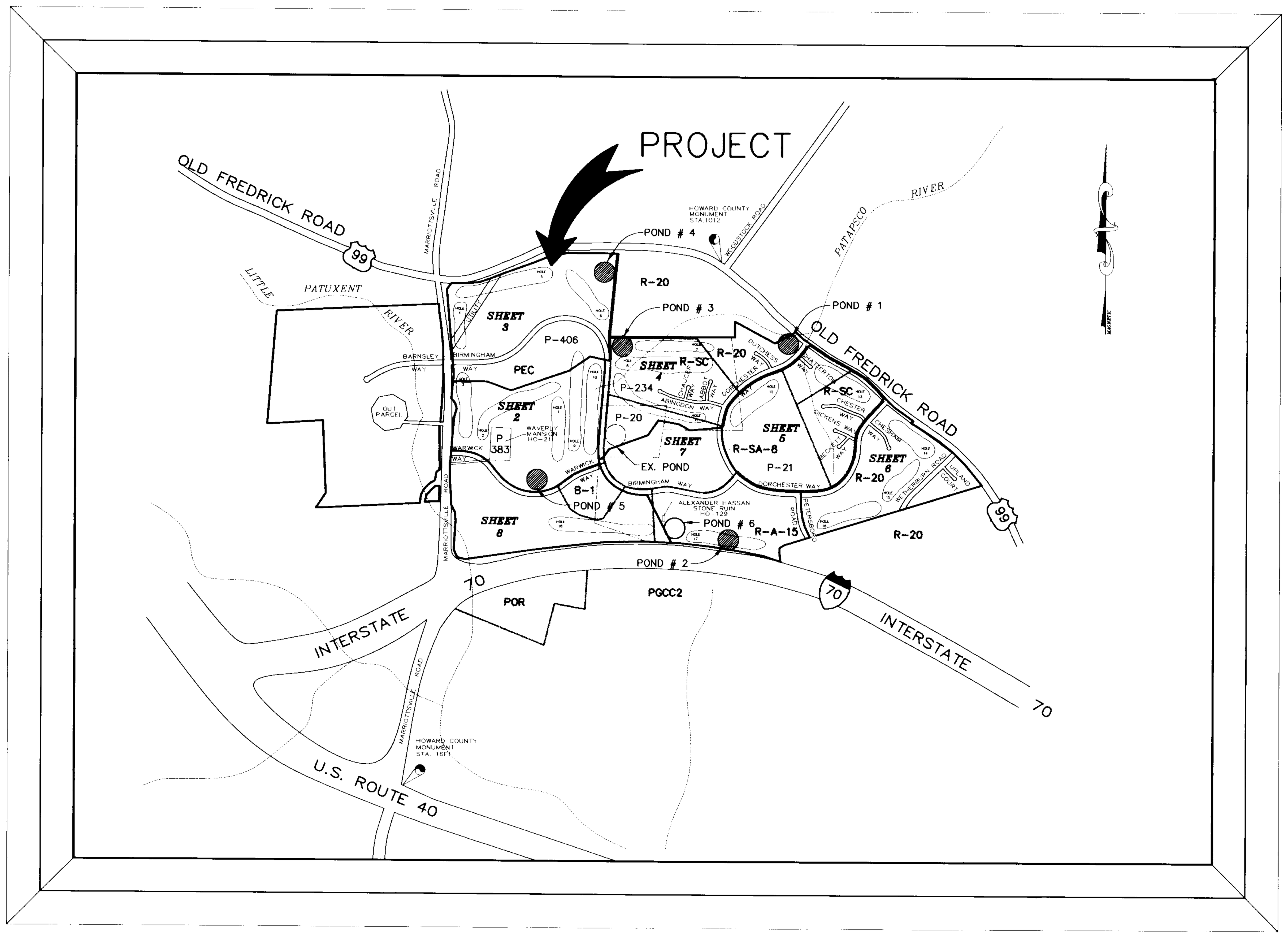
WAVERLY GOLF COURSE
THIRD ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

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, PARCELS 20, 21, 234, AND 406, ELECTION DISTRICT 3.
   ZONING: R-20; RSC; R-SA-8; R-A-15; AND PEC.
   AREA: 682 AC. +/-
   DPZ FILES: S-94-007, P-95-007, WP-95-023, ZB 929-M F-95-173, F-95-174, P-96-16, BA-96-21V
5. TOPOGRAPHY BASED ON 2' CONTOUR AERIAL SURVEY BY PHOTO SCIENCE FLOWN ON FEBRUARY 12, 1989.
6. HORIZONTAL AND VERTICAL DATUM SHOWN ARE BASED ON THE FOLLOWING NAD'83 HOWARD COUNTY CONTROL STATIONS :

HOWARD COUNTY MONUMENT 1012	N 601060.177 E 1345336.7580	EL. 445.577
HOWARD COUNTY MONUMENT 16E1	N 593250.9322 E 1340192.7100	EL. 509.924

7. FLOODPLAIN DELINEATION IS BASED ON FLOODPLAIN STUDY BY MILDENBERG ASSOCIATES INCORPORATED APPROVED MARCH 3, 1995.
8. STORMWATER MANAGEMENT WILL BE PROVIDED BY THE METHODS OF RETENTION AND EXTENDED DETENTION IN CONJUNCTION WITH THE OVERALL SWM SYSTEMS OF THE WAVERLY DEVELOPMENT UNDER F-95-173 AND F-95-174.
9. WETLAND DELINEATION IS BASED ON STUDY APPROVED NOVEMBER 30, 1993.
10. THE TRAFFIC STUDY PREPARED BY THE TRAFFIC GROUP WAS APPROVED ON NOVEMBER 30, 1993.
11. THIS PLAN IS PREPARED FOR THE PURPOSE OF GRADING THE GOLF COURSE, THE CONSTRUCTION OF THE PATHWAY SYSTEM AND PONDS 3, 4, AND 5. NO ROADS OR STRUCTURES CONSTRUCTION IS PROPOSED.
12. ALL STREAM CROSSING BRIDGES WILL BE CONSTRUCTED ABOVE THE HIGHWATER ELEVATION OF THE STREAM. STRUCTURE SPECIFICATIONS AND DETAILS WILL BE PROVIDED BY THE MANUFACTURER PRIOR TO CONSTRUCTION.
13. A REQUEST TO USE 1"=100 SCALE DRAWINGS WAS APPROVED ON OCTOBER 31, 1994.
14. A WAIVER TO SECTIONS 5.2.6.E AND F OF THE DESIGN MANUAL VOLUME 1 WAS APPROVED OCTOBER 19, 1995.
15. ALL PONDS ARE PRIVATELY OWNED AND MAINTAINED.
16. STORMWATER MANAGEMENT PONDS MAINTENANCE REQUIREMENTS:
    a. SILT SHALL BE REMOVED WHEN ACCUMULATION EXCEEDS SIX (6) INCHES IN BASINS WITHOUT FOREBAYS. IN BASINS WITH FOREBAYS, SILT SHALL BE REMOVED WHEN THE ACCUMULATION EXCEEDS FOUR (4) INCHES IN THE FOREBAY.
    b. ACCUMULATED PAPER, TRASH AND DEBRIS SHALL BE REMOVED AS NECESSARY.
    c. VEGETATION GROWING ON THE EMBANKMENT TOP AND FACES IS NOT ALLOWED TO EXCEED 18 INCHES IN HEIGHT AT ANY TIME.
    d. STRUCTURES SHALL BE INSPECTED ANNUALLY AND REPAIRED AS NEEDED.
    e. CORRECTIVE MAINTENANCE IS REQUIRED ANY TIME AN EXTENDED DETENTION BASIN DOES NOT DRAIN THE EQUIVALENT OF THE WATER QUALITY VOLUME WITHIN 60 HOURS.
    f. CORRECTIVE MAINTENANCE IS REQUIRED ANY TIME THE FOREBAY DOES NOT DRAIN DOWN COMPLETELY WITHIN 60 HOURS.
    g. HOWARD SOILS CONSERVATION DISTRICT STANDARD OPERATION, MAINTENANCE, AND INSPECTION:
       INSPECTION OF THE POND(S) SHOWN HEREON SHALL BE PERFORMED AT LEAST ANNUALLY, IN ACCORDANCE WITH THE CHECKLIST AND REQUIREMENTS CONTAINED WITH USDA, SCS "STANDARDS AND SPECIFICATIONS FOR PONDS" (MD-378). THE POND OWNER(S) AND ANY HEIRS, SUCCESSORS, OR ASSIGNS SHALL BE RESPONSIBLE FOR THE SAFETY OF THE POND AND THE CONTINUED OPERATION, SURVEILLANCE, INSPECTION, AND MAINTENANCE THEREOF. THE POND OWNER(S) SHALL PROMPTLY NOTIFY THE SOIL CONSERVATION DISTRICT OF ANY UNUSUAL OBSERVATIONS THAT MAY BE INDICATIONS OF DISTRESS SUCH AS EXCESSIVE SEEPAGE, TURBID SEEPAGE, SLIDING OR PLUMPING.
17. WETLANDS BEARING AND DISTANCES ESTABLISHED BY FISHER, COLLINS & CARTER, INC.
18. GOLF COURSE EASEMENTS AND PARCELS ARE BASED ON PLAT TITLED "PLAT SHOWING GOLF COURSE EASEMENTS AND LEASE PARCELS OF WAVERLY WOODS GOLF CLUB, L.L.C." BY FISHER COLLINS, & CARTER, INC. DATED AUGUST 3, 1995 AND RECORDED AS FOLLOWS: GOLF COURSE EASEMENT L. 3464 F. 574: GOLF COURSE PARCELS L. 3464 F. 493.
19. APPLICATION WAS MADE TO THE BOARD OF APPEALS FOR SETBACK VARIANCE. CASE # BA-96-21V.
20. PROPOSED DEVELOPMENTS WITHIN THE PROPERTY ARE CONCEPTUAL AND ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY. THEY ARE BASED ON S-94-07.
21. LANDSCAPING GENERAL NOTES:
    a. LANDSCAPE PLAN PROVIDED BY ARTHUR HILLS AND ASSOCIATES.
    b. EXISTING TREE BUFFERS TO REMAIN WHERE THE GOLF COURSE ABUTS EXTERIOR ROADS (MINIMUM 35' WIDTH IF TREE BUFFER).
    c. NO LANDSCAPING FOR GOLF COURSE IS REQUIRED WITHIN THE DEVELOPMENT. THE RESIDENTIAL/PEC.COMMERCIAL DEVELOPER IS TO PLANT STREET TREES ALONG INTERIOR ROADS.
    d. A LANDSCAPING PLAN FOR THE GOLF COURSE CLUB HOUSE AND MAINTENANCE FACILITY WILL BE SUBMITTED AS PART OF A SEPARATE SDP FOR THOSE FACILITIES.
    f. BEARMS ARE TO BE UTILIZED AT AREAS REQUIRING LANDSCAPING. (SEE SCHEDULE "A" ON SHEET 13 OF 18).
    g. NONE OF THE PROPOSED PONDS IS ADJACENT TO RESIDENTIAL LOTS. NO BUFFERS ARE REQUIRED.
    h. PERIMETER LANDSCAPING FOR RESIDENTIAL SECTIONS OF THIS DEVELOPMENT WILL BE PROVIDED AT THE FINAL PLAN STAGE OF THAT SECTION. NO PERIMETER LANDSCAPING IS REQUIRED NEXT TO OTHER SECTIONS. NO STRUCTURES, PARKING LOTS, OR ROADS ARE PROPOSED UNDER THIS SITE DEVELOPMENT PLAN.
    i. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.
    j. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING HAS BEEN POSTED AS PART OF THE DPW DEVELOPERS AGREEMENT IN THE AMOUNT OF $11,600.00.
22. THIS PROJECT IS SUBJECT TO WAIVER PETITION WP-95-23 FROM THE FOLLOWING SECTIONS:
    SECTION 16.116(a)(1) AND (2) WHICH RESTRICTS GRADING AND REMOVAL OF VEGETATIVE COVER FROM WETLAND AND STREAM BUFFERS. (APPROVED JAN.23, 1995.)
    SECTION 16.116(b) WHICH RESTRICTS GRADING OF STEEP SLOPES OF 25% OR GREATER. (APPROVED JAN.23, 1995.)
    SECTION 16.115(a) WHICH RESTRICTS DEVELOPMENT WITHIN 100 YEAR FLOODPLAIN. (APPROVED JAN. 23, 1995.)
    SECTION 16.1204(a) WHICH PERTAINS TO THE REQUIREMENT OF SUBMITTING A FOREST CONSERVATION PLANS WITH THE SDP.(APPROVED MAY 8, 1996)
23. THE DESIGN AND WORK INDICATED ON THIS PLAN IS SUBJECT TO THE BA CASE REQUIRED FOR THE GOLF COURSE FEATURES LOCATED WITHIN CERTAIN USE SETBACK AREAS. REVISIONS/CHANGES TO THIS PLAN MAY BE REQUIRED BASED UPON THE FINAL DECISION AND ANY CONDITIONS OF APPROVAL FOR THE BA CASE.
24. MDE PERMIT NUMBERS: CENAB-OP-RP-1-00921-3 AND CENAB-OP-RP-91-00921-5.
25. VEHICULAR INGRESS AND EGRESS RESTRICTED ON ALL ADJOINING ROADS EXCEPT AS APPROVED BY HOWARD COUNTY ON COUNTY ROADS OR BY SHA ON STATE ROADS.



VICINITY MAP
SCALE: 1=1200'

SHEET INDEX

OWNER
GTW JOINT VENTURE
C/O LAND DESIGN AND DEVELOPMENT
10805 HICKORY RIDGE ROAD
COLUMBIA, MARYLAND 21044

DEVELOPER
SHIVA GOLF, INC.
17111 TOM FOX AVENUE
POOLESVILLE, MARYLAND 20837
(301) 972-7506

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] SIGNATURE OF DEVELOPER — DATE: 5-28-96
Joseph G. Hills — 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 CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE NATURAL RESOURCE CONSERVATION SERVICE.

[signature] SIGNATURE OF ENGINEER — DATE: 5-28-96
R. JACOB HIKMAT — PRINTED NAME OF ENGINEER

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

[signature] USDA - NATURAL RESOURCE CONSERVATION SERVICE — DATE: 6/6/96

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

[signature] HOWARD SOIL CONSERVATION DISTRICT — DATE: 6/6/16

APPROVED: DEPARTMENT OF PLANNING AND ZONING

[signature] CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE: 6/10/90
Gina Suvmanyi [signature] CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH — DATE: 6/14/96
[signature] DIRECTOR — DATE: 6/14/96

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.

WAVERLY GOLF COURSE
HOWARD COUNTY, MARYLAND
3RD ELECTION DISTRICT, CENSUS TRACT 6030
TAX MAP 16, PARCELS 20, 21, 234 AND 406
TITLE SHEET

project: 94010 | date: SEPT 95 | illustrator: M.P. | engineering: J.H. | scale: AS SHOWN | approve: J.H.

no. | description | revisions | date

SDP-96-35

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–CODE, 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 PAINT. 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 O–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.

RECOMMENDATIONS

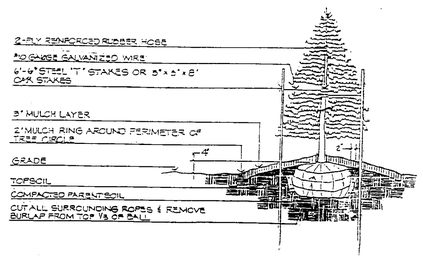
1. AT LOCATIONS WHERE REMOVAL OF VEGETATION AND OBJECTIONABLE MATERIAL RESULTS IN AN OPENING GREATER THAN 12 INCHES IN DEPTH, THEY SHOULD BE BACKFILLED WITH SOIL COMPACTED TO A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE STANDARD MOISTURE–DENSITY RELATIONSHIP TEST (ASTM D–698).

2. SOIL MATERIAL MEETING THE CLASSIFICATION REQUIREMENTS FOR GC, SC, CH OR CL AS CLASSIFIED IN ACCORDANCE WITH THE UNIFIED SOIL CLASSIFICATION SYSTEM AND RECOMMENDED BY SOIL CONSERVATION SERVICE MARYLAND, STANDARDS AND SPECIFICATIONS NOVEMBER, 1992 SHOULD BE USED FOR THE CONSTRUCTION OF THE CENTER OF THE EMBANKMENT AND THE CUT–OFF TRENCH. THE FILL MATERIAL SHOULD BE APPROVED BY GEOTECHNICAL ENGINEER PRIOR TO BEGIN USED. IT SHOULD BE FREE ROOM ROOTS, STUMPS, WOODS, RUBBISH, STONE GRATHED THAN SIX (6) INCHES, FROZEN SOIL OR OTHER DELETERIOUS MATERIAL.

3. CORE AND DIKE EMBANKMENT FILL AND BACKFILL SOILS SHOULD BE COMPACTED TO A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY (ASTM D–698).

4. THE PRINCIPAL SPILLWAY STRUCTURE SHOULD BE FOUNDED ON SUBGRADE SOIL WITH AN ALLOWABLE SOIL PRESSURE OF NO LESS THAN 2000 POUNDS PER SQUARE FOOT AND SHOULD BE VERIFIED DURING FOUNDATION CONSTRUCTION.

5. **WE RECOMMEND THE CONTRACTOR SHOULD PROVIDE THE GEOTECHNICAL ENGINEER AND THE DESIGN ENGINEER WITH A PLAN FOR DEWATERING PRIOR TO BEGINNING EXCAVATION AT THE SITE. THE PLAN SHOULD INCLUDE A WRITTEN DESCRIPTION OF THE DEWATERING SYSTEM, A SCHEDULE AND SKETCHES. THE DEWATERING SYSTEM SHOULD BE APPROVED BY THE DESIGN ENGINEER, INSTALLED AND FUNCTIONING EFFECTIVELY PRIOR TO EXCAVATION BELOW THE WATER LEVEL.**



CONIFEROUS TREE PLANTING DETAIL

SCHEDULE A – PERIMETER LANDSCAPED EDGE

Category	Adjacent to Roadways	Adjacent to Perimeter Properties
Landscape Type	B	A
Linear Feet of Golf Course Frontage	9,450	4,000
Credit for Existing Vegetation	7,030	2,450
Credit for Wall, Fence, or Berm	900	0
Number of Plants Required		
Shade Trees	30.40	25.83
Evergreen Trees	38.00	–
Shrubs	–	–
Number of Plants Provided		
Shade Trees	31	28
Evergreen Trees	38	–
Shrubs	–	–

SCHEDULE D – STORM WATER MANAGEMENT PONDS

Linear Feet of Perimeter	750
Number of Trees Required	
Shade Trees	15.00
Evergreen Trees	18.75
Credit of Existing Vegetation	Yes
Linear Feet	400
Credit for Other Landscaping	No
Number of Trees Provided	
Shade Trees	7
Evergreen Trees	9
Other Trees (2:1 substitution)	–

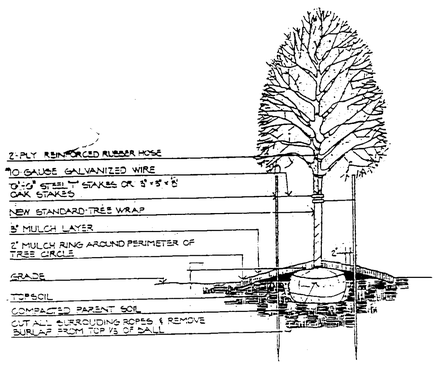
NOTES:

1) This plan has been prepared in accordance with the provisions of Section 16.124 of the Howard County Code and the Landscape Manual.

2) Financial Surety for the required landscaping has been posted as part of the DPW Developer's Agreement in the amount of **$11,600.00.**

PLANT LIST

Symbol	Quantity	Scientific Name	Common Name	Size
○	33	Acer saccharum	Sugar Maple	2.5" cal.
○	33	Acer rubrum	Red Maple	2.5" cal.
⊛	28	Pinus strobus	White Pine	6'– 8' ht.
⊛	29	Pinus nigra	Austrian Pine	6' –8' ht.



DECIDUOUS TREE PLANTING DETAIL

PERIMETER EDGE LANDSCAPE REQUIREMENTS

PERIMETER	TREES REQ'D	EDGE TYPE
PERIMETER 1 (Sheet 2)		
NON–RES TO ROAD – 1000 LF		B
CREDIT – 1000 LF EXISTING VEGETATION		
1 SHADE TREE / 50 LF	0	
1 EVERGREEN / 40 LF	0	
PERIMETER 2 (Sheet 3)		
NON–RES TO ROAD – 1230 LF		B
CREDIT – 1230 LF EXISTING VEGETATION		
1 SHADE TREE / 50 LF	0	
1 EVERGREEN / 40 LF	0	
PERIMETER 3 (Sheet 3)		
NON–RES TO ROAD – 2500 LF		B
CREDIT – 2100 LF EXISTING VEGETATION		
1 SHADE TREE / 50 LF	8	
1 EVERGREEN / 40 LF	10	
PERIMETER 4 (Sheet 3)		
NON–RES TO ROAD – 1250 LF		900 LF A
CREDIT – 700 LF EXISTING VEGETATION (TYPE A)		350 LF B (SWM)
1 SHADE TREE / 60 LF (A) – 50 LF (B)	11	
1 EVERGREEN / 40 LF (B)	9	
PERIMETER 5 (Sheet 4)		
SNGLE FAMILY DETACHED TO ALL USES – 1950 LF		1550 LF A
CREDIT – 1950 LF EXISTING VEGETATION		400 LF B (SWM)
1 SHADE TREE / 60 LF (A) – 50 LF (B)	0	
1 EVERGREEN / 40 LF (B)	0	
PERIMETER 6 (Sheet 5)		
SNGLE FAMILY DETACHED TO ROAD – 850 LF		B
CREDIT – 300 LF BERMING		
1 SHADE TREE / 50 LF	11	
1 EVERGREEN / 40 LF	14	
PERIMETER 7 (Sheet 6)		
SNGLE FAMILY DETACHED TO ROAD – 970 LF		B
CREDIT – 400 LF BERMING		
1 SHADE TREE / 50 LF	12	
1 EVERGREEN / 40 LF	14	
PERIMETER 8 (Sheet 6)		
SNGLE FAMILY DETACHED TO ALL USES – 800 LF		A
1 SHADE TREE / 60 LF	14	
PERIMETER 9 (Sheet 7)		
SNGLE FAMILY DETACHED TO ALL USES – 750 LF		A
CREDIT – 200 LF EXISTING VEGETATION		
1 SHADE TREE / 60 LF	10	
PERIMETER 10 (Sheet 7)		
SNGLE FAMILY DETACHED TO ROAD – 1350 LF		B
CREDIT – 1350 LF EXISTING VEGETATION		
1 SHADE TREE / 50 LF	0	
1 EVERGREEN / 40 LF	0	
PERIMETER 11 (Sheet 8)		
NON–RES TO ROAD – 1550 LF		B
CREDIT – 1350 LF EXISTING VEGETATION		
CREDIT – 200 LF BERMING		
1 SHADE TREE / 50 LF	0	
1 EVERGREEN / 40 LF	0	
TOTAL PLANTING OBLIGATION		
SHADE TREES	66	
EVERGREENS	47	
CREDIT – EXISTING VEGETATION	9880 LF	
CREDIT – BERMS	900 LF	

OWNER
GTW JOINT VENTURE
C/O LAND DESIGN AND DEVELOPMENT
10805 HICKORY RIDGE ROAD
COLUMBIA, MARYLAND 21044

AS–BUILT CERTIFICATION

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

P.E. NO.: _____

SIGNATURE _____ DATE: _____

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

BY THE DEVELOPER:

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

SIGNATURE OF DEVELOPER _____ DATE 5-20-96

PRINTED NAME OF DEVELOPER Joseph Q. Hills

BY THE ENGINEER:

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

SIGNATURE OF ENGINEER _____ DATE 4/9/96

PRINTED NAME OF ENGINEER R. E. HIKMAT

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

USDA – NATURAL RESOURCES CONSERVATION SERVICE _____ DATE 6/6/96

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

HOWARD SOIL CONSERVATION DISTRICT _____ DATE 6/6/96

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION _____ DATE 6/10/96

CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH _____ DATE 6/14/96

DIRECTOR _____ DATE 6/14/96

94010	SEPT 95		
		M.P.	J.H.
		N.T.S.	J.H.

WAVERLY GOLF COURSE
HOWARD COUNTY, MARYLAND
3RD ELECTION DISTRICT, CENSUS TRACT 6030
TAX MAP 16, PARCELS 20, 21, 234 AND 406

POND 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

WAVERLY
HOWARD COUNTY, MARYLAND
ITE PROJECT NO: 20-4006G

STORMWATER MANAGEMENT POND-A - #4

SUMMARY OF TEST PITS

DATE: May 5, 1995
Field Inspector: C.S. Bakhshi

TEST PIT 6984

DEPTH (FEET)	SOIL DESCRIPTION	REMARKS
0.3-5.0	Olive Yellow Silty SAND, little clay. USC: SM USDA: SANDY LOAM	Top Soil: ±4.0" Groundwater encountered at 9.0 feet depth.
5.0-12.0	Olive Brown and Green micaceous Silty fine SAND. USC: SM-SP USDA: LOAMY SAND	After 1 hour of completion of test pit, groundwater level at 7.0 feet depth. Test pit backfilled on completion of observations.

Test Pit terminated at 12.0 feet depth.

TEST PIT 6986

DEPTH (FEET)	SOIL DESCRIPTION	REMARKS
0.5-2.0	Brown Clayey SAND. USC: SC USDA: SANDY CLAY LOAM	Top Soil: ±6.0" Groundwater encountered at 10.0 feet depth.
2.0-6.0	Olive Green and Yellow Sandy Clayey SILT. USC: MH USDA: LOAM	Hard digging below 10.0 feet depth.
6.0-9.0	Olive Green micaceous fine SAND USC: SM-SP USDA: SANDY LOAM	After 1.5 hour of completion of test pit groundwater level at 11.0 feet depth.
9.0-12.0	Yellow and Brown micaceous fine SAND, rock fragments. USC: SM-SP USDA: LOAMY SAND	Test pit backfilled on completion of observations.

Test Pit terminated at 12.0 feet depth.

TEST PIT 6988

DEPTH (FEET)	SOIL DESCRIPTION	REMARKS
0.5-3.0	Dark Gray Sandy CLAY USC: CL USDA: CLAY LOAM	Top Soil: ±6.0" Groundwater encountered at 8.0 feet depth.
3.0-6.0	Olive Green and Yellow Sandy Clayey SILT, trace mica. USC: MH USDA: LOAM	Hard digging below 10.0 feet depth.
6.0-10.5	Olive Green micaceous Silty fine SAND, trace rock fragments. USC: SM USDA: LOAMY SAND	After 1 hour of test pit completion, ground water at 7.0 feet depth. Test pit backfilled on completion of observations.

Backhoe refusal at 10.5 feet depth.

Test Pit terminated at 10.5 feet depth

TEST PIT 7147

DEPTH (FEET)	SOIL DESCRIPTION	REMARKS
0.25-3.0	Light Yellow SAND USC: SM USDA: SANDY LOAM	Top Soil: ±3.0" Groundwater encountered at 12.0 feet depth.
3.0-12.0	Olive Green micaceous fine SAND USC: SM-SP USDA: SANDY LOAM	After 1 hour of completion of test pit, groundwater was at 6.0 feet depth. Test pit backfilled on completion of observations.

Test Pit terminated at 12.0 feet depth.

TEST PIT 7148

DEPTH (FEET)	SOIL DESCRIPTION	REMARKS
0.5-2.0	Olive Brown Clayey SAND USC: SC USDA: SANDY CLAY LOAM	Top Soil: ±6.0" Groundwater encountered at 9.0 feet depth.
2.0-6.0	Olive Green and Yellow Sandy Clayey SILT, trace mica. USC: MH USDA: LOAM	After completion, the test pit sides collapsed below 7.5 feet depth.
6.0-11.0	Yellow Brown micaceous SAND and rock fragments. USC: SM USDA: LOAMY SAND	Test pit backfilled on completion of observations.

Test Pit terminated at 11.0 feet depth.

WAVERLY
HOWARD COUNTY, MARYLAND
ITE PROJECT NO: 20-4006G

STORMWATER MANAGEMENT POND-A #4

SUMMARY OF TEST PITS

DATE: May 5, 1995
Field Inspector: C.S. Bakhshi

TEST PIT 7149

DEPTH (FEET)	SOIL DESCRIPTION	REMARKS
0.5-3.0	Dark Gray Sandy CLAY USC: CL USDA: CLAY LOAM	Top Soil: ±6.0" Groundwater encountered at 8.0 feet depth.
3.0-6.0	Olive Green and Yellow Sandy Clayey SILT, trace mica. USC: MH USDA: LOAM	Hard digging below 10.0 feet depth.
6.0-10.5	Olive Green micaceous Silty fine SAND, trace rock fragments. USC: SM USDA: LOAMY SAND	After 1 hour of test pit completion, groundwater at 7.0 feet depth. Test pit backfilled on completion of observations.

Backhoe refusal at 10.5 feet depth.

Test Pit terminated at 10.5 feet depth

WAVERLY
HOWARD COUNTY, MARYLAND
ITE PROJECT NO: 20-4006G

STORMWATER MANAGEMENT POND-B - #3

SUMMARY OF TEST PITS

Date: May 26, 1995
Field Inspector: C.S. Bakhshi

TEST PIT 1435

DEPTH (FEET)	SOIL DESCRIPTION	REMARKS
0.3-2.0	Yellowish Brown Clayey SAND with gravel. USC: SC USDA: SANDY LOAM	Top Soil: ±4.0" Groundwater seeping from test pit sides at 4.0 feet depth.
2.0-12.0	Olive Brown micaceous Silty fine SAND, rock fragments. USC: SM-SP USDA: LOAMY SAND	Hard digging below 6.0 feet depth. After 1.5 hours of completion-water level at 9.5 feet depth.

Test Pit backfilled on completion of Observations.
Test Pit terminated at 12.0 feet depth.

TEST PIT 1436

DEPTH (FEET)	SOIL DESCRIPTION	REMARKS
0.25-12.0	Olive Yellow and Green micaceous Silty fine SAND. USC: SM-SP USDA: LOAMY SAND	Top Soil: 3.0" Hard digging below 10.0 feet depth Groundwater not encountered.

Backhoe refusal at 12.0 feet depth.
Test Pit terminated at 12.0 feet depth.

TEST PIT 6958

DEPTH (FEET)	SOIL DESCRIPTION	REMARKS
0.25-6.0	Light Olive & yellow Clayey SAND. USC: SC USDA: SANDY LOAM	Top Soil: ±3.0" Groundwater encountered at 5.0 feet depth.
6.0-9.0	Yellow SAND and rock fragments. USC: SM-GP USDA: SAND	Hard digging below 6.0 feet depth.

Backhoe refusal at 9.0 feet depth.
Test Pit terminated at 9.0 feet depth.

TEST PIT 6959

DEPTH (FEET)	SOIL DESCRIPTION	REMARKS
0.5-3.0	Brown wet SAND, trace mica. USC: SM-SP USDA: SANDY LOAM	Top Soil: 6.0" Groundwater encountered at 2.0 feet depth.
3.0-8.0	Yellow micaceous SILT, trace sand. USC: ML USDA: SILT LOAM	Hard digging below 6.0 fe feet depth. Test pit backfilled on completion of observations.

Backhoe refusal at 8.0 feet depth
Test Pit terminated at 8.0 feet depth.

TEST PIT 6960

DEPTH (FEET)	SOIL DESCRIPTION	REMARKS
0.5-3.0	Yellowish Brown Silty CLAY, trace sand. USC: CL USDA: LOAM	Top Soil: 6.0" Groundwater not encountered. After 2.0 hours, groundwater at 11.0 feet depth
3.0-12.0	Olive Brown and Green micaceous fine SAND. USC: SM-SW USDA: LOAMY SAND	Test pit backfilled on completion of observations.

Test Pit terminated at 12.0 feet depth.

WAVERLY
HOWARD COUNTY, MARYLAND
ITE PROJECT NO: 20-4006G

STORMWATER MANAGENT POND-C - #5

SUMMARY OF TEST PITS

Date: May 26, 1995
Field Inspector: C.S. Bakhshi

TEST PIT 6978

DEPTH (FEET)	SOIL DESCRIPTION	REMARKS
0-3.0	Sand and rock fragments. (FILL)	Top Soil: None Groundwater seeping from test pit sides at 4.0 feet depth.
3.0-12.0	Olive Green medium and fine SAND. USC: SM-SP USDA: LOAMY SAND	After 2.0 hours, groundwater at 10.0 feet depth. Test pit backfilled on completion of observations.

Test Pit terminated at 12.0 feet depth.

TEST PIT 6982

DEPTH (FEET)	SOIL DESCRIPTION	REMARKS
0.3-6.0	Dark Olive Silty CLAY, trace fine sand. USC: CL USDA: CLAY LOAM	Top Soil: ±4.0" Groundwater encountered at 6.0 feet depth.
6.0-8.0	Light Yellow wet Clayey SAND, rock fragments. USC: SC USDA: SANDY CLAY LOAM	Test pit backfilled on completion of observations.

Test Pit terminated at 8.0 feet depth.

TEST PIT 1432

Date: May 26, 1995
Field Inspector: C.S. Bakhshi

DEPTH (FEET)	SOIL DESCRIPTION	REMARKS
0.25-3.0	Yellowish Brown Clayey SILT. USC: MH USDA: SILT LOAM	Top Soil: ±3.0" Groundwater not encountered.
3.0-13.0	Olive Yellow to Green fine SAND, trace clay, mica. USC: SM-SP USDA: LOAMY SAND	After 8 hours: water level at 9.0' depth. Test pit backfilled on completion of observations.

Test Pit terminated at 13.0 feet depth.

TEST PIT 1433

DEPTH (FEET)	SOIL DESCRIPTION	REMARKS
0.25-3.0	Dark Gray fine SAND with clay. USC: SC USDA: SANDY CLAY LOAM	Top Soil: ±3.0" Groundwater seeping from test pit sides 1.5 feet depth.
3.0-9.0	Olive Yellow and Green fine SAND, USC: SM-SP USDA: LOAMY SAND	Free water encountered at 8.0 feet depth. Rock fragments below 8.0 feet depth. Backhoe refusal at 9.0 feet depth. Test Pit backfilled on completion of observations.

Test Pit terminated at 9.0 feet depth.

TEST PIT 1434

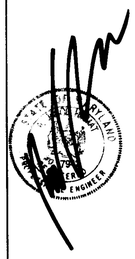
DEPTH (FEET)	SOIL DESCRIPTION	REMARKS
0.25-3.0	Olive Green and Yellow Clayey SILT, little sand. USC: MH USDA: SILT LOAM	Top Soil: ±3.0" Groundwater not encountered during excavation.
3.0-12.0	Yellowish Brown to Olive Green fine SAND, trace mica. USC: SM-SP USDA: LOAMY SAND	After 8 hours: Dry. Test pit backfilled on completion of observations.

Test Pit terminated at 12.0 feet depth.

TEST PIT 6980

DEPTH (FEET)	SOIL DESCRIPTION	REMARKS
0.25-3.0	Dark Olive Gray Silty CLAY. USC: CL USDA: CLAY LOAM	Top Soil: ±3.0" Groundwater encountered at 3.0 feet depth.
3.0-10.0	Olive Yellow fine SAND, trace mica. USC: SM-SP USDA: LOAMY SAND	After 1.5 hours, water level at 9.0 feet depth. Test pit backfilled on completion of observations.

Test Pit terminated at 10.0 feet depth.



OWNER
GTW JOINT VENTURE
C/O LAND DESIGN AND DEVELOPMENT
10805 HICKORY RIDGE ROAD
COLUMBIA, MARYLAND 21044

AS-BUILT CERTIFICATION

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

P.E. NO.:_____

SIGNATURE DATE: _____

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

BY THE DEVELOPER:

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

SIGNATURE OF DEVELOPER — DATE 5-28-96

PRINTED NAME OF DEVELOPER: Joseph Q. Wills

BY THE ENGINEER:

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

SIGNATURE OF ENGINEER — DATE 9-15-95

PRINTED NAME OF ENGINEER: R. KMAT

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

USDA — NATURAL RESOURCES CONSERVATION SERVICE — DATE 6/6/96

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

HOWARD SOIL CONSERVATION DISTRICT — DATE 6/6/96

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 6/10/96

CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH — DATE 6/14/96

DIRECTOR — DATE 6/14/96

SCALE	AS SHOWN
DESIGNED	J.H.
DRAWN	J.H.
CHECKED	M.P.
SHEET NO.	940(3)
DATE	AUG.1995

WAVERLY GOLF COURSE
HOWARD COUNTY, MARYLAND
3RD ELECTION DISTRICT, CENSUS TRACT 6030
TAX MAP 16, PARCELS 20,21,234 AND 406
SOIL BORINGS

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) 997-0296 Fax

SDP-96-35

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 THROUGH APRIL 30, AND AUGUST 1 THROUGH OCTOBER 15, SEED WITH 60 LBS. PER ACRE 1.4 LBS/1000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THROUGH 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 THROUGH 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 GAL 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, IF NOT PREVIOUSLY LOOSENED.

SOIL AMENDMENTS: APPLY 600 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS./1000 SQ.FT.)

SEEDING: FOR PERIODS MARCH 1 THROUGH APRIL 30 AND FROM AUGUST 15 THROUGH OCTOBER 15, SEED WITH 2-1/2 BUSHEL PER ACRE OF ANNUAL RYE (3.2 LBS./1000 SQ.FT.) FOR THE PERIOD MAY 1 THROUGH AUGUST 14, SEED WITH 3 LBS. PER ACRE OF WEEPING LOVEGRASS (.07 LBS./1000 SQ.FT.) FOR THE PERIOD NOVEMBER 16 THROUGH 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 1983 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 1991 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: 682 ACRES
   AREA DISTURBED: 59 ACRES
   AREA TO BE ROOFED OR PAVED: 0 ACRES
   AREA TO BE VEGETATIVELY STABILIZED: 59 ACRES
   TOTAL CUT: 108,500 CU. YDS.
   TOTAL FILL: 108,500
   TOTAL WASTE/BORROW AREA LOCATION: N/A
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.

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

_____ PE NO. _____
SIGNATURE DATE

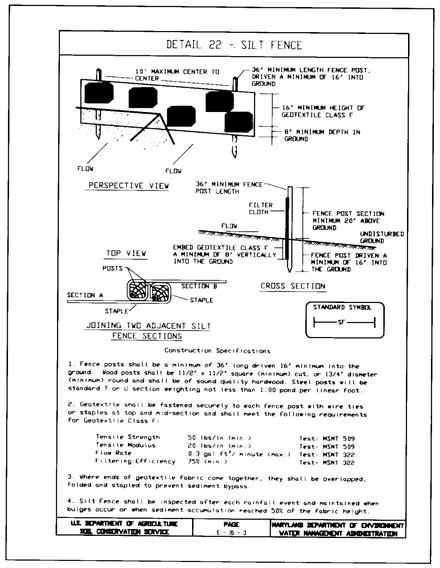
CERTIFY MEANS TO STATE OR DECLARE A PROFESSIONAL OPINION BASED UPON ONSITE INSPECTIONS AND MATERIAL TESTS WHICH ARE CONDUCTED DURING CONSTRUCTION. THE ONSITE INSPECTIONS AND MATERIAL TESTS ARE THOSE INSPECTIONS AND TESTS DEEMED SUFFICIENT AND APPROPRIATE BY COMMONLY ACCEPTED ENGINEERING STANDARDS. CERTIFY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

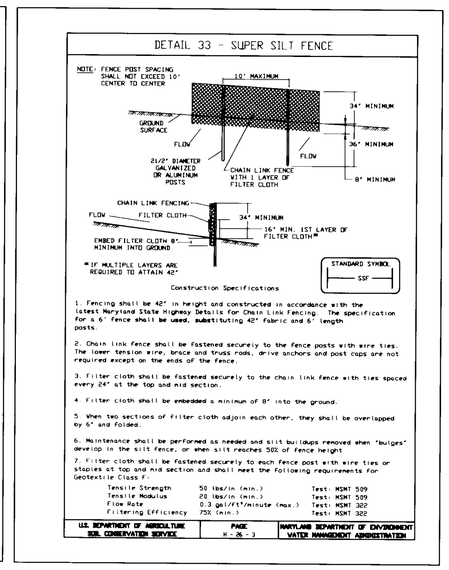
OPERATION, MAINTENANCE, AND INSPECTION

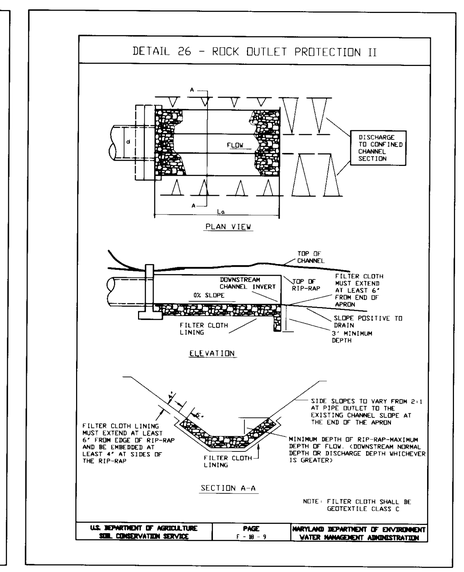
INSPECTION OF THE POND(S) SHOWN HEREON SHALL BE PERFORMED AT LEAST ANNUALLY, IN ACCORDANCE WITH THE CHECKLIST AND REQUIREMENTS CONTAINED WITH USDA, SCS "STANDARDS AND SPECIFICATIONS FOR PONDS" (MD-378). THE POND OWNER(S) AND ANY HEIRS, SUCCESSORS, OR ASSIGNS SHALL BE RESPONSIBLE FOR THE SAFETY OF THE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

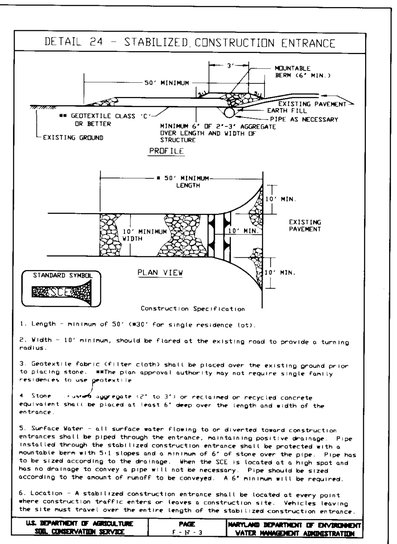
SEQUENCE OF CONSTRUCTION

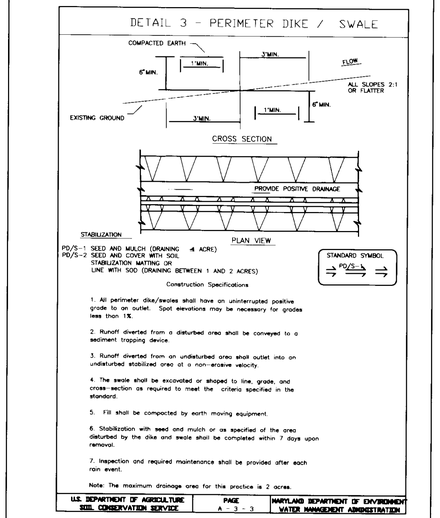
1. OBTAIN GRADING PERMIT
2. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE (1 DAY).
3. INSTALL TREE PROTECTION DEVICES (2 DAYS).
4. CLEAR AND GRUB AREAS SURROUNDING SEDIMENT CONTROL FEATURES (10 DAYS).
5. CONSTRUCT PERMANENT STORMWATER MANAGEMENT PONDS:
   A) INSTALL STREAM DIVERSION PIPE AS SHOWN (1 DAY EACH).
   B) CONSTRUCT THE PRINCIPAL SPILLWAY (3 DAYS EACH).
   C) REMOVE STREAM DIVERSION PIPE (1 DAY EACH).
   D) CONSTRUCT THE DAM AND STABILIZE (3 DAYS EACH).
   E) BLOCK RISER AS SHOWN ON TSWM DETAILS (1 DAY).
6. CONSTRUCT SILT FENCE AND EARTH DIKES, STABILIZE EARTH DIKES WITH TEMPORARY SEEDING (15 DAYS).
7. CLEAR SITE PER LIMITS INDICATED (10 DAYS).
8. GRADE SITE AS INDICATED ON THE PLANS(30 DAYS).
10. INSPECT ALL SEDIMENT CONTROL DEVICES DAILY AND AFTER EACH RAINFALL, REPAIR AS NECESSARY.
11. WHEN ALL CONTRIBUTING AREAS TO SEDIMENT CONTROL DEVICES HAVE BEEN PERMANENTLY STABILIZES, AND AFTER THE APPROVAL OF THE INSPECTOR, REMOVE SEDIMENT CONTROL DEVICES, GRADE AREAS DISTURBED, AND PROVIDE PERMANENT SEED AND MULCH.
12. SWM PONDS RISERS SHALL REMAIN BLOCKED IN ACCORDANCE WITH TEMPORARY SWM DETAILS UNTIL THE ENTIRE CONTRIBUTING DRAINAGE AREAS HAVE BEEN PERMANENTLY STABILIZED.
13. FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN
   A) 7 CALENDAR DAYS FOR ALL PERIMETER SLOPES AND GREATER THAN 3:1
   B) 14 DAYS FOR ALL OTHER DISTURBED GRADED AREAS ON THE PROJECT SITE.

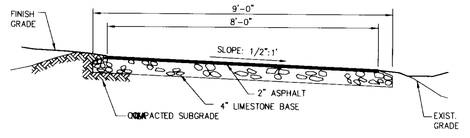








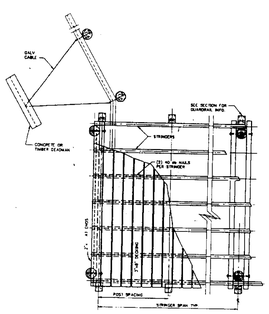




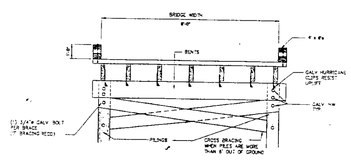
NOTE: CROSS SLOPE TO CONFORM WITH EXISTING GRADE.

ASPHALT CART PATH DETAIL

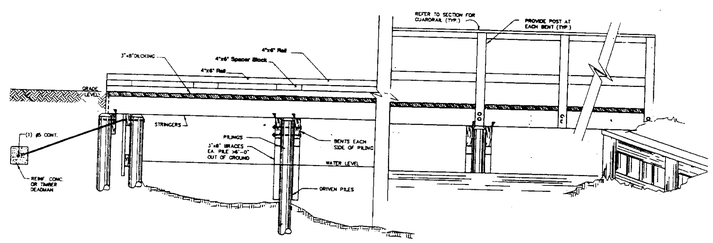
N.T.S.



BRIDGE PLAN
N.T.S



TYPICAL BRIDGE SECTION
N.T.S



BRIDGE ELEVATION
N.T.S

OWNER
GTW JOINT VENTURE
C/O LAND DESIGN AND DEVELOPMENT
10805 HICKORY RIDGE ROAD
COLUMBIA, MARYLAND 21044

AS-BUILT CERTIFICATION

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

_____ P.E. NO.: _____
SIGNATURE DATE: _____

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

BY THE DEVELOPER:

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

SIGNATURE OF DEVELOPER — DATE 5-28-96
PRINTED NAME OF DEVELOPER: Joseph Q. Wills

BY THE ENGINEER:

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

SIGNATURE OF ENGINEER — DATE 4/19/96
PRINTED NAME OF ENGINEER: R. [illegible] MAT

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

USDA – NATURAL RESOURCES CONSERVATION SERVICE — DATE 6/6/96

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

HOWARD SOIL CONSERVATION DISTRICT — DATE 6/6/96

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 6/10/96

CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH — DATE 6/14/96

DIRECTOR — DATE 6/14/96

WAVERLY GOLF COURSE
HOWARD COUNTY, MARYLAND
3RD ELECTION DISTRICT, CENSUS TRACT 6030
TAX MAP 16, PARCELS 20, 21, 234 AND 406

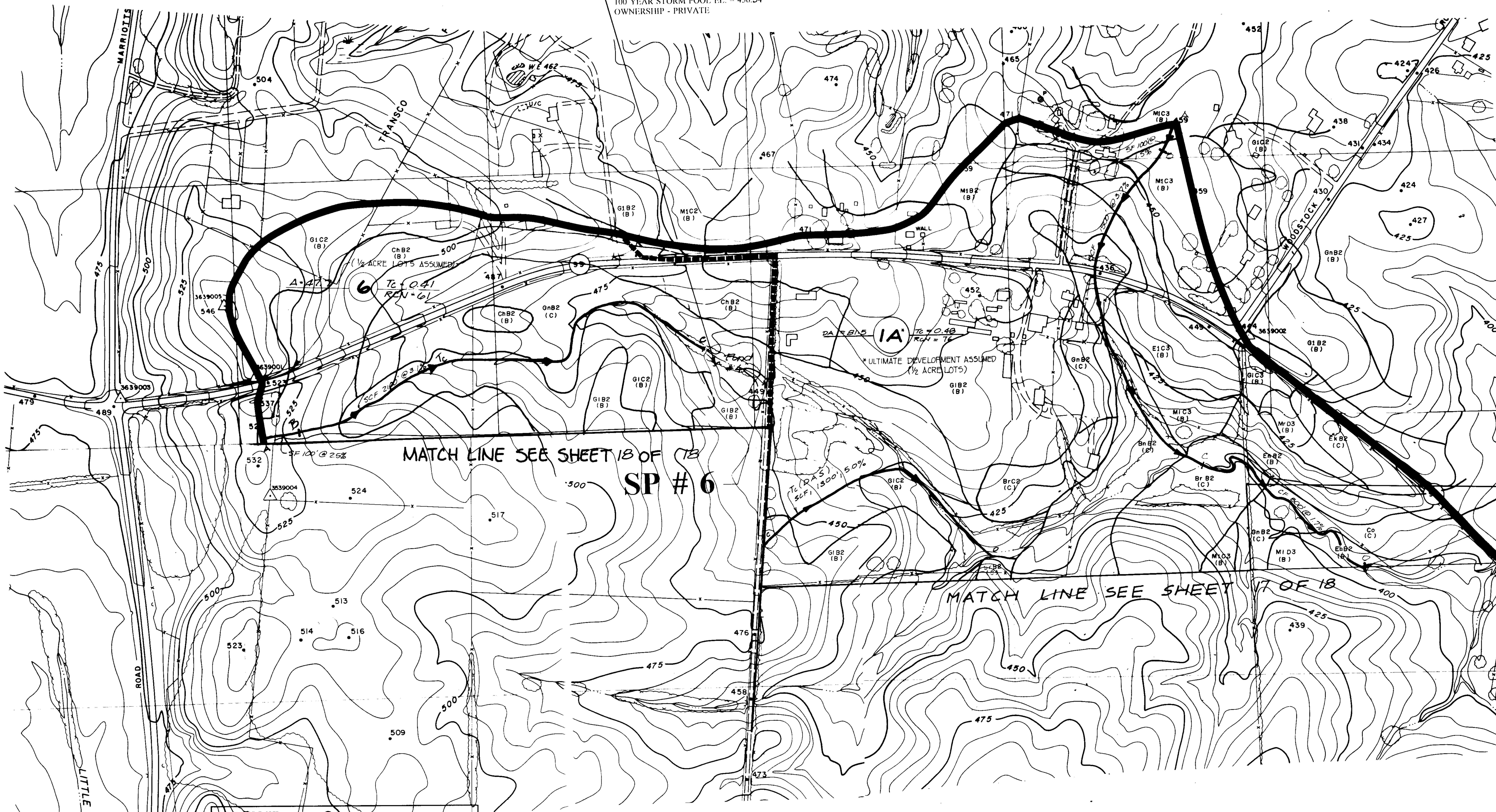
SEDIMENT CONTROL NOTES & DETAILS

date	SEPT.95
project no.	94010
engineering	J.H.
drawn	M.P.
checked	J.H.
scale	AS SHOWN

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-96-35

POND 4
HAZARD CLASSIFICATION - "a"
DRAINAGE AREA - 47.7 AC.
PROPOSED RCN - 70
PROPOSED Tc - 0.41
TYPE - DETENTION
2 YEAR STORM POOL EL. = 453.53
10 YEAR STORM POOL EL. = 455.06
100 YEAR STORM POOL EL. = 456.34
OWNERSHIP - PRIVATE



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

J. G. Warfield Jr. — 6/6/96
USDA – NATURAL RESOURCES CONSERVATION SERVICE — DATE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Robert W. Zielmer — 6/6/96
HOWARD SOIL CONSERVATION DISTRICT — DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

[signature] — 6/10/96
CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE

[signature] — 6/14/96
CHIEF, DIVSION OF LAND DEVELOPMENT AND RESEARCH — DATE

[signature] — 6/14/96
DIRECTOR — DATE

94007

BY THE DEVELOPER:

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

[signature] — 5-28-96
SIGNATURE OF DEVELOPER — DATE

Joseph Q. Hills
PRINTED NAME OF DEVELOPER

BY THE ENGINEER:

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

[signature] — 4/9/96
SIGNATURE OF ENGINEER — DATE

[illegible] KMAT
PRINTED NAME OF ENGINEER

STATE OF MARYLAND — REGISTERED PROFESSIONAL ENGINEER — 17042

PLAN

SCALE 1" = 200'

OWNER
GTW JOINT VENTURE
C/O LAND DESIGN AND DEVELOPMENT
10805 HICKORY RIDGE ROAD
COLUMBIA, MARYLAND 21044

project	date
94010	
illustration	engineering
jbm	
scale 200'	approval JBM

no.	description	date
	revisions	

WAVERLY GOLF COURSE
HOWARD COUNTY, MARYLAND
3RD ELECTION DISTRICT, CENSUS TRACT 6030
TAX MAP 16, PARCELS 20, 21, 234, AND 406
PROPOSED CONDITION DRAINAGE AREA MAP

MILDENBERG ASSOCIATES, 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-96-35

POND 3
HAZARD CLASSIFICATION - "a"
DRAINAGE AREA - 100.3 AC.
PROPOSED RCN - 76
PROPOSED Tc - 0.48
TYPE - DETENTION
2 YEAR STORM POOL EL. = 435.88
10 YEAR STORM POOL EL. = 438.40
100 YEAR ETORM POOL EL. = 440.61
OWNERSHIP - PRIVATE

POND 1

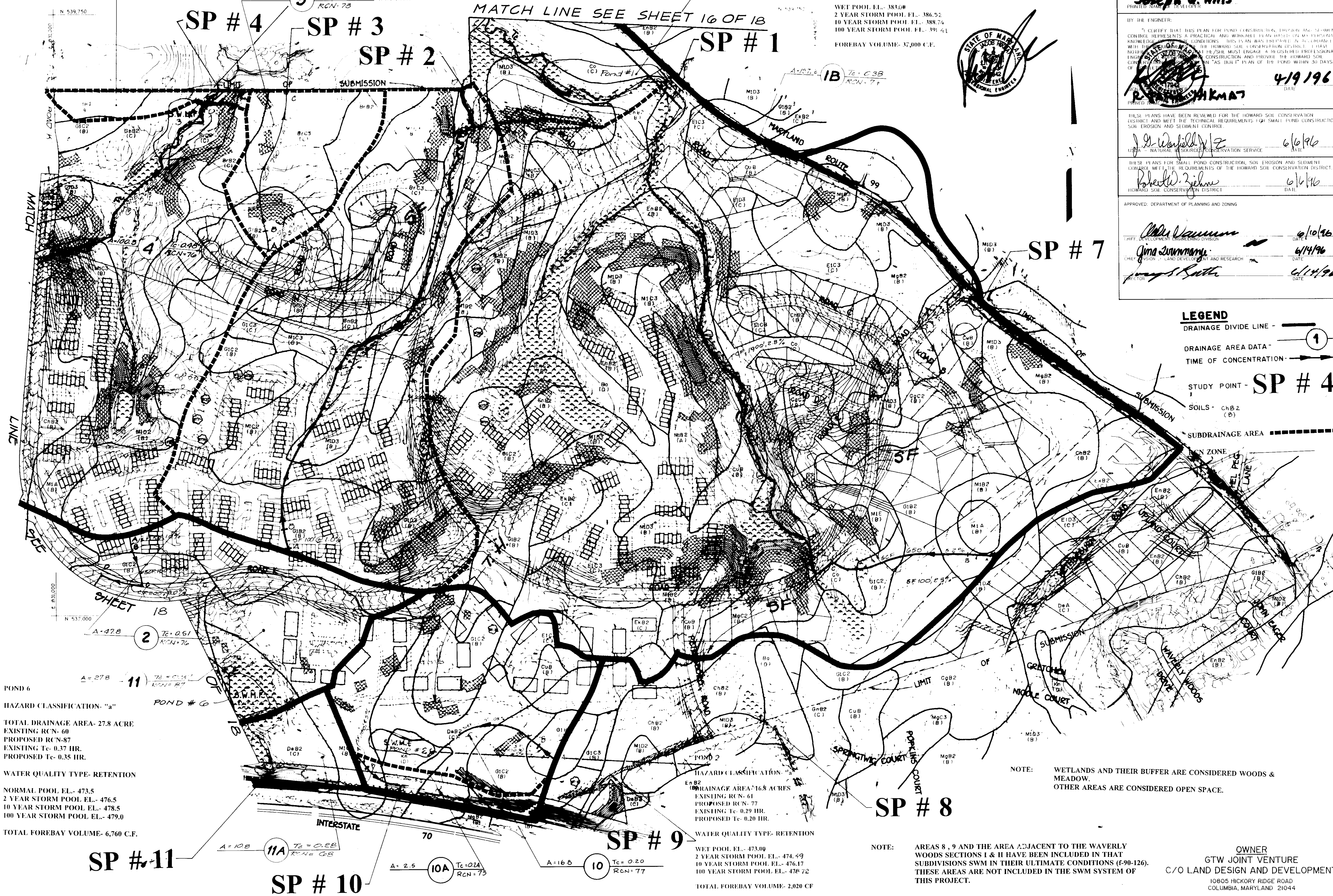
HAZARD CLASSIFICATION- "a"

TOTAL DRAINAGE AREA- 431 9 ACRES
EXISTING RCN- 61
PROPOSED RCN-74
EXISTING Tc- NA, ROUTED MODEL.
PROPOSED Tc- NA, ROUTED MODEL.

WATER QUALITY TYPE- RETENTION

WET POOL EL.- 383.00
2 YEAR STORM POOL EL.- 386.52
10 YEAR STORM POOL EL.- 388.74
100 YEAR STORM POOL EL.- 391 41

FOREBAY VOLUME- 37,000 C.F.



POND 6

HAZARD CLASSIFICATION- "a"

TOTAL DRAINAGE AREA- 27.8 ACRE
EXISTING RCN- 60
PROPOSED RCN-87
EXISTING Tc- 0.37 HR.
PROPOSED Tc- 0.35 HR.

WATER QUALITY TYPE- RETENTION

NORMAL POOL EL.- 473.5
2 YEAR STORM POOL EL.- 476.5
10 YEAR STORM POOL EL.- 478.5
100 YEAR STORM POOL EL.- 479.0

TOTAL FOREBAY VOLUME- 6,760 C.F.

POND 2
HAZARD CLASSIFICATION- "a"
DRAINAGE AREA- 16.8 ACRES
EXISTING RCN- 61
PROPOSED RCN- 77
EXISTING Tc- 0.29 HR.
PROPOSED Tc- 0.20 HR.

WATER QUALITY TYPE- RETENTION

WET POOL EL.- 473.00
2 YEAR STORM POOL EL.- 474.49
10 YEAR STORM POOL EL.- 476.17
100 YEAR STORM POOL EL.- 478.72

TOTAL FOREBAY VOLUME- 2,020 CF

NOTE: WETLANDS AND THEIR BUFFER ARE CONSIDERED WOODS & MEADOW.
OTHER AREAS ARE CONSIDERED OPEN SPACE.

NOTE: AREAS 8 , 9 AND THE AREA ADJACENT TO THE WAVERLY WOODS SECTIONS I & II HAVE BEEN INCLUDED IN THAT SUBDIVISIONS SWM IN THEIR ULTIMATE CONDITIONS (f-90-126). THESE AREAS ARE NOT INCLUDED IN THE SWM SYSTEM OF THIS PROJECT.

OWNER
GTW JOINT VENTURE
C/O LAND DESIGN AND DEVELOPMENT
10805 HICKORY RIDGE ROAD
COLUMBIA, MARYLAND 21044

BY THE DEVELOPER:

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

SIGNATURE OF DEVELOPER — 5-28-96 DATE
Joseph Q. Hills
PRINTED NAME OF DEVELOPER

BY THE ENGINEER:

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

STATE OF MARYLAND — JACOB HIKMAT — REGISTERED PROFESSIONAL ENGINEER

SIGNATURE OF ENGINEER — 4/9/96 DATE
R. JACOB HIKMAT
PRINTED NAME OF ENGINEER

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

USDA - NATURAL RESOURCES CONSERVATION SERVICE — 6/6/96 DATE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

HOWARD SOIL CONSERVATION DISTRICT — 6/6/96 DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION — 6/10/96 DATE
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH — 6/14/96 DATE
DIRECTOR — 6/14/96 DATE

94010 OCT 1994 SAS RJH 1"=200'

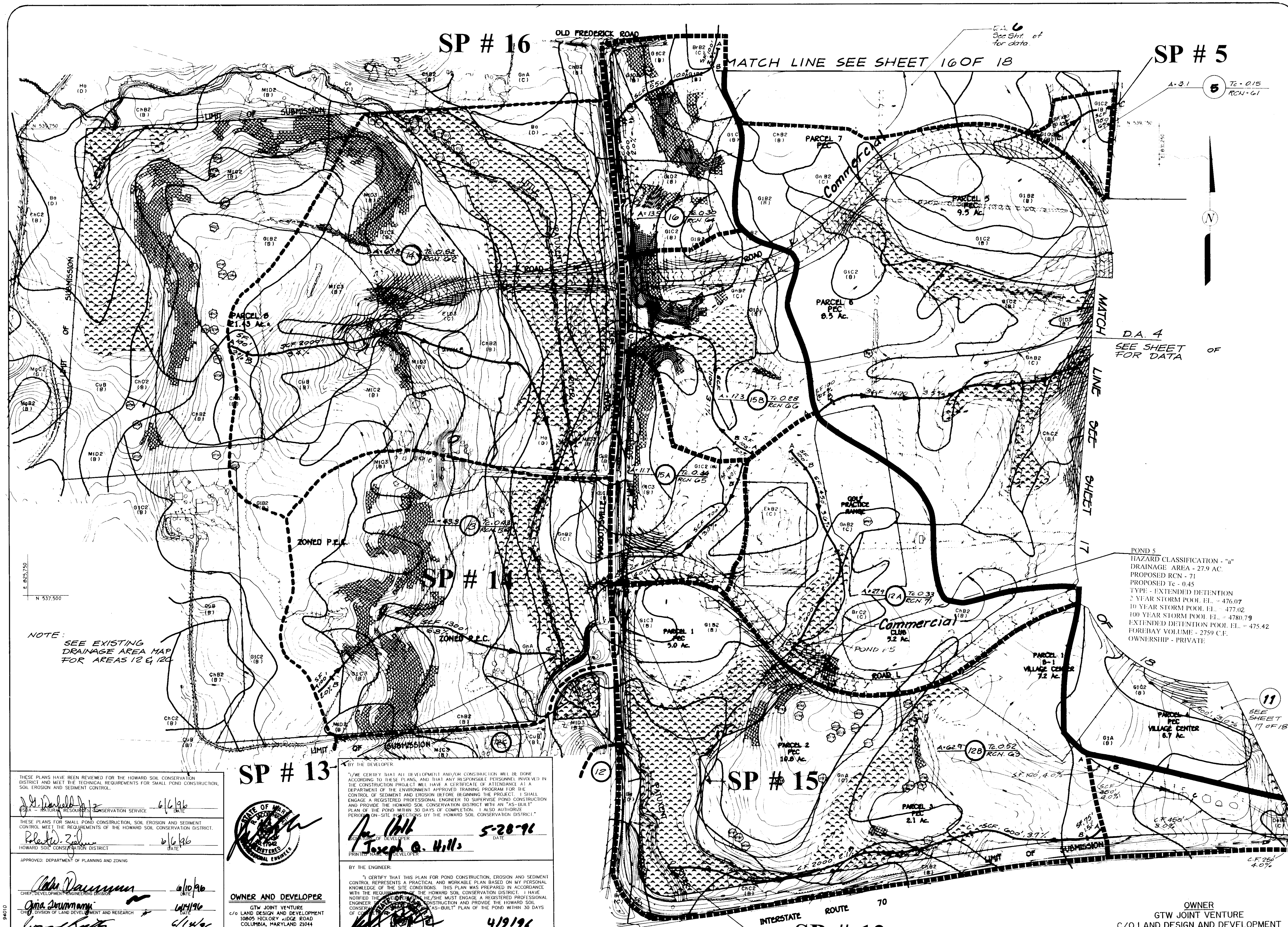
WAVERLY GOLF COURSE
HOWARD COUNTY, MARYLAND
3RD ELECTION DISTRICT, CENSUS TRACT 6030
TAX MAP 16, PARCELS 20, 21, 234, AND 406

PROPOSED CONDITION DRAINAGE AREA MAP

MILDENBERG ASSOCIATES, 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-96-35

94010



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

USDA – NATURAL RESOURCES CONSERVATION SERVICE — DATE 6/6/96

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

HOWARD SOIL CONSERVATION DISTRICT — DATE 6/6/96

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 6/10/96

CHIEF, DIVSION OF LAND DEVELOPMENT AND RESEARCH — DATE 6/14/96

DIRECTOR — DATE 6/14/96

94010

OWNER AND DEVELOPER

GTW JOINT VENTURE
c/o LAND DESIGN AND DEVELOPMENT
10805 HICKORY RIDGE ROAD
COLUMBIA, MARYLAND 21044

BY THE DEVELOPER:

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

SIGNATURE OF DEVELOPER — DATE 5-28-96

Joseph Q. Hills
PRINTED NAME OF DEVELOPER

BY THE ENGINEER:

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

SIGNATURE OF ENGINEER — DATE 4/9/96

R. [illegible]MAT
PRINED NAME OF ENGINEER

OWNER
GTW JOINT VENTURE
C/O LAND DESIGN AND DEVELOPMENT
10805 HICKORY RIDGE ROAD
COLUMBIA, MARYLAND 21044

project	date
94010	OCT 1994
illustration	engineering
SAS	RJH
scale	approval
1"=200'	

no.	description	date
0	SUBMITTED	
	revisions	

WAVERLY GOLF COURSE

HOWARD COUNTY, MARYLAND
3RD ELECTION DISTRICT, CENSUS TRACT 6030
TAX MAP 16, PARCELS 20, 21, 234, AND 406

PROPOSED CONDITION DRAINAGE AREA MAP

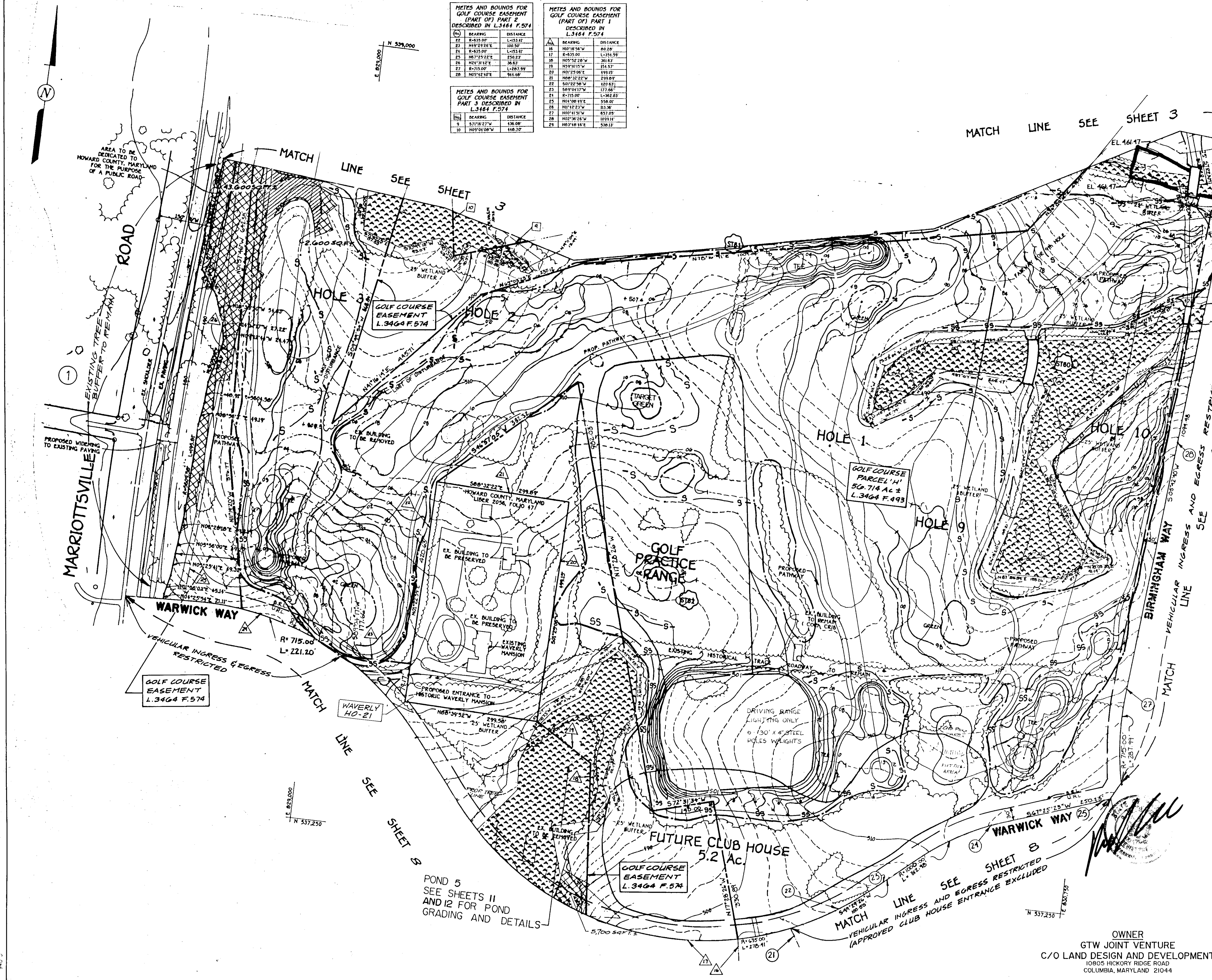
MILDENBERG ASSOCIATES, INC.
Engineers Planners Surveyors
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
(410) 997-0296 Balt. (301) 621-5521 Wash. (410) 997-0298 Fax

SDP-96-35

METES AND BOUNDS FOR GOLF COURSE EASEMENT (PART OF) PART 2 DESCRIBED IN L.3464 F.574		
No.	BEARING	DISTANCE
22	R=635.00'	L=153.41'
23	N49°29'26"E	100.50'
24	R=635.00'	L=153.41'
25	N67°25'22"E	250.23'
26	N24°31'42"E	36.63'
27	R=715.00'	L=287.99'
28	N05°42'40"E	944.48'

METES AND BOUNDS FOR GOLF COURSE EASEMENT PART 3 DESCRIBED IN L.3464 F.574		
No.	BEARING	DISTANCE
9	S71°16'27"W	436.08'
10	N09°04'08"W	448.70'

METES AND BOUNDS FOR GOLF COURSE EASEMENT (PART OF) PART 1 DESCRIBED IN L.3464 F.574		
No.	BEARING	DISTANCE
16	N10°18'56"W	80.28'
17	R=635.00	L=354.59'
18	N05°52'28"W	361.63'
19	N59°10'15"W	154.57'
20	N01°25'06"E	499.15'
21	N88°32'22"W	299.89'
22	S01°22'58"W	420.63'
23	S89°04'17"W	177.66'
24	R=715.00'	L=362.03'
25	N04°08'49"E	558.01'
26	N11°42'23"W	113.36'
27	N00°41'51"W	657.05'
28	N02°36'26"W	1099.14'
29	N83°48'46"E	538.13'



OWNER
GTW JOINT VENTURE
C/O LAND DESIGN AND DEVELOPMENT
10805 HICKORY RIDGE ROAD
COLUMBIA, MARYLAND 21044

AS-BUILT CERTIFICATION

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

SIGNATURE ____ P.E. NO.: ____ DATE: ____

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

BY THE DEVELOPER:

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

SIGNATURE OF DEVELOPER — DATE 9/15/95
Thomas Hency
PRINTED NAME OF DEVELOPER

BY THE ENGINEER:

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

SIGNATURE OF ENGINEER — DATE 9-15-95
R [illegible] H[illegible]KMAT
PRINTED NAME OF ENGINEER

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

USDA – NATURAL RESOURCES CONSERVATION SERVICE — DATE 6/6/96

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

HOWARD SOIL CONSERVATION DISTRICT — DATE 6/6/96

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 6/13/96
CHIEF, DIVSION OF LAND DEVELOPMENT AND RESEARCH — DATE 6/14/96
DIRECTOR — DATE 6/14/96

project	date	engineering	designed	scale	checked
94010	SEPT.95	M.P.	J.H.	1"=100'	J.H.

No.	Revision	Date
1	ADD LIGHTING TO DRIVING RANGE	9-16-96

WAVERLY GOLF COURSE
HOWARD COUNTY, MARYLAND
3RD ELECTION DISTRICT, CENSUS TRACT 6030
TAX MAP 16, PARCELS 20, 21, 234 AND 406

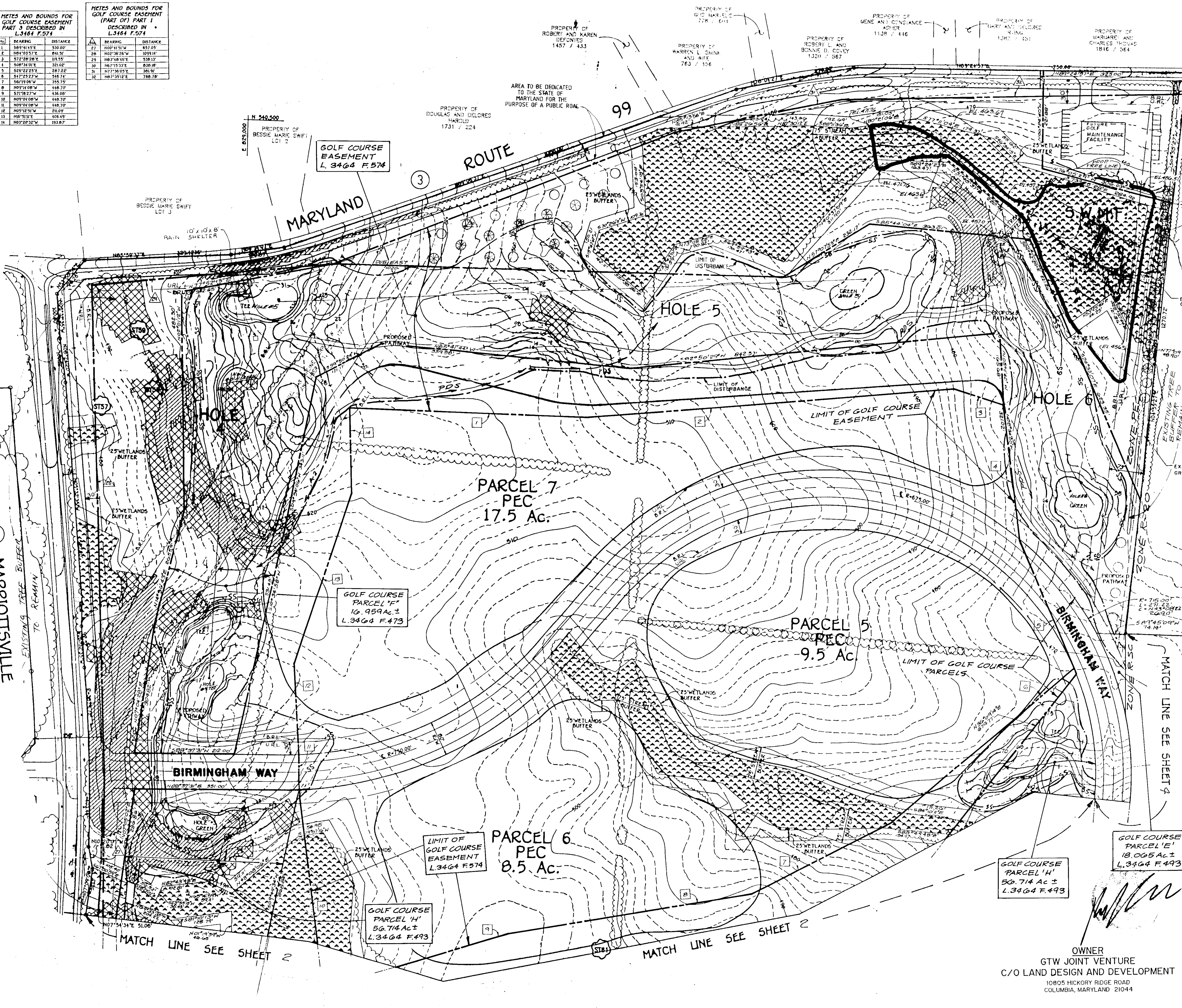
SITE, SEDIMENT & EROSION CONTROL PLAN

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
(410) 997-0236 Balt. (301) 621-5521 Wash. (410) 997-0298 Fax

SDP-96-35

METES AND BOUNDS FOR GOLF COURSE EASEMENT PART 3 DESCRIBED IN L.3464 F.574		
No.	BEARING	DISTANCE
1	S89°41'45"E	530.00'
2	N84°03'57"E	841.51'
3	S72°28'28"E	119.55'
4	S08°34'01"E	321.02'
5	S26°22'25"E	287.22'
6	S47°25'23"W	546.74'
7	S61°19'06"W	355.75'
8	N09°14'08"W	448.70'
9	S71°18'27"W	436.08'
10	N09°04'08"W	448.70'
11	N09°04'08"W	448.70'
12	N05°12'51"W	211.09'
13	N16°51'11"E	406.45'
14	N03°20'32"W	193.87'

METES AND BOUNDS FOR GOLF COURSE EASEMENT (PART OF) PART 1 DESCRIBED IN L.3464 F.574		
No.	BEARING	DISTANCE
27	N00°41'51"W	657.05'
28	N02°36'26"W	1099.14'
29	N83°48'46"E	538.13'
30	N67°15'33"E	838.16'
31	N77°36'05"E	381.91'
32	N87°35'12"E	788.78'



OWNER
GTW JOINT VENTURE
C/O LAND DESIGN AND DEVELOPMENT
10805 HICKORY RIDGE ROAD
COLUMBIA, MARYLAND 21044

AS-BUILT CERTIFICATION

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

SIGNATURE P.E. NO.: DATE:

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

BY THE DEVELOPER:

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

SIGNATURE OF DEVELOPER — DATE 9/15/95

Thomas Healy
PRINTED NAME OF DEVELOPER

BY THE ENGINEER:

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

SIGNATURE OF ENGINEER — DATE 9-15-95

PRINTED NAME OF ENGINEER

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

USDA – NATURAL RESOURCES CONSERVATION SERVICE — DATE 6/6/96

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

HOWARD SOIL CONSERVATION DISTRICT — DATE 6/6/96

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE

CHIEF, DIVSION OF LAND DEVELOPMENT AND RESEARCH — DATE 6/14/96

DIRECTOR — DATE

94010	SEPT. 95
M.P.	J.H.
	1"=100'

1 ADD RAIN SHELTER 9/16/96

WAVERLY GOLF COURSE

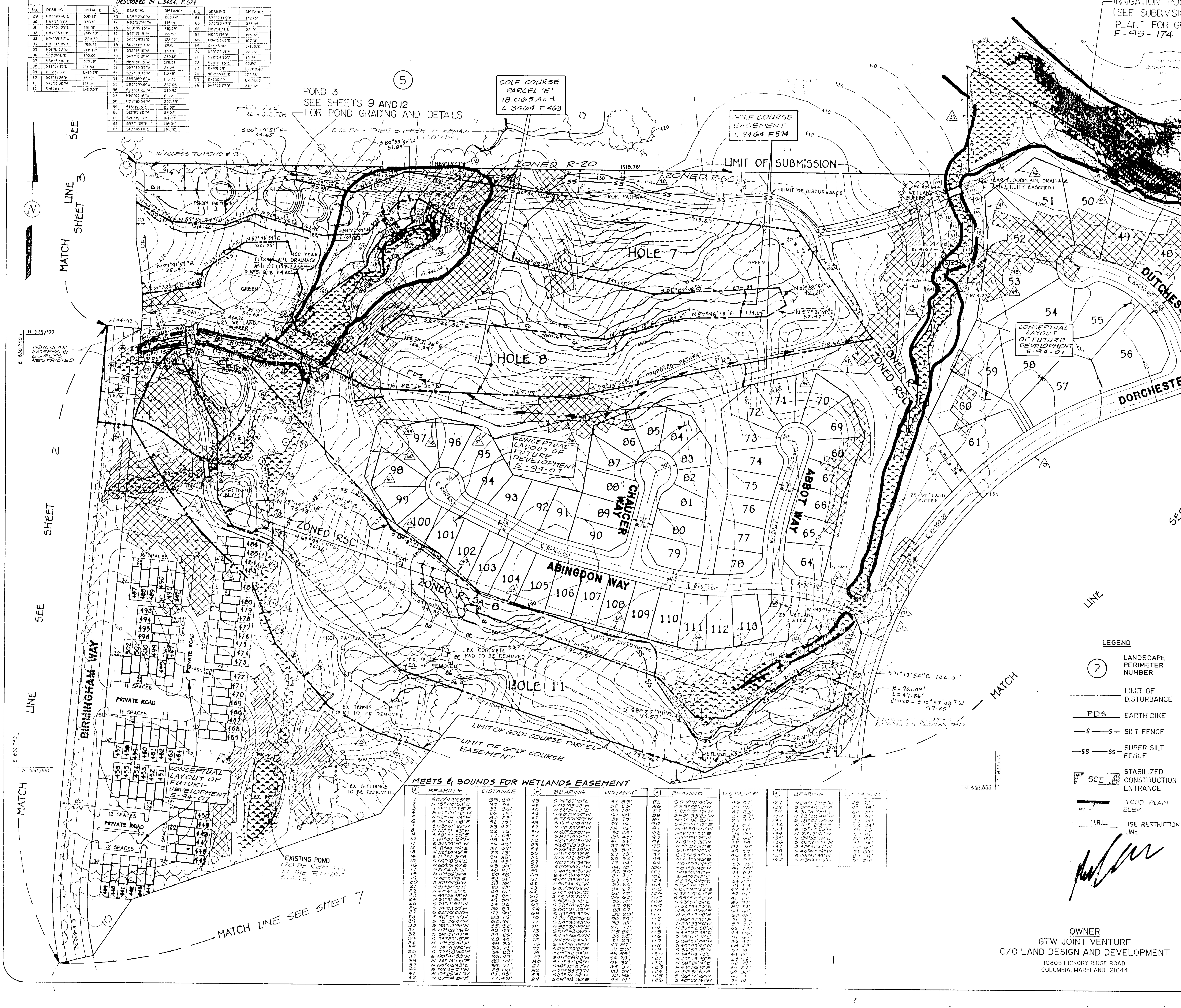
HOWARD COUNTY, MARYLAND
3RD ELECTION DISTRICT, CENSUS TRACT 6030
TAX MAP 16, PARCELS 20, 21, 234 AND 406

SITE, SEDIMENT & EROSION CONTROL 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

METES AND BOUNDS FOR GOLF COURSE EASEMENT (PART OF PART 1) DESCRIBED IN L.3464, F.574

No.	BEARING	DISTANCE	No.	BEARING	DISTANCE	No.	BEARING	DISTANCE
29	N83°48'46"E	538.13'	43	N38°12'40"W	200.44'	64	S72°23'09"E	132.45'
30	N67°15'33"E	838.16'	44	N83°27'49"W	145.91'	65	S76°23'47"E	376.05'
31	N77°36'05"E	381.91'	45	N69°09'45"W	410.38'	66	N89°11'34"E	37.15'
32	N87°35'12"E	768.78'	46	S52°01'18"W	144.50'	67	N83°11'16"E	195.02'
33	S04°55'27"W	1220.72'	47	S03°09'37"E	123.92'	68	N04°53'06"E	107.31'
34	N89°45'09"E	1918.76'	48	S07°41'58"W	20.01'	69	R=475.00'	L=128.91'
35	N01°51'22"W	248.47'	49	S53°46'16"W	45.49'	70	S65°27'19"E	22.26'
36	S61°06'41"E	690.00'	50	S43°56'10"W	340.13'	71	S22°54'23"E	45.76'
37	N58°50'02"E	308.18'	51	N85°56'15"W	126.34'	72	S70°12'45"E	60.00'
38	S44°59'15"E	134.53'	52	S67°45'57"W	24.25'	73	R=901.09'	L=788.40'
39	R=1239.33'	L=45.29'	53	S77°39'33"W	113.46'	74	N69°55'06"E	177.66'
40	S02°41'26"E	35.37'	54	S69°38'48"W	136.75'	75	R=730.00'	L=174.00'
41	S42°16'38"W	156.34'	55	S83°55'48"W	237.06'	76	S47°58'07"E	340.32'
42	R=670.00'	L=110.59'	56	S74°24'22"W	245.93'			
			57	N60°03'18"W	61.22'			
			58	N87°18'54"W	207.79'			
			59	S46°19'15"E	20.00'			
			60	S13°05'28"W	119.67'			
			61	S26°39'13"E	104.00'			
			62	S57°11'09"E	148.34'			
			63	S47°48'40"E	130.02'			



MEETS & BOUNDS FOR WETLANDS EASEMENT

#	BEARING	DISTANCE	#	BEARING	DISTANCE	#	BEARING	DISTANCE	#	BEARING	DISTANCE
1	S00°48'25"E	38.29'	43	S74°57'10"E	51.83'	85	S53°01'40"W	46.57'	127	N04°56'25"W	45.75'
2	N15°05'53"E	37.34'	44	N00°53'03"W	32.26'	86	S33°08'12"W	29.75'	128	S00°40'12"E	47.95'
3	N14°27'28"E	32.36'	45	N52°51'13"E	43.14'	87	S25°12'28"W	47.23'	129	S31°40'55"E	61.31'
4	S10°01'12"W	26.13'	46	S65°59'50"W	61.69'	88	S86°33'23"W	21.57'	130	N23°32'48"W	23.57'
5	N02°18'13"W	80.23'	47	S72°01'09"W	34.75'	89	S07°18'26"E	26.92'	131	S18°06'05"W	33.74'
6	S00°41'08"E	52.15'	48	S80°11'09"W	29.16'	90	S69°01'12"E	26.02'	132	N10°12'31"E	32.34'
7	S03°51'22"W	33.42'	49	N79°25'25"W	59.16'	91	N04°55'07"W	52.10'	133	S15°17'26"W	55.26'
8	N16°51'43"W	22.76'	50	N68°20'01"W	39.65'	92	N08°17'54"E	34.00'	134	N21°13'41"W	10.19'
9	S28°10'50"E	17.08'	51	S81°15'01"E	28.45'	93	N00°59'55"W	32.62'	135	S39°55'28"E	32.87'
10	S81°07'28"W	48.47'	52	N84°26'30"W	41.54'	94	N18°09'38"W	12.55'	136	S06°33'09"W	32.74'
11	S31°39'57"W	46.43'	53	N68°23'38"W	37.85'	95	N80°57'30"E	84.38'	137	S42°51'44"W	50.61'
12	S18°40'09"E	31.09'	54	N86°50'24"W	18.50'	96	S31°30'45"W	49.55'	138	S40°40'19"W	24.69'
13	N32°24'46"E	23.13'	55	N51°45'27"E	27.13'	97	S12°48'49"W	46.22'	139	S06°41'38"W	83.58'
14	S11°51'30"E	29.35'	56	N04°22'39"E	25.32'	98	S00°09'46"E	54.92'	140	S03°00'23"W	51.29'
15	S69°08'38"E	18.45'	57	N07°59'34"W	19.19'	99	N01°07'02"E	53.74'			
16	N60°03'50"E	63.30'	58	S80°16'07"W	18.10'	100	S07°37'45"W	59.69'			
17	N20°46'21"E	40.91'	59	S44°04'32"W	20.30'	101	S04°01'41"W	44.87'			
18	N07°06'38"E	50.58'	60	S41°34'47"W	21.47'	102	S08°47'42"E	73.43'			
19	N40°37'28"E	32.34'	61	S45°35'51"W	63.15'	103	S29°09'25"E	64.02'			
20	S52°54'34"W	58.38'	62	N50°44'42"W	38.22'	104	S16°44'15"E	79.63'			
21	N31°30'13"E	20.42'	63	S83°39'56"W	34.27'	105	N22°30'22"E	42.42'			
22	N47°41'25"E	45.01'	64	S14°18'00"E	32.70'	106	N32°19'01"E	32.81'			
23	N89°06'48"W	49.20'	65	S25°22'26"W	36.60'	107	S55°27'52"W	41.17'			
24	N61°51'50"E	49.50'	66	N56°03'42"E	55.10'	108	N63°57'29"E	86.97'			
25	S79°17'54"W	54.06'	67	S72°14'45"W	40.48'	109	N66°53'26"E	80.54'			
26	S74°23'50"W	36.29'	68	S00°31'35"E	28.97'	110	N80°07'00"E	69.18'			
27	S66°26'06"W	97.90'	69	S18°59'32"W	32.23'	111	N70°19'08"E	60.48'			
28	S48°10'11"W	83.16'	70	N35°20'56"E	50.55'	112	N86°07'51"E	51.36'			
29	S15°56'07"W	60.94'	71	S54°30'55"W	38.18'	113	N35°33'56"W	59.23'			
30	S33°02'34"W	55.32'	72	N82°24'49"E	25.77'	114	N37°02'58"W	66.23'			
31	S07°28'38"W	43.97'	73	S25°43'08"W	25.84'	115	N43°37'38"E	43.06'			
32	S58°01'47"E	29.86'	74	S43°56'50"W	35.35'	116	S78°01'11"E	31.67'			
33	S75°27'18"E	28.45'	75	N45°02'46"E	21.29'	117	S38°37'04"W	36.47'			
34	N79°55'41"W	48.36'	76	S14°31'19"W	49.84'	118	S45°55'47"W	69.63'			
35	N74°53'26"W	36.72'	77	S03°26'21"E	31.33'	119	S56°57'15"W	53.14'			
36	S77°58'49"E	54.23'	78	N85°42'04"W	48.85'	120	N44°08'13"E	44.01'			
37	S80°41'53"W	26.49'	79	S19°08'42"W	54.78'	121	N67°05'48"E	65.95'			
38	N74°14'00"E	88.74'	80	S17°31'29"W	54.32'	122	N58°24'14"E	52.72'			
39	N84°06'43"E	38.71'	81	S48°10'57"W	35.37'	123	N44°36'31"E	40.27'			
40	S53°45'07"W	25.00'	82	N79°33'53"W	28.59'	124	N34°51'40"E	69.30'			
41	N17°26'41"W	21.95'	83	S27°10'18"W	70.96'	125	S26°17'16"W	50.17'			
42	N27°04'29"E	17.43'	84	S09°48'30"E	43.14'	126	S40°22'30"W	25.44			

LEGEND

(2)	LANDSCAPE PERIMETER NUMBER
	LIMIT OF DISTURBANCE
PDS	EARTH DIKE
—S—S—	SILT FENCE
—SS—SS—	SUPER SILT FENCE
SCE	STABILIZED CONSTRUCTION ENTRANCE
	FLOOD PLAIN ELEV.
URL	USE RESTRICTION LINE

OWNER
GTW JOINT VENTURE
C/O LAND DESIGN AND DEVELOPMENT
10805 HICKORY RIDGE ROAD
COLUMBIA, MARYLAND 21044

AS-BUILT CERTIFICATION

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

SIGNATURE ______ P.E. NO.: ______ DATE ______

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

BY THE DEVELOPER:

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

SIGNATURE OF DEVELOPER — DATE 9/15/95
Thomas Henry
PRINTED NAME OF DEVELOPER

BY THE ENGINEER:

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

SIGNATURE OF ENGINEER — DATE 9-15-95
R. JACOBI-TEHCHMAT
PRINTED NAME OF ENGINEER

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

USDA - NATURAL RESOURCES CONSERVATION SERVICE — DATE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT

HOWARD SOIL CONSERVATION DISTRICT — DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE

CHIEF, DIVSION OF LAND DEVELOPMENT AND RESEARCH — DATE

DIRECTOR — DATE

94010	SEPT 95
M.P.	J.H.
1"=100'	J.H.

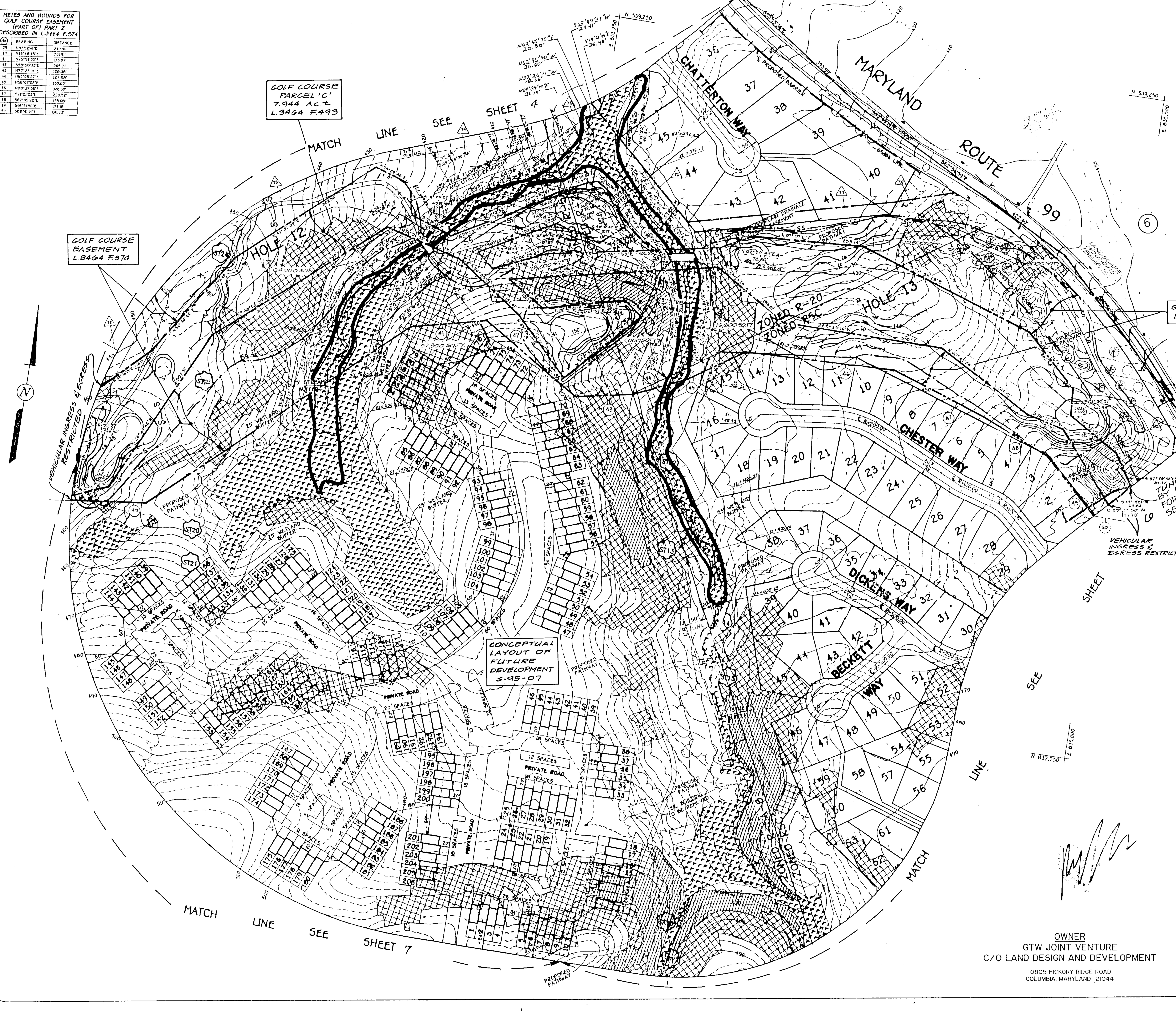
WAVERLY GOLF COURSE

HOWARD COUNTY, MARYLAND
3RD ELECTION DISTRICT, CENSUS TRACT 6030
TAX MAP 16, PARCELS 20, 21, 234 AND 406

SITE, SEDIMENT & EROSION CONTROL PLAN

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors

METES AND BOUNDS FOR GOLF COURSE EASEMENT (PART OF) PART 2 DESCRIBED IN L.3464 F.574		
No.	BEARING	DISTANCE
39	N83°12'41"E	240.90'
40	N16°48'45"E	701.91'
41	N75°54'03"E	176.07'
42	S58°58'33"E	265.72'
43	N77°23'04"E	128.38'
44	N65°08'37"E	127.88'
45	N56°02'02"E	150.00'
46	N88°37'36"E	336.30'
47	S71°21'23"E	220.52'
48	S67°05'22"E	175.08'
49	S46°51'50"E	174.18'
50	S88°41'14"E	80.73'



OWNER
GTW JOINT VENTURE
C/O LAND DESIGN AND DEVELOPMENT

10805 HICKORY RIDGE ROAD
COLUMBIA, MARYLAND 21044

LEGEND:

- LIMIT OF DISTURBANCE
- PDS — EARTH DIKE
- —S——S— SILT FENCE
- —SS——SS— SUPER SILT FENCE
- SCE — STABILIZED CONSTRUCTION ENTRANCE
- FLOOD PLAIN ELEV.
- U.R.L. — USE RESTRICTION LINE
- (2) LANDSCAPE PERIMETER NUMBER

AS-BUILT CERTIFICATION

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

P.E. NO.: ______

SIGNATURE DATE: ______

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

BY THE DEVELOPER:

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

SIGNATURE OF DEVELOPER — DATE 9/15/95

Thomas Henry
PRINTED NAME OF DEVELOPER

BY THE ENGINEER:

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

SIGNATURE OF ENGINEER — DATE 9-15-95

PRINTED NAME OF ENGINEER: K. TACCKMAT

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

USDA – NATURAL RESOURCES CONSERVATION SERVICE — DATE 6/6/96

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

HOWARD SOIL CONSERVATION DISTRICT — DATE 6/6/96

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE

CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH — DATE

DIRECTOR — DATE

PROJECT	DATE
94010	SEPT.95
DESIGNED BY: M.P.	ENGINEERING: J.H.
SCALE: 1"=100'	DRAWN: J.H.

WAVERLY GOLF COURSE

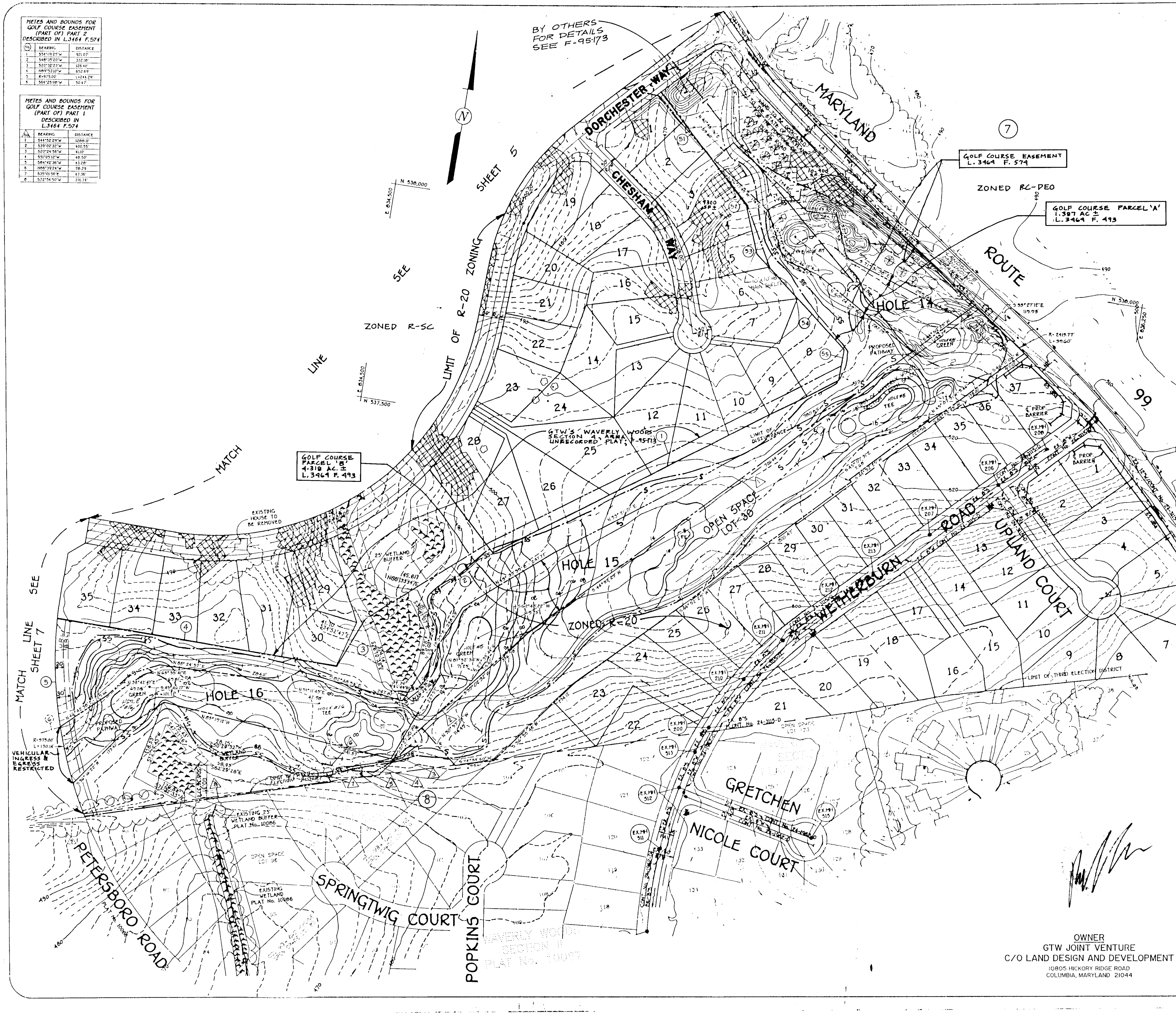
HOWARD COUNTY, MARYLAND
3RD ELECTION DISTRICT, CENSUS TRACT 6030
TAX MAP 16, PARCELS 20, 21, 234 AND 406

SITE, SEDIMENT & EROSION CONTROL 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

METES AND BOUNDS FOR GOLF COURSE EASEMENT (PART OF) PART 2 DESCRIBED IN L.3464 F.574		
No.	BEARING	DISTANCE
1	S54°09'25"W	921.07'
2	S48°35'20"W	332.18'
3	S20°32'23"W	126.40'
4	N89°53'10"W	652.69'
5	R=975.00'	L=244.29'
6	S64°25'08"W	50.47'

METES AND BOUNDS FOR GOLF COURSE EASEMENT (PART OF) PART 1 DESCRIBED IN L.3464 F.574		
No.	BEARING	DISTANCE
1	S44°52'29"W	1288.11'
2	S39°02'32"W	400.55'
3	S20°24'56"W	41.10'
4	S51°05'12"W	48.50'
5	S84°42'36"W	43.28'
6	N86°39'24"W	78.29
7	S35°01'56"E	47.36'
8	S72°54'50"W	331.74'



LEGEND:

- LIMIT OF DISTURBANCE
- PDS — EARTH DIKE
- —S—S— SILT FENCE
- —SS—SS— SUPER SILT FENCE
- SCE — STABILIZED CONSTRUCTION ENTRANCE
- U.R.L. — USE RESTRICTION LINE
- (2) — LANDSCAPE PERIMETER NUMBER

OWNER
GTW JOINT VENTURE
C/O LAND DESIGN AND DEVELOPMENT
10805 HICKORY RIDGE ROAD
COLUMBIA, MARYLAND 21044

AS-BUILT CERTIFICATION

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

SIGNATURE ____ P.E. NO.: ____ DATE: ____

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

BY THE DEVELOPER:

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

SIGNATURE OF DEVELOPER — DATE 9/15/95
THOMAS HEALY
PRINTED NAME OF DEVELOPER

BY THE ENGINEER:

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

SIGNATURE OF ENGINEER — DATE 9-15-95
R. JACOB HICMAT
PRINTED NAME OF ENGINEER

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

USDA - NATURAL RESOURCES CONSERVATION SERVICE — DATE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

HOWARD SOIL CONSERVATION DISTRICT — DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE

CHIEF, DIVSION OF LAND DEVELOPMENT AND RESEARCH — DATE

DIRECTOR — DATE

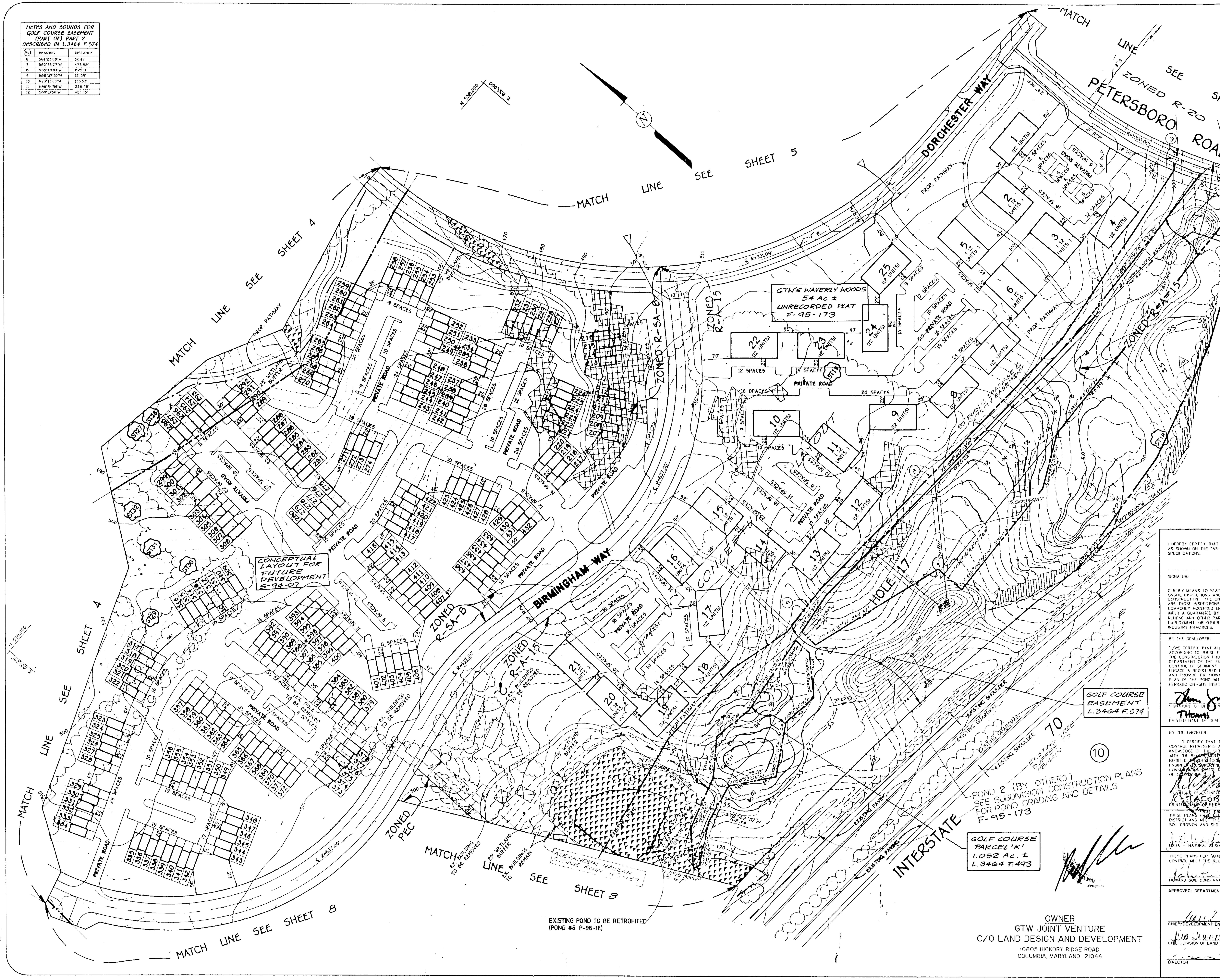
WAVERLY GOLF COURSE

HOWARD COUNTY, MARYLAND
3RD ELECTION DISTRICT, CENSUS TRACT 6030
TAX MAP 16, PARCELS 20, 21, 234 AND 406

SITE, SEDIMENT & EROSION CONTROL 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

METES AND BOUNDS FOR GOLF COURSE EASEMENT (PART OF) PART 2 DESCRIBED IN L.3464 F.574		
No.	BEARING	DISTANCE
6	S64°25'08"W	50.47'
7	S83°56'27"W	476.88'
8	N85°40'03"W	825.14'
9	S88°37'30"W	131.39'
10	N73°43'03"W	156.53'
11	N86°54'56"W	228.98'
12	S80°13'50"W	423.35'



LEGEND:

- (2) LANDSCAPE PERIMETER NUMBER
- LIMIT OF DISTURBANCE
- PDS — EARTH DIKE
- —S—S— SILT FENCE
- —SS—SS— SUPER SILT FENCE
- SCE — STABILIZED CONSTRUCTION ENTRANCE
- U.R.L. — USER RESTRICTION LINE

OWNER
GTW JOINT VENTURE
C/O LAND DESIGN AND DEVELOPMENT
10805 HICKORY RIDGE ROAD
COLUMBIA, MARYLAND 21044

AS-BUILT CERTIFICATION

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

SIGNATURE ______ P.E. NO: ______ DATE: ______

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

BY THE DEVELOPER:

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

SIGNATURE OF DEVELOPER — DATE 9/15/95

Thomas Healy
PRINTED NAME OF DEVELOPER

BY THE ENGINEER:

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

SIGNATURE OF ENGINEER — DATE 9-15-95

R. JACOB HIKMAT
PRINTED NAME OF ENGINEER

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

USDA - NATURAL RESOURCES CONSERVATION SERVICE — DATE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

HOWARD SOIL CONSERVATION DISTRICT — DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE

CHIEF, DIVSION OF LAND DEVELOPMENT AND RESEARCH — DATE

DIRECTOR — DATE

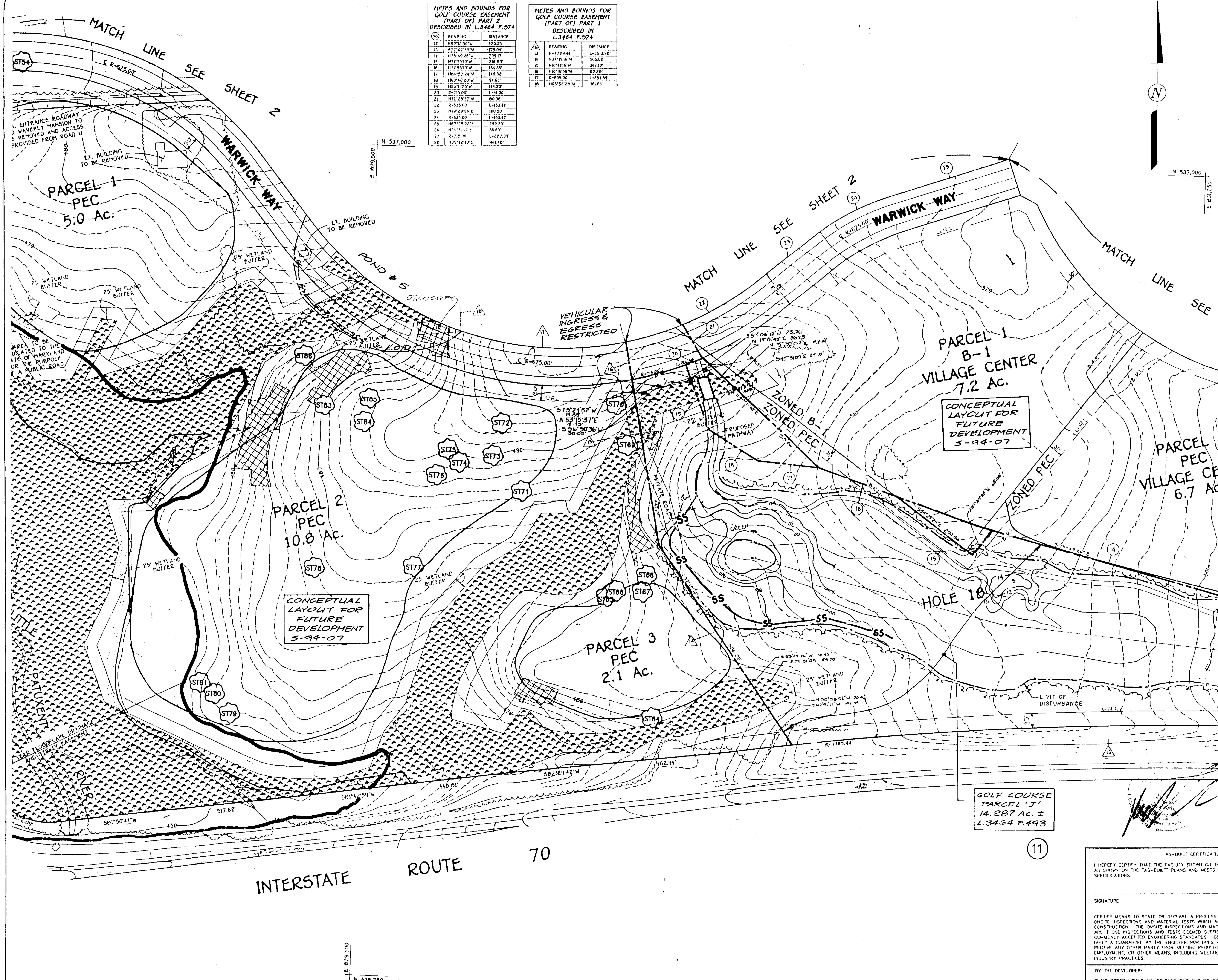
94010	SEPT. 95
M.P.	J.H.
1"=100'	J.H.

WAVERLY GOLF COURSE

HOWARD COUNTY, MARYLAND
3RD ELECTION DISTRICT, CENSUS TRACT 6030
TAX MAP 16, PARCELS 20, 21, 234 AND 406

SITE, SEDIMENT & EROSION CONTROL 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



METES AND BOUNDS FOR GOLF COURSE EASEMENT (PART OF) PART 2 DESCRIBED IN L.3464 F.574		
No.	BEARING	DISTANCE
12	S80°13'50"W	423.35'
13	S77°07'38"W	175.04'
14	N75°49'26"W	709.17'
15	N71°55'10"W	216.89'
16	N71°55'10"W	164.36'
17	N84°57'24"W	140.32'
18	N60°40'20"W	94.63'
19	N23°11'25"W	144.23'
20	R=715.00'	L=41.00'
21	N32°25'37"W	60.36'
22	R=635.00'	L=153.41'
23	N49°29'26"E	100.50'
24	R=635.00'	L=153.41'
25	N67°25'22"E	250.23'
26	N24°31'42"E	36.63'
27	R=715.00'	L=287.99'
28	N05°42'40"E	944.48'

METES AND BOUNDS FOR GOLF COURSE EASEMENT (PART OF) PART 1 DESCRIBED IN L.3464 F.574		
No.	BEARING	DISTANCE
13	R=7789.44'	L=2613.98'
14	N37°19'16"W	506.08'
15	N10°41'16"W	347.10'
16	N10°16'56"W	80.28'
17	R=635.00	L=354.59'
18	N05°52'28"W	361.63'

LEGEND:

- LIMIT OF DISTURBANCE
- EARTH DIKE
- —S——S— SILT FENCE
- —SS——SS— SUPER SILT FENCE
- SCE STABILIZED CONSTRUCTION ENTRANCE
- U.R.L. USER RESTRICTION LINE
- (2) LANDSCAPE PERIMETER NUMBER

OWNER
GTW JOINT VENTURE
C/O LAND DESIGN AND DEVELOPMENT
10805 HICKORY RIDGE ROAD
COLUMBIA, MARYLAND 21044

AS-BUILT CERTIFICATION

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

SIGNATURE ____ P.E. NO. ____ DATE: ____

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

BY THE DEVELOPER:

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

SIGNATURE OF DEVELOPER — DATE 9/15/95
Thomas Henry
PRINTED NAME OF DEVELOPER

BY THE ENGINEER:

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

SIGNATURE OF ENGINEER — DATE 9-15-95
[illegible] HIKMAT
PRINTED NAME OF ENGINEER

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

USDA – NATURAL RESOURCES CONSERVATION SERVICE — DATE 6/6/96

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

HOWARD SOIL CONSERVATION DISTRICT — DATE 6/6/96

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH — DATE 6/14/96
DIRECTOR — DATE

WAVERLY GOLF COURSE

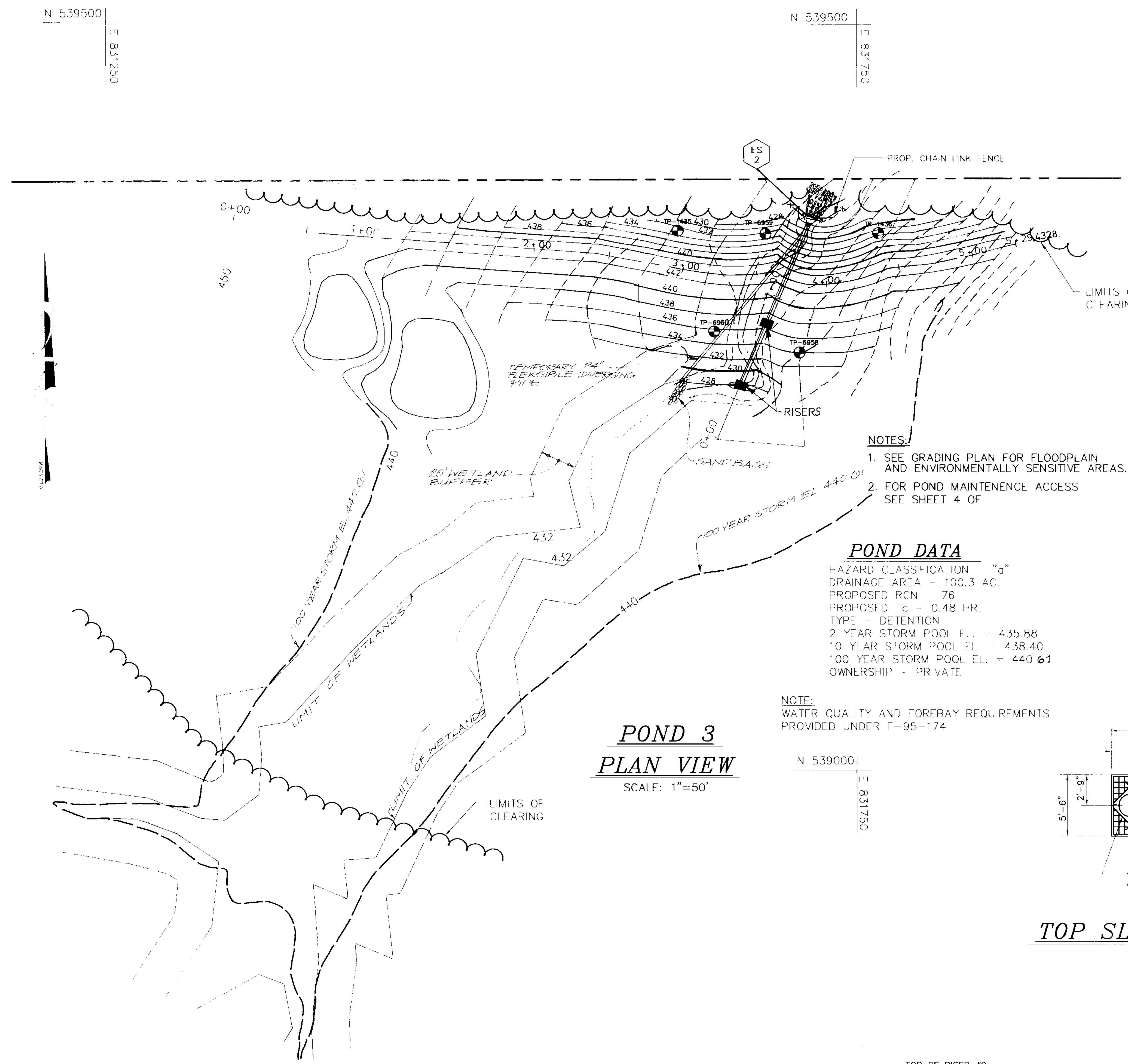
HOWARD COUNTY, MARYLAND
3RD ELECTION DISTRICT, CENSUS TRACT 6030
TAX MAP 16, PARCELS 20, 21, 234 AND 406

SITE, SEDIMENT & EROSION CONTROL PLAN

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
(410) 997-0236 Balt. (301) 621-5521 Wash. (410) 997-0293 Fax

94010 | SEPT 95 | M.P. | J.H. | 1"=100'

94010



NOTES:

1. SEE GRADING PLAN FOR FLOODPLAIN AND ENVIRONMENTALLY SENSITIVE AREAS.
2. FOR POND MAINTENENCE ACCESS SEE SHEET 4 OF

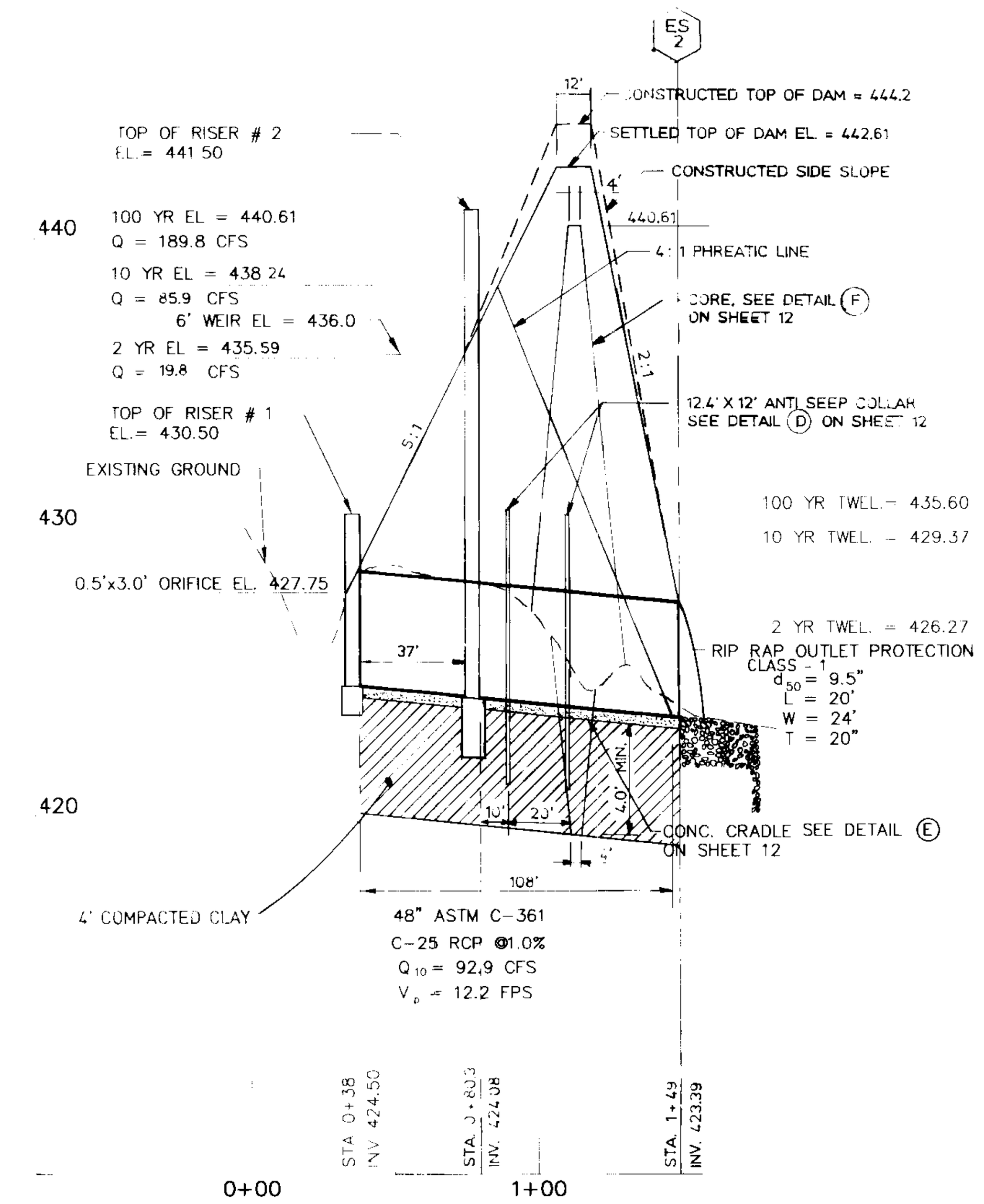
POND DATA

HAZARD CLASSIFICATION - "a"
DRAINAGE AREA - 100.3 AC.
PROPOSED RCN 76
PROPOSED Tc - 0.48 HR.
TYPE - DETENTION
2 YEAR STORM POOL EL. = 435.88
10 YEAR STORM POOL EL. - 438.40
100 YEAR STORM POOL EL. = 440 61
OWNERSHIP - PRIVATE

NOTE:
WATER QUALITY AND FOREBAY REQUIREMENTS PROVIDED UNDER F-95-174

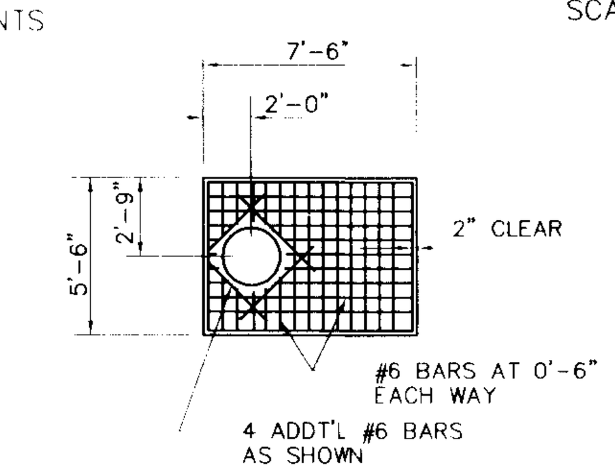
POND 3 PLAN VIEW

SCALE: 1"=50'



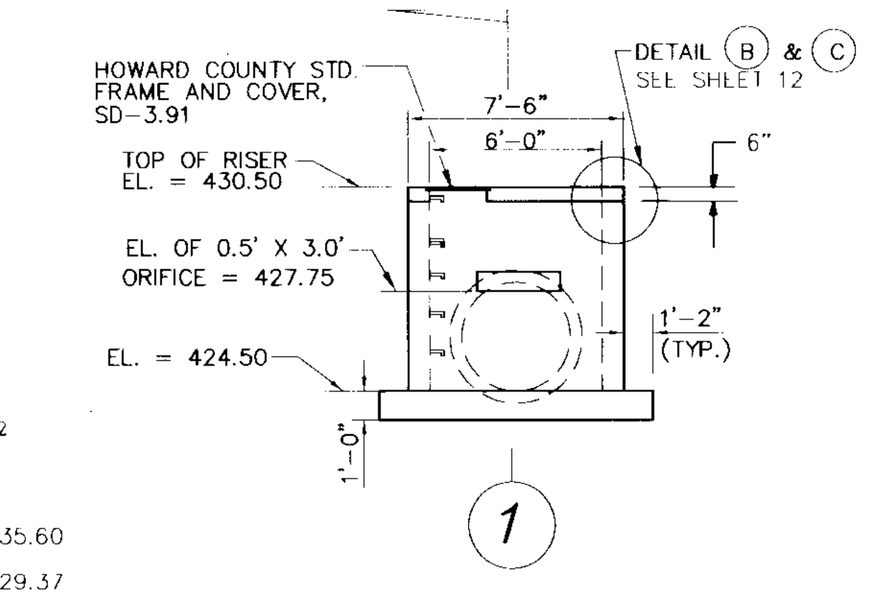
PROFILE OF PRINCIPAL SPILLWAY

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



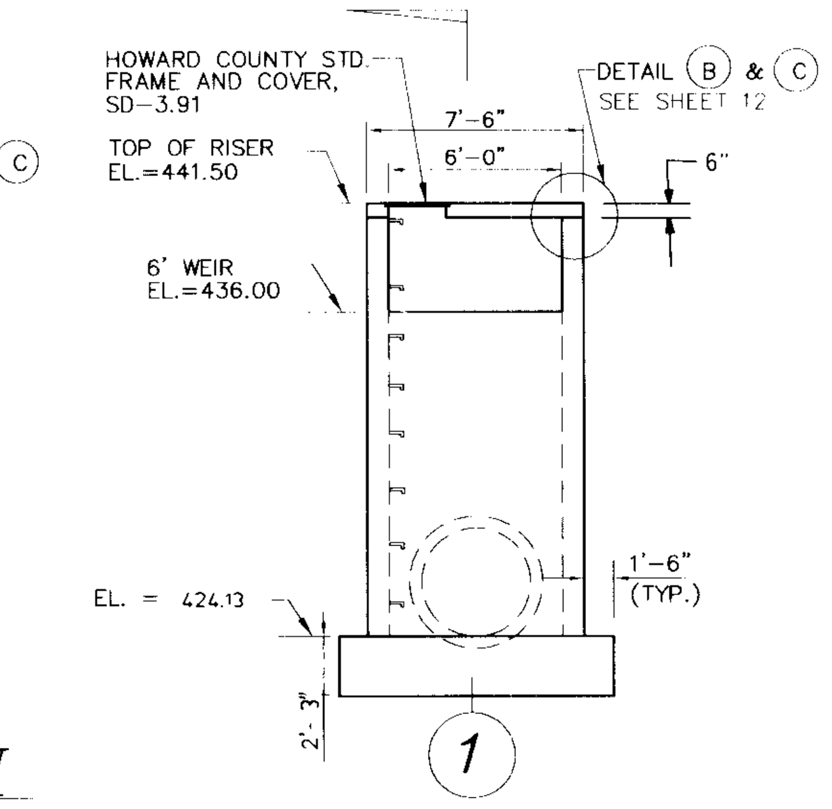
TOP SLAB DETAIL

N.T.S.



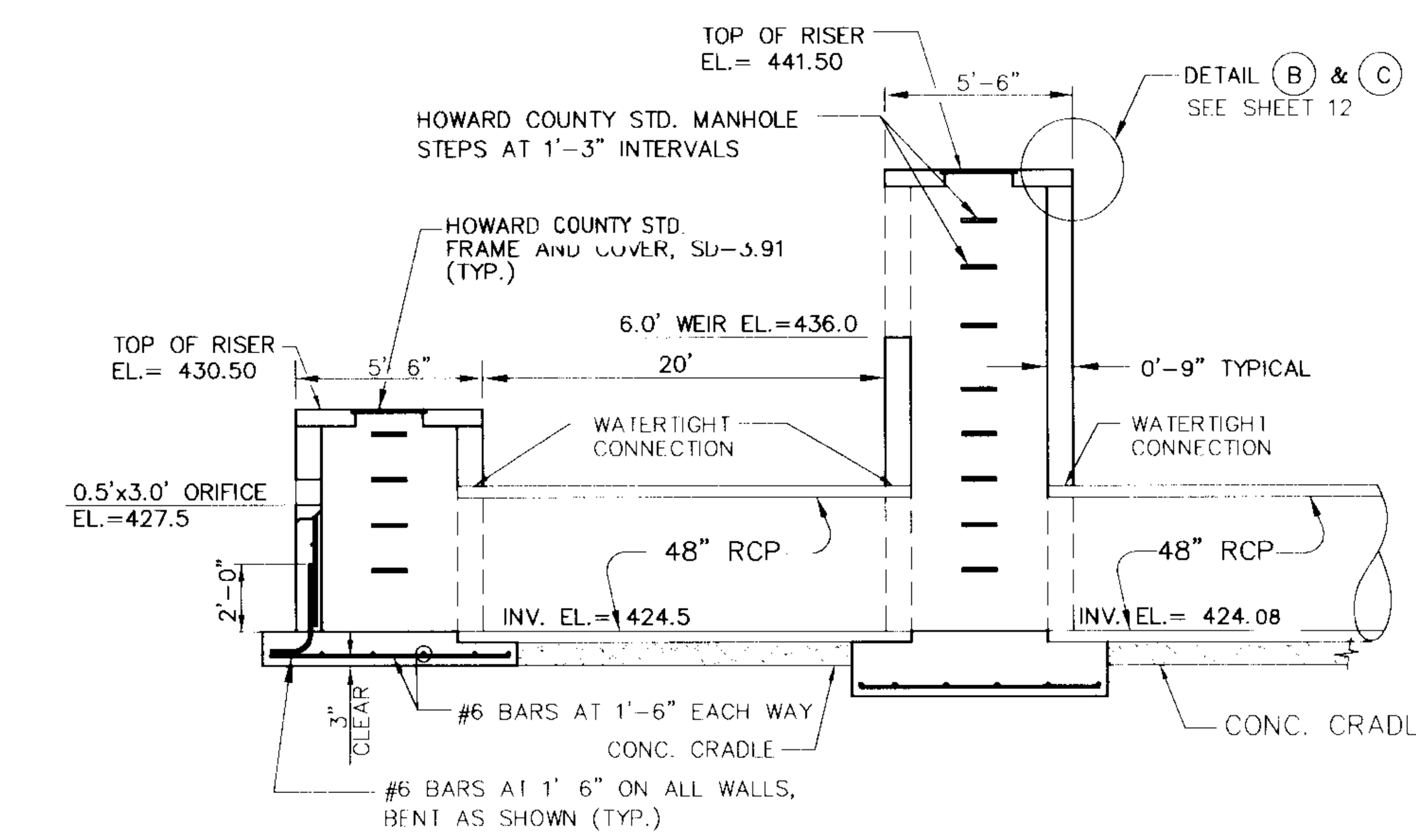
RISER #1 ELEVATION

N.T.S.



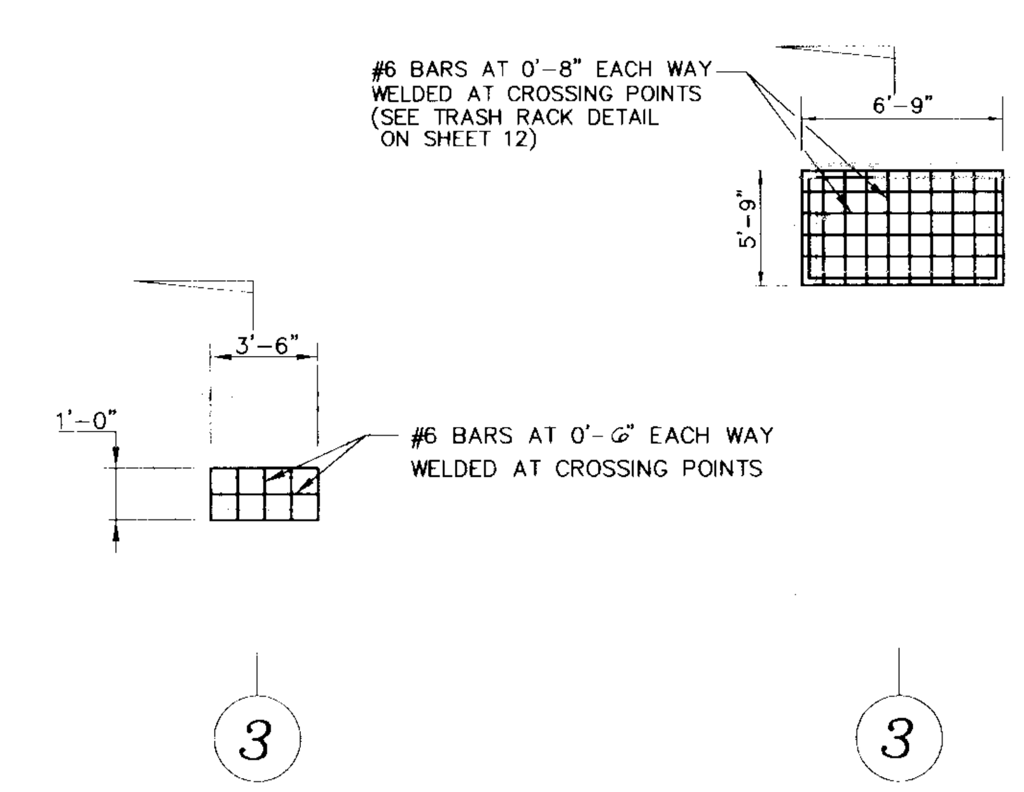
RISER #2 ELEVATION

N.T.S.



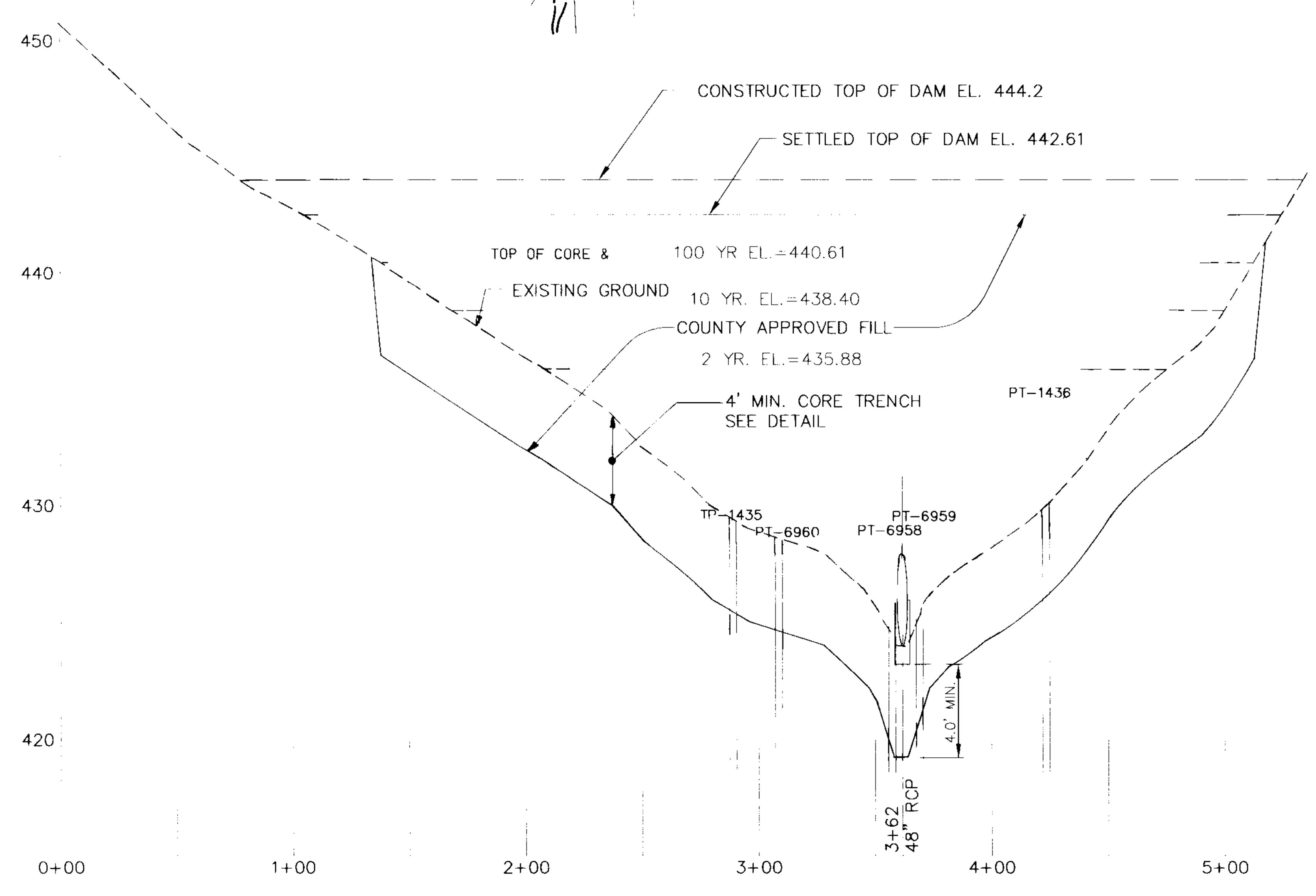
SECTION 1

N.T.S.



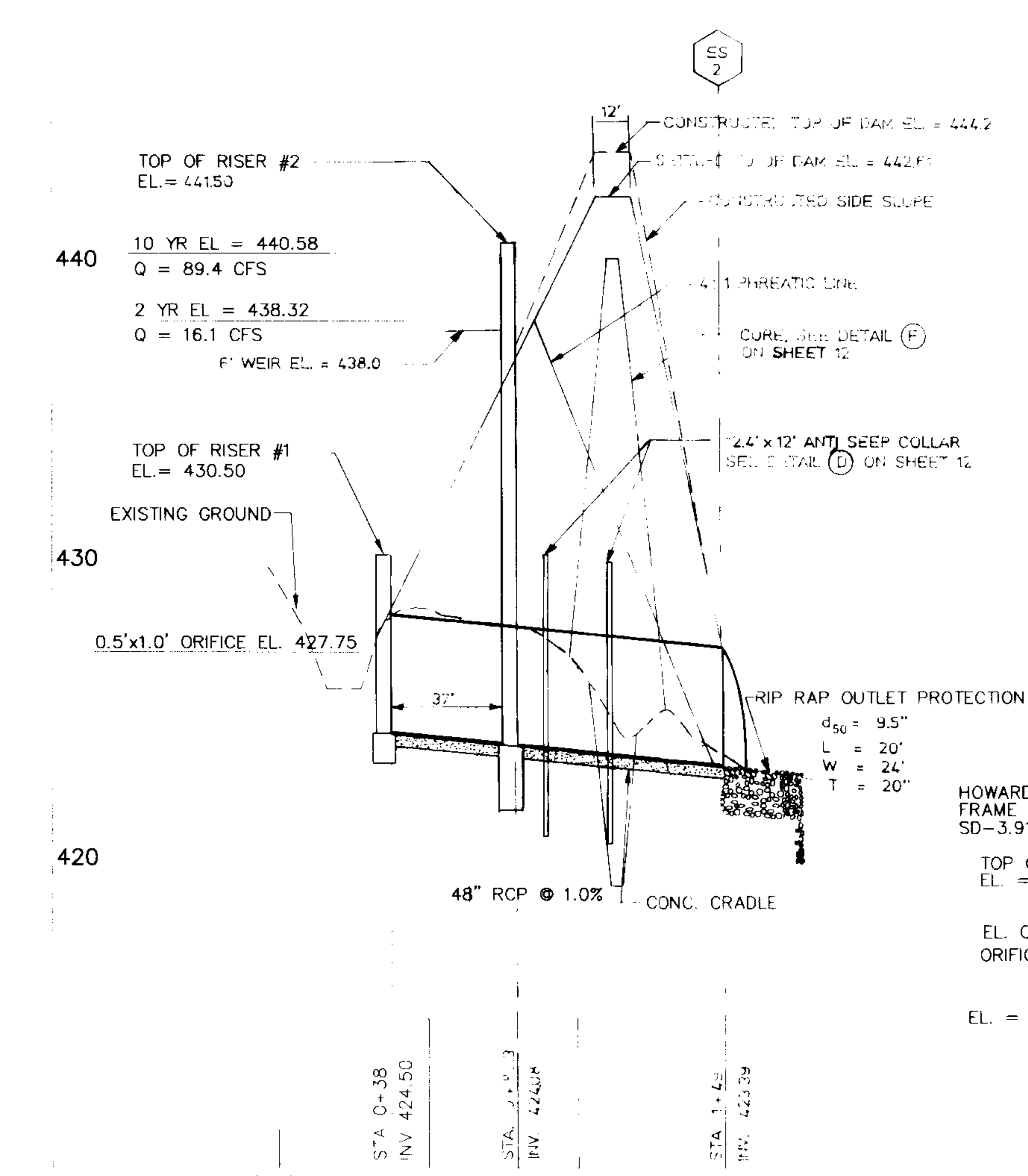
TRASH RACK ELEVATIONS

N.T.S.



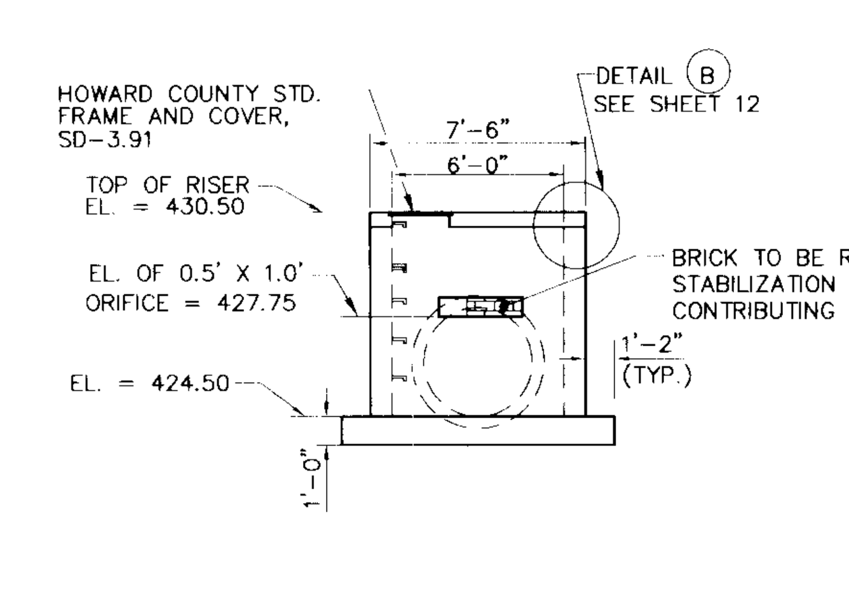
℄ TOP OF DAM PROFILE - POND 3

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



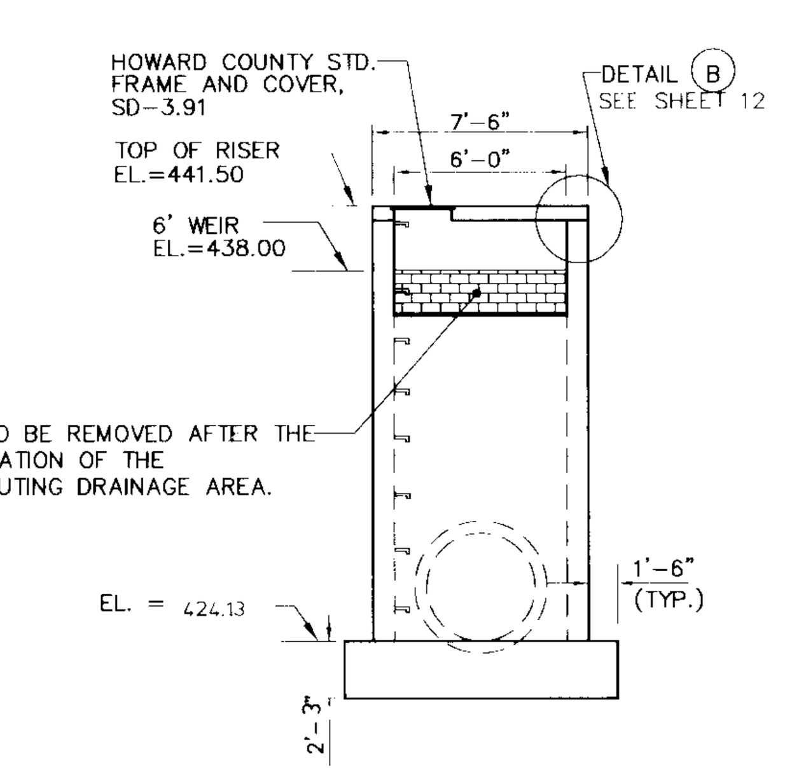
PROFILE OF PRINCIPAL SPILLWAY TEMPORARY SWM

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



RISER #1 ELEVATION TEMPORARY SWM

N.T.S.



RISER #2 ELEVATION TEMPORARY SWM

N.T.S.

AS-BUILT CERTIFICATION

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

SIGNATURE ____ P.E. NO. ____ DATE ____

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

BY THE DEVELOPER:

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

SIGNATURE OF DEVELOPER — DATE 5-28-96
PRINTED NAME OF DEVELOPER — Joseph Q Hills

BY THE ENGINEER:

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

SIGNATURE OF ENGINEER — DATE 4/9/96
PRINTED NAME OF ENGINEER — R. JACOB HIKMAT

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

USDA - NATURAL RESOURCES CONSERVATION SERVICE — DATE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

HOWARD SOIL CONSERVATION DISTRICT — DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 6.10.96
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH — DATE 6/14/96
DIRECTOR — DATE 6/14/96

94010 | FEB.96 | M.P. | J.H. | AS SHOWN | J.H.

REVISE DAM GRADING & ASSOC. CHANGES

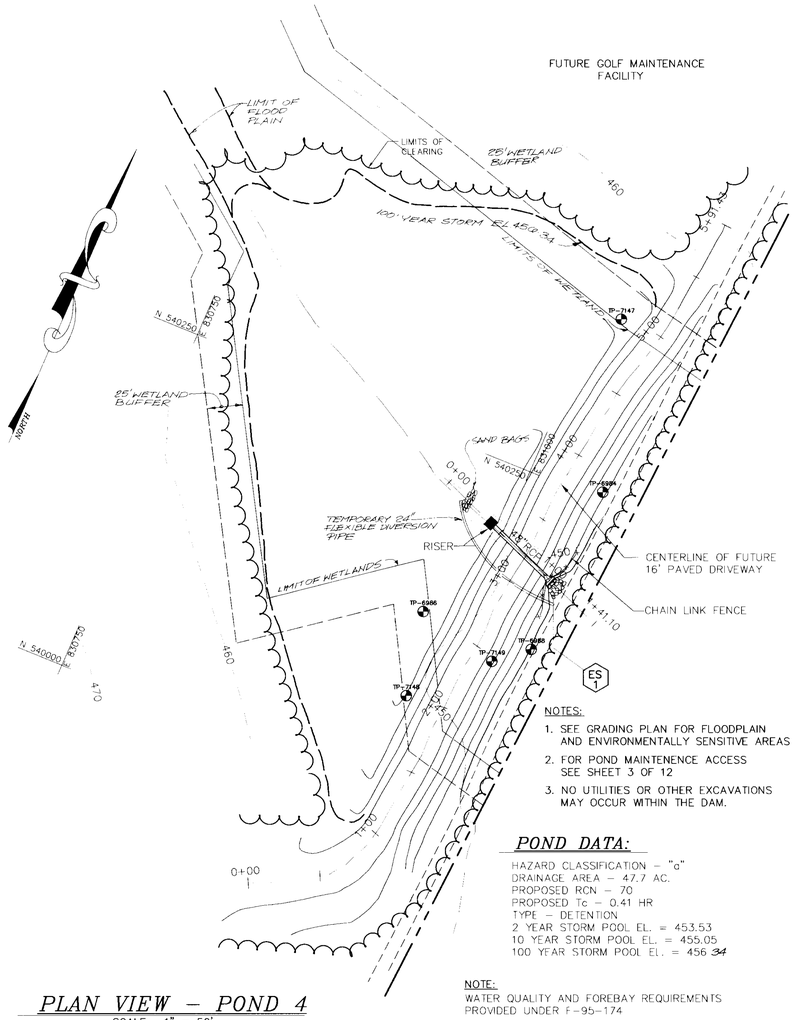
WAVERLY GOLF COURSE

HOWARD COUNTY, MARYLAND
3RD ELECTION DISTRICT, CENSUS TRACT 6030
TAX MAP 16, PARCELS 20, 21, 234 AND 406

POND 3 GRADING AND DETAILS

MILDENBERG, BOENDER & ASSOC., INC.

SDP-96-35



NOTES:

1. SEE GRADING PLAN FOR FLOODPLAIN AND ENVIRONMENTALLY SENSITIVE AREAS
2. FOR POND MAINTENENCE ACCESS SEE SHEET 3 OF 12
3. NO UTILITIES OR OTHER EXCAVATIONS MAY OCCUR WITHIN THE DAM.

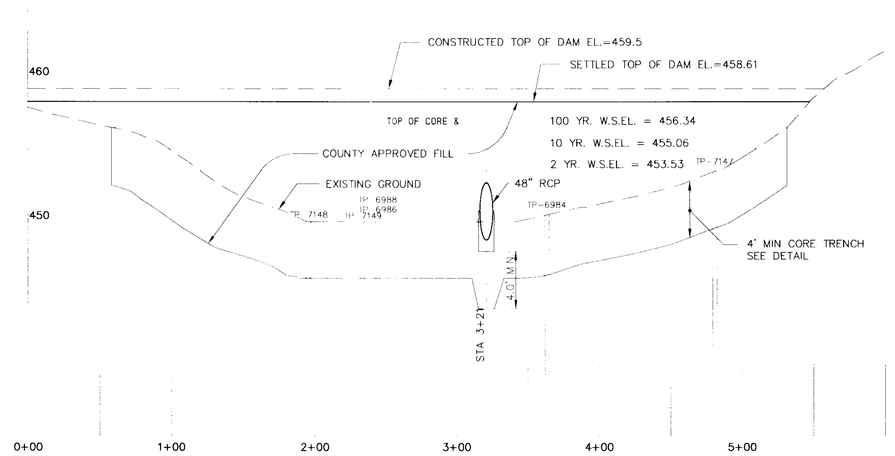
POND DATA:

HAZARD CLASSIFICATION – "a"
DRAINAGE AREA – 47.7 AC.
PROPOSED RCN – 70
PROPOSED Tc – 0.41 HR
TYPE – DETENTION
2 YEAR STORM POOL EL. = 453.53
10 YEAR STORM POOL EL. = 455.05
100 YEAR STORM POOL EL. = 456.34

NOTE:
WATER QUALITY AND FOREBAY REQUIREMENTS PROVIDED UNDER F-95-174

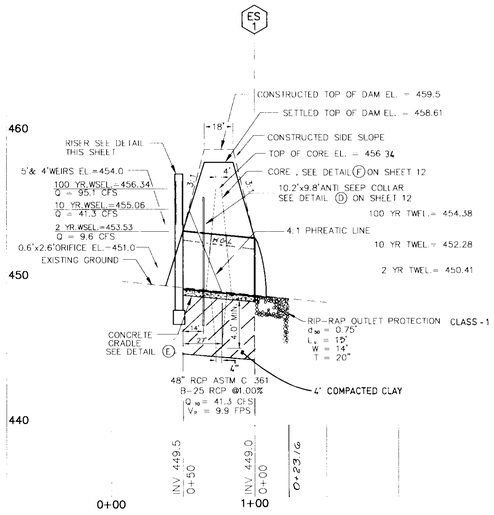
PLAN VIEW – POND 4

SCALE: 1" = 50'



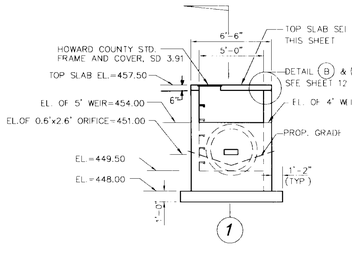
℄ OF DAM PROFILE

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



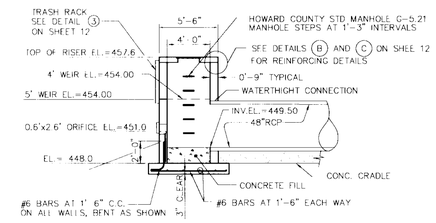
PROFILE OF PRINCIPAL SPILLWAY

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



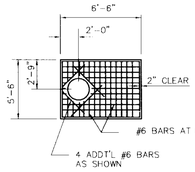
RISER ELEVATION

N.T.S.



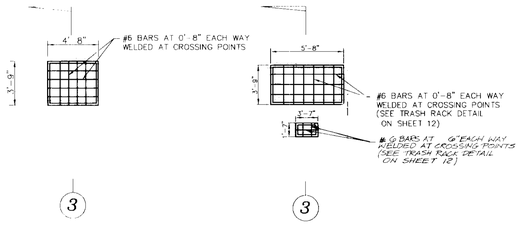
SECTION (1)

N.T.S.



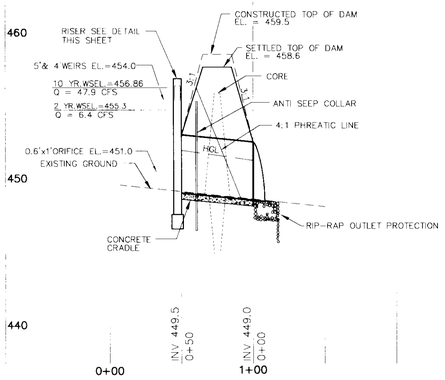
TOP SLAB DETAIL

N.T.S.



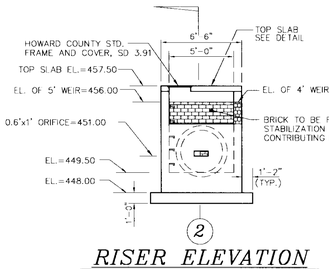
TRASH RACK ELEVATIONS

N.T.S.



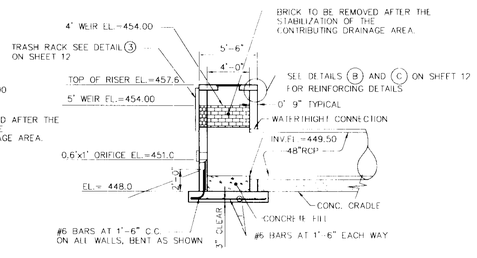
PROFILE OF PRINCIPAL SPILLWAY TEMPORARY SWM

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



RISER ELEVATION TEMPORARY SWM

N.T.S.



SECTION (2)

N.T.S.

AS-BUILT CERTIFICATION

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

SIGNATURE _____ P.E. NO.: _____ DATE: _____

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

BY THE DEVELOPER:

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

SIGNATURE OF DEVELOPER Joseph Q. Hills DATE 5-28-96
PRINTED NAME OF DEVELOPER Joseph Q. Hills

BY THE ENGINEER:

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

SIGNATURE OF ENGINEER R. Paul Hikmat DATE 4/19/96
PRINTED NAME OF ENGINEER R. PAUL HIKMAT

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

USDA – NATURAL RESOURCES CONSERVATION SERVICE _____ DATE _____

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL, MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

HOWARD SOIL CONSERVATION DISTRICT _____ DATE _____

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION _____ DATE 6.6.96

CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH Gina Sirimanji 6/14/96 DATE

DIRECTOR _____ DATE 6/14/96

94010	FEB.96	AS SHOWN J.H.
	W&P/M.P.	J.H.

WAVERLY GOLF COURSE

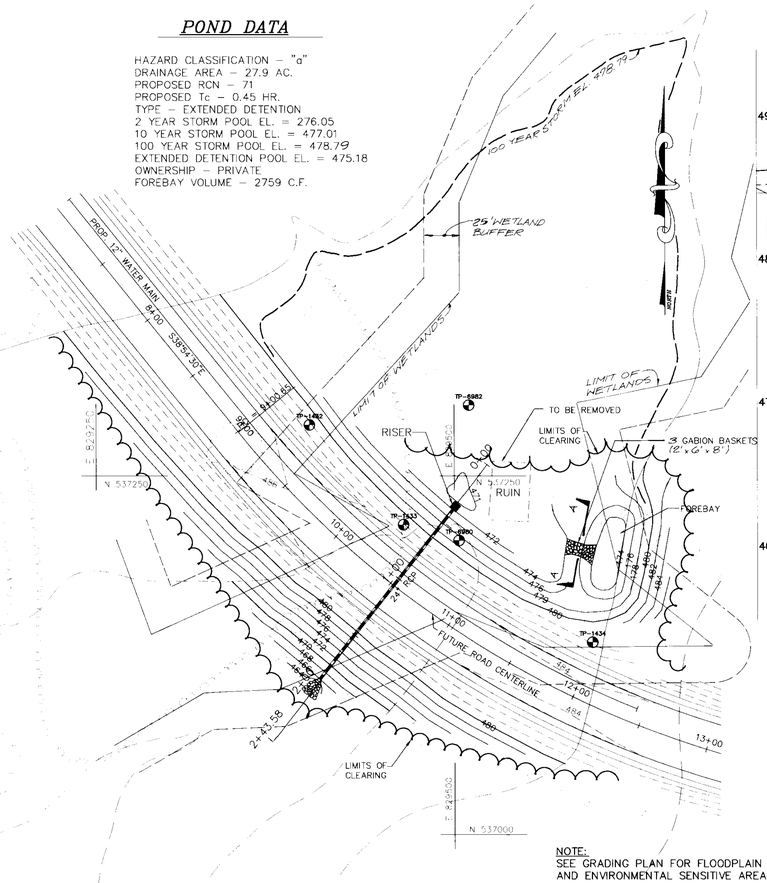
HOWARD COUNTY, MARYLAND
3RD. ELECTION DISTRICT, CENSUS TRACT 6030
TAX MAP 16, PARCELS 20, 21, 234 AND 406

POND 4 GRADING AND DETAILS

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
7672 Dorsey Hall Drive, Suite 202 Ellicott City, Maryland 21042
(410) 461-0296 Balt. (301) 621-5521 Wash. (410) 461-8961 Fax

POND DATA

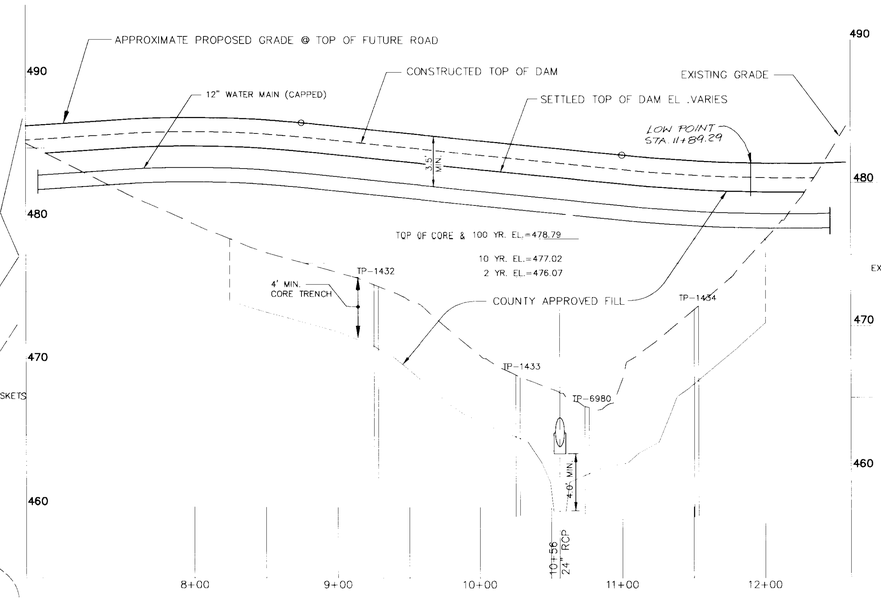
HAZARD CLASSIFICATION – "a"
DRAINAGE AREA – 27.9 AC.
PROPOSED RCN – 71
PROPOSED Tc – 0.45 HR.
TYPE – EXTENDED DETENTION
2 YEAR STORM POOL EL. = 276.05
10 YEAR STORM POOL EL. = 477.01
100 YEAR STORM POOL EL. = 478.79
EXTENDED DETENTION POOL EL. = 475.18
OWNERSHIP – PRIVATE
FOREBAY VOLUME – 2759 C.F.



NOTE:
SEE GRADING PLAN FOR FLOODPLAIN AND ENVIRONMENTAL SENSITIVE AREAS.

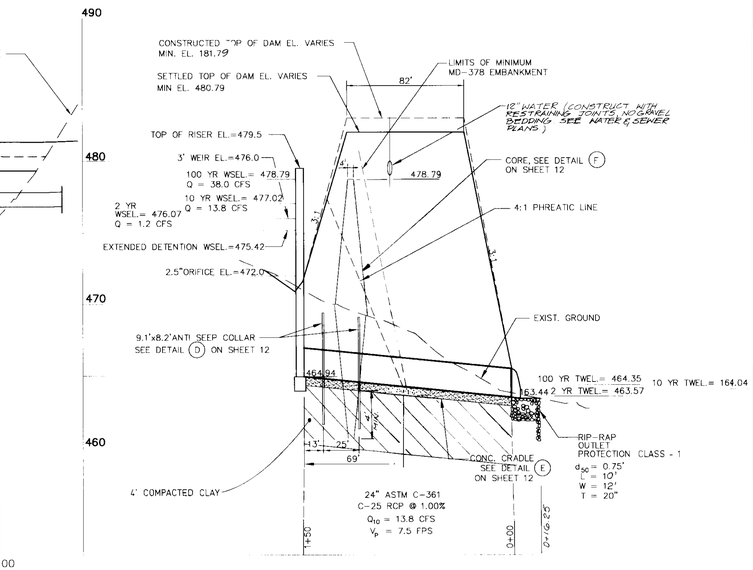
POND 5 – PLAN VIEW

SCALE: 1"=50



℄ TOP OF DAM PROFILE

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



PRINCIPAL SPILLWAY PROFILE

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

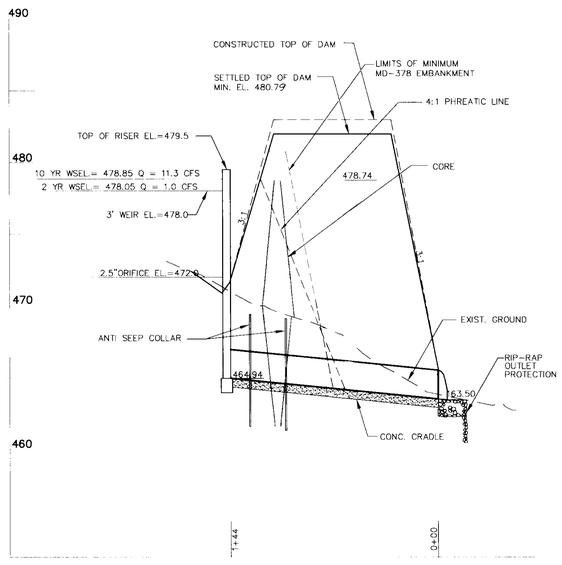
(2)

RISER ELEVATION

N.T.S.

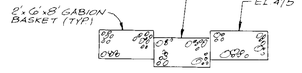
SECTION (2)

N.T.S.



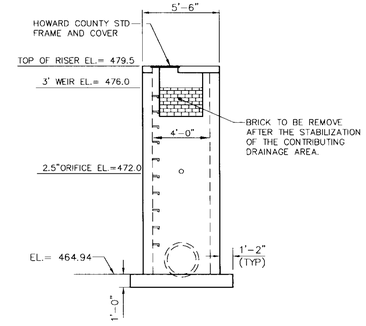
PRINCIPAL SPILLWAY PROFILE TEMPORARY SWM

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



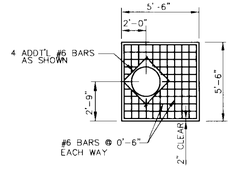
SECTION A-A

N.T.S.



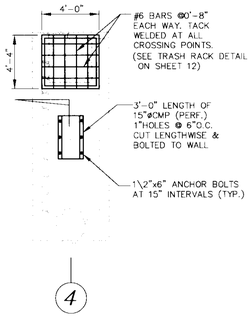
RISER ELEVATION TEMPORARY SWM

N.T.S.



TOP SLAB DETAIL

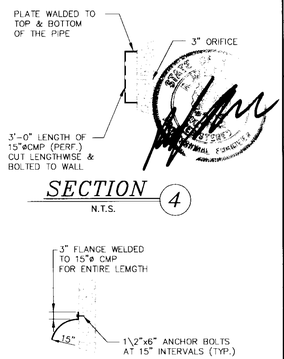
N.T.S.



(4)

TRASH RACK DETAIL

N.T.S.



(4)

SECTION

N.T.S.

LOW FLOW TRASH RACK CONNECTION DETAIL

N.T.S.

AS-BUILT CERTIFICATION

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

P.E. NO.: _____
SIGNATURE _____ DATE: _____

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

BY THE DEVELOPER:

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

SIGNATURE OF DEVELOPER _____ DATE 5-28-96
PRINTED NAME OF DEVELOPER Joseph Q. Hills

BY THE ENGINEER:

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

SIGNATURE OF ENGINEER _____ DATE 4-9-96
PRINTED NAME OF ENGINEER R. Scott HIKMAT

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

USDA – NATURAL RESOURCES CONSERVATION SERVICE _____ DATE 6/6/96

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

HOWARD SOIL CONSERVATION DISTRICT _____ DATE 6/6/96

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION _____ DATE 6/10/96

CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH _____ DATE 6/14/96

DIRECTOR _____ DATE 6/14/96

94010	FEB.96		
M.P.	J.H.		
AS SHOWN	J.H.		

description / revisions / date

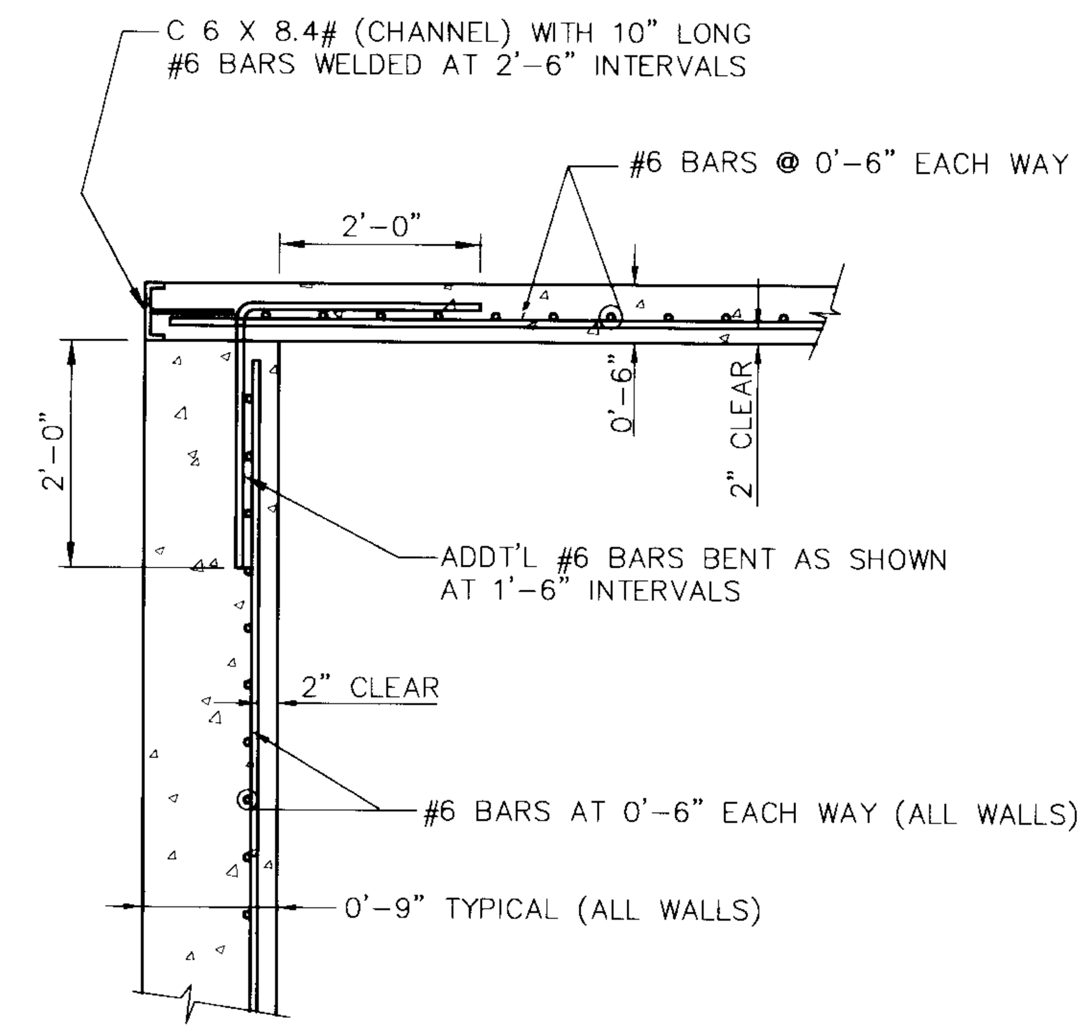
WAVERLY GOLF COURSE

HOWARD COUNTY, MARYLAND
3RD ELECTION DISTRICT, CENSUS TRACT 6030
TAX MAP 16, PARCELS 20, 21, 234 AND 406

POND 5 GRADING AND DETAILS

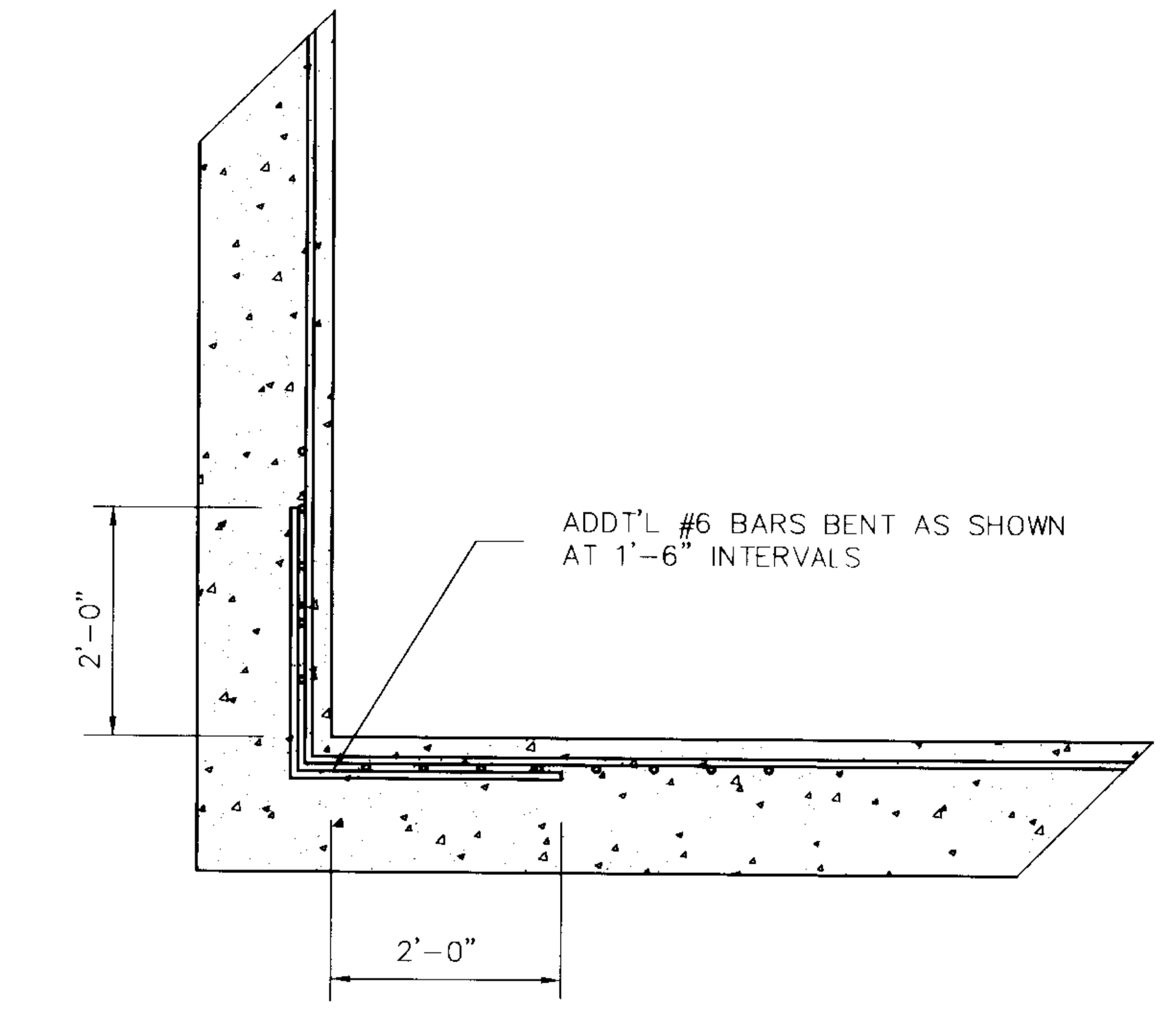
MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
(410) 997-0296 Balt. (301) 621-5521 Wash. (410) 997-0298 Fax

SDP-96-35



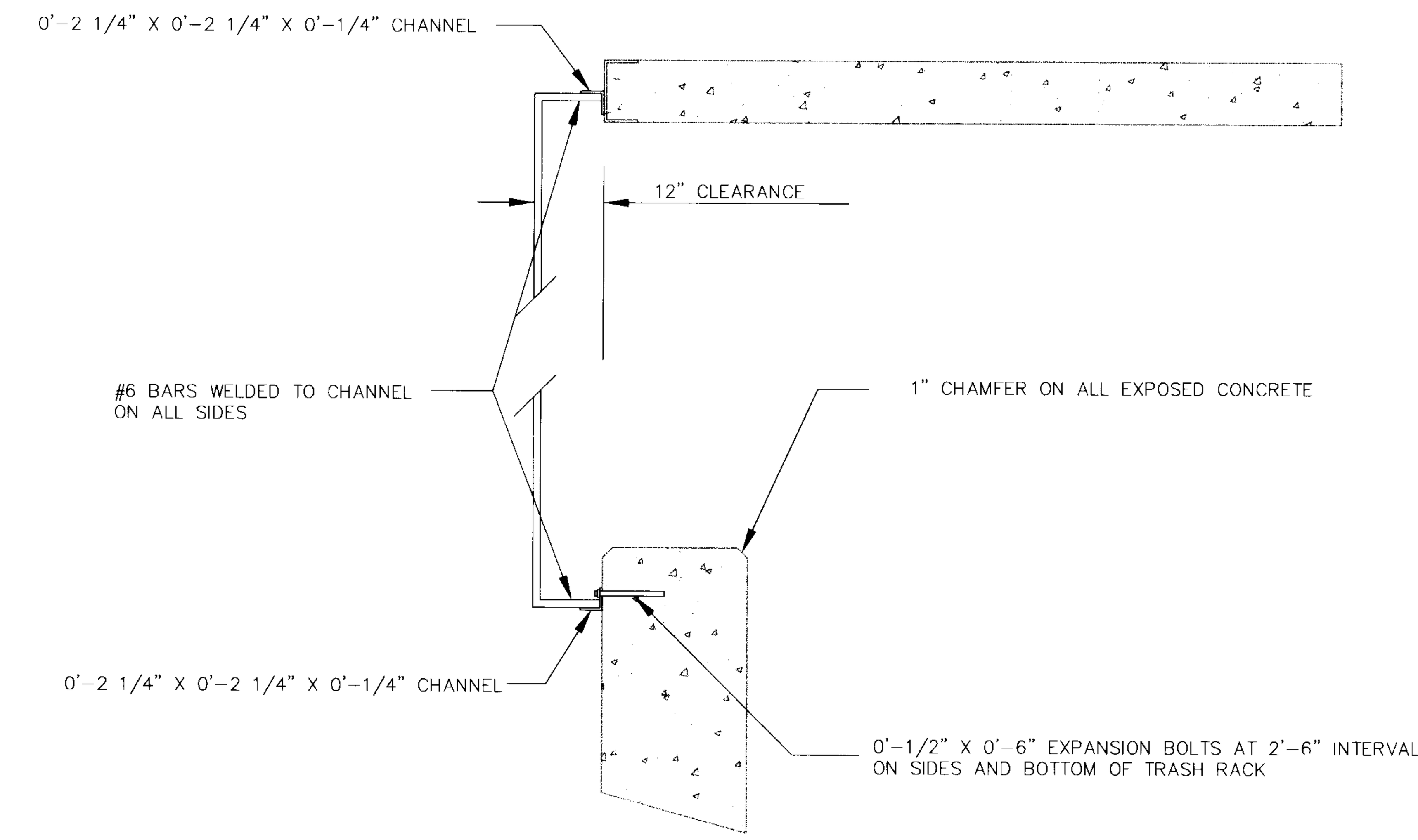
REINFORCEMENT DETAIL (B)

N.T.S.



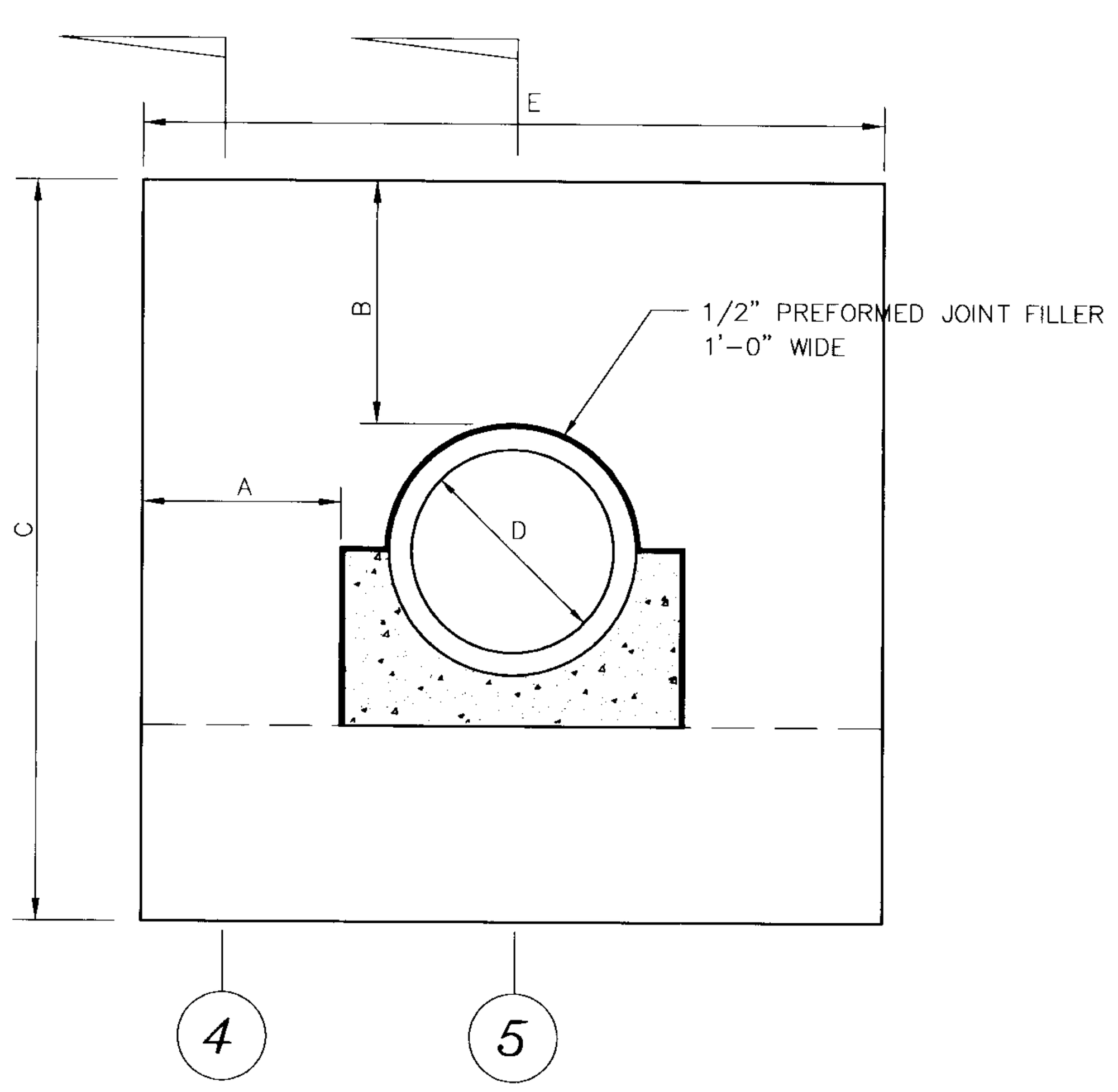
CORNER TREATMENT DETAIL (C)

N.T.S.



SECTION (3)

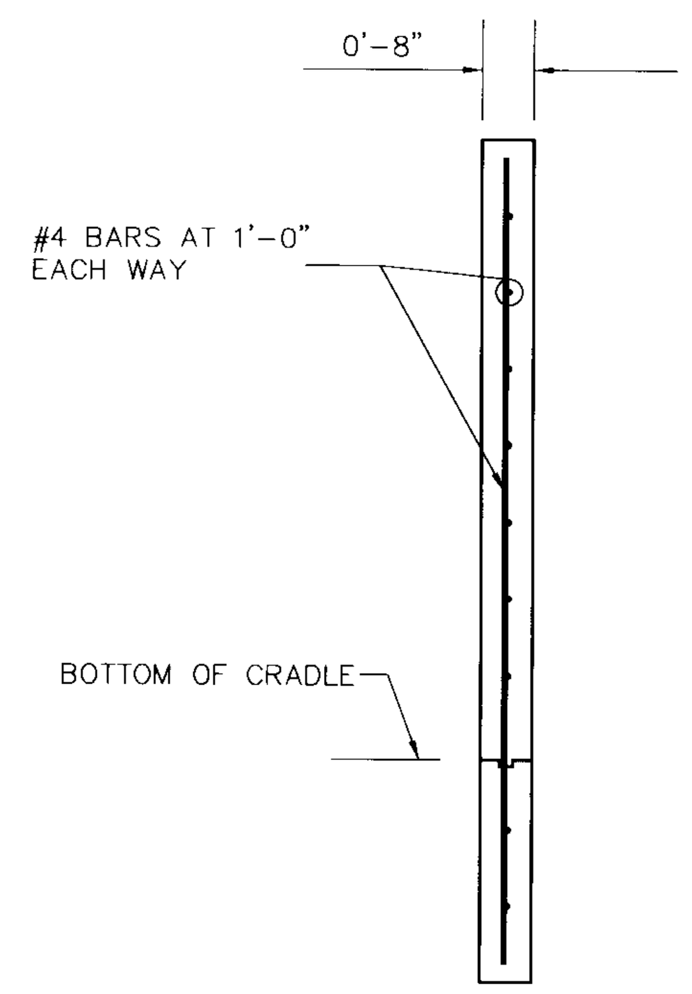
N.T.S.



PPOND NO.	A	B	C	D	E
3	3.3'	3.3'	12.8'	48"	12.4'
4	2.0'	2.0'	9.8'	48"	10.2'
5	2.6'	2.6'	8.2'	24"	9.1'

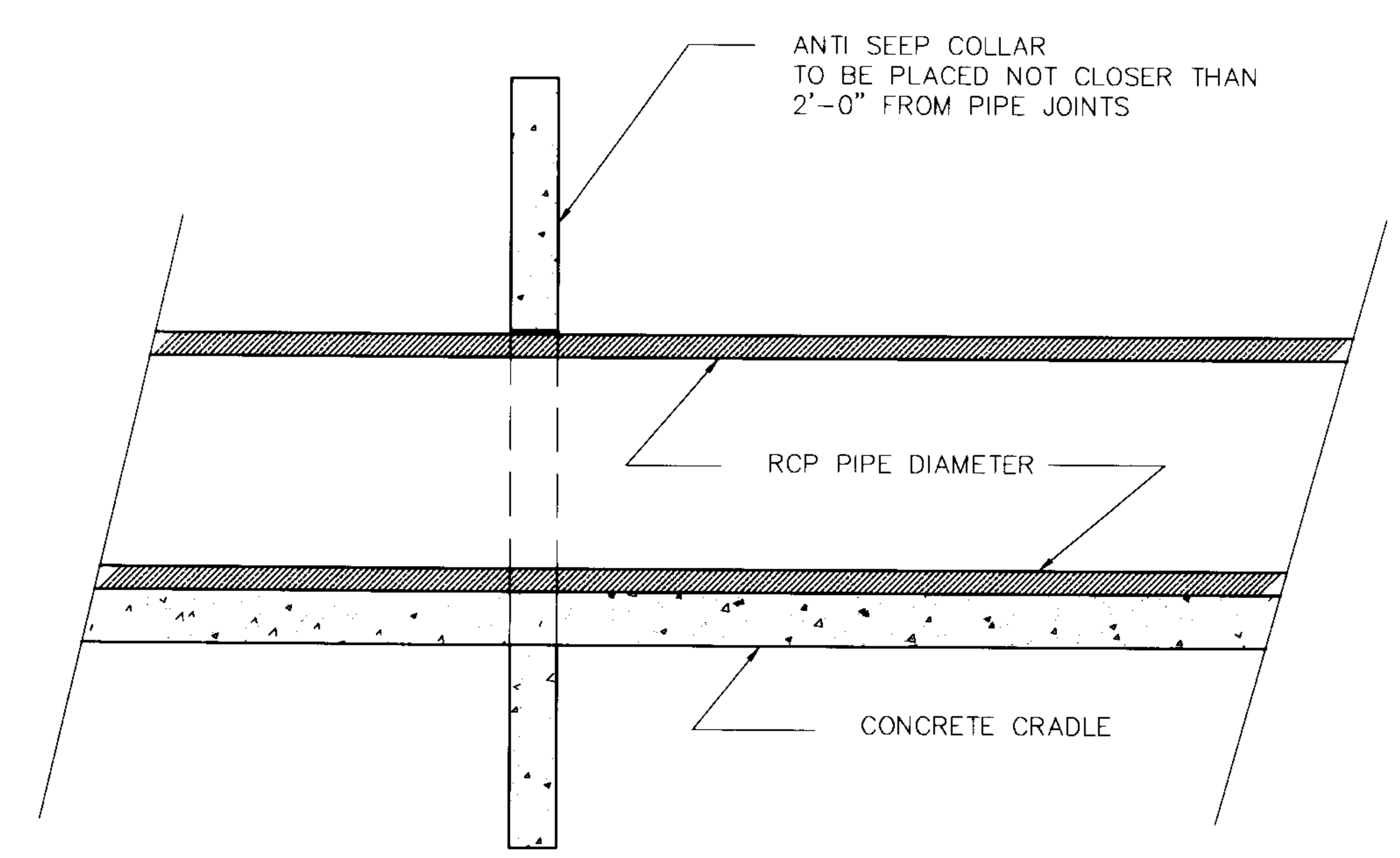
ANTI SEEP COLLAR DETAIL (D)

N.T.S.



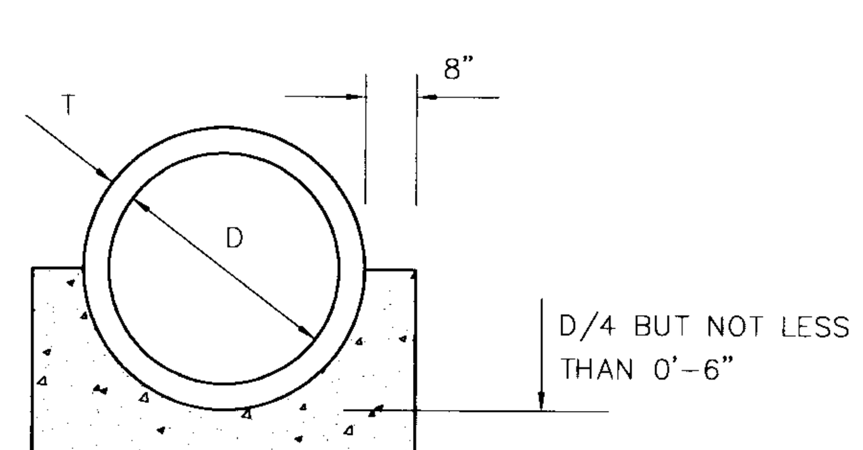
SECTION (4)

N.T.S.



SECTION (5)

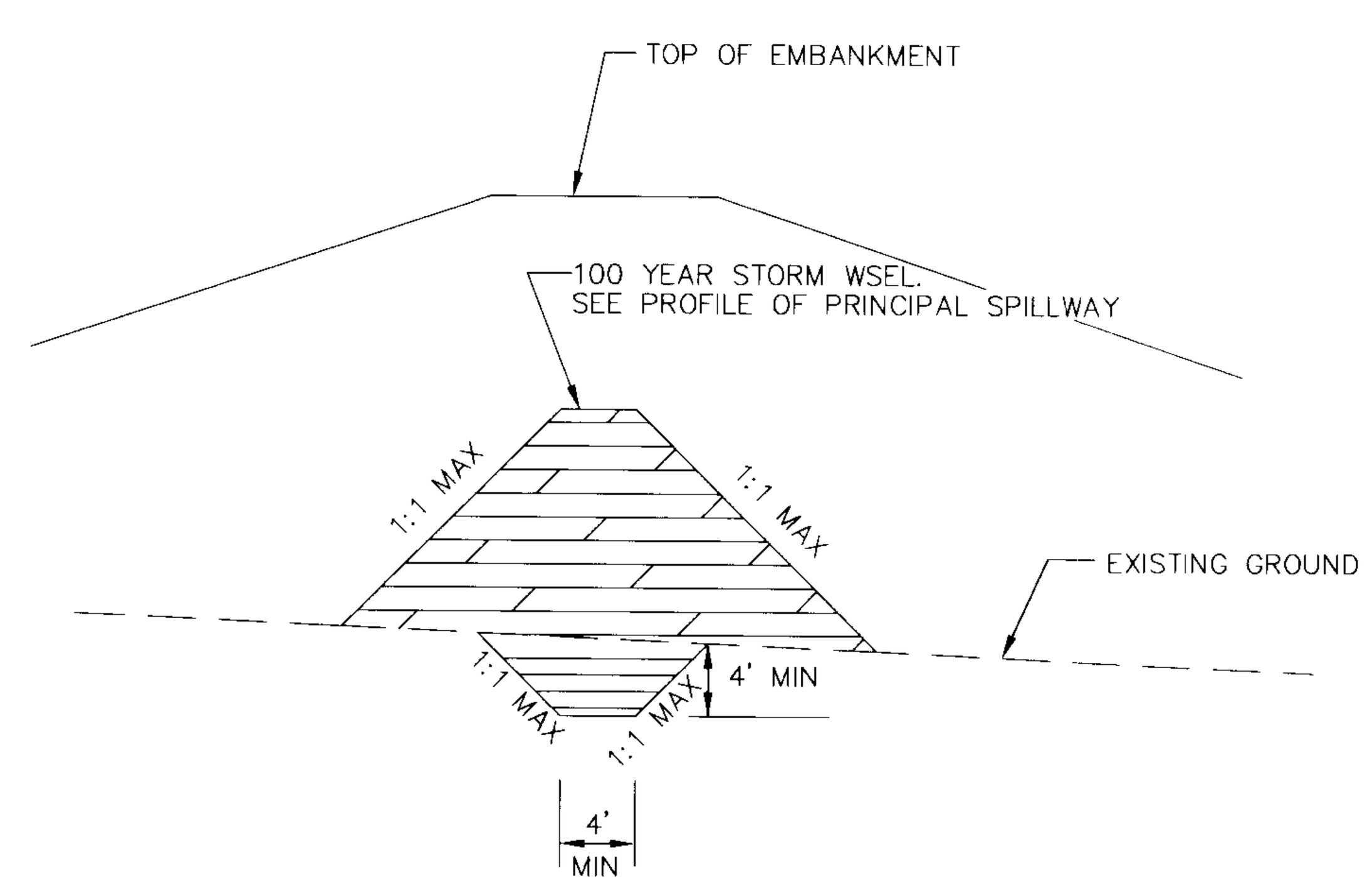
N.T.S.



PPOND NO.	D	T	D/4
3	48"	5"	1.0'
4	48"	5"	1.0'
5	24"	3"	0.5'

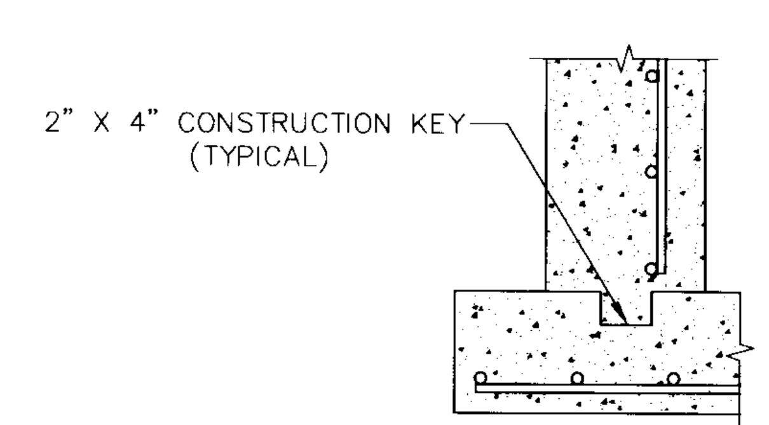
CONCRETE CRADLE DETAIL (E)

N.T.S.



CORE TRENCH DETAIL (F)

N.T.S.



KEY DETAIL

N.T.S.

OWNER
GTW JOINT VENTURE
C/O LAND DESIGN AND DEVELOPMENT
10805 HICKORY RIDGE ROAD
COLUMBIA, MARYLAND 21044

AS-BUILT CERTIFICATION

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

SIGNATURE ____ P.E. NO. ____ DATE ____

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

BY THE DEVELOPER:

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

SIGNATURE OF DEVELOPER — 5-28-96 DATE

Joseph Q. Hills — PRINTED NAME OF DEVELOPER

BY THE ENGINEER:

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

SIGNATURE OF ENGINEER — 5-28-96 DATE

R. JACOB HIKMAT — PRINTED NAME OF ENGINEER

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

USDA - NATURAL RESOURCES CONSERVATION SERVICE — 6/6/96 DATE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

HOWARD SOIL CONSERVATION DISTRICT — 6/6/96 DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION — 6/10/96 DATE

CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH — 6/14/96 DATE

DIRECTOR — 6/14/96 DATE

WAVERLY GOLF COURSE

HOWARD COUNTY, MARYLAND
3RD ELECTION DISTRICT, CENSUS TRACT 6030
TAX MAP 16, PARCELS 20, 21, 234 AND 406

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

PROJECT	DATE
94010	AUG.95
M.P.	J.H.
SCALE AS SHOWN	J.H.

SDP-96-35