THE PLANNING BOARD APPROVED RED-LINED REVISIONS TO THESE PLANS AUGUST 14, 1996. CHANGES ARE SHOWN ON SHEETS H-1 THROUGH H-13 ONLY.

FAIRWAY HILLS GOLF COURSE

HOWARD COUNTY COLUMBIA, MARYLAND

DOE PERMIT MODIFICATIONS:
PERMIT # 92-NT-0482/199266444:
1) DECEMBER 8, 1995: A MODIFICATION AFTER THE FACT WAS ISSUED TO PERMIT THE FOLLOWING IMPACTS:
A. HOLE #2: GRADING IN 1,663 S.F. OF NONTIDAL WETLANDS AND 4,080 S.F. OF WETLAND BUFFER.
B. HOLE #11: 1,600 S.F. ADDITIONAL DISTURBANCE OF WETLAND BUFFER.
C. HOLE #12: REDUCTION OF PREVIOUSLY APPROVED DISTURBANCE TO WETLAND BUFFER BY 3,150 S.F.
D. HOLE #16: ADDITIONAL 300 S.F. DISTURBANCE TO WETLAND BUFFER.
E. HOLE #18: ADDITIONAL 5,070 S.F. DISTURBANCE TO WETLAND BUFFER AND CONSTRUCTION OF 53 L.F. OF BOARDWALK OVER WETLANDS.

2) JUNE 4, 1996: A MODIFICATION WAS ISSUED TO PERMIT THE FOLLOWING IMPACTS:
A. HOLE #2: REDUCTION OF PREVIOUSLY APPROVED AREA OF WETLAND BUFFER IMPACT BY 190 L.F. (1900 S.F.) AND CONSTRUCTION OF 26 L.F. OF BOARDWALK OVER WETLANDS.
B. HOLE #3: REDUCTION OF APPROVED LENGTH OF WETLAND CROSSING BY 10 L.F.
C. HOLE #5: REDUCTION OF BUFFER IMPACT BY 95 L.F. (950 S.F.) AND 13 L.F. IN WETLANDS.

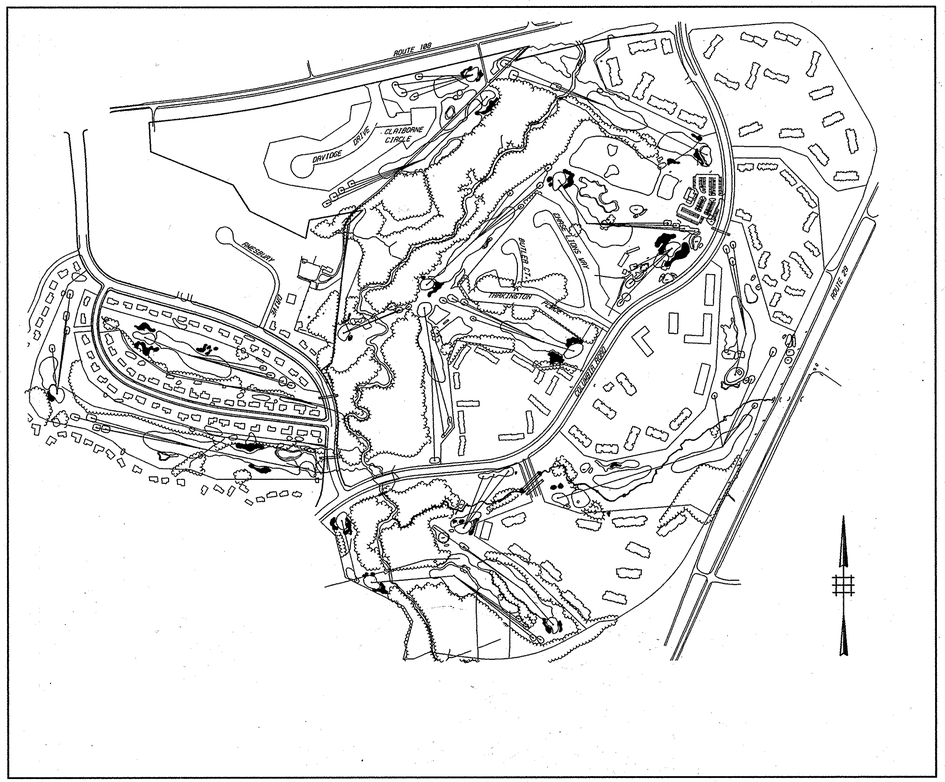
INDEX OF DRAWING

1. TITLE SHEET
2. KEY MAP AND NOTES
3. CONSTRAINTS MAP - WETLAND/FLOODPLAIN/WOODLANDS
4. CONSTRAINTS MAP - SOILS/STEEP SLOPES
5. H-1 GRADING AND DRAINAGE PLAN - HOLE 1
6. H-2 GRADING AND DRAINAGE PLAN - HOLE 2
7. H-3 GRADING AND DRAINAGE PLAN - HOLE 3 & 4
8. H-4 GRADING AND DRAINAGE PLAN - HOLE 5 & 6
9. H-5 GRADING AND DRAINAGE PLAN - HOLE 7 & 12
10. H-6 GRADING AND DRAINAGE PLAN - HOLE 8
11. H-7 GRADING AND DRAINAGE PLAN - HOLE 9 & 10 CLUBHOUSE AND PRACTICE RANGE
12. H-8 GRADING AND DRAINAGE PLAN - HOLE 11
13. H-9 GRADING AND DRAINAGE PLAN - HOLE 13
14. H-10 GRADING AND DRAINAGE PLAN - HOLE 14
15. H-11 GRADING AND DRAINAGE PLAN - HOLE 15
16. H-12 GRADING AND DRAINAGE PLAN - HOLE 16 & 17
17. H-13 GRADING AND DRAINAGE PLAN - HOLE 18

18-30 E-1 THROUGH E-13 EROSION CONTROL PLANS
31-43 L-1 THROUGH L-13 LANDSCAPE PLANS
44. L-14 PARKING LOT LANDSCAPE PLAN
45. L-15 DETAILS AND PLANTING SCHEDULE
46. STORM DRAINAGE/BASIN PROFILES
47. STORM DRAINAGE/BASIN PROFILES
48. STORM DRAINAGE/BASIN PROFILES
49. STORM DRAINAGE/BASIN PROFILES
50. STORM DRAINAGE/BASIN PROFILES
51. DETAIL SHEET
52. DETAIL SHEET
53. DETAIL SHEET
54. DETAIL SHEET
55. DETAIL SHEET
56. DETAIL SHEET
(SEE GREEN DETAIL SHEETS NOT PART OF THIS SDP.)

APPLICANT/OWNER:
COLUMBIA PARK AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY
COLUMBIA, MARYLAND 21045

56A. H-14 GRADING AND DRAINAGE PLAN-DRIVING RANGE TEE AREA



SCALE 1"= 500'

SITE ANALYSIS

A. ZONING: NEW TOWN (OPEN SPACE) FDP 191-A-II, FDP 167, FDP 19, FDP 18
B. O.S. CREDITED.....201.943 Ac.
C. O.S. NON-CREDITED. 0.83 AC (COMMERCIAL-PARCEL H - 1.813 AC.)
D. AREA OF SITE: 204.586 ACRES
E. BUILDING SIZE:
EXISTING CLUBHOUSE

GROUND FLOOR	1980 SF
2ND FLOOR	1840 SF
3RD FLOOR	1216 SF
4TH FLOOR	1216 SF
TOTAL	6252 SF

PROPOSED ADDITION 1242 SF CLASSROOM 381 SF (DECK)
TOT. EXIST. & PROP. 7875 SF
(AREA OF CLASSROOM 1242 SF)

F. ONE 18 HOLE CHAMPIONSHIP GOLF COURSE
G. AREA OF PRACTICE RANGE IS 3.85 AC
H. AREA OF PARKING LOT 1.53 AC
I. AREA OF LANDSCAPE ISLANDS 0.18 AC
J. TOTAL AREA OF PARKING AND DRIVEWAY IN CREDITED OPEN SPACE IS 0.0 AC
K. NUMBER OF PARKING SPACES REQUIRED
1 SPACE PER EMPLOYEE: 1 X 10 = 10 SPACES
6 SPACES PER HOLE: 6 X 18 = 108 SPACES
1 SPACE PER 300 SF OF REMAINING USE: 3222 /300 = 11 SPACES
TOTAL = 129
L. EMPLOYEES INCLUDING MAINTENANCE AND CLUBHOUSE SUPPORT 10 PEOPLE
M. NUMBER OF PARKING SPACES PROVIDED: 150 SPACES
N. BUILDING COVERAGE:

CLUBHOUSE (INCLUDING ADDITION)	3603 SF
MAINTENANCE BUILDING	6000 SF
PUMPHOUSE	375 SF
TOTAL BUILDING COVERAGE	11,475 SF

PERCENTAGE OF BUILDING COVERAGE IS LESS THAN 1% OF ENTIRE SITE

O. OPEN SPACE: IN PROJECT AREA CREDITED

LOT 30	23.834 Ac.
LOT 39	12.208 Ac.
LOT 33	8.439 Ac.
LOT 55	5.974 Ac.
LOT 1A	92.522 Ac.
LOT 2	25.710 Ac.
LOT 4A	33.256 Ac.
TOTAL	201.943 AC

AMENDMENTS TO WP-92-188 (CONT.)

THE HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING APPROVED THE FOLLOWING AMENDMENTS TO WP-92-188:

1. ON JULY 11, 1995 THE PLANING DIRECTOR WAIVED SECTION 16.116(a)(1) AND SECTION 16.116(a)(2)(ii) TO PERMIT GRADING OR REMOVAL OF VEGETATIVE COVER WITHIN 25 FEET OF A WETLAND AND 75 FEET OF A PERENNIAL STREAM FOR CONSTRUCTION OF HOLE #2.
2. ON NOVEMBER 16, 1995: THE PLANING DIRECTOR WAIVED SECTION 16.116(a)(1) AND SECTION 16.116(a)(2)(ii) TO PERMIT GRADING OR REMOVAL OF VEGETATIVE COVER WITHIN 25 FEET OF A WETLAND AND 75 FEET OF A PERENNIAL STREAM FOR CONSTRUCTION OF HOLES 11, 12, 16, & 18.
3. ON APRIL 16, 1995: THE PLANING DIRECTOR WAIVED SECTION 16.116(a)(1) AND SECTION 16.116(a)(2)(ii) TO PERMIT GRADING OR REMOVAL OF VEGETATIVE COVER WITHIN 25 FEET OF A WETLAND AND 75 FEET OF A PERENNIAL STREAM FOR CONSTRUCTION OF HOLES 2, 3, 5, & 6.

APPROVED
PLANNING BOARD of HOWARD COUNTY
DATE 2-2-93

PERMIT INFORMATION

PERMIT	NUMBER	EXPIRATION DATE
WATER APPROPRIATION PERMIT (MARYLAND DNR)	H0925010(01)	SEPTEMBER 1, 2005
NONTIDAL WETLAND AND WATERWAYS PERMIT (JOINT PERMIT)	92-NT-0482/ 199266444	SEPTEMBER 30, 1996

HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING WAIVER PETITION. FILE #WP92-188 REQUEST TO WAIVE SECTION 16, 116(A) PERMIT DEVELOPMENT ACTIVITY (GRADING AND CLEARING) WITHIN 100 YR. FLOODPLAIN. 16.116(CX4) TO PERMIT GRAING AND CLEARING ON 25% AND GREATER STEEP SLOPE AREAS AND 16.116(CX6) TO PERMIT GRADING AND CLEARING WITHIN THE 25 FOOT WETLAND BUFFERS AND WETLANDS FOR THE CONSTRUCTION OF AN 18 HOLE GOLF COURSE.
APPROVED 1-5-93

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE SYSTEMS, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS. HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
DIRECTOR — DATE 11/2/93
CHIEF, BUREAU OF ENGINEERING — DATE 11/1/93

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING
DIRECTOR — DATE 11/1/93
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 11/01/93

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.
COUNTY HEALTH OFFICER — DATE 11/5/92

OWNER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

DEVELOPER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

ADDRESS CHART

BUILDING	STREET ADDRESS
LOT5-CLUBHOUSE	5100 COLUMBIA ROAD
LOT1-MAINT. BLDG.	5280 COLUMBIA ROAD

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL
VWL.9/4,LOTS 33&55,TC.9/1,LOT30 & VDS.3/1,LOTS 1,2 & 4	9/3.9/4, 9/1 & 3/1	LOTS 1,2,3, 33,39 & 55

PLAT #S	BLOCK/ ZONE	TAX/ZONE MAP	ELEC. DIST.	CENSUS TR.
13 F.25; F.6-15 F.41; 6735-6745; 6936; 4105-4210	9,9.10,NT-0.8 14.15 & COMM.	30	5th	6054

WATER CODE E01 — SEWER CODE 5680200

THE RBA GROUP, MORRISTOWN, NEW JERSEY

The RBA Group — ENGINEERS • ARCHITECTS • PLANNERS
William Garro, P.E.,P.P. Lic.No. 16268
John Murphy, R.A. Cert. No. C3885
Warren Bendixen, R.A.,P.P. Cert. No. C4241

RON PRICHARD
Golf Architect

STATE OF MARYLAND — JOHN CHRISTMAN, P.E. — No. 14439 — REGISTERED PROFESSIONAL ENGINEER

no.	revisions description	date
1	AS PER COUNTY COMMENTS	7-27-92
2	AS PER COUNTY COMMENTS	1-6-93
3	AS PER DPZ COMMENTS 1/6/93	10/1/93
4	RED-LINE REVISIONS	9/30/96
5	CLASSROOM ADDITION	4.29.02
6	SITE ANALYSIS RED-LINE REVISIONS SHEET H-14 ADDED	5/20/14
7	RED-LINE REVISIONS	7/15/14

prepared by
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(301) 730-7950 621-6050

TITLE SHEET

FAIRWAY HILLS GOLF COURSE
COLUMBIA HO. CO. MARYLAND

SCALE AS SHOWN
DRAWN KBW | CHECKED J.B.
PROJ. NO. M0405 | DATE 3-92
SHEET 1 OF 56

PROJECT NO. _____

SDP-92-104

ADJACENT PROPERTIES/OWNERS

PROPERTY ID	OWNERS	LIBER/FILIO	ZONED
Running Brook Sec.9 Ar.4 Lot 54	A. Thomas Baity & wf.	666/375	NT
Running Brook Sec.9 Ar.3 Lot 28	Neil M. Kirschner & wf.	826/732	NT
Running Brook Sec.9 Ar.3 Lot 29	Raymond Davis Jr.	705/412	NT
Running Brook Sec.9 Ar.3 Lot 30	Ruben & Marta Adler & D. Arostegui	1113/261	NT
Running Brook Sec.9 Ar.3 Lot 31	Kenneth R. & Caroline M. Allen	1077/309	NT
Running Brook Sec.9 Ar.3 Lot 32	William Parnes & wf.	729/513	NT
Running Brook Sec.9 Ar.3 Lot 33	Rogers O. Weiss & wf.	639/112	NT
Running Brook Sec.9 Ar.3 Lot 34	Edwin C. Susskind & wf.	1152/366	NT
Running Brook Sec.9 Ar.3 Lot 35	Alvin James Wyrick & wf.	1611/67	NT
Run ing Brook Sec.9 Ar.3 Lot 36	Maurice Kogon & wf.	639/625	NT
Running Brook Sec.9 Ar.3 Lot 37	Janet I. Taddeo	1461/578	NT
Running Brook Sec.9 Ar.3 Lot 38	Uri Feldman & wf.	793/196	NT
Running Brook Sec.9 Ar.3 Lot 40	M.A. & Laura A. Arias	2137/421	NT
Running Brook Sec.9 Ar.3 Lot 41	Hugh A. Oesterreicher Jr. & wf.	1759/343	NT
Running Brook Sec.9 Ar.3 Lot 42	Saul Jay Lubitz & wf.	1024/692	NT
Running Brook Sec.9 Ar.3 Lot 43	John W. Kelly & wf.	617/142	NT
Running Brook Sec.9 Ar.3 Lot 44	Alfred H. Pietrzky & wf.	787/120	NT
Running Brook Sec.9 Ar.3 Lot 45	Edwin R. Strakna & wf.	621/59	NT
Running Brook Sec.9 Ar.3 Lot 46	Harold E. Greenberg & wf.	620/259	NT
Running Brook Sec.9 Ar.3 Lot 47	Stanley McKenzie & wf.	682/371	NT
Running Brook Sec.9 Ar.2 Lot 88	David E. Gardner	980/369	NT
Running Brook Sec.9 Ar.2 Lot 89	Charles F. Brooks & wf.	526/487	NT
Running Brook Sec.9 Ar.2 Lot 90	Donald H. & Mary Jane Bullock	898/257	NT
Running Brook Sec.9 Ar.1 Lot 38	Cary M. Cooper & wf.	542/72	NT
Running Brook Sec.9 Ar.1 Lot 39	Jacquiline Pratt Ludford	1273/210	NT
Running Brook Sec.9 Ar.1 Lot 40	Alfred J. Bates & wf.	692/103	NT
Running Brook Sec.9 Ar.1 Lot 52	Sominic M. Tiburzi & wf.	1352/15	NT
Running Brook Sec.9 Ar.1 Lot 53	Ernest F. Moreland & wf.	542/77	NT
Running Brook Sec.9 Ar.1 Lot 54	Robert J. Skapura & wf.	523/759	NT
Running Brook Sec.9 Ar.1 Lot 55	John M. & John Z. Schneider	1628/622	NT
Running Brook Sec.9 Ar.1 Lot 56	Nancy L. Provow	1514/468	NT
Running Brook Sec.9 Ar.1 Lot 57	Michael R. & Shirley J. Cothran	1075/261	NT
Running Brook Sec.9 Ar.1 Lot 84	Bertharae F. Glick	1610/572	NT
Running Brook Sec.9 Ar.1 Lot 85	Justin E. Morrill & Wf.	520/728	NT
Running Brook Sec.9 Ar.1 Lot 86	Barry J. & Gail M. Kearney	997/674	NT
Running Brook Sec.9 Ar.1 Lot 87	Steven M. Brakos & wf.	1402/263	NT
Running Brook Sec.9 Ar.4 Lot 65	Lawrence Hall Jr & Greer Hall Jr.	878/713	NT
Running Brook Sec.9 Ar.4 Lot 64	Jesse H. Ingram & wf.	757/583	NT
Running Brook Sec.9 Ar.4 Lot 63	David H. Swann	1021/394	NT
Running Brook Sec.9 Ar.4 Lot 62	Darrell E. Davis & wf.	760/694	NT
Running Brook Sec.9 Ar.4 Lot 60	Donald M. Wheeler & wf.	882/486	NT
Running Brook Sec.9 Ar.4 Lot 59	Edward Johnson & wf.	725/151	NT
Running Brook Sec.9 Ar.4 Lot 58	Ernest L. Murphy	568/278	NT
Running Brook Sec.9 Ar.4 Lot [illegible]	Clyde Smith & wf.	710/245	NT
Running Brook Sec.9 Ar.4 Lot 56	Homer J. Weidemeyer	2020/271	NT
Lot 73 Running Brook Sec.9 Ar.4	[illegible]OH Inc. c/o Krupp Realty Co.	1156/117	NT
Lot 30 "Town Center Sec.9 Ar.1"	Columbia Park & Rec. Assoc. Inc.	1910/9	NT
P. 120	Wm. HC Griffith & wf.	194/339	NT & R-20
Lot 1 "Mercer Tract"	Fiorelli S. & Ana Vicencio	745/427	R-20
Running Brook Sec.9 Ar.4 Lot 18	J. Homer Weidemeyer	2190/611	NT
Running Brook Sec.9 Ar.4 Lot 19	IndraKumar Jashnani & wf.	876/465	NT
Running Brook Sec.9 Ar.4 Lot 20	David McKusick et al	1759/189	NT
Running Brook Sec.9 Ar.4 Lot 21	Eugene Hwang & wf.	1673/554	NT
Running Brook Sec.9 Ar.4 Lot 22	Louis J. & Irene C. Marmo	1253/167	NT
Running Brook Sec.9 Ar.4 Lot 23	Richard T. West & wf.	646/351	NT
Running Brook Sec.9 Ar.4 Lot 24	Gene Bradford & wf.	651/267	NT
Running Brook Sec.9 Ar.4 Lot 25	Bernice A. Kish	1961/179	NT
Running Brook Sec.9 Ar.4 Lot 26	Rose M. Hall	1711/12	NT
Running Brook Sec.9 Ar.4 Lot 27	Richard E. Freudenberger & wf.	1913/680	NT
Running Brook Sec.9 Ar.4 Lot 28	Avram Yifrah & wf.	657/26	NT
Running Brook Sec.9 Ar.4 Lot 29	Ronald L. Spahn & wf.	772/237	NT
Running Brook Sec.9 Ar.4 Lot 30	William W. Blake & wf.	643/86	NT
Running Brook Sec.9 Ar.4 Lot 31	Richard F. Cioffi et al	1569/354	NT
Running Brook Sec.9 Ar.4 Lot 32	Phillip P. Cole & wf.	671/5	NT
Running Brook Sec.9 Ar.3 Lot 20	Heheadon Radden & wf.	660/738	NT
Running Brook Sec.9 Ar.3 Lot 21	Uri & Dahlia Feldman & WJ Behring	1056/483	NT
Running Brook Sec.9 Ar.3 Lot 22	William C. & Ruth C. Lach	1882/65	NT
Running Brook Sec.9 Ar.3 Lot 23	William R. Wood	634/459	NT
Running Brook Sec.9 Ar.3 Lot 24	Stuart Mowatt & wf.	634/695	NT
Running Brook Sec.9 Ar.3 Lot 25	Warner Lewis Shipp & wf.	1332/270	NT
Running Brook Sec.9 Ar.3 Lot 26	Stephan I. Block & wf.	1189/677	NT
Running Brook Sec.9 Ar.3 Lot 27	Joseph R. Gomez & wf.	2052/34	NT
Running Brook Sec.9 Ar.4 Lot 34	Donald R. Barbary & wf.	883/228	NT
Running Brook Sec.9 Ar.4 Lot 35	William W. McCollum & wf.	2238/195	NT
Running Brook Sec.9 Ar.4 Lot 36	William J. Smith & wf.	653/448	NT
Running Brook Sec.9 Ar.4 Lot 37	Lawrence G. Rowe Jr. & wf.	726/62[illegible]	NT
Running Brook Sec.9 Ar.4 Lot 38	Joseph M. Gentile & wf.	1229/1[illegible]0	NT
Running Brook Sec.9 Ar.4 Lot 39	Harold J. Engel & wf.	678/7[illegible]0	NT
Running Brook Sec.9 Ar.4 Lot 40	Hau L. Cheong & wf	1575/455	NT
Running Brook Sec.9 Ar.4 Lot 41	George E. Hohman Jr. & wf	556/258	NT
Running Brook Sec.9 Ar.4 Lot 42	Jay Don Gensler & wf.	803/748	NT
Running Brook Sec.9 Ar.4 Lot 43	Robert W. Alexander Jr. & wf.	1938/237	NT
Running Brook Sec.9 Ar.4 Lot 44	Herber Salisbury & wf.	1066/423	NT
Running Brook Sec.9 Ar.4 Lot 45	Jacoba I. Weaver & wf.	726/357	NT
Running Brook Sec.9 Ar.4 Lot 46	Charles M. Cullen Jr. & wf.	913/246	NT
Running Brook Sec.9 Ar.4 Lot 47	William Kovensky & wf.	1010/702	NT
Running Brook Sec.9 Ar.4 Lot 48	Uri & Dalia Feldman et al	1289/262	NT
Running Brook Sec.9 Ar.4 Lot 49	Thomas D. Scott & wf.	543/124	NT
Running Brook Sec.9 Ar.4 Lot 50	Alsandro Turner & wf.	723/334	NT
Running Brook Sec.9 Ar.4 Lot 51	Bruce D. Alexander & wf.	679/556	NT
Running Brook Sec.9 Ar.4 Lot 52	Robert L. & Carole F. Milner	1392/387	NT
Running Brook Sec.9 Ar.4 Lot 53	Joyce L.Wright & Thomas S.McElroy	1164/666	NT
Parcel D-1	Golf Course View Partnership	1763/287	NT
Parcel C-1	Chase Green Ltd. Partnership	1425/542	NT
Parcel C-2	Allview-Oxford Ltd. Partnership	1442/607	NT
Part of Parcel B-1 (GCE area)	Kehoe Homes of Allview Inc.	1518/470	NT
Parcel A-2	Fairway Partners	1584/488	NT
Part of Parcel G (GCE area)	Heatherfield Joint Venture	1917/558	NT
Part of Parcel F	Howard Research & Dev. Corp.	1533/193	NT
Part of Parcel E	NVR-Lazerov Assoc. & NV Homes, LP	1848/138	NT

SCALE: 1" = 400'

2-2-93

LEGEND

22 LOT NUMBERS

PROJECT LIMITS

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

DIRECTOR — 11/2/93 DATE

CHIEF, BUREAU OF ENGINEERING — 11/1/93 DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

DIRECTOR — 11/12/93 DATE

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — 11/10/93 DATE

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

COUNTY HEALTH OFFICER — 11/5/93 DATE

OWNER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

DEVELOPER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

ADDRESS CHART

BUILDING	STREET ADDRESS
LOT 5-CLUBHOUSE	5100 COLUMBIA ROAD
LOT 1-MAINT. BLDG.	5280 COLUMBIA ROAD

SUBDIVISION NAME			SECTION/AREA	LOT/PARCEL
VWL, 9/3, LOT 39, VWL, 9/4, LOTS 33 & 55, TC, 9/1, LOT 30 & VDS, 3/1, LOTS 1, 2 & 4			9/3, 9/4, 9/1 & 3/1	LOTS 1, 2, 3, 33, 39 & 55
PLAT 6735 thru 6743, 6536 PB13f.41 PB13f.25	BLOCK 8, 9, 10, 14, 15	ZONE NT-O.S. & COMM	TAX/ZONE MAP 30	ELEC. DIST. 5 th / CENSUS TR. 6054
WATER CODE			SEWER CODE	

revisions		
no.	description	date
1	PER DPZ COMMENTS	10-93

JOHN CHRISTMAN, P.E.

prepared by
RON PRICHARD
Golf Architect
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THE WOODLANDS, TEXAS 77380
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730 WALTON ROAD, SUITE 300
BLUE BELL, PA. 19422
(215) 941-7240

prepared by
The RBA Group ENGINEERS • ARCHITECTS • PLANNERS
5560 STERRETT PLACE, SUITE 300
COLUMBIA, MARYLAND 21044
(301) 7[illegible]0-7950 621-6050

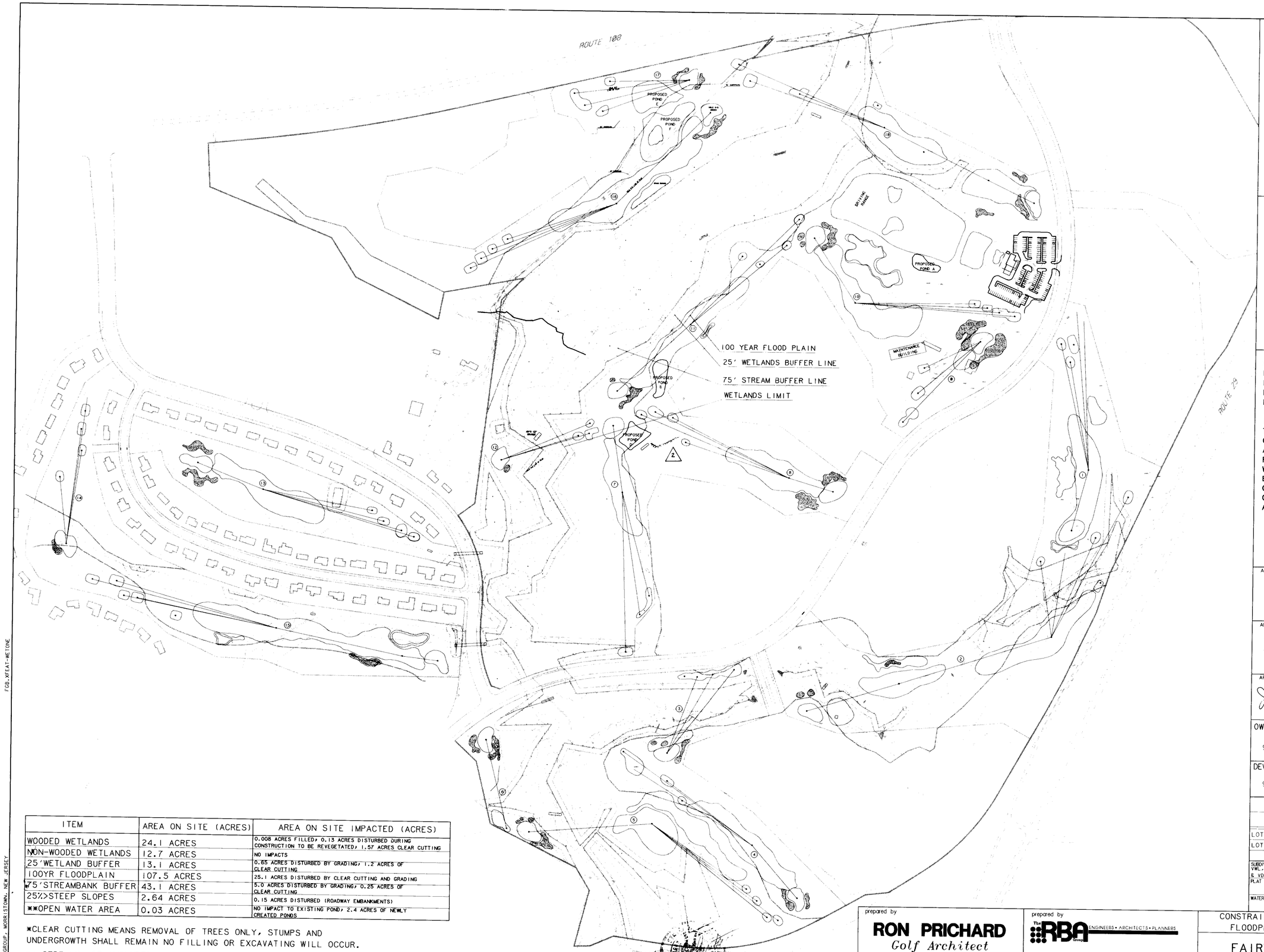
KEY SHEET

FAIRWAY HILLS GOLF COURSE

SCALE 1" = 400'
DRAWN BZ | CHECKED JB
PROJ. NO. M0405 | DATE 3-92
SHEET 2 OF 56

SDP-92-104

THE RBA GROUP, MORRISTOWN, NEW JERSEY   PROJECT NO.



ITEM	AREA ON SITE (ACRES)	AREA ON SITE IMPACTED (ACRES)
WOODED WETLANDS	24.1 ACRES	0.008 ACRES FILLED, 0.13 ACRES DISTURBED DURING CONSTRUCTION TO BE REVEGETATED, 1.57 ACRES CLEAR CUTTING
NON-WOODED WETLANDS	12.7 ACRES	NO IMPACTS
25'WETLAND BUFFER	13.1 ACRES	0.65 ACRES DISTURBED BY GRADING, 1.2 ACRES OF CLEAR CUTTING
100YR FLOODPLAIN	107.5 ACRES	25.1 ACRES DISTURBED BY CLEAR CUTTING AND GRADING
75'STREAMBANK BUFFER	43.1 ACRES	5.0 ACRES DISTURBED BY GRADING, 0.25 ACRES OF CLEAR CUTTING
25%>STEEP SLOPES	2.64 ACRES	0.15 ACRES DISTURBED (ROADWAY EMBANKMENTS)
**OPEN WATER AREA	0.03 ACRES	NO IMPACT TO EXISTING POND, 2.4 ACRES OF NEWLY CREATED PONDS

*CLEAR CUTTING MEANS REMOVAL OF TREES ONLY, STUMPS AND UNDERGROWTH SHALL REMAIN NO FILLING OR EXCAVATING WILL OCCUR.

** STREAMS NOT INCLUDED

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 2-2-93

LEGEND

EXISTING WOODLANDS
LINE
75'STREAMBANK BUFFER
LINE
WETLAND LIMIT
WETLAND BUFFER
100 YR. FLOOD PLAIN
EXISTING STREAMS

HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING WAIVER PETITION. FILE #WP92-188 REQUEST TO WAIVE SECTION 16.116(A) PERMIT DEVELOPMENT ACTIVITY (GRADING AND CLEARING) WITHIN 100 YR. FLOODPLAIN. 16.116(C)(4) TO PERMIT GRADING AND CLEARING ON 25% AND GREATER STEEP SLOPE AREAS AND 16.116(C)(6) TO PERMIT GRADING AND CLEARING WITHIN THE 25 FOOT WETLAND BUFFERS AND WETLANDS FOR THE CONSTRUCTION OF AN 18 HOLE GOLF COURSE.
APPROVED 1-5-93

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE SYSTEMS, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS. HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
DIRECTOR — DATE 11/1/93
CHIEF, BUREAU OF ENGINEERING — DATE 11/1/93

APPROVED : HOWARD COUNTY DEPT. OF PLANNING AND ZONING
DIRECTOR — DATE 11/8/93
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 11/10/93

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS. HOWARD COUNTY HEALTH DEPARTMENT.
COUNTY HEALTH OFFICER — DATE 11/5/93

OWNER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

DEVELOPER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

ADDRESS CHART

BUILDING	STREET ADDRESS
LOT$-CLUBHOUSE	5100 COLUMBIA ROAD
LOT1-MAINT.BLDG.	5280 COLUMBIA ROAD

SUBDIVISION NAME VWL.9/3,LOT39, VWL.9/4,LOTS 33&55,TC.9/1,LOT30 & VDS.3/1,LOTS 1,2 & 4		SECTION/AREA 9/3.9/4, 9/1 & 3/1	LOT/PARCEL LOTS 1,2,3, 33,39 & 55
PLAT	BLOCK ZONE B.9.10ONT-0.5, 4.15 TC COMM.	TAX/ZONE MAP 30	ELEC. DIST 5th CENSUS TR 6004
WATER CODE		SEWER CODE	

THE RBA GROUP, MORRISTOWN, NEW JERSEY FGB.XFEAT-WETONE

JOHN CHRISTMAN, P.E

revisions		
no.	description	date
1	AS PER COUNTY COMMENTS	4-14
2	OMIT POND 'C'	

prepared by
RON PRICHARD
Golf Architect
10600 SIX PINES DRIVE
THE WOODLANDS, TEXAS 77380
(713) 292-1902
1730 WALTON ROAD, SUITE 300
BLUE BELL, PA. 19422
(215) 941-7240

prepared by
The RBA Group ENGINEERS • ARCHITECTS • PLANNERS
5560 STERRETT PLACE, SUITE 300
COLUMBIA, MARYLAND 21044
(301) 730-7950 621-6050

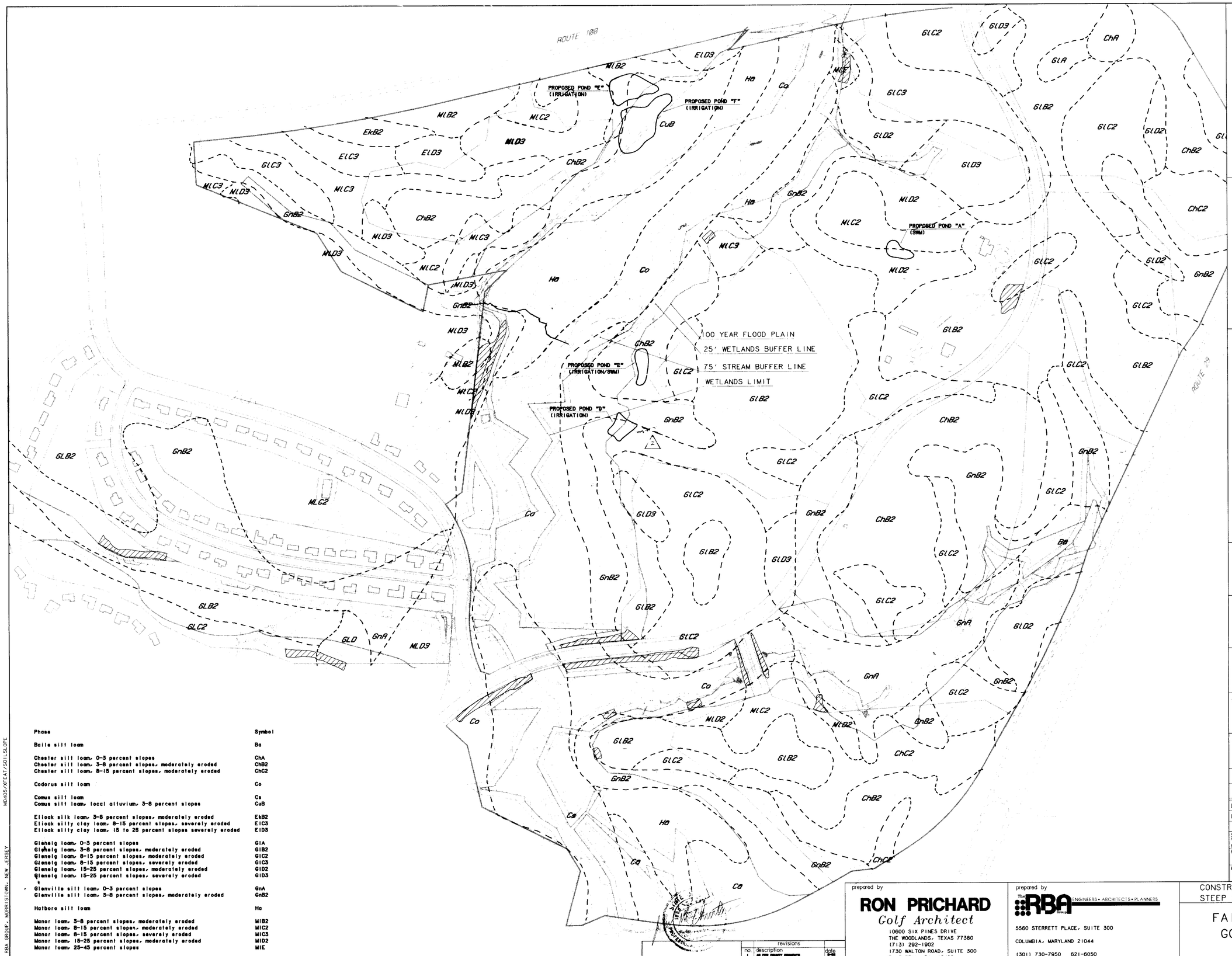
CONSTRAINTS MAP WETLAND, FLOODPLAIN, WOODLAND

FAIRWAY HILLS
GOLF COURSE

COLUMBIA MARYLAND

SCALE	1" = 200'
DRAWN	KBW
CHECKED	J.B
PROJ. NO	M0405
DATE	3-92
SHEET	3 OF 56

SDP-92-104



Phase	Symbol
Baile silt loam	Ba
Chester silt loam, 0-3 percent slopes	ChA
Chester silt loam, 3-8 percent slopes, moderately eroded	ChB2
Chester silt loam, 8-15 percent slopes, moderately eroded	ChC2
Codorus silt loam	Co
Comus silt loam	Cs
Comus silt loam, local alluvium, 3-8 percent slopes	CuB
Elioak silk loam, 3-8 percent slopes, moderately eroded	EkB2
Elioak silty clay loam, 8-15 percent slopes, severely eroded	ElC3
Elioak silty clay loam, 15 to 25 percent slopes severely eroded	ElD3
Glenelg loam, 0-3 percent slopes	GlA
Glenelg loam, 3-8 percent slopes, moderately eroded	GlB2
Glenelg loam, 8-15 percent slopes, moderately eroded	GlC2
Glenelg loam, 8-15 percent slopes, severely eroded	GlC3
Glenelg loam, 15-25 percent slopes, moderately eroded	GlD2
Glenelg loam, 15-25 percent slopes, severely eroded	GlD3
Glenville silt loam, 0-3 percent slopes	GnA
Glenville silt loam, 3-8 percent slopes, moderately eroded	GnB2
Hatboro silt loam	Ha
Manor loam, 3-8 percent slopes, moderately eroded	MlB2
Manor loam, 8-15 percent slopes, moderately eroded	MlC2
Manor loam, 8-15 percent slopes, severely eroded	MlC3
Manor loam, 15-25 percent slopes, moderately eroded	MlD2
Manor loam, 25-45 percent slopes	MlE

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 2-2-93

LEGEND
EXISTING TREE LINE
SOIL LINE
SLOPES GREATER THAN 25%

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE SYSTEMS, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS. HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
DIRECTOR — DATE 11/2/93
CHIEF, BUREAU OF ENGINEERING — DATE 11/1/93

APPROVED : HOWARD COUNTY DEPT. OF PLANNING AND ZONING
DIRECTOR — DATE 11/2/93
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 11/10/93

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS. HOWARD COUNTY HEALTH DEPARTMENT.
COUNTY HEALTH OFFICER — DATE 11/5/93

OWNER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

DEVELOPER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

ADDRESS CHART

BUILDING	STREET ADDRESS
LOT 5-CLUBHOUSE	5100 COLUMBIA ROAD
LOT 1-MAINT. BLDG.	5280 COLUMBIA ROAD

SUBDIVISION NAME VWL-9/3-LOT 39, VWL-9/4-LOTS 53&55, TC-9/1-LOT 30 & VDS-3/1-LOTS 1-2 & 4		SECTION/AREA 9/3-9/4, 9/1 & 3/1		LOT/PARCEL LOTS 1-2, 3-33, 39 & 55
PLAT	BLOCK/ZONE B-9-C(MT-0.5), 14-5 & COM.	TAX/ZONE MAP 30	ELEC DIST 5th	CENSUS TR 6004
WATER CODE		SEWER CODE		

revisions		
no.	description	date
1	AS PER COUNTY COMMENTS	9-93
2	PANEL TUNNELS	

JOHN CHRISTMAN, P.E.

prepared by
RON PRICHARD
Golf Architect
10600 SIX PINES DRIVE
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1730 WALTON ROAD, SUITE 300
BLUE BELL, PA. 19422
(215) 941-7240

prepared by
The RBA group ENGINEERS • ARCHITECTS • PLANNERS
5560 STERRETT PLACE, SUITE 300
COLUMBIA, MARYLAND 21044
(301) 730-7950 621-6050

CONSTRAINTS MAP
STEEP SLOPES AND SOILS

FAIRWAY HILLS
GOLF COURSE

COLUMBIA MARYLAND

SCALE	1" = 200'
DRAWN	KBW
CHECKED	J.B.
PROJ. NO	M0405
DATE	3-92
SHEET	4 OF 56

SDP-92-104

THE RBA GROUP, MORRISTOWN, NEW JERSEY M0405/XREAT/SOILSLOPE

MATCH LINE "A-1"
SEE SHEET H-7

ROAD

80 LF 15" RCP @ 1.00 %
(EX. I-31)
(EX. E-7)

EXISTING CART TUNNEL

TEE HOLE #1 (TYP.)

10 LF ± UNGROUTED RIPRAP (d_{50}= 9") AT ZERO SLOPE. PLACE 18" DEEP ON FILTER CLOTH

8' CARTPATH (TYP.)

20' STORM DRAIN EASEMENT REQ'D

CART PATH

52.2'

ROUGH AREA (TYP.)

FAIRWAY (TYP.)

AREA W/ LINE OF PLAY

RED MAPLE TO REMAIN

SYCAMORE TO REMAIN

EXISTING POND W.E. 356.5

WETLANDS MITIGATION AREA

GRASS BUNKER

AREA DRAIN 8
INV. 349.80
INV. 346.80

LP 349.80

FLOOD PLAIN
WETLANDS
75' STREAM BUFFER
25' WETLANDS BUFFER

TEE

HOLE #1 GREEN (TYP.)

SECTION I

HOLE #1 LINE OF PLAY

180 LF 12"RCP @ 2.11%

EXISTING SYCAMORE TO REMAIN

FLARRED END SECTION - WITH 3' INV. 343.00

GRASS BUNKER

WETLAND MITIGATION AREA

TEE HOLE #2 (TYP.)

TW 343.5
BW 339.0
343.0

SEE SHEET H-2

TICHL INE "A"

WETLANDS MITIGATION AREA

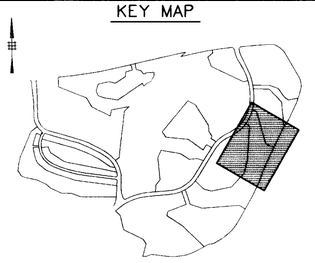
FILTRATION/DEGRADATION BOX FOR SUBSURFACE DRAINAGE FOR GREEN #1 (SEE DETAIL, SHEET D-5, 55 OF 56)

ROUTE 29

PROJECT NO.

THE RBA GROUP, MORRISTOWN, NEW JERSEY

KEY MAP



LEGEND

ITEM	EXISTING	PROPOSED
CONTOURS		350
SPOT GRADE		+ 350.0
WOODED AREA		TO REMAIN
WETLAND LIMIT		
(25' BUFFER)		
100 YR. FLOOD PLAIN		
75' STREAM BUFFER		
RETAINING WALL		
EXISTING STREAM		
EXISTING PROP. LINE		
EXISTING EASEMENT LINE		

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 2-2-93

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

DIRECTOR — DATE 11/2/93

CHIEF, BUREAU OF ENGINEERING — DATE 11/1/93

APPROVED : HOWARD COUNTY DEPT. OF PLANNING AND ZONING

DIRECTOR — DATE 11/4/93

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 11/10/93

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

COUNTY HEALTH OFFICER — DATE 11/5/93

OWNER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

DEVELOPER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

ADDRESS CHART

BUILDING	STREET ADDRESS
LOT5-CLUBHOUSE	5100 COLUMBIA ROAD
LOT1-MAINT. BLDG.	5280 COLUMBIA ROAD

SUBDIVISION NAME VWL.9/3,LOT39, VWL.9/4,LOTS 33&55,TC.9/1,LOT30 & VDS.3/1,LOTS 1,2 & 4		SECTION/AREA 9/3,9/4, 9/1 & 3/1	LOT/PARCEL LOTS 1,2,3, 33,39 & 55
PLAT	BLOCK / ZONE (R-D,10 UNIT/AC.5; 4.15 IE COMM.)	TAX/ZONE MAP 30	ELEC DIST 5th / CENSUS TR 6054
WATER CODE		SEWER CODE	

JOHN CHRISTMAN, P.E

revisions		
no.	description	date
1	AS PER COUNTY COMMENTS	7/27/92
2	AS PER FLOODPLAIN COMMENTS	2/18/93
3	AS PER DPZ COMMENTS DATED 11/6/93	10/1/93
4	AS PER HSCD COMMENTS 12/9/92	10/1/93
5	EXTENDED STORM DRAIN, ADDED TEE	4/94
6	CARTPATH, TEES FAIRWAY MITIGATION AREA	9/9/94

prepared by
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BLUE BELL, PA. 19422
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prepared by
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5560 STERRETT PLACE, SUITE 300
COLUMBIA, MARYLAND 21044
(301) 730-7950 621-6050

GRADING AND DRAINAGE PLAN
HOLE #1

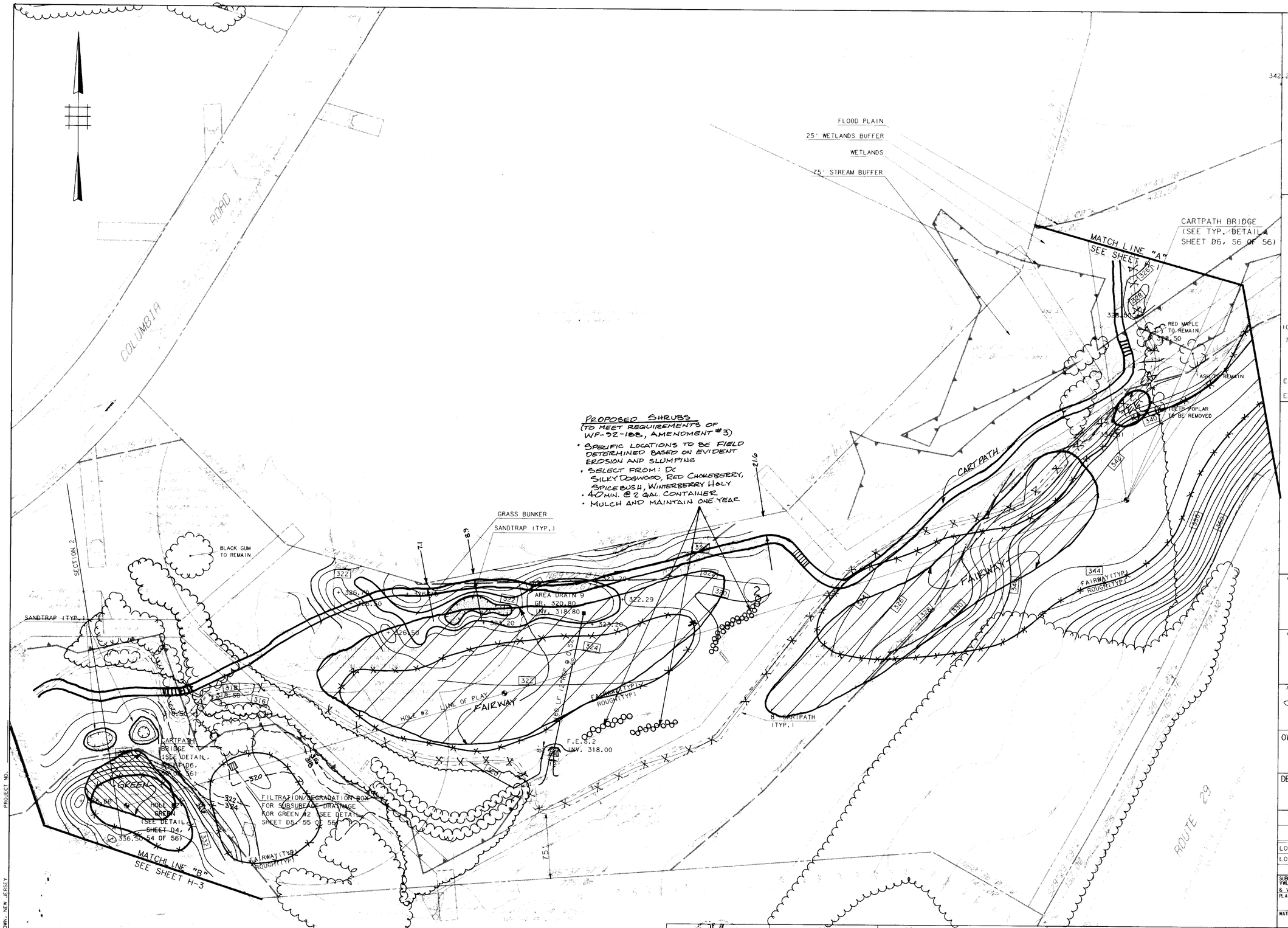
FAIRWAY HILLS
GOLF COURSE

COLUMBIA MARYLAND

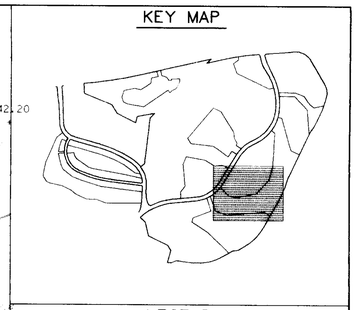
SCALE	1" = 50'
DRAWN	MBB
CHECKED	JJB
PROJ. NO	M0405
DATE	9-9-91
SHEET	H-1
	5 OF 56

SDP-92-104

H5



KEY MAP



LEGEND

ITEM	EXISTING	PROPOSED
CONTOURS		350
SPOT GRADE		+ 350.0
WOODED AREA		TO REMAIN
WETLAND LIMIT (25' BUFFER)		
100 YR. FLOOD PLAIN		
75' STREAM BUFFER		
RETAINING WALL		
EXISTING STREAM		
EXIST. PROPERTY LINE		
EXIST. EASEMENT LINE		

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 2-2-93

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE SYSTEMS, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS. HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
DIRECTOR — DATE 11 2 93
CHIEF, BUREAU OF ENGINEERING — DATE 11/1/93

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING
DIRECTOR — DATE 11/12/93
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 11/10/93

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.
COUNTY HEALTH OFFICER — DATE 11/5/93

OWNER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

DEVELOPER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

ADDRESS CHART

BUILDING	STREET ADDRESS
LOT5-CLUBHOUSE	5100 COLUMBIA ROAD
LOT1-MAINT.BLDG.	5280 COLUMBIA ROAD

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL
VWL,9/3,LOT39, VWL,9/4,LOTS 33&55,TC,9/1,LOT30 & VDS,3/1,LOTS 1,2 & 4	9/3,9/4, 9/1 & 3/1	LOTS 1,2,3, 33,39 & 55

PLAT	BLOCK	ZONE	TAX/ZONE MAP	ELEC DIST	CENSUS TR
	8,9,10, 14,15	NT-O.S. & COMM.	30	51h	6054

WATER CODE — SEWER CODE

JOHN CHRISTMAN, P.E.

revisions

no	description	date
1	AS PER COUNTY COMMENTS	7-27-92
2	AS PER DPZ COMMENTS 1/6/93	10/1/93
3	CARTPATHS, FAIRWAY, GREENS	10/2/94

prepared by
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(215) 941-7240

prepared by
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COLUMBIA, MARYLAND 21044
(301) 730-7950 621-6050

GRADING AND DRAINAGE PLAN
HOLE #2

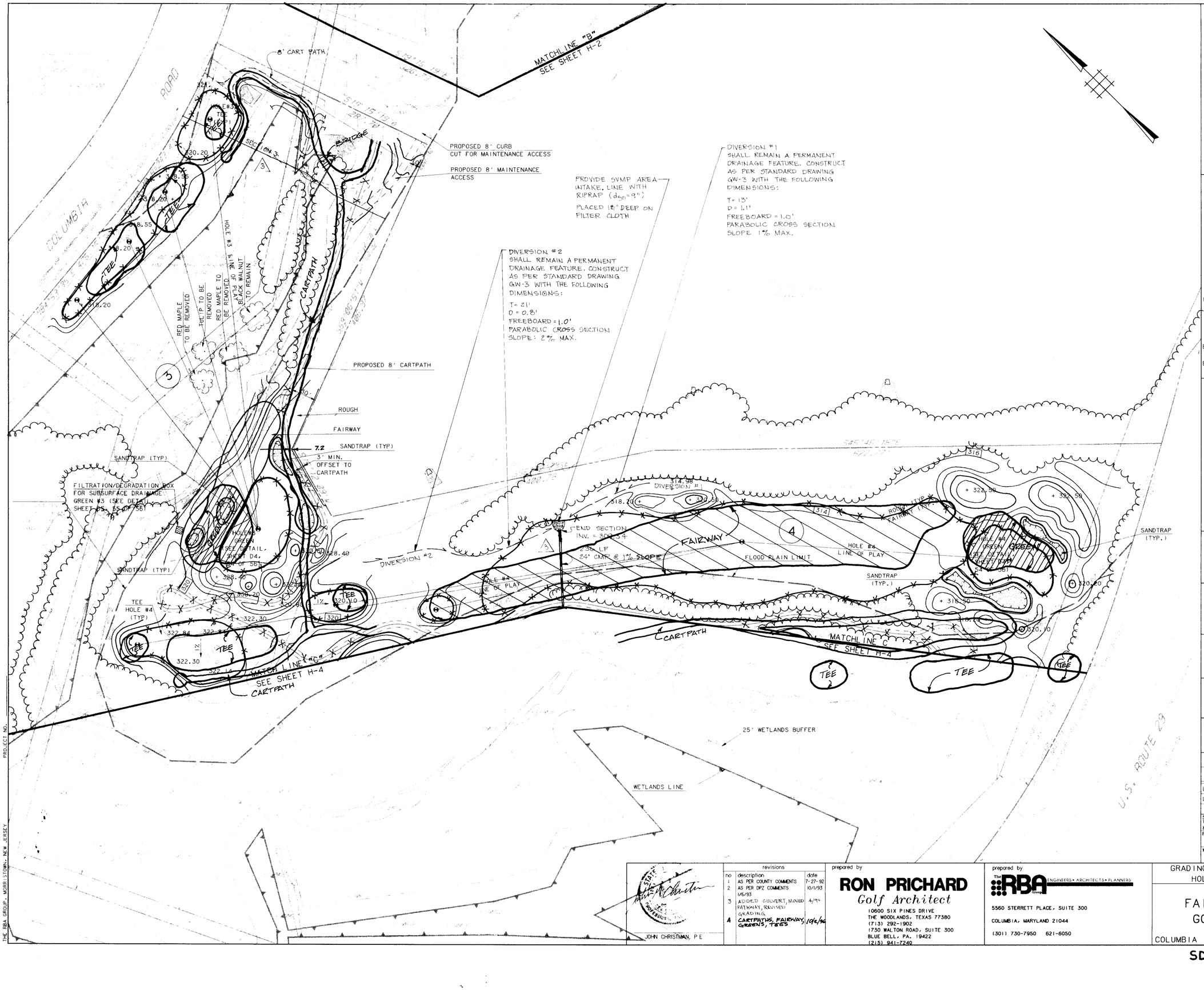
FAIRWAY HILLS
GOLF COURSE

COLUMBIA MARYLAND

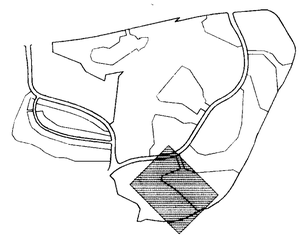
SCALE	1" = 50'
DRAWN MBB	CHECKED JJB
PROJ. NO. M0405	DATE 9-9-91
H-2 SHEET	6 OF 56

SDP-92-104

THE RBA GROUP, MORRISTOWN, NEW JERSEY
PROJECT NO.



KEY MAP



LEGEND

ITEM	EXISTING	PROPOSED
CONTOURS		350
SPOT GRADE		+ 350.0
WOODED AREA		TO REMAIN
WETLAND LIMIT		
(25' BUFFER)		
100 YR. FLOOD PLAIN		
75' STREAM BUFFER		
RETAINING WALL		
EXISTING STREAM		
EXIST. PROPERTY LINE		
EXIST. EASEMENT LINE		

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 2-2-93

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE SYSTEMS. STORM DRAINAGE SYSTEMS AND PUBLIC ROADS. HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
DIRECTOR — DATE
CHIEF, BUREAU OF ENGINEERING — 11/1/93 DATE

APPROVED : HOWARD COUNTY DEPT. OF PLANNING AND ZONING
DIRECTOR — 11/2/93 DATE
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — 11/10/93 DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS. HOWARD COUNTY HEALTH DEPARTMENT.
COUNTY HEALTH OFFICER — 11/5/93 DATE

OWNER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

DEVELOPER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

ADDRESS CHART

BUILDING	STREET ADDRESS
LOT5-CLUBHOUSE	5100 COLUMBIA ROAD
LOT1-MAINT.BLDG.	5280 COLUMBIA ROAD

SUBDIVISION NAME VWL.9/3,LOT39, VWL.9/4,LOTS 33&55,TC.9/1,LOT30 & 105.3/1,LOTS 1,2 & 4			SECTION/AREA 9/3,9/4, 9/1 & 3/1		LOT/PARCEL LOTS 1,2,3, 33,39 & 55
PLAT	BLOCK / ZONE (R.9, 0.2AT-0.5, A-1.5 & COM.)	TAX/ZONE MAP 30	ELEC	DIST 5th	CENSUS TR 6054
WATER CODE		SEWER CODE			

PROJECT NO.

THE RBA GROUP, MORRISTOWN, NEW JERSEY

JOHN CHRISTMAN, P.E.

revisions		
no	description	date
1	AS PER COUNTY COMMENTS	7-27-92
2	AS PER DPZ COMMENTS 1/6/93	10/1/93
3	ADDED CULVERT, MOVED PATHWAY, REVISED GRADING	4/94
4	CARTPATHS, FAIRWAY, GREENS, TEES	10/6/94

prepared by
RON PRICHARD
Golf Architect
10600 SIX PINES DRIVE
THE WOODLANDS. TEXAS 77380
(713) 292-1902
1730 WALTON ROAD, SUITE 300
BLUE BELL, PA. 19422
(215) 941-7240

prepared by
The RBA GROUP ENGINEERS • ARCHITECTS • PLANNERS
5560 STERRETT PLACE, SUITE 300
COLUMBIA, MARYLAND 21044
(301) 730-7950 621-6050

GRADING AND DRAINAGE PLAN
HOLE #3 & HOLE #4

FAIRWAY HILLS
GOLF COURSE

COLUMBIA MARYLAND

SCALE 1" = 50'
DRAWN MBB
CHECKED JJB
PROJ NO M0405
DATE 9-9-91
H-3
SHEET 7 OF 56

SDP-92-104

H3

HOLE #3 TEE

COLUMBIA ROAD

MATCH LINE "D" SEE SHEET H-3

MATCH LINE "C" SEE SHEET H-3

MATCH LINE "C" SEE SHEET H-3

FLOOD PLAIN

MATCH LINE "C" SEE SHEET H-3

HOLE #5 TEE AREA

230 LF 24" CMP @ 1% SLOPE. MATCH STREAM INVERT AT DOWN STREAM END. PROVIDE END SECTIONS.

MAINTAIN 1' MIN. COVER OVER PIPE

10 LF RIP RAP (d_{50}=9") PLACED 18" DEEP ON FILTER CLOTH

75' STREAM BUFFER

25' WETLANDS BUFFER

GRASS BUNKER

END SECTION INV. 309.0

WETLANDS LINE

AREA DRAIN 10-1 GR.309.0 INV.307.5

110 LF 12"RCP @ 0.5%

GRASS BUNKER

FAIRWAY

AREA DRAIN 10 GR.309.10 INV. 306.95

130 LF 12" RCP @ 0.5%

F.E.S. 3 INV.306.30

RIP RAP 12' X 8'

BOARDWALK CARTPATH (SEE DETAIL, SHEET D5, 55 OF 56)

60' CART PATH BRIDGE (SEE DETAIL, SHEET D6, 56 OF 56)

CARTPATH

FAIRWAY

HOLE #5 LINE OF PLAY

BOARDWALK CARTPATH (SEE DETAIL, SHEET D5, 55 OF 56)

60' CART PATH BRIDGE (SEE DETAIL, SHEET D6, 56 OF 56)

60' CARTPATH BRIDGE (SEE DETAIL, SHEET D6, 56 OF 56)

WOOD BRIDGE

45'

20' STORM DRAIN EASEMENT REQ'D.

15 LF± UNGROUTED RIPRAP (d_{50}=9") AT ZERO SLOPE 24" DEEP ON FILTER CLOTH

SANDTRAP (TYP)

FILTRATION/DEGRADATION BOX FOR SUBSURFACE DRAINAGE GREEN #5 (SEE DETAIL, SHEET D5, 55 OF 56)

FILTRATION/DEGRADATION BOX FOR SUBSURFACE DRAINAGE GREEN #6 (SEE DETAIL, SHEET D5, 55 OF 56)

SANDTRAP (TYP)

140 LF 24" RCP @ 0.5%

HOLE #6 GREEN (SEE DETAIL, SHEET D4, 56 OF 56)

8' CARTPATH

HOLE #6 LINE OF PLAY

CARTPATH

SWALE AT MIN. SLOPE

SANDTRAP (TYP)

HOLE #5 GREEN (SEE DETAIL, SHEET D4, 56 OF 56)

TEE HOLE #6

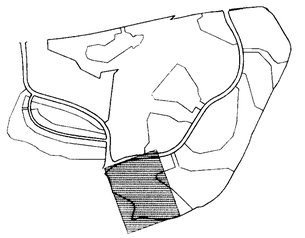
CARTPATH 5' MIN. FROM PROP. LINE

MD. ROUTE 175

THE RBA GROUP, MORRISTOWN, NEW JERSEY

PROJECT NO.

KEY MAP



LEGEND

ITEM	EXISTING	PROPOSED
CONTOURS		350
SPOT GRADE		+ 350.0
WOODED AREA		TO REMAIN
WETLAND LIMIT		
(25' BUFFER)		
100 YR. FLOOD PLAIN		
75' STREAM BUFFER RETAINING WALL		
EXISTING STREAM		
EXISTING PROPOERTY LINE		
EXISTING EASEMENT LINES		

APPROVED
PLANNING BOARD of HOWARD COUNTY
DATE 2-2-93

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

DIRECTOR — DATE 11.2.93

CHIEF, BUREAU OF ENGINEERING — DATE 11/1/93

APPROVED : HOWARD COUNTY DEPT. OF PLANNING AND ZONING

DIRECTOR — DATE 11/4/93

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 11/16/93

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

COUNTY HEALTH OFFICER — DATE 11/5/93

OWNER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

DEVELOPER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

ADDRESS CHART

BUILDING	STREET ADDRESS
LOT5-CLUBHOUSE	5100 COLUMBIA ROAD
LOT1-MAINT.BLDG.	5280 COLUMBIA ROAD

SUBDIVISION NAME VWL.9/3,LOT39, VWL.9/4,LOTS 33&55, TC-9/1,LOT30 & VDS.3/1,LOTS 1,2 & 4		SECTION/AREA 9/3,9/4, 9/1 & 3/1	LOT/PARCEL LOTS 1,2,3, 33,39 & 55
PLAT	BLOCK/ZONE B-9,10;NT-0.5; E-15 & COMM.	TAX/ZONE MAP 30	ELEC DIST 5th / CENSUS TR 6054
WATER CODE		SEWER CODE	

JOHN CHRISTMAN, P.E

no	revisions description	date
1	AS PER COUNTY COMMENTS 1/6/93	7-27-92
2	AS PER DPZ COMMENTS	10/1/93
3	ADDED CULVERT, EXTENDED STORM DRAIN REVISED GRADING	4/94
4	CARTPATH, FAIRWAY, GREENS, TEES	10/6/96

prepared by
RON PRICHARD
Golf Architect
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COLUMBIA, MARYLAND 21044
(301) 730-7950 621-6050

GRADING AND DRAINAGE PLAN
HOLE #5 & HOLE #6

FAIRWAY HILLS
GOLF COURSE

COLUMBIA MARYLAND

SCALE 1" = 50'
DRAWN MBB
CHECKED JJB
PROJ. NO M0405
DATE 9-9-91
H-4
SHEET 8 OF 56

SDP-92-104

H3

MATCH LINE "J" SEE SHEET H-9

WHETSTONE ROAD

BOARDWALK CARTPATH

TRENCH DRAIN 2
GR. 307.50
INV. 306.34

35 LF 8" DIP CLASS 52 @ 0.80%

EXISTING SAN LINE TO BE ABANDON. REMOVE SECTION AT TUNNEL LOCATION. PLUG ALL ENDS

EX. SAN DROP MH #3
INV. A 301.00
EX. INV. B 299.42

223 LF 8" DIP CLASS 52 @ 0.80%

EXIST SAN MH #1
INV. A 308.21

SAN DROP MH #2
RIM. 317.6
INV. A 307.93
INV. B 302.76

TRENCH DRAIN 2-1
GR 307.5
INV. A 305.67
INV. B 305.57

EMERGENCY GATE AT END OF TUNNEL (SEE DETAIL, SHEET D6 OF 56, B-6)

CARTPATH 8' FROM ℄

125 LF 18" @ 0.5%

INV. 305.00

MILLS ROAD

CARTPATH 5' MIN. FROM ℄

8' CARTPATH

PROPOSED BOARDWALK

WETLAND LIMIT

34.4

CARTPATH

BOARDWALK

FILTRATION/DEGRADATION BOX FOR SUBSURFACE DRAINAGE GREEN #12 (SEE DETAIL, SHEET D5, 55 OF 56)

SANDTRAP (TYP.)

HOLE #12 GREEN

CART PATH 8' FROM ℄ (TYP.)

40'X 15' BRIDGE (TYP.)

BOARDWALK CARTPATH (SEE DETAIL, SHEET D5, 55 OF 56)

HOLE #12 LINE OF PLAY

HOLE #12 TEE (TYP)

TEE

MATCH LINE "E" SEE SHEET H-8

25' WETLANDS BUFFER

HEADWALL 4
INV. 312.80

FILTRATION/DEGRADATION BOX FOR SUBSURFACE DRAINAGE GREEN #7 AND TEE #12 (SEE DETAIL, SHEET D5, 55 OF 56)

HOLE #7 GREEN (SEE DETAIL, SHEET D4, 54 OF 56)

75' STREAM BUFFER

POND CROSS SECTION LOCATION (SEE PROFILES, SHEET P2, 47 OF 56 AND SHEET P5, 50 OF 56)

PROPOSED POND 'B'

OUTLET CONTROL STRUCTURE #3
TC 318.00
INV. 312.30

POND

FAIRWAY

HOLE #7 LINE OF PLAY

MATCH LINE "E-1" SEE SHEET H-6

IRRIGATION PONDS TO BE CHARGED WITH WATER FROM IRRIGATION SYSTEM

BORING LOCATION (TYP)

Note: Emergency Gate shall be owned, operated, and maintained by The Columbia Association.

CARTPATH

FLOOD PLAIN ELEVATION 319 AS SHOWN ON F.E.M.A. MAPPING

8' CARTPATH

BOARDWALK CARTPATH (SEE DETAIL, SHEET D5, 55 OF 56)

HOLE #7 TEE

RETAINING WALL TW 319.70 BW 315.50

MATCH LINE "D" SEE SHEET H-4

MATCH LINE "G" SEE SHEET H-6

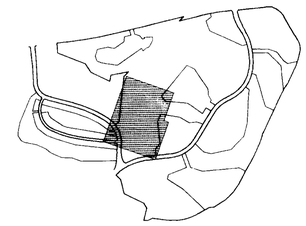
MATCH LINE "F" SEE SHEET H-6

COLUMBIA ROAD

PROJECT NO.

THE RBA GROUP, MORRISTOWN, NEW JERSEY

KEY MAP



LEGEND

ITEM	EXISTING	PROPOSED
CONTOURS	350	
SPOT GRADE	+ 350.0	
WOODED AREA	TO REMAIN	
WETLAND LIMIT		
(25' BUFFER)		
100 YR. FLOOD PLAIN		
75' STREAM BUFFER		
RETAINING WALL		
EXISTING STREAM		
EXISTING PROPERTY LINE		
EXISTING EASEMENT LINE		
BORING LOCATION	●	

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 2-2-93

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

DIRECTOR — DATE 11.2.93

CHIEF, BUREAU OF ENGINEERING — DATE 11/1/93

APPROVED : HOWARD COUNTY DEPT. OF PLANNING AND ZONING

DIRECTOR — DATE 11/10/93

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 11/10/93

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

COUNTY HEALTH OFFICER — DATE 11/5/93

OWNER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

DEVELOPER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

ADDRESS CHART

BUILDING	STREET ADDRESS
LOT5-CLUBHOUSE	5100 COLUMBIA ROAD
LOT1-MAINT. BLDG.	5280 COLUMBIA ROAD

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL
VWL.9/3, LOT39. VWL.9/4, LOTS 33&55. TC/9/1, LOT30 & VDS.3/1, LOTS 1,2 & 4	9/3,9/4, 9/1 & 3/1	LOTS 1,2,3, 33,39 & 55

PLAT	BLOCK	ZONE	TAX/ZONE MAP	ELEC DIST	CENSUS TR
	30	NT-0.5, 4.15 'C' COMM.	51h	6054	

WATER CODE — SEWER CODE

no	revisions description	date
1	AS PER COUNTY COMMENTS	7-27-92
2	ADDED WETLAND AREA & BOARDWALK	2-16-93
3	AS PER DPZ COMMENTS 1/6/93	10/1/93
4	PMN POND 'C' RELOCATE CART PATH	6/94
5	CARTPATH, FAIRWAY, TEES, POND	10/2/96

JOHN CHRISTMAN, P.E

prepared by
RON PRICHARD
Golf Architect
10800 SIX PINES DRIVE
THE WOODLANDS, TEXAS 77380
(713) 292-1902
1730 WALTON ROAD, SUITE 300
BLUE BELL, PA. 19422
(215) 941-7240

prepared by
The RBA Group ENGINEERS • ARCHITECTS • PLANNERS
5560 STERRETT PLACE, SUITE 300
COLUMBIA, MARYLAND 21044
(301) 730-7950 621-6050

GRADING AND DRAINAGE PLAN
HOLE #7 & HOLE #12

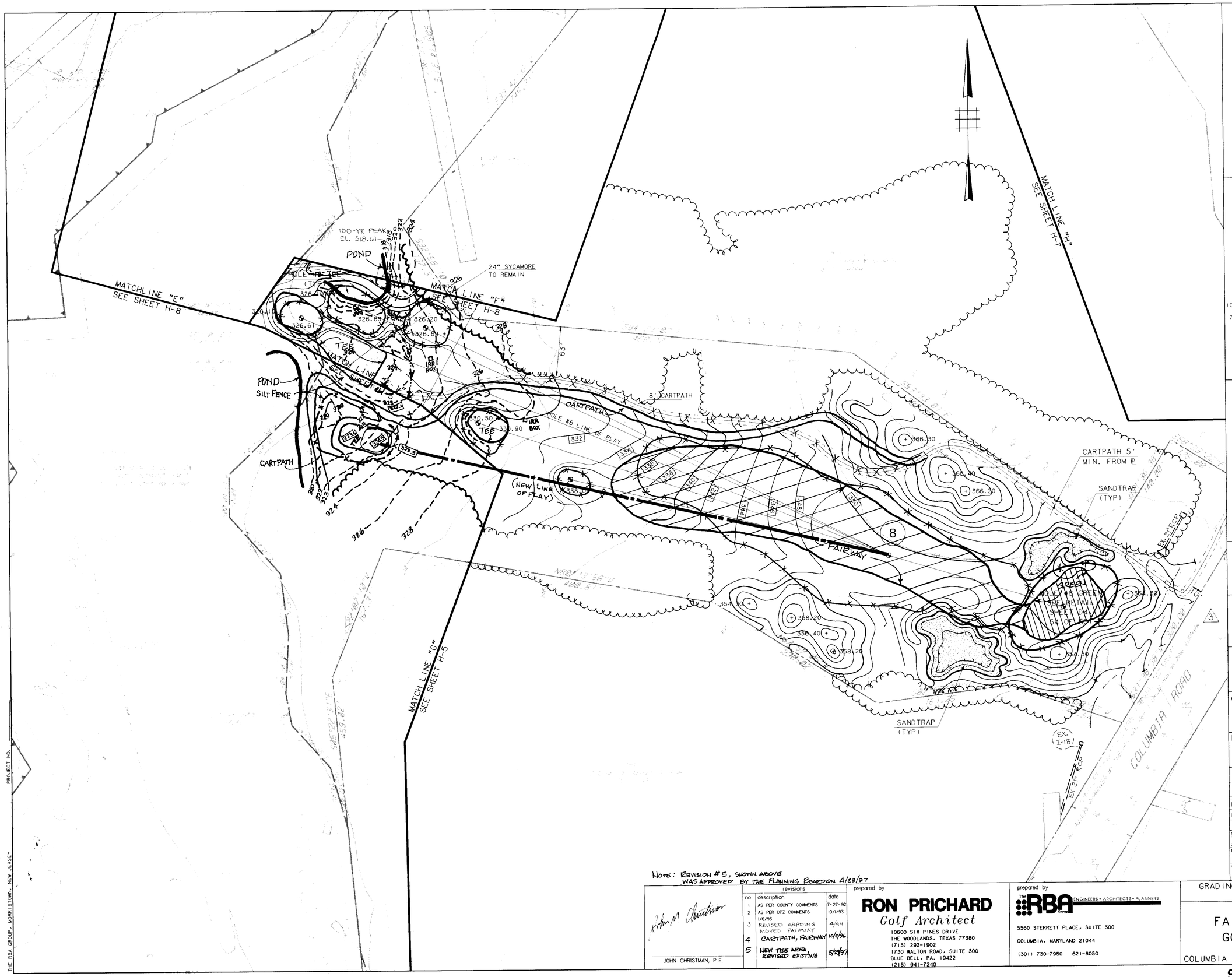
FAIRWAY HILLS
GOLF COURSE

COLUMBIA MARYLAND

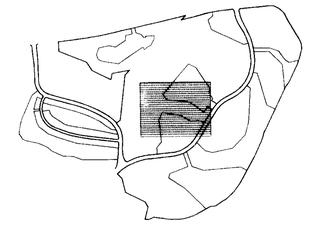
SCALE 1" = 50'
DRAWN MBB CHECKED JJB
PROJ NO. M0405 DATE 9-9-91
H-5 SHEET 9 OF 56

SDP-92-104

H5



KEY MAP



LEGEND

ITEM	EXISTING	PROPOSED
CONTOURS		350
SPOT GRADE		+ 350.0
WOODED AREA		TO REMAIN
WETLAND LIMIT		
(25' BUFFER)		
100 YR. FLOOD PLAIN		
75' STREAM BUFFER		
RETAINING WALL		
EXISTING STREAM		
EXISTING PROPERTY LINE		
EXISTING EASEMENT LINE		

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 2-2-93

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE SYSTEMS, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
DIRECTOR — DATE 11/2/93
CHIEF, BUREAU OF ENGINEERING — DATE 11/1/93

APPROVED : HOWARD COUNTY DEPT. OF PLANNING AND ZONING
DIRECTOR — DATE 11/10/93
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 11/10/93

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.
HOWARD COUNTY HEALTH DEPARTMENT.
COUNTY HEALTH OFFICER — DATE 11/5/93

OWNER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

DEVELOPER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

ADDRESS CHART

BUILDING	STREET ADDRESS
LOT5-CLUBHOUSE	5100 COLUMBIA ROAD
LOT1-MAINT. BLDG.	5280 COLUMBIA ROAD

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL
VWL.9/3,LOT39, VWL.9/4,LOTS 33&55,TC,9/1,LOT30 & VDS,3/1,LOTS 1,2 & 4	9/3,9/4, 9/1 & 3/1	LOTS 1,2,3, 33-39 & 55

PLAT	BLOCK	ZONE	TAX/ZONE MAP	ELEC DIST	CENSUS TR
	B-9,10-INT-0.5, 14,15	C CONN.	30	5th	6054

WATER CODE — SEWER CODE

PROJECT NO.

THE RBA GROUP, MORRISTOWN, NEW JERSEY

NOTE: REVISION #5, SHOWN ABOVE WAS APPROVED BY THE PLANNING BOARD ON 1/28/97

JOHN CHRISTMAN, P.E.

no	description	date
1	AS PER COUNTY COMMENTS	7-27-92
2	AS PER DPZ COMMENTS 1/6/93	10/1/93
3	REVISED GRADING MOVED PATHWAY	4/94
4	CARTPATH, FAIRWAY	10/6/96
5	NEW TEE AREA, REVISED EXISTING	5/29/97

prepared by
RON PRICHARD
Golf Architect
10600 SIX PINES DRIVE
THE WOODLANDS, TEXAS 77380
(713) 292-1902
1730 WALTON ROAD, SUITE 300
BLUE BELL, PA. 19422
(215) 941-7240

prepared by
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5560 STERRETT PLACE, SUITE 300
COLUMBIA, MARYLAND 21044
(301) 730-7950 621-6050

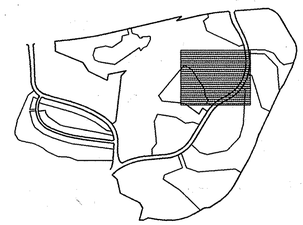
GRADING AND DRAINAGE PLAN
HOLE #8

FAIRWAY HILLS
GOLF COURSE
COLUMBIA MARYLAND

SCALE 1" = 50'
DRAWN MBB
CHECKED JJB
PROJ NO M0405
DATE 9-9-91
SHEET H-6
10 OF 56

SDP-92-104

KEY MAP



LEGEND

ITEM	EXISTING	PROPOSED
CONTOURS	350	350
SPOT GRADE	+ 350.0	+ 350.0
WOODED AREA		TO REMAIN
WETLAND LIMIT		
(25' BUFFER)		
100 YR. FLOOD PLAIN		
75' STREAM BUFFER RETAINING WALL		
EXISTING STREAM		
EXISTING PROPERTY LINE		
EXISTING EASEMENT LINE		
BORING LOCATION		

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 2-2-93

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE SYSTEMS, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS. HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
DIRECTOR — DATE 11/2/93
CHIEF, BUREAU OF ENGINEERING — DATE 11/1/93

APPROVED : HOWARD COUNTY DEPT. OF PLANNING AND ZONING
DIRECTOR — DATE 11/2/93
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 11/10/93

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.
COUNTY HEALTH OFFICER — DATE 11/5/93

OWNER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

DEVELOPER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

ADDRESS CHART

BUILDING	STREET ADDRESS
LOT5-CLUBHOUSE	5100 COLUMBIA ROAD
LOT1-MAINT. BLDG.	5280 COLUMBIA ROAD

SUBDIVISION NAME VML.9/3,LOT39, VML.9/4,LOTS 33&35,TC/9/1,LOT30 & VDS.3/1,LOTS 1,2 & 4		SECTION/AREA 9/3,9/4, 9/1 & 3/1	LOT/PARCEL LOTS 1,2,3, 33,39 & 55
PLAT	BLOCK ZONE 8,9,10,MT-0.5 14,15 & COMM.	TAX/ZONE MAP 30	ELEC. DIST. 5th	CENSUS TR. 6054
WATER CODE		SEWER CODE		

REVISIONS
A ADDED GOLF PAD AND FUEL TANK 2/7/95
B ADDED 1,182 SF CLUB HOUSE ADDITION 12-30-03
C ADDED 40'x24' GOLF CART SHELTER 2-20-06

no.	revisions description	date
1	AS PER COUNTY COMMENTS	8/92
2	AS PER COUNTY COMMENTS	1-6-92
3	AS PER DPZ COMMENTS 1/6/93	10/1/93
A	AS PER COUNTY COMMENTS	1/3/94
5	REVISED WATER TO SHOP & CLUBHOUSE, REV. GRADING, ADDED CONN. DRIVEWAY, REV. STORM DRAIN, ADDED CART PATH, ADDED WATER LINE, CORRECTED SEWER	4/94
6		7/94
7	ADDED PORCH LIGHTING, REVISED PARKING	7/94
8	CARTPATH, TEES, FAIRWAY	10/2/96
9	ADD ADDITION TO BLDG.	4.29.02
10	DRIVING RANGE EXPANSION 12 EXISTING DRIVING RANGE TEE AREA SHOWN	5/20/14 7/15/14

JOHN CHRISTMAN, P.E.

prepared by
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COLUMBIA, MARYLAND 21044
(301) 730-7950 621-6050

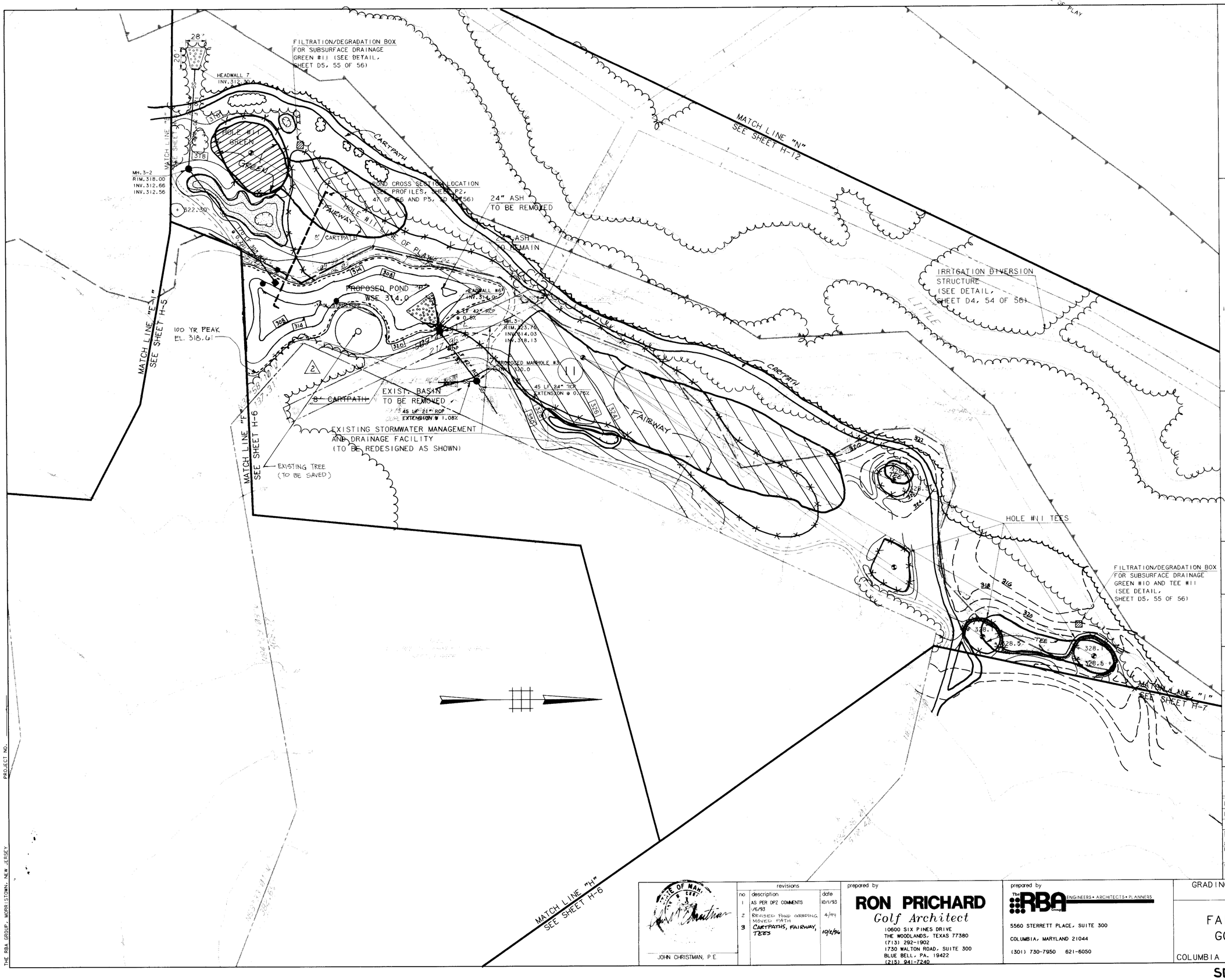
GRADING AND DRAINAGE PLAN
HOLE #9 & HOLE #10

FAIRWAY HILLS
GOLF COURSE
COLUMBIA MARYLAND

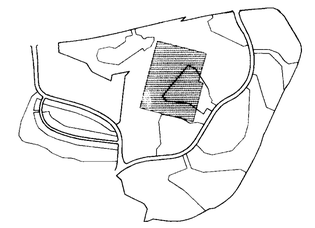
SCALE	1" = 50'
DRAWN	MBB
CHECKED	JJB
PROJ. NO.	M0405
DATE	9-9-91
SHEET	H-7
	11 OF 56

SDP-92-104
H3

PROJECT NO.
THE RBA GROUP, MORRISTOWN, NEW JERSEY



KEY MAP



LEGEND

ITEM	EXISTING	PROPOSED
CONTOURS	350	350
SPOT GRADE	+ 350.0	+ 350.0
WOODED AREA		TO REMAIN
WETLAND LIMIT		
(25' BUFFER)		
100 YR. FLOOD PLAIN		
75' STREAM BUFFER		
RETAINING WALL		
EXISTING STREAM		
EXISTING PROPERTY LINE		
EXISTING EASEMENT LINE		
BORING LOCATION	●	

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 2-2-93

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

DIRECTOR — DATE 11/2/93

CHIEF, BUREAU OF ENGINEERING — DATE 11/1/93

APPROVED : HOWARD COUNTY DEPT. OF PLANNING AND ZONING

DIRECTOR — DATE 11/10/93

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 11/10/93

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

COUNTY HEALTH OFFICER — DATE 11/5/93

OWNER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

DEVELOPER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

ADDRESS CHART

BUILDING	STREET ADDRESS
LOT5-CLUBHOUSE	5100 COLUMBIA ROAD
LOT1-MAINT.BLDG.	5280 COLUMBIA ROAD

SUBDIVISION NAME VWL.9/3,LOT39, VWL.9/4,LOTS 33&55,TC.9/1,LOT30 & VDS.31,LOTS 1,2 & 4		SECTION/AREA 9/3,9/4, 9/1 & 3/1		LOT# LOTS 1,2,3, 33,39 & 55	
PLAT	BLOCK N.9,10,NT-0.5 M-15 R COMM.	ZONE	TAX/ZONE MAP 30	ELEC DIST 5th	CENSUS TR 6054
WATER CODE		SEWER CODE			

JOHN CHRISTMAN, P.E.

no	revisions description	date
1	AS PER DPZ COMMENTS 1/6/93	10/1/93
2	REVISED POND GRADING, MOVED PATH	4/94
3	CARTPATHS, FAIRWAY, TEES	10/26/96

prepared by
RON PRICHARD
Golf Architect
10600 SIX PINES DRIVE
THE WOODLANDS, TEXAS 77380
(713) 292-1902
1730 WALTON ROAD, SUITE 300
BLUE BELL, PA. 19422
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COLUMBIA, MARYLAND 21044
(301) 730-7950 621-6050

GRADING AND DRAINAGE PLAN
HOLE #11

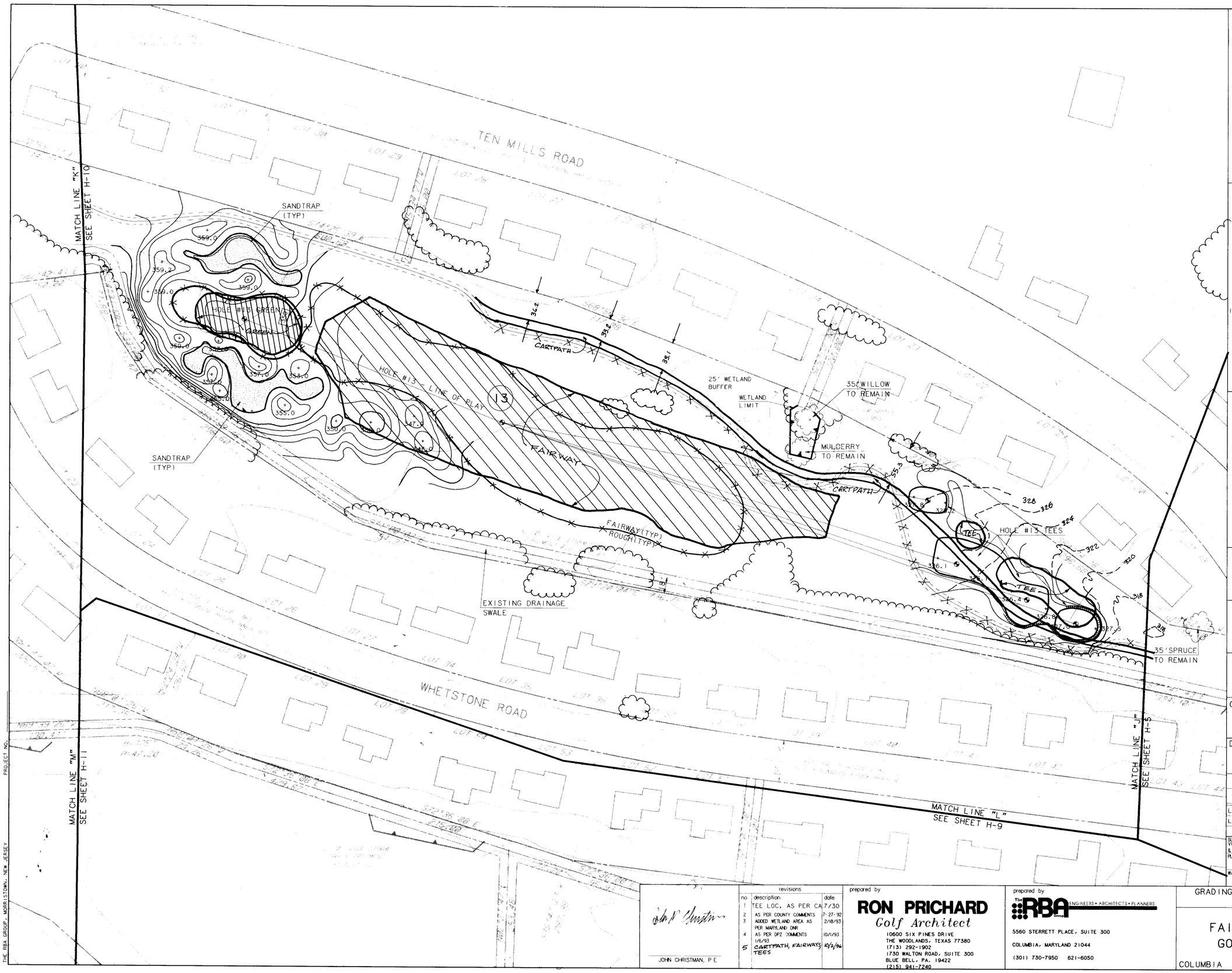
FAIRWAY HILLS
GOLF COURSE

COLUMBIA MARYLAND

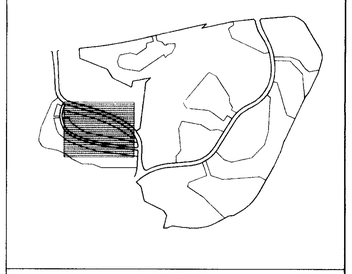
SCALE	1" = 50'
DRAWN	MBB
CHECKED	JJB
PROJ NO	M0405
DATE	9-9-91
SHEET	H-8
	12 OF 56

SDP-92-104

H8



KEY MAP



LEGEND

ITEM	EXISTING	PROPOSED
CONTOURS		350
SPOT GRADE		+ 350.0
WOODED AREA		TO REMAIN
WETLAND LIMIT (25' BUFFER)		
100 YR. FLOOD PLAIN		
75' STREAM BUFFER RETAINING WALL		
EXISTING STREAM		
EXISTING PROPERTY LINE		
EXISTING EASEMENT LINE		

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 2-2-93

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

DIRECTOR — DATE 11.2.93

CHIEF, BUREAU OF ENGINEERING — DATE 11/1/93

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

DIRECTOR — DATE 11/10/93

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 11/10/93

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

COUNTY HEALTH OFFICER — DATE 11/5/93

OWNER: COLUMBIA PARKS AND RECREATION ASSOCIATION
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DEVELOPER: COLUMBIA PARKS AND RECREATION ASSOCIATION
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ADDRESS CHART

BUILDING	STREET ADDRESS
LOT5-CLUBHOUSE	5100 COLUMBIA ROAD
LOT1-MAINT.BLDG.	5280 COLUMBIA ROAD

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL
VWL,9/3,LOT39, VWL,9/4,LOTS 33&55,TC,9/1,LOT30 & VDS,3/1,LOTS 1,2 & 4	9/3,9/4, 9/1 & 3/1	LOTS 1,2,3, 33,39 & 55

PLAT	BLOCK	ZONE	TAX/ZONE MAP	ELEC DIST	CENSUS TR
	8,9,10, 14,15	NT-O.S. & COMM.	30	51h	6054

WATER CODE — SEWER CODE

JOHN CHRISTMAN, P.E.

revisions

no	description	date
1	TEE LOC. AS PER CA	7/30
2	AS PER COUNTY COMMENTS	7-27-92
3	ADDED WETLAND AREA AS PER MARYLAND DNR	2/18/93
4	AS PER DPZ COMMENTS 1/6/93	10/1/93
5	CARTPATH, FAIRWAYS, TEES	10/2/96

prepared by
RON PRICHARD
Golf Architect
10600 SIX PINES DRIVE
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(301) 730-7950 621-6050

GRADING AND DRAINAGE PLAN
HOLE #13

FAIRWAY HILLS
GOLF COURSE

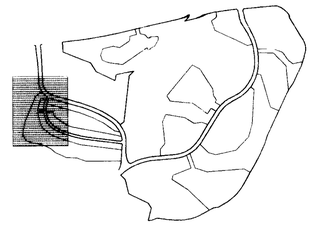
COLUMBIA MARYLAND

SCALE 1" = 50'
DRAWN MBB
CHECKED JJB
PROJ NO M0405
DATE 9-9-91
H-9
SHEET 13 OF 56

SDP-92-104

THE RBA GROUP, MORRISTOWN, NEW JERSEY
PROJECT NO.

KEY MAP



LEGEND

ITEM	EXISTING	PROPOSED
CONTOURS		350
SPOT GRADE		+ 350.0
WOODED AREA		TO REMAIN
WETLAND LIMIT		
(25' BUFFER)		
100 YR. FLOOD PLAIN		
75' STREAM BUFFER RETAINING WALL		
EXISTING STREAM		
EXISTING PROPERTY LINE		
EXISTING EASEMENT LINE		

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 2-2-93

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE SYSTEMS, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS. HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
James M. Irvin — DIRECTOR — DATE 11-2-93
Donald T. Jepson — CHIEF, BUREAU OF ENGINEERING — DATE 11/1/93

APPROVED : HOWARD COUNTY DEPT. OF PLANNING AND ZONING
Marsh M. Langer — DIRECTOR — DATE 11/12/93
Gina Trimmary — CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 11/10/93

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.
Joyce M Boyd and per JJm — COUNTY HEALTH OFFICER — DATE 11/5/93

OWNER: COLUMBIA PARKS AND RECREATION ASSOCIATION
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DEVELOPER: COLUMBIA PARKS AND RECREATION ASSOCIATION
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COLUMBIA, MD. 21045

ADDRESS CHART

BUILDING	STREET ADDRESS
LOT5-CLUBHOUSE	5100 COLUMBIA ROAD
LOT1-MAINT.BLDG.	5280 COLUMBIA ROAD

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL
VWL,9/3,LOT39, VWL,9/4,LOTS 33&55,TC,9/1,LOT30 & VDS,3/1,LOTS 1,2 & 4	9/3,9/4, 9/1 & 3/1	LOTS 1,2,3, 33,39 & 55

PLAT	BLOCK	ZONE	TAX/ZONE MAP	ELEC DIST	CENSUS TR
	8,9,10,14,15	NT-O.S. & COMM.	30	5th	6054

WATER CODE — SEWER CODE

JOHN CHRISTMAN, P.E

revisions

no	description	date
1	AS PER COUNTY COMMENTS	7-27-92
2	AS PER DPZ COMMENTS 1/6/93	10/1/93
3	CARTPATH, FAIRWAYS, TEES	10/2/96

prepared by
RON PRICHARD
Golf Architect
10600 SIX PINES DRIVE
THE WOODLANDS, TEXAS 77380
(713) 292-1902
1730 WALTON ROAD, SUITE 300
BLUE BELL, PA. 19422
(215) 941-7240

prepared by
The RBA Group ENGINEERS • ARCHITECTS • PLANNERS
5560 STERRETT PLACE, SUITE 300
COLUMBIA, MARYLAND 21044
(301) 730-7950 621-6050

GRADING AND DRAINAGE PLAN
HOLE #14

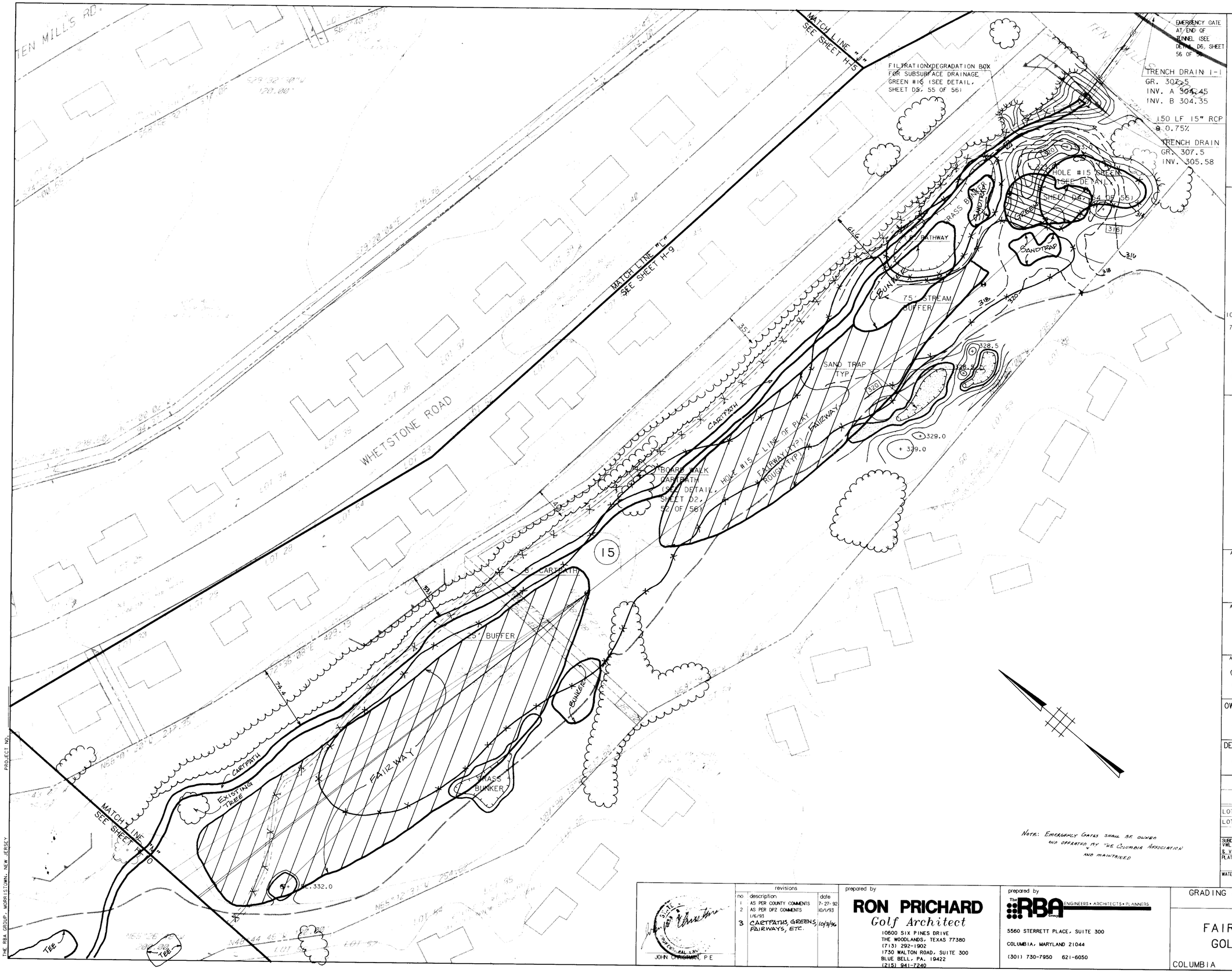
FAIRWAY HILLS
GOLF COURSE

COLUMBIA MARYLAND

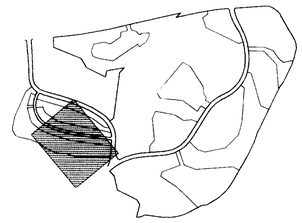
SCALE 1" = 50'
DRAWN MBB
CHECKED JJB
PROJ. NO. M0405
DATE 9-9-91
H10
SHEET 14 OF 56

SDP-92-104

THE RBA GROUP, MORRISTOWN, NEW JERSEY
PROJECT NO.



KEY MAP



LEGEND

ITEM	EXISTING	PROPOSED
CONTOURS		350
SPOT GRADE		+ 350.0
WOODED AREA		TO REMAIN
WETLAND LIMIT		
(25' BUFFER)		
100 YR. FLOOD PLAIN		
75' STREAM BUFFER		
RETAINING WALL		
EXISTING STREAM		
EXISTING PROPERTY LINE		
EXISTING EASEMENT LINE		

APPROVED
HOWARD COUNTY
DEPARTMENT OF PLANNING & ZONING
DATE 2-2-93

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

DIRECTOR — DATE 11/2/92

CHIEF, BUREAU OF ENGINEERING — DATE 11/1/93

APPROVED : HOWARD COUNTY DEPT. OF PLANNING AND ZONING

DIRECTOR — DATE 11/2/92

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 11/10/93

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

COUNTY HEALTH OFFICER — DATE 11/5/93

OWNER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

DEVELOPER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

ADDRESS CHART

BUILDING	STREET ADDRESS
LOT5-CLUBHOUSE	5100 COLUMBIA ROAD
LOT1-MAINT. BLDG.	5280 COLUMBIA ROAD

SUBDIVISION NAME VWL.9/3, LOT 39, VWL.9/4, LOTS 33&55, TC.9/1, LOT 30 & VDS.3/1, LOTS 1, 2 & 4	SECTION/AREA 9/3, 9/4, 9/1 & 3/1	LOT/PARCEL LOTS 1, 2, 3, 33, 39 & 55	
PLAT	BLOCK/ZONE B.9, PART OF 5, 14, 15 & COMM.	TAX/ZONE MAP 30	ELEC DIST 5th	CENSUS TR 6054
WATER CODE	SEWER CODE			

NOTE: EMERGENCY GATES SHALL BE OWNED AND OPERATED BY THE COLUMBIA ASSOCIATION AND MAINTAINED

PROJECT NO.

THE RBA GROUP, MORRISTOWN, NEW JERSEY

JOHN CHRISTMAN, P.E.

revisions		
no	description	date
1	AS PER COUNTY COMMENTS	7-27-92
2	AS PER DPZ COMMENTS 1/6/93	10/1/93
3	CARTPATHS, GREENS, FAIRWAYS, ETC.	10/3/93

prepared by
RON PRICHARD
Golf Architect
10600 SIX PINES DRIVE
THE WOODLANDS, TEXAS 77380
(713) 292-1902
1730 WALTON ROAD, SUITE 300
BLUE BELL, PA. 19422
(215) 941-7240

prepared by
The RBA Group — ENGINEERS • ARCHITECTS • PLANNERS
5560 STERRETT PLACE, SUITE 300
COLUMBIA, MARYLAND 21044
(301) 730-7950 621-6050

GRADING AND DRAINAGE PLAN
HOLE #15

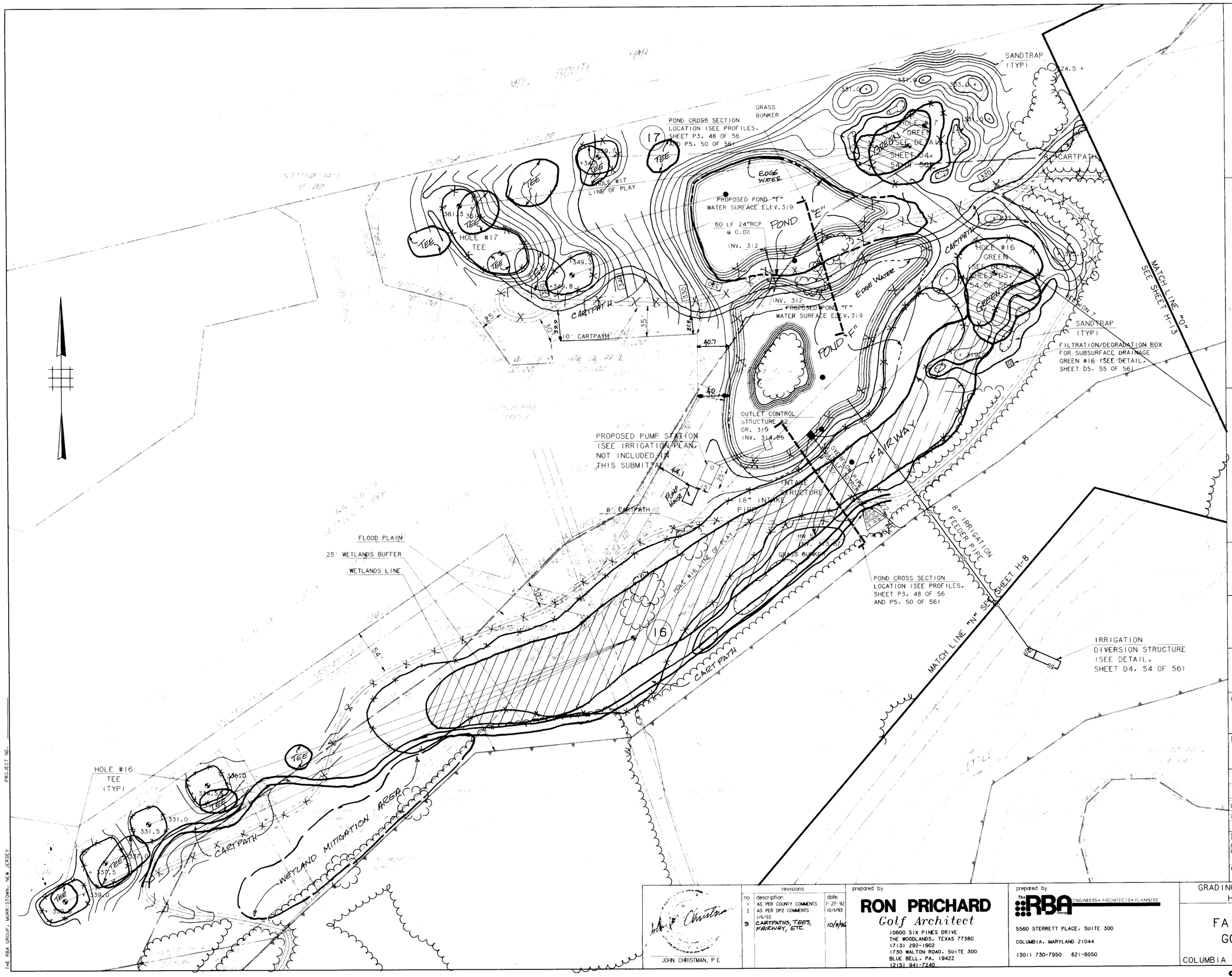
FAIRWAY HILLS
GOLF COURSE

COLUMBIA MARYLAND

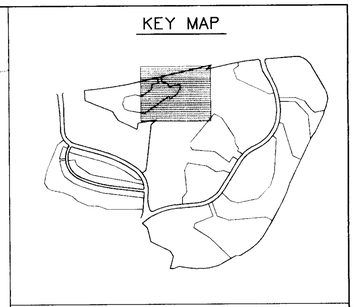
SCALE	1" = 50'
DRAWN	MBB
CHECKED	JJB
PROJ NO	M0405
DATE	9-9-91
SHEET	H11
	15 OF 56

SDP-92-104

H5



KEY MAP



LEGEND

ITEM	EXISTING	PROPOSED
CONTOURS		350
SPOT GRADE		+ 350.0
WOODED AREA		TO REMAIN
WETLAND LIMIT (25' BUFFER)		
100 YR. FLOOD PLAIN		
75' STREAM BUFFER		
EXISTING STREAM		
EXISTING PROPERTY LINE		
EXISTING EASEMENT LINE		
BORING LOCATION		

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 2-2-93

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

DIRECTOR — DATE 2-2-93

CHIEF, BUREAU OF ENGINEERING — DATE 11/1/93

APPROVED : HOWARD COUNTY DEPT. OF PLANNING AND ZONING

DIRECTOR — DATE 11/4/93

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 11/10/93

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

COUNTY HEALTH OFFICER — DATE 11/5/93

OWNER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

DEVELOPER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

ADDRESS CHART

BUILDING	STREET ADDRESS
LOT5-CLUBHOUSE	5100 COLUMBIA ROAD
LOT1-MAINT.BLDG.	5280 COLUMBIA ROAD

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL
VWL,9/3,LOT39, VWL,9/4,LOTS 33&55,TC,9/1,LOT30 & VDS,3/1,LOTS 1,2 & 4	9/3,9/4, 9/1 & 3/1	LOTS 1,2,3, 33,39 & 55

PLAT	BLOCK	ZONE	TAX/ZONE MAP	ELEC DIST	CENSUS TR
	8,9,10,14,15	NT-0.5, & COMM.	30	5th	6054

WATER CODE — SEWER CODE

JOHN CHRISTMAN, P.E.

revisions

no	description	date
1	AS PER COUNTY COMMENTS	7-27-92
2	AS PER DPZ COMMENTS 1/6/93	10/1/93
3	CARTPATHS, TEES, FAIRWAY, ETC.	10/3/96

prepared by
RON PRICHARD
Golf Architect
10600 SIX PINES DRIVE
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1730 WALTON ROAD, SUITE 300
BLUE BELL, PA. 19422
(215) 941-7240

prepared by
The RBA Group ENGINEERS • ARCHITECTS • PLANNERS
5560 STERRETT PLACE, SUITE 300
COLUMBIA, MARYLAND 21044
(301) 730-7950 621-6050

GRADING AND DRAINAGE PLAN
HOLES #16 & 17

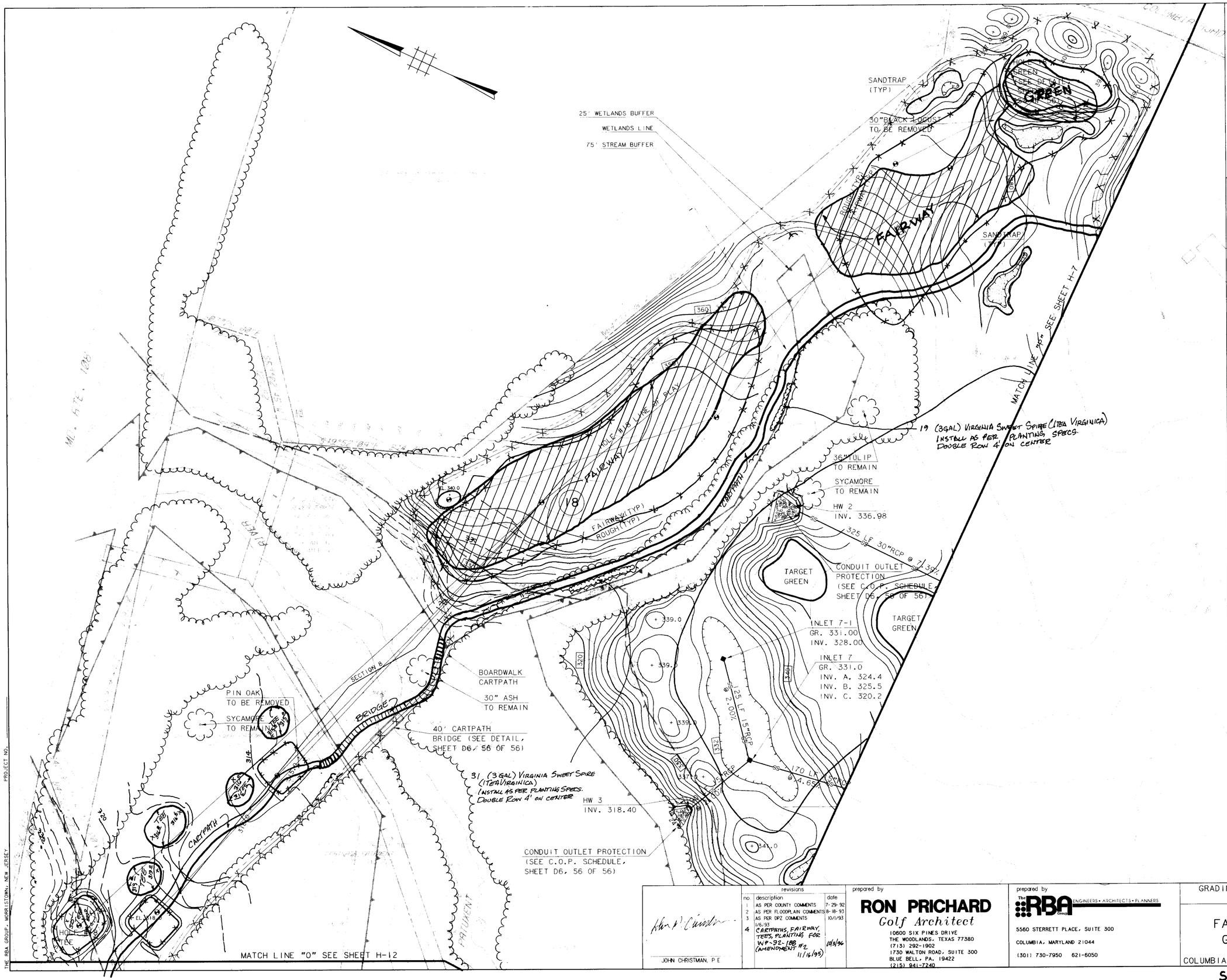
FAIRWAY HILLS
GOLF COURSE

COLUMBIA MARYLAND

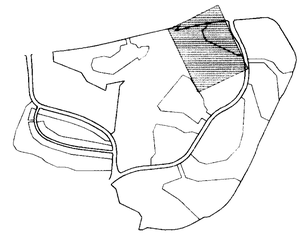
SCALE	1" = 50'
DRAWN MBB	CHECKED JJB
PROJ. NO. M0405	DATE 9-9-91
H12 SHEET	16 OF 56

SDP-92-104

THE RBA GROUP, MORRISTOWN, NEW JERSEY PROJECT NO.



KEY MAP



LEGEND

ITEM	EXISTING	PROPOSED
CONTOURS		350
SPOT GRADE		+ 350.0
WOODED AREA		TO REMAIN
WETLAND LIMIT		
(25' BUFFER)		
100 YR. FLOOD PLAIN		
75' STREAM BUFFER		
RETAINING WALL		
EXISTING STREAM		
EXISTING PROPERTY LINE		
EXISTING EASEMENT LINE		

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 2-2-93

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

DIRECTOR — DATE 11/1/93

CHIEF, BUREAU OF ENGINEERING — DATE

APPROVED : HOWARD COUNTY DEPT. OF PLANNING AND ZONING

DIRECTOR — DATE 11/10/93

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE

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

COUNTY HEALTH OFFICER — DATE 11/5/93

OWNER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

DEVELOPER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

ADDRESS CHART

BUILDING	STREET ADDRESS
LOT5-CLUBHOUSE	5100 COLUMBIA ROAD
LOT1-MAINT. BLDG.	5280 COLUMBIA ROAD

SUBDIVISION NAME VWL-9/3-LOT39, VWL-9/4-LOTS 33&35, TC/9/1-LOT30 & VDS-3/1-LOTS 1, 2 & 4		SECTION/AREA 9/3-9/4, 9/1 & 3/1	LOT/PARCEL LOTS 1-2, 3, 33, 39 & 55
PLAT	BLOCK / ZONE P-36-10&11-13,14,15 & COMM.	TAX/ZONE MAP 30	ELEC DIST / CENSUS TR 5th / 6054
WATER CODE		SEWER CODE	

no	revisions	date
1	AS PER COUNTY COMMENTS	7-29-92
2	AS PER FLOODPLAIN COMMENTS	8-18-93
3	AS PER DPZ COMMENTS 1/6/93	10/1/93
4	CARTPATHS, FAIRWAY, TEES, PLANTING FOR WP-92-188 #2 (AMENDMENT 11/16/93)	11/5/93

JOHN CHRISTMAN, P.E

prepared by
RON PRICHARD
Golf Architect
10600 SIX PINES DRIVE
THE WOODLANDS, TEXAS 77380
(713) 292-1902
1730 WALTON ROAD, SUITE 300
BLUE BELL, PA. 19422
(215) 941-7240

prepared by
The RBA Group ENGINEERS • ARCHITECTS • PLANNERS
5560 STERRETT PLACE, SUITE 300
COLUMBIA, MARYLAND 21044
(301) 730-7950 621-6050

GRADING AND DRAINAGE PLAN
HOLE #18

FAIRWAY HILLS
GOLF COURSE

COLUMBIA MARYLAND

SCALE 1" = 50'
DRAWN MBB
CHECKED JJB
PROJ NO M0405
DATE 9-9-91
SHEET H13
17 OF 56

SDP-92-104

H13

THE RBA GROUP, MORRISTOWN, NEW JERSEY

PROJECT NO.

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

James M. Irvin, DIRECTOR — 11/9/93 DATE

Edward Sachs, acting, CHIEF, BUREAU OF ENGINEERING — 11/8/93 DATE

APPROVED HOWARD COUNTY DEPT OF PLANNING AND ZONING

DIRECTOR — 11/10/93 DATE

Glenn Schimmoyer, CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — 11/10/93 DATE

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

Joyce M. Boyd Parsons, COUNTY HEALTH OFFICER — 11/10/93 DATE

APPROVED
PLANNING BOARD
HOWARD COUNTY
DATE 2-2-93

TEMPORARY STONE SEDIMENT TRAP #7
D.A.= 3.0 AC
STORAGE REQUIRED=5.400CUFT
STORAGE PROVIDED = 5.408 CUFT
CREST ELEV. = 329
CREST WIDTH = 12 FT
STORAGE DEPTH = 2 FT
BOTTOM ELEV. = 326
BOTTOM DIMENSION = 52'X 52'
EMBANKMENT TOP ELEV. = 330
(SEE DETAIL, SHEET D3, 53 OF 56)

FLOOD PLAIN
WETLANDS
75' STREAM BUFFER
25' WETLANDS BUFFER

MATCH LINE "A" SEE SHEET E-2

MATCH LINE "A" SEE SHEET E-1

80 LF 15" RCP (EX. I-31)

EX. E-7

EXISTING CART TUNNEL 371.30

TEE HOLE #1 (TYP.)

S.C.E.

LIMIT OF DISTURBANCE

8' CARTPATH (TYP.)

20' STORM DRAIN EASEMENT REQ'D

HOLE #1 LINE OF PLAY

SILT FENCE

RED MAPLE TO REMAIN

SYCAMORE TO REMAIN

EXISTING POND W.E. 356.5

ROUGH LIKE FAIRWAY TYP.

GRASS BUNKER

AREA DRAIN 8 GR. 349.80 INV. 346.80

LP 349.80

INLET PROTECTION (SEE DETAIL, SHEET D3, 53 OF 56)

180 LF 12"RCP @ 2.11%

TREE PROTECTION (SEE DETAIL, SHEET D5, 55 OF 56)

HOLE #1 GREEN (TYP.)

SECTION

EXISTING SYCAMORE TO REMAIN

FLARRED END SECTION #13 INV. 343.00

TEE HOLE #2 (TYP.)

TW 343.5 BW 339.0

STONE RIP-RAP

EL. 341.5

EL. 345.0

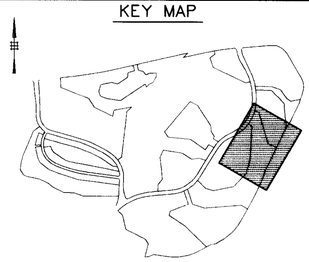
FILTRATION/DEGRADATION BOX FOR SUBSURFACE DRAINAGE FOR GREEN #1 (SEE DETAIL, SHEET D-5, 55 OF 56)

ROUTE 29

NOTE:
1. 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 (SEE STANDARD SEDIMENT CONTROL NOTE #2, SHEET D3, 53 OF 56).

2. SILT FENCE MUST BE INSTALLED PARALLEL TO CONTOURS.

KEY MAP



LEGEND

ITEM	EXISTING	PROPOSED
CONTOURS		350
SPOT GRADE		+ 350.0
WOODED AREA		TO REMAIN
SILT FENCE		
LIMIT OF DISTURBANCE		
RETAINING WALL		
WETLAND LIMIT (25' BUFFER)		
100 YR. FLOOD PLAIN		
DIVERSION SWALE		

RESPONSIBLE PERSONNEL CERTIFICATION

"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 WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT

SIGNATURE OF DEVELOPER (PRINT NAME BELOW) — DATE

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

SIGNATURE OF ENGINEER (PRINT NAME BELOW) — DATE
JOHN CHRISTMAN, P.E.

CERTIFICATION BE THE DEVELOPER

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

SIGNATURE OF DEVELOPER (PRINT NAME BELOW) — DATE

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

APPROVED Robert W. Zirkin, Jr. 10/21/1993
HOWARD S.C.D. — DATE

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS.

APPROVED J. K. Warfield 10/21/1993
U.S. SOIL CONSERVATION SERVICE — DATE

OWNER COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

DEVELOPER COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

ADDRESS CHART

BUILDING	STREET ADDRESS
LOT5-CLUBHOUSE	5100 COLUMBIA ROAD
LOT1-MAINT.BLDG.	5280 COLUMBIA ROAD

SUBDIVISION NAME VWL,9/3,LOT39, VWL,9/4,LOTS 33&55,TC,9/1,LOT30 & WDS,3/1,LOTS 1,2 & 4		SECTION/AREA 9/3,9/4, 9/1 & 3/1	LOT/PARCEL LOTS 1,2,3, 33,39 & 55
PLAT	BLOCK ZONE (R-S, O-N T-C, S-A, I-S, E COMM)	TAX/ZONE MAP 30	ELEC DIST 5th
			CENSUS TR 6054
WATER CODE		SEWER CODE	

revisions			
no.	description	date	
1	LIMIT OF DIST., SILT FENCE	9/22/92	
2	AS PER FLOODPLAIN COMMENTS DATED 1/6/93	2/18/93	
3	AS PER DPZ COMMENTS DATED 12/8/92	10/1/93	
4	AS PER HSCD COMMENTS	10/1/93	
5	ADC S.C.E.	3/31/94	
6	EXTEND STORM DRAIN, REVISE GRADING, ADDED TEE	4/1/94	

John A. Christman
JOHN CHRISTMAN, P.E.

prepared by
RON PRICHARD
Golf Architect
10600 SIX PINES DRIVE
THE WOODLANDS, TEXAS 77380
(713) 292-1902
1730 WALTON ROAD
SUITE 300, BLUE BELL, PA.
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The RBA Group ENGINEERS • ARCHITECTS • PLANNERS
5560 STERRETT PLACE, SUITE 300
COLUMBIA, MARYLAND 21044
(301) 730-7950 621-6050

EROSION AND SEDIMENT CONTROL PLAN

FAIRWAY HILLS GOLF COURSE

COLUMBIA MARYLAND

SCALE 1"= 50'
DRAWN KBW CHECKED JJB
PROJ. NO M0405 DATE 9/22/92
E-1 SHEET 18 OF 56

THE RBA GROUP, MORRISTOWN, NEW JERSEY PROJECT NO.

SDP-92-104

45

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

James M. Irvin — 11/9/93
DIRECTOR — DATE

E. Edward Rabb, Acting — 11/8/93
CHIEF, BUREAU OF ENGINEERING — DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

Director — 11/9/93
DIRECTOR — DATE

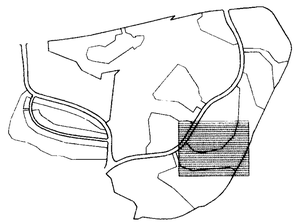
Chief — 11/10/93
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE

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

Joyce M. Boyd — 11/10/93
COUNTY HEALTH OFFICER — DATE

APPROVED
HOWARD SOIL CONSERVATION DISTRICT
DATE 2-2-93

KEY MAP



LEGEND

ITEM	EXISTING	PROPOSED
CONTOURS		350
SPOT GRADE		+ 350.0
WOODED AREA	TO REMAIN	TO REMAIN
SILT FENCE	S S S	
LIMIT OF DISTURBANCE		
RETAINING WALL		
WETLAND LIMIT		
(25' BUFFER)		
100 YR. FLOOD PLAIN		
DIVERSION SWALE		

RESPONSIBLE PERSONNEL CERTIFICATION

"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 WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

SIGNATURE OF DEVELOPER (PRINT NAME BELOW) — DATE

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

SIGNATURE OF ENGINEER (PRINT NAME BELOW) — DATE
JOHN CHRISTMAN, P.E.

CERTIFICATION BE THE DEVELOPER

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

SIGNATURE OF DEVELOPER (PRINT NAME BELOW) — DATE

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

APPROVED Robert W. Jubon — HOWARD S.C.D. — 10/21/93 DATE

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS.

APPROVED L. D. Warfield — U.S. SOIL CONSERVATION SERVICE — 10/21/93 DATE

OWNER COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

DEVELOPER COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

ADDRESS CHART

BUILDING	STREET ADDRESS
LOT5-CLUBHOUSE	5100 COLUMBIA ROAD
LOT1-MAINT. BLDG.	5280 COLUMBIA ROAD

SUBDIVISION NAME VML-9/3, LOT 39, VML-9/4, LOTS 33&55, TC-9/1, LOT 30 & VDS-3/1, LOTS 1, 2 & 4	SECTION/AREA 9/3-9/4; 9/1 & 3/1	LOT/PARCEL LOTS 1, 2, 3, 33, 39 & 55	
PLAT	BLOCK/ZONE R-9, 10 ANT-0.5, 4, 15 & COMM.	TAX/ZONE MAP 30	ELEC DIST 5th	CENSUS TR 6054
WATER CODE	SEWER CODE			

NOTE:
1. 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 (SEE STANDARD SEDIMENT CONTROL NOTE #2, SHEET D3, 53 OF 56).

2. SILT FENCE MUST BE INSTALLED PARALLEL TO CONTOURS.

JOHN CHRISTMAN, P.E

no	revisions description	date
2	LIMIT OF D ST. SILT FENCE AS PER DPZ COMMENTS 1/6/93	9/22/92 10/1/93
3	AS PER HSCD COMMENTS 12/8/92	10/1/93
4	ADD S.C.E	3/31/94

prepared by
RON PRICHARD
Golf Architect
10600 SIX PINES DRIVE
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(713) 292-1902
1730 WALTON ROAD
SUITE 300, BLUE BELL, PA.
(215) 941-7240

prepared by
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5560 STERRETT PLACE, SUITE 300
COLUMBIA, MARYLAND 21044
(301) 730-7950 621-6050

EROSION AND SEDIMENT CONTROL PLAN

FAIRWAY HILLS GOLF COURSE

COLUMBIA MARYLAND

SCALE 1"= 50'
DRAWN KBW CHECKED JJB
PROJ NO M0405 DATE 9/22/92
E-2
SHEET 19 OF 56

SDP-92-104

THE RBA GROUP, MORRISTOWN, NEW JERSEY PROJECT NO.

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

DIRECTOR — DATE 11/8/93

CHIEF, BUREAU OF ENGINEERING — DATE 11/8/93

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

DIRECTOR — DATE 11/12/93

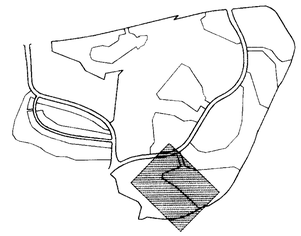
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 11/10/93

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

COUNTY HEALTH OFFICER — DATE 11/10/93

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 2-2-93

KEY MAP



LEGEND

ITEM	EXISTING	PROPOSED
CONTOURS		350
SPOT GRADE		+ 350.0
WOODED AREA		TO REMAIN
SILT FENCE		
LIMIT OF DISTURBANCE		
RETAINING WALL		
WETLAND LIMIT (25' BUFFER)		
100 YR. FLOOD PLAIN		

RESPONSIBLE PERSONNEL CERTIFICATION

"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 WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

SIGNATURE OF DEVELOPER — DATE
(PRINT NAME BELOW)

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

SIGNATURE OF ENGINEER — DATE
(PRINT NAME BELOW)
JOHN CHRISTMAN, P.E.

CERTIFICATION BE THE DEVELOPER

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

SIGNATURE OF DEVELOPER — DATE
(PRINT NAME BELOW)

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

APPROVED Robert W. Zahm — HOWARD S.C.D. — 10/21/93 DATE

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS

APPROVED — U.S. SOIL CONSERVATION SERVICE — 10/21/93 DATE

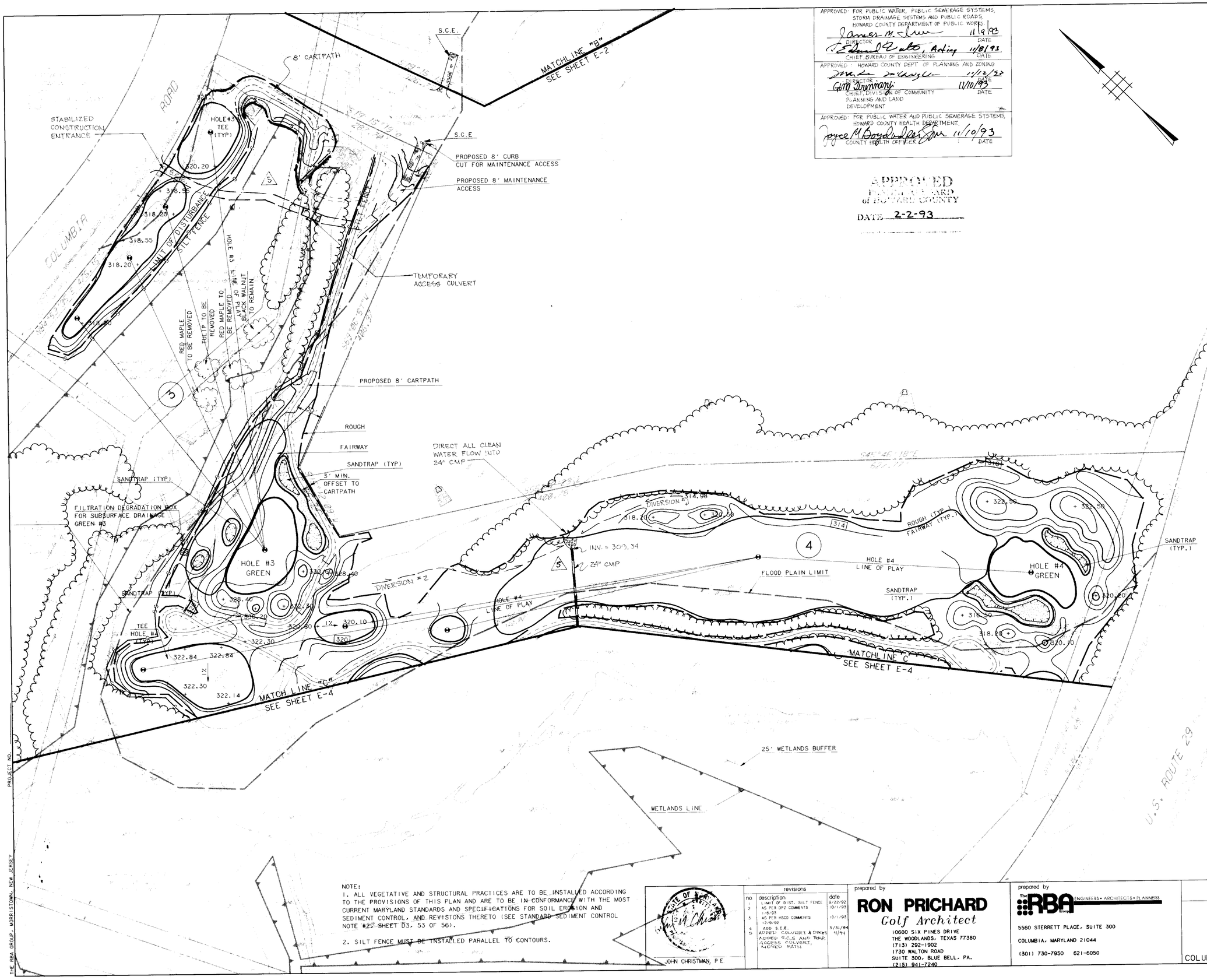
OWNER COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

DEVELOPER COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

ADDRESS CHART

BUILDING	STREET ADDRESS
LOT5-CLUBHOUSE	5100 COLUMBIA ROAD
LOT1-MAINT.BLDG.	5280 COLUMBIA ROAD

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL
VWL.9/3-LOT39, VWL.9/4-LOTS 33&55, TC.9/1-LOT30 & VDS.3/1-LOTS 1-2 & 4	9/3-9/4, 9/1 & 3/1	LOTS 1-2-3, 33-39 & 55
PLAT	BLOCK / ZONE / TAX/ZONE MAP / ELEC DIST / CENSUS TR	
	B-9.1(NT-O.S. & 4-15 & COMM.) / 30 / 5th / 6054	
WATER CODE	SEWER CODE	



NOTE:
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2. SILT FENCE MUST BE INSTALLED PARALLEL TO CONTOURS.

STATE OF MARYLAND — JOHN CHRISTMAN, P.E.

no	description	date
1	LIMIT OF DIST., SILT FENCE	9/22/92
2	AS PER OPZ COMMENTS 1/8/93	10/1/93
3	AS PER HSCD COMMENTS 12/9/92	10/1/93
4	ADD S.C.E.	3/31/94
5	ADDED CULVERT & DIKES, ADDED S.C.E AND TEMP. ACCESS CULVERT, MOVED PATH	9/94

prepared by
RON PRICHARD
Golf Architect
10600 SIX PINES DRIVE
THE WOODLANDS, TEXAS 77380
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COLUMBIA, MARYLAND 21044
(301) 730-7950 621-6050

EROSION AND SEDIMENT CONTROL PLAN

FAIRWAY HILLS GOLF COURSE

COLUMBIA MARYLAND

SCALE	1" = 50'
DRAWN	KBW
CHECKED	JJB
PROJ NO	M0405
DATE	9/22/92
SHEET	E-3
	20 OF 56

SDP-92-104

THE RBA GROUP, MORRISTOWN, NEW JERSEY — PROJECT NO.

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

DIRECTOR — DATE 11/9/93

CHIEF, BUREAU OF ENGINEERING — DATE 11/8/93

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

DIRECTOR — DATE 11/25/97

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 11/10/93

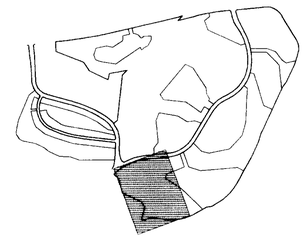
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE 11/10/93

APPROVED
DEPARTMENT OF PLANNING & ZONING
OF HOWARD COUNTY

DATE 2-2-93

KEY MAP



LEGEND

ITEM	EXISTING	PROPOSED
CONTOURS		350
SPOT GRADE		+ 350.0
WOODED AREA	TO REMAIN	
SILT FENCE	-S-S-S-	
LIMIT OF DISTURBANCE		
RETAINING WALL		
WETLAND LIMIT (25' BUFFER)		
100 YR. FLOOD PLAIN		
DIVERSION SWALE		

RESPONSIBLE PERSONNEL CERTIFICATION

"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 WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

SIGNATURE OF DEVELOPER — DATE

(PRINT NAME BELOW)

CERTIFICATION BY THE ENGINEER

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SIGNATURE OF ENGINEER — DATE 9/23

(PRINT NAME BELOW)
JOHN CHRISTMAN, P.E.

CERTIFICATION BE THE DEVELOPER

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

SIGNATURE OF DEVELOPER — DATE

(PRINT NAME BELOW)

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

APPROVED Robert W. Zirkman/jdb — HOWARD S.C.D. — DATE 10/21/93

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS.

APPROVED J. A. Warfield — U.S. SOIL CONSERVATION SERVICE — DATE 10/21/1993

OWNER COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

DEVELOPER COLUMBIA PARKS AND RECREATION ASSOCIATION
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COLUMBIA, MD. 21045

ADDRESS CHART

BUILDING	STREET ADDRESS
LOT5-CLUBHOUSE	5100 COLUMBIA ROAD
LOT1-MAINT.BLDG.	5280 COLUMBIA ROAD

SUBDIVISION NAME VWL.9/3,LOT39, VWL.9/4,LOTS 33&55,TC/9/1,LOT30 & VDS/3/1,LOTS 1,2 & 4	SECTION/AREA 9/3,9/4, 9/1 & 3/1	LOT/PARCEL LOTS 1,2,3, 33,39 & 55	
PLAT	BLOCK ZONE A,B,10,ANT-D.S, 14,15 & COMM	TAX/ZONE MAP 30	ELEC DIST 5th	CENSUS TR 6054
WATER CODE	SEWER CODE		

HOLE #3 TEE

COLUMBIA ROAD

MATCH LINE D SEE SHEET E-3

MATCH LINE "C" SEE SHEET E-3

MATCH LINE "C" SEE SHEET E-3

FLOOD PLAIN

MATCH LINE "C" SEE SHEET H-3

HOLE #5 TEE AREA

24" CMP

75' STREAM BUFFER

25' WETLANDS BUFFER

STONE RIP-RAP

TEMPORARY STONE SEDIMENT TRAP #5

D.A.= 2.9 AC.
STORAGE REQUIRED = 5,220 CUFT
STORAGE PROVIDED = 6,050 CUFT
CREST ELEV.= 311
CREST WIDTH = 16 FT.
STORAGE DEPTH = 2 FT.
BOTTOM ELEV.= 308
BOTTOM DIMENSION = 55'X 55'
EMBANKMENT TOP ELEV.= 312
(SEE DETAIL, SHEET D3, 53 OF 56)

GRASS BUNKER

INV.= 307.0

10 LF RIPRAP (d_{50}=9") PLACED 18" DEEP ON FILTER CLOTH.

TEMPORARY STONE SEDIMENT TRAP #6

D.A.= 3.3 AC.
STORAGE REQUIRED = 5,940 CUFT
STORAGE PROVIDED = 6,050 CUFT
CREST ELEV. = 309
CREST WIDTH = 20 FT
STORAGE DEPTH = 2 FT.
BOTTOM ELEV. = 306
BOTTOM DIMENSION = 55'X 55'
EMBANKMENT TOP ELEV. = 310
(SEE DETAIL, SHEET D3, 53 OF 56)

WETLANDS LINE

AREA DRAIN 10-1
GR.309.0
INV.307.5

110 LF 12"RCP @ 0.5%

AREA DRAIN 10
GR.309.10
INV. 306.95

130 LF 12" RCP @ 0.5%

INLET PROTECTION (SEE DETAIL, SHEET D3, 53 OF 56)

F.E.S. 3
INV.306.30

RIP RAP 12' X 8'

STONE RIP-RAP

FAIRWAY (TYP)

BOUNDARY

DISTURBANCE

SILT FENCE

BOARDWALK CARTPATH

60' CART PATH BRIDGE (SEE DETAIL, SHEET D6, 56 OF 56)

60' CART PATH BRIDGE

45°

20' STORM DRAIN EASEMENT REQ'D

15 LF UNGROUTED RIPRAP (d_{50}=9") AT ZERO SLOPE, PLACED 24" DEEP ON FILTER CLOTH

SANDTRAP (TYP)

FILTRATION DEGRADATION BOX FOR SUBSURFACE DRAINAGE FOR GREEN #5

FILTRATION DEGRADATION BOX FOR SUBSURFACE DRAINAGE GREEN #6

SANDTRAP (TYP)

LIMIT OF DISTURBANCE

CARTPATH

CARTPATH BRIDGE

CARTPATH 5' MIN. FROM PROP. LINE

S.C.E (SEE NOTE THIS SHEET)

REMOVE EX. END SECTION AND CONNECT EX 24" RCP INTO NEW MANHOLE

HOLE #6 GREEN

HOLE #6 LINE OF PLAY

HOLE #6 TEE

HOLE #5 GREEN

EL. 312.0

NOTE ON S.C.E.! MATERIAL TO BE BROUGHT IN TO REDUCE THE SLOPE OF S.C.E. THIS MATERIAL SHALL BE REMOVED AS SOON AS POSSIBLE.

NOTE:
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2. SILT FENCE MUST BE INSTALLED PARALLEL TO CONTOURS.

MD. ROUTE 175

JOHN CHRISTMAN, P.E.

no.	revisions description	date
1	LIMIT OF DIST., SILT FENCE AS PER DPZ COMMENTS 1/6/93	8/27/92 10/1/93
3	AS PER HSCD COMMENTS 12/9/92	10/1/93
4	ADD S.C.E.	3/31/94
5	ADDED CULVERT REVISED TRAPS EXTEND STORM DRAIN	4/94

prepared by
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Golf Architect
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(301) 730-7950 621-6050

EROSION AND SEDIMENT CONTROL PLAN

FAIRWAY HILLS GOLF COURSE

COLUMBIA MARYLAND

SCALE 1"= 50'
DRAWN KBW CHECKED JJB
PROJ NO. M0405 DATE 9/22/92
SHEET E-4 21 OF 56

SDP-92-104

H3

PROJECT NO.

THE RBA GROUP - MORRISTOWN, NEW JERSEY

MATCH LINE "J" SEE SHEET E-9

WHETSTONE ROAD

BOARDWALK CARTPATH

S.C.E. (SEE NOTE THIS SHEET)

TRENCH DRAIN 2
GR. 307.50
INV. 306.34

35 LF 8" DIP CLASS 52 @ 0.80%

EXISTING SAN LINE TO BE ABANDON. REMOVE SECTION AT TUNNEL LOCATION. PLUG ALL ENDS

EX. SAN DROP MH #3
INV. A 301.00
EX. INV. B 299.42

233 LF 8" DIP CLASS 52 @ 0.80%

SAN DROP MH #2
RIM. 314.6
INV. A 307.93
INV. B 302.76

TRENCH DRAIN 2-1
GR 307.5
INV. A 305.67
INV. B 305.57

EMERGENCY GATE AT END OF TUNNEL (SEE DETAIL, SHEET D5 OF 56, D-6)

CARTPATH 8' FROM ℄

INV. 305.00

MILLS GLEN

EXPANSION #1
INV. A 308.21

SILT FENCE

CARTPATH 5' MIN. FROM ℄

8' CARTPATH

PROPOSED BOARDWALK

WETLAND LIMIT

LIMIT OF DISTURBANCE

HOLE #12 GREEN

40'X 15' BRIDGE (TYP.)

FILTRATION/DEGRADATION BOX FOR SUBSURFACE DRAINAGE GREEN #7 AND TEE #12

SANDTRAP (TYP.)

BOARDWALK CARTPATH

HOLE #12 LINE OF PLAY

HOLE #12 TEE (TYP)

MATCH LINE "E" SEE SHEET E-8

25' WETLANDS BUFFER

HEADWALL 4
INV. 312.80

FILTRATION/DEGRADATION BOX FOR SUBSURFACE DRAINAGE GREEN #7 AND TEE #12

HOLE #7 GREEN

75' STREAM BUFFER

NOTE ON S.C.E.:
MATERIAL TO BE BROUGHT IN TO REDUCE THE SLOPE OF S.C.E. THIS MATERIAL SHALL BE REMOVED AS SOON AS POSSIBLE.

POND CROSS SECTION LOCATION

SILT FENCE

PROPOSED POND 'C'

OUTLET CONTROL STRUCTURE #3
TC 318.00
INV. 312.30

MATCH LINE "E-1" SEE SHEET E-6

LIMIT OF DISTURBANCE

HOLE #7 - LINE OF PLAY

IRRIGATION PONDS TO BE CHARGED WITH WATER FROM IRRIGATION SYSTEM

NOTE:
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2. SILT FENCE MUST BE INSTALLED PARALLEL TO CONTOURS.

TREE PROTECTION (SEE DETAIL, SHEET D5, 55 OF 56)

BORING LOCATION (TYP)

FLOOD PLAIN ELEVATION 319 AS SHOWN ON F.E.M.A. MAPPING

PROPOSED POND 'C'

8' CARTPATH

BOARDWALK CARTPATH

HOLE #7 TEE

RETAINING WALL
TW 319.70
BW 315.50

FLOOD PLAIN

MATCH LINE "D" SEE SHEET H-4

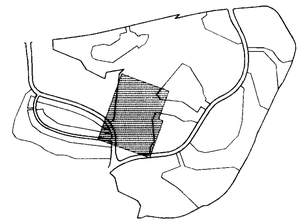
MATCH LINE "F" SEE SHEET E-6

COLUMBIA ROAD

THE RBA GROUP, MORRISTOWN, NEW JERSEY

PROJECT NO.

KEY MAP



LEGEND

ITEM	EXISTING	PROPOSED
CONTOURS		350
SPOT GRADE		+ 350.0
WOODED AREA		TO REMAIN.
SILT FENCE	S S S	S S S
LIMIT OF DISTURBANCE		
RETAINING WALL		
WETLAND LIMIT (25' BUFFER)		
100 YR. FLOOD PLAIN		
DIVERSION SWALE		

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

DIRECTOR — DATE 11/9/93

CHIEF, BUREAU OF ENGINEERING — DATE 11/8/93

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

DIRECTOR — DATE 11/12/93

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 11/10/93

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

COUNTY HEALTH OFFICER — DATE 11/10/93

RESPONSIBLE PERSONNEL CERTIFICATION

"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 WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

SIGNATURE OF DEVELOPER (PRINT NAME BELOW) — DATE

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

SIGNATURE OF ENGINEER (PRINT NAME BELOW) — DATE

JOHN CHRISTMAN, P.E.

CERTIFICATION BE THE DEVELOPER

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.

SIGNATURE OF DEVELOPER (PRINT NAME BELOW) — DATE

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

APPROVED Robert W. Zickwolf — HOWARD S.C.D. — DATE 10/21/93

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS.

APPROVED — U.S. SOIL CONSERVATION SERVICE — DATE 10/21/93

OWNER COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

DEVELOPER COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

APPROVED PLANNING BOARD of HOWARD COUNTY
DATE 2-2-93

ADDRESS CHART

BUILDING	STREET ADDRESS
LOT5-CLUBHOUSE	5100 COLUMBIA ROAD
LOT1-MAINT. BLDG.	5280 COLUMBIA ROAD

SUBDIVISION NAME VWL.9/3,LOT39, VWL.9/4,LOTS 33&55,TC.9/1,LOT30 & VDS.3/1-LOTS 1,2 & 4		SECTION/AREA 9/3,9/4, 9/1 & 3/1		LOT/PARCEL LOTS 1,2,3, 33,39 & 55
PLAT	BLOCK ZONE R-ED,R-ENT-O.S. R-15 & COMM	TAX/ZONE MAP 30	ELEC DIST 5th	CENSUS TR 6054
WATER CODE		SEWER CODE		

no	description	date
1	LIMIT OF DIST. SILT FENCE AS PER DPZ COMMENTS 1/8/93	8/22/92
2	AS PER HSCD COMMENTS 12/9/92	10/1/93
3	ADD S.C.E.	10/1/93
4	OMIT POND 'C' RELOCATE CART PATH	3/31/94 4/94
5		

JOHN CHRISTMAN, P.E.

prepared by
RON PRICHARD
Golf Architect
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EROSION AND SEDIMENT CONTROL PLAN

FAIRWAY HILLS GOLF COURSE

COLUMBIA MARYLAND

SCALE	1"= 50'	
DRAWN	KBW	CHECKED JJB
PROJ. NO.	M0405	DATE 9/22/92
SHEET	E-5	22 OF 56

SDP-92-104

H5

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

James M. Irvin — DIRECTOR — 11/9/93 DATE

Edward Rubin, Acting — CHIEF, BUREAU OF ENGINEERING — 11/8/93 DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

Joseph W. Lange — DIRECTOR — 11/12/93 DATE

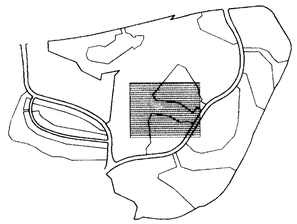
Gina Summers — CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — 11/10/93 DATE

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

Joyce M Boyd — COUNTY HEALTH OFFICER — 11/10/93 DATE

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 2-2-93

KEY MAP



LEGEND

ITEM	EXISTING	PROPOSED
CONTOURS		350
SPOT GRADE		+ 350.0
WOODED AREA		TO REMAIN
SILT FENCE		
LIMIT OF DISTURBANCE		
RETAINING WALL		
WETLAND LIMIT (25' BUFFER)		
100 YR. FLOOD PLAIN		
DIVERSION SWALE		

RESPONSIBLE PERSONNEL CERTIFICATION

"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 WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

SIGNATURE OF DEVELOPER (PRINT NAME BELOW) — DATE

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

SIGNATURE OF ENGINEER (PRINT NAME BELOW) — DATE
JOHN CHRISTMAN, P.E.

CERTIFICATION BE THE DEVELOPER

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

SIGNATURE OF DEVELOPER (PRINT NAME BELOW) — DATE

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

APPROVED _____ HOWARD S.C.D. — DATE 10/21/93

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS

APPROVED _____ U.S. SOIL CONSERVATION SERVICE — DATE 10/21/93

OWNER COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

DEVELOPER COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

ADDRESS CHART

BUILDING	STREET ADDRESS
LOT5-CLUBHOUSE	5100 COLUMBIA ROAD
LOT1-MAINT.BLDG.	5280 COLUMBIA ROAD

SUBDIVISION NAME VWL.9/3,LOT39, VWL.9/4,LOTS 33&55,TC.9/1,LOT30 & VDS.3/1,LOTS 1,2 & 4		SECTION/AREA 9/3,9/4, 9/1 & 3/1	LOT/PARCEL LOTS 1,2,3, 33,39 & 55
PLAT	BLOCK / ZONE B.9,10,2NT 0.5; 4,15 & COMM.	TAX/ZONE MAP 30	ELEC DIST 5th / CENSUS TR 6054
WATER CODE		SEWER CODE	

NOTE:
1. 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 (SEE STANDARD SEDIMENT CONTROL NOTE #2, SHEET D3, 53 OF 56)
2. SILT FENCE MUST BE INSTALLED PARALLEL TO CONTOURS.
3. CONSTRUCT SWALE FOR OFF SITE WATER FLOW AND STABILIZE IMMEDIATELY, THEN INSTALL SILT FENCE AND BEGIN GRADING AT HOLE #8.

JOHN CHRISTMAN, P.E.

no	revisions description	date
1	LIMIT OF DIST., SILT FENCE	9/22/92
2	AS PER DPZ COMMENTS 1/8/93	10/1/93
3	AS PER HSCD COMMENTS 12/9/92	10/1/93
4	ADD S.C.E.	3/3/94
5	REVISED GRADING MOVED PATH	4/94

prepared by
RON PRICHARD
Golf Architect
10600 SIX PINES DRIVE
THE WOODLANDS, TEXAS 77380
(713) 292-1902
1730 WALTON ROAD
SUITE 300, BLUE BELL, PA.
(215) 941-7240

prepared by
The RBA Group — ENGINEERS • ARCHITECTS • PLANNERS
5560 STERRETT PLACE, SUITE 300
COLUMBIA, MARYLAND 21044
(301) 730-7950 621-6050

EROSION AND SEDIMENT CONTROL PLAN

FAIRWAY HILLS
GOLF COURSE
COLUMBIA MARYLAND

SCALE 1"= 50'
DRAWN KBW | CHECKED JJB
PROJ. NO M0405 | DATE 9/22/92
SHEET E-6 | 23 OF 56

SDP-92-104

H5

PROJECT NO.
THE RBA GROUP, MORRISTOWN, NEW JERSEY

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE SYSTEMS, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR — DATE 11/9/93
CHIEF, BUREAU OF ENGINEERING — DATE 11/8/93

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING
DIRECTOR — DATE 11/8/93
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 11/10/93

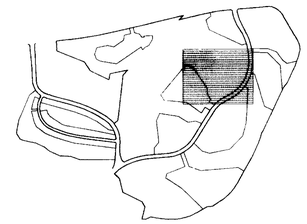
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
COUNTY HEALTH OFFICER — DATE 11/10/93

APPROVED
DEPARTMENT OF PLANNING AND ZONING
DATE 2-2-93

FLOOD PLAIN
75' STREAM BUFFER
WETLANDS LINE
25' WETLAND BUFFER
CARTPATH 5' MIN. FROM ℄
MATCH LINE "I" SEE SHEET E-8
MATCH LINE "P" SEE SHEET E-13
MATCH LINE "H" SEE SHEET E-6
MATCH LINE "H-1" SEE SHEET E-7
EXISTING 12" WATER MAIN
EXISTING 8" WATER MAIN
HOLE #10 GREEN
HOLE #10 TEE (TYP)
HOLE #9 GREEN
HOLE #9 TEE (TYP)
GRASS BUNKER
DRIVING RANGE
DRIVING RANGE TEE AREA
FAIRWAY (TYP)
ROUGH (TYP)
PROPOSED TREE SCREENING AREA
POND CROSS SECTION LOCATION (SEE PROFILES)
OUTLET CONTROL STRUCTURE 1
POND "A"
STORM WATER MANAGEMENT FACILITY
CONDUIT OUTLET PROTECTION (SEE C.O.P.T. SCHEDULE SHEET D3, 56 OF 56)
TREE PROTECTION TYP. (SEE DETAIL, SHEET D5, 55 OF 56)
INLET PROTECTION TYP. (SEE DETAIL, SHEET D3, 53 OF 56)
INLET PROTECTION TYP. (SEE DETAIL, SHEET D5, 55 OF 56)
LIMIT OF DISTURBANCE
SILT FENCE
8' CARTPATH (SEE DETAIL SHEET D-2)
FULL-DEPTH PAVEMENT
20' DRIVEWAY (FULL DEPTH PAVEMENT)
PROPOSED TOWNHOUSES (BY OTHERS)
PAVED PARKING AREA (FULL DEPTH PAVEMENT)
MAINTENANCE SHOP
10 CART STORAGE
PROPOSED SEWER CONNECTION
SAN. MH.6 (DROP) RIM. 391.90 INV. 375.90 INV. 375.80
SAN. MH.7 RIM. 378.30 INV. 369.30 INV. 369.20
TO BE REMOVED 12-9 AB PARKING SPACES, FULL DEPTH PAVEMENT
15' WIDE (FIRE ACCESS DRIVEWAY (FULL DEPTH PAVEMENT)
22" NORWAY MAPLE TO REMAIN
18" NORWAY MAPLE TO BE REMOVED
BLACK LOCUST TO BE REMOVED
PROPOSED TOWNHOUSES
EXISTING SAN. MH.10 RIM. AT GRADE INV. 352.17
20' PROPOSED EASEMENT
SAN. MH. 9 RIM. AT GRADE 355.0± RIM. 36. INV. 35 INV. 354.
175 LF 8" PVC @ 1.00% (PUBLIC) CONT NO. 24-3239-D
DEPRESSED CURB
LIONS WAY
PROP. DUMPSTER SCREENING (SEE SHEET L1 & A4 OF 56)
PROP. 10'X10' DUMPSTER PAD
EXIST. SHED TO REMAIN (STARTER SHED)
PRACTICE PUTTING GREEN
EXISTING CLUB HOUSE
FUTURE EXPANSION
FUTURE DECK
GREASE INTERCEPTOR 5' X 9'
CONC. APRON
10' NO PARKING SECTOR
EXISTING FILMS TO BE REMOVED
S90°00'00"E 286.20'
S31°25'14"E 294.68'
S65°48'43"W 264.50'
S65°48'43"W 85.00'
R=746.46' L=150.25'
INLET 1 GR. 399.50 INV. 386.50
INLET 2 GR. 396.60 INV. A. 393.60 INV. B. 393.50
INLET 3-4 GR. 392.50 INV. 389.30 13 LF 15"RCP @ 1.00%
INLET 3-3 GR. 392.00 INV. A 388.90 INV. B 388.90 25 LF 15"RCP @ 1.00%
INLET 3-2 GR 392.00 INV. A 388.55 INV. B 388.45 S.C.E.
INLET 3-5 GR. 398.46 INV. 394.75
INLET 3-1 GR. 390.90 INV. A 387.00 INV. B 386.90
INLET 3 GR. 394.50 INV. A & B 391.50 INV. C 386.20 INV. D 386.10 100 LF 15"RCP @ 1.5%
INLET 4 GR. 393.70 INV. A. 384.60 INV. B. 384.50
INLET 5 GRATE 369.5 INV. 366.91
INLET 6 GR. 339.0 INV. A. 332.4 INV. B. 332.3
STORM MH 1 RIM. 379.00 INV. A 374.40 INV. B 367.00
STORM MH 2 RIM. 379.00 INV. A. 374.40 INV. B. 367.00
STORM MH 3 RIM. 375.50 INV. A 371.60 INV. B 371.50
STORM MH 4 INV. 371.50 INV. 371.40
STORM MH 5 RIM. 388.00 INV. 382.00 INV. 381.90
STORM MH 6 RIM. 385.50 INV. 381.90 INV. 381.70
86 LF 18"RCP @ 2.00%
85 LF 18"RCP @ 2.00%
285 LF 15"RCP @ 0.74%
233 LF 8"PVC @ 1.00%
135 LF 15"RCP @ 1.00%
80 LF 15"RCP @ 1.00%
66 LF 15"RCP @ 1.00%
54 LF 15"RCP @ 1.00%
24 LF 15"RCP @ 1.00%
18 LF 15"RCP @ 1.00%
SILT FENCE
EXISTING 12" WATERMAIN
COLUMBIA ROAD

NOTE:
1. 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 (SEE STANDARD SEDIMENT CONTROL NOTE #2, SHEET D3, 53 OF 56).
2. SILT FENCE MUST BE INSTALLED PARALLEL TO CONTOURS.

KEY MAP



LEGEND

ITEM	EXISTING	PROPOSED
CONTOURS		350
SPOT GRADE		+ 350.0 TO REMAIN
WOODED AREA		
SILT FENCE		
LIMIT OF DISTURBANCE		
RETAINING WALL		
WETLAND LIMIT (25' BUFFER)		
100 YR. FLOOD PLAIN		
DIVERSION SWALE		

RESPONSIBLE PERSONNEL CERTIFICATION

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SIGNATURE OF DEVELOPER — DATE
(PRINT NAME BELOW)

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SIGNATURE OF ENGINEER — DATE
(PRINT NAME BELOW)
JOHN CHRISTMAN, P.E.

CERTIFICATION BE THE DEVELOPER

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

SIGNATURE OF DEVELOPER — DATE
(PRINT NAME BELOW)

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

APPROVED Robert W. Gibson 10/21/93
HOWARD S.C.D. — DATE

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS

APPROVED J. H. Woodward 10/21/93
U.S. SOIL CONSERVATION SERVICE — DATE

OWNER COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

DEVELOPER COLUMBIA PARKS AND RECREATION ASSOCIATION
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PLAT	BLOCK/ZONE 8,9,10,NT-0.5; 4,15 R CONV.	TAX/ZONE MAP 30	ELEC DIST 5th	CENSUS TR 6054
WATER CODE		SEWER CODE		

no	revisions description	date
1	LIMIT OF DIST. SILT FENCE AS PER DPZ COMMENTS 1/6/93	9/22/92 10/1/93
3	AS PER HSCD COMMENTS 12/9/92	10//-/93
4	ADD S.C.E.	3/31/94
5	REVISED GRADING, ADDED CONN. DRIVE WAY, REV. STORM DRAIN, ARVED CART PATH	4/94
6	ADDED WATER LINE CORRECTED SEWER	7/94

JOHN CHRISTMAN, P.E.

prepared by
RON PRICHARD
Golf Architect
10600 SIX PINES DRIVE
THE WOODLANDS, TEXAS 77380
(713) 292-1902
1730 WALTON ROAD
SUITE 300, BLUE BELL, PA.
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prepared by
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5560 STERRETT PLACE, SUITE 300
COLUMBIA, MARYLAND 21044
(301) 730-7950 621-6050

EROSION AND SEDIMENT CONTROL PLAN

FAIRWAY HILLS GOLF COURSE

COLUMBIA MARYLAND

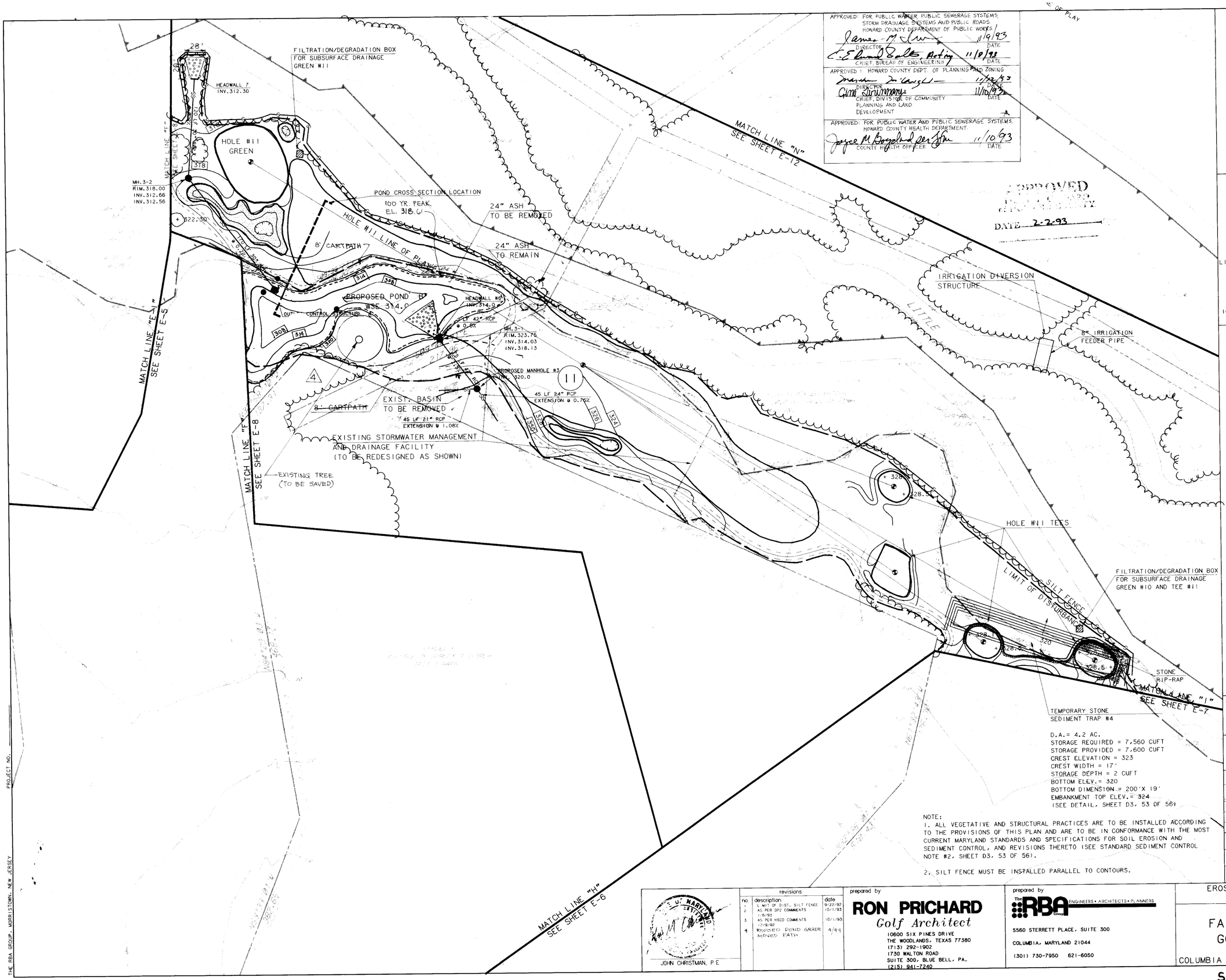
SCALE	1"= 50'
DRAWN	KBW
CHECKED	JJB
PROJ NO.	M0405
DATE	9/22/92
SHEET	E-7
	24 OF 56

PROJECT NO.

THE RBA GROUP, MORRISTOWN, NEW JERSEY

SDP-92-104

H5



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

James M. Irvin, DIRECTOR — 11/9/93 DATE

C. Edmund Sachs, Acting, CHIEF, BUREAU OF ENGINEERING — 11/9/93 DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

DIRECTOR — 11/22/93 DATE

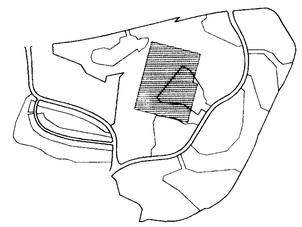
Gene Sharrow, CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — 11/10/93 DATE

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

Joyce M. Boyland per JH, COUNTY HEALTH OFFICER — 11/10/93 DATE

APPROVED
DEPARTMENT OF PUBLIC WORKS
DATE 2-2-93

KEY MAP



LEGEND

ITEM	EXISTING	PROPOSED
CONTOURS		350
SPOT GRADE		+ 350.0
WOODED AREA		TO REMAIN
SILT FENCE	-S-S-S-	
LIMIT OF DISTURBANCE		
RETAINING WALL		
WETLAND LIMIT (25' BUFFER)		
100 YR. FLOOD PLAIN		
DIVERSION SWALE		

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SIGNATURE OF ENGINEER (PRINT NAME BELOW) JOHN CHRISTMAN, P.E. — DATE

CERTIFICATION BE THE DEVELOPER

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.

SIGNATURE OF DEVELOPER (PRINT NAME BELOW) — DATE

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

APPROVED Robert W. Jichon III, HOWARD S.C.D. — 10/21/93 DATE

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS

APPROVED K. Warfield, U.S. SOIL CONSERVATION SERVICE — 10/21/93 DATE

OWNER COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

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PLAT	BLOCK 8,9,10 AND 4,15	ZONE T-D.S. & COMM.	TAX/ZONE MAP 30	ELEC DIST 5th / CENSUS TR 6054
WATER CODE		SEWER CODE		

revisions		
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3	REVISED POND GRADE MOVED PATH	4/94
4		

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prepared by
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EROSION AND SEDIMENT CONTROL PLAN

FAIRWAY HILLS GOLF COURSE

COLUMBIA MARYLAND

SCALE	1"= 50
DRAWN KBW	CHECKED JJB
PROJ NO. M0405	DATE 9/22/92
SHEET E-8	25 OF 56

PROJECT NO. _____

THE RBA GROUP, MORRISTOWN, NEW JERSEY

SDP-92-104

APPROVED
DEPARTMENT OF PLANNING AND ZONING
DATE 2-2-93

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE SYSTEMS, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
James M. Irvin — DIRECTOR — 11/9/93 DATE
C. Edward Dove Acting — CHIEF, BUREAU OF ENGINEERING — 11/8/93 DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING
Marsha McLaughlin — DIRECTOR — 11/12/93 DATE
Gina Fiumara — CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — 11/10/93 DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
Joyce M Boyd for Peter J Jones — COUNTY HEALTH OFFICER — 11/10/93 DATE

TEN MILLS ROAD

MATCH LINE "K" SEE SHEET E-10

SANDTRAP (TYP)

HOLE #13 GREEN

HOLE #13 - LINE OF PLAY

13

SANDTRAP (TYP)

FAIRWAY (TYP)
ROUGH (TYP)

EXISTING DRAINAGE SWALE

25' WETLAND BUFFER

WETLAND LIMIT

35' WILLOW TO REMAIN

MULBERRY TO REMAIN

HOLE #13 TEES

35' SPRUCE TO REMAIN

WHETSTONE ROAD

MATCH LINE "L" SEE SHEET E-9

MATCH LINE "J" SEE SHEET E-5

MATCH LINE "M" SEE SHEET E-11

NOTE:
1. 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 (SEE STANDARD SEDIMENT CONTROL NOTE #2, SHEET D3, 53 OF 561).

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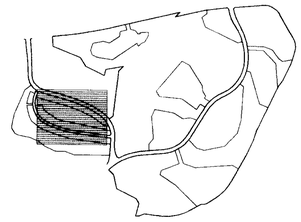
KEY MAP



LEGEND

ITEM	EXISTING	PROPOSED
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SPOT GRADE		+ 350.0
WOODED AREA		TO REMAIN
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DIVERSION SWALE		

RESPONSIBLE PERSONNEL CERTIFICATION

"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 WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

SIGNATURE OF DEVELOPER (PRINT NAME BELOW) — DATE

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

SIGNATURE OF ENGINEER (PRINT NAME BELOW) — DATE
JOHN CHRISTMAN, P.E.

CERTIFICATION BE THE DEVELOPER

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.

SIGNATURE OF DEVELOPER (PRINT NAME BELOW) — DATE

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

APPROVED Robert W. Guthrie — HOWARD S.C.D. — 10/21/93 DATE

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS.

APPROVED J. H. Warfield — U.S. SOIL CONSERVATION SERVICE — 10/21/93 DATE

OWNER COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

DEVELOPER COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

ADDRESS CHART

BUILDING	STREET ADDRESS
LOT5-CLUBHOUSE	5100 COLUMBIA ROAD
LOT1-MAINT. BLDG.	5280 COLUMBIA ROAD

SUBDIVISION NAME VWL.9/3,LOT39, VWL.9/4,LOTS 33&55,TC.9/1,LOT30 & VDS.3/1,LOTS 1,2 & 4	SECTION/AREA 9/3,9/4, 9/1 & 3/1	LOT/PARCEL LOTS 1,2,3, 33,39 & 55	
PLAT	BLOCK (R-8,10,INT-0.5, I-4,15 & COMM.)	ZONE	TAX/ZONE MAP 30
ELEC. DIST. 5th	CENSUS TR 6054		
WATER CODE	SEWER CODE		

no	revisions description	date
1	LIMIT OF DIST., SILT FENCE	9/27/92
2	ADDED WETLAND AREA AS PER MARYLAND DNR	2/18/93
3	AS PER DPZ COMMENTS 1/15/93	10/1/93
4	AS PER HSCD COMMENTS 12/9/92	10/1/93

JOHN CHRISTMAN, P.E.

prepared by
RON PRICHARD
Golf Architect
10600 SIX PINES DRIVE
THE WOODLANDS, TEXAS 77380
(713) 292-1902
1730 WALTON ROAD
SUITE 300, BLUE BELL, PA.
(215) 941-7240

prepared by
The RBA Group ENGINEERS • ARCHITECTS • PLANNERS
5560 STERRETT PLACE, SUITE 300
COLUMBIA, MARYLAND 21044
(301) 730-7950 621-6050

EROSION AND SEDIMENT CONTROL PLAN

FAIRWAY HILLS GOLF COURSE

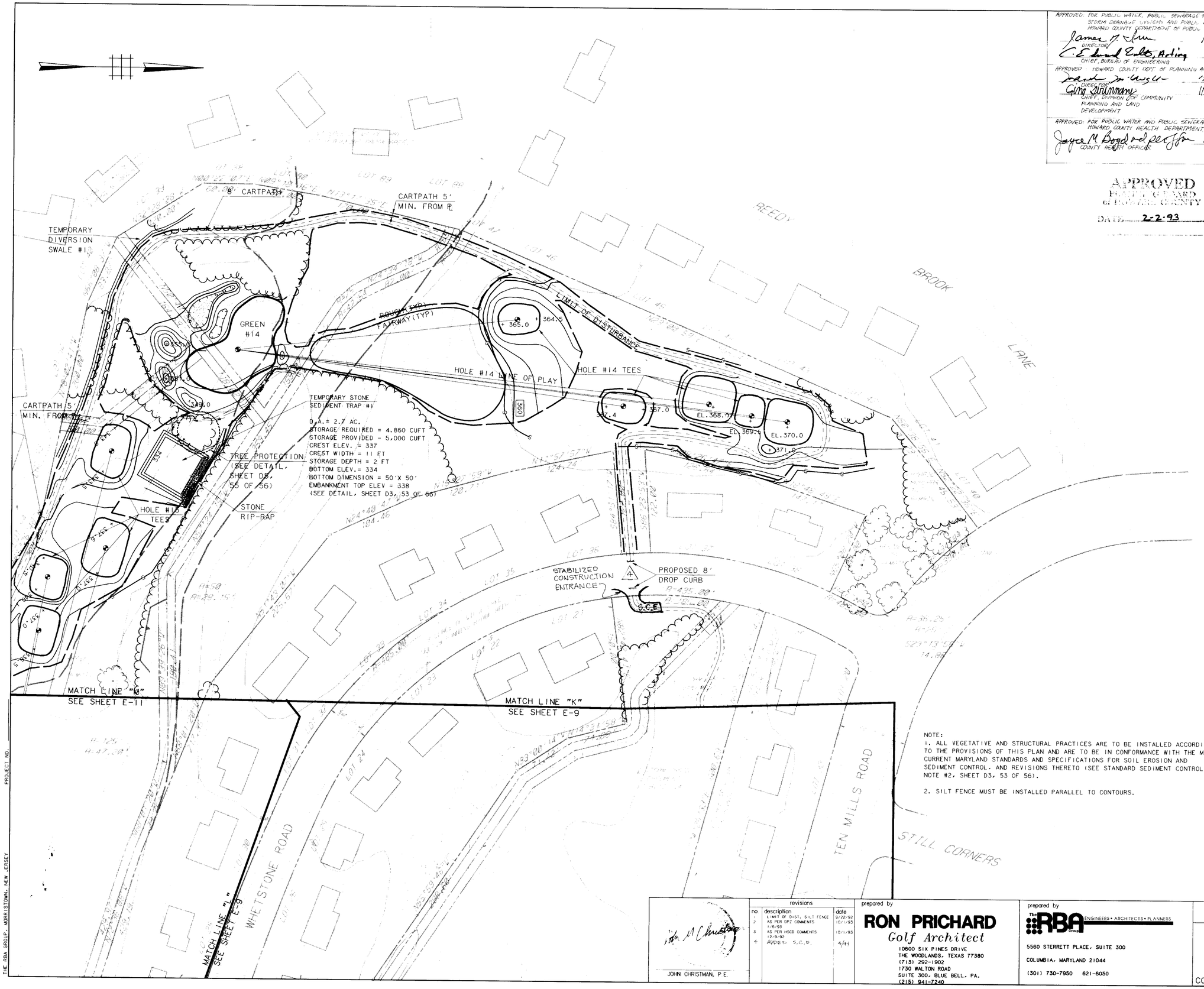
COLUMBIA MARYLAND

SCALE 1"= 50'
DRAWN KBW CHECKED JJB
PROJ NO. M0405 DATE 9/22/92
SHEET E-9 26 OF 56

PROJECT NO.

THE RBA GROUP, MORRISTOWN, NEW JERSEY

SDP-92-104



NOTE:
1. 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 (SEE STANDARD SEDIMENT CONTROL NOTE #2, SHEET D3, 53 OF 56).

2. SILT FENCE MUST BE INSTALLED PARALLEL TO CONTOURS.

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

James M. Irvin, DIRECTOR — 11/9/93 DATE

C. Edward Sultz, Acting, CHIEF, BUREAU OF ENGINEERING — 11/9/93 DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

DIRECTOR — 11/4/93 DATE

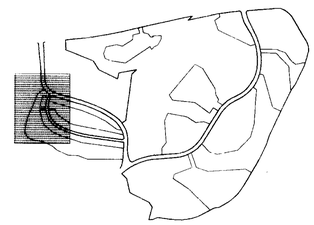
Gene Sansonetti, CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — 11/10/93 DATE

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

Joyce M. Boyd, COUNTY HEALTH OFFICER — 11/10/93 DATE

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE 2-2-93

KEY MAP



LEGEND

ITEM	EXISTING	PROPOSED
CONTOURS		350
SPOT GRADE		+ 350.0
WOODED AREA		TO REMAIN
SILT FENCE		
LIMIT OF DISTURBANCE		
RETAINING WALL		
WETLAND LIMIT (25' BUFFER)		
100 YR. FLOOD PLAIN		
DIVERSION SWALE		

RESPONSIBLE PERSONNEL CERTIFICATION

"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 WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

SIGNATURE OF DEVELOPER — DATE

(PRINT NAME BELOW)

CERTIFICATION BY THE ENGINEER

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SIGNATURE OF ENGINEER — DATE

(PRINT NAME BELOW)

JOHN CHRISTMAN, P.E.

CERTIFICATION BE THE DEVELOPER

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.

SIGNATURE OF DEVELOPER — DATE

(PRINT NAME BELOW)

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

APPROVED Robert W. Zuber — HOWARD S.C.D. — 10/21/93 DATE

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS.

APPROVED J. A. Warfield — U.S. SOIL CONSERVATION SERVICE — 10/21/93 DATE

OWNER COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

DEVELOPER COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

ADDRESS CHART

BUILDING	STREET ADDRESS
LOT5-CLUBHOUSE	5100 COLUMBIA ROAD
LOT1-MAINT. BLDG.	5280 COLUMBIA ROAD

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL
VWL.9/3,LOT39, VWL.9/4,LOTS 33&55,TC.9/1,LOT30 & VDS.3/1,LOTS 1,2 & 4	9/3,9/4, 9/1 & 3/1	LOTS 1,2,3, 33,39 & 55

PLAT	BLOCK	ZONE	TAX/ZONE MAP	ELEC DIST	CENSUS TR
	8,9,10,ANT-0.5; 14-15 & CONV.		30	5th	6054

WATER CODE — SEWER CODE

PROJECT NO.

THE RBA GROUP, MORRISTOWN, NEW JERSEY

JOHN CHRISTMAN, P.E.

revisions		
no.	description	date
1	LIMIT OF DIST., SILT FENCE	9/22/92
2	AS PER DPZ COMMENTS 1/6/93	10/1/93
3	AS PER HSCD COMMENTS 12/9/92	10/1/93
4	APPROV. S.C.E.	4/94

prepared by
RON PRICHARD
Golf Architect
10600 SIX PINES DRIVE
THE WOODLANDS, TEXAS 77380
(713) 292-1902
1730 WALTON ROAD
SUITE 300, BLUE BELL, PA.
(215) 941-7240

prepared by
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5560 STERRETT PLACE, SUITE 300
COLUMBIA, MARYLAND 21044
(301) 730-7950 621-6050

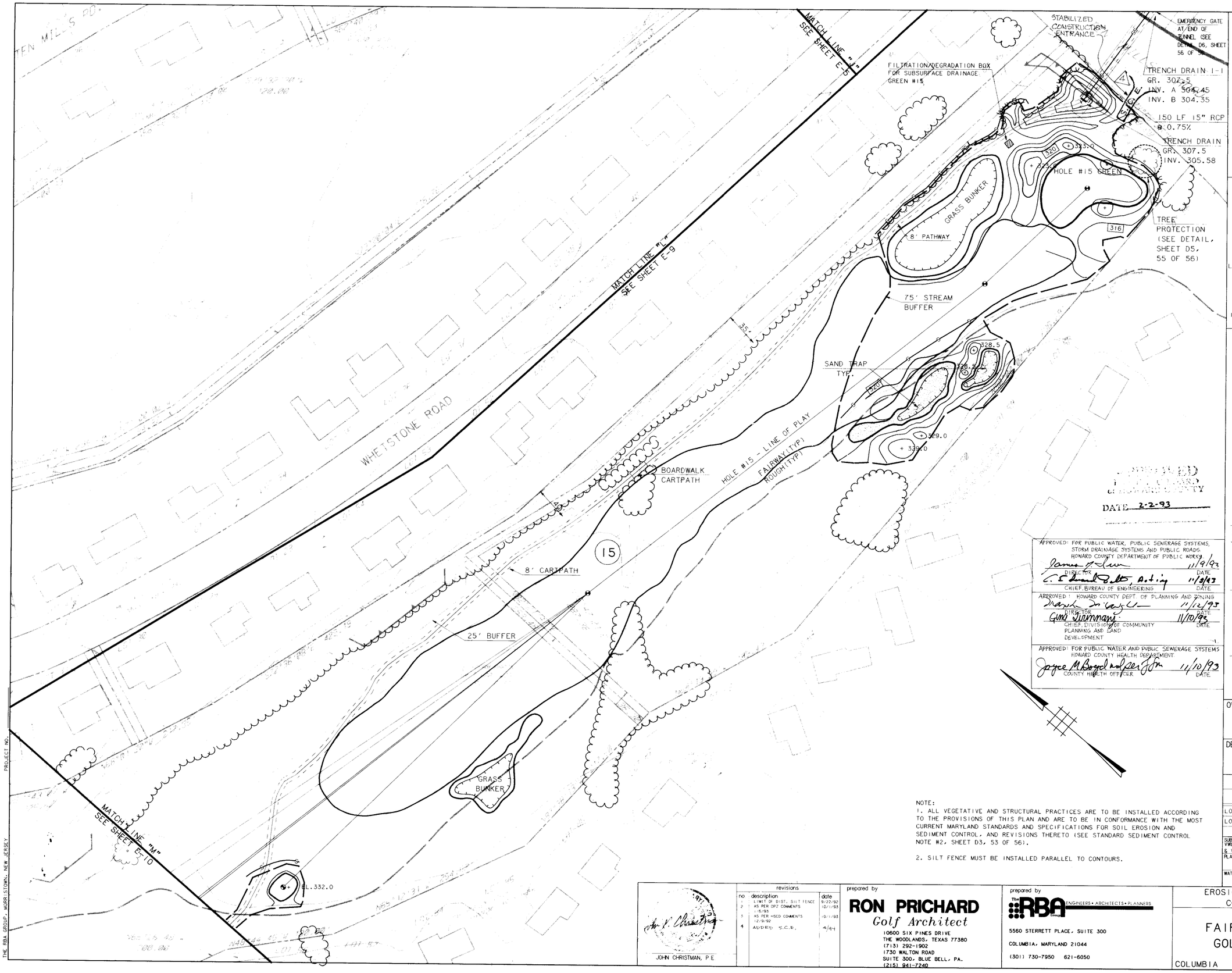
EROSION AND SEDIMENT CONTROL PLAN

FAIRWAY HILLS GOLF COURSE

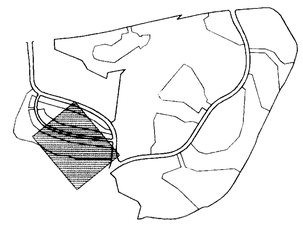
COLUMBIA MARYLAND

SCALE 1"= 50'
DRAWN KBW CHECKED JJB
PROJ. NO. M0405 DATE 9/22/92
E10 SHEET 27 OF 56

SDP-92-104



KEY MAP



LEGEND

ITEM	EXISTING	PROPOSED
CONTOURS		350
SPOT GRADE		+ 350.0
WOODED AREA		TO REMAIN
SILT FENCE	S S S	
LIMIT OF DISTURBANCE		
RETAINING WALL		
WETLAND LIMIT		
(25' BUFFER)		
100 YR. FLOOD PLAIN		
DIVERSION SWALE		

RESPONSIBLE PERSONNEL CERTIFICATION

"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 WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

SIGNATURE OF DEVELOPER (PRINT NAME BELOW) — DATE

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

SIGNATURE OF ENGINEER (PRINT NAME BELOW) — DATE

JOHN CHRISTMAN, P.E.

CERTIFICATION BE THE DEVELOPER

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

SIGNATURE OF DEVELOPER (PRINT NAME BELOW) — DATE

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

APPROVED: Robert V. Jahn 10/21/93
HOWARD S.C.D. — DATE

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS.

APPROVED: J. L. Warfield 10/21/93
U.S. SOIL CONSERVATION SERVICE — DATE

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

James M. Irvin 11/9/93
DIRECTOR — DATE

C. E. Dunkle, Acting 11/9/93
CHIEF, BUREAU OF ENGINEERING — DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

Marsha S. McLaughlin 11/12/93
DIRECTOR — DATE

Gene Giammanco 11/10/93
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE

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

Joyce M. Boyd 11/10/93
COUNTY HEALTH OFFICER — DATE

DATE 2-2-93

NOTE:
1. 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 (SEE STANDARD SEDIMENT CONTROL NOTE #2, SHEET D3, 53 OF 56).

2. SILT FENCE MUST BE INSTALLED PARALLEL TO CONTOURS.

OWNER COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

DEVELOPER COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

ADDRESS CHART

BUILDING	STREET ADDRESS
LOT5-CLUBHOUSE	5100 COLUMBIA ROAD
LOT1-MAINT.BLDG.	5280 COLUMBIA ROAD

SUBDIVISION NAME VWL.9/3,LOT39, VWL.9/4,LOTS 33&55,TC.9/1,LOT30 & VDS.3/1,LOTS 1,2 & 4			SECTION/AREA 9/3,9/4, 9/1 & 3/1		LOT/PARCEL LOTS 1,2,3, 33,39 & 55
PLAT	BLOCK	ZONE	TAX/ZONE MAP	ELEC DIST	CENSUS TR
	B-9, 00NT-0.5, 4-15 & COMM.		30	5th	6054
WATER CODE			SEWER CODE		

no	revisions	date
1	LIMIT OF DIST., SILT FENCE	9/22/92
2	AS PER DPZ COMMENTS 1/5/93	1/5/93
3	AS PER HSCD COMMENTS 12/9/92	10/1/93
4	ADDED S.C.D.	4/94

JOHN CHRISTMAN, P.E.

prepared by
RON PRICHARD
Golf Architect
10600 SIX PINES DRIVE
THE WOODLANDS, TEXAS 77380
(713) 292-1902
1730 WALTON ROAD
SUITE 300, BLUE BELL, PA.
(215) 941-7240

prepared by
The RBA Group ENGINEERS • ARCHITECTS • PLANNERS
5560 STERRETT PLACE, SUITE 300
COLUMBIA, MARYLAND 21044
(301) 730-7950 621-6050

EROSION AND SEDIMENT CONTROL PLAN

FAIRWAY HILLS GOLF COURSE

COLUMBIA MARYLAND

SCALE	1"= 50'
DRAWN	KBW
CHECKED	JJB
PROJ. NO.	M0405
DATE	9/22/92
SHEET	E11
	28 OF 56

PROJECT NO.

THE RBA GROUP, MORRISTOWN, NEW JERSEY

SDP-92-104

H5

NOTE:
1. 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 (SEE STANDARD SEDIMENT CONTROL NOTE #2, SHEET D3, 53 OF 56).

2. SILT FENCE MUST BE INSTALLED PARALLEL TO CONTOURS.

APPROVED FOR PUBLIC WATER, PUBLIC SEWERAGE SYSTEMS, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
James M. Irvin, DIRECTOR — 11/9/93 DATE
E. Dunn Jr. Acting, CHIEF, BUREAU OF ENGINEERING — 11/8/93 DATE

APPROVED HOWARD COUNTY DEPT. OF PLANNING AND ZONING
Marsha S. McLaughlin, DIRECTING — 11/8/93
Glenn Kimmmy, CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — 11/10/93 DATE

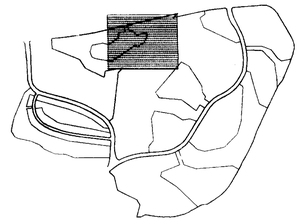
APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS HOWARD COUNTY HEALTH DEPARTMENT
Joyce M. Boyd and per JJH, COUNTY HEALTH OFFICER — 11/10/93 DATE

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE 2-2-93

S.C.E. BEGINS AT RT. 108 (SEE NOTE THIS SHEET)

NOTE: OWNER TO OBTAIN TEMPORARY PERMIT FROM SHA IF NECESSARY PRIOR TO CONSTRUCTION OF S.C.E.; IF REQUIRED THIS ACCESS IS CURRENTLY IN USE BY ADJOINING PROPERTY OWNER WHO WILL ALLOW OWNER TEMPORARY USE OF DRIVEWAY FOR S.C.E..

KEY MAP



LEGEND

ITEM	EXISTING	PROPOSED
CONTOURS		350
SPOT GRADE		+ 350.0
WOODED AREA		TO REMAIN
SILT FENCE		
LIMIT OF DISTURBANCE		
RETAINING WALL		
WETLAND LIMIT (25' BUFFER)		
100 YR. FLOOD PLAIN		
DIVERSION SWALE		

RESPONSIBLE PERSONNEL CERTIFICATION

"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 WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN. AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT

SIGNATURE OF DEVELOPER — DATE
(PRINT NAME BELOW)

CERTIFICATION BY THE ENGINEER

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SIGNATURE OF ENGINEER — DATE
(PRINT NAME BELOW)
JOHN CHRISTMAN, P.E.

CERTIFICATION BE THE DEVELOPER

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SIGNATURE OF DEVELOPER — DATE
(PRINT NAME BELOW)

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

APPROVED Robert W. Zirkman/JJH 10/24/93
HOWARD S.C.D. — DATE

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS.

APPROVED J. A. Warfield/JJH 10/24/93
U.S. SOIL CONSERVATION SERVICE — DATE

OWNER COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

DEVELOPER COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

ADDRESS CHART

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LOT1-MAINT. BLDG.	5280 COLUMBIA ROAD

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL
VWL-9/3-LOT39, VWL-9/4-LOTS 33&55, TC-9/1, LOT30 & VOS-3/1-LOTS 1-2 & 4	9/3, 9/4, 9/1 & 3/1	LOTS 1-2, 3, 33, 39 & 55

PLAT	BLOCK	ZONE	TAX/ZONE MAP	ELEC DIST	CENSUS TR
	B, 9-10-21-0.5, 14-15 & COMM		30	5th	6054

WATER CODE — SEWER CODE

no	description	date
1	LIMIT OF DIST., SILT FENCE	9/22/92
2	AS PER FLOODPLAIN COMMENTS	2/18/93
3	AS PER DPZ COMMENTS 10/5/93	10/11/93
4	AS PER HSCD COMMENTS 12/9/92	10/11/93
5	ADD S.C.E	3/31/94

JOHN CHRISTMAN, P.E

prepared by
RON PRICHARD
Golf Architect
10800 SIX PINES DRIVE
THE WOODLANDS, TEXAS 77380
(713) 292-1902
1730 WALTON ROAD
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COLUMBIA, MARYLAND 21044
(301) 730-7950 621-6050

EROSION AND SEDIMENT CONTROL PLAN

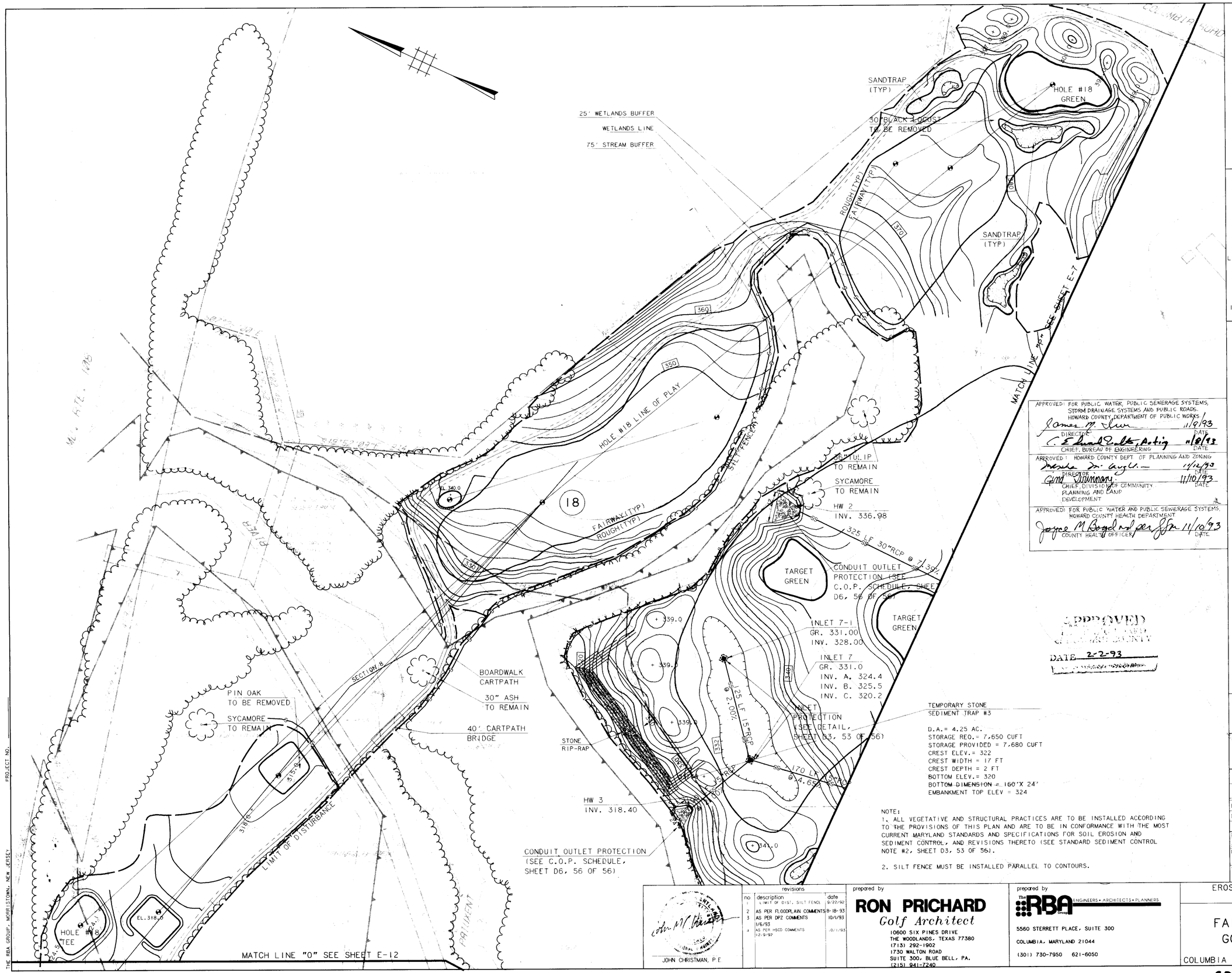
FAIRWAY HILLS GOLF COURSE

COLUMBIA MARYLAND

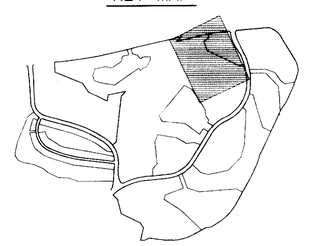
SCALE 1"= 50'
DRAWN KBW | CHECKED JJB
PROJ. NO M0405 | DATE 9/22/92
SHEET E12 | 29 OF 56

SDP-92-104

THE RBA GROUP, MORRISTOWN, NEW JERSEY — PROJECT NO.



KEY MAP



LEGEND

ITEM	EXISTING	PROPOSED
CONTOURS		350
SPOT GRADE		+ 350.0
WOODED AREA		TO REMAIN
SILT FENCE		
LIMIT OF DISTURBANCE		
RETAINING WALL		
WETLAND LIMIT (25' BUFFER)		
100 YR. FLOOD PLAIN		
DIVERSION SWALE		

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

James M. Irvin — DIRECTOR — 11/9/93 DATE

C. Edward Carter, Acting — CHIEF, BUREAU OF ENGINEERING — 11/8/93 DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

Marsha S. McLaughlin — DIRECTOR — 11/2/93 DATE

Gene Summary — CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — 11/10/93 DATE

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

Joyce M Boyd not per JSA — COUNTY HEALTH OFFICER — 11/10/93 DATE

APPROVED
HOWARD COUNTY
DATE 2-2-93

RESPONSIBLE PERSONNEL CERTIFICATION

"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 WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT

SIGNATURE OF DEVELOPER — DATE
(PRINT NAME BELOW)

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

SIGNATURE OF ENGINEER — DATE
(PRINT NAME BELOW)
JOHN CHRISTMAN, P.E.

CERTIFICATION BE THE DEVELOPER

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

SIGNATURE OF DEVELOPER — DATE
(PRINT NAME BELOW)

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

APPROVED Robert W. Julm — HOWARD S.C.D. — 10/21/93 DATE

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS

APPROVED J.A. Warfield — U.S. SOIL CONSERVATION SERVICE — 10/21/93 DATE

OWNER COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

DEVELOPER COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

ADDRESS CHART

BUILDING	STREET ADDRESS
LOT5-CLUBHOUSE	5100 COLUMBIA ROAD
LOT1-MAINT. BLDG.	5280 COLUMBIA ROAD

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL
VWL/9/3, LOT 39, VWL/9/4, LOTS 33&55, TC/9/1, LOT 30 & VDS/3/1, LOTS 1-2 & 4	9/1 & 3/1	LOTS 1-2, 3, 33, 39 & 55
PLAT	BLOCK / ZONE	TAX/ZONE MAP
	8, 9, 10 NT-0.5; 14, 15 E. COMM.	30
		ELEC DIST: 5th
		CENSUS TR: 6054
WATER CODE	SEWER CODE	

NOTE:
1. 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 (SEE STANDARD SEDIMENT CONTROL NOTE #2, SHEET D3, 53 OF 56).

2. SILT FENCE MUST BE INSTALLED PARALLEL TO CONTOURS.

JOHN CHRISTMAN, P.E

no.	description	date
1	LIMIT OF DIST., SILT FENCE	9-22-92
2	AS PER FLOODPLAIN COMMENTS 12-9-92	8-18-93
3	AS PER DPZ COMMENTS 1/6/93	10/1/93
4	AS PER HSCD COMMENTS 12-9-92	10/11/93

prepared by
RON PRICHARD
Golf Architect
10600 SIX PINES DRIVE
THE WOODLANDS, TEXAS 77380
(713) 292-1902
1730 WALTON ROAD
SUITE 300, BLUE BELL, PA.
(215) 941-7240

prepared by
The RBA Group — ENGINEERS • ARCHITECTS • PLANNERS
5560 STERRETT PLACE, SUITE 300
COLUMBIA, MARYLAND 21044
(301) 730-7950 621-6050

EROSION AND SEDIMENT CONTROL PLAN

FAIRWAY HILLS GOLF COURSE

COLUMBIA MARYLAND

SCALE 1"= 50'
DRAWN KBW
CHECKED JJB
PROJ NO. M0405
DATE 9/22/92
SHEET E13
30 OF 56

PROJECT NO.

THE RBA GROUP, MORRISTOWN, NEW JERSEY

SDP-92-104

PLANT LIST SHEETS L-1 & L-2

SYMBOL	QTY.	KEY	SIZE	PLANT NAME: BOTANICAL/COMMON NAME	ROOT	REMARKS
–	4	⊕	2-2½" CAL.	ACER RUBRUM 'RED SUNSET' RED SUNSET MAPLE	B&B	FULL HEAD
3	–	⊙	6-8' HT	CRATAEGUS LAVALLEI LAVELL HAWTHORN	B&B	FULL
5	2	◯	2-2½" CAL	FRAXINUS PENNSYLVANICA GREEN ASH	B&B	FULL HEAD
6	2	⊗	2-2½" CAL	PLATANUS ACERIFOLIA LONDON PLANE TREE	B&B	FULL HEAD
0	6	⊕	6-8' HT	PRUNUS YEDOENSIS YOSHINO CHERRY	B&B	FULL HEAD
14	0	✺	3-6' HT	PINUS STROBUS WHITE PINE	B&B	FULL
22	0	✺	6-8' HT	PINUS STROBUS WHITE PINE	B&B	FULL
7	2	✺	8-10' HT	PINUS STROBUS WHITE PINE	B&B	FULL
0	–	●	2-2½" CAL	QUERCUS PALUSTRIS PIN OAK	B&B	FULL HEAD

REFER TO SHEET L-15 FOR DETAILS & GENERAL NOTES.

COLUMBIA ROAD

MATCH LINE "A" SEE SHEET L-2

TEE HOLE #1 (TYP.)

TUNNEL ST. 20

374.65 374.06 375.5 370 368.5 368.5 374.0 368.05

8' CARTPATH (TYP.)

HOLE #1 LINE OF PLAY

ROUGH LINE

FAIRWAY (TYP.) 360

EXISTING POND W.E. 356.5

358.20 360.10 358.25

GRASS BUNKER

LP 349.80

AREA DRAIN 8 GR. 349.80 INV. 346.80

364.25 364.26 360.25 358.30

HOLE #1 LINE OF PLAY

180 LF 15"RCP @ 6.8%

350

FLOOD PLAIN
WETLANDS
75' STREAM BUFFER
25' WETLANDS BUFFER

350.10 350.10 356.20 356.50

TW 336.00 BW 350.70

339.00

GRASS BUNKER

HOLE #1 GREEN (TYP.)

349.00 348.20 348.20 340

FLARED END SECTION INV. 343.00

MATCH LINE "A" SEE SHEET L-2

EL. 341.5

EL. 340.5

TW 341.0 BW 335.0

TEE HOLE #2 (TYP.)

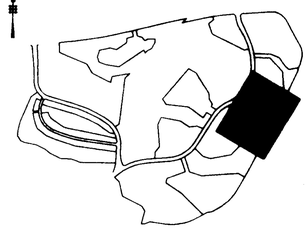
TW 343.5 BW 339.0

343.5 343.0

BUILT 29

NOTE: THIS PLAN IS FOR PLANTING PURPOSES ONLY

KEY MAP



LEGEND

ITEM	EXISTING	PROPOSED
CONTOURS		350
SPOT GRADE	+ 350.0	+ 350.0
WOODED AREA		TO REMAIN
WETLAND LIMIT		
(25' BUFFER)		
100 YR. FLOOD PLAIN		
75' STREAM BUFFER		
RETAINING WALL		
EXISTING STREAM		
EXISTING PROP. LINE		
EXISTING EASEMENT LINE		
BOUNDARY/PROPERTY LINE		

APPROVED
PLANNING BOARD
HOWARD COUNTY
DATE 2-2-93

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE SYSTEMS, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
DIRECTOR — DATE 11.2.92
CHIEF, BUREAU OF ENGINEERING — DATE 11/1/93

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING
DIRECTOR — DATE 11/2/93
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 11/10/93

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.
HOWARD COUNTY HEALTH DEPARTMENT.
COUNTY HEALTH OFFICER — DATE 11/5/96

OWNER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

DEVELOPER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

ADDRESS CHART

BUILDING	STREET ADDRESS
LOT1-CLUBHOUSE	5100 COLUMBIA ROAD
LOT1-MAINT.BLDG.	5280 COLUMBIA ROAD

SUBDIVISION NAME: VOL. 9/3, LOT 39, VOL. 9/4, LOTS 33&55, TC 9/1, LOT 30 & VDS-3/1, LOTS 1, 2 & 4
PLAT: PB 13/P 25, PB 13/P 41, GT 35-GT 43, 5550 & 4205-4210
SECTION/AREA: 9/3-9/4, 9/1 & 3/1
LOT/PARCEL: LOTS 1, 2, 3, 33, 39 & 55
BLOCK: E
ZONE: NT-0.5 (4.5 PER COMB.)
TAX/ZONE MAP: 30
ELEC DIST: 5th
CENSUS TR: 6054
WATER CODE: E01
SEWER CODE: 5680200

No.	description	date
2	PER DPZ COMMENTS. 10-93	

prepared by
• Charles H. Shaw •
Landscape Architect
6651 Cedar Lane
Columbia, MD 21044

prepared by
The RBA ENGINEERS • ARCHITECTS • PLANNERS
5560 STERRETT PLACE, SUITE 300
COLUMBIA, MARYLAND 21044
(301) 730-7950 621-8050

LANDSCAPE PLAN
HOLE #1
SDP-92-104
FAIRWAY HILLS
GOLF COURSE
COLUMBIA MARYLAND

SCALE 1" = 50'
DRAWN
CHECKED CHS
PROJ. NO. MO405
DATE 10-2-92
SHEET L-1
31 OF 56

PROJECT NO.

THE RBA GROUP, MORRISTOWN, NEW JERSEY

STATE OF MARYLAND CHARLES H. SHAW REGISTERED LANDSCAPE ARCHITECT NO. 339

CHARLES H. SHAW JR.

SDP-92-104

MATCH SHEET H-1

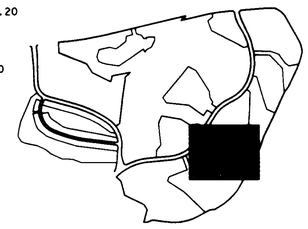
MATCH SHEET L-3

FLOOD PLAIN
25' WETLANDS BUFFER
WETLANDS
75' STREAM BUFFER

GRASS BUNKER
SANDTRAP (TYP.)
SANDTRAP (TYP.)
AREA DRAIN 9
GR. 320.80
INV. 318.80
322.29
HOLE #2 LINE OF PLAY
160 LF 14"RCP @ 0.05%
FLARED END SECTION - 2
INV. 318.00
FAIRWAY (TYP)
ROUGH (TYP)
8' CARTPATH (TYP.)
CARTPATH BRIDGE
HOLE #2 GREEN
EXISTING CARTPATH CROSSING
CARTPATH BRIDGE
FAIRWAY (TYP)
ROUGH (TYP)
TW 336.00
BW 331.80
328.90
328.50
344.23
348.20
342.20
340.20
335.90
336.20
336.50
330.70
360.30
356.60
332.20
322.40

NOTE:
REFER TO SHEET L-1 FOR PLANT LIST & QUAN.
THIS PLAN IS FOR PLANTING PURPOSES ONLY

KEY MAP



LEGEND

ITEM	EXISTING	PROPOSED
CONTOURS	350	350
SPOT GRADE	+ 350.0	+ 350.0
WOODED AREA		
WETLAND LIMIT		
(25' BUFFER)		
100 YR. FLOOD PLAIN		
75' STREAM BUFFER		
RETAINING WALL		

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 2-2-93

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

DIRECTOR — DATE 12 93
CHIEF, BUREAU OF ENGINEERING — DATE 11/1/93

APPROVED : HOWARD COUNTY DEPT. OF PLANNING AND ZONING

DIRECTOR — DATE 11/4/93
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 11/10/93

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

COUNTY HEALTH OFFICER — DATE 11/5/93

OWNER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

DEVELOPER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

ADDRESS CHART

BUILDING	STREET ADDRESS
CLUBHOUSE	COLUMBIA ROAD, COLUMBIA

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL
VILLAGE OF DORSEYS SEARCH RUNNING BROOK	1/1 8/3,4	LOTS 1,2,3,4 33,39 & 55

PLAT	BLOCK	ZONE	TAX/ZONE MAP	ELEC. DIST.	CENSUS TR.
8733 thru 8745, 8536 PB131,41 PB131,25		NT	30	5	

WATER CODE — SEWER CODE

revisions		
no	description	date
1	PER DPZ COMMENTS	10-93

prepared by
• Charles H. Shaw •
Landscape Architect
6651 Cedar Lane
Columbia, MD 21044

prepared by
The RBA ENGINEERS • ARCHITECTS • PLANNERS
5360 STERRETT PLACE, SUITE 300
COLUMBIA, MARYLAND 21044
(301) 730-7950 621-8050

LANDSCAPE PLAN
HOLE #2

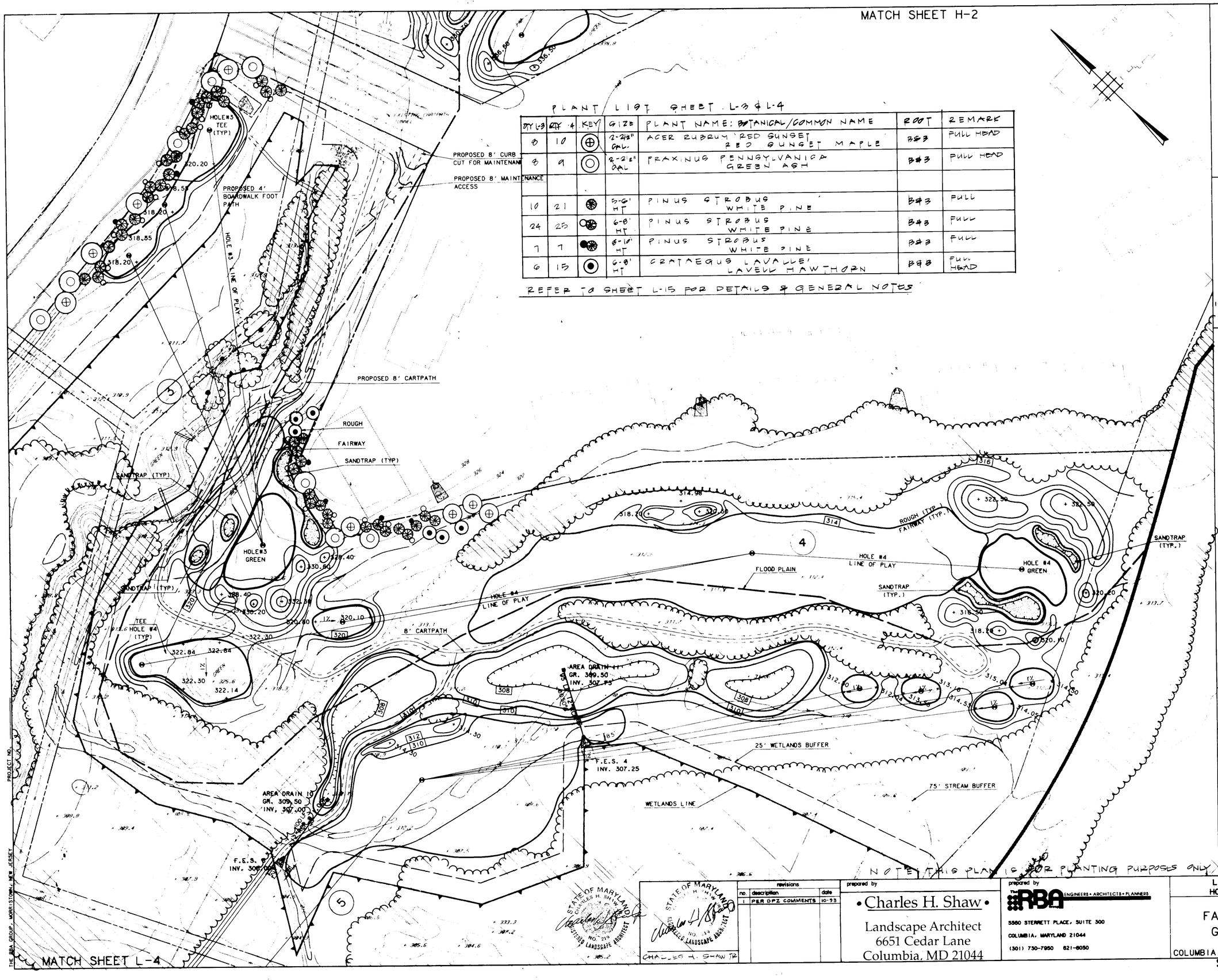
FAIRWAY HILLS
GOLF COURSE
COLUMBIA MARYLAND

SCALE 1" = 50'
DRAWN
CHECKED
PROJ. NO M0405
DATE 10·2·92
L-2
SHEET 32 OF 56

SDP-92-104

THE RBA GROUP - MORRISTOWN, NEW JERSEY
PROJECT NO.

MATCH SHEET H-2

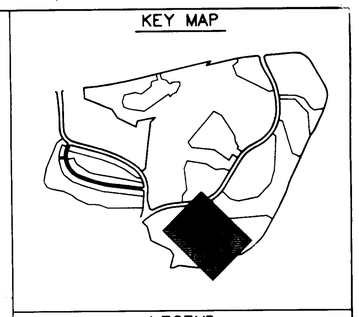


PLANT LIST SHEET L-3 & L-4

QTY L-3	QTY L-4	KEY	SIZE	PLANT NAME: BOTANICAL/COMMON NAME	ROOT	REMARK
8	10	⊕	2-2½" CAL.	ACER RUBRUM RED SUNSET / RED SUNSET MAPLE	B&B	FULL HEAD
8	9	◎	2-2½" CAL	FRAXINUS PENNSYLVANICA / GREEN ASH	B&B	FULL HEAD
10	21	❀	5-6' HT	PINUS STROBUS / WHITE PINE	B&B	FULL
24	25	❀	6-8' HT	PINUS STROBUS / WHITE PINE	B&B	FULL
7	7	❀	8-10' HT	PINUS STROBUS / WHITE PINE	B&B	FULL
6	15	●	6-8' HT	CRATAEGUS LAVALLEI / LAVELL HAWTHORN	B&B	FULL HEAD

REFER TO SHEET L-15 FOR DETAILS & GENERAL NOTES

KEY MAP



LEGEND

ITEM	EXISTING	PROPOSED
CONTOURS	350	350
SPOT GRADE	+ 350.0	+ 350.0
WOODED AREA		
WETLAND LIMIT		
(25' BUFFER)		
100 YR. FLOOD PLAIN		
75' STREAM BUFFER		
RETAINING WALL		

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 2-2-93

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE SYSTEMS, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS. HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
DIRECTOR — DATE 11/2/93
CHIEF, BUREAU OF ENGINEERING — DATE 11/1/93

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING
DIRECTOR — DATE 11/12/93
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 11/10/93

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.
COUNTY HEALTH OFFICER — DATE 11/5/93

OWNER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

DEVELOPER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

ADDRESS CHART

BUILDING	STREET ADDRESS
CLUBHOUSE	COLUMBIA ROAD, COLUMBIA

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL
VILLAGE OF DORSEYS SEARCH RUNNING BROOK	1/1 9/3,4	LOTS 1,2,3,4, 33,39 & 55

PLAT	BLOCK	ZONE	TAX/ZONE MAP	ELEC. DIST.	CENSUS TR.
6735 thru 6743, 6536 PB131.41 PB131.25		NT	30	5	

WATER CODE — SEWER CODE

STATE OF MARYLAND — CHARLES H. SHAW — REGISTERED LANDSCAPE ARCHITECT — NO. 219

CHARLES H. SHAW JR.

revisions		
no.	description	date
1	PER DPZ COMMENTS	10-93

prepared by
• Charles H. Shaw •
Landscape Architect
6651 Cedar Lane
Columbia, MD 21044

prepared by
The RBA ENGINEERS • ARCHITECTS • PLANNERS
5560 STERRETT PLACE, SUITE 300
COLUMBIA, MARYLAND 21044
(301) 730-7950 621-6050

LANDSCAPE PLAN
HOLE #3 & HOLE #4

FAIRWAY HILLS
GOLF COURSE

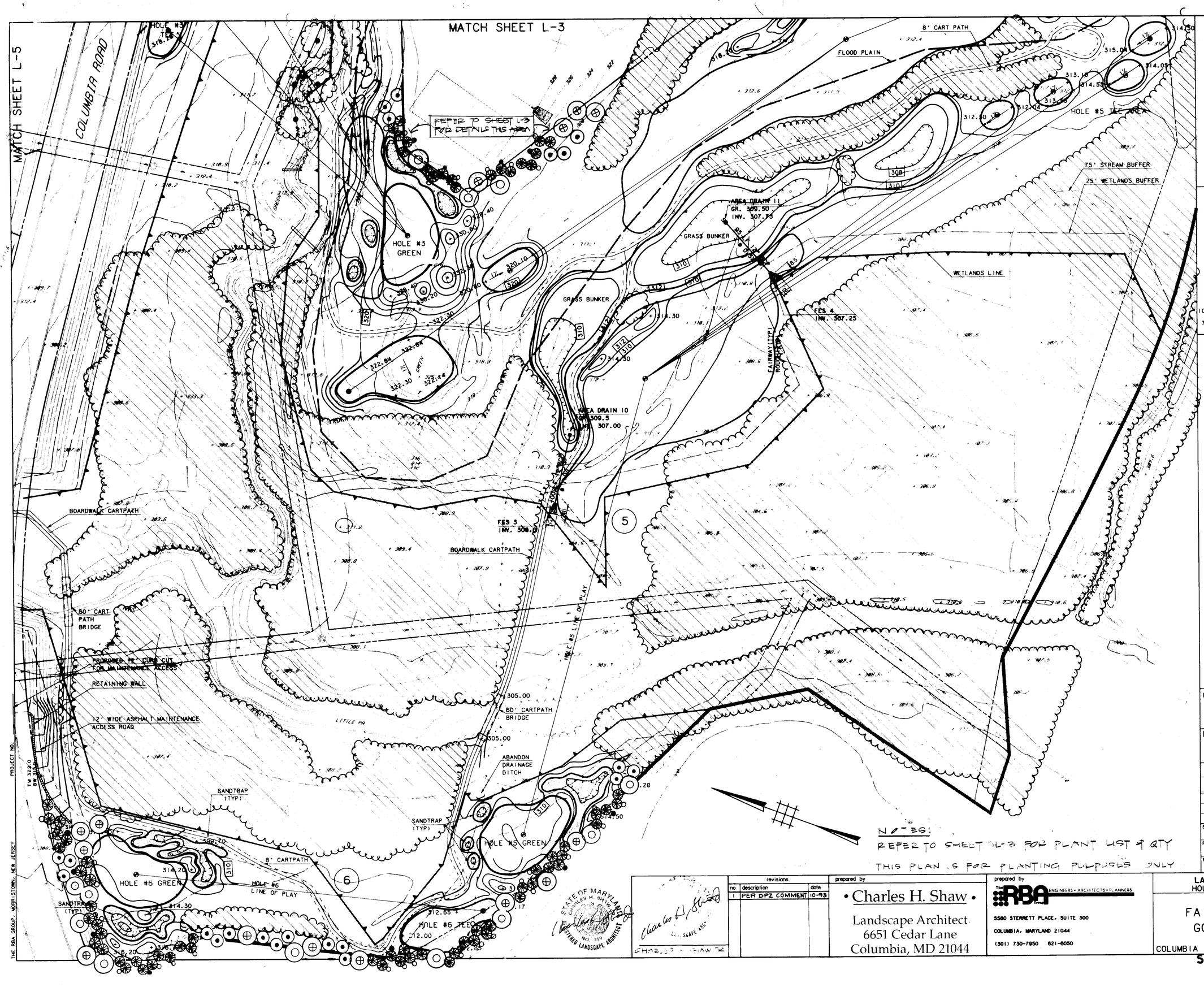
COLUMBIA MARYLAND

SCALE 1" = 50'
DRAWN Shaw — CHECKED Shaw
PROJ. NO. M0405 — DATE 10-2-92
L-3 SHEET 33 OF 56

SDP-92-104

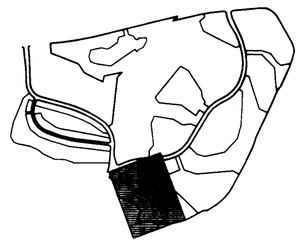
MATCH SHEET L-4

THE RBA GROUP, MORRISTOWN, NEW JERSEY — PROJECT NO.



NOTES:
REFER TO SHEET L-3 FOR PLANT LIST & QTY
THIS PLAN IS FOR PLANTING PURPOSES ONLY

KEY MAP



LEGEND

ITEM	EXISTING	PROPOSED
CONTOURS	350	350
SPOT GRADE	+ 350.0	+ 350.0
WOODED AREA		
WETLAND LIMIT		
(25' BUFFER)		
100 YR. FLOOD PLAIN		
75' STREAM BUFFER		
RETAINING WALL		

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 2-2-93

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE SYSTEMS, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS. HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
James M. Irwin — DIRECTOR — DATE 11/2/93
[signature] — CHIEF, BUREAU OF ENGINEERING — DATE 11/1/93

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING
[signature] — DIRECTOR — DATE 11/12/93
Gina Swinnany — CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 11/10/93

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.
Joyce M Boyd and per JJM — COUNTY HEALTH OFFICER — DATE 11/5/93

OWNER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

DEVELOPER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

ADDRESS CHART

BUILDING	STREET ADDRESS
CLUBHOUSE	COLUMBIA ROAD, COLUMBIA

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL
VILLAGE OF DORSEYS SEARCH RUNNING BROOK	1/1 9/3,4	LOTS 1,2,3,4, 33,39 & 55

PLAT	BLOCK	ZONE	TAX/ZONE MAP	ELEC. DIST.	CENSUS TR.
6735 thru 6743, 6536 PB131.41 PB131.25		NT	30	5	

WATER CODE — SEWER CODE

revisions		
no	description	date
1	PER DPZ COMMENT	10-93

prepared by
• Charles H. Shaw •
Landscape Architect
6651 Cedar Lane
Columbia, MD 21044

prepared by
The RBA Engineers • Architects • Planners
5560 STERRETT PLACE, SUITE 300
COLUMBIA, MARYLAND 21044
(301) 730-7950 621-6050

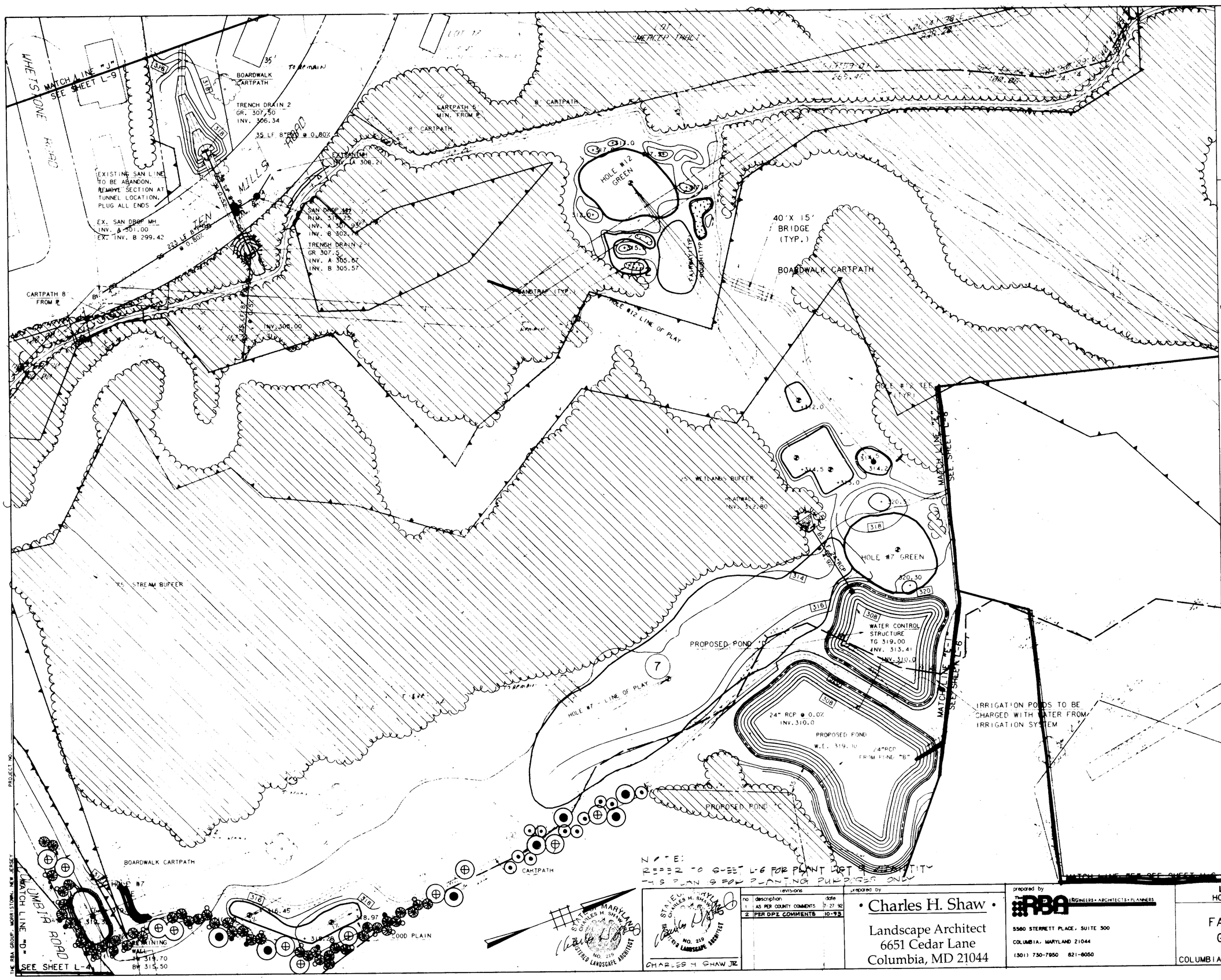
LANDSCAPE PLAN
HOLE #5 & HOLE #6

FAIRWAY HILLS
GOLF COURSE

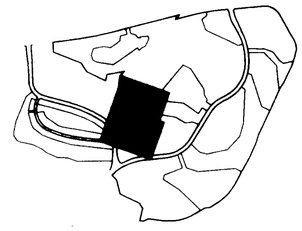
COLUMBIA MARYLAND

SCALE 1" = 50'
DRAWN Shaw — CHECKED Shaw
PROJ. NO. M0405 — DATE 10-2-92
L-4 SHEET 34 of 56

SDP-92-104



KEY MAP



LEGEND

ITEM	EXISTING	PROPOSED
CONTOURS		350
SPOT GRADE		+ 350.0
WOODED AREA		TO REMAIN
WETLAND LIMIT		
(25' BUFFER)		
100 YR. FLOOD PLAIN		
75' STREAM BUFFER		
RETAINING WALL		
EXISTING STREAM		
EXISTING PROPERTY LINE		
EXISTING EASEMENT LINE		

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 2-2-93

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE SYSTEMS, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
DIRECTOR — DATE 11/2/93
CHIEF, BUREAU OF ENGINEERING — DATE 11/1/93

APPROVED : HOWARD COUNTY DEPT. OF PLANNING AND ZONING
DIRECTOR — DATE 11/4/93
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 11/10/93

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.
HOWARD COUNTY HEALTH DEPARTMENT.
COUNTY HEALTH OFFICER — DATE 11/5/93

OWNER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

DEVELOPER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

ADDRESS CHART

BUILDING	STREET ADDRESS
LOTI-CLUBHOUSE	5100 COLUMBIA ROAD
LOTI-MAINT. BLDG.	5280 COLUMBIA ROAD

SUBDIVISION NAME VML.9/3-LOT39, VML.9/4-LOTS 33&55, TC.9/1-LOT30 & VDS.3/1-LOTS 1,2 & 4		SECTION/AREA 9/3,9/4, 9/1 & 3/1		LOT/PARCEL LOTS 1,2,3, 33,39 & 55	
PLAT	BLOCK B.9.-D, A-1-0.S, 4.15 & COMM	ZONE	TAX/ZONE MAP 30	ELEC DIST 5th	CENSUS TR 6054
WATER CODE			SEWER CODE		

PROJECT NO.

THE RBA GROUP MORRISTOWN, NEW JERSEY

revisions		
no	description	date
1	AS PER COUNTY COMMENTS	7-27-92
2	PER DPZ COMMENTS	10-93

STATE OF MARYLAND — CHARLES H. SHAW JR. — No. 219 — REGISTERED LANDSCAPE ARCHITECT

CHARLES H SHAW JR

prepared by
• Charles H. Shaw •
Landscape Architect
6651 Cedar Lane
Columbia, MD 21044

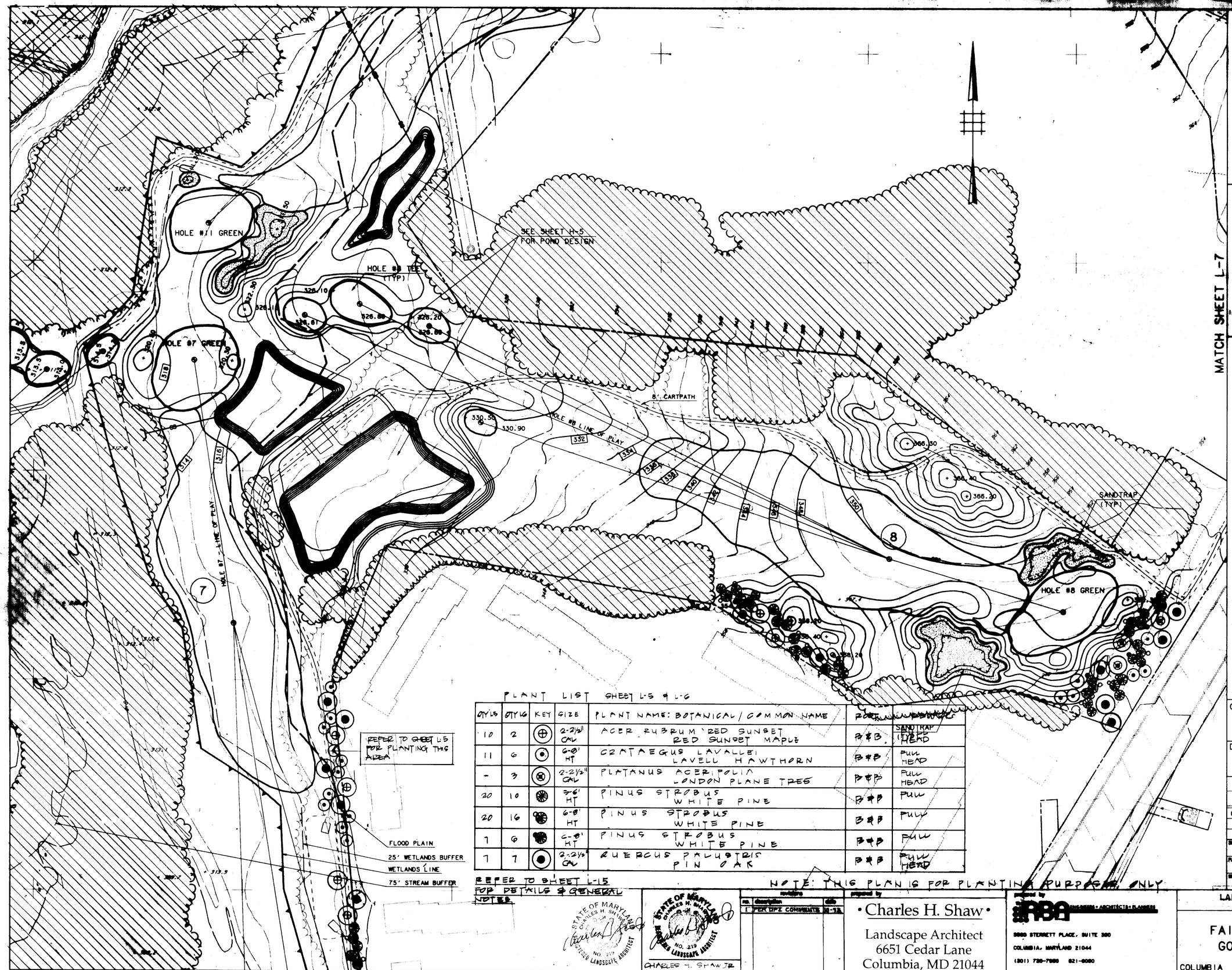
prepared by
THE RBA GROUP — ENGINEERS • ARCHITECTS • PLANNERS
5560 STERRETT PLACE, SUITE 500
COLUMBIA, MARYLAND 21044
(301) 730-7950 621-6050

LANDSCAPE PLAN
HOLE #7 & HOLE #12

FAIRWAY HILLS
GOLF COURSE
COLUMBIA MARYLAND

SCALE	1" = 50'
DRAWN	Shaw
CHECKED	Shaw
PROJ NO	MO405
DATE	10-2-92
SHEET	L-5
	35 OF 56

SDP-92-104



PLANT LIST SHEET L-5 & L-6

QTY L5	QTY L6	KEY	SIZE	PLANT NAME: BOTANICAL / COMMON NAME	ROOT	REMARKS
10	2	⊕	2-2½" CAL	ACER RUBRUM 'RED SUNSET' RED SUNSET MAPLE	B&B	SANDTRAP (TYP) FULL HEAD
11	6	⊙	6-8' HT	CRATAEGUS LAVALLEI LAVELL HAWTHORN	B&B	FULL HEAD
-	3	⊗	2-2½" CAL	PLATANUS ACERIFOLIA LONDON PLANE TREE	B&B	FULL HEAD
20	10	❋	5-6' HT	PINUS STROBUS WHITE PINE	B&B	FULL
20	16	❋	6-8' HT	PINUS STROBUS WHITE PINE	B&B	FULL
7	6	❋	6-8' HT	PINUS STROBUS WHITE PINE	B&B	FULL
7	7	●	2-2½" CAL	QUERCUS PALUSTRIS PIN OAK	B&B	FULL HEAD

REFER TO SHEET L-15 FOR DETAILS & GENERAL NOTES

NOTE: THIS PLAN IS FOR PLANTING PURPOSES ONLY

STATE OF MARYLAND CHARLES H. SHAW NO. 219 REGISTERED LANDSCAPE ARCHITECT

STATE OF MARYLAND CHARLES H. SHAW NO. 219 REGISTERED LANDSCAPE ARCHITECT

CHARLES H. SHAW JR

no.	description	date
1	PER DPZ COMMENTS	10-93

prepared by

• Charles H. Shaw •

Landscape Architect
6651 Cedar Lane
Columbia, MD 21044

prepared by

RBA ENGINEERS • ARCHITECTS • PLANNERS

5660 STERRETT PLACE, SUITE 300
COLUMBIA, MARYLAND 21044
(301) 730-7660 621-6060

LANDSCAPE PLAN
HOLE #8

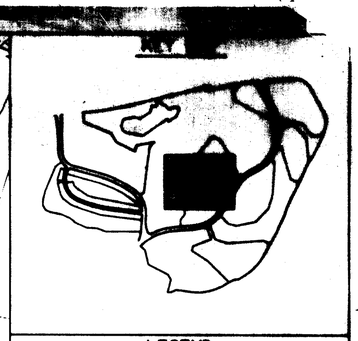
FAIRWAY HILLS
GOLF COURSE

COLUMBIA MARYLAND

SCALE 1" = 50'
DRAWN Shaw
CHECKED Shaw
PROJ. NO. M0405
DATE 10·2·92
L·6
SHEET 36 OF 56

SDP-92-104

KEY



LEGEND

ITEM	EXISTING	PROPOSED
CONTOURS		
SPOT GRADE	+ 300.0	+ 300.0
WOODED AREA		
WETLAND LIMIT		
(25' BUFFER)		
100 YR. FLOOD PLAIN		
75' STREAM BUFFER		
RETAINING WALL		

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 2-2-93

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE SYSTEMS, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS. HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
James M. Irwin 11.2.93
DIRECTOR DATE
[signature] 11/1/93
CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING
[signature] 11/12/93
DIRECTOR DATE
[signature] 11/10/93
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.
Joyce M Bond and [signature] 11/5/93
COUNTY HEALTH OFFICER DATE

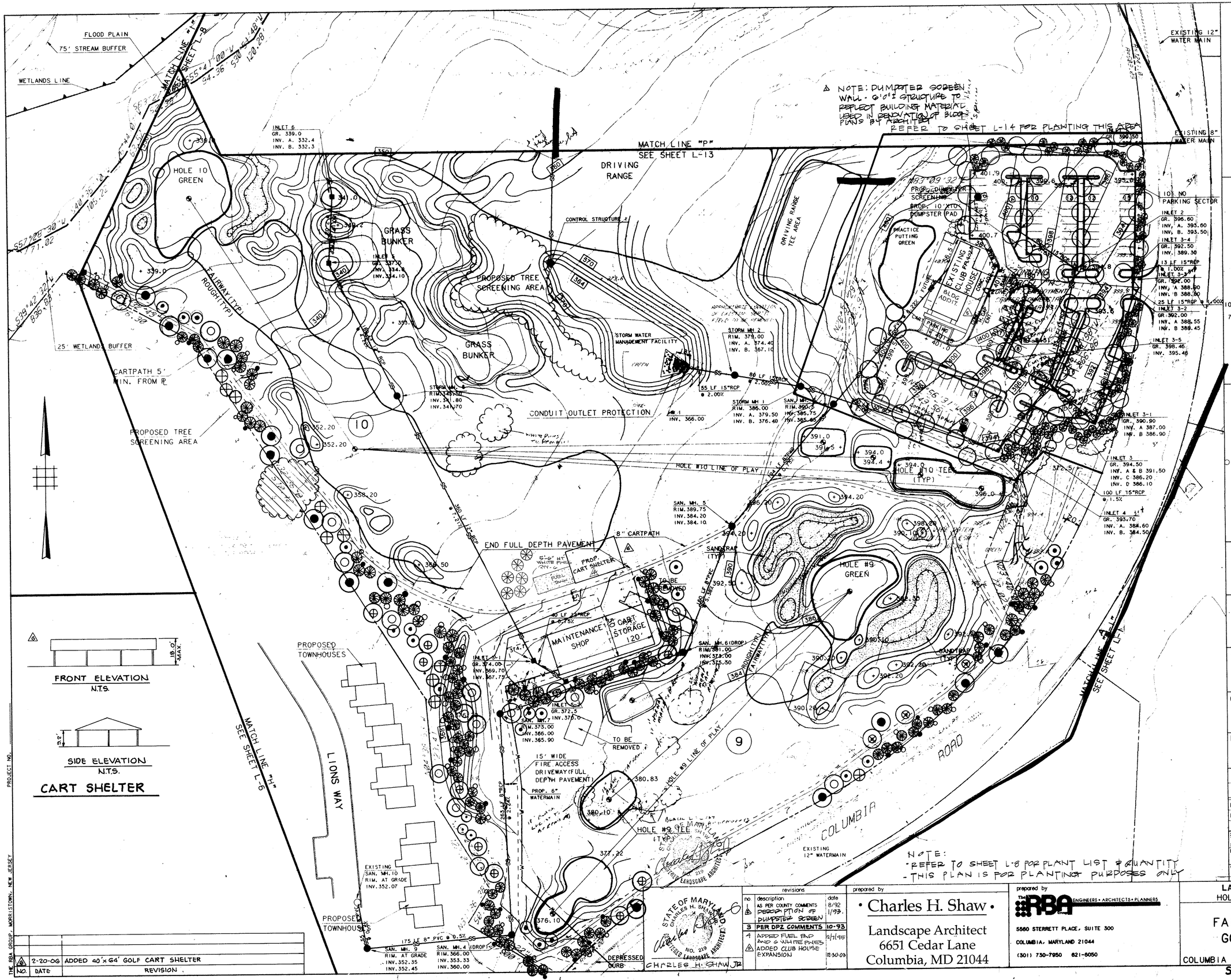
OWNER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

DEVELOPER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

ADDRESS CHART

BUILDING	STREET ADDRESS
CLUBHOUSE	COLUMBIA ROAD, COLUMBIA

SUBDIVISION NAME: VILLAGE OF DORSEYS SEARCH RUNNING BROOK
SECTION/AREA: 1/1 9/3.4
LOT/PARCEL: LOTS 1,2,3,4, 33,39 & 55
PLAT 6735 thru 6743, 6636 PB131.41 PB131.25
BLOCK
ZONE: NT
TAX/ZONE MAP: 30
ELEC. DIST.: 5
CENSUS TR.
WATER CODE
SEWER CODE

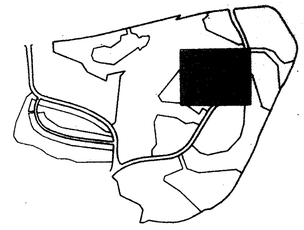


NO.	DATE	REVISION
2	2-20-06	ADDED 40'x64' GOLF CART SHELTER

PROJECT NO.

THE RBA GROUP, MORRISTOWN, NEW JERSEY

KEY MAP



LEGEND

ITEM	EXISTING	PROPOSED
CONTOURS	350	350
SPOT GRADE	+ 350.0	+ 350.0
WOODED AREA		
WETLAND LIMIT		
(25' BUFFER)		
100 YR. FLOOD PLAIN		
75' STREAM BUFFER		
RETAINING WALL		
EXISTING STREAM		
EXISTING PROPERTY LINE		
EXISTING EASEMENT LINE		

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 2-2-93

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

DIRECTOR — DATE 11/2/93

CHIEF, BUREAU OF ENGINEERING — DATE 11/1/93

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

DIRECTOR — DATE 11/2/93

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 11/10/93

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

COUNTY HEALTH OFFICER — DATE 11/5/93

OWNER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9881 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

DEVELOPER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9881 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

ADDRESS CHART

BUILDING	STREET ADDRESS
LOT1-CLUBHOUSE	5100 COLUMBIA ROAD
LOT1-MAINT. BLDG.	5280 COLUMBIA ROAD

SUBDIVISION NAME: WML. 9/3, LOT 39, WML. 9/4, LOTS 33&55, TC. 9/1, LOT 30 & VOL. 3/1, LOTS 1, 2 & 4		SECTION/AREA 9/3, 9/4, 9/1 & 3/1	LOT/PARCEL LOTS 1, 2, 3, 33, 39 & 55
PLAT	BLOCK/ZONE 9, 9, 10 ANT-0.5, 14, 15 R COMM	TAX/ZONE MAP 30	ELEC DIST. 5th / CENSUS TR 6054
WATER CODE		SEWER CODE	

NOTE:
-REFER TO SHEET L-8 FOR PLANT LIST & QUANTITY
-THIS PLAN IS FOR PLANTING PURPOSES ONLY

no	description	date
1	AS PER COUNTY COMMENTS	8/92
2	DESCRIPTION OF DUMPSTER SCREEN	1/93
3	PER DPZ COMMENTS	10-93
4	ADDED FUEL PAD AND 6 WHITE PINES	2/1/95
5	ADDED CLUB HOUSE EXPANSION	12-30-09

STATE OF MARYLAND — CHARLES H. SHAW — NO. 215 — REGISTERED LANDSCAPE ARCHITECT
CHARLES H. SHAW JR

prepared by
• Charles H. Shaw •
Landscape Architect
6651 Cedar Lane
Columbia, MD 21044

prepared by
The RBA ENGINEERS • ARCHITECTS • PLANNERS
5560 STERRETT PLACE, SUITE 300
COLUMBIA, MARYLAND 21044
(301) 730-7950 621-6050

LANDSCAPE PLAN
HOLE #9 & HOLE #10

FAIRWAY HILLS GOLF COURSE
COLUMBIA MARYLAND

SCALE 1" = 50'
DRAWN Shaw
CHECKED Shaw
PROJ. NO. MO405
DATE 10-2-92
SHEET L-7
37 OF 56

SDP-92-104

HOLE #12 TEES

8' BOARDWALK CARTPATH

HOLE #11 GREEN

HOLE #7 GREEN

IRRIGATION DIVERSION STRUCTURE

GRASS BUNKER

HOLE #1 LINE OF PLAY

8" IRRIGATION LINE

PROPOSED POND 'B' W.S.E.-319.00

FAIRWAY (TYP.)

ROUGH (TYP.)

LITTLE

MATCH SHEET L-5

SEE SHEET H-5 FOR POND GRADING AND DRAINAGE DESIGN

APPROXIMATE LOCATION OF STORMWATER MANAGEMENT AND DRAINAGE EASEMENT

GRASS BUNKER

HOLE #11 TEES

HOLE #10 GREEN

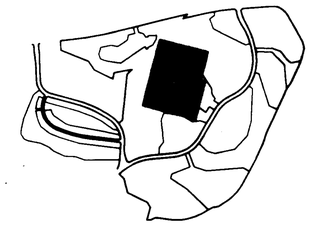
HOLE #10 LINE OF PLAY

MATCH SHEET L-7

PROJECT NO.

THE RBA GROUP, MORRISTOWN, NEW JERSEY

KEY MAP



LEGEND

ITEM	EXISTING	PROPOSED
CONTOURS	350	350
SPOT GRADE	+ 350.0	+ 350.0
WOODED AREA		
WETLAND LIMIT		
(25' BUFFER)		
100 YR. FLOOD PLAIN		
75' BUFFER		

APPROVED
FAIRWAY HILLS GOLF COURSE
2-2-93

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

James M. Irvin, DIRECTOR — 11-2-93 DATE

CHIEF, BUREAU OF ENGINEERING — 11/1/93 DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

DIRECTOR — 11/2/93 DATE

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — 11/10/93 DATE

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

Joyce M Boyd for JMB — COUNTY HEALTH OFFICER — 11/5/93 DATE

OWNER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9961 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

DEVELOPER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9961 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

ADDRESS CHART

BUILDING	STREET ADDRESS
CLUBHOUSE	COLUMBIA ROAD, COLUMBIA

SUBDIVISION NAME		SECTION/AREA		LOT/PARCEL
VILLAGE OF DORSEYS SEARCH RUNNING BROOK		7/1 9/3-4		LOTS 1-2-3-4 33-36 & 55
PLAT 6735 thru 6743, 6536 PB131.41 PB131.25	BLOCK	ZONE NT	TAX/ZONE MAP 30	ELEC. DIST. 5	CENSUS TR.
WATER CODE			SEWER CODE		

PLANT LIST SHEET L-7 & L-8

QTY L-7	QTY L-8	KEY	SIZE	PLANT NAME: BOTANICAL / COMMON NAME	ROOT	REMARKS
10	3	⊕	2-2½" CAL	ACER RUBRUM 'RED SUNSET' RED SUNSET MAPLE	B&B	FULL HEAD
25	3	⊙	6-8' HT	CRATAEGUS LAVALLEI LAVELL HAWTHORN	B&B	FULL HEAD
16	8	◯	2-2½" CAL	FRAXINUS PENNSYLVANICA GREEN ASH	B&B	FULL HEAD
3	—	⊗	2-2½" CAL.	PLATANUS ACERIFOLIA LONDON PLANE TREE	B&B	FULL HEAD
10	6	⊕	6-8' HT	PRUNUS YEDOENSIS YOSHINO CHERRY	B&B	FULL HEAD
31	12	✺	5-6' HT	PINUS STROBUS WHITE PINE	B&B	FULL
54	18	✺	6-8' HT	PINUS STROBUS WHITE PINE	B&B	FULL
33	7	✺	4-10' HT	PINUS STROBUS WHITE PINE	B&B	FULL
14	6	⊙	2-2½" CAL	QUERCUS PALUSTRIS PIN OAK	B&B	FULL HEAD

NOTE: THIS PLAN IS FOR PLANTING PURPOSES ONLY
REFER TO SHEET L-1.5 FOR DETAILS & GENERAL NOTES

STATE OF MARYLAND — CHARLES H. SHAW — REGISTERED LANDSCAPE ARCHITECT

STATE OF MARYLAND — CHARLES H. SHAW — NO. 219 — REGISTERED LANDSCAPE ARCHITECT

CHARLES H. SHAW JR.

revisions		
no	description	date
1	PER DPZ COMMENTS	10-93

prepared by
• Charles H. Shaw •
Landscape Architect
6651 Cedar Lane
Columbia, MD 21044

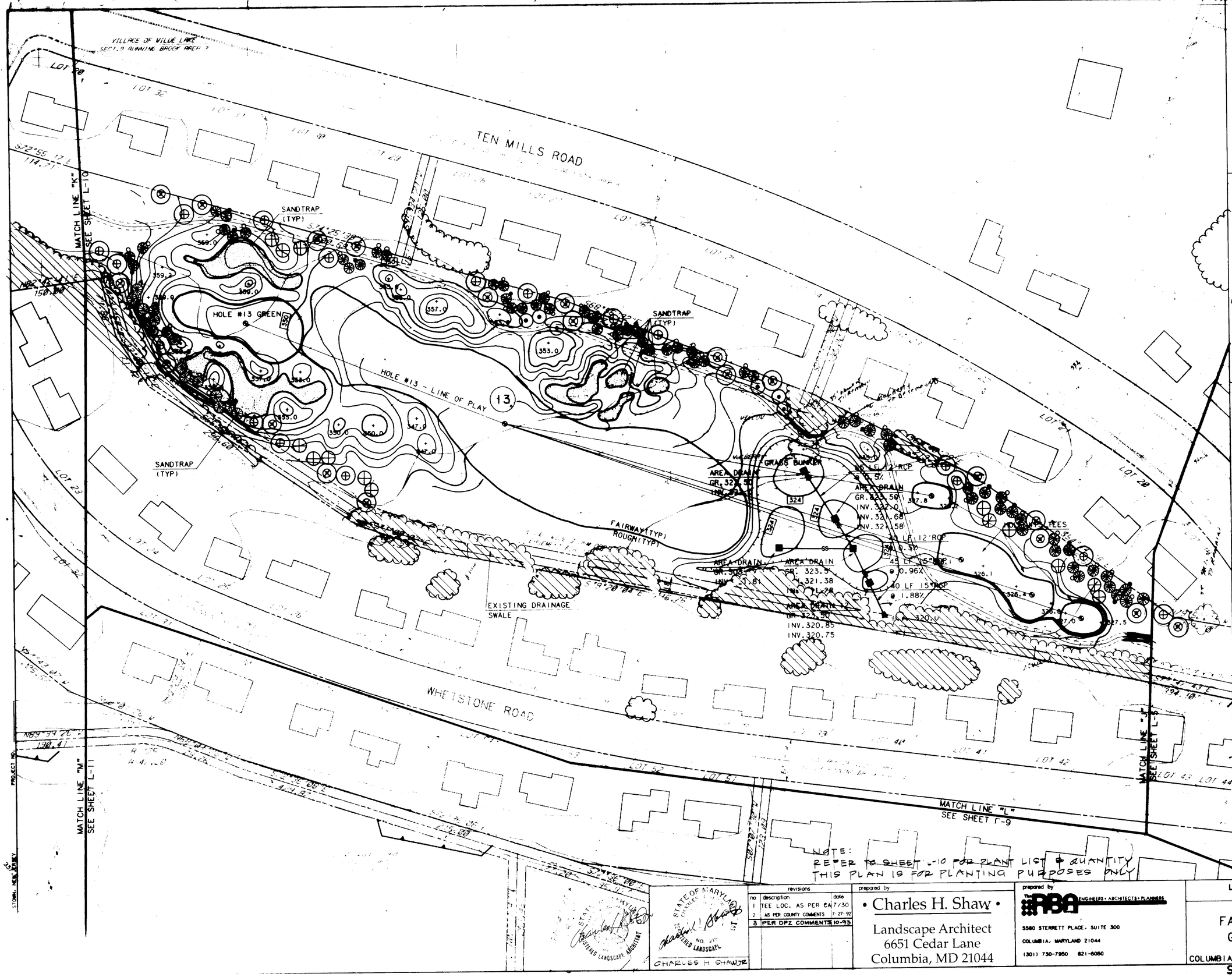
prepared by
The RBA ENGINEERS • ARCHITECTS • PLANNERS
5560 STERRETT PLACE, SUITE 300
COLUMBIA, MARYLAND 21044
(301) 730-7950 821-8050

LANDSCAPE PLAN
HOLE #11

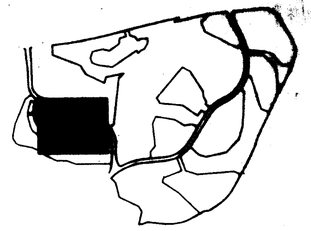
FAIRWAY HILLS GOLF COURSE
COLUMBIA MARYLAND

SCALE	1" = 50'
DRAWN	Sm
CHECKED	Shaw
PROJ. NO.	M0405
DATE	10-2-92
SHEET	L-8
	38 OF 56

SDP-92-104



KEY MAP



LEGEND

ITEM	EXISTING	PROPOSED
CONTOURS		
SPOT GRADE		+ 350.0
WOODED AREA		
WETLAND LIMIT		
(25' BUFFER)		
100 YR. FLOOD PLAIN		
75' STREAM BUFFER		
RETAINING WALL		
EXISTING STREAM		
EXISTING PROPERTY LINE		
EXISTING EASEMENT LINE		

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 2-2-93

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

DIRECTOR — DATE 11/2/93

CHIEF, BUREAU OF ENGINEERING — DATE 11/1/93

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

DIRECTOR — DATE 11/4/93

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 11/10/93

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

COUNTY HEALTH OFFICER — DATE 11/5/93

OWNER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

DEVELOPER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

ADDRESS CHART

BUILDING	STREET ADDRESS
LOTI-CLUBHOUSE	5100 COLUMBIA ROAD
LOTI-MAINT. BLDG.	5280 COLUMBIA ROAD

SUBDIVISION NAME OR PARCEL NO. — SECTION/AREA — LOT OR PARCEL NO.
PARCEL 674, LOTS 33,38, 39, 61, LOT 30 — 3 — LOTS 1, 2, 3, & 4 YDS. 3/4, LOTS 1, 2 & 4

PLAT — BLOCK — ZONE — TAX/ZONE MAP — ELEC. DIST. — CENSUS TRACT
5-9, 10-17, 18-20 & COMM. — 30 — 5th — 6064

WATER CODE — SEWER CODE

no	revisions	date
1	TEE LOC. AS PER CA	7/30
2	AS PER COUNTY COMMENTS	7-27-92
3	PER DPZ COMMENTS	10-93

STATE OF MARYLAND — CHARLES H. SHAW JR. — NO. 217 — REGISTERED LANDSCAPE ARCHITECT

prepared by
• Charles H. Shaw •
Landscape Architect
6651 Cedar Lane
Columbia, MD 21044

prepared by
The RBA ENGINEERS • ARCHITECTS • PLANNERS
5560 STERRETT PLACE, SUITE 300
COLUMBIA, MARYLAND 21044
(301) 730-7950 821-6050

LANDSCAPE PLAN
HOLE #13

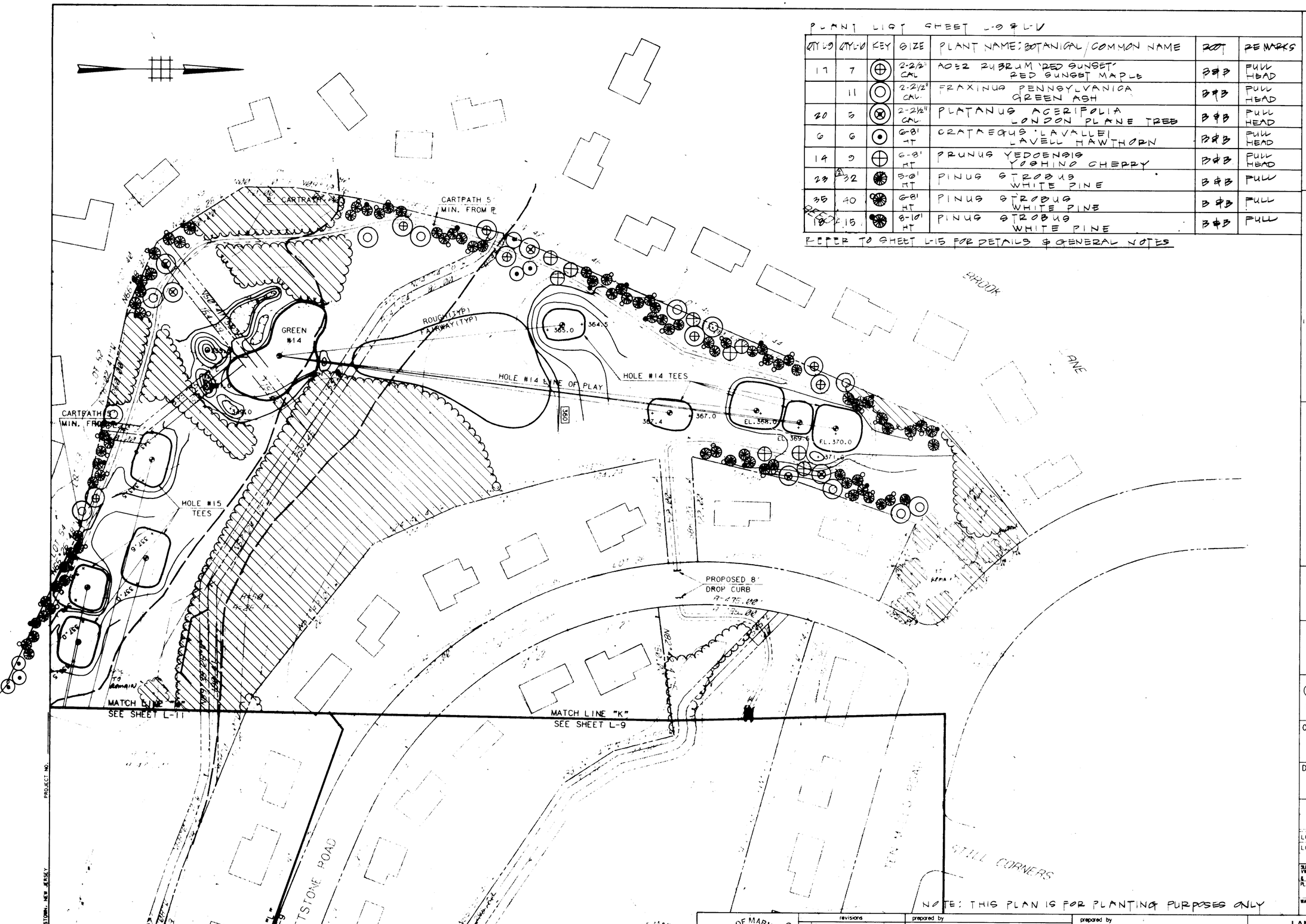
FAIRWAY HILLS
GOLF COURSE

COLUMBIA MARYLAND

SCALE 1" = 50'
DRAWN BLM — CHECKED Shaw
PROJ. NO. MO405 — DATE 10-2-92
L-9 — SHEET 39 of 56

SDP-92-104

NOTE:
REFER TO SHEET L-10 FOR PLANT LIST & QUANTITY
THIS PLAN IS FOR PLANTING PURPOSES ONLY



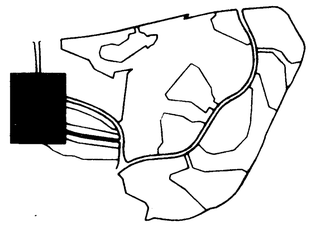
PLANT LIST SHEET L-9 & L-10

QTY L-9	QTY L-10	KEY	SIZE	PLANT NAME: BOTANICAL / COMMON NAME	ROOT	REMARKS
17	7	⊕	2-2½" CAL	ACER RUBRUM 'RED SUNSET' RED SUNSET MAPLE	B&B	FULL HEAD
	11	○	2-2½" CAL.	FRAXINUS PENNSYLVANICA GREEN ASH	B&B	FULL HEAD
20	5	⊗	2-2½" CAL.	PLATANUS ACERIFOLIA LONDON PLANE TREE	B&B	FULL HEAD
6	6	⊙	6-8' HT	CRATAEGUS LAVALLEI LAVELL HAWTHORN	B&B	FULL HEAD
14	9	⊕	6-8' HT	PRUNUS YEDOENSIS YOSHINO CHERRY	B&B	FULL HEAD
23	32	✱	5-6' HT	PINUS STROBUS WHITE PINE	B&B	FULL
35	40	✱	6-8' HT	PINUS STROBUS WHITE PINE	B&B	FULL
18	15	✱	8-10' HT	PINUS STROBUS WHITE PINE	B&B	FULL

REFER TO SHEET L-15 FOR DETAILS & GENERAL NOTES

NOTE: THIS PLAN IS FOR PLANTING PURPOSES ONLY

KEY MAP



LEGEND

ITEM	EXISTING	PROPOSED
CONTOURS		350
SPOT GRADE		+ 350.0
WOODED AREA		
WETLAND LIMIT		
(25' BUFFER)		
100 YR. FLOOD PLAIN		
75' STREAM BUFFER RETAINING WALL		
EXISTING STREAM		
EXISTING PROPERTY LINE		
EXISTING EASEMENT LINE		

2-2-93

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE SYSTEMS, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS. HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
DIRECTOR — DATE 11 2 93
CHIEF, BUREAU OF ENGINEERING — DATE 11/1/93

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING
DIRECTOR — DATE 11/12/93
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 11/10/93

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.
COUNTY HEALTH OFFICER — DATE 11/5/93

OWNER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

DEVELOPER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

ADDRESS CHART

BUILDING	STREET ADDRESS
LOT1-CLUBHOUSE	5100 COLUMBIA ROAD
LOT1-MAINT. BLDG.	5280 COLUMBIA ROAD

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL
VWL.9/3, LOT39, VWL.9/4, LOTS 33&55, TC.9/1, LOT30 & VDS.3/1, LOTS 1,2 & 4	9/3, 9/4, 9/1 & 3/1	LOTS 1,2,3, 33,39 & 55

PLAT	BLOCK	ZONE	TAX/ZONE MAP	ELEC DIST	CENSUS TR
	8,9,10, 14,15	NT-O.S. & COMM.	30	51h	6054

WATER CODE — SEWER CODE

STATE OF MARYLAND — REGISTERED LANDSCAPE ARCHITECT
CHARLES H SHAW JR

revisions		
no	description	date
1	AS PER COUNTY COMMENTS	7-27-92
2	NS PER COUNTY COMMENT	9-29-93
3	PER DPZ COMMENTS	10-93

prepared by
Charles H. Shaw
Landscape Architect
6651 Cedar Lane
Columbia, MD 21044

prepared by
The RBA ENGINEERS • ARCHITECTS • PLANNERS
5660 STERRETT PLACE, SUITE 300
COLUMBIA, MARYLAND 21044
(301) 730-7950 621-6050

LANDSCAPE PLAN
HOLE #14

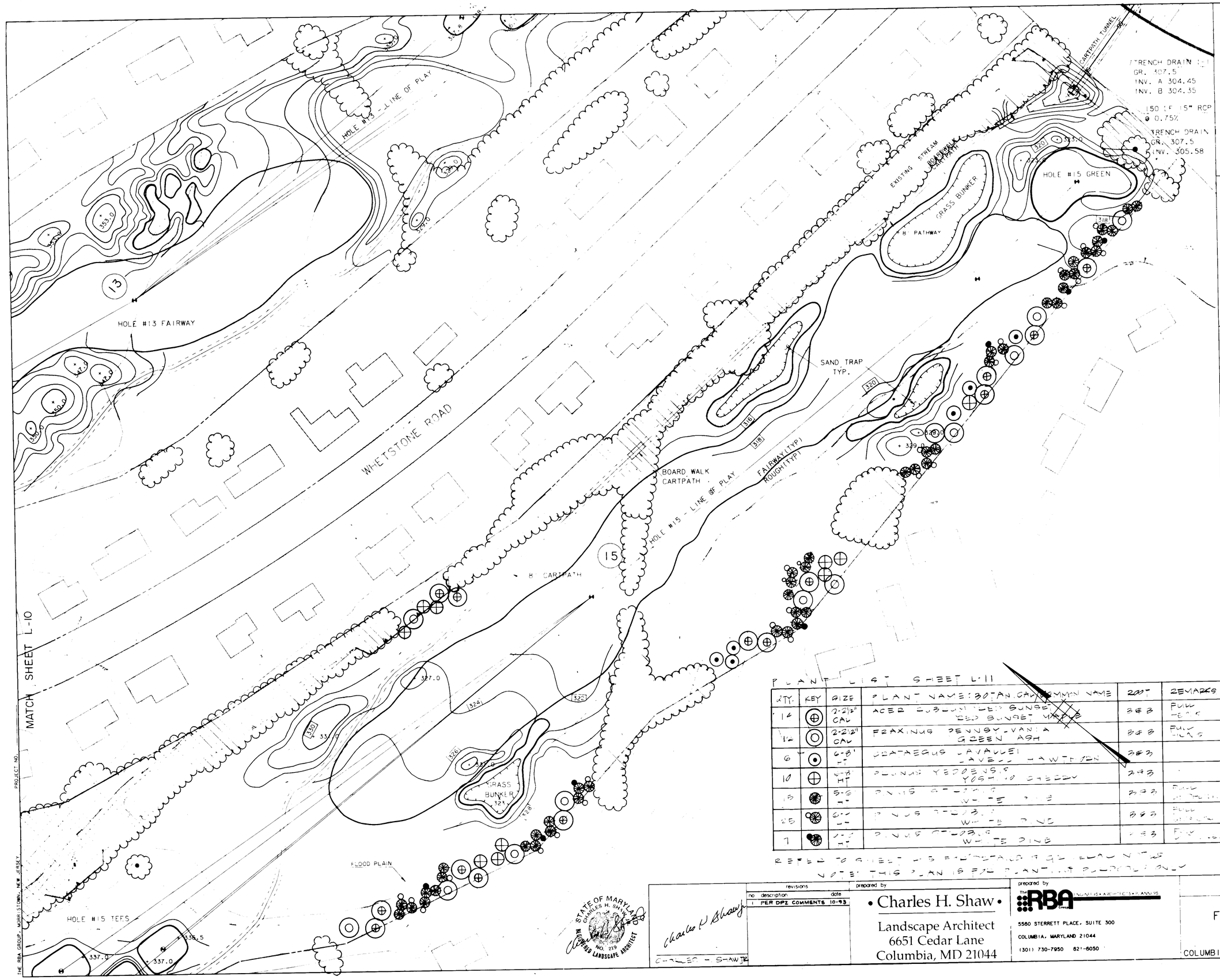
FAIRWAY HILLS
GOLF COURSE

COLUMBIA MARYLAND

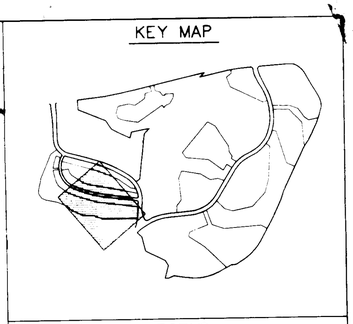
SCALE 1" = 50'
DRAWN Shaw — CHECKED Shaw
PROJ. NO. M0405 — DATE 10 2 92
SHEET L-10 — 40 of 56

SDP-92-104

THE RBA GROUP, MORRISTOWN, NEW JERSEY — PROJECT NO.



KEY MAP



LEGEND

ITEM	EXISTING	PROPOSED
CONTOURS		350
SPOT GRADE		+ 350.0
WOODED AREA		
WETLAND LIMIT (25' BUFFER)		
100 YR. FLOOD PLAIN		
75' STREAM BUFFER RETAINING WALL		

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 2-2-93

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE SYSTEMS, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS. HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
DIRECTOR — DATE 11/2/93
CHIEF, BUREAU OF ENGINEERING — DATE 11/1/93

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING
DIRECTOR — DATE 11/12/93
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 11/10/93

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.
COUNTY HEALTH OFFICER — DATE 11/5/93

OWNER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

DEVELOPER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

ADDRESS CHART

BUILDING	STREET ADDRESS
CLUBHOUSE	COLUMBIA ROAD, COLUMBIA

SUBDIVISION NAME: VILLAGE OF DORSEYS SEARCH RUNNING BROOK
SECTION/AREA: 1/1, 9/3,4
LOT/PARCEL: LOTS 1,2,3,4, 33,39 & 55
PLAT 6735 thru 6743, 6536 PB131.4 PB131.25
BLOCK ZONE: NT
TAX/ZONE MAP: 30
ELEC DIST: 5
CENSUS TR
WATER CODE
SEWER CODE

PLANT LIST SHEET L-11

QTY.	KEY	SIZE	PLANT NAME: BOTAN. CAL/COMMON NAME	ROOT	REMARKS
14		2-2½" CAL	ACER RUBRUM RED SUNSET / RED SUNSET MAPLE	B&B	FULL HEADS
12		2-2½" CAL	FRAXINUS PENNSYLVANIA / GREEN ASH	B&B	FULL HEADS
6		6-8' HT	CRATAEGUS LAVALLEI / LAVELL HAWTHORN	B&B	
10		6-8' HT	PRUNUS YEDOENSIS / YOSHINO CHERRY	B&B	
15		5-6' HT	PINUS STROBUS / WHITE PINE	B&B	FULL [illegible]
25		6-[illegible] HT	PINUS STROBUS / WHITE PINE	B&B	FULL [illegible]
7		[illegible] HT	PINUS STROBUS / WHITE PINE	B&B	FULL [illegible]

REFER TO SHEET L-13 FOR DETAILS & GENERAL NOTES
NOTE: THIS PLAN IS FOR PLANTING PURPOSES ONLY

STATE OF MARYLAND — CHARLES H. SHAW JR. — REGISTERED LANDSCAPE ARCHITECT — NO. 219

Charles H. Shaw
CHARLES H. SHAW JR.

revisions

no	description	date
1	PER DPZ COMMENTS	10-93

prepared by
• Charles H. Shaw •
Landscape Architect
6651 Cedar Lane
Columbia, MD 21044

prepared by
The RBA Group — ENGINEERS • ARCHITECTS • PLANNERS
5560 STERRETT PLACE, SUITE 300
COLUMBIA, MARYLAND 21044
(301) 730-7950 621-6050

LANDSCAPE PLAN
HOLE #15

FAIRWAY HILLS
GOLF COURSE

COLUMBIA MARYLAND

SCALE 1" = 50'
DRAWN
CHECKED
PROJ NO M0405
DATE 10-2-92
SHEET L-11
41 OF 56

SDP-92-104

THE RBA GROUP, MORRISTOWN, NEW JERSEY
PROJECT NO.

PLANT LIST - SHEET 12

QTY	FEATURE	SIZE	PLANT NAME: BOTANICAL / COMMON NAME	ROOT	REMARK
4		2-2½" CAL	ACER RUBRUM 'RED SUNSET' RED SUNSET MAPLE	B&B	
8		2-2½" CAL	FRAXINUS PENNSYLVANIA GREEN ASH	B&B	
6		2-2½" CAL	PLATANUS ACERIFOLIA LONDON PLANE TREE	B&B	
6		6-8' HT	CRATAEGUS LAVALLEI LAVELL HAWTHORN	B&B	
3		6-8' HT	PRUNUS YEDOENSIS YOSHINO CHERRY	B&B	
15		8-10' HT	PINUS STROBUS WHITE PINE	B&B	
30		6-8' HT	PINUS STROBUS WHITE PINE	B&B	
6		6-10' HT	PINUS STROBUS WHITE PINE	B&B	

REFER TO SHEET L-15 FOR DETAILS & GENERAL NOTES

MATCH SHEET L-11

MATCH SHEET L-13

NOTE: THIS PLAN IS FOR PLANTING PURPOSES ONLY

KEY MAP

LEGEND

ITEM	EXISTING	PROPOSED
CONTOURS	350	350
SPOT GRADE	+ 350.0	+ 350.0
WOODED AREA		
WETLAND LIMIT		
(25' BUFFER)		
100 YR. FLOOD PLAIN		
75' STREAM BUFFER		
RETAINING WALL		

APPROVED
HOWARD SOIL CONSERVATION DISTRICT

DATE 12-2-93

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

DIRECTOR — DATE 11/2/93

CHIEF, BUREAU OF ENGINEERING — DATE 11/1/93

APPROVED : HOWARD COUNTY DEPT. OF PLANNING AND ZONING

DIRECTOR — DATE 11/2/93

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 11/10/93

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

COUNTY HEALTH OFFICER — (DATE) 11/5/93

OWNER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9961 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

DEVELOPER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9961 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

ADDRESS CHART

BUILDING	STREET ADDRESS
CLUBHOUSE	COLUMBIA ROAD, COLUMBIA

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL
VILLAGE OF DORSEYS SEARCH	1/1	LOTS 1,2,3,4
RUNNING BROOK	9/3,4	33,39 & 55

PLAT 6735 thru 6745, 6536 PB131.41 PB131.25	BLOCK	ZONE	TAX/ZONE	MAP	ELEC DIST	CENSUS TR
		NT	30		5	

WATER CODE — SEWER CODE

STATE OF MARYLAND — CHARLES H. SHAW JR. — No. 219 — REGISTERED LANDSCAPE ARCHITECT

no.	revisions	date
1	PER DPZ COMMENTS	10-93

prepared by
• Charles H. Shaw •
Landscape Architect
6651 Cedar Lane
Columbia, MD 21044

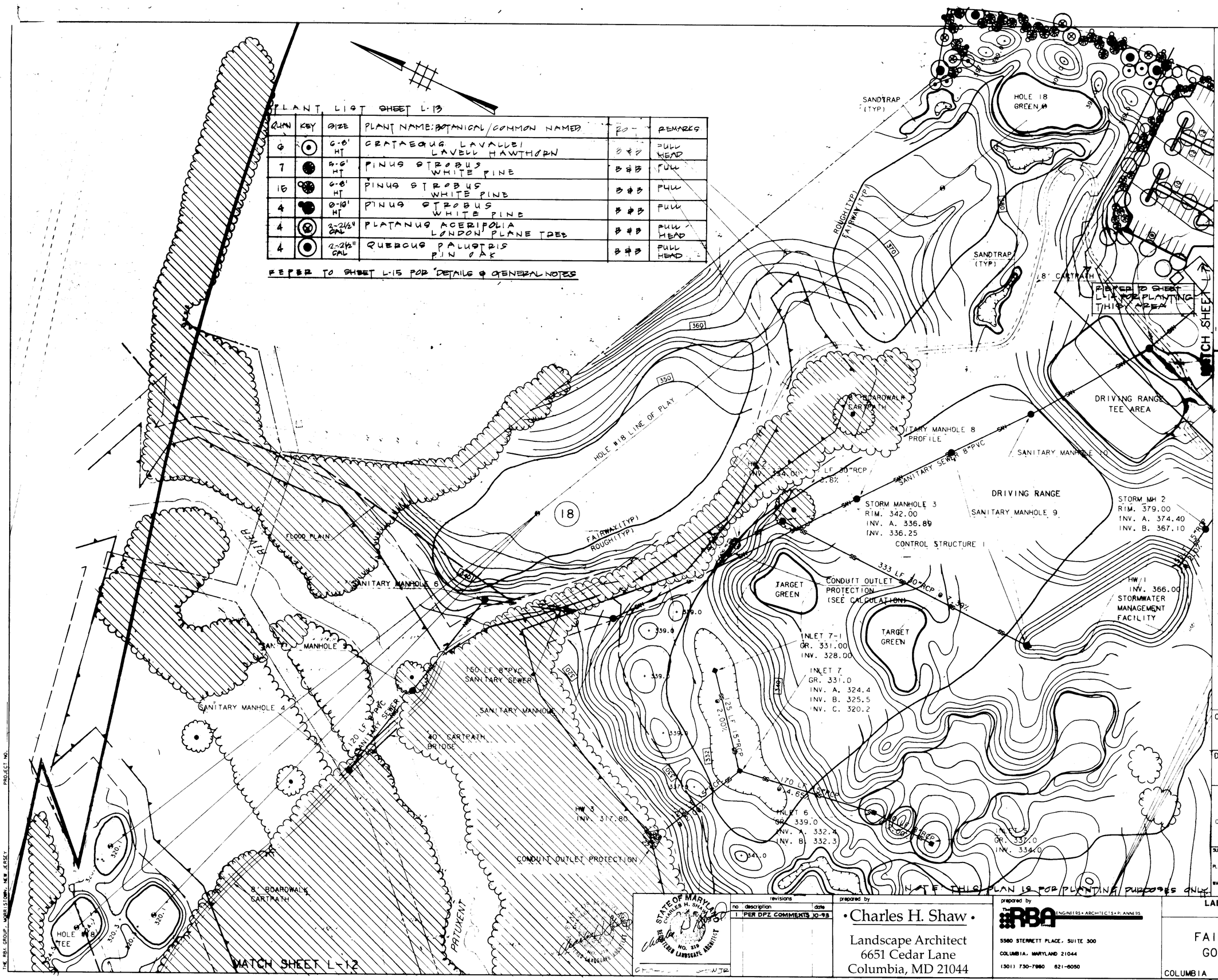
prepared by
The RBA GROUP — ENGINEERS • ARCHITECTS • PLANNERS
5580 STERRETT PLACE, SUITE 300
COLUMBIA, MARYLAND 21044
(301) 730-7950 621-6050

LANDSCAPE PLAN
HOLES #16 & 17

FAIRWAY HILLS
GOLF COURSE
COLUMBIA MARYLAND

SCALE	1" = 50'
DRAWN	CHECKED
S.A.	S.A.
PROJ. NO.	DATE
M0405	10-2-92
L-12	
SHEET	42 OF 56

SDP-92-104

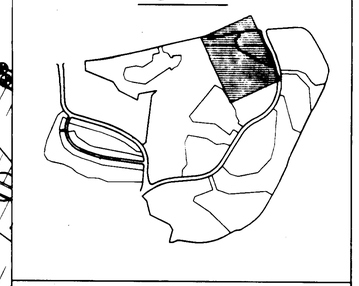


PLANT LIST SHEET L-13

QUAN	KEY	SIZE	PLANT NAME: BOTANICAL/COMMON NAMED	RO	REMARKS
6		6-8' HT	CRATAEGUS LAVALLEI LAVELL HAWTHORN	B & B	FULL HEAD
7		5-6' HT	PINUS STROBUS WHITE PINE	B & B	FULL
15		6-8' HT	PINUS STROBUS WHITE PINE	B & B	FULL
4		8-10' HT	PINUS STROBUS WHITE PINE	B & B	FULL
4		2-2½" CAL	PLATANUS ACERIFOLIA LONDON PLANE TREE	B & B	FULL HEAD
4		2-2½" CAL	QUERCUS PALUSTRIS PIN OAK	B & B	FULL HEAD

REFER TO SHEET L-15 FOR DETAILS & GENERAL NOTES

KEY MAP



LEGEND

ITEM	EXISTING	PROPOSED
CONTOURS		350
SPOT GRADE		+ 350.0
WOODED AREA		
WETLAND LIMIT		
(25' BUFFER)		
100 YR. FLOOD PLAIN		
STREAM BUFFER RETAINING WALL		

DATE 2-2-93

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE SYSTEMS, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS. HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR 11.2.93 DATE
CHIEF, BUREAU OF ENGINEERING 11/1/93 DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING
DIRECTOR 11/12/93 DATE
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT 11/10/93 DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.
COUNTY HEALTH OFFICER 11/5/93 DATE

OWNER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

DEVELOPER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

ADDRESS CHART

BUILDING	STREET ADDRESS
CLUBHOUSE	COLUMBIA ROAD, COLUMBIA

SUBDIVISION NAME: VILLAGE OF DORSEYS SEARCH RUNNING BROOK
SECTION/AREA: 1/1 9/3,4
LOT/PARCEL: LOTS 1,2,3,4, 33,39 & 55
PLAT 6735 thru 6743, 6536 PB131.41 PB131.25
BLOCK ZONE: NT
TAX/ZONE MAP: 30
ELEC DIST: 5
CENSUS TR
WATER CODE
SEWER CODE

STATE OF MARYLAND CHARLES H. SHAW NO. 219 REGISTERED LANDSCAPE ARCHITECT

revisions		
no	description	date
1	PER DPZ COMMENTS	10-93

prepared by
• Charles H. Shaw •
Landscape Architect
6651 Cedar Lane
Columbia, MD 21044

prepared by
The RBA ENGINEERS • ARCHITECTS • PLANNERS
5580 STERRETT PLACE, SUITE 300
COLUMBIA, MARYLAND 21044
(301) 730-7960 621-6050

LANDSCAPE PLAN
HOLE #18

FAIRWAY HILLS GOLF COURSE
COLUMBIA MARYLAND

SCALE 1" = 50'
DRAWN Shaw
CHECKED Shaw
PROJ NO M0405
DATE 10-2-92
SHEET L-13
43 of 56

SDP-92-104

THE RBA GROUP, MORRISTOWN, NEW JERSEY
PROJECT NO.

PLANT LIST - SHEET L-14

QUAN	KEY	SIZE	PLANT NAME; BOTANICAL/COMMON NAME	ROOT	REMARK
12	⊕	2-2½" CAL	ACER RUBRUM 'RED SUNSET' RED SUNSET MAPLE	B&B	FULL HEAD
6	⊙	6-8' HT	CRATAEGUS LAVALLEI LAVELL HAWTHORN	B&B	FULL HEAD
125	≈	24-30" SPR	ILEX GLABRA NANA DWARF INKBERRY	CAN	TRIM INTO HEDGE
6	⊗	8-10' HT	MAGNOLIA SOULANGIANA SAUCER MAGNOLIA	B&B	FULL MULTISTEM
41	⊗	2½-3" CAL	PLATANUS ACERIFOLIA LONDON PLANE TREE	B&B	FULL HEAD
34	✱	5-6' HT	PINUS STROBUS WHITE PINE	B&B	FULL
30	✱	6-8' HT	PINUS STROBUS WHITE PINE	B&B	FULL
11	✱	8-10' HT	PINUS STROBUS WHITE PINE	B&B	FULL
3	⊕	8-10' HT	PRUNUS YEDOENSIS YOSHINO CHERRY	B&B	FULL HEAD
20	◉	2½-3" CAL	QUERCUS PALUSTRIS PIN OAK	B&B	FULL HEAD
85	❀	24-30" SPR	VIBURNUM CARLESII KOREAN SPICE VIBURNUM	B&B	

REFER TO SHEET L-13 FOR DETAILS & GENERAL NOTES

PLANT 30 ILEX GLABRA 3'OC TRIM INTO HEDGE

DUMPSTER PAD FINAL BUILDING SIZE TO BE DETERMINED BY ARCHITECT

EXISTING CLUBHOUSE

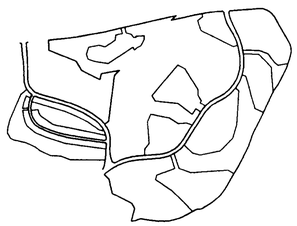
FUTURE ADDITION

PLANT 95 ILEX GLABRA - 3'OC TRIM INTO HEDGE

HOLE #10 TEE

NOTE THIS PLAN IS FOR PLANTING PURPOSES ONLY

KEY MAP



LEGEND

ITEM	EXISTING	PROPOSED
CONTOURS	350	350
SPOT GRADE	+ 350.0	+ 350.0
WOODED AREA		
WETLAND LIMIT		
(25' BUFFER)		
100 YR. FLOOD PLAIN		
75' STREAM BUFFER		
RETAINING WALL		

APPROVED
HOWARD COUNTY
DEPARTMENT OF PLANNING AND ZONING
DATE 2-2-93

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

DIRECTOR — DATE 11/2/93

CHIEF, BUREAU OF ENGINEERING — DATE 11/1/93

APPROVED : HOWARD COUNTY DEPT. OF PLANNING AND ZONING

DIRECTOR — DATE 11/2/93

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 11/6/93

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

COUNTY HEALTH OFFICER — DATE 11/5/93

OWNER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

DEVELOPER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

ADDRESS CHART

BUILDING	STREET ADDRESS
LOT1-CLUBHOUSE	5100 COLUMBIA ROAD
LOT1-MAINT. BLDG.	5280 COLUMBIA ROAD

SUBDIVISION NAME VWL.9/3-LOT39, VWL.9/4-LOTS 33&35, TC-9/1-LOT30 & VDS-311-LOTS 1,2 & 4		SECTION/AREA 9/3.9/4. 9/1 & 3/1	LOT/PARCEL LOTS 1.2.3. 33.38 & 55
PLAT	BLOCK/ZONE 8.9.10 AT-0.5 14.15 & COMM	TAX/ZONE MAP 30	ELEC DIST. 5th / CENSUS TR 6054
WATER CODE		SEWER CODE	

no.	revisions description	date
1	AS PER COUNTY COMMENTS	7-27-92
2	ADD SHRUBS DUMPSTER NOTE	1/93
3	PER DPZ COMMENTS	10-93

CHARLES H SHAW JR

prepared by
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Landscape Architect
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Columbia, MD 21044

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COLUMBIA, MARYLAND 21044
(301) 730-7950 621-6050

LANDSCAPE PLAN

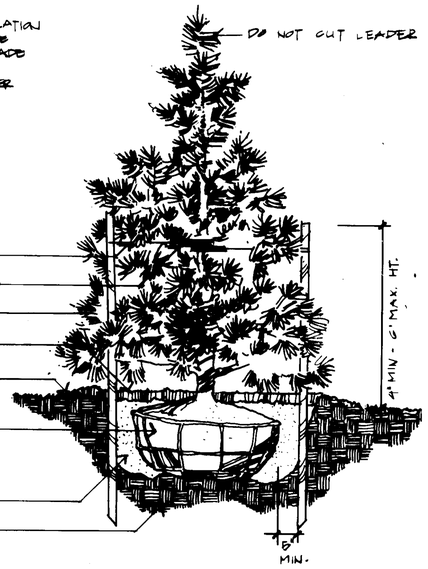
FAIRWAY HILLS
GOLF COURSE
COLUMBIA MARYLAND

SCALE 1" = 20'
DRAWN — CHECKED
PROJ. NO. M0405
DATE 10-2-92
SHEET L-14
44 OF 56

SDP-92-104

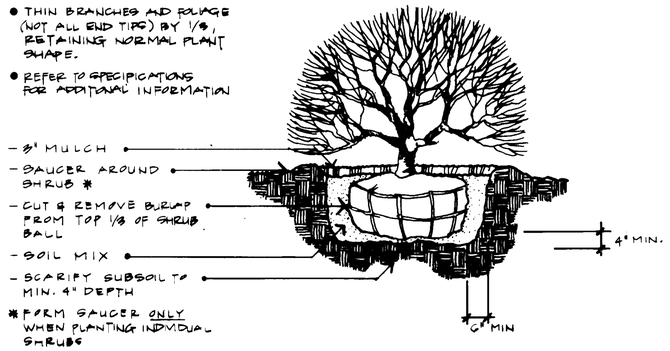
THE RBA GROUP, MORRISTOWN, NEW JERSEY
PROJECT NO.

- TREE SHALL BEAR SAME RELATION TO FINISHED GRADE AS IT BORE TO PREVIOUSLY EXISTING GRADE
- STAKE TREES UNDER 4" IN CALIPER WITH 2 - 2" HARDWOOD STAKES PER TREE



A / L-15 TYPICAL EVERGREEN TREE PLANTING DETAIL
N.T.S.

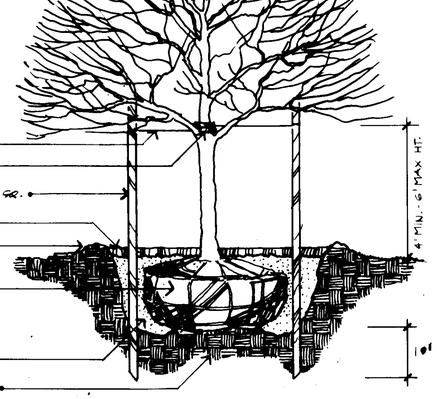
- SHRUB SHALL BEAR SAME RELATION TO FINISH GRADE AS IT BORE TO PREVIOUSLY EXISTING GRADE
- THIN BRANCHES AND FOLIAGE (NOT ALL END TIPS) BY 1/3, RETAINING NORMAL PLANT SHAPE.
- REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION



* FORM SAUCER ONLY WHEN PLANTING INDIVIDUAL SHRUBS

O / L-15 TYPICAL SHRUB PLANTING DETAIL
N.T.S.

- GUY TREES UP TO 3 1/2" CALIPER WITH STAKES - 2 PER TREE
- REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION
- NEVER CUT LEADER OUT OF TREE



B / L-15 TYPICAL DECIDUOUS TREE PLANTING DETAIL
N.T.S

MASTER PLANT LIST SHEET L-1 THRU L-14

NO.	QUAN.	KEY	SIZE	PLANT NAMES - BOTANICAL - COMMON NAME	ROOT	REMARKS
1.	103	⊕	2-2½" CAL 14-16' HT	ACER RUBRUM 'RED SUNSET' RED SUNSET MAPLE	B&B	FULL HEADS
2.	165	⊙	6-8' HT 1½"-1¾" CAL	CRATAEGUS LAVALLEI LAVELL HAWTHORN	B&B	FULL HEADS
3	74	◎	2-2½" CAL 14-16' HT	FRAXINUS PENNSYLVANICA GREEN ASH	B&B	FULL HEADS
4.	25	▬	24-30" SPR HT	ILEX GLABRA 'NANA' DWARF INKBERRY	CAN	PLANT 3' OC TYP FOR HEDGE
5.	6	⊗	8-10' HT 2-2½" CAL	MAGNOLIA SOULANGIANA SAUCER MAGNOLIA	B&B	FULL HEADS MULTI STEM
6.	240	✳	5-6' HT	PINUS STROBUS WHITE PINE	B&B	FULL UN-SHEARED
7.	369	✳	6-8' HT	PINUS STROBUS WHITE PINE	B&B	FULL UNSHEARED
8.	136	✳	8-10' HT	PINUS STROBUS WHITE PINE	B&B	FULL UN-SHEARED
9.	90	⊗	2-2½" CAL 14-16' HT	PLATANUS ACERIFOLIA 'LONDON' PLANE TREE	B&B	FULL HEADS
10	69	⊕	6-8' HT 1½"-1¾" CAL	PRUNUS VEDOENSIS YOSHINO CHERRY.	B&B	FULL HEADS
11	66	◉	2-2½" CAL 14-16' HT	QUERCUS PALUSTRIS PIN OAK	B&B	FULL HEADS
⚠ 12	85	✿	24-30" SPR HT	VIBURNUM CARLESI KOREAN SPICE VIBURNUM	B&B	

GENERAL NOTES

1. ALL PLANT MATERIAL TO MEET A.A.N. STANDARDS.
2. ALL PLANTING SHALL BE IN ACCORDANCE WITH STD. AMERICAN ASSOCIATION OF NURSERYMEN PROCEDURES & SPECIFICATIONS
3. CONTRACTOR & OWNERS REPRESENTATIVE SHALL VERIFY THE CORRECT LOCATION OF ALL UNDERGROUND UTILITIES IN THE FIELD PRIOR TO INSTALLATION OF ANY PLANT MATERIALS
4. NO SUBSTITUTIONS TO BE MADE WITHOUT CONSENT OF LANDSCAPE ARCHITECT OR OWNER
5. ALL PLANT BEDS & PLANTING AREAS TO BE MULCHED TO A DEPTH OF 3"
6. ALL AREAS DISTURBED BY PLANTING OPERATIONS SHALL BE FINE GRADED & SEEDED
7. LANDSCAPE CONTRACTOR/OWNER SHALL SELECT, VERIFY AND/OR APPROVE ALL PLANT MATERIAL.
8. QUANTITIES SHOWN ON PLANT LIST ARE FOR THE CONTRACTORS CONVENIENCE ONLY & ARE NOT GUARANTEED TO BE ACCURATE. IN THE EVENT OF A DISCREPANCY BETWEEN QUANTITIES SHOWN ON THE PLAN & QUANTITIES SHOWN ON THE PLANT LIST THE QUANTITIES SHOWN ON THE PLAN SHALL APPLY
9. REFER TO ENGINEERS PLANS FOR LOCATION OF EXISTING TREES TO REMAIN, WETLANDS & ALL OTHER PERTINENT INFORMATION

STATE OF MARYLAND CHARLES H. SHAW JR. No. 217 REGISTERED LANDSCAPE ARCHITECT

CHARLES H SHAW JR

revisions		
no.	description	date
1	AS PER COUNTY COMMENTS ADD PLANT MATERIAL	7-27-92 1/93

prepared by
• Charles H. Shaw •
Landscape Architect
6651 Cedar Lane
Columbia, MD 21044

prepared by
The RBA GROUP ENGINEERS • ARCHITECTS • PLANNERS
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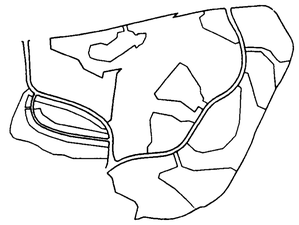
COLUMBIA, MARYLAND 21044
(301) 730-7950 821-6050

FAIRWAY HILLS
GOLF COURSE
COLUMBIA MARYLAND

SCALE 1" = 50'
DRAWN Shaw | CHECKED Sh.
PROJ. NO. M0405 | DATE 10 2 92
L-15 SHEET | 45 OF 56

KEY MAP



LEGEND

ITEM	EXISTING	PROPOSED
CONTOURS	350	350
SPOT GRADE	+ 350.0	+ 350.0
WOODED AREA		
WETLAND LIMIT		
(25' BUFFER)		
100 YR. FLOOD PLAIN		
75' STREAM BUFFER		
RETAINING WALL		

2-2-93

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE SYSTEMS, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR — DATE 11.2.93
CHIEF, BUREAU OF ENGINEERING — DATE 11/1/93

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING
DIRECTOR — DATE 11/2/93
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 11/10/93

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.
COUNTY HEALTH OFFICER — DATE 11/5/93

OWNER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

DEVELOPER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

ADDRESS CHART

BUILDING	STREET ADDRESS
LOT I-CLUBHOUSE	5100 COLUMBIA ROAD
LOT I-MAINT. BLDG.	5280 COLUMBIA ROAD

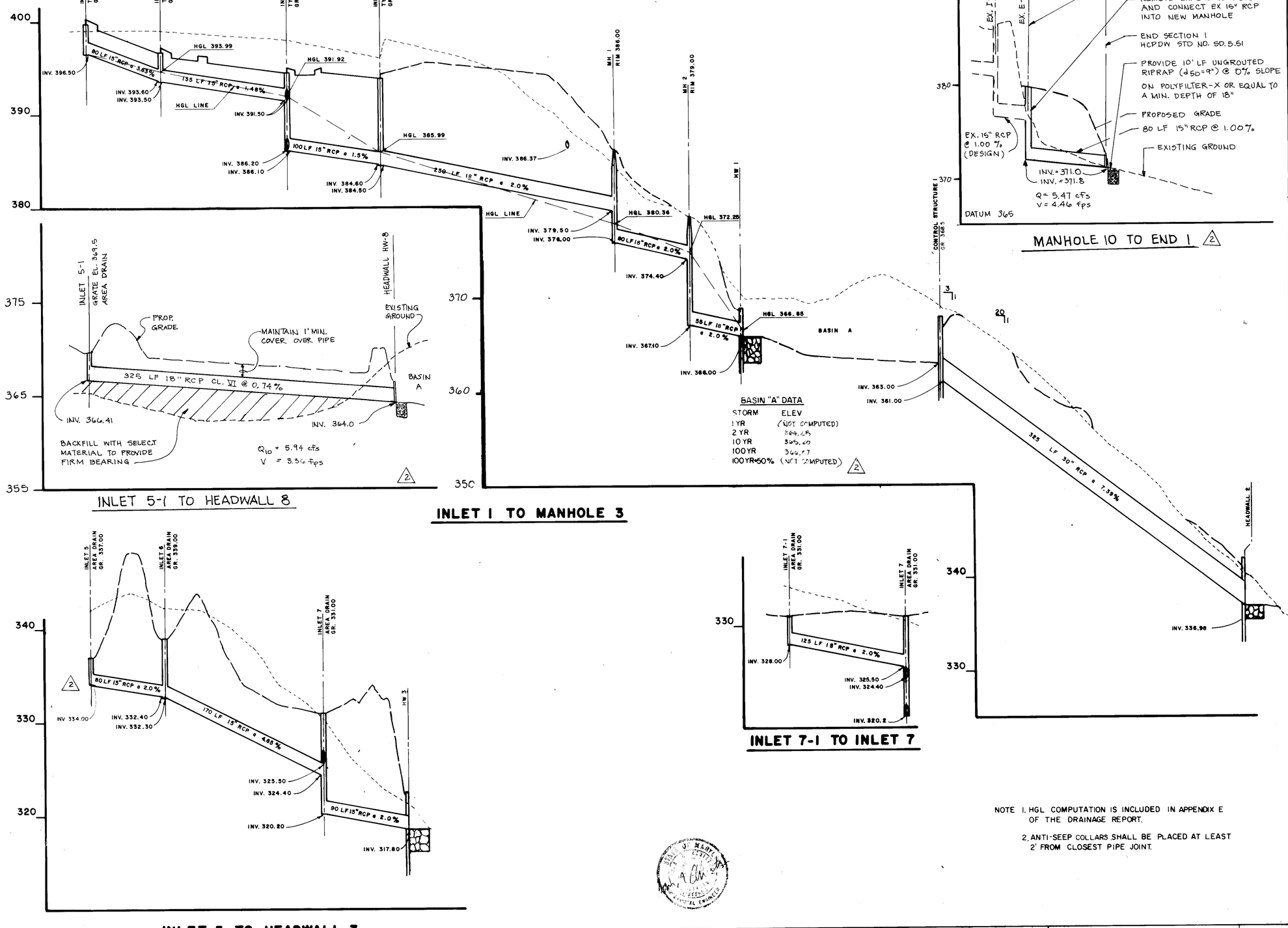
SUBDIVISION NAME VML-9/3, LOT 39, VML-9/4-LOTS 33&35, TC-9/1, LOT 30 & VDS-311, LOTS 1-2 & 4	SECTION/AREA 9/3, 9/4, 9/1 & 3/1	LOT/PARCEL LOTS 1, 2, 3, 33, 39 & 55	
PLAT	BLOCK/ZONE B.O.10 INT-0.5, 14.15 R-COM	TAX/ZONE MAP 30	ELEC DIST. 5th
WATER CODE	SEWER CODE		CENSUS TR 6054

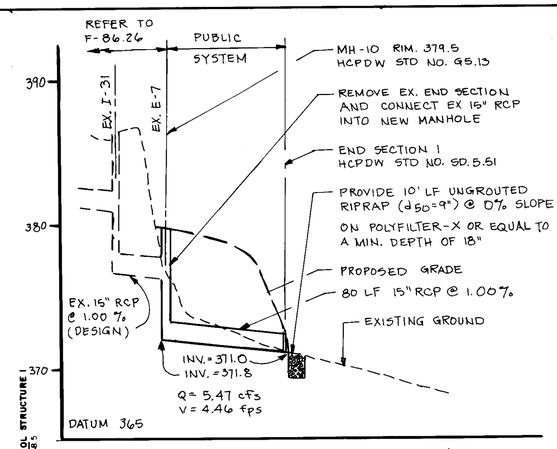
PROJECT NO.

THE RBA GROUP, MORRISTOWN, NEW JERSEY

SDP-92-104

45





MANHOLE 10 TO END 1 (2)

INLET 5-1 TO HEADWALL 8

BASIN "A" DATA

STORM	ELEV
1 YR	(NOT COMPUTED)
2 YR	369.25
10 YR	365.60
100 YR	366.77
100 YR+50%	(NOT COMPUTED) (2)

INLET 1 TO MANHOLE 3

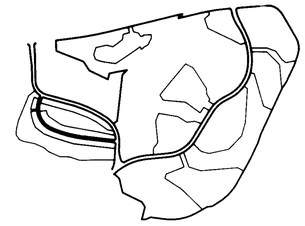
INLET 5 TO HEADWALL 3

INLET 7-1 TO INLET 7

NOTE 1. HGL COMPUTATION IS INCLUDED IN APPENDIX E OF THE DRAINAGE REPORT.

2. ANTI-SEEP COLLARS SHALL BE PLACED AT LEAST 2' FROM CLOSEST PIPE JOINT.

KEY MAP



LEGEND

ITEM	EXISTING	PROPOSED
GROUND	----------	----------
PIPE	8" PVC	8" PVC

APPROVED
DEPARTMENT OF PUBLIC WORKS
DATE 2-2-93

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE SYSTEMS, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS,
DIRECTOR — DATE 11.2.93
CHIEF, BUREAU OF ENGINEERING — DATE 11/1/93

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING
DIRECTOR — DATE 11/4/93
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 11/10/93

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.
COUNTY HEALTH OFFICER — DATE 11/5/93

OWNER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

DEVELOPER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

ADDRESS CHART

BUILDING	STREET ADDRESS
LOT5-CLUBHOUSE	5100 COLUMBIA ROAD
LOT1-MAINT. BLDG	5280 COLUMBIA ROAD

JOHN CHRISTMAN, P.E.

no.	revisions description	date
1	AS PER COUNTY COMMENT	10/24/92
2	ADDED PROFILE. REVISE POND DATA. DELETE STORM DRAIN	4/94

prepared by
RON PRICHARD
Golf Architect
10868 SIX PINES DRIVE
THE WOODLANDS, TEXAS 77380
(713) 292-1802
1730 WALTON ROAD, SUITE 300
BLUE BELL, PA. 19422
(215) 641-1700

prepared by
RBA ENGINEERS • ARCHITECTS • PLANNERS
5600 STERRETT PLACE, SUITE 300
COLUMBIA, MARYLAND 21044
(301) 730-7560 621-6080

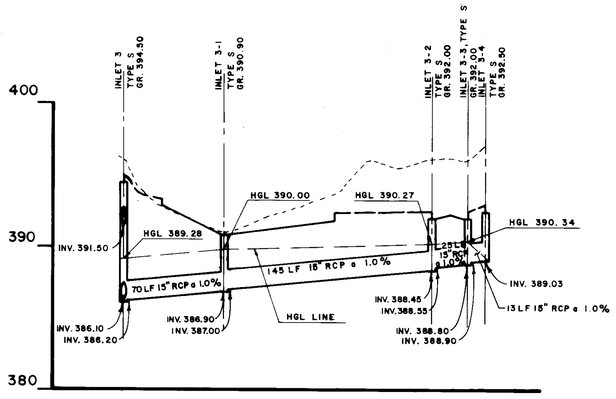
STORM DRAINAGE/ BASIN PROFILES

FAIRWAY HILLS GOLF COURSE

COLUMBIA MARYLAND

SCALE VERT. 1" = 5'
HORIZ. 1" = 50'
DRAWN MBB
CHECKED JJB
PROJ. NO. M0405
DATE 3-20-92
P1
SHEET 46 OF 56

SDP-92-104



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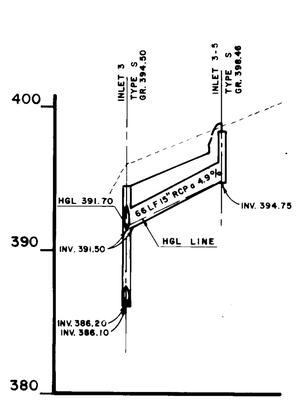

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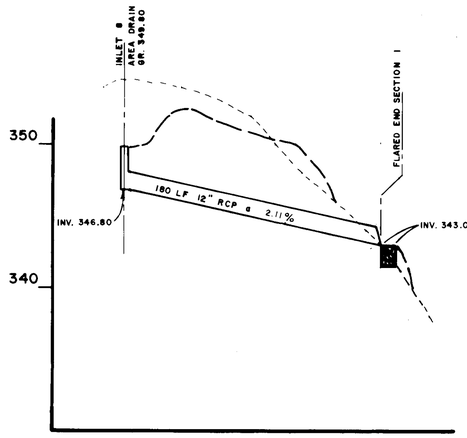

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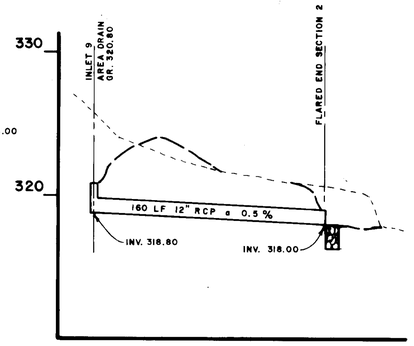

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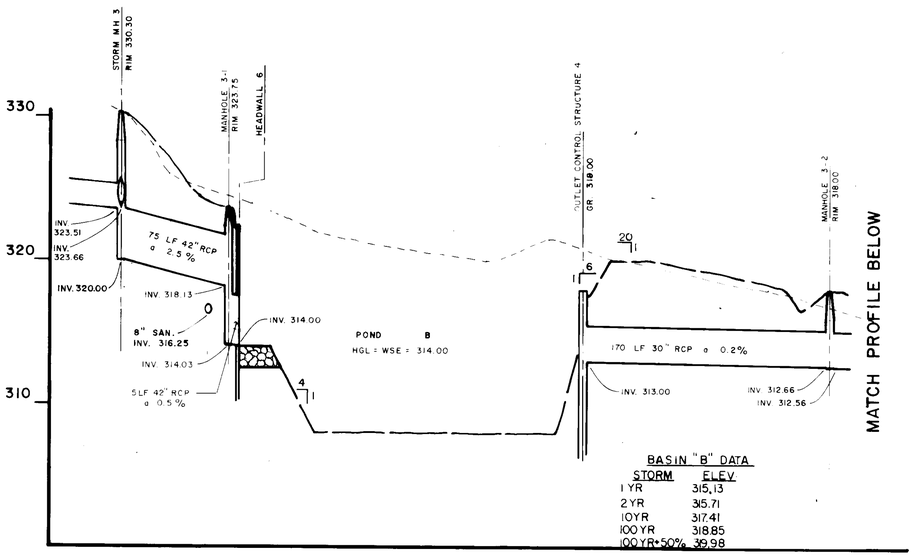
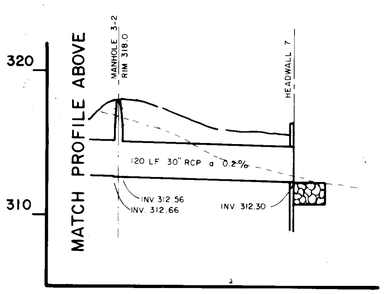
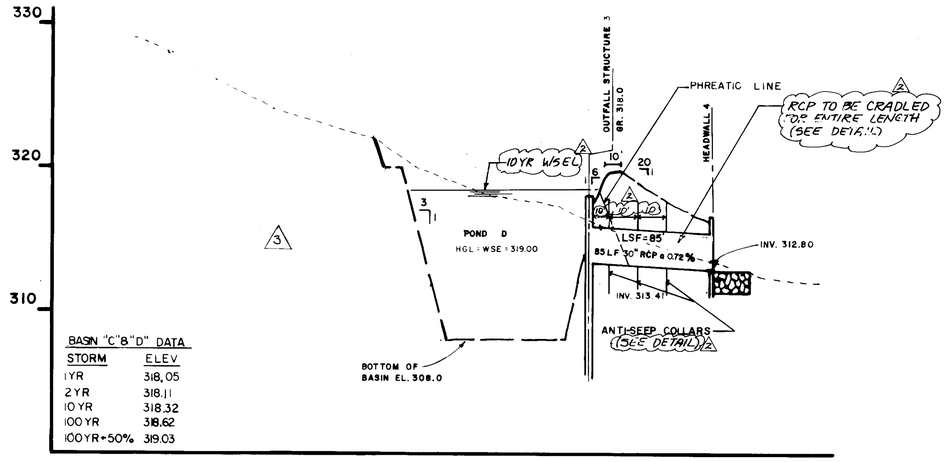


STORM MANHOLE 3 TO STORM MANHOLE 3-2



STORM MANHOLE 3-2 TO HEADWALL 7

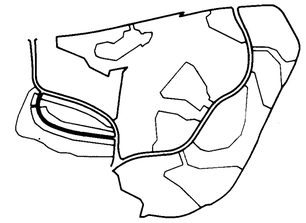


POND C TO HEADWALL 4

NOTE 1. HGL COMPUTATION IS INCLUDED IN APPENDIX E OF THE DRAINAGE REPORT.

2. ANTI-SEEP COLLARS SHALL BE PLACED AT LEAST 2' FROM CLOSEST PIPE JOINT.

KEY MAP



LEGEND

ITEM	EXISTING	PROPOSED
GROUND	----------	————
PIPE	8" PVC	8" PVC

2-2-93

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

DIRECTOR — DATE 11 2 93

CHIEF, BUREAU OF ENGINEERING — DATE 11/1/93

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

DIRECTOR — DATE 11/2/93

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 11/10/93

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

COUNTY HEALTH OFFICER — DATE 11/5/93

OWNER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

DEVELOPER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

ADDRESS CHART

BUILDING	STREET ADDRESS
LOT5-CLUBHOUSE	5100 COLUMBIA ROAD
LOT1-MAINT. BLDG	5280 COLUMBIA ROAD

SUBDIVISION NAME: VOL. 874/LOT30, VOL. 874/LOTS 33&35, TC-87-17/LOT30 & VOL. 3/1/LOTS 1,2 & 4 — PARCEL/AREA: 874 & 3/1 — LOT/AREA: LOTS 1,2,3, 33.98 & 44

PLAT — BLOCK: 2 — ZONE: R-A-10/MXT-0.5, 14.15 & other — TAX/ZONE MAP: 30 — ELEC. DIST.: 5th — CENSUS TR.: 6064

WATER CODE — SEWER CODE

revisions			
no.	description	date	
1	AS PER COUNTY COMMENTS	10/24/92	
2	AS PER COUNTY COMMENTS	1/3/94	
3	REVISED W.S.EL'S, POND 'B', OMIT POND 'C'	4/94	

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JOHN CHRISTMAN, P.E.

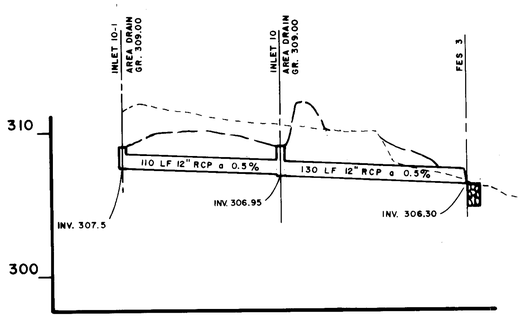
STORM DRAINAGE/ BASIN PROFILES

FAIRWAY HILLS GOLF COURSE

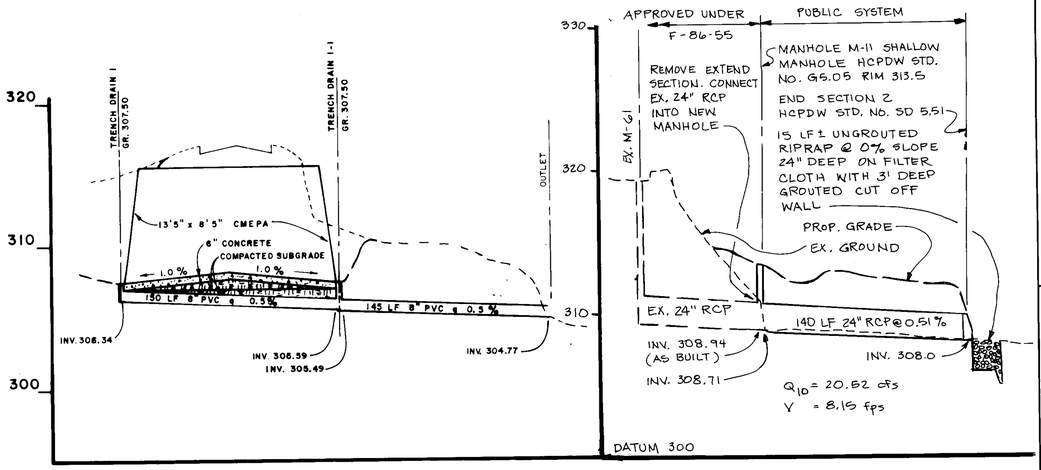
COLUMBIA MARYLAND

SCALE VERT. 1" = 5'
HORIZ. 1" = 50'
DRAWN MBB
CHECKED JJB
PROJ. NO. M0405
DATE 3-20-92
P2
SHEET 47 OF 56

SDP-92-104

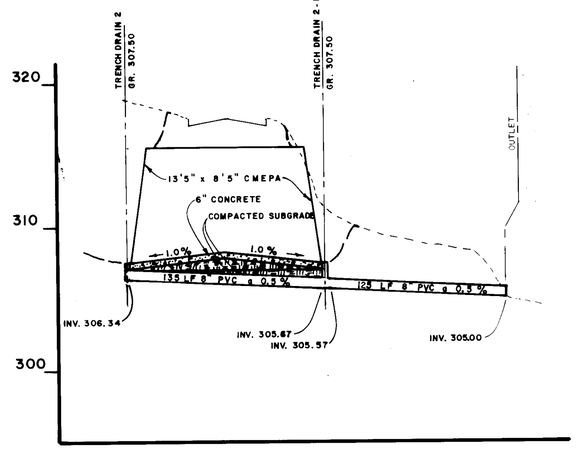


INLET 10-1 TO FES 3

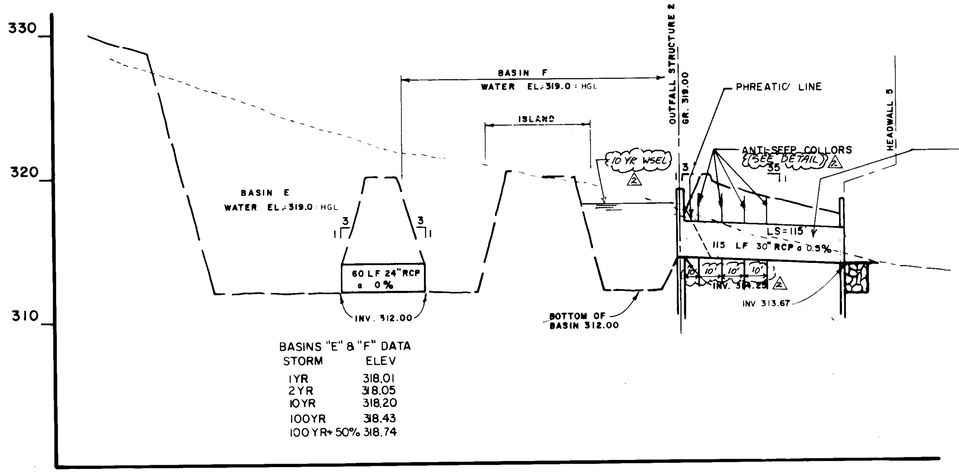


TRENCH DRAIN 1 TO OUTLET

MANHOLE 11 TO END 2 (2)



TRENCH DRAIN 2 TO OUTLET



BASINS "E" & "F" DATA

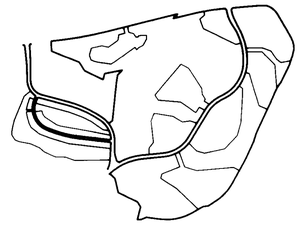
STORM	ELEV
1YR	318.01
2YR	318.05
10YR	318.20
100YR	318.43
100YR+ 50%	318.74

BASIN E TO HEADWALL 5

NOTE 1. HGL COMPUTATION IS INCLUDED IN APPENDIX E OF THE DRAINAGE REPORT.

2. ANTI-SEEP COLLARS SHALL BE PLACED AT LEAST 2' FROM CLOSEST PIPE JOINT.

KEY MAP



LEGEND

ITEM	EXISTING	PROPOSED
GROUND		
PIPE	8" PVC	8" PVC

2-2-93

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

DIRECTOR — DATE 11/2/93

CHIEF, BUREAU OF ENGINEERING — DATE 11/1/93

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

DIRECTOR — DATE 11/4/93

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 11/10/93

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

COUNTY HEALTH OFFICER — DATE 11/5/93

OWNER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

DEVELOPER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

ADDRESS CHART

BUILDING	STREET ADDRESS
LOT5-CLUBHOUSE	5100 COLUMBIA ROAD
LOT1-MAINT. BLDG	5280 COLUMBIA ROAD

SUBDIVISION NAME: VOL. 673/LOT30, VOL. 874/LOTS 33&36, 76/81/LOT30 & VOL. 3/1/LOTS 1,2 & 4 | SECTION/AREA 5/5.874, 5/1 & 5/1 | LOT/PARCEL: LOTS 1,2,5, 33,34 & 36

PLAT: BLOCK: 5-8,10 PT-9, 14-15 & OPENS. | ZONE: | TAX/ZONE MAP: 30 | ELEC. DIST.: 5th | CENSUS TR.: 6064

WATER CODE | SEWER CODE

revisions		
no.	description	date
1	AS PER COUNTY COMMENTS	10/29/93
2 (A)	AS PER COUNTY COMMENTS	1/3/94
3	ADDED PROFILE DELETED PROFILES	4/94

STATE OF MARYLAND — JOHN CHRISTMAN, P.E.

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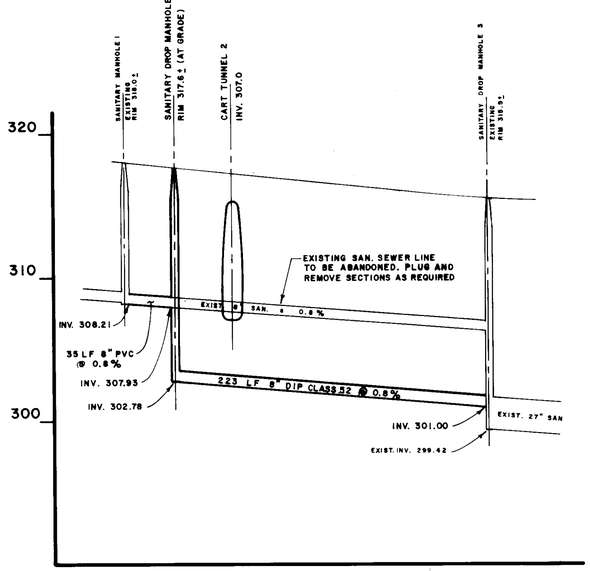
STORM DRAINAGE/ BASIN PROFILES

FAIRWAY HILLS GOLF COURSE

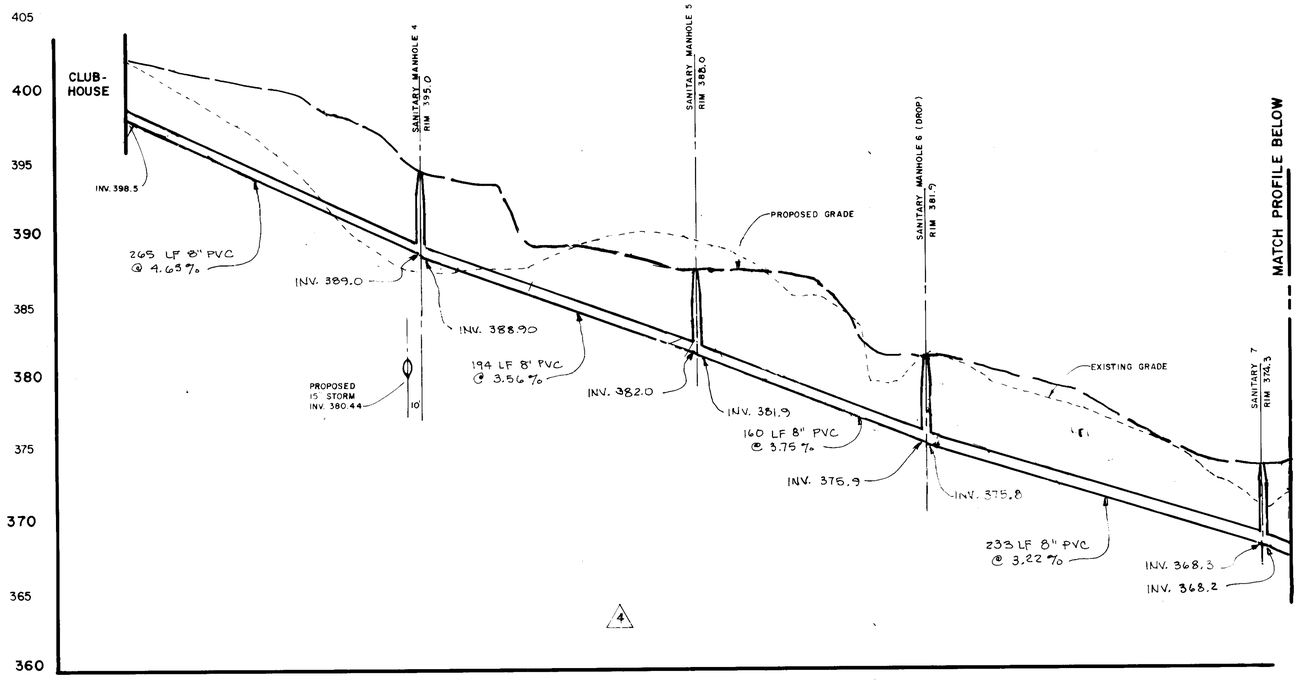
COLUMBIA MARYLAND

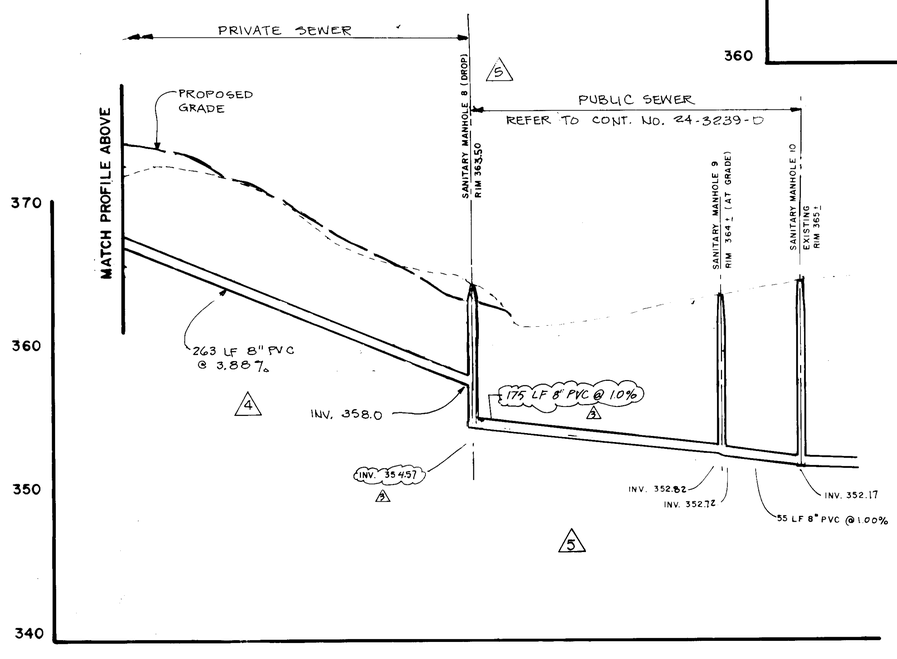
SCALE VERT. 1" = 5' HORIZ. 1" = 50'
DRAWN MBB | CHECKED JJB
PROJ. NO. M0405 | DATE 3-20-92
P3 SHEET | 48 OF 56

SDP-92-104



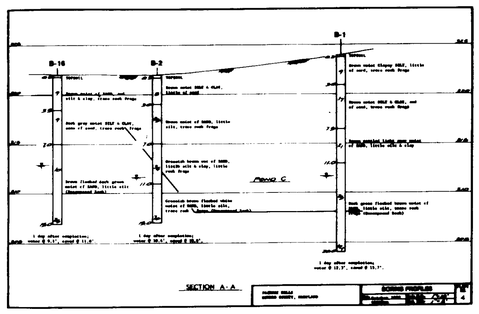
SAN. MH 1 TO SAN. MH 3

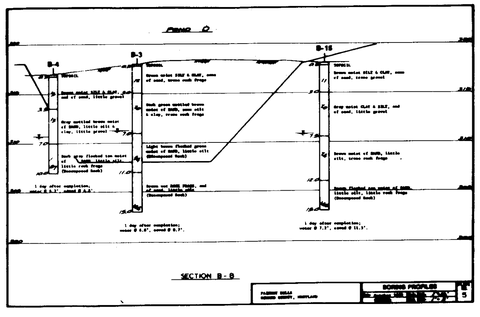




SAN. MH 7 TO SAN. MH 10 (EXISTING)

CLUBHOUSE TO SAN. MH 7 (PRIVATE SEWER) 5

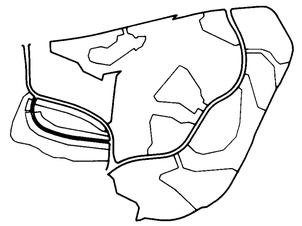




NOTE 1. HGL COMPUTATION IS INCLUDED IN APPENDIX E OF THE DRAINAGE REPORT.

2. ANTI-SEEP COLLARS SHALL BE PLACED AT LEAST 2' FROM CLOSEST PIPE JOINT.

KEY MAP



LEGEND

ITEM	EXISTING	PROPOSED
GROUND	----------	— — —
PIPE	8" PVC	8" PVC

2-2-93

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

DIRECTOR — DATE 11.2.93

CHIEF, BUREAU OF ENGINEERING — DATE 11/1/93

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

DIRECTOR — DATE 11/2/93

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 11/10/93

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

COUNTY HEALTH OFFICER — DATE 11/5/93

OWNER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

DEVELOPER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

ADDRESS CHART

BUILDING	STREET ADDRESS
LOT5-CLUBHOUSE	5100 COLUMBIA ROAD
LOT1-MAINT. BLDG	5280 COLUMBIA ROAD

SUBDIVISION NAME: VIL. 8/3, LOT 30, VIL. 8/4, LOTS 33&55, TC 8/1, LOT 30 & YDS. 3/1, LOTS 1, 2 & 4 — SECTION/AREA 8/3 & 8/4, 9/1 & 3/1 — LOT/PARCEL LOTS 1, 2, 3, 33, 30 & 55

PLAT — BLOCK: 8-10, 14-15 & Others — ZONE — TAX/ZONE MAP 30 — ELEC. DIST. 5th — CENSUS TR. 6054

WATER CODE — SEWER CODE

no.	description	date
1	SEWER LINE	8-92
2	PER DPZ COMMENTS	10-93
3	PER COUNTY COMMENTS	1/3/94
4	REVISED PROFILES FROM CLUBHOUSE TO MANHOLE 8,	
5	REVISED SEWER	7/94

JOHN CHRISTMAN, P.E.

prepared by
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COLUMBIA, MARYLAND 21044
(301) 730-7330 621-8080

STORM DRAINAGE/
BASIN PROFILES

FAIRWAY HILLS
GOLF COURSE

COLUMBIA MARYLAND

SCALE VERT. 1" = 5'
HORIZ. 1" = 50'
DRAWN MBB — CHECKED JJB
PROJ. NO. M0405 — DATE 3-20-92
P4
SHEET 49 OF 56

SDP-92-104

POND A

POND B

PONDS C & D

PONDS E & F

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, fences, rubbish and other objectionable material unless otherwise designated on the plans. Trees, brush and stumps shall be cut approximately level with the ground surface. 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 quantity 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 placed 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 the hauling and spreading equipment over the fill shall be controlled so that the entire surface of each lift shall be traversed by not less than one 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 than 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 cutoff 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 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 structure or pipe, unless there is a compacted 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 appurtenances shall be galvanized and fully bituminous coated and shall conform to the requirements of AASHTO Specification M-190 Type A with watertight coupling bands. Any bituminous coating damaged or otherwise removed shall be replaced with cold applied bituminous coating compound. Steel pipes with polymeric coatings shall have a minimum coating thickness of 0.01 inch (10 mil) on both sides of the pipe. The following coatings or an approved equal may be used: Nexon, Plasti-Cote, Blac-Klad, and Beth-Cu-Loy. Coated corrugated steel pipe shall meet the requirements of AASHTO M-245 and M-246.

   Materials - (Aluminum Coated Steel Pipe) - This pipe and its appurtenances shall conform to the requirements of AASHTO Specification M-274 with watertight coupling bands or flanges. Any aluminum coating damaged or 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 coupling bands or flanges. Aluminum surfaces that are to be in contact with concrete shall be painted with one coat of zinc chromate primer. Hot dip galvanized bolts may be used for connections. The pH of the surrounding soils shall be between 4 and 9.

2. Coupling bands, anti-seep collars, end sections, etc., must be composed of the same material as the pipe. Metals must be insulated from dissimilar materials with use of 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-seep 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 or neoprene gasket when joining pipe sections. The end of each pipe shall be re-rolled an adequate number of corrugations to accommodate the band width. The following type connections are acceptable for pipes less than 48" 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 a minimum diameter of 1/2" greater than the corrugation depth. Pipes 48" 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.

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. An approved equivalent is AWWA Specification C-302.
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 608, Mix No. 3

Rock Riprap

All rock shall be dense, sound, and free from cracks, seams, and other defects conducive to accelerated weathering. The rock fragments shall be angular to subrounded in shape. The least dimension of an individual rock fragment shall be not less than one-third the greatest dimension of the fragment.

The rock shall have the following properties:

1. Bulk specific gravity (saturated surface-dry basis) not less than 2.5.
2. Absorption not more than three percent.
3. Soundness: Weight loss in five cycles not more than 20 percent when sodium sulfate is used.

Bulk specific gravity and absorption shall be determined according to ASTM C 127. The test for soundness shall be performed according to ASTM C 88.

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 homogeneous 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 placed 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 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 required excavations and will allow satisfactory performance of all 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 sightly 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.

LEGEND

ORIGINAL GROUND -------
PROPOSED GROUND — — —

2-2-93

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE SYSTEMS, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS. HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
DIRECTOR — DATE 11.2.93
CHIEF, BUREAU OF ENGINEERING — DATE 11/1/93

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING
DIRECTOR — DATE 11/12/93
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 11/10/93

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
COUNTY HEALTH OFFICER — DATE 11/5/93

OWNER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

DEVELOPER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

ADDRESS CHART

BUILDING	STREET ADDRESS
LOT5-CLUBHOUSE	5100 COLUMBIA ROAD
LOT1-MAINT.BLDG.	5280 COLUMBIA ROAD

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL
VWL,9/3,LOT39, VWL,9/4,LOTS 33&55,TC,9/1,LOT30 & VDS,3/1,LOTS 1,2 & 4	9/3,9/4, 9/1 & 3/1	LOTS 1,2,3, 33,39 & 55

PLAT	BLOCK	ZONE	TAX/ZONE MAP	ELEC. DIST.	CENSUS TR
	B,9,10, 14,15	NT-O.S. & COMM.	30	5th	6054

WATER CODE — SEWER CODE

JOHN CHRISTMAN, P.E.

no.	description	date
1	AS PER COUNTY COMMENTS	7-27-92
2	OMIT POND "C"	

prepared by
RON PRICHARD
Golf Architect
10600 SIX PINES DRIVE
THE WOODLANDS, TEXAS 77380
(713) 292-1902
1730 WALTON ROAD, SUITE 300
BLUE BELL, PA. 19422
(215) 941-7240

prepared by
The RBA Group — ENGINEERS • ARCHITECTS • PLANNERS
5560 STERRETT PLACE, SUITE 300
COLUMBIA, MARYLAND 21044
(301) 730-7950 621-6050

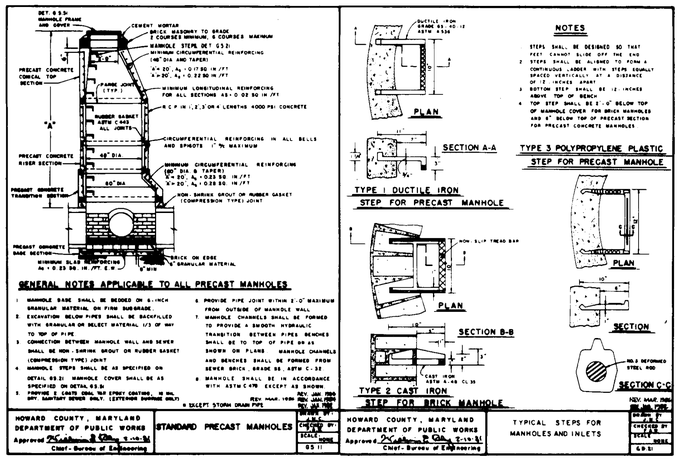
POND EMBANKMENT SECTIONS

FAIRWAY HILLS
GOLF COURSE

COLUMBIA MARYLAND

SCALE VERT 1" = 5'
HORZ 1" = 50'
DRAWN K.M. — CHECKED
PROJ. NO. M0405 — DATE 10-0-92
P-5
SHEET 50 OF 56

SDP-92-104



GENERAL NOTES APPLICABLE TO ALL PRECAST MANHOLES

1. MANHOLE BASE SHALL BE DECKED ON 6-INCH GRANULAR MATERIAL ON FIRM SUBGRADE.
2. EXCAVATION BELOW PIPES SHALL BE BACKFILLED WITH GRANULAR OR SELECT MATERIAL 1/3 OF WAY TO TOP OF PIPE.
3. CONNECTION BETWEEN MANHOLE WALL AND SEWER SHALL BE NON-SHRINK GROUT OR RUBBER GASKET (COMPRESSION TYPE) JOINT.
4. MANHOLE STEPS SHALL BE AS SPECIFIED ON DETAIL G 5.31. MANHOLE COVER SHALL BE AS SPECIFIED ON DETAIL G 5.31.
5. PROVIDE 2 COATS COAL TAR EPOXY COATING, 16 MIL DRY, ON SANITARY SEWER MANH. (EXPOSED SURFACES ONLY).
6. PROVIDE PIPE JOINT WITHIN 2'-0" MAXIMUM FROM OUTSIDE OF MANHOLE WALL.
7. MANHOLE CHANNELS SHALL BE FORMED TO PROVIDE A SMOOTH HYDRAULIC TRANSITION BETWEEN PIPES. BENCHES SHALL BE TO TOP OF PIPE OR AS SHOWN ON PLANS. MANHOLE CHANNELS AND BENCHES SHALL BE FORMED FROM SEWER BRICK, GRADE SS, ASTM C-32.
8. MANHOLE SHALL BE IN ACCORDANCE WITH ASTM C 478 EXCEPT AS SHOWN.

EXCEPT STORM DRAIN PIPE

REV. MAR. 1988	REV. JAN. 1989	REV. JAN. 1990

HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS
Approved ... 5-14-91
Chief - Bureau of Engineering

STANDARD PRECAST MANHOLES

DRAWN BY: R.A.
CHECKED BY:
SCALE: NONE
G5.11

NOTES

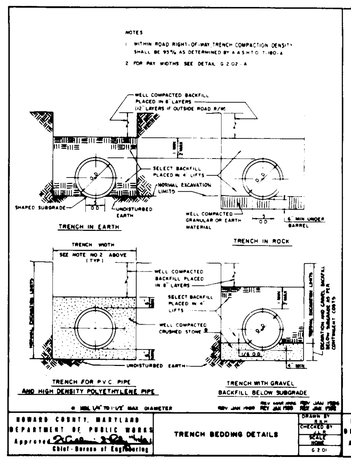
1. STEPS SHALL BE DESIGNED SO THAT FEET CANNOT SLIDE OFF THE END.
2. STEPS SHALL BE ALIGNED TO FORM A CONTINUOUS LADDER WITH STEPS EQUALLY SPACED VERTICALLY AT A DISTANCE OF 12 INCHES APART.
3. BOTTOM STEP SHALL BE 12 INCHES ABOVE TOP OF BENCH.
4. TOP STEP SHALL BE 2'-0" BELOW TOP OF MANHOLE COVER FOR BRICK MANHOLES AND 8" BELOW TOP OF PRECAST SECTION FOR PRECAST CONCRETE MANHOLES.

REV. MAR. 1988	REV. JAN. 1989	REV. JAN. 1990

HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS
Approved ... 5-14-91
Chief - Bureau of Engineering

TYPICAL STEPS FOR MANHOLES AND INLETS

DRAWN BY: R.A.
CHECKED BY:
SCALE: NONE
G5.21

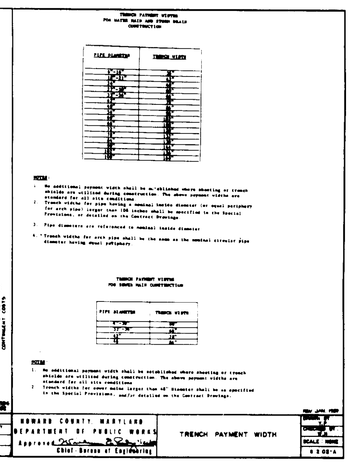


REV. JAN. 1988	REV. JAN. 1989	REV. JAN. 1990

HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS
Approved ... 5-14-91
Chief, Bureau of Engineering

TRENCH BEDDING DETAILS

DRAWN BY: R.A.
CHECKED BY:
SCALE: NONE
G 2.01



NOTES

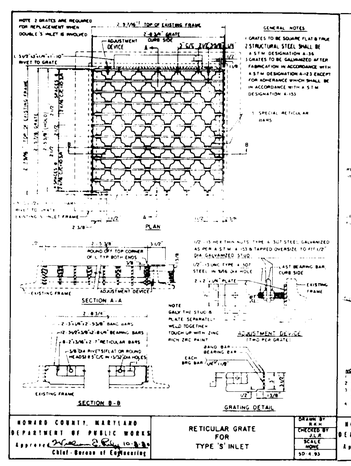
1. No additional payment width shall be established where sheeting or trench shields are required during construction. The above payment widths are standard for all site conditions.
2. Trench widths for pipes having a nominal inside diameter (or equal pavement) of 4'-0" or greater than 108 inches shall be specified in the Special Provisions, or detailed on the Contract Drawings.
3. Pipe diameters are referenced to nominal inside diameter.
4. Trench widths for arch pipe shall be the same as the nominal diameter pipe diameter having equal pavement.

REV. JAN. 1988	REV. JAN. 1989	REV. JAN. 1990

HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS
Approved ... 5-14-91
Chief, Bureau of Engineering

TRENCH PAYMENT WIDTH

DRAWN BY: R.A.
CHECKED BY:
SCALE: NONE
G 2.02-A



GENERAL NOTES

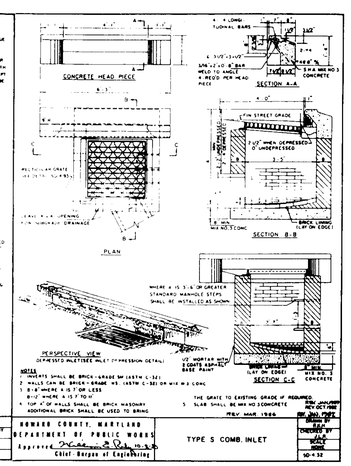
1. GRATES TO BE SQUARE FLAT BAR TYPE STRUCTURAL STEEL SHALL BE A 57 M DESIGNATION A 36.
2. GRATES TO BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH A 53 M DESIGNATION A-123 EXCEPT FOR MAINTENANCE WHICH SHALL BE IN ACCORDANCE WITH A 53 M DESIGNATION A-153.

REV. JAN. 1988	REV. JAN. 1989	REV. JAN. 1990

HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS
Approved ... 5-14-91
Chief, Bureau of Engineering

RETICULAR GRATE FOR TYPE 'S' INLET

DRAWN BY: R.A.
CHECKED BY:
SCALE: NONE
SD-4.30



NOTES

1. INLETS SHALL BE BRICK-GRADE SM (ASTM C-32).
2. WALLS CAN BE BRICK-GRADE MS (ASTM C-32) OR MIX NO 3 CONC WHERE H IS 7'-0" OR LESS.
3. WHERE H IS 7'-0" TO 11'-0" WALLS SHALL BE BRICK MASONRY.
4. TOP 4" OF WALLS SHALL BE BRICK MASONRY.

ADDITIONAL BRICK SHALL BE USED TO BRING THE GRATE TO EXISTING GRADE IF REQUIRED.

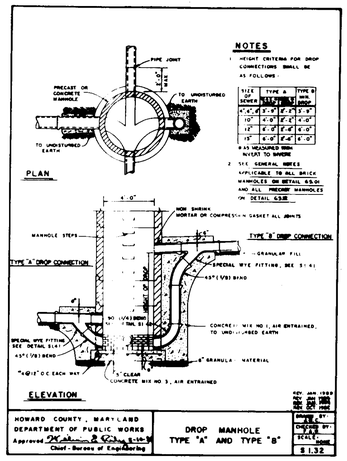
5. SLAB SHALL BE MIX NO 3 CONCRETE.

REV. MAR. 1988	REV. JAN. 1989	REV. JAN. 1990

HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS
Approved ... 5-14-91
Chief, Bureau of Engineering

TYPE 'S' COMB. INLET

DRAWN BY: R.A.
CHECKED BY:
SCALE: NONE
SD-4.32



NOTES

1. HEIGHT CRITERIA FOR DROP CONNECTIONS SHALL BE AS FOLLOWS:

SIZE OF SEWER	TYPE A MAX. DROP	TYPE B MAX. DROP
8"	5'-0"	5'-0"
10"	4'-0"	4'-0"
12"	4'-0"	4'-0"
15"	4'-0"	4'-0"

SIZES MEASURED FROM INVERT TO INVERT

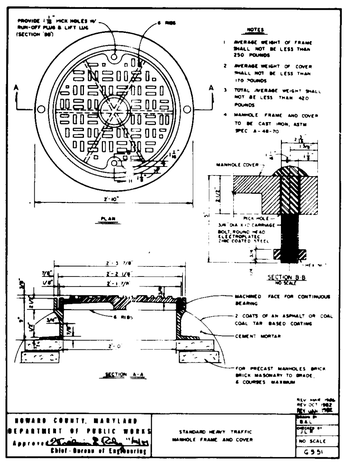
2. SEE GENERAL NOTES APPLICABLE TO ALL BRICK MANHOLES ON DETAIL S 5.01 AND ALL PRECAST MANHOLES ON DETAIL G 5.11.

REV. JAN. 1988	REV. JAN. 1989	REV. JAN. 1990

HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS
Approved ... 5-14-91
Chief - Bureau of Engineering

DROP MANHOLE TYPE 'A' AND TYPE 'B'

DRAWN BY: R.A.
CHECKED BY:
SCALE: NONE
S 1.32



NOTES

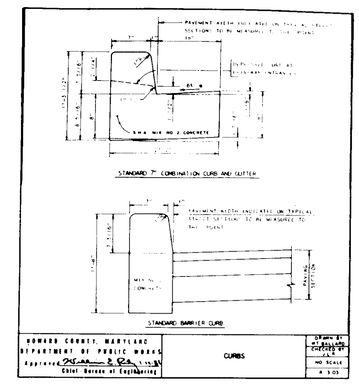
1. AVERAGE WEIGHT OF FRAME SHALL NOT BE LESS THAN 250 POUNDS.
2. AVERAGE WEIGHT OF COVER SHALL NOT BE LESS THAN 175 POUNDS.
3. TOTAL AVERAGE WEIGHT SHALL NOT BE LESS THAN 420 POUNDS.
4. MANHOLE FRAME AND COVER TO BE CAST IRON, ASTM SPEC A-48-70.

REV. JAN. 1988	REV. JAN. 1989	REV. JAN. 1990

HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS
Approved ... 5-14-91
Chief, Bureau of Engineering

STANDARD HEAVY TRAFFIC MANHOLE FRAME AND COVER

DRAWN BY: R.A.
CHECKED BY:
SCALE: NONE
G 5.51

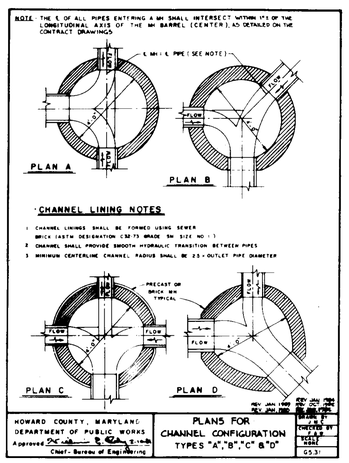


REV. JAN. 1988	REV. JAN. 1989	REV. JAN. 1990

HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS
Approved ... 5-14-91
Chief, Bureau of Engineering

CURBS

DRAWN BY: R.A.
CHECKED BY:
SCALE: NONE
A 3.03

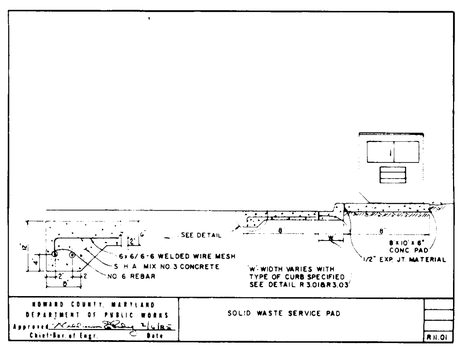


REV. JAN. 1988	REV. JAN. 1989	REV. JAN. 1990

HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS
Approved ... 5-14-91
Chief - Bureau of Engineering

PLANS FOR CHANNEL CONFIGURATION TYPES "A", "B", "C" & "D"

DRAWN BY: R.A.
CHECKED BY:
SCALE: NONE
G 5.31

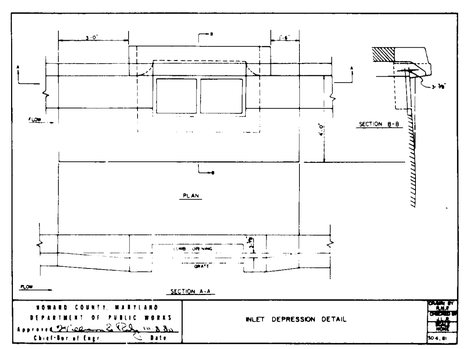


REV. JAN. 1988	REV. JAN. 1989	REV. JAN. 1990

HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS
Approved ... 5-14-91
Chief, Bureau of Engineering

SOLID WASTE SERVICE PAD

DRAWN BY: R.A.
CHECKED BY:
SCALE: NONE
R.M.01



REV. JAN. 1988	REV. JAN. 1989	REV. JAN. 1990

HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS
Approved ... 5-14-91
Chief, Bureau of Engineering

INLET DEPRESSION DETAIL

DRAWN BY: R.A.
CHECKED BY:
SCALE: NONE
M 4.01

APPROVED
HOWARD COUNTY
DEPARTMENT OF PLANNING AND ZONING
DATE 2-2-93

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

DIRECTOR — DATE 11-2-93

CHIEF, BUREAU OF ENGINEERING — DATE 11/1/93

APPROVED : HOWARD COUNTY DEPT. OF PLANNING AND ZONING

DIRECTOR — DATE 11/2/93

Gary Summers — CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 11/10/93

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

COUNTY HEALTH OFFICER — DATE 11/5/93

OWNER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

DEVELOPER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

ADDRESS CHART

BUILDING	STREET ADDRESS
LOT 5 - CLUBHOUSE	5100 COLUMBIA ROAD
LOT 1 - MAINT. BLDG.	5280 COLUMBIA ROAD

SUBDIVISION NAME: VWL-9/3-LOT 39, VWL-9/4-LOTS 33&55-TC-9/1-LOT 30 & VDS-3/1-LOTS 1-2 & 4		SECTION/AREA 9/3-9/4, 9/1 & 3/1	LOT/PARCEL LOTS 1-2-3, 33-39 & 55
PLAT	BLOCK: B-V, I-OUT-0.5, I-4-5 & COMM	ZONE / TAX/ZONE MAP: 30	ELEC. DIST.: 5th / CENSUS TR.: 6054
WATER CODE		SEWER CODE	

JOHN CHRISTMAN, P.E.

revisions		
no.	description	date
1	AS PER COUNTY COMMENTS	10/09/92
2	PER DPZ COMMENTS	10-93

prepared by
RON PRICHARD
Golf Architect
10600 SIX PINES DRIVE
THE WOODLANDS, TEXAS 77380
(713) 292-1902
1730 WALTON ROAD, SUITE 300
BLUE BELL, PA. 19422
(215) 941-7240

prepared by
The RBA GROUP ENGINEERS • ARCHITECTS • PLANNERS
5560 STERRETT PLACE, SUITE 300
COLUMBIA, MARYLAND 21044
(301) 730-7950 621-6050

DETAILS

FAIRWAY HILLS GOLF COURSE

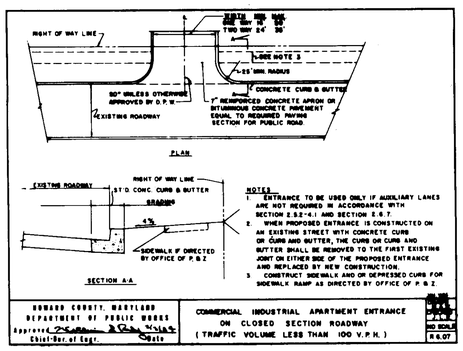
COLUMBIA MARYLAND

SCALE: AS SHOWN
DRAWN: CADD
CHECKED:
PROJ. NO.: MO405
DATE: 9 - 92
D1
SHEET 51 OF 56

SDP-92-104

PROJECT NO.

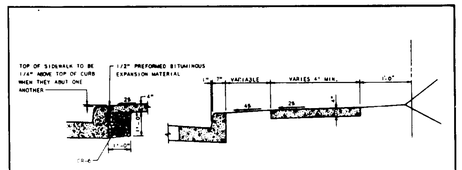
THE RBA GROUP, MORRISTOWN, NEW JERSEY



NOTES

1. ENTRANCE TO BE USED ONLY IF AUXILIARY LANES ARE NOT REQUIRED IN ACCORDANCE WITH SECTION 2.S.2-4.1 AND SECTION E.6.7.
2. WHEN PROPOSED ENTRANCE IS CONSTRUCTED ON AN EXISTING STREET WITH CONCRETE CURB OR CURB AND GUTTER, THE CURB OR CURB AND GUTTER SHALL BE REMOVED TO THE FIRST EXISTING JOINT ON EITHER SIDE OF THE PROPOSED ENTRANCE AND REPLACED BY NEW CONSTRUCTION.
3. CONSTRUCT SIDEWALK AND OR DEPRESSED CURB FOR SIDEWALK RAMP AS DIRECTED BY OFFICE OF P.B.Z.

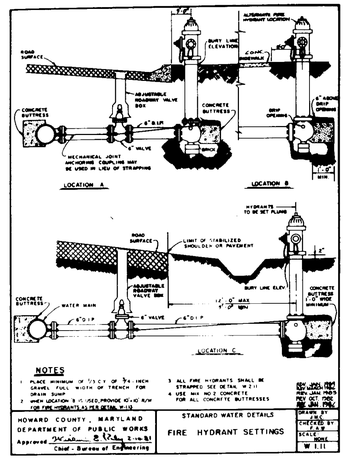
HOWARD COUNTY, MARYLAND DEPARTMENT OF PUBLIC WORKS Approved [signature] 3-Feb-81 Chief-Bur. of Engr. Date	COMMERCIAL INDUSTRIAL APARTMENT ENTRANCE ON CLOSED SECTION ROADWAY (TRAFFIC VOLUME LESS THAN 100 V.P.H.)	REV. JAN. 1988 REV. OCT. 1982 DRAWN BY J.L.R. SCALE NO SCALE R & 07



NOTES:

1. SIDEWALK TO BE SCRIBED IN 5' MAXIMUM SQUARES.
2. EXPANSION JOINTS ACROSS THE SIDEWALK NOT TO BE MORE THAN 15' APART.
3. 1/2" PREFORMED BITUMINOUS EXPANSION MATERIAL IN EXPANSION JOINTS TO BE KEPT 1/4" BELOW SURFACE OF SIDEWALK.
4. CONCRETE TO BE MIX NO.2.
5. WHEN SIDEWALK ABUTS CURB, WALK SHALL BE 1/4" ABOVE CURB WITH 1/2" PREFORMED BITUMINOUS EXPANSION MATERIAL BETWEEN SIDEWALK AND CURB AND RESTING ON A COMPACTED CRUSHED STONE BASE. SEE DETAIL A THIS SHEET.
6. ON LONGITUDINAL SLOPING GRADES OF 5% OR GREATER, A CONCRETE HEADER, AT THICKNESS OF CURB FROM THE NORMAL 4" SIDEWALK THICKNESS SHALL BE CONSTRUCTED FOR THE FULL WIDTH OF THE SIDEWALK AT INTERVALS OF 40 FEET. THE HEADERS SHALL BE PLACED AT EXPANSION JOINT LOCATIONS AND SHALL BE MONOLITHIC WITH THE SIDEWALK.

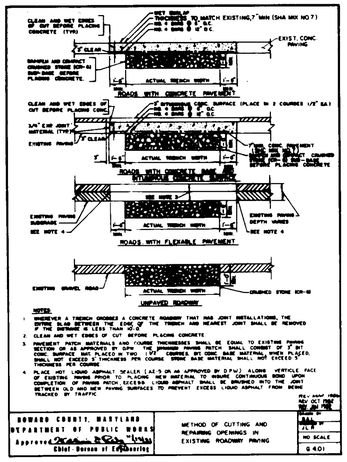
HOWARD COUNTY, MARYLAND DEPARTMENT OF PUBLIC WORKS Approved [signature] 3-Feb-81 Chief-Bur. of Engr. Date	CONCRETE SIDEWALK	REV. JAN. 1988 REV. OCT. 1982 DRAWN BY J.L.R. SCALE NO SCALE R 3.03



NOTES

1. PLANE MINIMUM OF 9 SQ. FT. OF 3/4 INCH CRUSHED STONE UNDER FULL WIDTH OF TRENCH FOR DRAIN, TYP.
2. WHEN LOCATION B IS USED, PROVIDE 42"x42" R/W FOR FIRE HYDRANTS AS PER DETAIL W-2.10
3. ALL FIRE HYDRANTS SHALL BE STRAPPED SEE DETAIL W 2.11
4. USE MIX NO. 2 CONCRETE FOR ALL CONCRETE BUTTRESSES

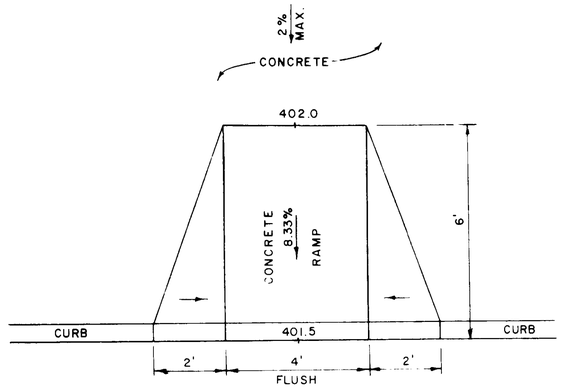
HOWARD COUNTY, MARYLAND DEPARTMENT OF PUBLIC WORKS Approved [signature] 3-Feb-81 Chief - Bureau of Engineering	STANDARD WATER DETAILS FIRE HYDRANT SETTINGS	REV. APRIL 1988 REV. JAN. 1988 REV. OCT. 1982 DRAWN BY J.L.R. SCALE NONE W 1.11



NOTES:

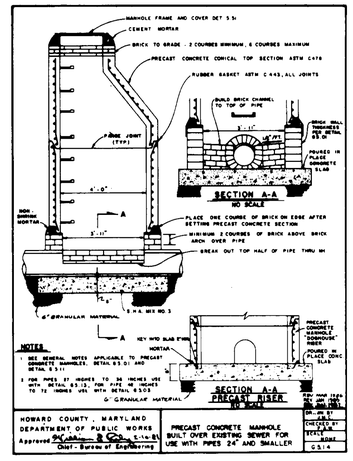
1. WHENEVER A TRENCH CROSSES A CONCRETE ROADWAY THAT HAS JOINT INSTALLATIONS, THE ENTIRE SLAB BETWEEN THE EDGE OF THE TRENCH AND NEAREST JOINT SHALL BE REMOVED IF THE DISTANCE IS LESS THAN 10'-0.
2. CLEAN AND WET EDGES OF CUT BEFORE PLACING CONCRETE.
3. PAVEMENT PATCH MATERIALS AND COURSE THICKNESSES SHALL BE EQUAL TO EXISTING PAVING SECTION OR AS APPROVED BY D.P.W. THE MINIMUM PAVING SECTION SHALL BE 3" BITUMINOUS CONCRETE OVER 6" GRADED AGGREGATE BASE MATERIAL WHEN PLACED. SHALL NOT EXCEED 3" THICKNESS PER COURSE WHEN BASE MATERIAL SHALL NOT EXCEED 5" THICKNESS PER COURSE.
4. PLACE HOT LIQUID ASPHALT SEALER (A.E.'S OR AS APPROVED BY D.P.W.) ALONG VERTICAL FACE OF EXISTING PAVING PRIOR TO PLACING NEW MATERIAL TO ENSURE CONTINUOUS BOND UPON COMPLETION. TRENCH PATCH EXCESS LIQUID ASPHALT SHALL BE BRUSHED INTO THE NEWLY PLACED SURFACE. ALL NEW PAVING SURFACES TO PREVENT EXCESS LIQUID ASPHALT FROM BEING TRACKED BY TRAFFIC.

HOWARD COUNTY, MARYLAND DEPARTMENT OF PUBLIC WORKS Approved [signature] 3-Feb-81 Chief-Bur. of Engineering	METHOD OF CUTTING AND REPAIRING OPENINGS IN EXISTING ROADWAY PAVING	REV. JAN. 1988 REV. OCT. 1982 DRAWN BY J.L.R. SCALE NO SCALE S 401



HANDICAP ACCESS RAMP TO CLUBHOUSE

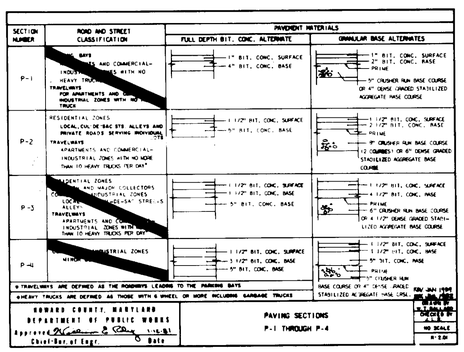
SCALE: 1"= 2'



NOTES

1. SEE GENERAL NOTES APPLICABLE TO PRECAST CONCRETE HANDHOLES, DETAIL S.5.01 AND DETAIL S.5.11.
2. FOR PIPES 27 INCHES TO 36 INCHES USE WITH DETAIL S5.13. FOR PIPE 42 INCHES TO 72 INCHES USE WITH DETAIL S5.05.

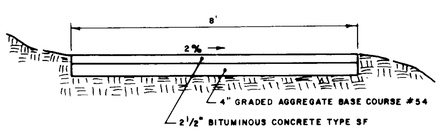
HOWARD COUNTY, MARYLAND DEPARTMENT OF PUBLIC WORKS Approved [signature] 3-Feb-81 Chief - Bureau of Engineering	PRECAST CONCRETE MANHOLE BUILT OVER EXISTING SEWER FOR USE WITH PIPES 24" AND SMALLER	REV. MAR. 1988 REV. JAN. 1988 DRAWN BY J.L.R. SCALE NONE S 5.14



* TRAVELWAYS ARE DEFINED AS THE ROADWAYS LEADING TO THE PARKING BAYS

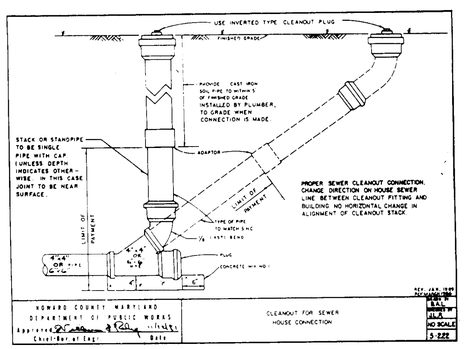
@ HEAVY TRUCKS ARE DEFINED AS THOSE WITH 6 WHEEL OR MORE INCLUDING GARBAGE TRUCKS

HOWARD COUNTY, MARYLAND DEPARTMENT OF PUBLIC WORKS Approved [signature] 3-Feb-81 Chief-Bur. of Engr. Date	PAVING SECTIONS P-1 THROUGH P-4	REV. JAN. 1988 REV. OCT. 1982 DRAWN BY J.L.R. SCALE NO SCALE S 2.01



CARTPATH

SCALE: 1"= 2'



HOWARD COUNTY, MARYLAND DEPARTMENT OF PUBLIC WORKS Approved [signature] 3-Feb-81 Chief-Bureau of Engr. Date	CLEANOUT FOR SEWER HOUSE CONNECTION	REV. JAN. 1988 DRAWN BY J.L.R. SCALE NO SCALE S 2.25

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE 2-2-93

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

DIRECTOR — DATE 11-2-93

CHIEF, BUREAU OF ENGINEERING — DATE 11/1/93

APPROVED : HOWARD COUNTY DEPT. OF PLANNING AND ZONING

DIRECTOR — DATE 11/2/93

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 11/10/93

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

COUNTY HEALTH OFFICER — DATE 11/5/93

OWNER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

DEVELOPER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

ADDRESS CHART

BUILDING	STREET ADDRESS
LOT5-CLUBHOUSE	5100 COLUMBIA ROAD
LOT1-MAINT. BLDG.	5280 COLUMBIA ROAD

SUBDIVISION NAME VWL-9/3-LOT39, VWL-9/4-LOTS 33&55-TC-9/1-LOT30 & VDS-3/1-LOTS 1-2 & 4		SECTION/AREA 9/3-9/4, 9/1 & 3/1		LOT/PARCEL LOTS 1-2-3, 33-39 & 55
PLAT	BLOCK / ZONE: B-9.10-INT-0.5; 14-15 & COMM.	TAX/ZONE MAP: 30	ELEC. DIST.: 5th	CENSUS TR.: 6054
WATER CODE		SEWER CODE		

JOHN CHRISTMAN, P.E.

revisions		
no.	description	date
1	AS PER COUNTY COMMENTS	10/09/92

prepared by
RON PRICHARD
Golf Architect
10800 SIX PINES DRIVE
THE WOODLANDS, TEXAS 77380
(713) 292-1902
1730 WALTON ROAD, SUITE 300
BLUE BELL, PA. 19422
(215) 941-7240

prepared by
The RBA ENGINEERS • ARCHITECTS • PLANNERS
5580 STERRETT PLACE, SUITE 300
COLUMBIA, MARYLAND 21044
(301) 730-7950 621-6050

DETAILS

FAIRWAY HILLS GOLF COURSE

COLUMBIA MARYLAND

SCALE	AS SHOWN
DRAWN	CADD
CHECKED	
PROJ. NO.	M0405
DATE	9 - 92
SHEET	D2
	52 OF 56

SDP-92-104

PROJECT NO.

THE RBA GROUP, MORRISTOWN, NEW JERSEY

STABILIZED CONSTRUCTION ENTRANCE
(NOT TO SCALE)

CONSTRUCTION SPECIFICATIONS

1. STONE SIZE – USE MSHA SIZE NO. 2 (2-1/2" TO 1") OR AASHTO DESIGNATION M43, SIZE NO. 2 (2-1/2" TO 1-1/2"). USE CRUSHED STONE.
2. LENGTH – AS EFFECTIVE, BUT NOT LESS THAN 50 FEET.
3. THICKNESS - NOT LESS THAN EIGHT (8) INCHES.
4. WIDTH - NOT LESS THAN FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS.
5. WASHING - WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH, OR WATERCOURSE THROUGH USE OF SAND BAGS, GRAVEL, BOARDS OR OTHER APPROVED METHODS.
6. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.

STANDARD SYMBOL — SCE —

HOWARD COUNTY, MARYLAND DEPARTMENT OF PUBLIC WORKS Approved [signature] Chief - Bureau of Engineering	STABILIZED CONSTRUCTION ENTRANCE	DRAWN BY R.A.H. CHECKED BY J.L.R. SCALE NONE C.G.11

STONE OUTLET SEDIMENT TRAP V

OPTION: A one foot layer of 2" stone may be placed on the upstream side of the riprap in place of the embedded filter cloth.

CONSTRUCTION SPECIFICATIONS FOR ST-V

1. Area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The pool area shall be cleared.
2. The fill material for the embankment shall be free of roots and other woody vegetation as well as over-sized stones, rocks, organic material or other objectionable material. The embankment shall be compacted by traversing with equipment while it is being constructed.
3. All cut and fill slopes shall be 2:1 or flatter.
4. The stone used in the outlet shall be small riprap 4"-8" along with a 1' thickness of 2" aggregate placed on the up-grade side on the small riprap or embedded filter cloth in the riprap.
5. Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to ½ the design depth of the trap.
6. The structure shall be inspected after each rain and repairs made as needed.
7. Construction operations shall be carried out in such a manner that erosion and water pollution is minimized.
8. The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.

Maximum Drainage Area: 5 Acres

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE COLLEGE PARK, MARYLAND	STONE OUTLET SEDIMENT TRAP	STANDARD DRAWING ST-V

SILT FENCE

CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

1. Woven wire fence to be fastened securely to fence posts with wire ties or staples.
2. Filter cloth to be fastened securely to woven wire fence with ties spaced every 24" at top and mid section.
3. When two sections of filter cloth adjoin each other they shall be over-lapped by six inches and folded.
4. Maintenance shall be performed as needed and material removed when "bulges" develop in the silt fence.

POSTS: Steel either T or U type or 2" hardwood.

FENCE: Woven wire, 14 Ga. 6" Max. Mesh Opening.

FILTER CLOTH: Filter X, Mirafi 100X, Stabilinka T140N or Approved Equal.

PREFABRICATED UNIT: Geofab, Envirofence, or Approved Equal.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE COLLEGE PARK, MARYLAND	SILT FENCE	STANDARD DRAWING SF-1

APPROVED PLANNING BOARD of HOWARD CO. DATE 2-2-93

CONCRETE END SECTION – CIRCULAR CONCRETE PIPE

NOTES:
1. END SECTIONS MUST BE REINFORCED TO CONFORM WITH CLASS IV PIPE.
2. CONCRETE FOOTER SHALL BE USED. COST OF CONCRETE FOOTER TO BE PAID PER CUBIC YARD OF CLASS A-1 CONCRETE FOR MISCELLANEOUS STRUCTURES. REINFORCEMENTS TO BE NO. 3 BARS.
3. INVERT ELEVATION TO BE AT THE PIPE END OF THE STD. END SECTION. ELEVATIONS TO BE NOTED ON CONSTRUCTION PLANS.
4. CONTRACTOR HAS OPTION OF FURNISHING END SECTIONS CONFORMING TO DETAILS ON THIS SHEET OR END SECTIONS CONFORMING TO DETAILS ON STD. NO. 5.52

CONCRETE END SECTION							CONCRETE FOOTER		
DIAM.	SLOPE	A	B	C	D	E	W	X	Y
15"	3:1	6-1/2"	2'-4"	3'-10"	6'-2"	2'-6"	3'-6"	12"	9"
18"	3:1	10-1/2"	2'-2"	4'-0"	6'-2"	3'-0"	4'-0"	12"	9"
24"	3:1	11"	3'-7"	2'-7"	6'-3"	5'-0"	6'-0"	15"	9"
30"	3:1	1'-1"	4'-5"	1'-10"	6'-3"	5'-0"	6'-0"	15"	9"
36"	3:1	1'-3-1/2"	5'-3"	3'-1"	6'-1-1/2"	6'-0"	7'-3"	15"	9"
42"	3:1	1'-9-1/2"	5'-5"	2'-10"	6'-3"	6'-6"	7'-9"	15"	9"
48"	3:1	2'-1"	6'-0"	2'-2"	8'-2"	7'-0"	8'-6"	16"	12"
54"	2.4:1	2'-5"	5'-2"	2'-10"	8'-0"	7'-6"	9'-0"	18"	12"
60"	2:1	2'-7"	4'-11"	3'-0-1/2"	6'-7-1/2"	8'-0"	9'-6"	18"	12"
66"	2:1	2'-4"	6'-6"	1'-9"	8'-3"	8'-6"	10'-0"	18"	12"
72"	2:1	2'-10"	6'-6"	1'-9"	8'-3"	9'-0"	10'-9"	18"	12"

HOWARD COUNTY, MARYLAND DEPARTMENT OF PUBLIC WORKS Approved [signature] Chief - Bureau of Engineering	CONCRETE END SECTION CIRCULAR CONCRETE PIPE	DRAWN BY R.A.H. CHECKED BY J.L.R. SCALE NONE SD-5.51

TRAPEZOIDAL OPEN CHANNELS

NOTE:
ALL SOD TO BE STAKED WITH ½" x 1" x 12" WOOD STAKES ON 24" CENTERS BOTH WAYS.

HOWARD COUNTY, MARYLAND DEPARTMENT OF PUBLIC WORKS Approved [signature] Chief - Bureau of Engineering	TRAPEZOIDAL OPEN CHANNELS	DRAWN BY R.A.H. CHECKED BY J.L.R. SCALE NONE SD-6.12

RIPRAP OUTLET PROTECTION - I

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE COLLEGE PARK, MARYLAND	RIPRAP OUTLET PROTECTION-I	STANDARD DRAWING ROP – I

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

[signature] DIRECTOR — 11.2.93 DATE

[signature] CHIEF, BUREAU OF ENGINEERING — 11/1/93 DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

[signature] DIRECTOR — 11/12/93 DATE

[signature] CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — 11/10/93 DATE

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

[signature] COUNTY HEALTH OFFICER — 11/5/93 DATE

OWNER: COLUMBIA PARKS AND RECREATION ASSOCIATION, 9861 BROKEN LAND PARKWAY, SUITE 300, COLUMBIA, MD. 21045

DEVELOPER: COLUMBIA PARKS AND RECREATION ASSOCIATION, 9861 BROKEN LAND PARKWAY, SUITE 300, COLUMBIA, MD. 21045

STORM INLET SEDIMENT TRAP ST-III

CONSTRUCTION SPECIFICATION FOR ST-III

1. Sediment shall be removed and the trap restored to its original dimensions when the sediment has accumulated to ½ the design depth of the trap. Removed sediment shall be deposited in a suitable area and in such a manner that it will not erode.
2. The volume of sediment storage shall be 1800 cubic feet per acre of contributory drainage.
3. The structure shall be inspected after each rain and repairs made as needed.
4. Construction operations shall be carried out in such a manner that erosion and water pollution shall be minimized.
5. The sediment trap shall be removed and the area stabilized when the constructed drainage area has been properly stabilized.
6. All cut slopes shall be 1:1 or flatter.

Maximum Drainage Area: 3 Acres

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE COLLEGE PARK, MARYLAND	STORM INLET SEDIMENT TRAP	STANDARD DRAWING ST-III

HOWARD COUNTY 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 any construction, (880-3450).
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 1983 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: 204 Acres
   - Area Disturbed: 55.3/4 Acres
   - Area to be roofed or paved: 1.77 Acres
   - Area to be vegetatively stabilized: 53.3/4 Acres
   - Total Cut: 116,930 Cu. Yds.
   - Total Fill: 116,930 Cu. Yds.
   - Offsite 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 backfilled and stabilized within one working day, whichever is shorter.

HOWARD COUNTY 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 acre dolomitic limestone (92 lbs/1,000 sq. ft.) and 600 lbs. per acre 10-10-10 fertilizer (14 lbs/1,000 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/1,000 sq. ft.).
2. Acceptable - Apply 2 tons per acre dolomitic limestone (92 lbs/1,000 sq. ft.) and 1,000 lbs per acre 10-10-10 fertilizer (23 lbs/1,000 sq. ft) before seeding. Harrow or disk into upper three inches of soil.

Seeding - For the periods March 1 thru April 30, and August 1 thru October 15, seed with 60 lbs per acre (1.4 lbs/1,000 sq. ft.) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs Kentucky 31 Tall Fescue per acre and 2 lbs per acre (.05 lbs/1,000 sq. ft.) of weeping lovegrass. During the period of October 16 thru February 28, protect site by: Option (1) - 2 tons per acre of well anchored straw mulch and seed as soon as possible in the Spring. Option (2) - Use sod. Option (3) - Seed with 60 lbs/acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw.

Mulching - Apply 1-1/2 to 2 tons per acre (70 to 90 lbs/1,000 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/1,000 sq. ft.) of emulsified asphalt on flat area. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1,000 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/1,000 sq. ft.).

Seeding - For periods March 1 thru April 30 and from August 15 thru October 15, seed with 2-1/2 bushel per acre of annual rye (3.2 lbs/1,000 sq. ft.). For the period May 1 thru August 14, seed with 3 lbs per acre of weeping lovegrass (.07 lbs/1,000 sq. ft.). For the period November 16 thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the Spring, or use sod.

Mulching - Apply 1-1/2 to 2 tons per acre (70 to 90 lbs/1,000 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/1,000 sq. ft.) of emulsified asphalt on flat areas. On slopes 8 ft. or higher, use 348 gal per acre (8 gal/1,000 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.

TYPE 'A' HEADWALL – CIRCULAR

D	E	F	G	H	J	K*	L	N	R	VOL.* C.Y.
18" 21"	3'-0" 3'-4"	7'-6" 7'-9"	3'-0"	3'-0" 3'-3"	2'-0" 2'-0"	8"	8"	8"	#5-12" %	1.70 1.80
24" 27"	3'-8" 3'-11"	8'-0" 8'-3"	3'-0"	3'-6" 3'-9"	2'-0" 2'-0"	8"	8"	8"	#5-12" %	1.90 2.00
30"	4'-2"	8'-6"	3'-0"	4'-0"	2'-1½"	8"	8"	10"	#5-12" %	2.85
36"	4'-8"	10'-0"	3'-6"	4'-6"	2'-3"	8"	10"	10"	#5-12" %	3.15
42"	5'-3"	11'-6"	4'-0"	5'-0"	2'-9"	8"	10"	10"	#5-12" %	3.87
48"	5'-10"	13'-0"	4'-6"	5'-6"	3'-0"	8"	10"	12"	#5-12" %	5.08
54"	6'-5"	14'-6"	5'-0"	6'-0"	3'-3"	9"	12"	12"	#6-8" %	6.50
60"	7'-0"	16'-0"	5'-6"	6'-6"	3'-6"	9"	12"	12"	#6-8" %	7.98
66"	7'-7"	17'-6"	6'-0"	7'-0"	3'-9"	9"	12"	14"	#6-8" %	9.14
72"	8'-2"	19'-0"	6'-6"	7'-6"	4'-3"	9"	12"	14"	#6-8" %	11.10

* - BASED ON 2:1 CHANNEL SIDE SLOPES AND 45° ANGLE

NOTE: CONTRACTOR SHALL PROVIDE 3" - 45° BEVEL AROUND PIPE OPENINGS ON UP-STREAM HEADWALLS

REV. JAN. 1989 REV. MAR. 1986

HOWARD COUNTY, MARYLAND DEPARTMENT OF PUBLIC WORKS Approved [signature] Chief-Bur. of Engr. Date	TYPE 'A' HEADWALL CIRCULAR	DRAWN BY R.A.H. CHECKED BY J.L.R. SCALE NONE SD-5.11

ADDRESS CHART

BUILDING	STREET ADDRESS
LOT5-CLUBHOUSE	5100 COLUMBIA ROAD
LOT1-MAINT.BLDG.	5280 COLUMBIA ROAD

SUBDIVISION NAME VWL, 9/3, LOT39, VWL, 9/4, LOTS 33&55, TC, 9/1, LOT30 & VDS, 3/1, LOTS 1, 2 & 4			SECTION/AREA 9/3, 9/4, 9/1 & 3/1		LOT/PARCEL LOTS 1, 2, 3, 33, 39 & 55
PLAT	BLOCK 8, 9, 10, 14, 15	ZONE NT-O.S. & COMM.	TAX/ZONE MAP 30	ELEC. DIST. 5th	CENSUS TR. 6054
WATER CODE			SEWER CODE		

JOHN CHRISTMAN, P.E.

revisions		
no.	description	date
1	AS PER COUNTY COMMENTS	10/10/92

prepared by
RON PRICHARD
Golf Architect
10800 SIX PINES DRIVE
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COLUMBIA, MARYLAND 21044
(301) 730-7950 621-6050

DETAILS

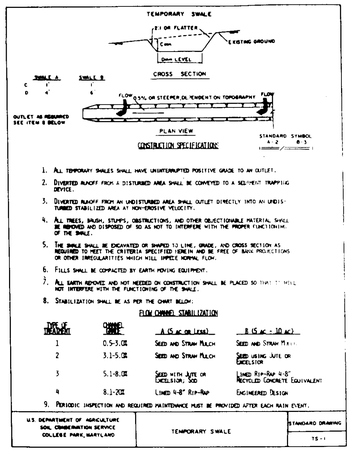
FAIRWAY HILLS GOLF COURSE

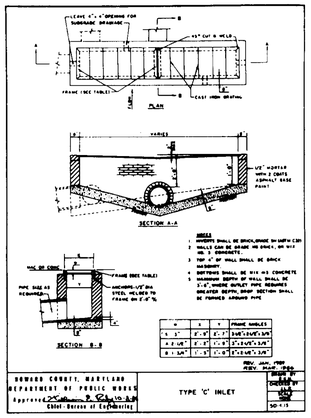
COLUMBIA MARYLAND

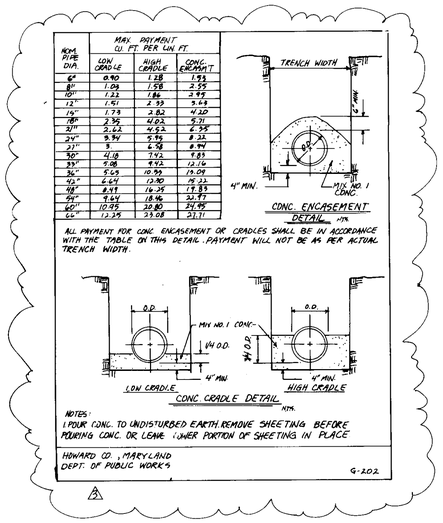
SCALE AS SHOWN	
DRAWN CADD	CHECKED
PROJ. NO. M0405	DATE 9 - 92
SHEET D3	53 OF 56

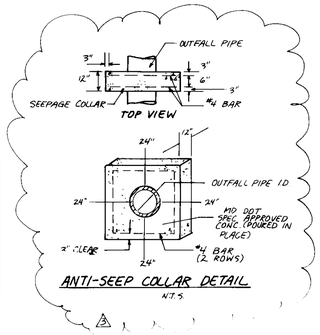
SDP-92-104

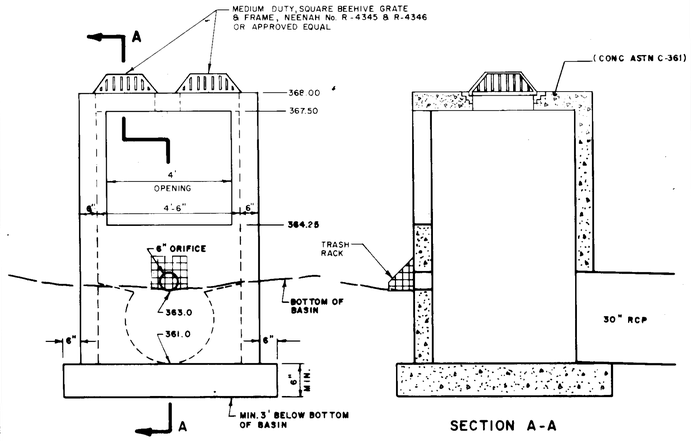
THE RBA GROUP, MORRISTOWN, NEW JERSEY — PROJECT NO. ______



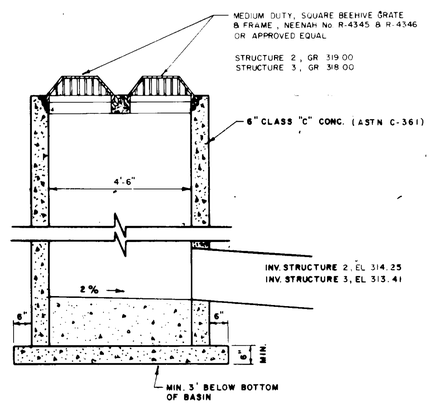




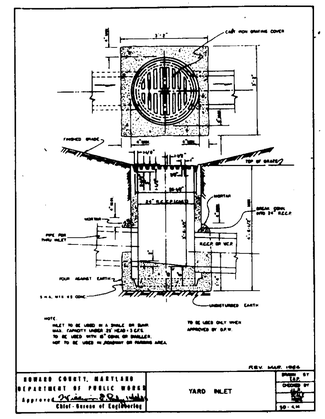


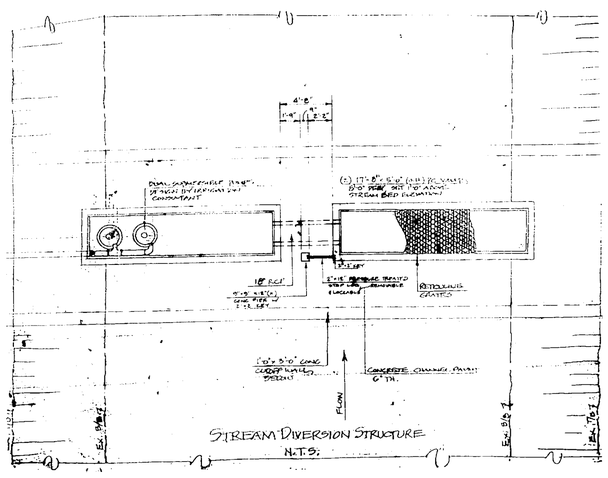


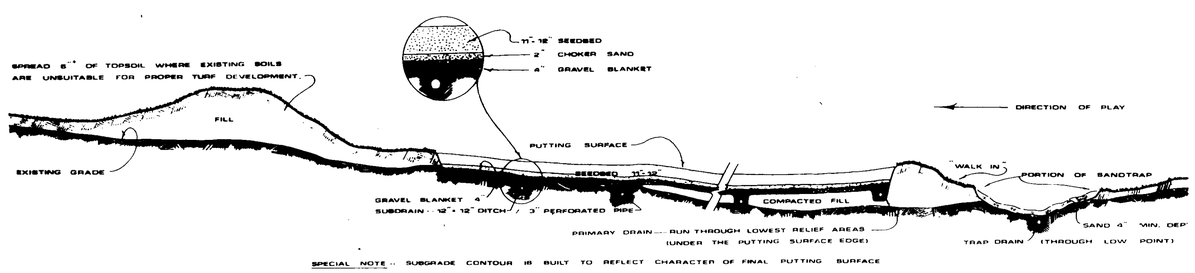
OUTLET CONTROL STRUCTURE 1
SCALE: 1"=2'



OUTLET CONTROL STRUCTURES 2 , 3







TYPICAL GREEN CONSTRUCTION

JOHN CHRISTMAN, P.E.

revisions		
no.	description	date
1	AS PER COUNTY COMMENTS	10/20/93
2	PER DPZ COMMENTS	10-93
3	AS PER COUNTY COMMENTS	1/5/94

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COLUMBIA, MARYLAND 21044
(301) 730-7950 621-6050

DETAILS

FAIRWAY HILLS
GOLF COURSE
COLUMBIA MARYLAND

SCALE	AS SHOWN
DRAWN	CADD
CHECKED	
PROJ. NO.	MO405
DATE	9 - 92
SHEET	D4
	54 of 54

2-2-93

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE SYSTEMS, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
James M. Irvin, DIRECTOR — 11-2-93 DATE
CHIEF, BUREAU OF ENGINEERING — 11/1/93 DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING
DIRECTOR — 11/2/93 DATE
Gary Summers, CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — 11/10/93 DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS. HOWARD COUNTY HEALTH DEPARTMENT.
COUNTY HEALTH OFFICER — 11/5/93 DATE

OWNER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

DEVELOPER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

ADDRESS CHART

BUILDING	STREET ADDRESS
LOT5-CLUBHOUSE	5100 COLUMBIA ROAD
LOT1-MAINT. BLDG.	5280 COLUMBIA ROAD

SUBDIVISION NAME	VWL./9/3,LOT39, VWL./9/4,LOTS 33&55,TC/9/1,LOT30 & VDS/3/1,LOTS 1,2 & 4		SECTION/AREA 9/3/9/4, 9/1 & 3/1		LOT/PARCEL LOTS 1,2,3, 33,39 & 55
PLAT	BLOCK	ZONE	TAX/ZONE MAP	ELEC. DIST.	CENSUS TR
	B-9,10,NT-0.5, 14-15	& COMM	30	5th	6054
WATER CODE			SEWER CODE		

THE RBA GROUP, MORRISTOWN, NEW JERSEY
PROJECT NO.

SDP-92-104

HANDICAPPED PARKING SIGN SPECIFICATIONS

I. Fine Sign:

Pursuant to Howard County Council Bill #58-85, which established a $50.00 fine for violating provisions for handicapped parking and provided for posting notifications of that fine, this specification describes the sign authorized for posting and the associated mounting detail.

Sign to utilize an aluminum blank 6" x 12" x 0.080 inch thick with two (2) single post mounting holes. The text and border shall be standard green to match the R7-8 reserved parking sign and the background shall be reflective white. The text shall be 3" characters.

II. Mounting:

The above fine sign shall be mounted underneath the below R7-8 reserved parking sign. The bottom edge shall be no less than 7 feet above ground. If the sign is placed against a building, structure or other location where vehicle or pedestrian traffic is not obstructed, the bottom edge of the sign shall be at least 6 feet, but no more than 10 feet above ground. Because this is in addition to existing sign installations, some adjustment in height will be necessary.

HANDICAPPED PARKING SIGN
R7-8

NTS

CONCRETE BLOCK RETAINING WALL (DRAIN PIPE)
N.T.S.

2-2-93

6"X8"X10' TIMBER CURB.(TYP) BOLTED TO DECKING 3 BOLTS PER. TIMBER
3"X8"X8' DECK PLANK INSTALLED BARK SIDE UP
2-2"X8" STRINGERS.(TYP)
2"X10"X8' GIRT. 2 PER. PILE (TYP)
10" Ø PILE NOTCHED TO ACCEPT 2"X10" GIRT.

NOTES:
1. GIRT BOLTED TO PILE W/ ⅝"X12" GAL. BOLT
2. ALL BOLTS WILL BE FASTENED WITH NUTS AND WASHERS
3. 6"X8" TIMBER CURB BOLTED TO DECKING. W/⅝"X12" GAL. BOLT. COUNTER SINK 3 PER TIMBER(ENDS AND MIDDLE)
6"X8"X10' TIMBER
⅝"X12" BOLT-TIMBER CURB TO DECKING.
DECL PLANK TO BE SCREWED TO STRINGER 3 PER TIMBER CURB.(COUNTER SINK SCREW 2-2"X8" STRINGER)
2-⅝"X12" GAL. BOLT
PILE NOTCHED TO ACCEPT 2"X10" GIRT.

BOARDWALK CARTPATH
N.T.S.

GENERAL NOTES
1. ALL R.R. TIES SHALL BE SOUND, UNWARPED WITH SQUARED ENDS AND EDGES AND WITHOUT MAJOR SPLITS OR DEFECTS. GENERALLY 6"x6" AND APPROXIMATELY 8' LONG EXCEPT WHEN CUT TO FIT.
2. ALL CORNER CONSTRUCTION SHALL BE DOVETAILED WITH ENDS CUT FOR A GOOD FIT.
3. TIE BACKS TO BE 16' O.C. WITH FIRST COURSE 6 TIES ABOVE GRADE FOR EVERY 2 TIERS OF TIES ABOVE 3. AN EXTRA TIE SHALL BE ON A STAGGERED BASIS 8' O.C.
4. FASTENERS SHALL BE STANDARD 10" R.R. SPIKES OR 5/8"x24" STEEL ROD IN DRILLED HOLES. THE BOTTOM COURSE SHALL BE ANCHORED WITH TWO 30" STEEL RODS DRIVEN INTO THE GROUND FOR EVERY 8' TIE.
5. OVERLAPPING JOINTS SHALL BE PROPERLY SPIKED OR TIED TO MEMBER BELOW.

RAILROAD TIE RETAINING WALL
N.T.S.

FILTRATION / DEGRADATION BOX

CURB INLET PROTECTION DETAIL

STANDARD SYMBOL

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE COLLEGE PARK, MARYLAND	INLET PROTECTION DETAIL	STANDARD DRAWING IPD—1

General Notes:

1. All construction shall be in accordance with the latest standards and specifications of Howard County. (verbatim)
2. The contractor shall notify the Department of Public Works/Bureau of Construction Inspection at (301) 792-7272 at least five (5) working days prior to the start of work. (verbatim)
3. The contractor shall notify "Miss Utility" at 1-800-257-7777 at least 48 hours prior to any excavation work (verbatim)
4. Project Background:

   Location: Tax Map 30 , Parcel 1,2,3, 33,39 8 55
   Zoning: NT-OS
   Section/Area: 9/3, 9/4, 9/1 & 3/1
   Site Area 204.62 AC.
   Date Final Plan Approved, Name and DPZ Reference#:

   Dates, reference numbers, and names of all submittals, waivers (approved or denied), etc. concerning this tract.
5. Traffic control devices, markings, and signing shall be in accordance with the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD). All street and regulatory signs shall be in place prior to the placement of any asphalt. (verbatim)
6. All plan dimensions are to the face of curb unless otherwise noted (verbatim).
7. Reference the survey, contour interval, company performing the survey and date of survey.
8. Identify the horizontal and vertical datums used.
9. State whether water and sewer is public or private. Include contract number and drainage area if public.
10. Reference the floodplain study, name of the company that performed the study, date compiled, file reference number, and date approved by Howard County.
11. State whether water and sewer is public or private. Include contract number and drainage area if public.
12. State the type of stormwater management control.
13. Reference the wetlands delineation study, date compiled, and date approved by Howard County.
14. Reference the traffic study, date compiled and date approved by Howard County.
15. Stormwater management facility will be privately owned and maintained. (verbatim if applicable)
16. Identify how existing utilities were located.

Sequence of Construction

1. Notify MDE, DNR and Howard County of intent to commence.
2. Notify Miss Utility.
3. Clearing and grubbing of those areas necessary for installation of perimeter controls.
4. Construction of perimeter controls.
5. Install tree protection devices.
6. Install stabilized construction entrances where excavation vehicles will be crossing paved roadways.
7. Construct temporary stormwater detention traps and swales
8. Clearing and grubbing of site
9. Mass excavation and rough grading associated with golf course construction. Stockpiles must be stabilized within 7 days
10. Construction and stabilization of permanent stormwater management ponds, structures piping and outfalls
11. Construct remaining area drains and outfalls
12. Provide inlet protection
13. Construct irrigation ponds and diversion structures
14. Construct concrete and railroad tie retaining walls
15. extend sanitary sewer lines to clubhouse and maintenance building locations.
16. Obtain building permits from County
17. Construction of clubhouse, maintenance building boardwalks and bridges
18. Construct manholes install pipe and reroute sanitary line in Ten Mill Road.
19. Excavate Ten Mill Road and related areas for cart tunnel
20. Install trench drain and provide inlet protection
21. Construct tunnel and reconstruct roadway
22. Install flood gates.
23. Construct filtration/degradation boxes and green underdrain systems
24. Fine grade site.
25. Construct parking lots and cartpaths.
26. Stabilization of greens, tees, fairways and rough areas as grading is completed.
27. Removal of sediment control devices upon approval of the Maryland Department of Environmental and Howard County

Construction timing
(per item number)

1.	Two days	15.	Two weeks
2.	Four days	16.	One day
3.	Four weeks	17.	Sixteen weeks
4.	Two weeks	18.	One weeks
5.	Two weeks	19.	One week
6.	One week	20.	Three days
7.	Two weeks	21.	Two weeks
8.	Eight weeks	22.	One week
9.	Twelve weeks	23.	Fifteen weeks
10.	Six weeks	24.	Sixteen weeks
11.	Three weeks	25.	Two weeks
12.	Three weeks	26.	Two weeks
13.	Four weeks	27.	Seven days
14.	Two weeks		

STANDARD
FOR
TREE PROTECTION DURING CONSTRUCTION

Definition

Protection of desirable trees from environmental and mechanical injury during construction activities.

Purpose

To protect desirable trees that have value for erosion and sediment control, shade, aesthetics, song birds, other wildlife, dust control, noise abatement, and oxygen production.

Where Applicable

On new development sites containing valuable trees.

Methods and Materials

1. The reconnaissance before land clearing begins can result in an aesthetically pleasing development with natural vegetation rather than the presence of dead or dying trees. Inventory the site and clearly mark the trees to be saved. Consider relocating streets, houses, or other structures if necessary and feasible. Once clearing begins and damage to the trees occurs, valuable specimens may be lost.

   a. Characteristics of trees to be protected and saved. The following lists characteristics that should be evaluated before deciding to remove or protect a tree.

      (1) Tree Vigor

      Vigor is the overall condition of the tree. A tree of low vigor is more susceptible to damage by environmental changes than healthy trees and is more susceptible to insect and disease attacks. Indications of poor vigor include the dying of the tips of the branches and entire limbs, small annual twig growth, stunted leaf size, sparse foliage, and poor foliage color. Avoid saving hollow or rotten trees, trees cracked, split, leaning or crooked, oozing sap, or with broken tops.

      (2) Tree Age

      Very old, picturesque trees may be more aesthetically valuable than smaller, young tree, but also require more extensive protection measures. If leaving a very old tree, be sure it is sound and healthy.

      (3) Species

      Many species of trees found in New Jersey woodlands are not suitable for shade tree uses around buildings. Avoid protecting trees that are short-lived, brittle, have soft wood, messy leaves, fruit, or are frequently attacked by insects and disease.

      (4) Resistant to Insects and Diseases

      Avoid leaving trees in highly visible areas or specimens that are frequent targets of insects and diseases. American Elm, for example, could be lost due to Dutch Elm Disease. Wild Cherry, another example, is a favorite host of the tent caterpillar, which causes defoliation of the trees in early summer.

      (5) Tree Aesthetics

      Choose trees that are aesthetically pleasing, exhibiting good shape and form. Avoid leaning, crooked, and misshapen trees. Occasionally, an odd-shaped tree or one of unusual form may add interest to the landscape if strategically located. Be sure the tree is structurally sound and vigorous.

      (6) Spring and Autumn Coloration

      Species differ in fall color. Some are bright red, others orange and yellow. Other species exhibit no autumn color, such as walnut, locust, and sycamore.

      (7) Wildlife Benefits

      Favor trees that are preferred by wildlife for food, cover, and nesting. A mixture of evergreens and hardwoods is beneficial. Evergreen trees are important for cover during the winter months. The hardwoods are more valuable for food.

      (8) Air Pollution Susceptibility

      Tree species vary greatly in this respect. Symptoms vary from browning on the edges of the leaves and needles, to stunting of growth, to death of the tree.

      (9) Species Longevity

      Favor trees whose life span is long, such as oak, beech, and tulip poplar. Short-lived trees should be avoided for use as shade, lawn, or specimen trees. Although some short-lived trees have an attractive form or pleasing coloration in the spring or fall, such trees may not live for a long time.

   b. Criteria for protecting remaining trees:

      (1) Mechanical damage - see Figure 3.9-1.

      (2) Box trees within 25 feet of a building site to prevent mechanical injury. Fencing or other barrier should be installed at the drip line of the tree branches. See Figure 3.9-1.

      (3) Boards will not be nailed to trees during building operations.

      (4) Feeder roots should not be cut in an area inside the drip line of the tree branches.

      (5) Damaged trunks or exposed roots will be painted immediately with a good grade of "tree paint." Care for serious injury should be prescribed by a professional forester or licensed tree expert.

      (6) Tree limb removal, where necessary, will be done flush to trunk or main branch and that area painted with a good grade of tree paint.

NOTE: For more specific data on certain tree characteristics, consult the tree shrub and vine standard in this handbook (pg. 3.8.1) or consult local professional experts. Your local soil conservation district or county agricultural agent can assist you in this.

Figure 3.9-I Correct fencing for tree protection

Isometric

Section

Figure 3.9-II Tree protection - tile and gravel will allow air circulation to root zone under a fill

SPECIFICATIONS
- Concrete Minimum Strength — 3,500 P.S.I. @ 28 Days
- Steel Reinforcement — 6" x 6" x 10 ga. wire mesh in sides — #3 Rebar in lid
- Design — Seepage Tank shall be one piece as manufactured by MODERN CONCRETE SEPTIC TANK COMPANY OR APPROVED EQUAL

42" SEEPAGE TANK / DRYWELL
N.T.S.

CLUBHOUSE PROFILE

MAINTENANCE BUILDING PROFILE

STATE OF MARYLAND — JOHN R. CHRISTMAN — REGISTERED PROFESSIONAL ENGINEER

JOHN CHRISTMAN, P.E.

revisions

no.	description	date
1	AS PER COUNTY COMMENTS	10/23/92
2	PER DPZ COMMENTS	10-93

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APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE SYSTEMS, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS. HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
DIRECTOR — DATE 11/2/93
CHIEF, BUREAU OF ENGINEERING — DATE 11/1/93

APPROVED : HOWARD COUNTY DEPT. OF PLANNING AND ZONING
DIRECTOR — DATE 11/12/93
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 11/10/93

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.
COUNTY HEALTH OFFICER — DATE 11/5/93

OWNER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

DEVELOPER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

ADDRESS CHART

BUILDING	STREET ADDRESS
LOT5-CLUBHOUSE	5100 COLUMBIA ROAD
LOT1-MAINT.BLDG.	5280 COLUMBIA ROAD

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL
VWL,9/3,LOT39, VWL,9/4,LOTS 33&55,TC,9/1,LOT30 & VDS,3/1,LOTS 1,2 & 4	9/3,9/4, 9/1 & 3/1	LOTS 1,2,3, 33,39 & 55

PLAT	BLOCK	ZONE	TAX/ZONE MAP	ELEC. DIST.	CENSUS TR.
	8,9,10, 14,15	NT-O.S. & COMM.	30	5th	6054

WATER CODE | SEWER CODE

DETAILS	SCALE: AS SHOWN
FAIRWAY HILLS GOLF COURSE	DRAWN: CADD / CHECKED:
COLUMBIA MARYLAND	PROJ. NO. M0405 / DATE 9 - 92
	D5 SHEET 55 OF 56

SDP-92-104

THE RBA GROUP, MORRISTOWN, NEW JERSEY PROJECT NO.

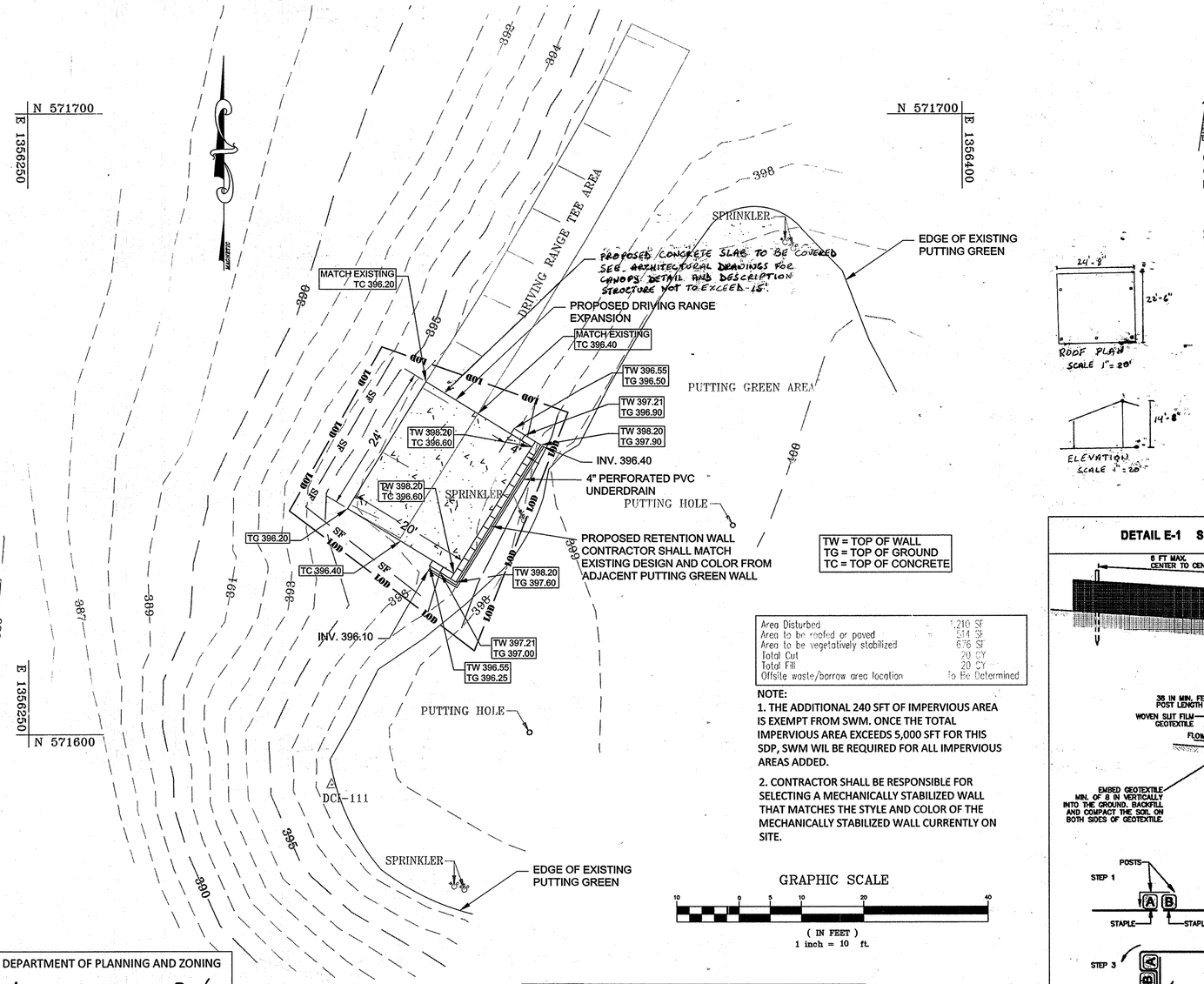
Name	Northing	Easting	Elevation	Description
110	571814.059163	1356485.085520	402.759	DCI-110R&C
111	571591.935942	1356298.619657	397.695	DCI-111R&C

SITE LEGEND

- PROPOSED RETENTION WALL
- PUTTING AREA EXPANSION
- SF — SILT FENCE
- 100 — LIMITS OF DISTURBANCE

GENERAL DEMOLITION NOTES:

1. ALL WORK BE PERFORMED IN STRICT ACCORDANCE WITH THE MOST CURRENT APPLICABLE EPA AND OSHA REGULATIONS AND MUST COMPLY WITH THE MOST CURRENT FEDERAL, STATE AND/OR LOCAL REGULATIONS AND CODES APPLICABLE TO SAID WORK.
2. THE CONTRACTOR SHALL NOTIFY THE CONTRACTING OFFICER IMMEDIATELY UPON ENCOUNTERING ANY HAZARDOUS AND CONTAMINATED MATERIALS. THE CONTRACTOR SHALL DOCUMENT SAME TO THE OWNER TO OBTAIN DIRECTION AS TO THE APPROPRIATE ACTION(S) TO BE TAKEN.
3. CARE SHALL BE TAKEN TO PROTECT ALL EXISTING ADJACENT SURFACES AND AREAS FROM DAMAGE. ANY AREAS DAMAGED DURING CONSTRUCTION SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AT NO ADDITIONAL COST TO THE OWNER. THE CONTRACTOR SHALL SHEET/SHORE AND BRACE ANY AND ALL STRUCTURES EXPOSED BY EXCAVATION/CONSTRUCTION AS NECESSARY.
4. ALL SAWCUTS ARE TO BE STRAIGHT AND EVEN, JAGGED EDGES WILL NOT BE ACCEPTED.
5. ALL UNDERGROUND UTILITIES ENCOUNTERED DURING DEMOLITION AND CONSTRUCTION SHALL BE ASSUMED TO BE LIVE UNTIL DETERMINED OTHERWISE.
6. SURVEY CONTROL SHOWN HEREON IS FOR THE CONVENIENCE OF THE CONTRACTOR. IF ADDITIONAL CONTROL IS REQUIRED, THE CONTRACTOR SHALL ESTABLISH HIS OR HER OWN CONTROL PRIOR TO DEMOLITION OF EXISTING CONTROLS AT HIS OR HER OWN COST.
7. STRIPPING/EXCAVATION OPERATIONS BY THE CONTRACTOR WILL INCLUDE THE FOLLOWING:
   A. REMOVE DEBRIS AND WASTE FROM SITE
   B. EXISTING STRUCTURAL FEATURES SHALL BE ENTIRELY REMOVED FROM WITHIN THE PROPOSED BUILDING FOOTPRINT AND EXTENDED TO LIMITS OF DISTURBANCE.



Area Disturbed	=	1,210 SF
Area to be roofed or paved	=	514 SF
Area to be vegetatively stabilized	=	676 SF
Total Cut		20 CY
Total Fill		20 CY
Offsite waste/borrow area location

NOTE:
1. Stone for Rip-Rap shall consist of well-graded hard angular field or quarry stone, approx. rectangular in shape and with a specific gravity of at least 2.5. Fifty percent by weight of the Rip-Rap mixture shall be smaller than the median stone size, designated as d50. The largest stone size in the mix shall be 1.5 times the d50 size. Rubble concrete having a minimum density of 150 pounds per cubic foot and meeting specified stone sizes may be used.

2. Minimum Rip-Rap thickness shall be 3 times the median stone diameter or 6 in.

LOCATION	PIPE DIA. (FT.)	APRON DIMENSIONS (FT.)		RIP-RAP DIMENSIONS (IN.)		
	Do	W	La	d50	dMax	THICKNESS
HW-1	1.25	22	18	11	16	33
HW-2	2.50	27	20	6	9	18
HW-3	1.25	24	21	10	15	30
HW-4	2.50	32	25	6	9	18
HW-5	2.50	30	22	6	9	18
HW-6	3.50	44	34	6	9	18
HW-7	2.50	28	20	6	9	18
FES-1	1.00	13	10	6	9	18
FES-2	1.00	12	8	6	9	18
FES-3	1.00	12	8	6	9	18
END-1	1.25	10	10	6	9	18
END-2	2.00	15	15	9	12	24
HW-8	1.50	14	10	6	9	18

3

OUTLET CONTROL STRUCTURE 4

SCALE: NTS

MH-10	379.5	371.8	80 LF 15"RCP @ 1.00%	END 1		371.0
MH-11	313.5	308.71	140 LF 24"RCP @ 0.51%	END 2		308.0

3

STRUCTURE SCHEDULE

UPPER STRUCTURE	GR/RIM	INV.	PIPE	LOWER STRUCTURE	GR/RIM	INV.
Inlet 1	399.50	396.50	80 LF 15" RCP @ 3.63%	Inlet 2	396.60	393.60
Inlet 2	396.60	393.50	135 LF 15" RCP @ 1.48%	Inlet 3	394.50	391.50
Inlet 3	394.50	386.10	100 LF 15" RCP @ 1.50%	Inlet 4	393.70	384.60
Inlet 4	393.70	384.50	250 LF 18" RCP @ 2.00%	MH-1	386.00	379.50
[illegible]	386.00	376.00	80 LF 18" RCP @ 2.00%	MH-2	379.00	374.40
MH-2	379.00	367.10	55 LF 18" RCP @ 2.00%	HW-1	----	366.00
Inlet 3-4	392.50	389.03	13 LF 15" RCP @ 1.00%	Inlet 3-3	392.00	388.90
Inlet 3-3	392.00	388.80	25 LF 15" RCP @ 1.00%	Inlet 3-2	392.00	388.25
Inlet 3-2	392.00	388.45	148 LF 15" RCP @ 1.00%	Inlet 3-1	390.90	387.00
Inlet 3-1	390.90	386.90	70 LF 15" RCP @ 1.00%	Inlet 3	394.50	386.20
Inlet 3-5	398.46	394.75	66 LF 15" RCP @ 4.90%	Inlet 3	394.50	391.50
~~Inlet 5-2~~	~~372.50~~	~~370.00~~	~~40 LF 12" RCP @ 0.75%~~	~~Inlet 5-1~~	~~374.00~~	~~368.70~~
~~Inlet 5-1~~	~~374.00~~	~~367.75~~	~~360 LF 12" RCP @ 7.21%~~	~~MH-5~~	~~345.50~~	~~341.00~~
~~MH-5~~	~~349.50~~	~~341.70~~	~~100 LF 12" RCP @ 4.22%~~	~~Inlet 5~~	~~337.00~~	~~334.10~~
Inlet 5	337.00	334.00	80 LF 15" RCP @ 2.00%	Inlet 6	339.00	332.40
Inlet 6	339.00	332.30	170 LF 15" RCP @ 4.65%	Inlet 7	331.00	324.40
Inlet 7	331.00	320.20	90 LF 15" RCP @ 2.00%	HW-3	----	317.80
Inlet 7-1	331.00	328.00	125 LF 15" RCP @ 2.00%	Inlet 7	331.00	325.50
Inlet 8	349.80	346.80	180 LF 12" RCP @ 2.11%	FES-1	----	343.00
Inlet 9	320.80	318.80	160 LF 12" RCP @ 0.50%	FES-2	----	318.00
Inlet 10-1	309.00	307.50	110 LF 12" RCP @ 0.50%	Inlet 10	309.00	306.95
Inlet 10	309.00	306.95	130 LF 12" RCP @ 0.50%	FES-3	----	306.30
INLET 5	369.5	366.41	285 LF 15" RCP @ 0.857%	HW-8	---	364.0

3

3

UPPER STRUCTURE	GR/RIM	INV.	PIPE	LOWER STRUCTURE	GR/RIM	INV.
TD-1	307.50	306.34	150 LF 8" PVC @ 0.50%	TD-1-1	307.50	305.59
TD-1-1	307.50	305.49	145 LF 8" PVC @ 0.50%	Outlet	----	304.77
TD-2	307.50	306.34	135 LF 8" PVC @ 0.50%	TD-2-1	307.50	305.67
TD-2-1	307.50	305.57	135 LF 8" PVC @ 0.50%	Outlet	----	305.00
OCS-1	368.00	361.00	325 LF 30" RCP @ 7.39%	HW-2	----	336.98
OCS-2	319.00	314.25	115 LF 30" RCP @ 0.50%	HW-5	----	313.67
OCS-3	318.00	313.41	85 LF 30" RCP @ 0.72%	HW-4	----	312.80
OCS-4	318.00	313.00	170 LF 30" RCP @ 0.20%	MH-3-4	318.00	312.66
MH-3-2	318.00	312.56	120 LF 30" RCP @ 0.20%	HW-7	----	312.30
MH-3	330.30	320.00	75 LF 42" RCP @ 2.50%	MH-3-1	323.75	318.13
MH-3-1	323.75	314.03	5 LF 42" RCP @ 0.50%	HW-6	----	3.14.00

SANITARY

UPPER STRUCTURE	GR/RIM	INV.	PIPE	LOWER STRUCTURE	GR/RIM	INV.
SAN.MH-1	318.00+/-	308.21	35 LF 8" PVC @ 0.80%	SAN.MH-2	317.60+/-	307.93
SAN.MH-2	317.60+/-	302.78	223 LF 8" DIP @ 0.80%	SAN.MH-3	315.50+/-	301.00
Clubhouse	----	398.50	205 LF 8" PVC @ 6.22%	SAN.MH-4	390.50	385.75
SAN.MH-4	390.50	385.65	194 LF 8" PVC @ 0.75%	SAN.MH-5	389.75	384.20
SAN.MH-5	389.75	384.10	160 LF 8" PVC @ 5.38%	SAN.MH-6	381.00	375.50
SAN.MH-6	381.00	373.00	233 LF 8" PVC @ 3.00%	SAN.MH-7	373.00	366.00
SAN.MH-7	373.00	365.90	263 LF 8" PVC @ 2.24%	SAN.MH-8	366.00	360.00
SAN.MH-8	366.00	353.33	175 LF 8" PVC @ 0.50%	SAN.MH-9	364.00+/-	352.45
SAN.MH-9	364.00+/-	352.35	55 LF 8" PVC @ 0.50%	SAN.MH-10	365.00+/-	352.07

CLUBHOUSE	—	398.5	205 LF 8" PVC @ 4.63%	SAN MH 4	395.0	389.0
SAN MH 4	395.0	388.9	194 LF 8" PVC @ 3.56%	SAN MH 5	388.0	382.0
SAN MH 5	388.0	381.9	160 LF 8" PVC @ 3.75%	SAN HH 6	381.9	375.9
SAM MH 6	381.9	375.8	233 LF 8" PVC @ 3.22%	SAN MH 7	374.3	368.3
SAN. MH 7	374.3	368.2	263 LF 8" PVC @ 3.88%	SAN MH 8	363.5	358.0

3

TRASH RACK

NOTE: DESIGN = 1,000 GALLON CAPACITY CONSTRUCTION IN ACCORDANCE WITH LOCAL CITY STANDARDS. CAPACITY MAY VARY WITH LOCATION.
ARCHITECT TO PROVIDE DESIGN DETAILS

GREASE TRAP DETAIL

NTS

TYPICAL BRIDGE

Conversion Frame - low carbon steel

FLOOD BARRIER DETAIL

Model CGSL - Presray Corp.

NTS

Finish:
Stop logs bare alum.; Conversion frame brush off blast clean per SSPC-SP7, primed w one coat Sherwin Williams Kem Flash rust inhibitive, lead free red primer no E-61-R-26

TYPICAL BRIDGE FOOTING

CROSS SECTION OF DAM ON ℄ OF PIPE SPILLWAY

Height of Riser
1. Enter Table No. 1 with the planned conduit slope. (See view above and use next largest whole number for entering table.)
2. From Table No. 1 obtain value for discharge (Q) for planned conduit size.
3. If Q obtained from Table No. 1 is:
(a) greater than Q shown in Table No. 2 (for the design head, conduit length and conduit size), a riser height (Z) of 50 is required to provide full pipe flow.
(b) equal to or less than that Q shown in Table No. 2 a riser height (Z) less than 50 can be used. (minimum height - 2.0').

ANTI-SEEP COLLAR TYPICAL LOCATION

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE SYSTEMS, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS. HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
James M. Irvin 11/2/93
DIRECTOR DATE
[signature] 11/1/93
CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING
[signature] 11/12/93
DIRECTOR DATE
[signature] 11/10/93
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
Joyce M Boyd [signature] 11/5/93
COUNTY HEALTH OFFICER DATE

OWNER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

DEVELOPER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

ADDRESS CHART

BUILDING	STREET ADDRESS
LOT I-CLUBHOUSE	5100 COLUMBIA ROAD
LOT I-MAINT. BLDG.	5280 COLUMBIA ROAD

SUBDIVISION NAME			SECTION/AREA		LOT/PARCEL
VWL, 9/3, LOT39, VWL, 9/4, LOTS 33&55, TC, 9/1, LOT30 & VDS, 3/1, LOTS 1,2 & 4			9/3, 9/4, 9/1 & 3/1		LOTS 1,2,3, 33,39 & 55
PLAT	BLOCK 8,9,10, 14,15	ZONE NT-O.S. & COMM.	TAX/ZONE MAP 30	ELEC. DIST. 5th	CENSUS TR. 6054
WATER CODE			SEWER CODE		

2-2-93

JOHN CHRISTMAN, P.E.

no.	description	date
1	AS PER COUNTY COMMENTS	10/26/92
2	PER DPZ COMMENTS	10-93
3	ADDED TABLE INFO	4/94

prepared by
RON PRICHARD
Golf Architect
10800 SIX PINES DRIVE
THE WOODLANDS, TEXAS 77380
(713) 292-1802
1730 WALTON ROAD, SUITE 300
BLUE BELL, PA. 19422
(215) 941-7240

prepared by
The RBA Group ENGINEERS • ARCHITECTS • PLANNERS
5560 STERRETT PLACE, SUITE 300
COLUMBIA, MARYLAND 21044
(301) 730-7960 621-6050

DETAILS

FAIRWAY HILLS GOLF COURSE

COLUMBIA MARYLAND

SCALE AS SHOWN
DRAWN CADD | CHECKED
PROJ. NO. M0405 | DATE
D6 SHEET 56 OF 56

SDP-92-104

THE RBA GROUP, MORRISTOWN, NEW JERSEY PROJECT NO.

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

DIRECTOR — DATE 11/9/93

CHIEF, BUREAU OF ENGINEERING — DATE 11/8/93

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

DIRECTOR — DATE 11/2/93

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 11/16/93

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

COUNTY HEALTH OFFICER — DATE 11/10/93

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 2-2-93

ZONING

FLOOD PLAIN
75' STREAM BUFFER
WETLANDS/ LINE
25' WETLANDS BUFFER
CARTPATH 5' MIN. FROM ℄
FAIRWAY (TYP)
ROUGH (TYP)
MATCH LINE "P" SEE SHEET E-13
MATCH LINE "H" SEE SHEET E-6
EXISTING 12" WATER MAIN
EXISTING 8" WATER MAIN
PARCEL F VILLAGE OF DORSEY'S SEARCH SECT. 3 AREA 1
LIONS WAY
COLUMBIA ROAD
EXISTING 12" WATERMAIN

INLET 6
GR. 339.0
INV. A. 332.4
INV. B. 332.3

INLET PROTECTION TYP. (SEE DETAIL, SHEET D3, 53 OF 56)

INLET 1
GR. 399.50
INV. 396.50

INLET 2
GR. 396.60
INV. A. 393.60
INV. B. 393.50

INLET 3-4
GR. 392.50
INV. 389.30
13 LF 15"RCP @ 1.00%
INLET 3-3
GR. 392.00
INV. A 388.90
INV. B 388.80
25 LF 15"RCP @ 1.00%
INLET 3-2
GR. 392.00
INV. A 388.55
INV. B 388.45
S.O.E.
INLET 3-5
GR. 398.46
INV. 394.76

INLET 3-1
GR. 390.90
INV. A 387.00
INV. B 386.90

INLET 3
GR. 394.50
INV. A & B 391.50
INV. C 386.20
INV. D 386.10
100 LF 15"RCP @ 1.5%

INLET 4
GR. 393.70
INV. A. 384.60
INV. B. 384.50

INLET 5
GR. 337.50
INV. 334.8
INV. 334.10

INLET 5-1
GRATE 369.5
INV. 366.91

HOLE #10 GREEN
HOLE #10 TEE (TYP)
HOLE #9 GREEN
HOLE #9 TEE (TYP)
HOLE #1 TEE
HOLE #1 LINE OF PLAY
HOLE #9 LINE OF PLAY

DRIVING RANGE
DRIVING RANGE TEE AREA
POND CROSS SECTION LOCATION (SEE PROFILES)
OUTLET CONTROL STRUCTURE 1
PROPOSED TREE SCREENING AREA
POND "A"
STORM WATER MANAGEMENT FACILITY
APPROXIMATE LOCATION OF EXISTING PIPE TO BE REMOVED
GRASS BUNKER
GREEN #10
CONDUIT OUTLET PROTECTION (SEE C.O.P. SCHEDULE SHEET D3, 56 OF 56)
20' DRIVEWAY (FULL DEPTH PAVEMENT)
LAKE PROTECTION TYP. (SEE DETAIL, SHEET D5, 55 OF 56)
8' CARTPATH (SEE DETAIL SHEET D-2)
FULL DEPTH PAVEMENT
PROP. GOLF SHELTER
PROP. 40'x64' GOLF CART SHELTER
PROP. 10'X10' DUMPSTER PAD
PROP. DUMPSTER SCREENING (SEE SHEET D5, 55 OF 56)
EXIST. SHED TO REMAIN (STARTER SHED)
PRACTICE PUTTING GREEN
EXISTING CLUB HOUSE
CONC. PATIO
ASPH. PAVING
GREASE INTERCEPTOR 5'x10'
PROPOSED SEWER CONNECTION SAN. MH. 6 (DROP) RIM: 391.90 INV: 375.90 INV: 375.80
SAND TRAP
SAND TRAP (TYP)
ROUGH (TYP)
FAIRWAY (TYP)
MAINTENANCE / GOLF CART STORAGE 120'
SHOP
PRIVATE
TO BE REMOVED
EXISTING SAN. MH. 10 RIM. AT GRADE INV. 352.17
SAN. MH. 9 RIM. AT GRADE 359.01 INV. 352.82 INV. 352.72
175 LF 8" PVC @ 1.00%
(PUBLIC)
CONT NO. 24-3239-D
SAN. MH. 5 RIM. 368.00 INV. 382.90 INV. 381.30
SAN. MH. 7 RIM. 374.30 INV. 368.30 INV. 368.20
STORM MH. 1 RIM. 373.00 INV. A. 367.40 INV. B. 362.60
STORM MH. 2 RIM. 373.00 INV. A. 374.40 INV. B. 367.10
STORM MH. 3 RIM. 375.50 INV. 371.00 INV. 371.10
INV. 366.00
86 LF 18"RCP @ 2.00%
35 LF 18"RCP @ 2.00%
285 LF 15"RCP @ 2.00%
PROPOSED TOWNHOUSES (BY OTHERS)
PROPOSED PAVED PARKING AREA (FULL DEPTH PAVEMENT)
PROPOSED TOWNHOUSES
20' PROPOSED EASEMENT
1 WAY ACCESS (DRIVEWAY (FULL DEPTH PAVEMENT)
TO BE REMOVED 12-1" AS PARKING SPACES FULL DEPTH PAVEMENT
22" NORWAY MAPLE TO REMAIN
18" NORWAY MAPLE TO BE REMOVED
BLACK LOCUST TO BE REMOVED
BLACK LOCUST TO BE REMOVED
DEPRESSED CURB
SILT FENCE
LIMIT OF DISTURBANCE
VEHICULAR INGRESS AND EGRESS IS RESTRICTED EXCEPT AT POINTS APPROVED BY THE HO. CO. DEPT. OF PLANNING AND ZONING
SAND
GRASS
EXISTING SHED TO BE REMOVED
EXISTING ELMS TO BE REMOVED
10' NO PARKING SECTOR
EXISTING 8" WATER MAIN
EXISTING 12" WATER MAIN
PROP. 8" WATER MAIN
PROP. 6" WATER MAIN
PROP. 1" WATER MAIN
PROP. 2" WATER MAIN
PROP. 4" WATER MAIN
PROP. 6" WATER MAIN
PROP. 8" WATER MAIN
PROP. 10" WATER MAIN
PROP. 12" WATER MAIN
PROP. 1" WATER MAIN
PROP. 2" WATER MAIN
PROP. 4" WATER MAIN
PROP. 6" WATER MAIN
PROP. 8" WATER MAIN
PROP. 10" WATER MAIN
PROP. 12" WATER MAIN

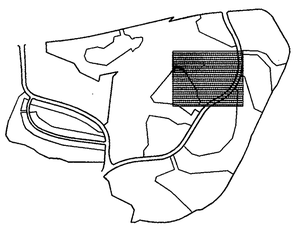
CLUB HOUSE ADDITION
FF=402.00
27' MAX.
ELEVATION

EXISTING CLUB HOUSE
FF=402.00
LL=400.00
1,182 SF
PORCH
RAMP
34.0'
10.0'
34.75'
PLAN
CLUB HOUSE ADDITION

NOTE:
1. 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 (SEE STANDARD SEDIMENT CONTROL NOTE #2, SHEET D3, 53 OF 56).
2. SILT FENCE MUST BE INSTALLED PARALLEL TO CONTOURS.

ADDED 40'x64' GOLF CART SHELTER 2-20-06
ADDED CLUB HOUSE ADDITION 12-30-03

KEY MAP



LEGEND

ITEM	EXISTING	PROPOSED
CONTOURS	350	350
SPOT GRADE	+ 350.0	+ 350.0
WOODED AREA		TO REMAIN
SILT FENCE		
LIMIT OF DISTURBANCE		
RETAINING WALL		
WETLAND LIMIT		
(25' BUFFER)		
100 YR. FLOOD PLAIN		
DIVERSION SWALE		

RESPONSIBLE PERSONNEL CERTIFICATION

"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 WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

Dennis Hart — 10/13/93
SIGNATURE OF DEVELOPER — DATE
(PRINT NAME BELOW)

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

John M Christman — 10/13/93
SIGNATURE OF ENGINEER — DATE
(PRINT NAME BELOW)
JOHN CHRISTMAN, P.E.

CERTIFICATION BE THE DEVELOPER

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.

Dennis Hart — 10/13/93
SIGNATURE OF DEVELOPER — DATE
(PRINT NAME BELOW)

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

APPROVED Robert W. Gibson — 10/21/93
HOWARD S.C.D. — DATE

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS.

APPROVED: J. H. Woodfield — 10/21/93
U.S. SOIL CONSERVATION SERVICE — DATE

OWNER COLUMBIA PARKS AND RECREATION ASSOCIATION
9881 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

DEVELOPER COLUMBIA PARKS AND RECREATION ASSOCIATION
9881 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

ADDRESS CHART

BUILDING	STREET ADDRESS
LOT5-CLUBHOUSE	5100 COLUMBIA ROAD
LOT1-MAINT. BLDG.	5280 COLUMBIA ROAD

SUBDIVISION NAME VWL.9/3,LOT39, VWL.9/4,LOTS 33&55,7C/9/1,LOT30 & VDS.3/1,LOTS 1,2 & 4		SECTION/AREA 9/3,9/4, 9/1 & 3/1	LOT/PARCEL LOTS 1,2,3, 33,39 & 55
PLAT	BLOCK/ZONE 8-9,10,INT-O.S. 14,15 C COMM.	TAX/ZONE MAP 30	ELEC. DIST. 5th
			CENSUS TR. 6054
WATER CODE		SEWER CODE	

no.	revisions description	date
1	LIMIT OF DIST. SILT FENCE	9/20/92
2	AS PER DPZ COMMENTS 1/6/93	10/1/93
3	AS PER HSCD COMMENTS 12/9/92	10/1/93
4	ADD S.C.E.	3/31/94
5	REVISED GRADING, ADDED CONN. DRIVE WAY, REV STORM DRAIN, MOVED CART PATH	4/94
6	ADDED WATER LINE CORRECTED SEWER	7/94

STATE OF MARYLAND — JOHN CHRISTMAN — No. 14539 — REGISTERED PROFESSIONAL ENGINEER
JOHN CHRISTMAN, P.E.

prepared by
RON PRICHARD
Golf Architect
10600 SIX PINES DRIVE
THE WOODLANDS, TEXAS 77380
(713) 292-1902
1730 WALTON ROAD
SUITE 300, BLUE BELL, PA.
(215) 941-7240

prepared by
The RBA Group — ENGINEERS • ARCHITECTS • PLANNERS
5560 STERRETT PLACE, SUITE 300
COLUMBIA, MARYLAND 21044
(301) 730-7950 621-6050

EROSION AND SEDIMENT CONTROL PLAN

FAIRWAY HILLS GOLF COURSE

COLUMBIA MARYLAND

SCALE	1"= 50'
DRAWN	KBW
CHECKED	JJB
PROJ. NO.	MO405
DATE	9/22/92
SHEET	E-7
	24 OF 56

PROJECT NO.

THE RBA GROUP, MORRISTOWN, NEW JERSEY

SDP-92-104

H5

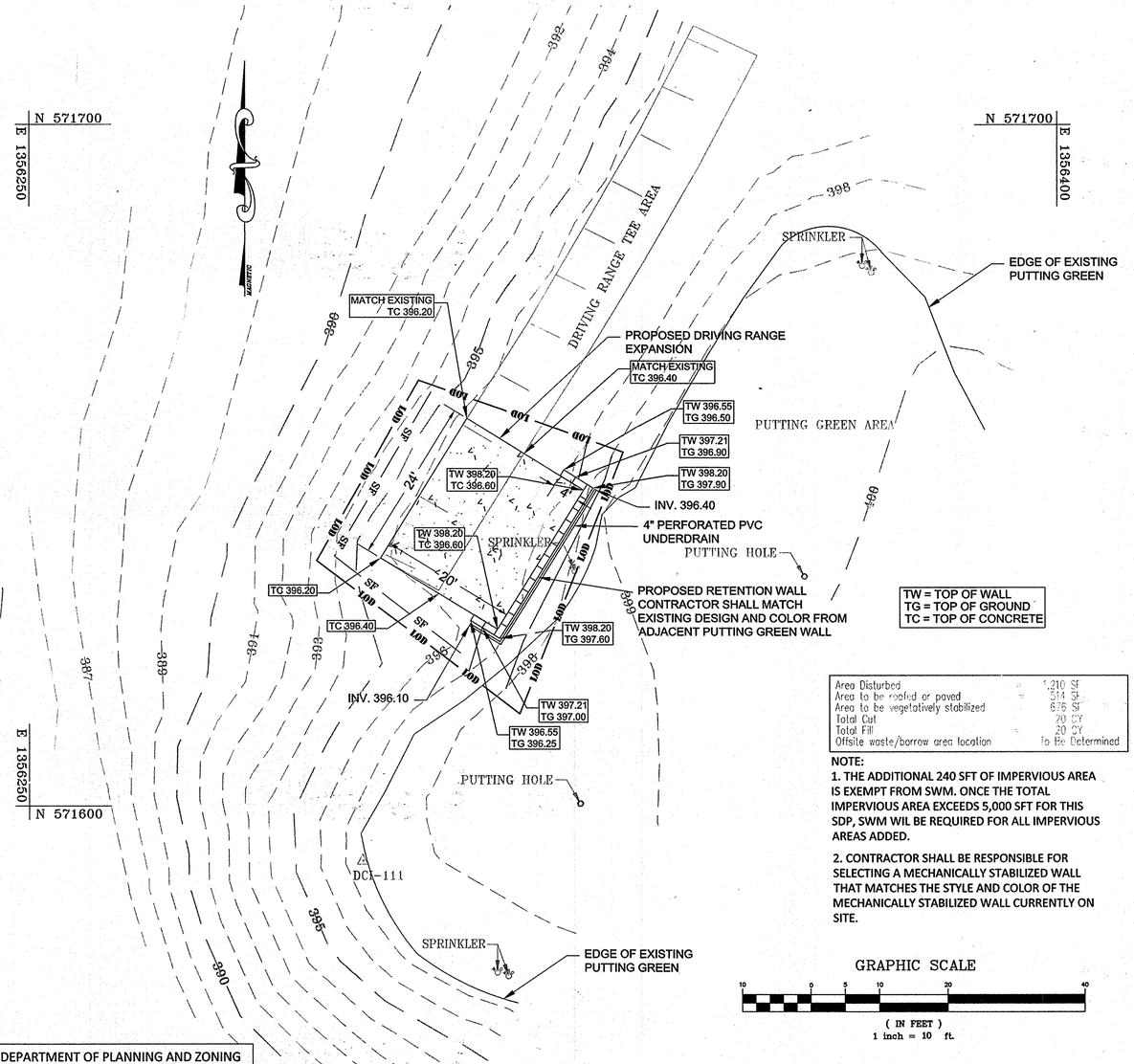
Name	Northing	Easting	Elevation	Description
110	571814.059163	1356485.085520	402.759	DCI-110R&C
111	571591.935942	1356298.619657	397.695	DCI-111R&C

SITE LEGEND

- PROPOSED RETENTION WALL
- PUTTING AREA EXPANSION
- SF — SILT FENCE
- LOD — LIMITS OF DISTURBANCE

GENERAL DEMOLITION NOTES:

1. ALL WORK BE PERFORMED IN STRICT ACCORDANCE WITH THE MOST CURRENT APPLICABLE EPA AND OSHA REGULATIONS AND MUST COMPLY WITH THE MOST CURRENT FEDERAL, STATE AND/OR LOCAL REGULATIONS AND CODES APPLICABLE TO SAID WORK.
2. THE CONTRACTOR SHALL NOTIFY THE CONTRACTING OFFICER IMMEDIATELY UPON ENCOUNTERING ANY HAZARDOUS AND CONTAMINATED MATERIALS. THE CONTRACTOR SHALL DOCUMENT SAME TO THE OWNER TO OBTAIN DIRECTION AS TO THE APPROPRIATE ACTION(S) TO BE TAKEN.
3. CARE SHALL BE TAKEN TO PROTECT ALL EXISTING ADJACENT SURFACES AND AREAS FROM DAMAGE. ANY AREAS DAMAGED DURING CONSTRUCTION SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AT NO ADDITIONAL COST TO THE OWNER. THE CONTRACTOR SHALL SHEET/SHORE AND BRACE ANY AND ALL STRUCTURES EXPOSED BY EXCAVATION/CONSTRUCTION AS NECESSARY.
4. ALL SAWCUTS ARE TO BE STRAIGHT AND EVEN, JAGGED EDGES WILL NOT BE ACCEPTED.
5. ALL UNDERGROUND UTILITIES ENCOUNTERED DURING DEMOLITION AND CONSTRUCTION SHALL BE ASSUMED TO BE LIVE UNTIL DETERMINED OTHERWISE.
6. SURVEY CONTROL SHOWN HEREON IS FOR THE CONVENIENCE OF THE CONTRACTOR. IF ADDITIONAL CONTROL IS REQUIRED, THE CONTRACTOR SHALL ESTABLISH HIS OR HER OWN CONTROL PRIOR TO DEMOLITION OF EXISTING CONTROLS AT HIS OR HER OWN COST.
7. STRIPPING/EXCAVATION OPERATIONS BY THE CONTRACTOR WILL INCLUDE THE FOLLOWING:
   A. REMOVE DEBRIS AND WASTE FROM SITE
   B. EXISTING STRUCTURAL FEATURES SHALL BE ENTIRELY REMOVED FROM WITHIN THE PROPOSED BUILDING FOOTPRINT AND EXTENDED TO LIMITS OF DISTURBANCE.



TW = TOP OF WALL
TG = TOP OF GROUND
TC = TOP OF CONCRETE

Area Disturbed	=	1.210 SF
Area to be roofed or paved	=	314 SF
Area to be vegetatively stabilized	=	676 SF
Total Cut	=	20 CY
Total Fill	=	20 CY
Offsite waste/borrow area location		To Be Determined

NOTE:

1. THE ADDITIONAL 240 SFT OF IMPERVIOUS AREA IS EXEMPT FROM SWM. ONCE THE TOTAL IMPERVIOUS AREA EXCEEDS 5,000 SFT FOR THIS SDP, SWM WIL BE REQUIRED FOR ALL IMPERVIOUS AREAS ADDED.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR SELECTING A MECHANICALLY STABILIZED WALL THAT MATCHES THE STYLE AND COLOR OF THE MECHANICALLY STABILIZED WALL CURRENTLY ON SITE.

GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chief, Development Engineering Division — Date 7.2.14

Chief, Division of Land Development NN — Date 7-2-14

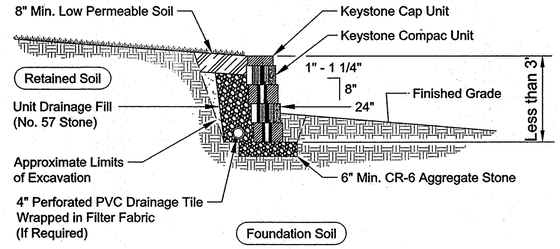
Director — Date 7/2/14

OWNER:
COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD 21045

SUBDIVISION NAME VWL 9/3, LOT 39 VWL9/4, LOTS 33&35, TC,9/1, LOT 30 & VDS,3/1 LOTS1,2 & 4			SECTION /AREA 9/3, 9/4, 9/1 &3/1		LOT/PARCEL LOTS 1,2,3, 33,39 & 55
PLAT	BLOCK 8,9,10, 14,15	ZONE NT-O.S.& COMM.	TAX MAP 30	ELEC.DIST. 51 h	CENSUS TR 6054
WATER CODE			SEWER CODE		

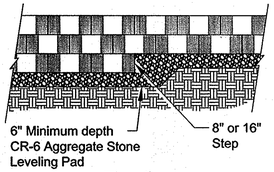
SITE PLAN AND DETAILS

SCALE: 1" = 10'



Typical Gravity Wall Section

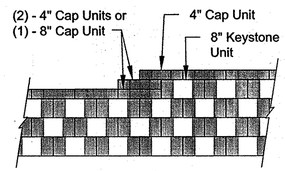
Compac Unit - 1" Setback



Elevation

Note:

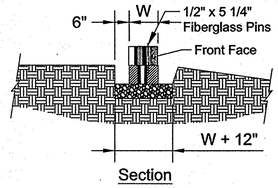
1. The leveling pad is to be constructed of CR-6 Aggregate Stone.



Note:

1. Secure all cap units with Keystone Kapseal or equal.

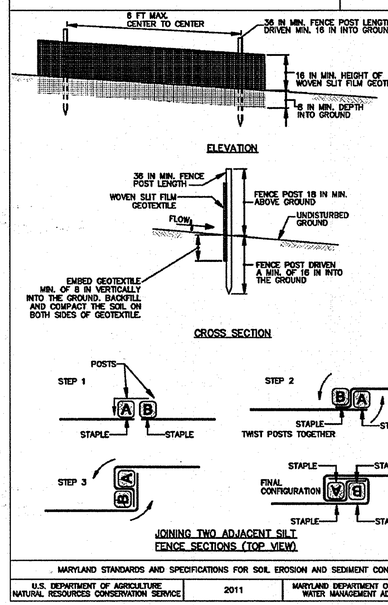
Top of Wall Steps



Section

Leveling Pad Detail

DETAIL E-1 SILT FENCE — STANDARD SYMBOL — SF



JOINING TWO ADJACENT SILT FENCE SECTIONS (TOP VIEW)

1 OF 2

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

E.2

DETAIL E-1 SILT FENCE — STANDARD SYMBOL — SF

CONSTRUCTION SPECIFICATIONS

1. USE WOOD POSTS 1¾ X 1¾ ± ⅛ INCH (MINIMUM) SQUARE CUT OF SOUND QUALITY HARDWOOD. AS AN ALTERNATIVE TO WOODEN POST USE STANDARD "T" OR "U" SECTION STEEL POSTS WEIGHING NOT LESS THAN 1 POUND PER LINEAR FOOT.
2. USE 36 INCH MINIMUM POSTS DRIVEN 16 INCH MINIMUM INTO GROUND NO MORE THAN 6 FEET APART.
3. USE WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS AND FASTEN GEOTEXTILE SECURELY TO UPSLOPE SIDE OF FENCE POSTS WITH WIRE TIES OR STAPLES AT TOP AND MID-SECTION.
4. PROVIDE MANUFACTURER CERTIFICATION TO THE AUTHORIZED REPRESENTATIVE OF THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT THE GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS.
5. EMBED GEOTEXTILE A MINIMUM OF 8 INCHES VERTICALLY INTO THE GROUND. BACKFILL AND COMPACT THE SOIL ON BOTH SIDES OF FABRIC.
6. WHERE TWO SECTIONS OF GEOTEXTILE ADJOIN: OVERLAP, TWIST, AND STAPLE TO POST IN ACCORDANCE WITH THIS DETAIL.
7. EXTEND BOTH ENDS OF THE SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SILT FENCE.
8. REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN SILT FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. IF UNDERMINING OCCURS, REINSTALL FENCE.

2 OF 2

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

E.3

gba
gant·brunnett
ARCHITECTS
15 West Mulberry Street
Baltimore, Maryland 21201-4406
Telephone Number: 410-234-8444

"PROFESSIONAL CERTIFICATION. I CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NUMBER 6581, EXPIRATION DATE 05/23/2015."

(C) GANT BRUNNETT ARCHITECTS
ALL REPRODUCTION IS PROHIBITED

CONSULTANTS:

DANIEL CONSULTANTS INC.
CONSULTING ENGINEERS AND PLANNERS
8950 Rt. 108 E., Suite 229, Columbia, MD 21045
Phone: 410-995-0090 Fax: 410-992-7038

STATE OF MARYLAND — RICHARD LECOUR SCHMOYER — 21626 — REGISTERED PROFESSIONAL ENGINEER

"PROFESSIONAL CERTIFICATION. I CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NUMBER 15222, EXPIRATION DATE 01/04/2015."

PROJECT:

FAIRWAY HILLS GOLF CLUB
DRIVING RANGE IMPROVEMENTS
5100 COLUMBIA ROAD
COLUMBIA, MARYLAND 21045

PROJ. NO:	14-205-01
DATE:	04/16/2014
SCALE:	AS SHOWN
REVISION:	5/20/14 DPZ 5/8/14

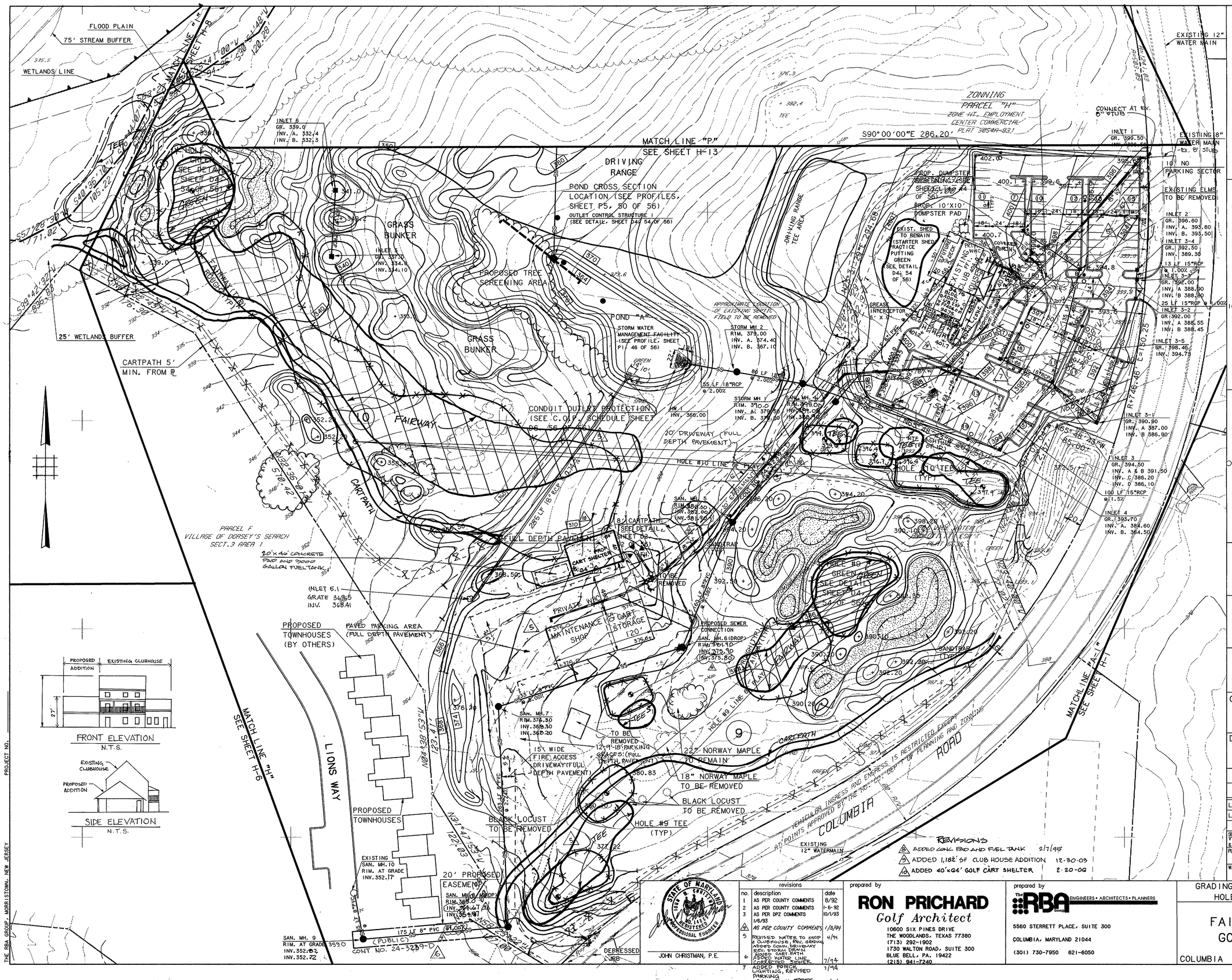
SITE PLAN AND DETAILS

H-14

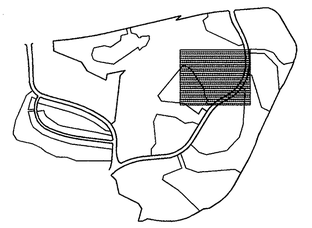
SHEET 56A OF 56

FILE NAME: H: ▫ PROJECTS ▫ Civil ▫ 14-205-01 Fairway Hills ▫ Print Files ▫ 02 - Fairway Hills Site Plan.dwg PLOTTED: Thursday, June 26, 2014 - 3:09pm

SDP-92-104



KEY MAP



LEGEND

ITEM	EXISTING	PROPOSED
CONTOURS	350	350
SPOT GRADE	+ 350.8	+ 350.0
WOODED AREA	TO REMAIN	TO REMAIN
WETLAND LIMIT		
(25' BUFFER)		
100 YR. FLOOD PLAIN		
75' STREAM BUFFER		
RETAINING WALL		
EXISTING STREAM		
EXISTING PROPERTY LINE		
EXISTING EASEMENT LINE		
BORING LOCATION		

APPROVED
PLANNING BOARD of HOWARD COUNTY
DATE 2-2-93

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

DIRECTOR — DATE 11/2/93

CHIEF, BUREAU OF ENGINEERING — DATE 11/1/93

APPROVED : HOWARD COUNTY DEPT. OF PLANNING AND ZONING

DIRECTOR — DATE 11/2/93

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 11/10/93

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

COUNTY HEALTH OFFICER — DATE 11/5/93

OWNER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

DEVELOPER: COLUMBIA PARKS AND RECREATION ASSOCIATION
9861 BROKEN LAND PARKWAY, SUITE 300
COLUMBIA, MD. 21045

ADDRESS CHART

BUILDING	STREET ADDRESS
LOTS-CLUBHOUSE	5100 COLUMBIA ROAD
LOT1-MAINT. BLDG.	5280 COLUMBIA ROAD

SUBDIVISION NAME WML 9/3 LOT39, WML 9/4 LOTS 33&35 TC 9/7 LOT30 & VDS 3/1 LOTS 1,2 & 4			SECTION/AREA 9/3 & 9/4 9/1 & 3/1	LOT/PARCEL LOTS 1,2,3, 33,39 & 55
PLAT	BLOCK / ZONE: 9/9-10 INT-0.5, 14-15 R-CONN.	TAX/ZONE MAP 30	ELEC. DIST. 5th	CENSUS TR. 6054
WATER CODE		SEWER CODE		

REVISIONS
6 ADDED CONC. PAD AND FUEL TANK 2/7/95
5 ADDED 1,182 SF CLUB HOUSE ADDITION 12-30-09
10 ADDED 40'x64' GOLF CART SHELTER 2-20-06

STATE OF MARYLAND — JOHN R. CHRISTMAN — No. 14418 — REGISTERED PROFESSIONAL ENGINEER
JOHN CHRISTMAN, P.E.

no.	revisions	date
1	AS PER COUNTY COMMENTS	8/92
2	AS PER COUNTY COMMENTS	1-6-92
3	AS PER DPZ COMMENTS 1/6/93	10/1/93
4	AS PER COUNTY COMMENTS	1/3/94
5	REVISED WATER TO STOP 2 CLUBHOUSES, REV. GRADING, ADDED CONN. DRIVEWAY, REV. STORM DRAIN, MOVED CART PATH	4/94
6	ADDED WATER LINE, CORRECTED SEWER	7/94
7	ADDED PORCH LIGHTING, REVISED PARKING	7/94
9	CARTPATH, TEES, FAIRWAY	10/2/96
10	ADD ADDITION TO EXIST. 4-20-07	

prepared by
RON PRICHARD
Golf Architect
10600 SIX PINES DRIVE
THE WOODLANDS, TEXAS 77380
(713) 292-1902
1730 WALTON ROAD, SUITE 300
BLUE BELL, PA. 19422
(215) 941-7240

prepared by
The RBA group — ENGINEERS • ARCHITECTS • PLANNERS
5560 STERRETT PLACE, SUITE 300
COLUMBIA, MARYLAND 21044
(301) 730-7950 621-6050

GRADING AND DRAINAGE PLAN
HOLE #9 & HOLE #10

FAIRWAY HILLS GOLF COURSE

COLUMBIA MARYLAND

SCALE	1" = 50'
DRAWN	MBB
CHECKED	JJB
PROJ. NO.	MO405
DATE	9-9-91
SHEET	H-7
	11 OF 56

SDP-92-104

H3

THE RBA GROUP MORRISTOWN, NEW JERSEY PROJECT NO.