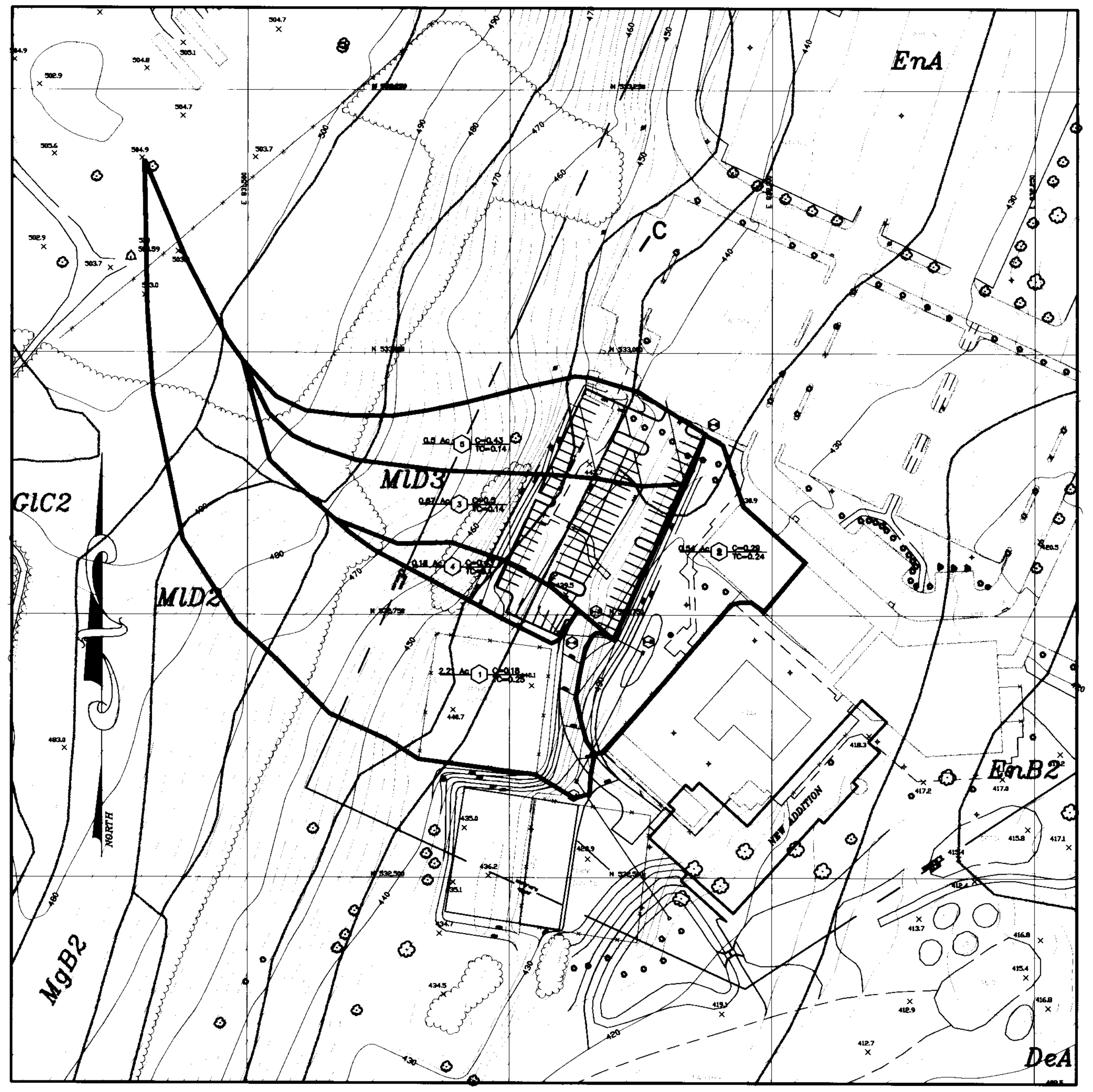
revisions

TAX MAP 16, PARCEL # 394
TURF VALLEY HOTEL ADDITION
THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SEDIMENT CONTROL NOTES AND DETAILS

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

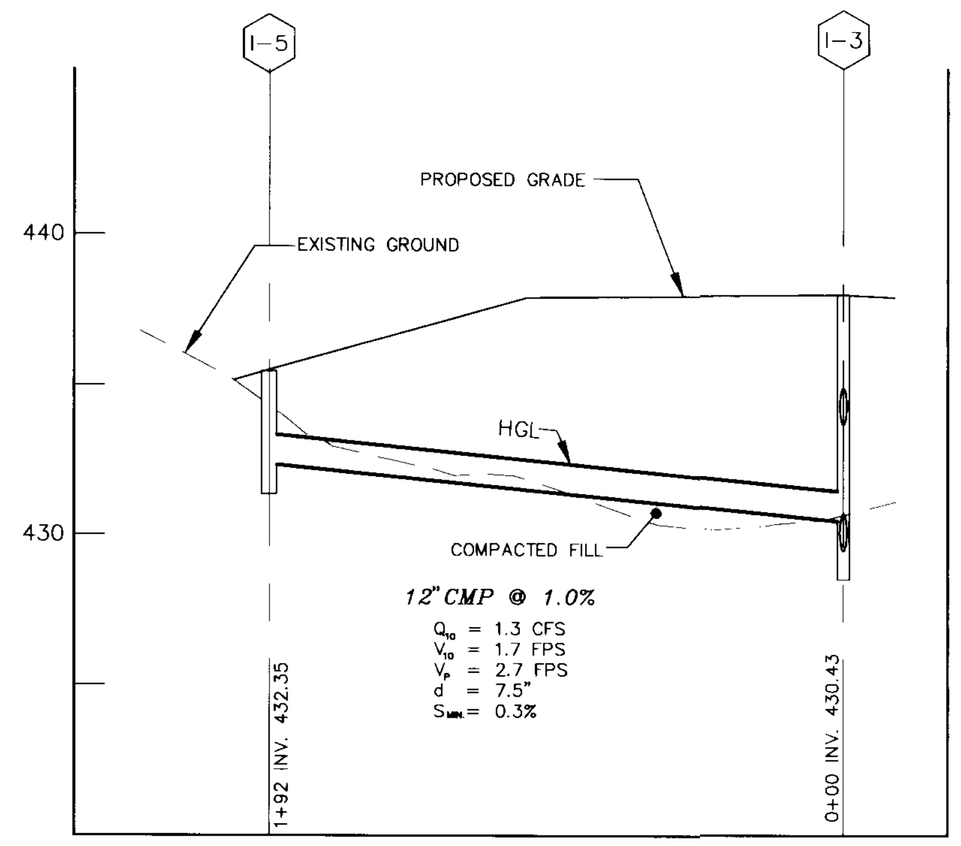
SDP-96-144

ALL PIPES GAGES ARE 16 UNLESS OTHERWISE NOTED



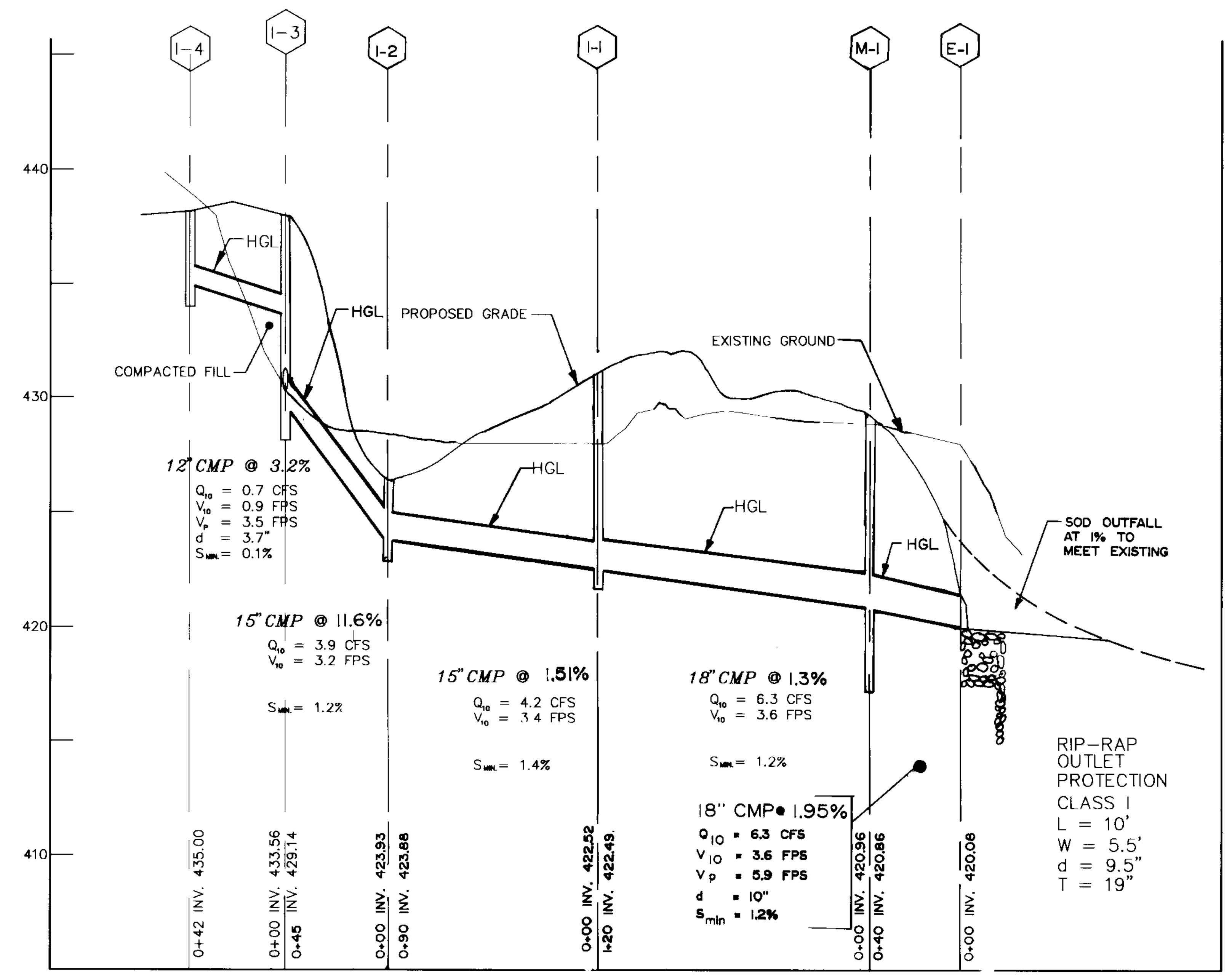
DRAINAGE AREA MAP

SCALE: 1"=100'



STORM DRAIN PROFILE

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



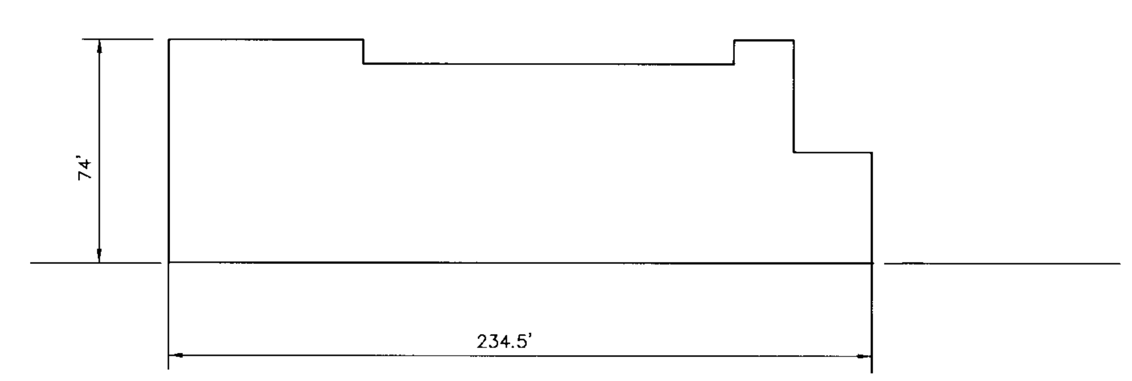
STORM DRAIN PROFILE

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

STRUCTURE SCHEDULE

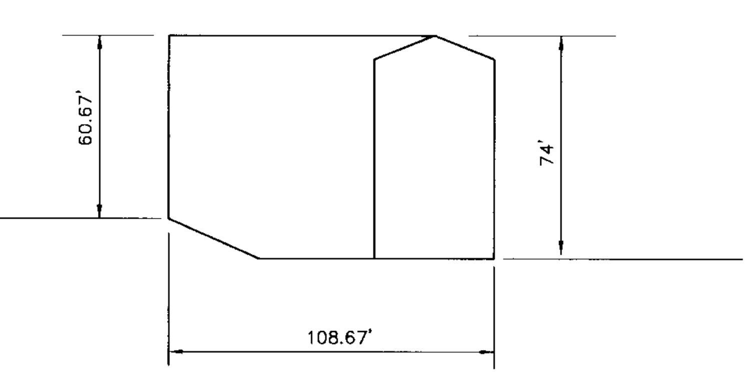
NO	TYPE	TOP EL.	REMARKS
I-5	A-5	435.35	
I-4	A-5	438.20	
I-3	A-5	438.55	
I-2	K	427.00	
I-1	K	429.75	
M-1	STORMSEPTOR	428.50	SEE DETAIL
E-1	END SECTION	–	

NOTE: LOCATION OF ALL STRUCTURES TO BE AS SHOWN ON PLAN.



EAST ELEVATION

NTS



SOUTH ELEVATION

NTS

Concrete Stormceptor Order Form *

Contractor Information

Name: ______
Address: ______
City: ______
State: ______
Zip Code: ______
Contact: ______
Phone: ______
Fax: ______

18" CMP, INV=421.14 IN

90° 180° 0° 270°

18" CMP, INV.=421.04 OUT

Office Use Only

Order #: ______
Date: ______
Internal Sale: ______

Owner Information

Name: Mangione Enterprises of Turf Valley
Phone: (410) 825-8400
Fax: (410) 825-8407

Please draw orientation of inlet and outlet pipes on diagram along with pipe inside diameter (in.) and invert elevation (ft.). Clearly mark inlet pipes with an I and outlet pipes with an O and provide the inlet/outlet pipe angle in degrees.

Stormceptor Model

900	☐	3600	☐
1200	■	4800	☐
1800	☐	6000	☐
2400	☐	7200	☐

Insert Size

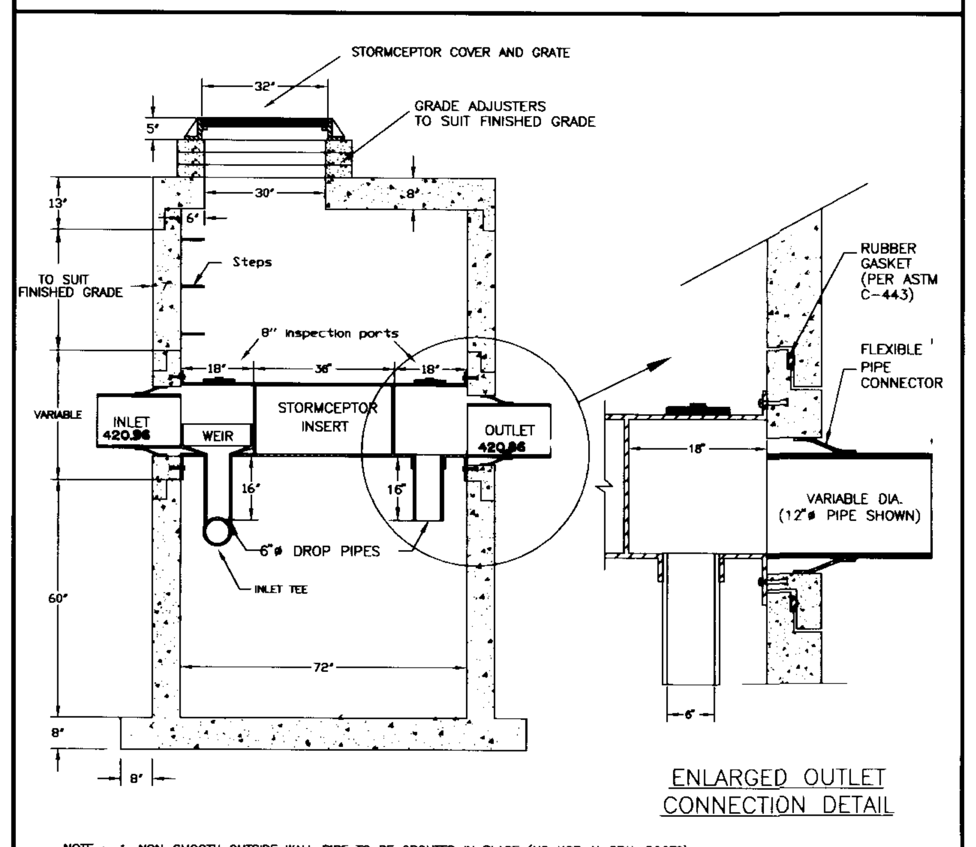
22"	■
32"	☐
44"	☐
Custom	☐

Manhole Number	1
Top Elevation (ft.)	428.50
Inlet Pipe Invert (ft)	420.96
Outlet Pipe Invert (ft)	420.86
Pipe Type:	CMP
Pipe Inside Diameter (in.)(ID)	18
Pipe Outside Diameter (in)(OD)	N/A

Project Name: TURF VALLEY HOTEL ADDITION
Approximate time until required delivery (weeks) ______
Delivery Address: Street 2702 TURF VALLEY ROAD
City: ELLICOTT CITY State: MARYLAND Zip Code: 21042
Designer Company : MILDENBERG, BOENDER & ASSOCIATES, INC.
Designer Contact: John Mildenberg Phone: (410) 997-0296 Fax: (410) 997-0298

For Technical Assistance and Stormceptor Order Information
Please Call Stormceptor Corporation at (301) 762-8361
or toll free at 1-(800)-762-4703

* TO BE INCLUDED ON SWM PLAN BY DESIGNER



ENLARGED OUTLET CONNECTION DETAIL

NOTE : 1. NON-SMOOTH OUTSIDE WALL PIPE TO BE GROUTED IN PLACE (NO KOR-N-SEAL BOOTS)
2. RISER SECTION ABOVE THE INSERT TO BE 72" ø FOR A MINIMUM OF 60" OR TO THE GRADE (WHICHEVER IS THE LESSER)
3. COVER TO BE LOCATED ADJACENT TO INLET INSPECTION PORT

Design Specifications:

1. ASTM C 478
2. BASE WEIGHT = 7.6 TONS

REV.	D.B G.B.	S.B	STC 1200 PRECAST CONCRETE STORMCEPTOR 1200 US GALLON CAPACITY
DATE 08/16/95	SCALE NTS	UNITS U.S.	

DEVELOPERS CERTIFICATE

I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE NATURAL RESOURCE CONSERVATION SERVICE.

Louis Mangione 7/15/96
SIGNATURE OF DEVELOPER DATE

LOUIS MANGIONE
PRINTED NAME OF DEVELOPER

ENGINEER'S CERTIFICATE

I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWEDGE OF THE SITE CONDTIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE NATURAL RESOURCE CONSERVATION SERVICE.

John Mildenberg 7/15/96
SIGNATURE OF ENGINEER DATE

John Mildenberg
PRINTED NAME OF ENGINEER

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

J. G. Warfield / JGW 8/1/96
USDA - NATURAL RESOURCE CONSERVATION SERVICE DATE

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

John R. Robertson 8/1/96
HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

8/12/96
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

8/13/96
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH DATE

8/13/96
DIRECTOR DATE

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

8-1-96
HOWARD COUNTY HEALTH OFFICER DATE

APPROVED
PLANNING BOARD of HOWARD COUNTY
DATE 17 July 1996

DR-PROF

OWNER
MANGIONE ENTERPRISES OF TURF VALLEY
1205 YORK ROAD - PENTHOUSE
LUTHERVILLE, MARYLAND 21093
(301) 825-8400

project	date
96028	JULY 96
illustration	engineering
MMP	MMP
scale	approval
AS SHOWN	JBM

no.	description	date
1	DELETE SWMF & REVISE E-1 TO I-3	5/27/97

revisions

TAX MAP 16, PARCEL #394
TURF VALLEY HOTEL ADDITION
THIRD ELECTION DISTRICT HOWARD COUNTY
STORM DRAIN PROFILES AND DETAILS

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

SDP-96-144

POND SPECIFICATIONS

THESE SPECIFICATIONS ARE APPROPRIATE TO ALL PONDS WITHIN THE SCOPE OF THE STANDARD FOR PRACTICE MD-378. ALL REFERENCES TO ASTM AND AASHTO SPECIFICATIONS APPLY TO THE MOST RECENT VERSION.

SITE PREPARATION

AREAS DESIGNATED FOR BORROW AREAS, EMBANKMENT, AND STRUCTURAL WORKS SHALL BE CLEARED, GRUBBED AND STRIPPED OF TOPSOIL. ALL TREES, VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED. CHANNEL BANKS AND SHARP BREAKS SHALL BE SLOPED TO NO STEEPER THAN 1:1

AREAS TO BE COVERED BY THE RESERVOIR WILL BE CLEARED OF ALL TREES, BRUSH, LOGS, RUBBISH AND OTHER OBJECTIONABLE MATERIAL UNLESS OTHERWISE DESIGNATED TO THE PLANS. TREES, BRUSH AND STUMPS SHALL BE CUT APPROXIMATELY LEVEL WITH THE GROUND SURFACE. FOR DRY STORMWATER MANAGEMENT PONDS, A MINIMUM OF A 50 FOOT RADIUS AROUND THE INLET STRUCTURE SHALL BE CLEARED.

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

EARTH FILL

MATERIAL- THE FILL MATERIAL SHALL BE TAKEN FROM APPROVED DESIGNATED BORROW AREAS. IT SHALL BE FREE OF ROOTS, STUMPS, WOOD, RUBBISH, STONES GREATER THAN 6", FROZEN OR OTHER OBJECTIONABLE MATERIALS. FILL MATERIAL FOR THE CENTER OF THE EMBANKMENT AND CUT OFF TRENCH SHALL CONFORM TO UNIFIED SOIL CLASSIFICATION GC, SC, CH, OR CL. CONSIDERATION MAY BE GIVEN TO THE USE OF OTHER MATERIALS IN THE EMBANKMENT IF DESIGN AND CONSTRUCTION ARE SUPERVISED BY A GEOTECHNICAL ENGINEER.

PLACEMENT- AREAS ON WHICH FILL IS TO BE SHALL BE SCARIFIED PRIOR TO PLACEMENT OF FILL. FILL MATERIALS SHALL BE PLACED IN MAXIMUM 8 INCH THICK (BEFORE COMPACTION) LAYERS WHICH ARE TO BE CONTINUOUS OVER THE ENTIRE LENGTH OF THE FILL. THE MOST PERMEABLE BORROW MATERIAL SHALL BE PLACED IN THE DOWNSTREAM PORTIONS OF THE EMBANKMENT. THE PRINCIPAL SPILLWAY MUST BE INSTALLED CONCURRENTLY WITH FILL PLACEMENT AND NOT EXCAVATED INTO THE EMBANKMENT.

COMPACTION- THE MOVEMENT OF AND SPREADING EQUIPMENT OVER THE FILL SHALL BE CONTROLLED SO THAT THE ENTIRE SURFACE OF EACH LIFT SHALL BE TRAVERSE BY NOT LESS THAN ONE TREAD TRACK OF THE EQUIPMENT OR COMPACTION SHALL BE ACHIEVED BY A MINIMUM OF FOUR COMPLETE PASSES OF A SHEEPSFOOT, RUBBER TIRED OR VIBRATORY ROLLER. FILL MATERIAL SHALL CONTAIN SUFFICIENT MOISTURE SUCH THAT THE REQUIRED DEGREE OF COMPACTION WILL BE OBTAINED WITH THE EQUIPMENT USED. THE FILL MATERIAL SHALL CONTAIN SUFFICIENT MOISTURE SO THAT IF FORMED INTO A BALL IT WILL NOT CRUMBLE YET NOT BE SO WET THAT WATER CAN BE SQUEEZED OUT.

WHERE A MINIMUM REQUIRED DENSITY IS SPECIFIED, IT SHALL NOT BE LESS 95% OF MAXIMUM DRY DENSITY WITH A MOISTURE CONTENT WITHIN+- 2% OF THE OPTIMUM. EACH LAYER OF FILL SHALL BE COMPACTED AS NECESSARY TO OBTAIN THAT DENSITY, AND IS TO BE CERTIFIED BY THE ENGINEER AT THE TIME OF CONSTRUCTION. ALL COMPACTION IS TO BE DETERMINED BY AASHTO METHOD T-99

CUT OFF TRENCH- THE CUFF OFF TRENCH SHALL BE EXCAVATED INTO IMPERVIOUS MATERIAL 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, WITH THE MINIMUM WIDTH BEING FOUR FEET. THE DEPTH SHALL BE AT LEAST FOUR FEET BELOW EXISTING GRADE OR AS SHOWN ON THE PLANS. THE SIDE SLOPES OF THE TRENCH SHALL BE 1 TO 1 OR FLATTER. THE BACKFILL SHALL BE COMPACTED WITH CONSTRUCTION EQUIPMENT, ROLLERS, OR HAND TAMPERS TO ASSURE MAXIMUM DENSITY AND MINIMUM PERMEABILITY.

STRUCTURE BACKFILL

BACKFILL ADJACENT TO PIPES OR STRUCTURES SHALL BE OF THE TYPE AND QUALITY CONFORMING TO THAT SPECIFIED FOR THE ADJOINING FILL MATERIAL. THE FILL MATERIAL SHALL BE PLACED IN HORIZONTAL LAYERS NOT TO EXCEED FOUR INCHES IN THICKNESS AND COMPACTED BY HAND TAMPERS OR OTHER MANUALLY DIRECTED COMPACTION EQUIPMENT. THE MATERIAL NEEDS TO FILL COMPLETELY ALL SPACES UNDER AND 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 EQUIPMENT BE DRIVEN OVER ANY PART OF A CONCRETE FILL OF 24" OR GREATER OVER THE STRUCTURE OR PIPE.

PIPE CONDUITS

ALL PIPES SHALL BE CIRCULAR IN CROSS SECTION.

CORRUGATED METAL PIPE- ALL OF THE FOLLOWING CRITERIA SHALL APPLY FOR CORRUGATED METAL PIPE:
1. MATERIALS- (STEEL PIPE)- THIS PIPE AND ITS APPURTENANCE SHALL BE GALVANIZED AND FULLY BITUMINOUS COATED AND SHALL CONFORM TO THE REQUIREMENTS OF AASHTO SPECIFICATION M-190 TYPE A WITH WATERTIGHT COUPLING BANDS. ANY BITUMINOUS COATING DAMAGED OR OTHERWISE REMOVED SHALL BE REPLACED WITH COLD APPLIED BITUMINOUS COATING COMPOUND. STEEL PIPES WITH POLYMERIC COATINGS SHALL HAVE A MINIMUM COATING THICKNESS OF 0.01 INCH (10 MIL) ON BOTH SIDES OF THE PIPE. THE FOLLOWING COATINGS OR AN APPROVED EQUAL MAY BE USED: NEXON, PLASTI-COTE, BLAC-KLAD, AND BETH-CU-LOY. COATED CORRUGATED STEEL PIPE SHALL MEET THE REQUIREMENTS OF AASHTO M-245 AND M-246.

MATERIALS- (ALUMINUM COATED STEEL PIPE)- THIS PIPE AND ITS APPURTENANCES SHALL CONFORM TO THE REQUIREMENTS OF AASHTO SPECIFICATION M-274 WITH WATERTIGHT COUPLING BANDS OR FLANGES. ANY ALUMINUM COATING DAMAGED OF OTHERWISE REMOVED SHALL BE REPLACED WITH COLD APPLIED BITUMINOUS COATING COMPOUND.?

MATERIALS-(ALUMINUM PIPE)- THIS PIPE AND ITS APPURTENANCES SHALL CONFORM TO THE REQUIREMENTS OF AASHTO SPECIFICATION M-196 OR M-211 WITH WATERTIGHT COUPLINGS BANDS OR FLANGES. 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 PH OF THE SURROUNDING SOILS SHALL BE BETWEEN 4 AND 9.

2. 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 RUBBER OR PLASTIC INSULATING MATERIALS AT LEAST 24 MILS IN THICKNESS.

3. CONNECTIONS- ALL CONNECTIONS WITH PIPES MUST BE COMPLETELY WATERTIGHT. THE DRAIN PIPE OR BARREL CONNECTION TO THE RISER SHALL BE WELDED ALL AROUND WHEN THE PIPE AND RISER ARE METAL. ANTI-STEEP COLLARS SHALL BE CONNECTED TO THE PIPE IN SUCH A MANNER AS TO BE COMPLETELY WATERTIGHT. DIMPLE BANDS ARE NOT CONSIDERED TO BE WATERTIGHT.

ALL CONNECTIONS SHALL USE A RUBBER OF NEOPRENE GASKET WHEN JOINING PIPE SECTIONS. THE END OF EACH PIPE SHALL BE-ROLLED AND ADEQUATE NUMBER OF CORRUGATIONS TO ACCOMMODATE THE BAND WIDTH. THE FOLLOWING TYPE CONNECTIONS ARE ACCEPTABLE FOR PIPE LESS THAN 24" IN DIAMETER: FLANGES ON BOTH ENDS OF THE PIPE, A 12" WIDE STANDARD LAP TYPE BAND WITH 12" WIDE BY 3/8" THICK CLOSED CELL CIRCULAR NEOPRENE GASKET; AND A 12" WIDE HUGGER TYPE BAND WITH 0-RING GASKETS HAVING MINIMUM DIAMETER OF 1/2" GREATER THAN THE CORRUGATION DEPTH. PIPES 24: IN DIAMETER AND LARGER SHALL BE CONNECTED BY A 24" LONG ANNULAR CORRUGATED BAND USING RODS AND LUGS. A 12" WIDE BY 3/8" THICK CLOSED CELL CIRCULAR NEOPRENE GASKET WILL BE INSTALLED ON THE END OF EACH PIPE FOR A TOTAL OF 24"

HELICALLY CORRUGATED PIPE SHALL HAVE EITHER CONTINUOUSLY WELDED SEAMS OR HAVE LOCK SEAMS WITH INTERNAL CAULKING OR A NEOPRENE BEAD.

4. 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.

5. BACKFILLING SHALL CONFORM TO "STRUCTURE BACKFILL."

6. OTHER DETAILS (ANTI-SEEP COLLARS, VALVES, ETC.) SHALL BE AS SHOWN ON THE DRAWINGS.

REINFORCED CONCRETE PIPE- ALL OF THE FOLLOWING CRITERIA SHALL APPLY FOR REINFORCED CONCRETE PIPE:

1. MATERIALS-REINFORCED CONCRETE PIPE SHALL HAVE BELL AND SPIGOT JOINTS WITH RUBBER GASKETS AND SHALL EQUAL OR EXCEED ASTM DESIGNATION C-361.

2. BEDDING- ALL REINFORCED CONCRETE PIPE CONDUITS SHALL BE LAID IN A CONCRETE BEDDING FOR THEIR ENTIRE LENGTH. THIS BEDDING SHALL CONSIST OF HIGH SLUMP CONCRETE PLACED UNDER THE PIPE AND UP THE SIDES OF THE PIPE AT LEAST 10% OF ITS OUTSIDE DIAMETER WITH A MINIMUM THICKNESS OF 3 INCHES, 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. THE FIRST JOINT MUST BE LOCATED WITHIN 2 FEET FROM THE RISER.

4. BACKFILLING SHALL CONFORM TO "STRUCTURE BACKFILL."

5. OTHER DETAILS (ANTI-SEEP COLLARS, VALVES, ETC.) SHALL BE AS SHOWN ON THE DRAWINGS.

POLYVINYL CHLORIDE (PVC) PIPE- ALL OF THE FOLLOWING CRITERIA SHALL APPLY FOR POLYVINYL CHLORIDE (PVC) PIPE:

1. MATERIALS-PVC PIPE SHALL BE PVC-1120 OR PVC-1220 CONFORMING TO ASTM D-1785 OR ASTM D-2241.

2. JOINTS AND CONNECTIONS TO ANTI-SEEP COLLARS SHALL BE COMPLETELY WATERTIGHT.

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. BACKFILLING SHALL CONFORM TO "STRUCTURE BACKFILL."

5. OTHER DETAILS (ANTI-SEEP COLLARS, VALVES, ETC.) SHALL BE AS SHOWN ON THE DRAWINGS.

CONCRETE

CONCRETE SHALL MEET THE REQUIREMENTS OF MARYLAND DEPARTMENT OF TRANSPORTATION, STATE HIGHWAY ADMINISTRATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, SECTION 905.

THE RIPRAP SHALL BE PLACED TO THE REQUIRED THICKNESS IN ONE OPERATION. THE ROCK SHALL BE DELIVERED AND PLACED IN A MANNER THAT WILL INSURE THE RIPRAP IN PLACE SHALL BE REASONABLY HOMOGENOUS WITH THE LARGER ROCKS UNIFORMLY DISTRIBUTED AND FIRMLY IN CONTACT ONE TO ANOTHER WITH THE SMALLER ROCKS FILLING THE VOIDS BETWEEN THE LARGER ROCKS. FILTER CLOTH SHALL BE REPLACED UNDER ALL RIPRAP AND SHALL MEET THE REQUIREMENTS OF MARYLAND DEPARTMENT OF TRANSPORTATION, STATE HIGHWAY ADMINISTRATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, SECTION 919.12.?

CARE OF WATER DURING CONSTRUCTION

ALL WORK ON THE PERMANENT STRUCTURES SHALL BE CARRIED OUT IN AREAS FREE FROM WATER. THE CONTRACTOR SHALL CONSTRUCT AND MAINTAIN ALL TEMPORARY DIKES, LEVEES, COFFERDAMS, DRAINAGE CHANNELS, AND STREAM DIVERSIONS NECESSARY TO PROTECT THE AREAS TO BE OCCUPIED BY THE PERMANENT WORKS. THE CONTRACTOR SHALL ALSO FURNISH, INSTALL, OPERATE AND MAINTAIN ALL NECESSARY PUMPING AND OTHER EQUIPMENT REQUIRED FOR REMOVAL OF WATER FROM THE VARIOUS PARTS OF THE WORK AND FOR MAINTAINING THE EXCAVATIONS, FOUNDATION AND OTHER PARTS OF THE WORK FREE FROM WATER AS REQUIRED OR DIRECTED BY THE ENGINEER FOR CONSTRUCTING EACH PART OF THE WORK. AFTER HAVING SERVED THEIR PURPOSE, ALL TEMPORARY PROTECTIVE WORKS SHALL BE REMOVED OR LEVELED AND GRADED TO THE EXTENT REQUIRED TO PREVENT OBSTRUCTION IN ANY DEGREE WHATSOEVER OF THE FLOW OF WATER TO THE SPILLWAY OR OUTLET WORKS AND SO AS NOT TO INTERFERE IN ANY WAY WITH THE OPERATION OR MAINTENANCE OF THE STRUCTURE. STREAM DIVERSIONS SHALL BE MAINTAINED UNTIL THE FULL FLOW CAN BE PASSED THROUGH THE PERMANENT WORKS. THE REMOVAL OF WATER FROM THE REQUIRED EXCAVATION AND THE FOUNDATION SHALL BE ACCOMPLISHED IN A MANNER AND TO THE EXTENT THAT WILL MAINTAIN STABILITY OF THE EXCAVATED SLOPES AND BOTTOM OF THE REQUIRED EXCAVATIONS AND WILL ALLOW SATISFACTORY PERFORMANCE OF ALL AND CONSTRUCTION OPERATIONS. DURING THE PLACING AND COMPACTING OF MATERIAL IN REQUIRED EXCAVATIONS, THE WATER LEVEL AT THE LOCATIONS BEING REFILLED SHALL BE MAINTAINED BELOW THE BOTTOM OF THE EXCAVATION AT SUCH LOCATIONS WHICH MAY REQUIRE DRAINING THE WATER TO SUMPS FROM WHICH THE WATER SHALL BE PUMPED.

STABILIZATION

ALL BORROW AREAS SHALL BE GRADED TO PROVIDE PROPER DRAINAGE AND LEFT IN A SLIGHTLY CONDITION. ALL EXPOSED SURFACES OF THE EMBANKMENT, SPILLWAY, SPOIL AND BORROW AREAS, AND BERMS SHALL BE STABILIZED BY SEEDING, LIMING, FERTILIZING AND MULCHING IN ACCORDANCE WITH THE MARYLAND SOIL CONSERVATION SERVICE STANDARDS AND SPECIFICATIONS FOR CRITICAL AREA PLANTING (MD-342) OR AS SHOWN ON THE ACCOMPANYING DRAWINGS.

EROSION AND SEDIMENT CONTROL

CONSTRUCTION OPERATIONS WILL BE CARRIED OUT IN SUCH A MANNER THAT EROSION WILL BE CONTROLLED AND WATER AND AIR POLLUTION MINIMIZED. STATE AND LOCAL LAWS CONCERNING POLLUTION ABATEMENT WILL BE FOLLOWED. CONSTRUCTION PLANS SHALL DETAIL EROSION AND SEDIMENT CONTROL MEASURES TO BE EMPLOYED DURING THE CONSTRUCTION PROCESS.

DEVELOPERS CERTIFICATE

I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE NATURAL RESOURCE CONSERVATION SERVICE.

SIGNATURE OF DEVELOPER — 7/15/96 DATE

Louis Ma[illegible]
PRINTED NAME OF DEVELOPER

ENGINEER'S CERTIFICATE

I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWEDGE OF THE SITE CONDTIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE NATURAL RESOURCE CONSERVATION SERVICE.

SIGNATURE OF ENGINEER — 7/19/96 DATE

John Mil[illegible]
PRINTED NAME OF ENGINEER

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

USDA - NATURAL RESOURCE CONSERVATION SERVICE — 8/4/96 DATE

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

HOWARD SOIL CONSERVATION DISTRICT — 8/4/96 DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION — 8/12/96 DATE

CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH JA — 8/13/96 DATE

DIRECTOR — 8/13/96 DATE

APPROVED
PLANNING BOARD
of HOWARD COUNTY

DATE 12 July 1996

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

HOWARD COUNTY HEALTH OFFICER — 8-1-96 DATE

OPERATION AND MAINTENANCE SCHEDULE FOR STORMCEPTOR WATER QUALITY DEVICE

1. STORMCEPTOR WATER QUALITY STRUCTURES WILL REQUIRE PERIODIC INSPECTION AND CLEANING TO MAINTAIN OPERATION AND FUNCTION. OWNERS WILL HAVE THE STORMCEPTOR UNIT INSPECTED YEARLY OR AS REQUIRED BY HOWARD COUNTY, UTILIZING THE STORMCEPTOR INSPECTION/MONITORING FORM. INSPECTIONS CAN BE DONE BY USING A CLEAR PLEXIGLAS TUBE ("SLUDGE JUDGE") TO EXTRACT A WATER COLUMN SAMPLE. WHEN SEDIMENT DEPTHS EXCEED THE SPECIFIED LEVEL (TABLE 6 OF TECHNICAL MANUAL) THEN CLEANING OF THE UNIT IS REQUIRED.
2. STORMCEPTOR WATER QUALITY STRUCTURES MUST BE CHECKED AND CLEANED IMMEDIATELY AFTER PETROLEUM SPILLS, CONTACT APPROPRIATE REGULATORY AGENCIES.
3. MAINTENANCE OF STORMCEPTOR UNITS SHOULD BE DONE BY A VACUUM TRUCK WHICH WILL REMOVE THE WATER, SEDIMENT, DEBRIS, FLOATING HYDROCARBONS AND OTHER MATERIALS IN UNIT. THE PROPER CLEANING AND DISPOSAL OF THE REMOVED MATERIALS AND LIQUID MUST BE FOLLOWED.
4. INLET AND OUTLET PIPES MUST BE CHECKED FOR ANY OBSTRUCTIONS AND IF ANY OBSTRUCTIONS AREA FOUND THEY MUST BE REMOVED. STRUCTURAL PARTS OF THE STORMCEPTOR WILL BE REPAIRED AS NEEDED.
5. OWNER SHALL RETAIN AND MAKE STORMCEPTOR INSPECTION/MONITORING FORMS AVAILABLE TO HOWARD COUNTY OFFICIALS UPON THEIR REQUEST.

OWNER
MANGIONE ENTERPRISES OF TURF VALLEY
1205 YORK ROAD - PENTHOUSE
LUTHERVILLE, MARYLAND 21093
(301) 825-8400

028-SWM

project	date
96028	JULY 96
illustration	engineering
MMP	MMP
scale	approval
AS SHOWN	JBM

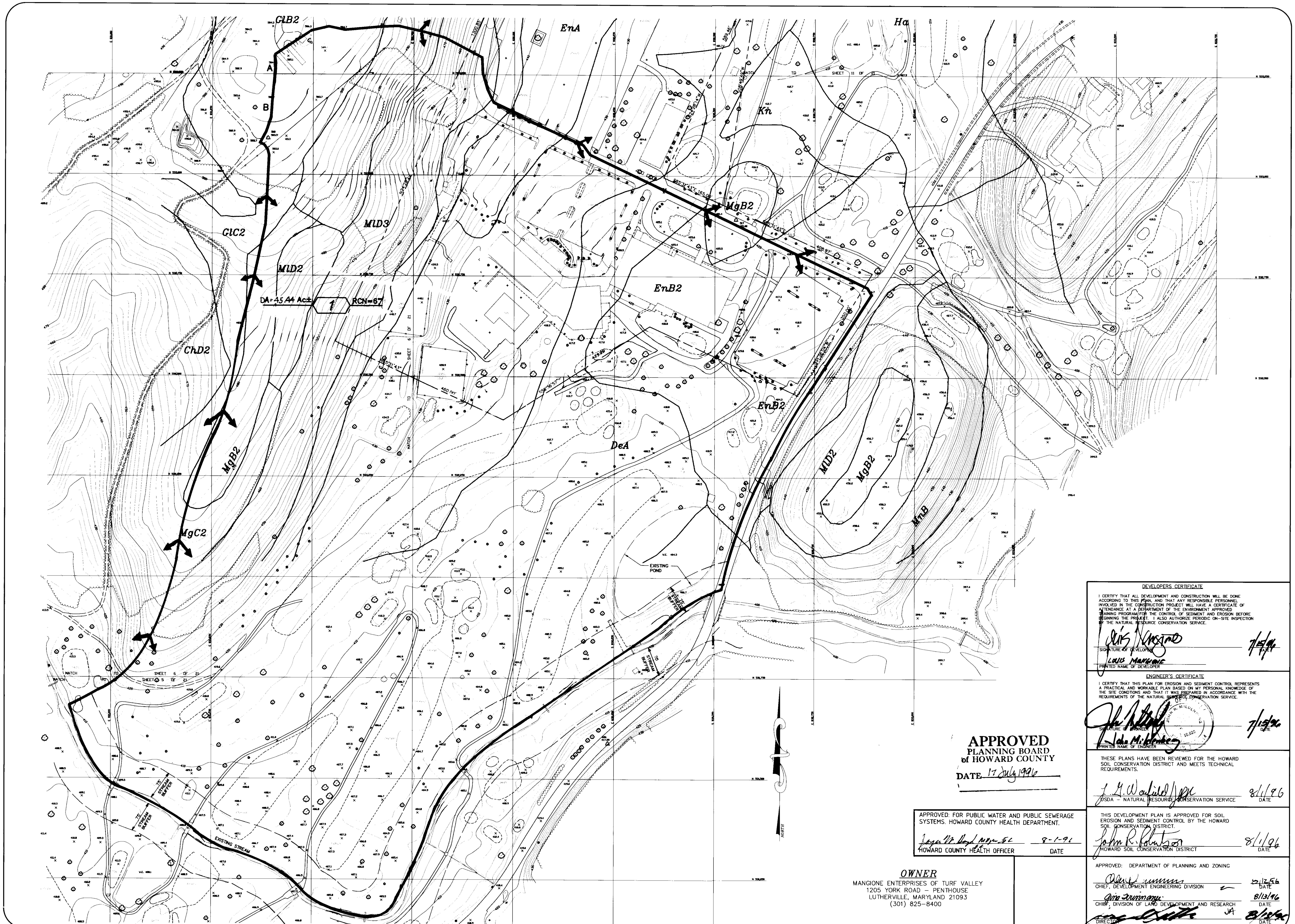
no.	description	date
1	DELETE SWMF & REVISE E-1 TO I-3	5/27/97

revisions

TAX MAP 16, PARCEL, #394
TURF VALLEY HOTEL ADDITION
THIRD ELECTION DISTRICT — HOWARD COUNTY, MARYLAND
STORMWATER MANAGEMENT DETAILS AND SPECIFICATIONS

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

SDP-96-144



APPROVED
PLANNING BOARD
of HOWARD COUNTY

DATE 17 July 1996

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

8-1-96
HOWARD COUNTY HEALTH OFFICER — DATE

OWNER
MANGIONE ENTERPRISES OF TURF VALLEY
1205 YORK ROAD – PENTHOUSE
LUTHERVILLE, MARYLAND 21093
(301) 825-8400

DEVELOPERS CERTIFICATE

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SIGNATURE OF DEVELOPER — 7/15/96 DATE
LOUIS MANGIONE
PRINTED NAME OF DEVELOPER

ENGINEER'S CERTIFICATE

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SIGNATURE OF ENGINEER — 7/15/96 DATE
John Mildenberg
PRINTED NAME OF ENGINEER

JOHN B. MILDENBERG 10,020

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

USDA – NATURAL RESOURCE CONSERVATION SERVICE — 8/1/96 DATE

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

John R. Robertson
HOWARD SOIL CONSERVATION DISTRICT — 8/1/96 DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION — 8/12/96 DATE
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH — 8/13/96 DATE
DIRECTOR — JA 8/13/96 DATE

TAX MAP 16, PARCEL #394
TURF VALLEY HOTEL ADDITION
THIRD ELECTION DISTRICT — HOWARD COUNTY
EXISTING CONDITION DRAINAGE AREA MAP

no.	description	date
1	REVISE DRAINAGE AREA	5/27/97

revisions

project	date
96028	JULY 96
illustration	engineering
MMP	MMP
scale	approval
1"=100'	JBM

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
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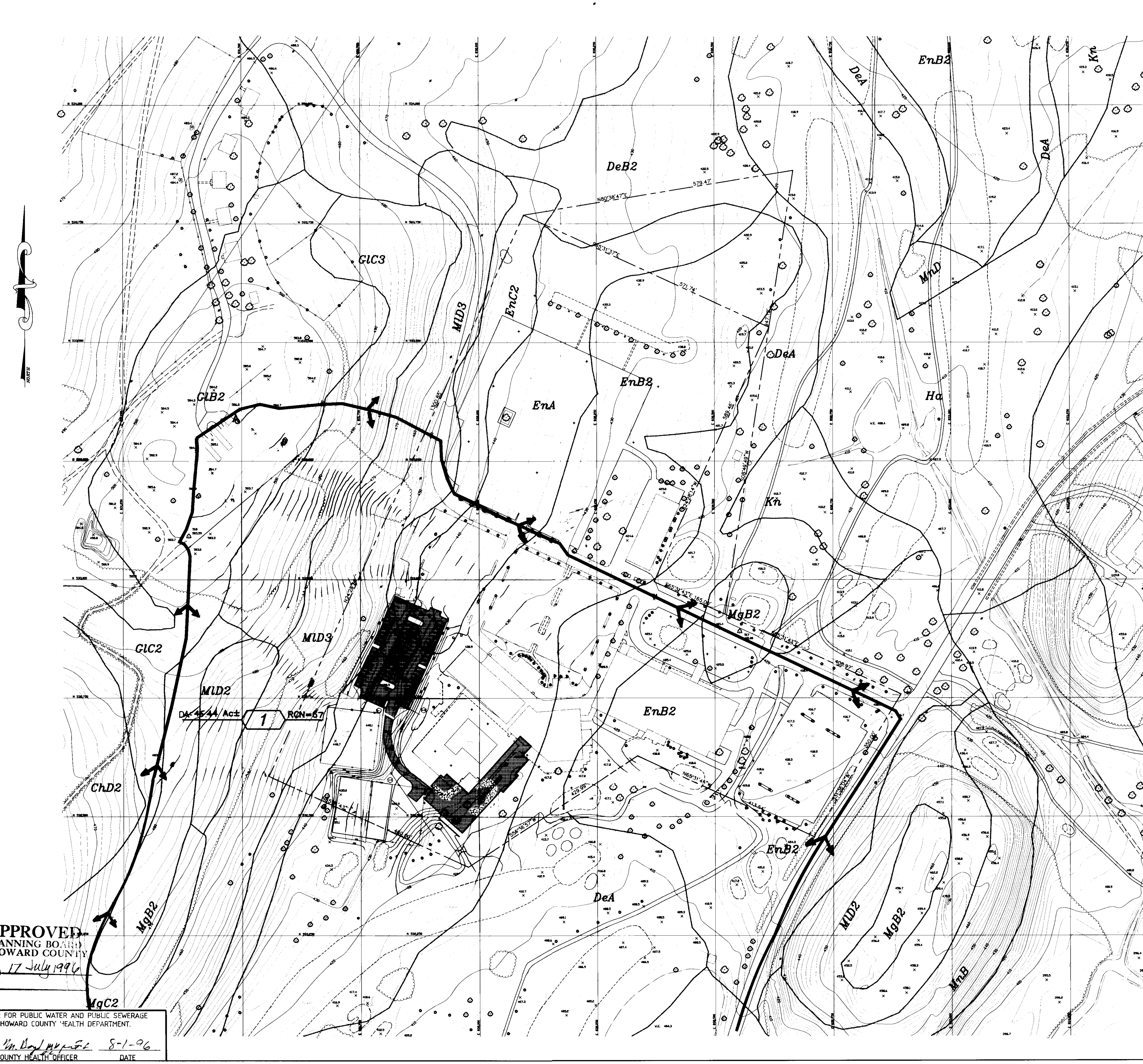
SDP-96-144

EX-D-MAP



OWNER

MANGIONE ENTERPRISES OF TURF VALLEY
1205 YORK ROAD – PENTHOUSE
LUTHERVILLE, MARYLAND 21093
(301) 825-8400

DEVELOPERS CERTIFICATE

I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE NATURAL RESOURCE CONSERVATION SERVICE.

SIGNATURE OF DEVELOPER — DATE 7/15/96

PRINTED NAME OF DEVELOPER

ENGINEER'S CERTIFICATE

I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWEDGE OF THE SITE CONDTIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE NATURAL RESOURCE CONSERVATION SERVICE.

SIGNATURE OF ENGINEER — DATE 7/15/96

John Mildenberg

PRINTED NAME OF ENGINEER

JOHN B. MILDENBERG 10,020

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

USDA – NATURAL RESOURCE CONSERVATION SERVICE — DATE 8/1/96

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

HOWARD SOIL CONSERVATION DISTRICT — DATE 8/1/96

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 8/12/96

CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH — DATE 8/13/96

JA

DIRECTOR — DATE

PR-D-MAP

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 17 July 1996

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

HOWARD COUNTY HEALTH OFFICER — DATE 8-1-96

project	date
96028	JULY 96
illustration	engineering
MMP	MMP
scale	approval
1"–100'	JBM

no.	description	date
1	REVISE DRAINAGE AREA	5/27/97

revisions

TAX MAP 16, PARCEL #394

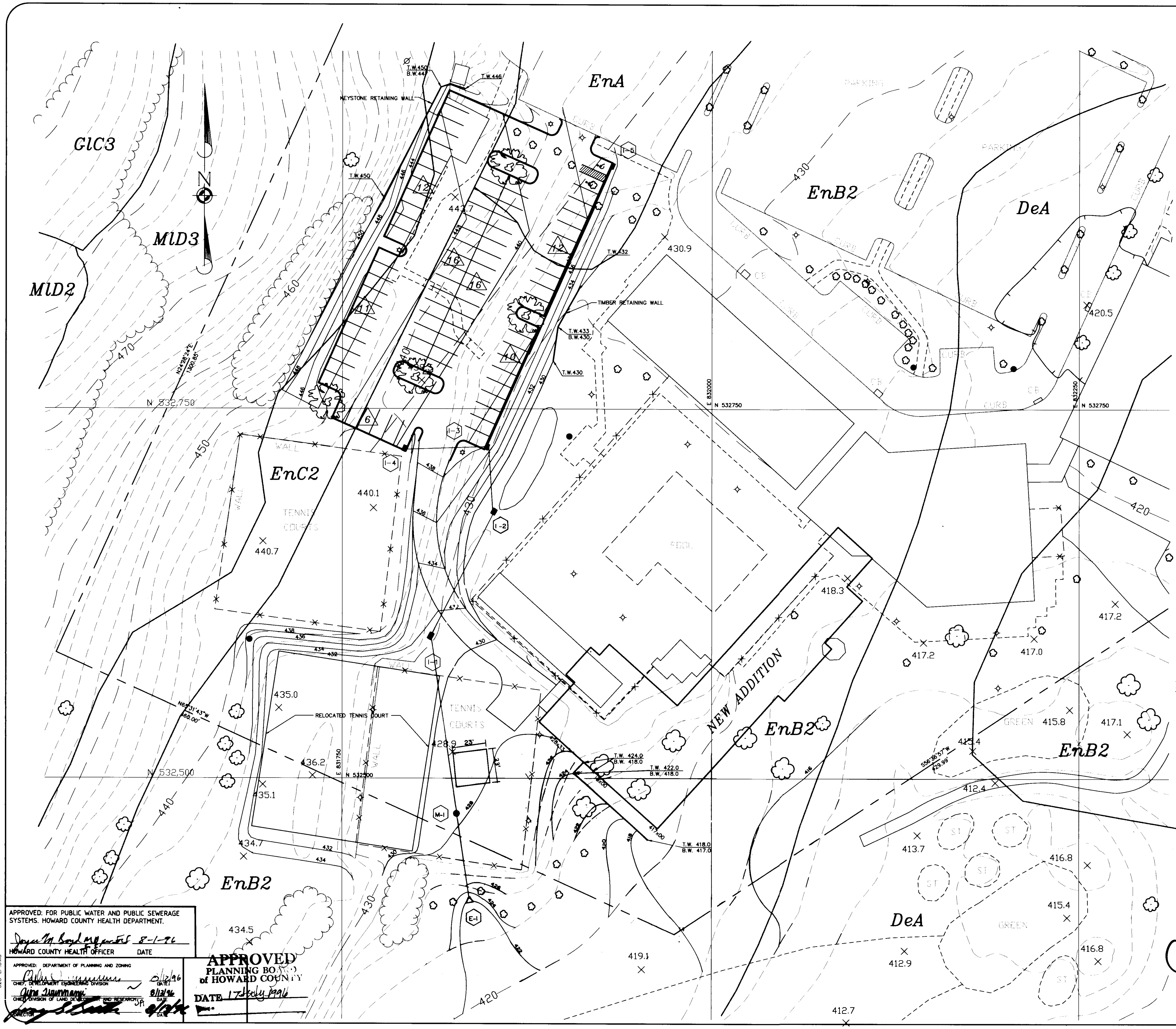
TURF VALLEY HOTEL ADDITION

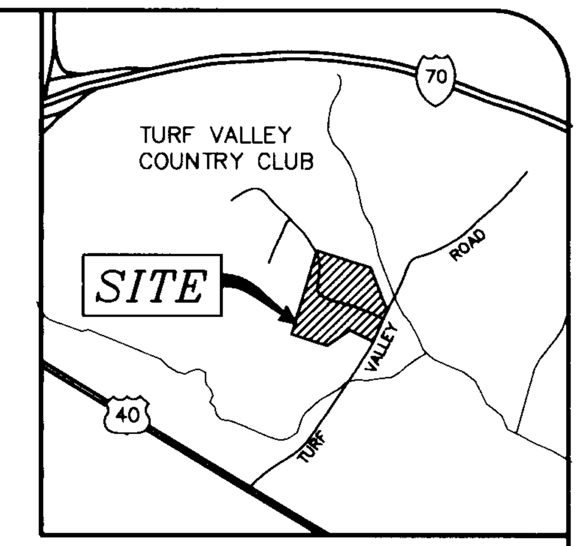
THIRD ELECTION DISTRICT — HOWARD COUNTY

DEVELOPED CONDITION DRAINAGE AREA MAP

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

SDP-96-144





VICINITY MAP

SCALE: 1"=200'

NOTE:
- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.

SCHEDULE B: PARKING LOT INTERNAL LANDSCAPING

NUMBER OF PARKING SPACES	83
NUMBER OF TREES REQUIRED SHADE TREES	4 SHADE TREES
NUMBER OF TREES PROVIDED SHADE TREES OTHER TREES (2:1 SUBSTITUTION)	4 SHADE TREES 0 TREES

LANDSCAPE REQUIREMENT PLANTING SCHEDULE

QUANTITY	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE
4		ACER RUBRUM 'RED SUNSET'	RED SUNSET RED MAPLE	2 1/2" - 3" CAL.

TOTAL
4 SHADE TREES

SOILS DESCRIPTION

SYMBOL	DESCRIPTION
DeA	DELANCO SILT LOAM, 0% TO 3% SLOPES -- TYPE C
EnA	ELSINBORO LOAM, 0% TO 3% SLOPES -- TYPE B
EnB2	ELSINBORO LOAM, 3% TO 8% SLOPES, MODERATELY ERODED -- TYPE B
EnC2	ELSINBORO LOAM, 8% TO 15% SLOPES, MODERATELY ERODED -- TYPE B
GlC3	GLENELG LOAM, 8% TO 15% SLOPES, SEVERELY ERODED -- TYPE B
MlD2	MANOR LOAM, 15% TO 25% SLOPES, MODERATELY ERODED -- TYPE B
MlD3	MANOR LOAM, 15% TO 25% SLOPES, SEVERELY ERODED -- TYPE B

NOTE : THIS PLAN IS TO BE USED FOR THE PURPOSE OF A LANDSCAPE PLAN ONLY.

OWNER
MANGIONE ENTERPRISES OF TURF VALLEY
1205 YORK ROAD - PENTHOUSE
LUTHERVILLE, MARYLAND 21093
(301) 825-8400

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

8-1-96
HOWARD COUNTY HEALTH OFFICER DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

8/12/96
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

8/13/96
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH DATE

DIRECTOR DATE

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 17 July 1996

028-LP.DWG

project	date	illustration	engineering	scale	approval
96028	MAY 96	MMP	MMP/SJD	1"=30'	JBM

no.	description	date
1	DELETE SWMF & REVISE E-1 TO I-3	5/27/97

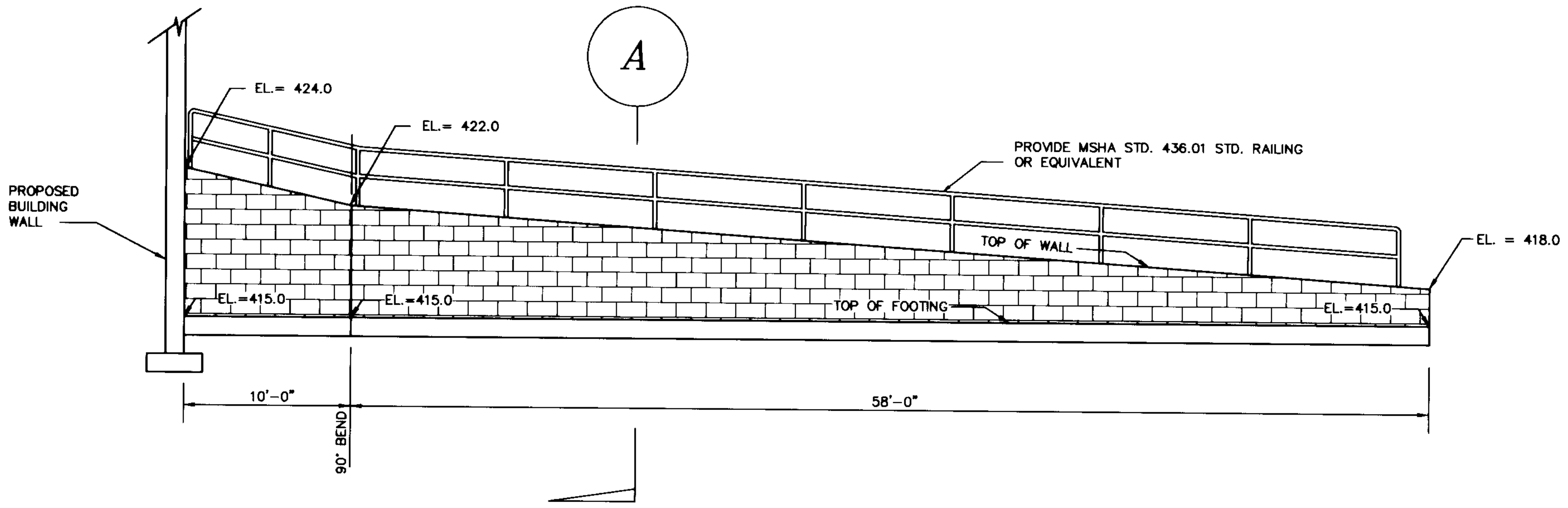
revisions

TAX MAP 16 - PARCEL 1
TURF VALLEY HOTEL ADDITION
THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND

LANDSCAPE PLAN

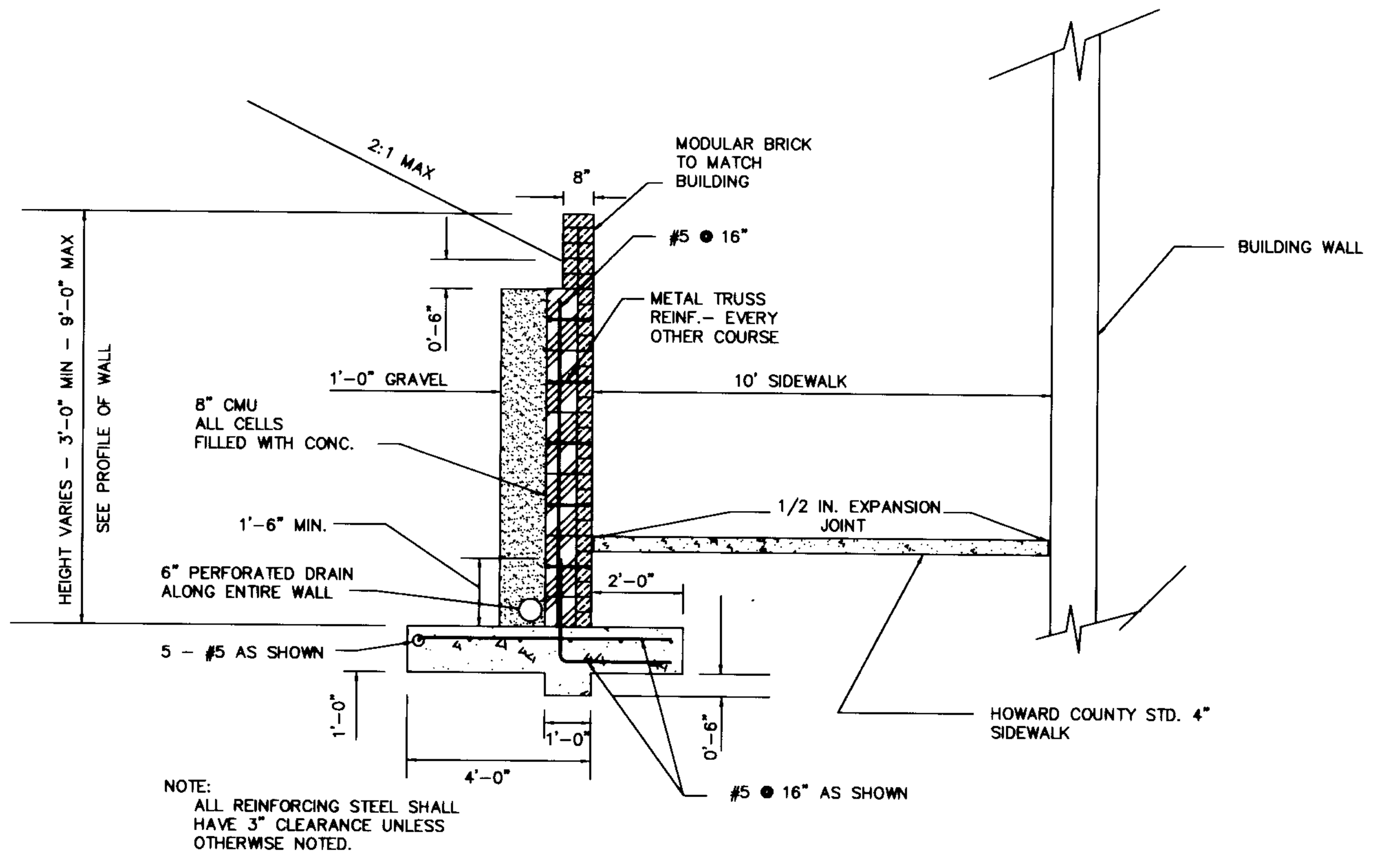
MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
(410) 997-0296 Balt. (301) 621-5521 Wash. (410) 997-0298 Fax.

SDP-96-144



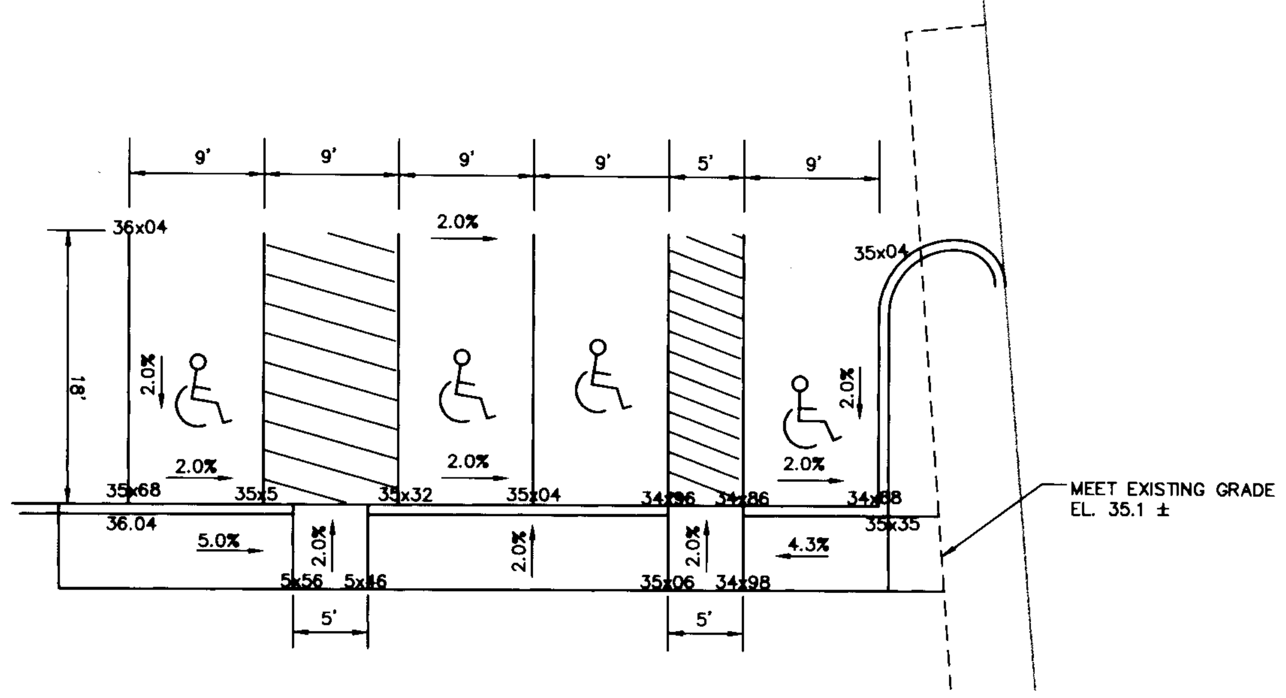
RETAINING WALL ELEVATION

SCALE: 1"=6'



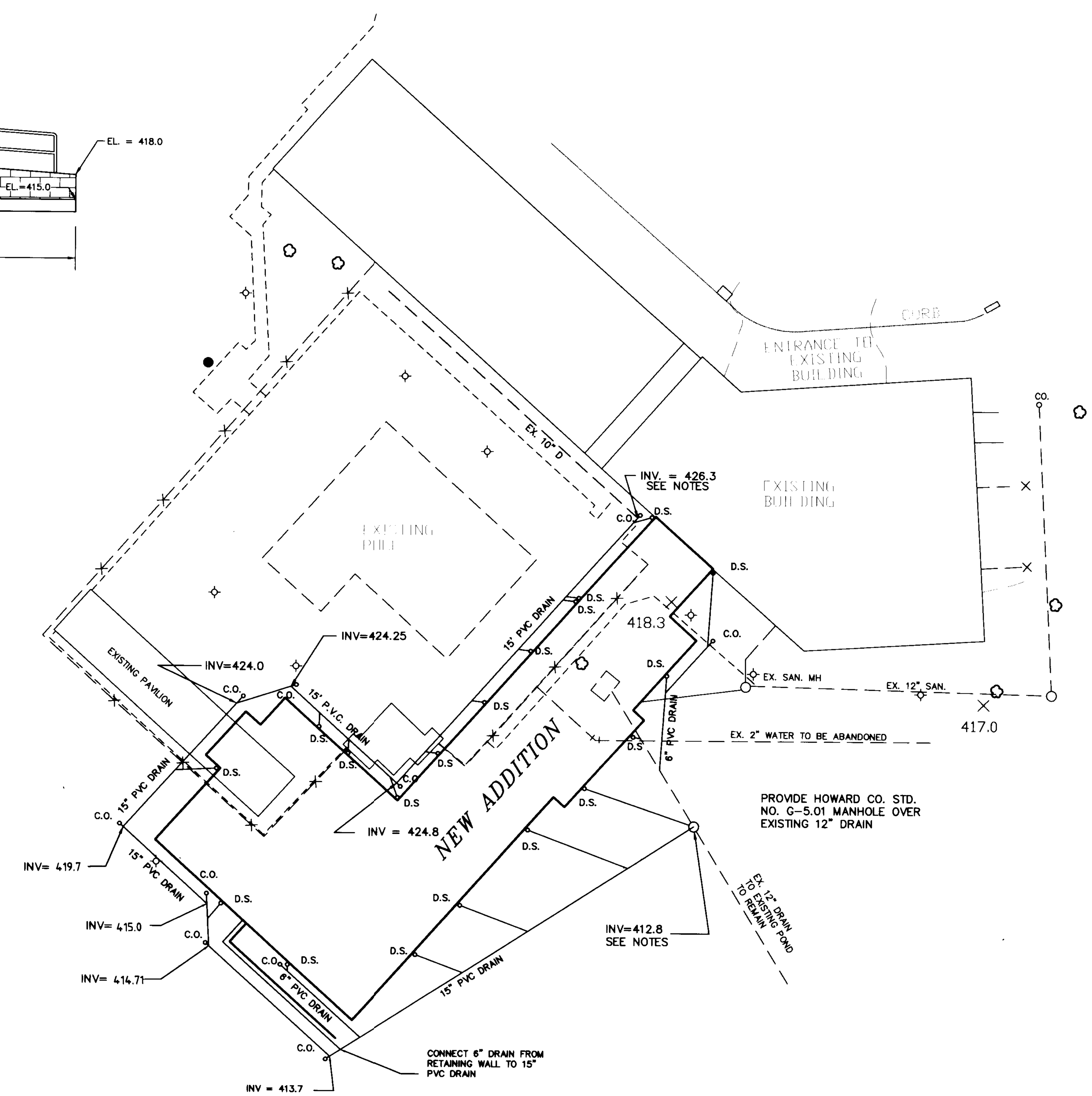
SECTION A

SCALE: 1"=3'



HANDICAPPED RAMP DETAIL

SCALE: 1"=10'



ROOF LEADER PLAN

SCALE: 1"=30'

GENERAL NOTES:

1. CONTRACTOR SHALL VERIFY INVERT ELEVATIONS OF ALL EXISTING STORM DRAINS PRIOR TO COMMENCING WORK.
2. ALL LEADERS FROM DOWNSPOUTS ARE TO BE 4" P.V.C. UNLESS OTHERWISE NOTED.
3. COLLECTOR DRAINS ARE 15" P.V.C. UNLESS OTHERWISE NOTED.
4. ALL P.V.C. PIPES SHALL BE SCHEDULE 40.
5. ALL TEE SECTIONS, BEND FITTINGS, CLEAN OUTS, AND RELATED FITTINGS ARE CONSIDERED INCIDENTAL TO THE WORK INDICATED HEREON.

STANDARD AND SPECIFICATIONS FOR TOPSOIL

Definition

Placement of topsoil over a prepared subsoil prior to establishment of permanent vegetation.

Purpose

To provide a suitable soil medium for vegetative growth. soils of concern have low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or unacceptable soil gradation.

Conditions Where Practice Applies

I. This practice is limited to areas have 2:1 or flatter slopes where:
   a. The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth.
   b. The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish continuing supplies of moisture and plant nutrients.
   c. The original soil to be vegetated contains material toxic to plant growth.
   d. The soil is so acidic that treatment with limestone is not feasible.

II. For the purpose of these Standards and Specifications, areas having slopes steeper than 2:1 require special consideration and design for adequate stabilization. Areas having slopes steeper than 2:1 shall have the appropriate stabilization shown on the plans.

Construction and Material Specifications

I. Topsoil salvaged from the existing site may be used provided that it meets the standards as set forth in these specifications. Typically the depth of topsoil to be salvaged for a given soil type can be found in the representative soil profile section in the Soil Survey published by USDA-SCS in cooperation with Maryland Agricultural Experimental Station.

II. Topsoil Specifications – Soil to be used as topsoil must meet the following:
   i. Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority. Regardless, topsoil shall not be mixture of contrasting textured subsoils and shall contain less than 5% by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger that 1 1/2" in diameter.
   ii. Topsoil must be of plants or plant parts such as bermuda grass, quackgrass, Johnsongrass, nutsedge, poison ivy, thistle, or others as specified.
   iii. Where the subsoil is either highly acidic or composed of heavy clays, ground limestone shall be spread at the rate of 4-8 tons/acre (200-400 pounds per 1,000 square feet) prior to the placement or topsoil. limestone shall be distributed uniformly over designated areas and worked into the soil in conjunction with tillage operations as described in the following procedures.

II. For sites having disturbed areas under 5 acres:
   i. Place topsoil (if required) and add soil amendments as specified in 20.0 Vegetative Stabilization – Section I – Vegetative Stabilization Methods and Materials

III. For sites having disturbed areas over 5 acres:
   i. On soil meeting Topsoil specifications, obtain test results dictating fertilizer and lime amendments required to bring the soil into compliance with the following:
      a. pH for topsoil shall be between 6.0 and 7.5. If the tested soil demonstrates a pH of less than 6.0, sufficient lime shall be prescribed to raise the pH to 6.5 or higher.
      b. Organic content of soil shall be not less than 1.5% by weight.
      c. Topsoil having soluble salt content greater than 500 parts per million shall not be used.
      d. No sod or seed shall be placed on soil which has been treated with soil sterilants or chemicals used for weed control until sufficient time has elapsed (14 days min.) to permit dissipation of phyto-toxic materials.

   Note: Topsoil substitutes or amendments, as recommended by a qualified agronomist or soil scientist and approved by the appropriate approval authority may be used in lieu of natural topsoil.

   ii. Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization – Section I – Vegetative Stabilization Methods and Materials.

V. Topsoil Application
   i. When topsoiling, maintain needed erosion and sediment control practices such as diversions, grade stabilization structures, earth dikes, slope silt fence and sediment traps and basins.
   ii. Grades on the areas to be topsoiled, which have been previously established, shall be maintained, albeit 4" – 8" in elevation.
   iii. Topsoil shall be uniformly distributed in a 4" – 8" layer and lightly compacted to a minimum thickness of 4". Spreading shall be performed in such a manner that sodding or seeding can proceed with a minimum of soil preparation and tillage. Any irregularities in the surface resulting from topsoiling or other operations shall be corrected in order to prevent the formation of depressions or water pockets.
   iv. Topsoil shall not be placed while the topsoil or subsoil is in a frozen or muddy condition, when the subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading and seeded preparation.

VI. Alternative for Permanent Seeding – Instead of applying the full amounts or lime and commercial fertilizer, comported sludge and amendments may be applied as specified below:
   i. Comported Sludge Material for use as a soil conditioner for sites having disturbed areas over 5 acres shall be tested to prescribe amendments and for sites having disturbed areas under 5 acres shall conform to the following requirements:
      a. Comported sludge shall be supplied by, or originate from, a person or persons that are permitted (at the time of acquisition of the compost) by the Maryland Department of the Environment under COMAR 26.04.06.
      b. Comported sludge shall contain at least 1 percent nitrogen, 1.5 percent phosphorous, and 0.2 percent potassium and have a pH of 7.0 to 8.0. If compost does not net these requirements, the appropriate constituents must be added to meet the requirements prior to use.
      c. Composted sludge shall be applied at a rate of 1 ton/1,000 square feet
   ii. Comported sludge shall be amended with a potassium fertilizer applied at the rate of 4lb/1,000 square feet, and 1/3 the normal lime application rate.

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

8-1-96

HOWARD COUNTY HEALTH OFFICER   DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION   8/12/96 DATE

CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH   8/13/96 DATE

DIRECTOR   DATE

APPROVED
PLANNING BOARD of HOWARD COUNTY
DATE 17 July 1996

028-ROOF

OWNER
MANGIONE ENTERPRISES OF TURF VALLEY
1205 YORK ROAD – PENTHOUSE
LUTHERVILLE, MARYLAND 21093
(301) 825-8400

project	date
96028	JULY 96
illustration	engineering
JBM	MMP
scale	approval
AS SHOWN	JBM

no.	description	date
1	CHANGE INVERT ELEVATIONS ON ROOF DRAIN	10/10/96
	revisions	

TAX MAP 16, PARCEL #394
TURF VALLEY HOTEL ADDITION
THIRD ELECTION DISTRICT   HOWARD COUNTY
MISCELLANEOUS DETAILS

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
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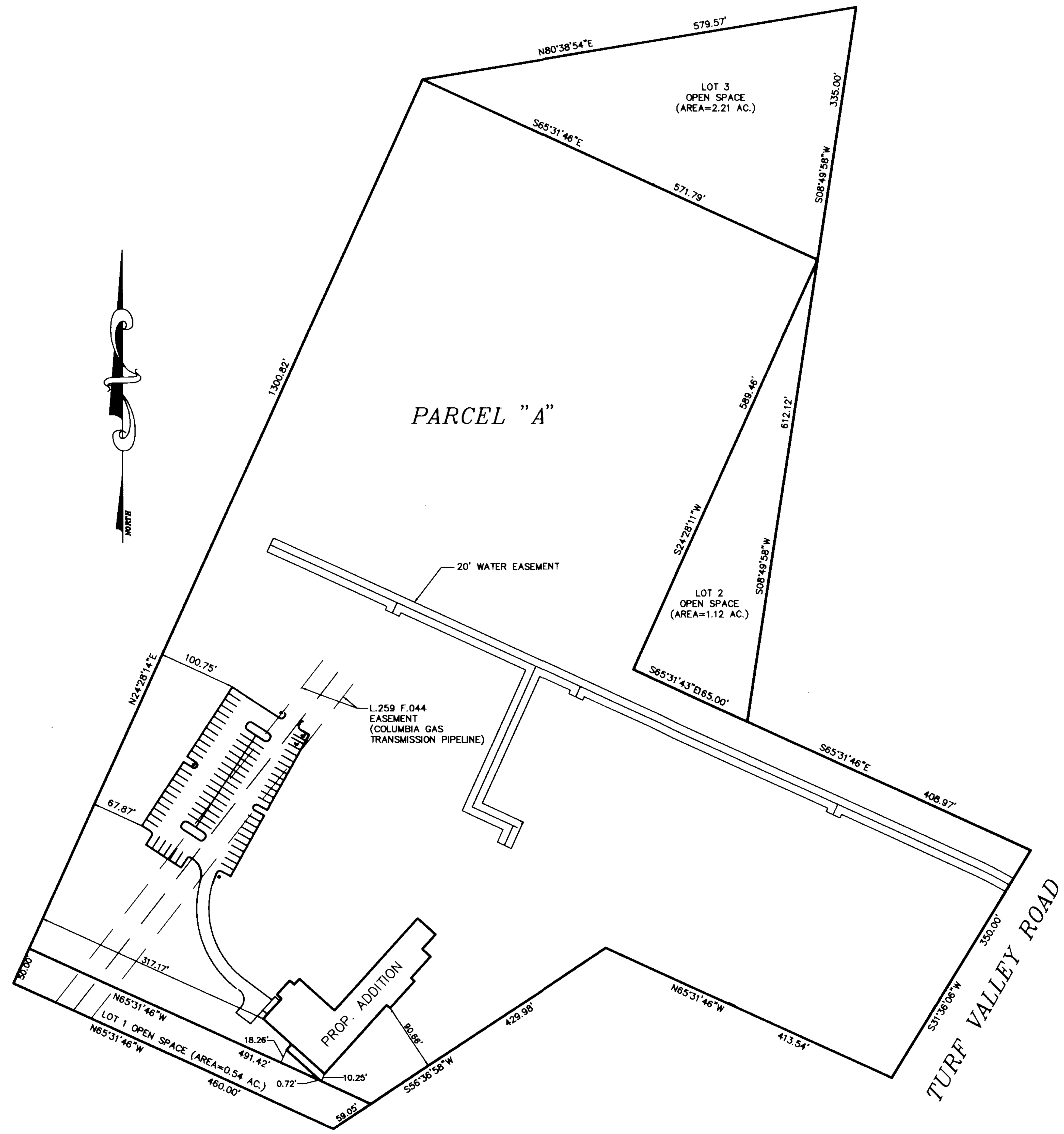
SDP-96-144



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

8-1-96

HOWARD COUNTY HEALTH OFFICER — DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 8/12/96

Gina Hammaji

CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH — DATE 8/13/96

DIRECTOR — DATE

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 17 July 1996

TAX MAP 16, PARCEL #394

TURF VALLEY HOTEL ADDITION

THIRD ELECTION DISTRICT — HOWARD COUNTY

PROJECT OUTLINE

project	date
96028	JULY 96
illustration	engineering
MMP	MMP
scale	approval
1"=100'	JBM

no.	description	date
	revisions	

MILDENBERG, BOENDER & ASSOC., INC.
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