SITE DEVELOPMENT PLAN
SUPREME COURT / SKATELAND
6TH ELECTION DISTRICT
HOWARD COUNTY, MD

GENERAL NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE ENGINEERING OFFICE, CENTURY ENGINEERING, AT (301) 823-8070, IN THE EVENT OF ANY DISCREPANCIES IN THE PLANS OR IN THE RELATIONSHIPS OF FINISHED GRADES TO EXISTING GRADES, PRIOR TO BEGINNING WORK.
2. ALL WATER LINES SHALL BE CONSTRUCTED WITH A MINIMUM OF 42" COVER BELOW FINISHED GRADE. ALL WATER MAINS SHALL BE D.I.P. CLASS 52 UNLESS OTHERWISE NOTED.
3. CORRUGATED STEEL PIPE SECTIONS WILL BE JOINED WITH A SINGLE OR TWO PIECE CORRUGATED BAND WITH A WATERTIGHT NEOPRENE GASKET. DIMPLE BAND CONNECTIONS WILL NOT BE PERMITTED.
4. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL VOLUME IV, AS AMENDED ~~IN JANUARY 1989~~, I.E. STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION UNLESS SHOWN OTHERWISE. THE CONTRACTOR SHALL HAVE A COPY IN HIS POSSESSION AT ALL TIMES.
5. THE LOCATION OF EXISTING UTILITIES SHOWN IS APPROXIMATE ONLY. THE CONTRACTOR SHALL VERIFY THE EXISTENCE, LOCATION, AND DEPTH OF ANY UTILITIES AND SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO BEGINNING WORK.
6. NECESSARY PRECAUTIONS SHALL BE TAKEN BY THE CONTRACTOR TO PROTECT EXISTING SERVICES AND MAINS. ANY DAMAGE TO THEM DUE TO HIS NEGLIGENCE SHALL BE REPAIRED IMMEDIATELY AT HIS OWN EXPENSE.
7. THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE COMMENCING ANY WORK SHOWN ON THESE DRAWINGS.

MISS UTILITY	1-800-282-8555 OR 1-800-257-7777
C & P TELEPHONE COMPANY	725-9976
HOWARD COUNTY BUREAU OF UTILITIES	992-2366
AT&T CABLE LOCATIONS DIVISION	393-3553
BALTIMORE GAS & ELECTRIC COMPANY - CONTRACTORS' SERVICES	
BALTIMORE GAS & ELECTRIC COMPANY - U.G. DAMAGE CONTROL	850-4620
BALTIMORE GAS & ELECTRIC COMPANY - TROUBLE SHOOTING	859-9004
STATE HIGHWAY ADMINISTRATION	298-9013
HOWARD COUNTY CONSTRUCTION/INSPECTION SURVEY DIVISION (24 HOURS NOTICE PRIOR TO COMMENCEMENT OF WORK)	531-5533
COLONIAL PIPELINE COMPANY	792-7272
	795-1390

8. ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS.
9. ALL PIPE ELEVATIONS SHOWN ARE INVERT (FLOW-LINE) ELEVATIONS UNLESS OTHERWISE NOTED.
10. TOPOGRAPHY SHOWN HEREON IS FIELD RUN AND DATED SEPTEMBER 1989 BY CENTURY ENGINEERING, AND SUPPLEMENTAL TOPOGRAPHY DATED JUNE 1993.
11. ALL PLAN DIMENSIONS SHOWN ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
12. THE CONTRACTOR SHALL REMOVE ALL TREES, STUMPS, AND ROOTS ALONG THE LINE OF EXCAVATION. ALL OTHER TREES AND SHRUBS SHALL BE PROTECTED TO THE MAXIMUM EXTENT POSSIBLE.
13. ALL STORM DRAIN PIPE BEDDING SHALL BE AS SHOWN IN DETAIL G2.01 (TRENCH IN ROCK OR TRENCH IN EARTH) AS DETERMINED BY THE ENGINEER OR AS SHOWN ON THE DRAWINGS.
14. THE DEVELOPER IS RESPONSIBLE FOR THE ACQUISITION OF ALL EASEMENTS, RIGHTS, AND/OR RIGHTS-OF-WAY THAT MAY BE REQUIRED FOR THE SEDIMENT AND EROSION CONTROL PRACTICES, STORM WATER MANAGEMENT PRACTICES, AND THE DISCHARGE ONTO OR ACROSS DOWNSTREAM AREAS INCLUDED IN THIS PLAN. HE IS ALSO RESPONSIBLE FOR THE ACQUISITION OF ALL EASEMENTS, RIGHTS-OF-WAY THAT MAY BE REQUIRED FOR GRADING AND/OR WORK ON ADJACENT PROPERTIES INCLUDED IN THIS PLAN.
15. ALL HORIZONTAL CONTROLS ARE BASED ON MARYLAND STATE PLANE GRID COORDINATE SYSTEM. ALL VERTICAL CONTROLS ARE BASED ON U.S.G.S. MEAN SEA LEVEL DATUM 1929.
16. ALL UTILITIES SHALL HAVE A MINIMUM CLEARANCE OF TWELVE INCHES (12") UNLESS OTHERWISE NOTED. ALL POLES SHALL HAVE A MINIMUM HORIZONTAL CLEARANCE OF TWO FEET (2').
17. THE CONTRACTOR SHALL PROVIDE A JOINT IN ALL SEWER MAINS WITHIN 2'-0" OF EXTERIOR MANHOLE WALLS.
18. THE CONTRACTOR SHALL NOTE THAT, IN CASE OF A DISCREPANCY BETWEEN THE SCALED AND THE FIGURED DIMENSIONS SHOWN ON THESE PLANS, THE FIGURED DIMENSIONS SHALL GOVERN.
19. DEVIATIONS FROM THESE PLANS AND SPECIFICATIONS WITHOUT PRIOR WRITTEN CONSENT OF THE CIVIL ENGINEER MAY BE CAUSE FOR REJECTION OF WORK PERFORMED. THE CONTRACTOR WILL BE LIABLE FOR ANY DISCREPANCIES NOT REMEDIED. THE CONTRACTOR SHALL RESTORE ALL EXISTING PAVING, SIDEWALKS, OR LAWNS AFFECTED BY CONSTRUCTION SHOWN HEREON TO A CONDITION COMPARABLE TO THAT EXISTING PRIOR TO CONSTRUCTION.
20. ALL GUTTER SLOPES SHALL MATCH EXISTING PAVING.
21. THE CONTRACTOR SHALL REFER TO APPROPRIATE ARCHITECTURAL AND STRUCTURAL PLANS PRIOR TO CONSTRUCTION.
22. ALL PIPE LENGTHS ARE MEASURED BETWEEN CENTER OF STRUCTURES AND SHALL BE CONSIDERED APPROXIMATE. THE CONTRACTOR IS TO VERIFY ALL LENGTHS OF PIPE WITH FIELD MEASUREMENTS AFTER STRUCTURES ARE IN PLACE.
23. THERE MAY BE ADDITIONAL UTILITIES NOT SHOWN ON THESE PLANS. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR LOCATIONS SHOWN AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL UTILITIES WITHIN THE LIMITS OF CONSTRUCTION AND NOTIFY THE ENGINEER.
24. ALL REINFORCED CONCRETE FOR STORM DRAIN STRUCTURES SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3500 PSI.
25. CONCRETE BUTTRESSES ARE TO BE INSTALLED AT ALL WATER MAIN BENDS, TEES, BLOWOFFS AND HYDRANTS, UNLESS OTHERWISE NOTED.
26. IT SHALL BE DISTINCTLY UNDERSTOOD THAT FAILURE TO MENTION SPECIFICALLY ANY WORK WHICH WOULD NORMALLY BE REQUIRED TO COMPLETE THE PROJECT SHALL NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO PERFORM SUCH WORK.
27. PRIOR TO INSTALLING UTILITIES, EXISTING GRADE IS TO BE BROUGHT TO SUBGRADES
28. TAMPED FILL TO BE COMPACTED TO A MINIMUM DENSITY OF 95% IN ACCORDANCE WITH A.A.S.H.T.O. DESIGNATION T-180, METHOD C, ASTM D 1557.

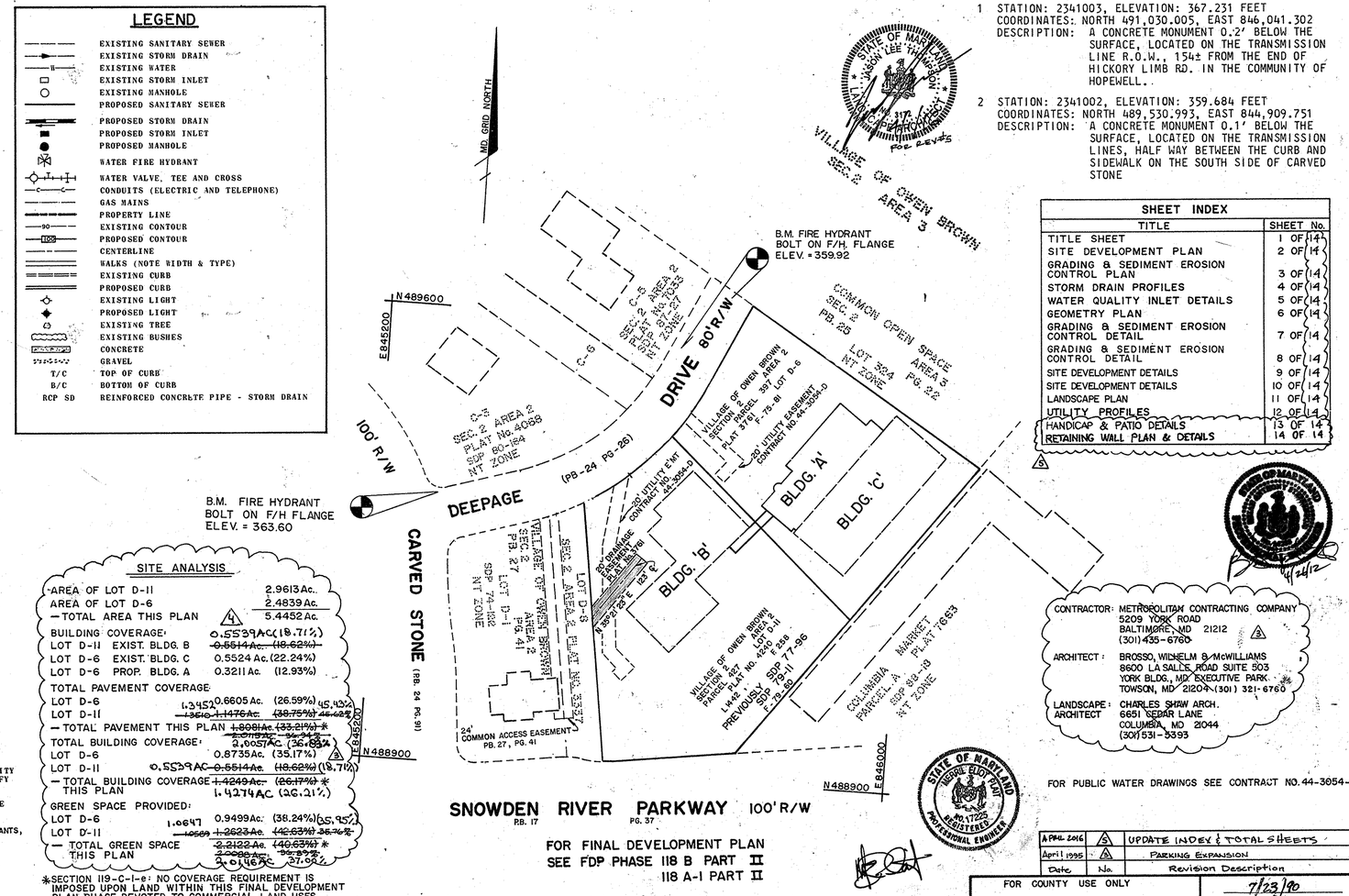
LEGEND

	EXISTING SANITARY SEWER
	EXISTING STORM DRAIN
	EXISTING WATER
	EXISTING STORM INLET
	EXISTING MANHOLE
	PROPOSED SANITARY SEWER
	PROPOSED STORM DRAIN
	PROPOSED STORM INLET
	PROPOSED MANHOLE
	WATER FIRE HYDRANT
	WATER VALVE, TEE AND CROSS
	CONDUITS (ELECTRIC AND TELEPHONE)
	GAS MAINS
	PROPERTY LINE
90	EXISTING CONTOUR
100	PROPOSED CONTOUR
	CENTERLINE
	WALKS (NOTE WIDTH & TYPE)
	EXISTING CURB
	PROPOSED CURB
	EXISTING LIGHT
	PROPOSED LIGHT
	EXISTING TREE
	EXISTING BUSHES
	CONCRETE
	GRAVEL
T/C	TOP OF CURB
B/C	BOTTOM OF CURB
RCP SD	REINFORCED CONCRETE PIPE - STORM DRAIN

SITE ANALYSIS

AREA OF LOT D-11	2.9613 Ac.	
AREA OF LOT D-6	2.4839 Ac.	
— TOTAL AREA THIS PLAN	5.4452 Ac.	
BUILDING COVERAGE:		
LOT D-11 EXIST. BLDG. B	0.5539 AC	(18.71%)
LOT D-6 EXIST. BLDG. C	~~0.5514 Ac.~~	~~(18.62%)~~
LOT D-6 PROP. BLDG. A	0.5524 Ac.	(22.24%)
	0.3211 Ac.	(12.93%)
TOTAL PAVEMENT COVERAGE:		
LOT D-6	1.3452 0.6605 Ac.	(26.59%)
LOT D-11	~~1.3610~~ ~~1.1476 Ac.~~	~~(38.75%)~~
— TOTAL PAVEMENT THIS PLAN	~~1.8081 Ac.~~	~~(33.21%)~~ *
TOTAL BUILDING COVERAGE:	2.0057 AC	(36.83%)
LOT D-6	0.8735 Ac.	(35.17%)
LOT D-11	0.5539 AC ~~0.5514~~	(18.71%) ~~(18.62%)~~
— TOTAL BUILDING COVERAGE THIS PLAN	~~1.4249 Ac.~~ 1.4274 AC	~~(26.17%)~~ * (26.21%)
GREEN SPACE PROVIDED:		
LOT D-6	1.0647 0.9499 Ac.	(38.24%) (65.95%)
LOT D-11	~~1.0569~~ ~~1.2623 Ac.~~	~~(42.63%)~~ ~~36.76%~~
— TOTAL GREEN SPACE THIS PLAN	~~2.2122 Ac.~~ ~~2.0088 Ac.~~ 2.0146 AC	~~(40.63%)~~ * ~~36.89%~~ (37.00%)

*SECTION 119-C-1-e: NO COVERAGE REQUIREMENT IS IMPOSED UPON LAND WITHIN THIS FINAL DEVELOPMENT PLAN PHASE DEVOTED TO COMMERCIAL LAND USES EXCEPT IN ACCORDANCE WITH A SITE DEVELOPMENT PLAN APPROVED BY THE HOWARD COUNTY PLANNING BOARD.



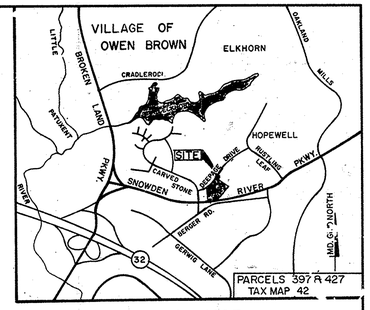
FOR FINAL DEVELOPMENT PLAN
SEE FDP PHASE 118 B PART II
118 A-1 PART II

HOWARD COUNTY BENCH MARKS

1. STATION: 2341003, ELEVATION: 367.231 FEET
   COORDINATES: NORTH 491,030.005, EAST 846,041.302
   DESCRIPTION: A CONCRETE MONUMENT 0.2' BELOW THE SURFACE, LOCATED ON THE TRANSMISSION LINE R.O.W., 154± FROM THE END OF HICKORY LIMB RD. IN THE COMMUNITY OF HOPEWELL.
2. STATION: 2341002, ELEVATION: 359.684 FEET
   COORDINATES: NORTH 489,530.993, EAST 844,909.751
   DESCRIPTION: A CONCRETE MONUMENT 0.1' BELOW THE SURFACE, LOCATED ON THE TRANSMISSION LINES, HALF WAY BETWEEN THE CURB AND SIDEWALK ON THE SOUTH SIDE OF CARVED STONE

SHEET INDEX

TITLE	SHEET No.
TITLE SHEET	1 OF 14
SITE DEVELOPMENT PLAN	2 OF 14
GRADING & SEDIMENT EROSION CONTROL PLAN	3 OF 14
STORM DRAIN PROFILES	4 OF 14
WATER QUALITY INLET DETAILS	5 OF 14
GEOMETRY PLAN	6 OF 14
GRADING & SEDIMENT EROSION CONTROL DETAIL	7 OF 14
GRADING & SEDIMENT EROSION CONTROL DETAIL	8 OF 14
SITE DEVELOPMENT DETAILS	9 OF 14
SITE DEVELOPMENT DETAILS	10 OF 14
LANDSCAPE PLAN	11 OF 14
UTILITY PROFILES	12 OF 14
HANDICAP & PATIO DETAILS	13 OF 14
RETAINING WALL PLAN & DETAILS	14 OF 14



VICINITY MAP
SCALE: 1" = 2000'

4-25-2012
4 RED LINE REVISION:
1. PROPOSED ADDITION TO BUILDING B (1085.6 SQ.FT.)

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

U.S. CONSERVATION SERVICE — 7/27/90 DATE

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

HOWARD S.C.D. — 7/27/90 DATE

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

COUNTY HEALTH OFFICER — 10/23/90 DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

PLANNING DIRECTOR — 11.1.90 DATE

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — 10/26/90 DATE

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

DIRECTOR — 10/16/90 DATE

CHIEF, BUREAU OF ENGINEERING — 8-7-90 DATE

Date	No	Revision Description
4-2-90	1	REVISED PER HOWARD CO. COMMENTS
7-5-90	2	REVISED PER HOWARD CO. COMMENTS

OWNER/DEVELOPER: (301)381-0020
COLUMBIA ASSOCIATION
9801 BROKEN LAND
SUITE 300
COLUMBIA, MARYLAND 21046

CONTRACTOR: METROPOLITAN CONTRACTING COMPANY
5209 YORK ROAD
BALTIMORE, MD 21212
(301) 435-6760

ARCHITECT: BROSSO, WILHELM & McWILLIAMS
9600 LA SALLE ROAD SUITE 503
YORK BLDG., MD EXECUTIVE PARK
TOWSON, MD 21204 (301) 321-6760

LANDSCAPE ARCHITECT: CHARLES SHAW ARCH.
6651 CEDAR LANE
COLUMBIA, MD 21044
(301) 531-5393

FOR PUBLIC WATER DRAWINGS SEE CONTRACT NO. 44-3054-D

SUPREME COURT/SKATELAND
D-11 D-6

Date	No.	Revision Description
APRIL 2016	5	UPDATE INDEX & TOTAL SHEETS
April 1995	4	PARKING EXPANSION

CENTURY ENGINEERING, INC.
(301)823-8070
CONSULTING ENGINEERS • PLANNERS
32 WEST ROAD
TOWSON, MARYLAND 21204

AREA: RECORD PLAT REFERENCE NO. 3337, 4240
VILLAGE OF OWEN BROWN
SECTION 2 AREA 2 PARCELS D-6 & D-11
ELECTION DISTRICT NO. 6 HOWARD COUNTY, MD

TITLE: TITLE SHEET

Des By NAM	Scale 1" = 100'	Proj No 89-064
Drn By ETJ	Date DEC. 26, 1989	Drawing No. 1 OF 14
Chk By DDS	Approved CSC	

Professional Engr. No. 10963

BY THE ENGINEER:
"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

ENGINEER: CHARLES S. CARNAGGIO — 4-26-90 DATE

BY THE DEVELOPER:
"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT & EROSION BEFORE BEGINNING THE PROJECT." I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

DEVELOPER — 7-24-90 DATE

FOR COUNTY USE ONLY
APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 7-5-90

7/23/90 Date

Professional Engr. No. 10963

ADDRESS CHART	
LOT NO.	ADDRESS
D6	7060 DEEPAGE DRIVE
D11	7080 DEEPAGE DRIVE

SUBDIVISION NAME			SECT./AREA	LOT PARCEL NO.
VILLAGE OF OWEN BROWN			2/2	D6 & D11
PLAT NO.	BLOCK NO.	ZONE	TAX/ZONE-MAP	ELECT. DIST.	CENSUS TR
3337 4240	4	NEW TOWN COMMERCIAL	42	6	6061.03
WATER CODE			SEWER CODE	
E-11			53303006	

SDP 90-124

PROPOSED PARKING - SUPREME COURT/SKATELAND PROJECT

LOT D-11 SUPREME COURT BUILDING 'B' (PROPOSED RENOVATION)

PARKING REGULATIONS PER STUDY AS PREPARED BY NORMAN E. GERBER A.I.C.P. "PARKING AND LOADING FACILITY REGULATIONS STUDY. PHASE I REPORT", FEB. 20, 1989.

RECREATIONAL USES:

TENNIS AND RACQUETBALL CLUBS: RECOMMENDED REQUIREMENTS - SIX OFF-STREET PARKING SPACES PER COURT PLUS TWO SPACES PER 1,000 S.F. OF WEIGHT/EXERCISE ROOM PLUS ONE SPACE PER 1,000 S.F. REMAINING INDOOR SPACE

TOTAL NET USABLE SQUARE FOOTAGE OF BUILDING 'B'. 33,100 S.F. / 34,186 SF

SUBTOTAL OF EXERCISE AREA 15086 S.F.

EXERCISE AREA = 13,500 ÷ 1,000 = 13 × 2 = 26 SPACES

RACQUETBALL COURT = (15,600 S.F.) 12 COURTS x 6 SPACES = 42 SPACES

REMAINING AREA = 33,100 - 19,600 = 13,500 ÷ 1,000 = 13.5 = 14 SPACES

SPACES REQUIRED = 84 86

SPACES PROVIDED @ 8.5'x18' = 37 COMPACT CARS

SPACES PROVIDED @ 9'x18' = 193 STANDARD

TOTAL 230 SPACES

DIFFERENCE = 86

HANDICAP SPACES REQ'D = 6

HANDICAP SPACES PROV = 6

PROPOSED ADDITION

PARKING REQUIREMENTS PER FDP-118-A-III-1 PART 2 PARKING SPACES FOR EACH 1000SF

RECOMMENDED REQUIREMENTS FOR ENCLOSED BASKETBALL COURT FOR 1086 SQFT IS 2

TOTAL AREA FOR THE PROP. LIMIT OF DISTURBANCE 7907 SQ.FT.

LEGEND

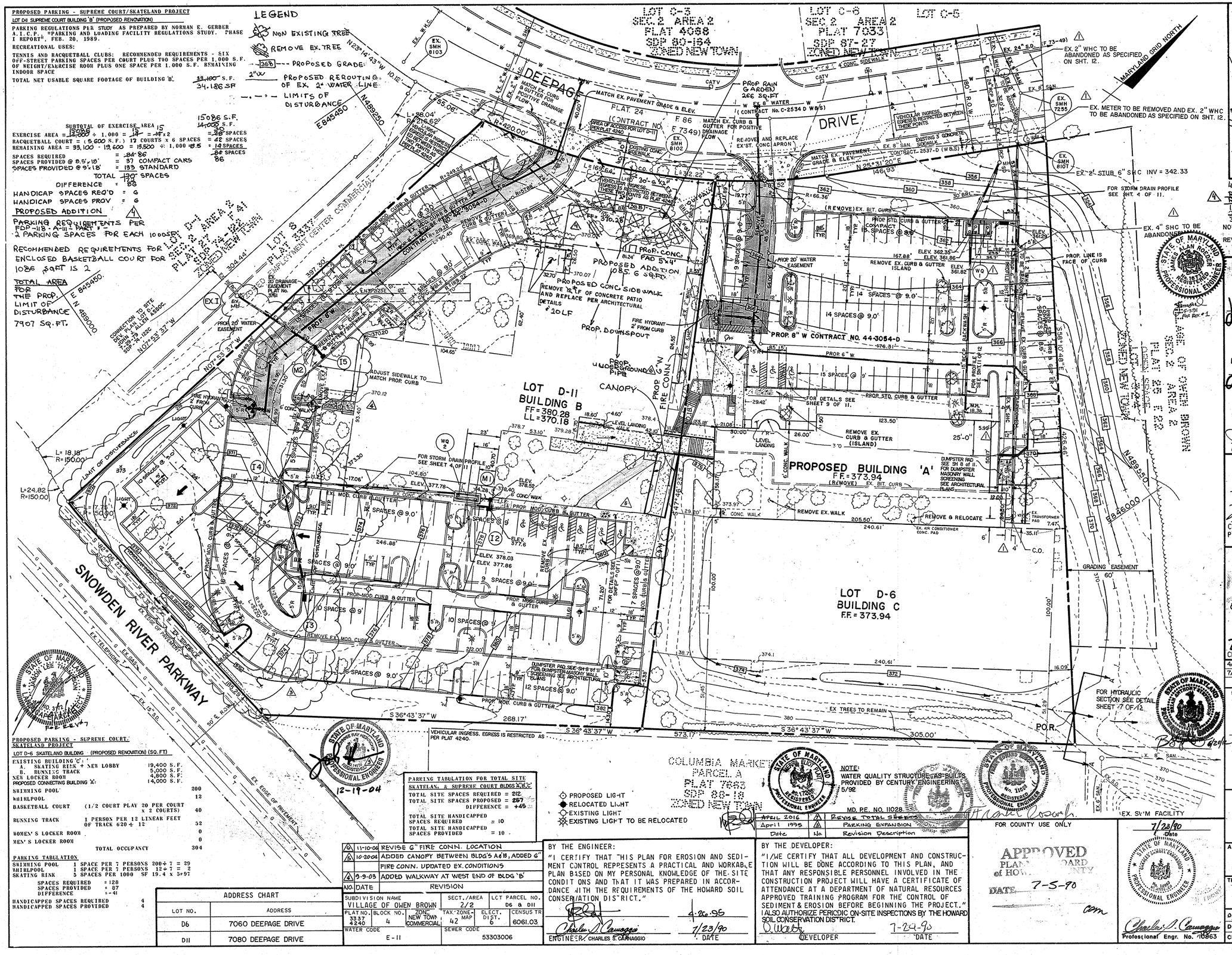
NON EXISTING TREE

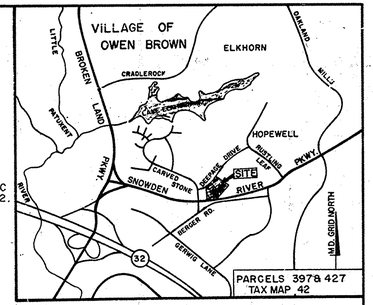
REMOVE EX. TREE

26% PROPOSED GRADE

2"W PROPOSED REROUTING OF EX. 2" WATER LINE

LIMITS OF DISTURBANCE





VICINITY MAP

SCALE: 1" = 2000'

4-25-2012 RED LINE REVISION:
1. PROPOSED ADDITION (1085.6 SQ.FT) TO BUILDING B
2. PROPOSED RAIN GARDEN (266 SQ.FT)
3. RELOCATION OF EX. 2" WATER LINE

NOTE: BUILDING DIMENSIONS ARE TO THE FACE OF BUILDING.

REVISION 1 ABANDON 2" WHC, REPLACE EX. 4" SHC W/6" SHC, REVISE 6" WHC INTO BLDG. JR 4-4-91.

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

U.S. SOIL CONSERVATION SERVICE — DATE 7/27/90

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

HOWARD S.C.D. — DATE 7/27/90

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

COUNTY HEALTH OFFICER — DATE 10/23/90

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

PLANNING DIRECTOR — DATE 11.1.90

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 10/26/90

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Acting DIRECTOR — DATE 10/16/90

CHIEF, BUREAU OF ENGINEERING — DATE 8/7/90

Date	No	Revision Description
4/2/90	1	REVISED PER HOWARD CO. COMMENTS
7/5/90	2	REVISED PER HOWARD CO. COMMENTS

OWNER/DEVELOPER (301) 381-0020

COLUMBIA ASSOCIATION
9861 BROKEN LAND
SUITE 300
COLUMBIA, MARYLAND 21046

SUPREME COURT/SKATELAND

LOT D-11 LOT D-6

CENTURY ENGINEERING, INC.
(301) 823-8070
CONSULTING ENGINEERS • PLANNERS
32 WEST ROAD
TOWSON, MARYLAND 21204

AREA: RECORD PLAT REFERENCE NO. 3337, 4240
VILLAGE OF OWEN BROWN
SECTION 2 AREA 2 LOTS D6 & D11
ELECTION DISTRICT NO. 6 HOWARD COUNTY, MD

TITLE: SITE DEVELOPMENT PLAN

Des By NAM	Scale 1" = 30'	Proj No 89-064	
Drn By ETJ	Date DEC. 26, 1989	Drawing No. 2 OF 14	7
Chk By DDS	Approved CSC		

PROPOSED PARKING - SUPREME COURT/SKATELAND PROJECT

LOT D-6 SKATELAND BUILDING (PROPOSED RENOVATION) (SQ.FT)

EXISTING BUILDING 'C':		
A. SKATING RINK + NEW LOBBY	19,400 S.F.	
B. RUNNING TRACK	5,000 S.F.	
NEW LOCKER ROOM	4,800 S.F.	
PROPOSED CONNECTING BUILDING 'A':	14,000 S.F.	
SWIMMING POOL		200
WHIRLPOOL		12
BASKETBALL COURT	(1/2 COURT PLAY 20 PER COURT x 2 COURTS)	40
RUNNING TRACK	1 PERSON PER 12 LINEAR FEET OF TRACK 620 ÷ 12	52
WOMEN'S LOCKER ROOM		0
MEN'S LOCKER ROOM		0
	TOTAL OCCUPANCY	304

PARKING TABULATION

SWIMMING POOL	1 SPACE PER 7 PERSONS 200 ÷ 7	= 29
WHIRLPOOL	1 SPACE PER 7 PERSONS 12 ÷ 7	= 2
SKATING RINK	5 SPACES PER 1000 SF 19.4 x 5	= 97
SPACES REQUIRED		= 128
SPACES PROVIDED		= 87
DIFFERENCE		= -41
HANDICAPPED SPACES REQUIRED		4
HANDICAPPED SPACES PROVIDED		4

PARKING TABULATION FOR TOTAL SITE

SKATELAND & SUPREME COURT BLDGS 'A', 'B', 'C'

TOTAL SITE SPACES REQUIRED = 212

TOTAL SITE SPACES PROPOSED = 257

DIFFERENCE = +45

TOTAL SITE HANDICAPPED SPACES REQUIRED = 10

TOTAL SITE HANDICAPPED SPACES PROVIDED = 10

PROPOSED LIGHT
RELOCATED LIGHT
EXISTING LIGHT
EXISTING LIGHT TO BE RELOCATED

NOTE: WATER QUALITY STRUCTURE AS-BUILTS PROVIDED BY CENTURY ENGINEERING 5/92

MD. P.E. NO. 11028

Date	No.	Revision Description
APRIL 2016	4	REVISE TOTAL SPACES
April 1995	3	PARKING EXPANSION

NO.	DATE	REVISION
4	11-10-04	REVISE 6" FIRE CONN. LOCATION
3	10-20-04	ADDED CANOPY BETWEEN BLDG'S A & B, ADDED 6" FIRE CONN. UPDATED EX. CONDITIONS
2	5-9-03	ADDED WALKWAY AT WEST END OF BLDG 'B'

SUBDIVISION NAME			SECT./AREA	LOT PARCEL NO.
VILLAGE OF OWEN BROWN			2/2	D6 & D11
PLAT NO.	BLOCK NO.	ZONE	TAX ZONE MAP	ELECT. DIST.	CENSUS TR
3337 4240	4	NEW TOWN COMMERCIAL	42	6	6061.03
WATER CODE			SEWER CODE	
E-11			53303006	

ADDRESS CHART

LOT NO.	ADDRESS
D6	7060 DEEPAGE DRIVE
D11	7080 DEEPAGE DRIVE

BY THE ENGINEER:

"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

4-26-95

ENGINEER CHARLES S. CAMAGGIO — DATE 7/23/90

BY THE DEVELOPER:

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT & EROSION BEFORE BEGINNING THE PROJECT." I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

DEVELOPER — DATE 7-24-90

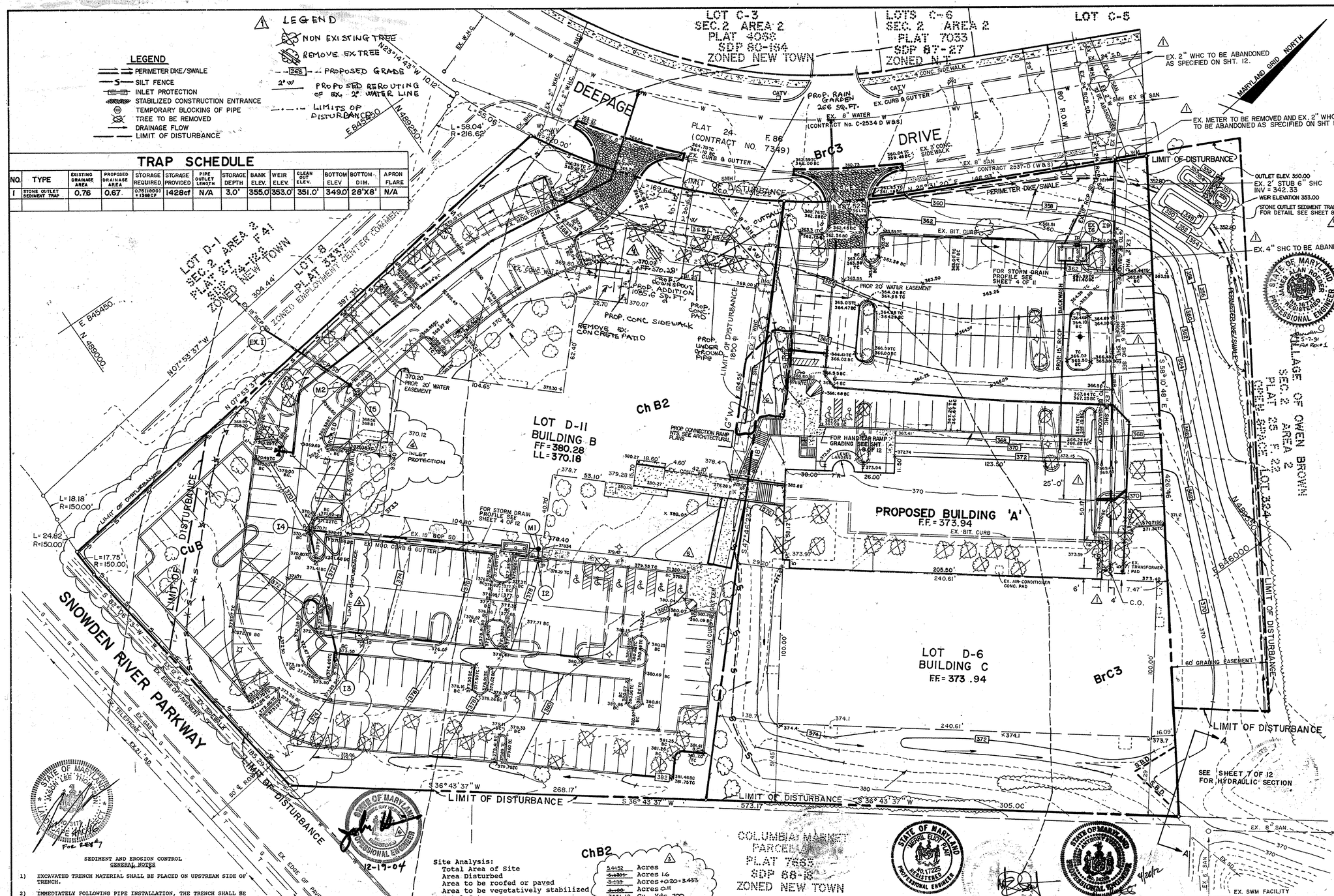
FOR COUNTY USE ONLY

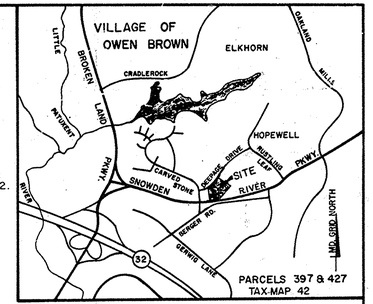
APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 7-5-90

7/23/90 Date

Professional Engr. No. 10863

SDP 90-124





VICINITY MAP

SCALE: 1" = 2000'

4-25-2012 RED LINE REVISION:
1. PROPOSED ADDITION (1085.6 SQ.FT.) TO BUILDING B
2. PROPOSED RAIN GARDEN (266 SQ.FT.)
3. RELOCATION OF EX. 2" WATER LINE

REVISION 1 ABANDON 2" WHC, REPLACE EX. 4" SHC W/6" SHC, REVISE 6" WHC INTO BLDG JR 4-4-91

TRAP SCHEDULE

NO.	TYPE	EXISTING DRAINAGE AREA	PROPOSED DRAINAGE AREA	STORAGE REQUIRED	STORAGE PROVIDED	PIPE OUTLET LENGTH	STORAGE DEPTH	BANK ELEV.	WEIR ELEV.	CLEAN OUT ELEV.	BOTTOM ELEV	BOTTOM DIM.	APRON FLARE
1	STONE OUTLET SEDIMENT TRAP	0.76	0.67	0.76(1800) +1368CF	1428cf	N/A	3.0'	355.0'	353.0'	351.0'	349.0'	28'X8'	N/A

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

U.S. SOIL CONSERVATION SERVICE — DATE 7/27/90

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

HOWARD S.C.D. — DATE 7/27/90

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

COUNTY HEALTH OFFICER — DATE 10/23/90

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

PLANNING DIRECTOR — DATE 11.1.90

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 10/22/90

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

DIRECTOR — DATE 10/16/90

CHIEF, BUREAU OF ENGINEERING — DATE 8/2/90

Date	No	Revision Description
4-2-90	1	REVISED PER HOWARD COUNTY COMMENTS
7-5-90	2	REVISED PER HOWARD COUNTY COMMENTS

OWNER/DEVELOPER (301) 381-0020
COLUMBIA ASSOCIATION
9661 BROKEN LAND
SUITE 300
COLUMBIA, MARYLAND 21046

SUPREME COURT/SKATELAND
LOT D-11 LOT D-6

CENTURY ENGINEERING, INC.
(301) 823-8070
CONSULTING ENGINEERS • PLANNERS
32 WEST ROAD
TOWSON, MARYLAND 21204

AREA: RECORD PLAT REFERENCE NO. 3337, 4240
VILLAGE OF OWEN BROWN
SECTION 2 AREA 2 LOTS D6 & D11
ELECTION DISTRICT NO. 6 HOWARD COUNTY, MD

TITLE: GRADING AND SEDIMENT EROSION CONTROL PLAN

Des By	NAM	Scale	1" = 30'	Proj No	89-064
Drn By	MAG	Date	DEC. 26, 1989	Drawing No.	3 OF 14
Chk By	DDS	Approved	CSC		

Professional Engr. No. 10963

SEDIMENT AND EROSION CONTROL
GENERAL NOTES

1) EXCAVATED TRENCH MATERIAL SHALL BE PLACED ON UPSTREAM SIDE OF TRENCH.
2) IMMEDIATELY FOLLOWING PIPE INSTALLATION, THE TRENCH SHALL BE BACK FILLED, COMPACTED AND STABILIZED (MULCHED, SEEDED, SODDED MECHANICAL STABILIZATION, OR PAVED) WITHIN SEVEN DAYS.
3) SILT FENCES SHALL BE PLACED IMMEDIATELY DOWNSTREAM OF ANY DISTURBED AREA INTENDED TO REMAIN DISTURBED LONGER THAN ONE WORKING DAY. (SEE SCE DRAWING SF-1.)
4) THE CONTRACTOR SHALL OPEN ONLY THE MINIMUM PRACTICAL LENGTH OF TRENCH REQUIRED TO COMPLETE THAT DAY'S SCHEDULED WORK.
5) ALL SEDIMENT AND EROSION CONTROL PRACTICES AND VEGETATIVE STABILIZATION SHALL BE IN ACCORDANCE WITH THE "1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL."

ADDRESS CHART	
LOT NO.	ADDRESS
D6	7060 DEEPAGE DRIVE
D11	7080 DEEPAGE DRIVE

Site Analysis:

Total Area of Site	5.4452 Acres
Area Disturbed	~~5.4309~~ Acres 1.6
Area to be roofed or paved	~~3.433~~ Acres +0.20 = 3.433
Area to be vegetatively stabilized	~~3.098~~ Acres 0.11
Total Cut	~~3551.12~~ Cu. Yds. 700
Total Fill	~~4519.04~~ Cu. Yds. 20
Offsite waste/borrow area location	TO BE DETERMINED

NO.	DATE	REVISION
4	4-1-16	REVISE TOTAL SHEETS
3	11-10-04	REVISED 6" FIRE CONN. LOCATION
2	10-20-04	ADDED CANOPY BETWEEN BLDG'S A&B, ADDED 6" FIRE CONN., UPDATED EX. CONDITIONS
1	9-9-03	ADDED WALKWAY AT WEST END OF BLDG 'B'

SUBDIVISION NAME	SECT./AREA	LOT PARCEL NO.
VILLAGE OF OWEN BROWN	2/2	D6 & D11

PLAT NO.	BLOCK NO.	ZONE	TAX/ZONE MAP	ELECT. DIST.	CENSUS TR
3337 4240	4	NEW TOWN COMMERCIAL	42	6	6061.03

WATER CODE E-11 — SEWER CODE 53303006

BY THE ENGINEER:
"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

ENGINEER, CHARLES S. BONNAGGIO — DATE 7/23/90

BY THE DEVELOPER:
"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT & EROSION BEFORE BEGINNING THE PROJECT." I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."

DEVELOPER — DATE 7-24-90

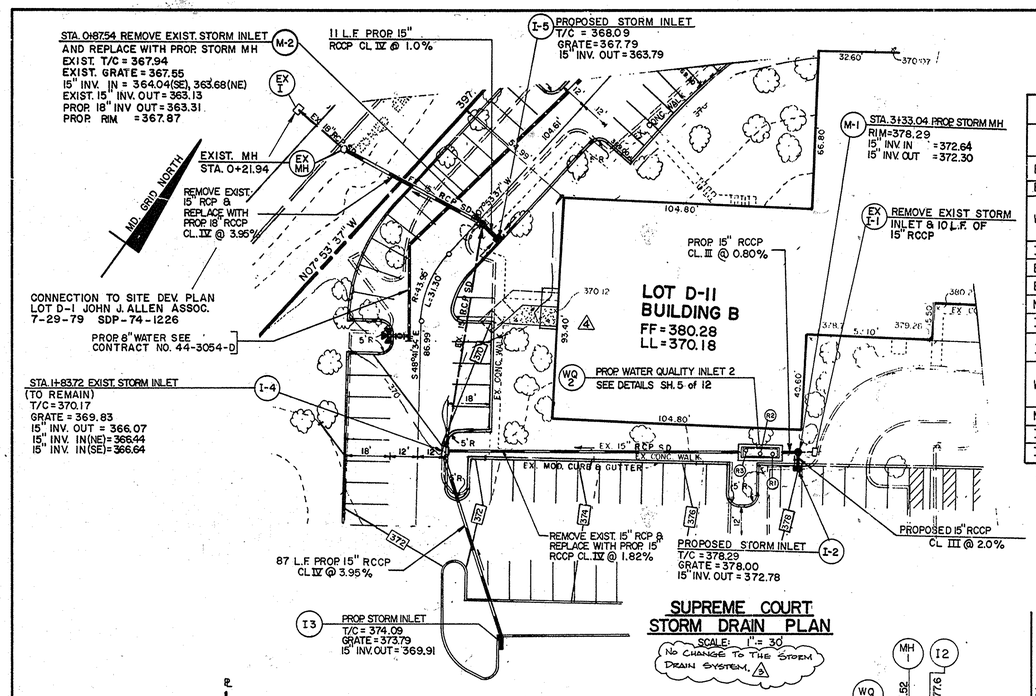
Date	No	Revision Description
April 1995	4	PARKING EXPANSION

FOR COUNTY USE ONLY

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 7-5-90

Date 7/23/90

SDP 90-124



SUPREME COURT STORM DRAIN PLAN

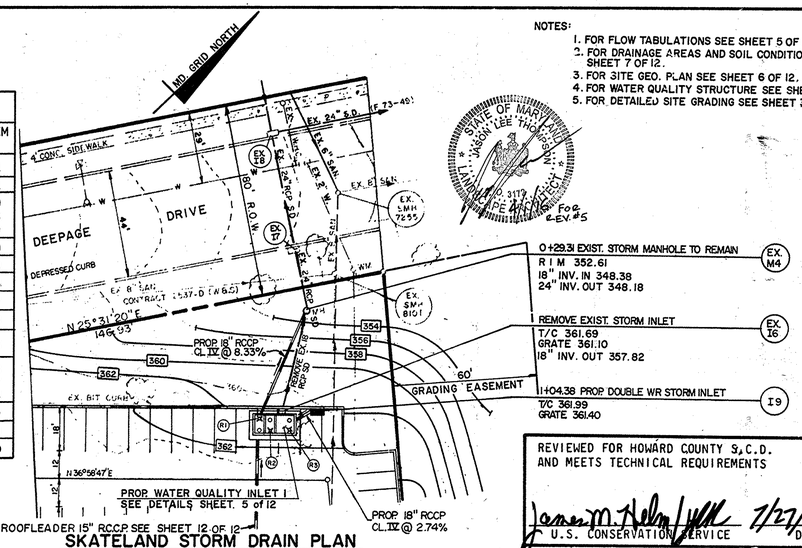
SCALE: 1" = 30'

No CHANGE TO THE STORM DRAIN SYSTEM. 3

MANHOLE & INLET SCHEDULE					
NO.	COORDINATES *		INV. IN	INV. OUT	GRATE/RIM ELEV.
EX. I7	N 489609.2276	E 845721.2600	347.51	347.51	351.41
EX. M4	N 489595.5801	E 845747.1955	348.46	348.18	352.61
WQ1	N 489556.6035	E 845778.3776	356.35	352.35	(R3)361.50 (R2)361.56 (R1)361.59
I9	N 489574.1393	E 845784.1821	—	356.64	361.40
EX. I	N 489097.4082	E 845497.9301	359.88		363.58
EX. MH	N 489100.4625	E 845519.6592	360.72	360.72	364.64
M2	N 489125.6584	E 845580.2191	364.04	363.31	367.87
I5	N 489127.0327	E 845590.1310	—	363.79	367.79
I4	N 489052.4730	E 845642.6277	366.64 366.44	366.07	369.83
WQ2	N 489152.9195	E 845730.3007	372.22	368.72	(R3)377.38 (R2)377.77 (R1)378.04
M1	N 489164.9737	E 845740.8219	372.64	372.30	378.29
I2	N 489162.3706	E 845743.8267	—	372.78	378.00
I3	N 489017.5640	E 845723.1437	—	369.91	373.79

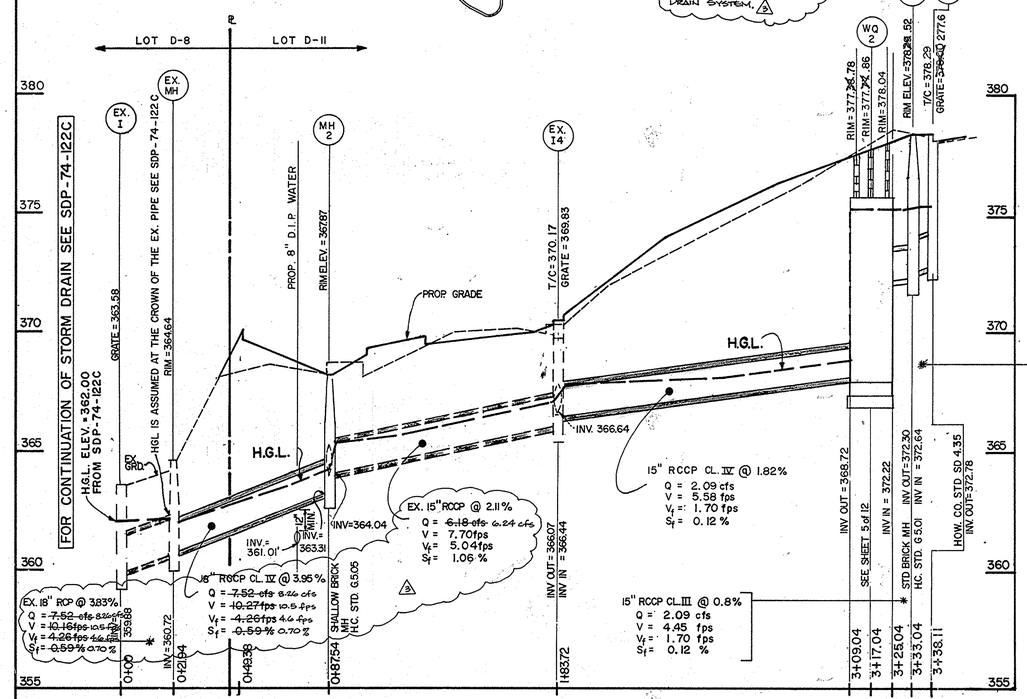
* CENTER OF STRUCTURE

NOTES:
1. FOR FLOW TABULATIONS SEE SHEET 5 OF 12.
2. FOR DRAINAGE AREAS AND SOIL CONDITIONS SEE SHEET 7 OF 12.
3. FOR SITE GEO. PLAN SEE SHEET 6 OF 12.
4. FOR WATER QUALITY STRUCTURE SEE SHEET 5 OF 12.
5. FOR DETAILED SITE GRADING SEE SHEET 3 OF 12.



SKATELAND STORM DRAIN PLAN

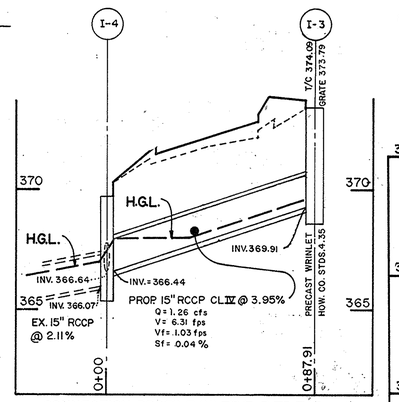
SCALE 1" = 30'



SUPREME COURT STORM DRAIN PROFILE

NOTE:
WATER QUALITY STRUCTURE AS-BUILTS PROVIDED BY CENTURY ENGINEERING 5/92

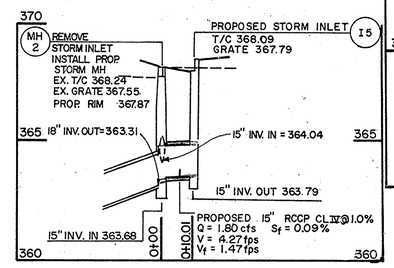
SCALE: HORZ. 1" = 30' VERT. 1" = 3'



CONNECTION PROFILE INLET I-5 TO I-4

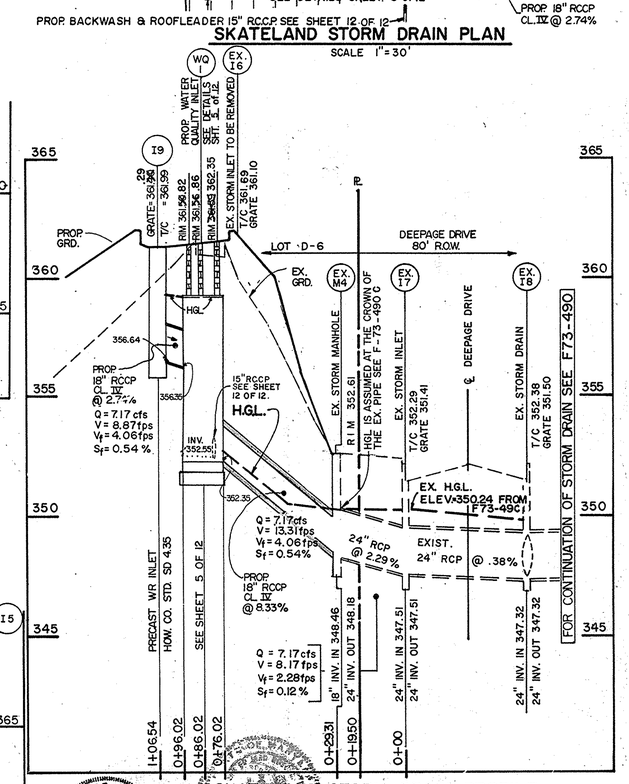
SCALE: HORZ. 1" = 30' VERT 1" = 3'

PROP. 15" RCCP CL. III @ 2.0%
Q = 2.09 cfs
V = 5.72 fps
Vf = 1.70 fps
Sf = 0.12 %



CONNECTION PROFILE INLET I 5 TO MH M2

SCALE: HORZ. 1" = 30' VERT. 1" = 3'



SKATELAND STORM DRAIN PROFILE

SCALE: HORZ. 1" = 30' VERT. 1" = 3'

Date	No.	Revision Description
April 1995	3	PARKING EXPANSION

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

James M. Helm 7/27/90
U.S. CONSERVATION SERVICE — DATE

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

John R. Robertson 7/27/90
HOWARD S.C.D. — DATE

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

Joyce M. Beadenkopf 10/23/90
COUNTY HEALTH OFFICER — DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

11.1.90
PLANNING DIRECTOR — DATE

10/26/90
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE

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

10/16/90
Acting DIRECTOR — DATE

8/7/90
CHIEF, BUREAU OF ENGINEERING — DATE

Date	No	Revision Description
4-2-90	1	REVISED PER HOWARD CO. COMMENTS
7-5-90	2	REVISED PER HOWARD CO. COMMENTS

OWNER/DEVELOPER
(301) 381-0020
COLUMBIA ASSOCIATION
9861 BROKEN LAND
SUITE 300
COLUMBIA, MARYLAND 21046

CENTURY ENGINEERING, INC.
(301) 823-8070
CONSULTING ENGINEERS • PLANNERS
32 WEST ROAD
TOWSON, MARYLAND 21204

AREA: RECORD PLAT REFERENCE NO. 3337, 4240
VILLAGE OF OWEN BROWN
SECTION 2 AREA 2 PARCELS D-68 & D-11
ELECTION DISTRICT NO. 6 HOWARD COUNTY, MD.

TITLE: STORM DRAIN PROFILES

Des By	NAM	Scale	AS SHOWN	Proj No	89-064
Drn By	MAG	Date	DEC. 26, 1989	Drawing No.	4 OF 14
Chk By	DDS	Approved	CSC		

ADDRESS CHART	
LOT NO.	ADDRESS
D6	7060 DEEPAGE DRIVE
D11	7080 DEEPAGE DRIVE

NO	DATE	REVISION
3	4-1-16	REVISE TOTAL SHEETS
2	9-9-03	ADDED WALKWAY AT WEST END OF BLDG 'B'

SUBDIVISION NAME			ELECT. AREA	LOT PARCEL NO.
VILLAGE OF OWEN BROWN			2/2	D6 & D11
PLAT NO.	BLOCK NO.	ZONE	TAX ZONE	ELECT. DIST.	ENSITR
3337 4240	4	NEW TOWN COMMERCIAL	42	6	6061.03
WATER CODE			SEWER CODE		
E-11			53303006		

BY THE ENGINEER:
"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

7-26-90
ENGINEER: CHARLES S. CARNEGGIO — 7/23/90 DATE

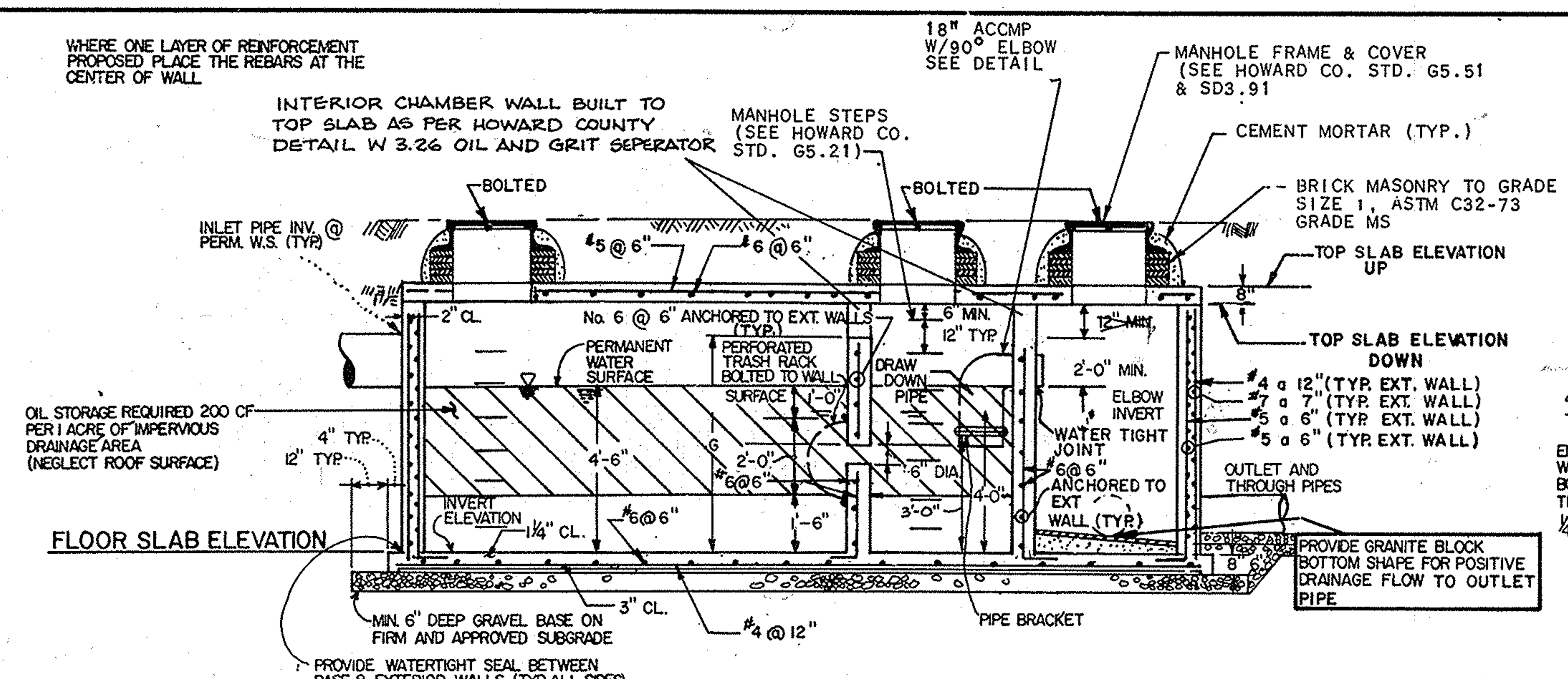
BY THE DEVELOPER:
"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT & EROSION BEFORE BEGINNING THE PROJECT." I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

7-26-90
DEVELOPER — DATE

FOR COUNTY USE ONLY
APPROVED PLANNING BOARD of HOWARD COUNTY
DATE 7-5-90

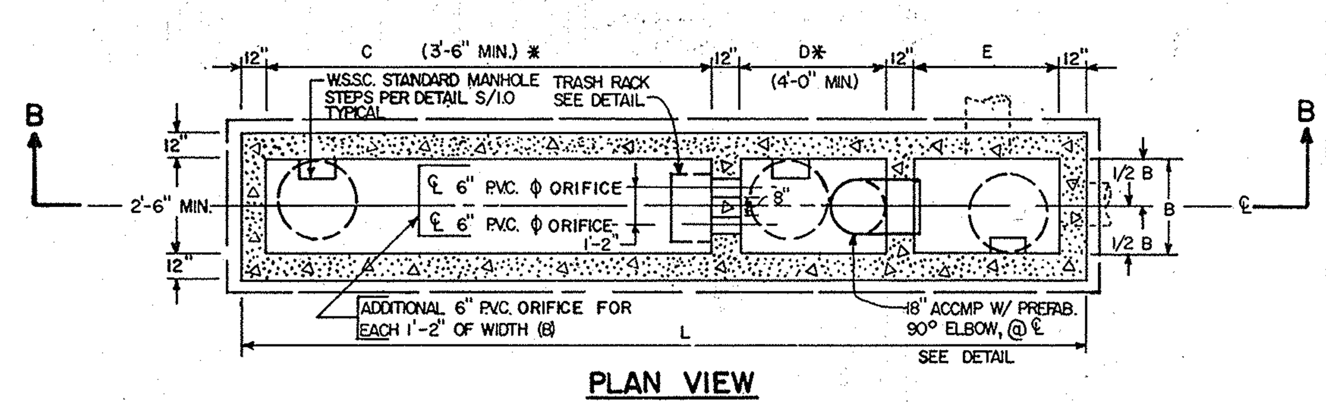
7/23/90
Date
Professional Engr. No. 10963

SDP 90-124



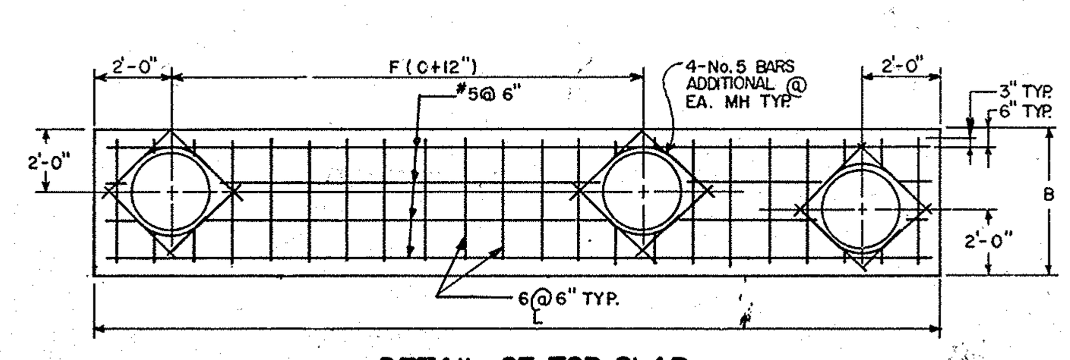
SECTION B-B

WQ #1-R1 NO LADDER 4-8-92
INSPECTED 5-4-92 LADDER INSTALLED
AS PER DRAWING

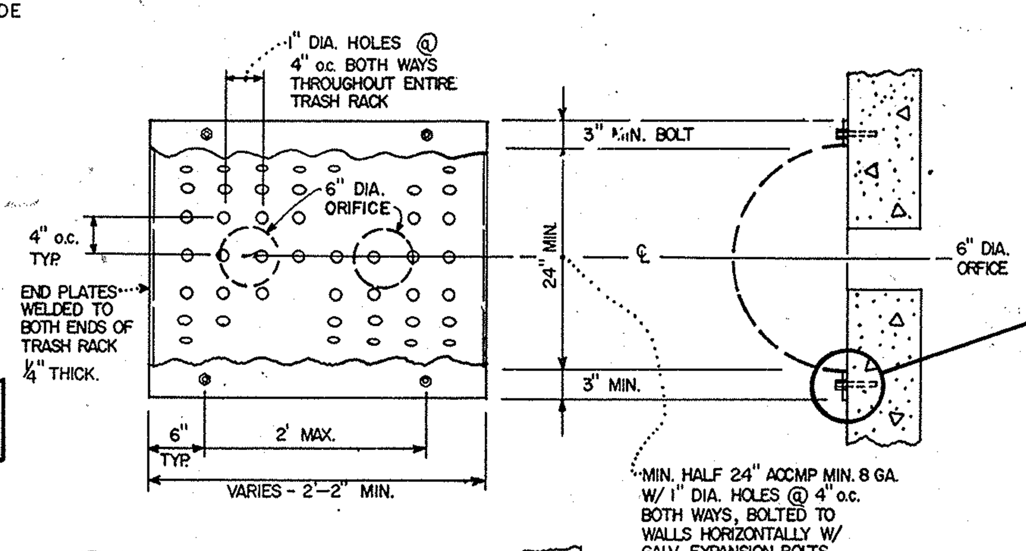


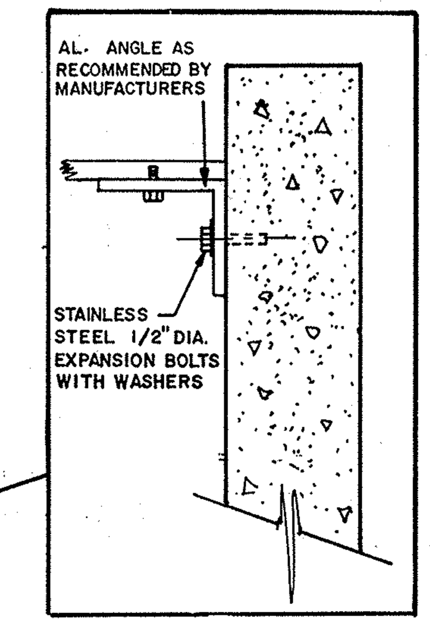
PLAN VIEW

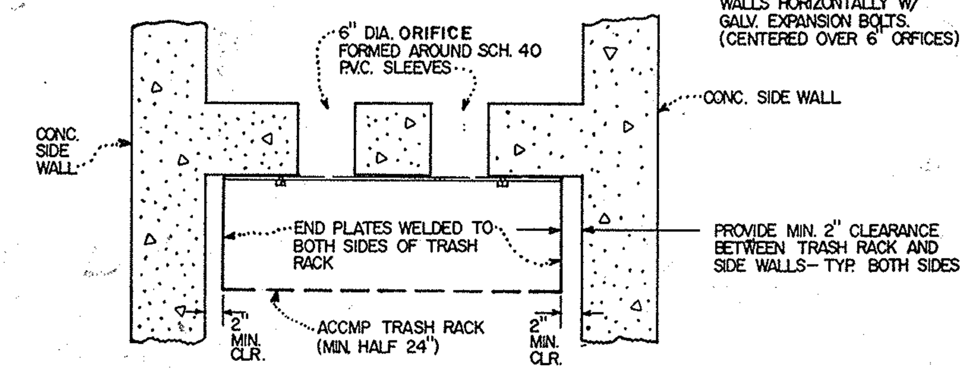
* WHEN COMBINED LENGTH OF OIL AND GRIT CHAMBERS EXCEEDS 12', C = 2/3 TOTAL AND D = 1/3 TOTAL.



DETAIL OF TOP SLAB





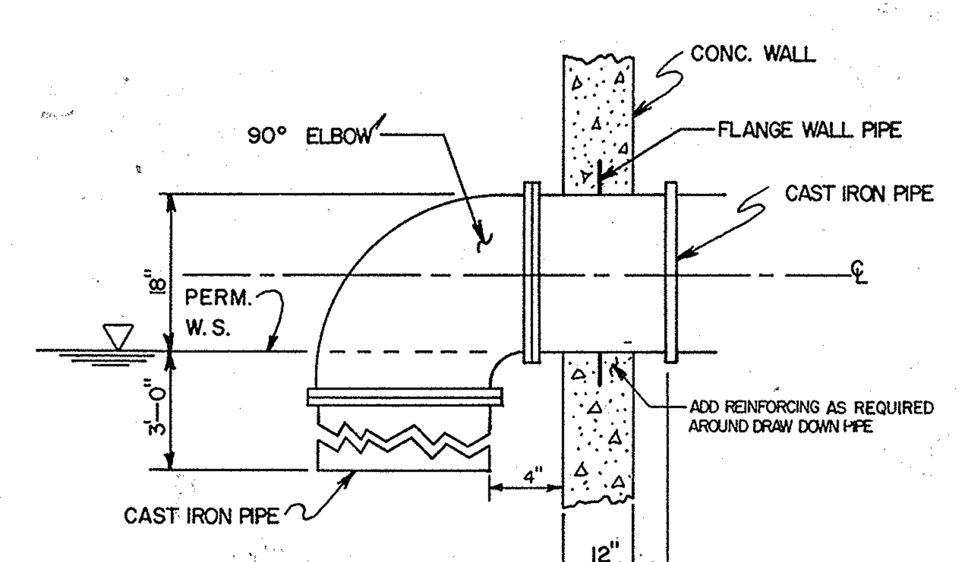


PLAN VIEW

ACCMP TRASH RACK

SCALE: 3/4" = 1'-0"

NOTE: PAINT ALUMINUM SURFACE IN CONTACT WITH CONCRETE ACCORDING TO W.S.S.C. SPECIFICATIONS.



90° CAST IRON ELBOW

SCALE : 3/4" = 1'-0"

(DRAW DOWN PIPE)

STORM DRAIN FLOW TABULATION FORM

sf/s vf/v

LOCATION FROM	LOCATION TO	AREA	ACRES SUB.	ACRES TOTAL	COEFF. "C"	CA	ΣCA	TIME CONC. - MIN. INLET	DRAIN	TOTAL	INTEN. "I"	Q = CIA CFS	PIPE N = 0.014 SIZE	SLOPE	VEL.	LGTH.	REMARKS
I9	WQ I	E	1.55	—	0.72	1.12	—	7.5	—	7.50	6.43	7.17	18"	0.54 / 2.74	4.06 / 8.87	10'	d = 46.67%
WQ I	EX. M4	E	—	1.55	—	—	1.12	—	—	7.50	6.43	7.17	18"	0.54 / 8.33	4.06 / 13.31	48'	d = 4.42%
EX. M4	EX. I7	E	—	1.55	—	—	1.12	—	—	7.50	6.43	7.17	24"	0.12 / 2.29	2.28 / 8.17	29'	d = 32.39%
BLDG.	WQ I	—	—	—	1.0	—	—	—	—	—	—	1.11	8"	0.50 / 8.70	3.18 / 10.90	135'	d = 33.32% h = 0.010 * BACK WASH LINE
I2	M I	B	0.47	—	0.70	0.33	—	7.81	—	7.81	6.36	2.09	15"	0.12 / 2.00	1.70 / 5.72	5'	d = 33.82%
M I	WQ 2	B	—	0.47	—	—	0.33	—	—	7.81	6.36	2.09	15"	0.12 / 1.00	1.70 / 4.45	8'	d = 40.74%
WQ 2	I4	B	—	0.47	(3) —	—	0.33	—	—	7.81	6.36	2.09	15"	0.12 / 1.82	1.70 / 5.53	125'	d = 34.67%
I3	I4	A	0.26	—	0.74	0.19	—	7.10	—	7.10	6.52	1.26	15"	0.04 / 3.95	1.03 / 6.31	8'	d = 21.96%
I4	M2	ABC	~~0.75~~ 0.68	~~1.48~~ 1.41	~~0.64~~ 0.72	~~0.48~~ 0.49	~~1.00~~ 1.01	8.91	—	8.91	6.18	~~6.18~~ 6.24	15"	1.06 / 2.11	5.04 / 7.70	96'	d = 62.20%
I5	MH 2	D	~~0.61~~ 0.69	—	~~0.52~~ 0.64	~~0.32~~ 0.44	—	10.98	—	10.98	5.70	~~1.80~~ 2.52	15"	0.09 / 1.00	1.47 / 4.27	11'	d = 37.56%
MH 2	EX. MH	ABCD	—	~~2.09~~ 2.10	—	—	~~1.32~~ 1.45	—	—	10.98	5.70	~~7.52~~ 8.26	18"	0.59 / 3.95	4.26 / 10.27	66'	d = 43.24%
EX. MH2	EX. I	ABCD	—	~~2.09~~ 2.10	—	—	~~1.32~~ 1.45	—	—	10.98	5.70	~~7.52~~ 8.26	18"	0.59 / 3.83	4.26 / 10.16	22'	d = 43.61%

SEQUENCE OF CONSTRUCTION AND INSPECTOR'S CHECK-OFF LIST FOR SM OIL/GRIT SEPARATORS

STAGE	DEVELOPER'S/ENGINEER APPROVAL INITIALS	DATE	H.C.D.P.W. INSPECTOR'S APPROVAL INITIALS	DATE
1. PRE-CONSTRUCTION MEETING *				
2. INSTALLATION OF OIL/GRIT SEPARATOR AND ASSOCIATED STORM DRAINAGE: *				
a. FOOTING SUBGRADE PRIOR TO POURING. *				
b. FOOTING FORMED AND STEEL SET PRIOR TO POURING. *				
c. STRUCTURE SIDES FORMED AND STEEL SET PRIOR TO POURING. *				
d. PRIOR TO TOP SLAB AND MANHOLES BEING SET ON, HCDPW INSPECTOR MUST INSPECT ALL CAST-IN-PLACE AND PRE-CAST STRUCTURES FOR PROPER ASSEMBLY. *				
3. SITE IS PERMANENTLY STABILIZED, SEDIMENT CONTROL MEASURES REMOVED AND ALL SEDIMENT AND DEBRIS REMOVED FROM THE STRUCTURE. *				
4. FINAL INSPECTION. *				

NOTE: SEE CONSTRUCTION SPECIFICATIONS FOR DETAILED REQUIREMENTS.
* MANDATORY 72 HOUR NOTIFICATION/APPROVAL OF H.C.D.P.W. INSPECTOR PRIOR TO PROCEEDING WITH NEXT STAGE.

MAINTENANCE NOTES (WATER QUALITY STRUCTURE WASTE)

1. WATER QUALITY STRUCTURES WILL REQUIRE PERIODICAL CLEANING. OWNERS OF THESE FACILITIES WILL HAVE TO CLEAN THEM QUARTERLY PER YEAR FROM THE APPROVAL OF INSTALLATION, OR AS DETERMINED BY THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
2. MAINTENANCE OF THESE FACILITIES WILL CONSIST OF CLEANING OUT THE SEPARATOR AND DISPOSAL OF THE WASTE AND THE REPAIR OF THE FACILITY AS NEEDED. PERIODIC INSPECTIONS OF THESE FACILITIES WILL BE MADE BY THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
3. THE DISPOSAL OF THE LIQUID AND SOLID MATTER SHOULD BE AS FOLLOWS:
   A. ALL LIQUID MATERIAL IN THE SEPARATOR INLET SHALL BE PUMPED INTO A SUITABLE TANK TRUCK AND DISPOSED OF AT AN APPROVED SANITARY DISTRICT DISCHARGE MANHOLE OR BE TAKEN TO AN APPROVED SEWAGE TREATMENT PLANT FOR DISCHARGE.
   B. THE SOLID MATERIAL SHALL BE LANDFILLED IN AN APPROVED SANITARY LANDFILL.
4. THE INLET PIPES, TRASH RACKS, GRATES, AND STRUCTURAL PARTS SHALL BE REPAIRED AS NEEDED.

CONSTRUCTION NOTES:

1. SILT AND DEBRIS SHALL NOT BE ALLOWED TO ENTER THE STRUCTURES UNTIL CONTRIBUTING DRAINAGE AREAS HAVE BEEN PERMANENTLY STABILIZED.
2. ALL OPENINGS TO STRUCTURES SHALL BE PROTECTED WITH THE APPROPRIATE SEDIMENT CONTROL MEASURES DURING CONSTRUCTION.

INSPECTION NOTES:

1. PRIOR TO START OF CONSTRUCTION ON WATER QUALITY STRUCTURES, THE H.C.D.P.W. INSPECTOR MUST BE CALLED 72 HOURS IN ADVANCE AT 792-7272.
2. THE H.C.D.P.W. INSPECTOR MUST BE NOTIFIED 792-7272, AT EACH OF THE FOLLOWING STAGES:
   A. APPROVAL OF SUBGRADE FOR FOOTINGS.
   B. FOOTING FORMED AND STEEL SET PRIOR TO POURING.
   C. STRUCTURE SIDES FORMED AND STEEL SET PRIOR TO POURING.
   D. PRIOR TO TOP SLAB AND MANHOLES BEING SET, MCDEP INSPECTOR MUST CHECK STRUCTURE AND ALL DEBRIS AND SILT IN STRUCTURE REMOVED.
   E. WHEN SITE IS PERMANENTLY STABILIZED AND SEDIMENT CONTROL MEASURES TO PROTECT INLET ARE TO BE REMOVED.

WATER QUALITY STRUCTURES

GENERAL NOTES:

1. USE POURED-IN PLACE CONCRETE FOR THE ENTIRE STRUCTURE.
2. REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION FOR MATERIALS AND METHODS OF CONSTRUCTION.
3. f'c = 4000 psi AT 28 DAYS.
4. ALL REINFORCING STEEL TO BE ASTM A615, GR. 60.
5. THE TOP 4 INCHES OF WALLS MAY BE BRICK MASONRY FOR LEVELING, IF REQUIRED. BRICK MASONRY SHALL COMPLY WITH THE LATEST S.H.A. SPECIFICATION.

STRUCT. NUMBER	DRAIN. AREA	VOL. REQ'D	VOL. PROV.	DIMENSIONS L	B	C*	D*	E	F	G	FLOOR SLAB ELEV.	18" ACCMP ELBOW INV.	THROAT LENGTH if req'd	TOP SLAB ELEV. DOWN	UP
WQ 1	1.548	620.0	624.0	20.00	8.00	8.00	4.00	4.00	9.00	6.50	351.85	356.35	N/A	359.35	360.02
WQ 2	0.58	232.0	234.0	16.00	4.00	5.00	4.00	4.00	5.00	6.50	367.72	372.22	N/A	375.22	375.89

NOTES:

FOR STORM DRAIN INVERTS, SEE STORM DRAIN PROFILES. SHEETS 4 & 12 of 12.

STORAGE REQUIRED = 40 c.f. PER 0.1 Ac. OF DRAINAGE AREA.
(TOTAL STORAGE COMPUTED TO DEPTH (G))

* WHEN COMBINED LENGTH OF OIL AND GRIT CHAMBERS EXCEEDS 12', "D" = 1/2 X "C" ("C" = 2/3 TOTAL AND "D" = 1/3 TOTAL).

NOTE:
WATER QUALITY STRUCTURE AS-BUILTS
PROVIDED BY CENTURY ENGINEERING 5/92

MD. P.E. NO. 11028

WATER QUALITY CONTROL STRUCTURE

NOT TO SCALE

ALL DIMENSIONS ARE MINIMUM DIMENSIONS
ALSO SEE HOWARD CO. STD. DETAILS W3.26 THRU W3.28

STATE OF MARYLAND — JASON LEE THOMPSON — No. 3172 — LANDSCAPE ARCHITECT — FOR REV #4

STATE OF MARYLAND — MERRIL ELIOT PLAIT — No. 17225 — REGISTERED PROFESSIONAL ENGINEER

STATE OF MARYLAND — FRANK EDWARD ROSCOE, JR. — No. 11028 — REGISTERED PROFESSIONAL ENGINEER

Date	No.	Revision Description
4-1-16	4	REVISE TOTAL SHEETS
April 1995	3	PARKING EXPANSION

REVIEWED FOR HOWARD COUNTY S.C.D. AND MEETS TECHNICAL REQUIREMENTS
James M. Helm 7/27/90
U.S. SOIL CONSERVATION SERVICE — DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT
John R. Robertson 7/27/90
HOWARD S.C.D. — DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
Joyce M Boyd 10/23/90
COUNTY HEALTH OFFICER — DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
11.1.90
PLANNING DIRECTOR — DATE

11/20/9
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Ronald Pepson 10/16/90
Acting DIRECTOR — DATE

William C. Riley 8/7/90
CHIEF, BUREAU OF ENGINEERING — DATE

Date	No	Revision Description
4-2-90	1	REVISED PER HOWARD CO. COMMENTS
7-5-90	2	REVISED PER HOWARD CO. COMMENTS

OWNER/DEVELOPER (301) 381-0020
COLUMBIA ASSOCIATION
9861 BROKEN LAND
SUITE 300
COLUMBIA, MARYLAND 21046

SUPREME COURT/SKATELAND

LOT D-11 — LOT D-6

CENTURY ENGINEERING, INC.
(301) 823-8070
CONSULTING ENGINEERS • PLANNERS
32 WEST ROAD
TOWSON, MARYLAND 21204
(301) 823-8070

AREA: RECORD PLAT REFERENCE NO. 3337, 4240
VILLAGE OF OWEN BROWN
SECTION 2 AREA 2 LOTS D-6, D-11
ELECTION DISTRICT NO. 6 HOWARD COUNTY, MD.

TITLE: **WATER QUALITY INLET DETAILS**

Des By NAM	Scale 1" = 30'	Proj No 89-064
Drn By FLP	Date DEC. 26, 1989	Drawing No.
Chk By DDS	Approved CSC	5 OF 14 (4)

FOR COUNTY USE ONLY
APPROVED PLANNING BOARD of HOWARD COUNTY
DATE 7-5-90

7/23/90
Date
STATE OF MARYLAND — CHARLES SAMUEL CARNAGGIO — No. 10963 — REGISTERED PROFESSIONAL ENGINEER
Professional Engr. No. 10963

BY THE ENGINEER:
"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."
4-26-95
Charles S. Carnaggio 7/23/90
ENGINEER: CHARLES S. CARNAGGIO — DATE

BY THE DEVELOPER:
"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT & EROSION BEFORE BEGINNING THE PROJECT."
I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.
D. Watts 7-24-90
DEVELOPER — DATE

ADDRESS CHART	
LOT NO.	ADDRESS
D-6	7060 DEEPAGE DRIVE
D-11	7080 DEEPAGE DRIVE

SUBDIVISION NAME			SECT./AREA		LOT PARCEL NO.
VILLAGE OF OWEN BROWN			2/2		D-6 & D-11
PLAT NO. 3337 4240	BLOCK NO. 4	ZONE NEW TOWN COMMERCIAL	TAX/ZONE-MAP 42	ELECT. DIST. 6	CENSUS TR 6061.03
WATER CODE E-11			SEWER CODE 53303006		

SDP 90-124

BASELINE COORDINATES

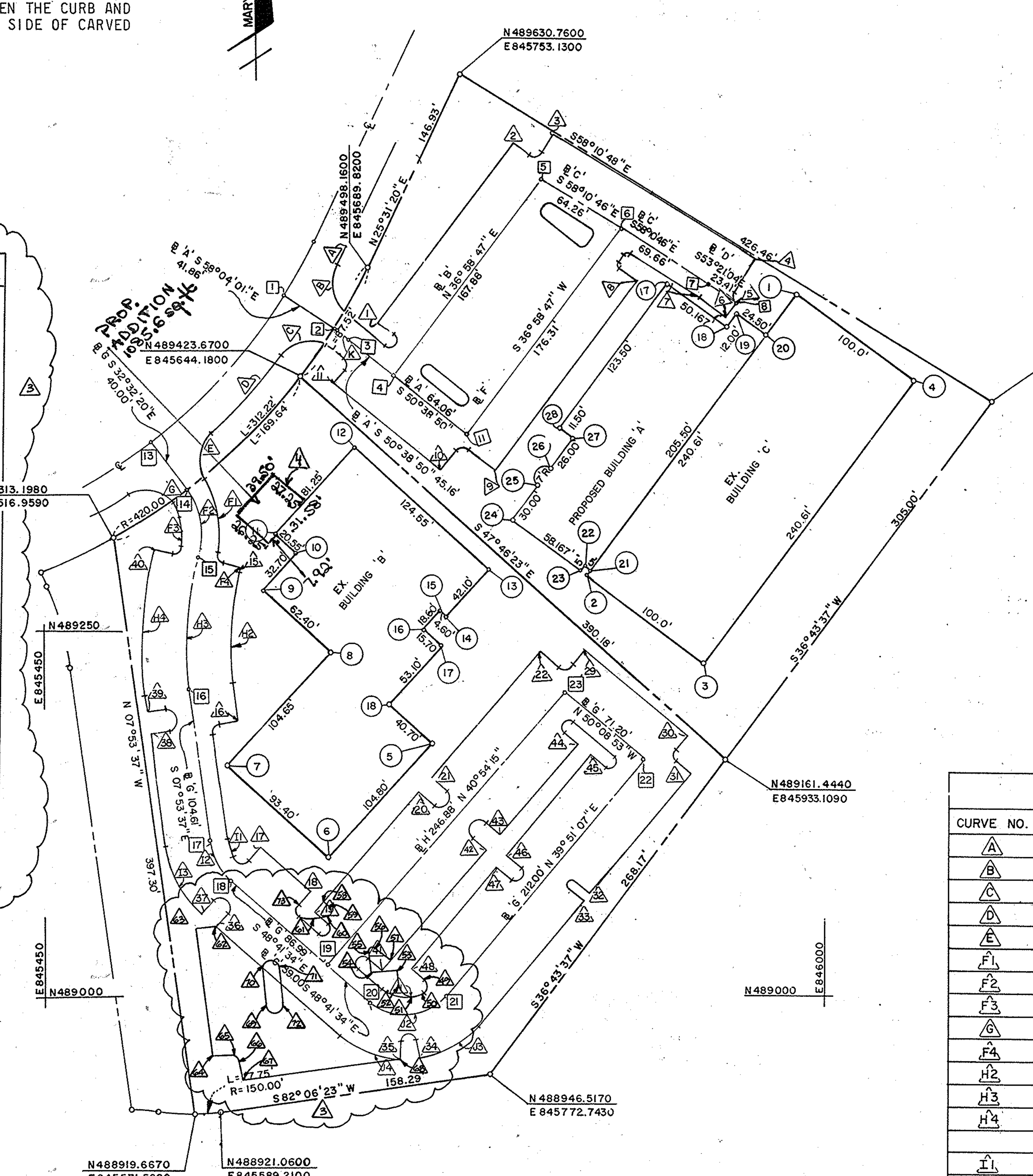
POINT	STATION	NORTH	EAST	BASELINE
1	0+00	489478.1323	845633.2993	A
2	0+41.86	489455.9930	845668.8217	A
3	0+46.74	489453.1485	845672.7886	A
4	0+91.89 / 0+00	489424.5151	845707.7062	A/B
5	1+67.88 /0+00	489560.2275	845809.8980	B/C
6	1+76.31 /0+00	489526.3455	845864.5001	C/F
7	0+69.66/0+00	489501.9028	845903.8904	C/D
8	0+23.41	489474.8840	845940.1276	D.
-				
11	0+00 / 1+55.95	489383.8984	845757.2371	F/A
13	0+00	489380.1336	845545.3245	G
14	0+40.04	489346.3803	845566.8599	G
15	0+88.82	489299.5415	845573.7673	G
16	1+79.26	489209.9467	845567.6191	G
17	2+83.87	489106.3331	845581.9852	G
18	3+15.17	489079.3520	845596.5089	G
19	4+02.15/0+00	489021.9330	845661.8509	G/H
20	4+41.15	488996.1920	845691.1437	G
21	4+98.35	489000.1475	845742.3105	G
22	7+10.35	489162.9007	845878.1611	G
23	7+81.55 / 2+46.88	489208.5232	845823.5039	G/H

HOWARD COUNTY BENCH MARKS

1. STATION: 2341003, ELEVATION: 367.231 FEET
COORDINATES: NORTH 491,030.005, EAST 846,041.302
DESCRIPTION: A CONCRETE MONUMENT 0.2' BELOW THE SURFACE, LOCATED ON THE TRANSMISSION LINE R.O.W., 154± FROM THE END OF HICKORY LIMB RD. IN THE COMMUNITY OF HOPEWELL.

2. STATION: 2341002, ELEVATION: 359.684 FEET
COORDINATES: NORTH 489,530.993, EAST 844,909.751
DESCRIPTION: A CONCRETE MONUMENT 0.1' BELOW THE SURFACE, LOCATED ON THE TRANSMISSION LINES, HALF WAY BETWEEN THE CURB AND SIDEWALK ON THE SOUTH SIDE OF CARVED STONE

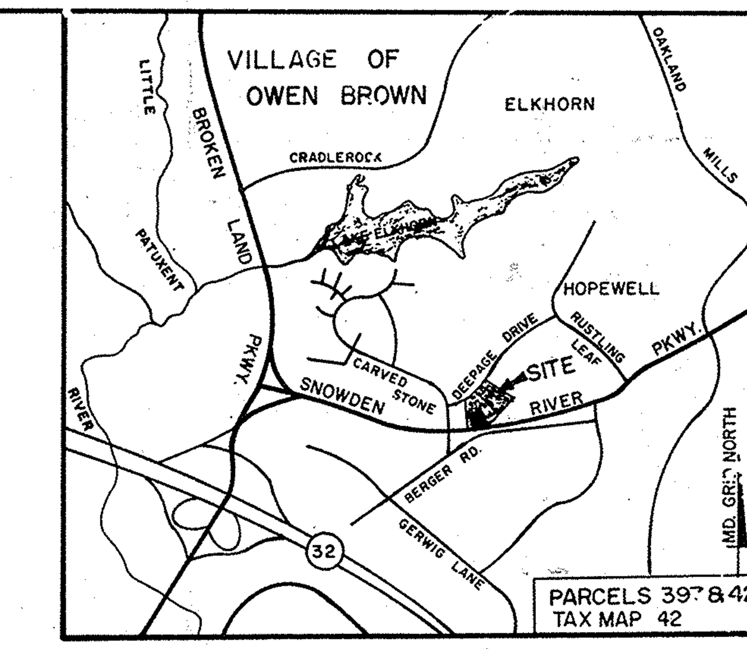
LEGEND
- [1] DENOTES BASELINE COORDINATES
- △1 DENOTES CORNER COORDINATES FOR PARKING AREAS
- (1) DENOTES COORDINATES FOR BUILDING
- △A DENOTES CURVE DATA



BUILDING ADDITION 'A'

POINT	NORTH	EAST
17	489486.9116	845893.9808
18	489456.8848	845934.1694
19	489466.4980	845941.3518
20	489451.8338	845960.9787
21	489291.2141	845840.9723
22	489294.2067	845836.9668
23	489290.2013	845833.9741
24	489325.0163	845787.3767
25	489349.0492	845805.3328
26	489360.2645	845813.7123
27	489381.0930	845829.2742
28	489387.9762	845820.0616

CURVE 25 TO 26
△=180° L=21.99' CHD.=14.00'



VICINITY MAP
SCALE: 1" = 2000'

4-25-2012
△4 RED LINE REVISION:
1. PROPOSED ADDITION TO BUILDING B (1085.6 SQ. FT)

SKATELAND BLDG.

POINT	NORTH	EAST
1	489479.9569	845981.9907
2	489287.2086	845837.9796
3	489227.3550	845918.0892
4	489420.1034	846062.1003

SUPREME COURT BLDG.

POINT	NORTH	EAST
5	489172.4766	845733.6941
6	489095.0511	845662.9299
7	489158.0625	845593.9870
8	489235.3096	845664.5881
9	489277.4071	845618.5277
10	489301.5445	845640.5884
11	489315.4083	845625.4195
12	489375.3828	845680.2340
13	489291.3564	845772.1702
14	489260.2804	845743.7679
15	489263.3837	845740.3724
16	489249.6542	845727.8241
17	489239.0624	845739.4130
18	489199.8667	845703.5896

SKATELAND PARKING LOT

POINT	NORTH	EAST	DISTANCE
1	489460.5589	845697.2931	153.00'
2	489582.7825	845789.3278	
3	489590.7385	845817.6260	157.50'
4	489505.3220	845955.2779	
5	489484.4610	845947.2830	12.00'
6	489465.2708	845932.9452	
7	489491.7064	845897.5632	
8	489495.7259	845878.9976	170.50'
9	489359.5224	845776.4361	
10	489359.9639	845739.1129	94.50'
11	489419.8856	845666.0401	

SUPREME COURT PARKING LOT

POINT	NORTH	EAST
49	489012.44	845729.57
50	489002.77	845726.80
51	489001.50	845717.67
52	489003.77	845712.03
53	489018.61	845710.25
54	489016.14	845692.42
55	489032.94	845690.09
56	489032.73	845693.38
57	489025.20	845704.37
58	489064.49	845659.03
59	489058.26	845666.22
60	489054.77	845665.18
61	489052.55	845649.24
62	489050.40	845590.02
63	489047.89	845571.92
64	488958.74	845584.28
65	488960.55	845597.35
66	488956.29	845602.99
67	488943.41	845604.77
68	488958.26	845711.82
69	488993.24	845621.90
70	489018.99	845618.33
71	489020.36	845628.23
72	488994.61	845631.80
73	489064.11	845643.02

SUPREME COURT PARKING LOT

POINT	NORTH	EAST	DISTANCE
15	489292.3384	845602.9004	
16	489188.3445	845600.9013	
17	489101.8874	845616.3118	45.00'
18	489072.1831	845650.1149	
19	489058.2688	845653.6378	108.00'
20	489139.8959	845724.3557	
21	489149.8997	845733.0225	113.50'
22	489235.6838	845807.3418	
29	489235.9146	845837.5043	90.00'
30	489178.2422	845906.5976	
31	489152.8891	845908.8818	108.00'

SUPREME COURT PARKING LOT

POINT	NORTH	EAST	DISTANCE
32	489069.9770	845839.6749	108.00'
33	489065.3708	845835.8301	
34	488958.1543	845725.5209	
35	488957.3445	845711.7819	
36	489047.4177	845587.4018	
37	489056.8166	845576.7060	
38	489178.6767	845541.6678	
39	489194.1886	845539.5170	
40	489305.4555	845544.2763	
41	489018.7578	845698.7927	108.00'
42	489100.3849	845769.5106	
43	489111.1951	845778.8761	81.00'
44	489172.4154	845831.9145	
45	489165.2354	845841.0322	90.00'
46	489096.1420	845783.3598	
47	489088.4650	845776.9518	90.00'
48	489019.3716	845719.2794	

PARKING LOT CURVE DATA

CURVE NO.	RADIUS	LENGTH	CENTRAL ANGLE	CHORD	CHORD DIR.
A	400.52'	9.53'	01°21'46"	9.53'	S26°09'49"W
B	25.00'	37.10'	85°00'56"	33.78'	S15°37'21"E
C	25.00'	39.95'	91°32'56"	35.83'	S82°45'20"W
D	399.69'	72.98'	10°27'45"	72.88'	S42°33'56"W
E	25.00'	34.90'	79°58'57"	32.13'	S07°27'08"W
F1	69.88'	53.45'	43°49'16"	52.16'	N10°37'42"W
F2	57.88'	48.78'	48°17'02"	47.35'	S08°23'21"E
F3	45.88'	21.97'	27°26'34"	21.76'	S01°55'02"E
G	25.00'	46.40'	106°21'07"	40.02'	N68°48'53"W
F4	87.88'	0.97'	00°38'03"	0.97'	N15°25'40"E
H2	189.22'	64.04'	19°23'28"	63.74'	N01°48'06"E
H3	219.22'	90.45'	23°38'19"	89.81'	S03°55'32"W
H4	249.22'	100.51'	23°06'27"	99.83'	S03°39'36"W
I1	31.95'	16.79'	30°06'32"	16.60'	S22°56'53"E
I2	43.95'	31.30'	40°47'57"	30.64'	S28°17'36"E
I3	73.95'	52.66'	40°47'57"	51.56'	N28°17'36"W
J1	23.84'	31.64'	76°03'43"	29.37'	N86°43'25"W
J2	35.84'	57.20'	91°27'19"	51.32'	N85°34'46"E
J3	65.84'	46.85'	40°46'31"	45.87'	S60°14'22"W
J4	65.84'	44.45'	38°40'50"	43.61'	N68°01'59"W
K	37.72'	4.89'	7°25'10"	4.88'	S54°21'26"E

NOTE: CURVES WITH SAME LETTER INDICATE COMMON RADIUS POINT

REVIEWED FOR HOWARD COUNTY S.C.D. AND MEETS TECHNICAL REQUIREMENTS
James M. Helm 7/27/90
U.S. SOIL CONSERVATION SERVICE DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT
John R. Robertson 7/27/90
HOWARD S.C.D. DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
Joyce M Boyd 10/23/90
COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
11.01.90
PLANNING DIRECTOR DATE
10/22/90
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
10/16/90
Acting DIRECTOR DATE
William C. Riley 8/7/90
CHIEF, BUREAU OF ENGINEERING DATE

Date	No	Revision Description
4-2-90	1	REVISED PER HOWARD COUNTY COMMENTS
7-5-90	2	REVISED PER HOWARD COUNTY COMMENTS

OWNER/DEVELOPER (301) 381-0020
COLUMBIA ASSOCIATION
9861 BROKEN LAND
SUITE 300
COLUMBIA, MARYLAND 21046

SUPREME COURT/SKATELAND
LOT D-11 LOT D-6

CENTURY ENGINEERING, INC.
(301) 823-8070
CONSULTING ENGINEERS • PLANNERS
32 WEST ROAD
TOWSON, MARYLAND 21204

AREA
RECORD PLAT REFERENCE NO. 3337,4240
VILLAGE OF OWEN BROWN
SECTION 2 AREA 2 PARCELS D6 & D11
ELECTION DISTRICT NO. 6 HOWARD COUNTY, MD

TITLE
GEOMETRY PLAN

Des By NAM	Scale 1" = 60'	Proj No 89-064
Drn By MAG	Date DEC. 26, 1989	Drawing No.
Chk By DDS	Approved CSC	6 OF 14 △4

Date	No.	Revision Description
April 1995	3	PARKING EXPANSION

BY THE ENGINEER:
"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."
4.26.95
7/23/90
ENGINEER: CHARLES S CARNAGGIO DATE

BY THE DEVELOPER:
"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT & EROSION BEFORE BEGINNING THE PROJECT."
I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.
D. Watt 7-24-90
DEVELOPER DATE

FOR COUNTY USE ONLY
APPROVED
PLANNING BOARD of HOWARD COUNTY
DATE 7-5-90

7/23/90
Date
Professional Engr. No. 10963

STATE OF MARYLAND JASON LEE THOMPSON LANDSCAPE ARCHITECT NO. 3172 — 4/1/16 FOR REV. #4
STATE OF MARYLAND MERRIL ELIOT PLATT NO. 17225 REGISTERED PROFESSIONAL ENGINEER
4/26/12

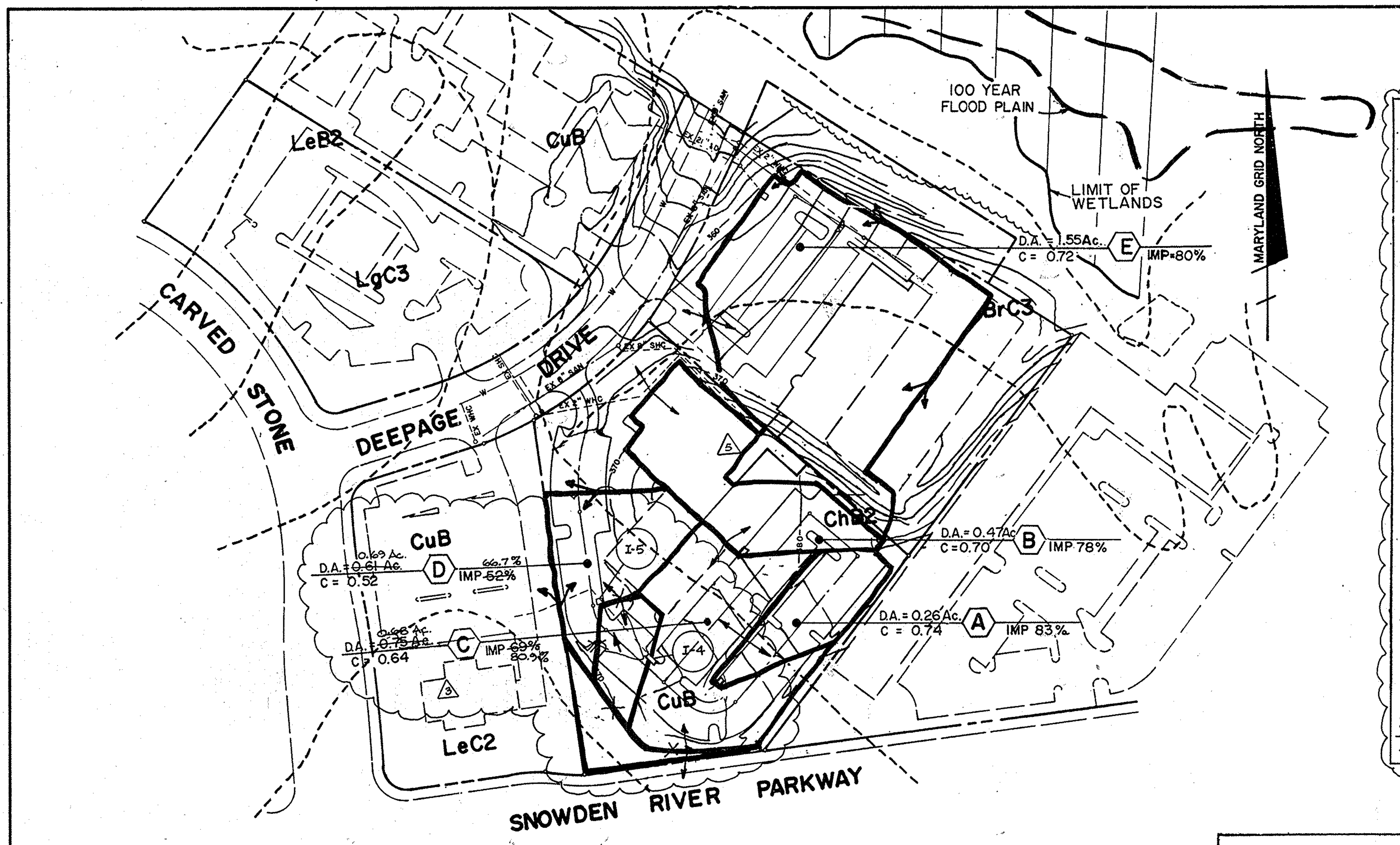
△	4-1-16	REVISE TOTAL SHEETS
No.	DATE	REVISION DESCRIPTION

SUBDIVISION NAME			SECT./AREA	LOT PARCEL NO.	
VILLAGE OF OWEN BROWN			2/2	D6 & D11	
PLAT NO. 3337 4240	BLOCK NO. 4	ZONE NEW TOWN COMMERCIAL	TAX ZONE-MAP 42	ELECT. DIST. 6	CENSUS TR 6061.03
WATER CODE E-11			SEWER CODE 53303006		

ADDRESS CHART

LOT NO.	ADDRESS
D6	7060 DEEPAGE DRIVE
D11	7080 DEEPAGE DRIVE

SDP-90-124



DRAINAGE AREA MAP

SCALE: 1"=100'

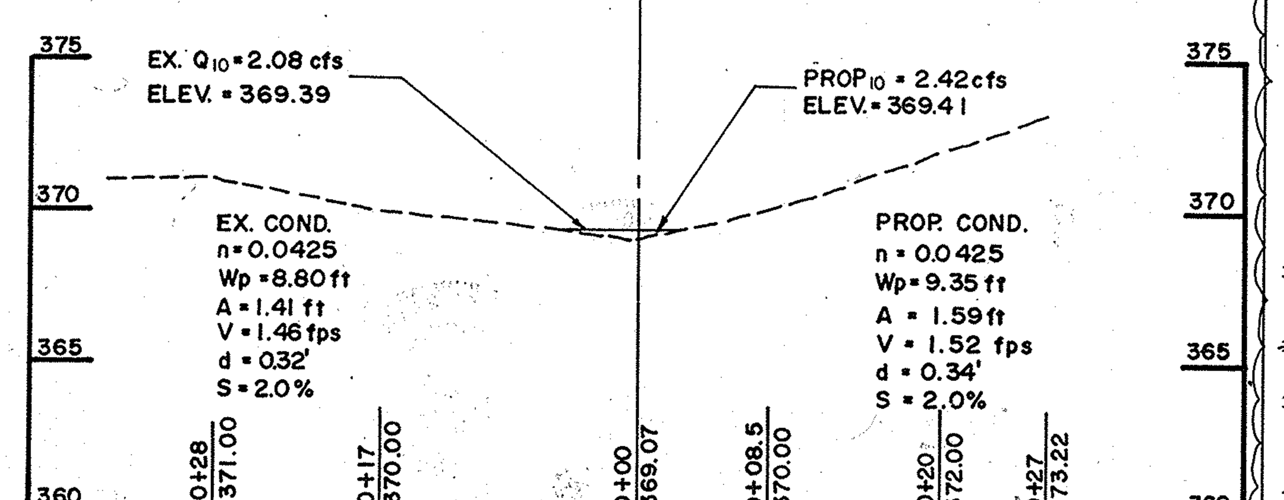
SOIL TYPE	HYDROLOGIC CLASS	DESCRIPTION
Br C3	C	BRANDYWINE LOAM, 8 TO 15 % SLOPES, SEVERELY ERODED
Ch B2	B	CHESTER SILT LOAM, 3 TO 8 % SLOPES, MODERATELY ERODED
CuB	B	COMUS SILT LOAM, LOCAL ALLUVIUM, 3 TO 8 % SLOPES
LeB2	B	LEGORE SILT LOAM, 3 TO 8 % SLOPES, MODERATELY ERODED
LeC2	B	LEGORE SILT LOAM, 8 TO 15 % SLOPES, MODERATELY ERODED
LgC3	B	LEGORE SILTY CLAY LOAM, 8 TO 15% SLOPES, SEVERELY ERODED

SEDIMENT CONTROL NOTES

1) A minimum of 24 hours notice must be given to the Howard County Office of Inspection and Permits prior to the start of any construction, ~~(992-2437)~~ 313-1855.
2) All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
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 seedings (Sec. 51), sod (Sec. 54), temporary seeding (Sec. 50) and mulching (Sec. 52). Temporary stabilization with mulch alone can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
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: (3)

Total Area of Site	5.4452	Acres
Area Disturbed	~~5.1357~~ 1.8	Acres
Area to be roofed or paved	~~3.233~~ 0.2	Acres
Area to be vegetatively stabilized	~~2.100~~ 0.11	Acres
Total Cut	~~3551.12~~ 700	Cu. Yds.
Total Fill	~~5519.04~~ 20	Cu. Yds.
Offsite waste/borrow area location	TO BE DETERMINED	

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 controls must be provided, if deemed necessary by the Howard County DPW 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.

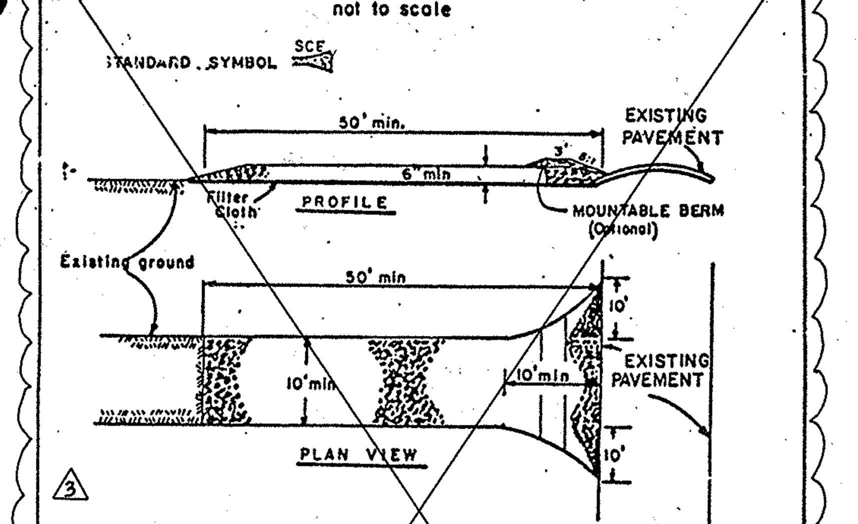


SECTION A-A

SCALE: HORZ. 1"= 10, VERT. 1"= 5'

STABILIZED CONSTRUCTION ENTRANCE

not to scale

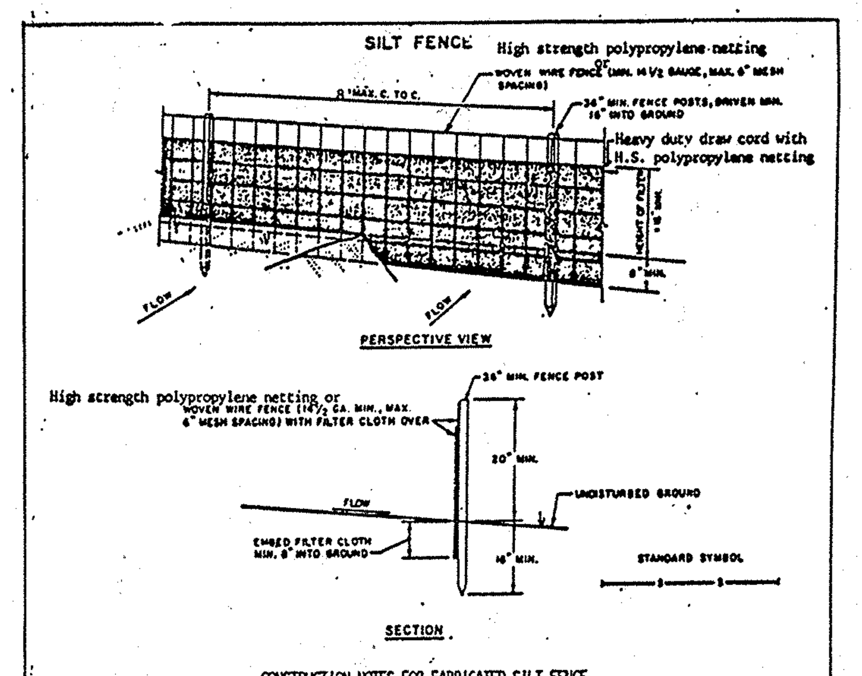


CONSTRUCTION SPECIFICATIONS

1. Stone Size - Use 2" stone, or reclaimed or recycled concrete equivalent.
2. Length - As required, but not less than 50 feet (except on a single residence lot where a 30 foot minimum length would apply).
3. Thickness - Not less than six (6) inches.
4. Width - Ten (10) foot minimum, but not less than the full width at points where ingress or egress occurs.
5. Filter Cloth - Will be placed over the entire area prior to placing of stone. Filter will not be required on a single family residence lot.
6. Surface Water - All surface water flowing or diverted toward construction entrances shall be piped across the entrance. If piping is impractical, a mountable berm with 5:1 slopes will be permitted.
7. 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.
8. Washing - Wheels shall be cleaned to remove sediment prior to entrance onto public rights-of-way. When washing is required, it shall be done on an area stabilized with stone and which drains into an approved sediment trapping device.
9. Periodic inspection and needed maintenance shall be provided after each rain.

STABILIZED CONSTRUCTION ENTRANCE

NOT TO SCALE



CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

1. High strength polypropylene netting or 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 1 1/2" x 1 1/2" Min. (Actual) Hardwood

FENCE: WOVEN WIRE, 14 GA. 6" MAX. MESH OPENING or high strength polypropylene netting

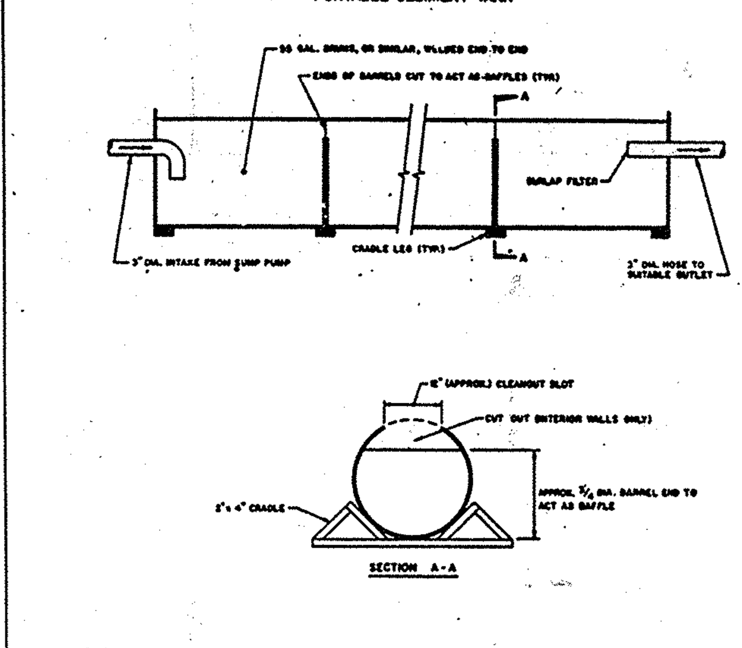
FILTER CLOTH: FILTER X, MIRAFI 100X, STABI-LINKA T140N OR APPROVED EQUAL

PREFABRICATED UNIT: GEOFAB, ENVIROFENCE, OR APPROVED EQUAL.

SILT FENCE

NOT TO SCALE

PORTABLE SEDIMENT TANK



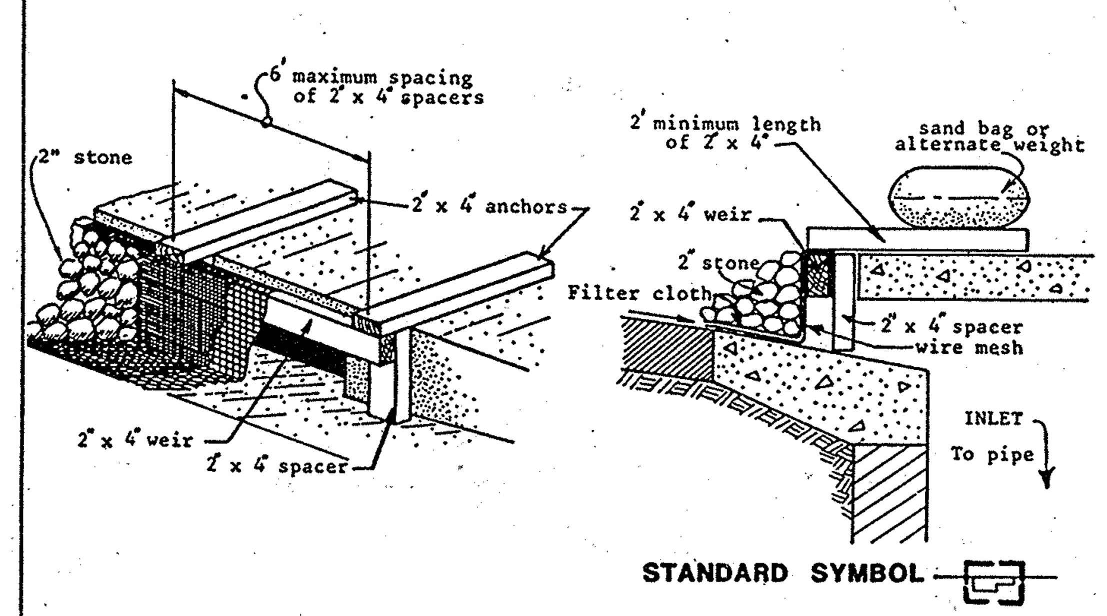
CONSTRUCTION NOTES

1. CLEAN OUT THE SEDIMENT TANK WHEN ONE THIRD (1/3) FILLED WITH SILT.
2. STEEL DRUMS ARE USED AS AN EXAMPLE DUE TO THEIR READY AVAILABILITY. ANY TANKS MAY BE USED, PROVIDING THAT THE VOLUME REQUIREMENTS FROM PAGE 20.01 ARE MET.
3. ALL SEDIMENT COLLECTED IN THE TANK SHALL BE DISPOSED OF IN A SEDIMENT TRAPPING DEVICE OR AS APPROVED BY THE INSPECTOR.

PORTABLE SEDIMENT TANK

NOT TO SCALE

CURB INLET PROTECTION DETAIL



INLET PROTECTION DETAIL

NOT TO SCALE

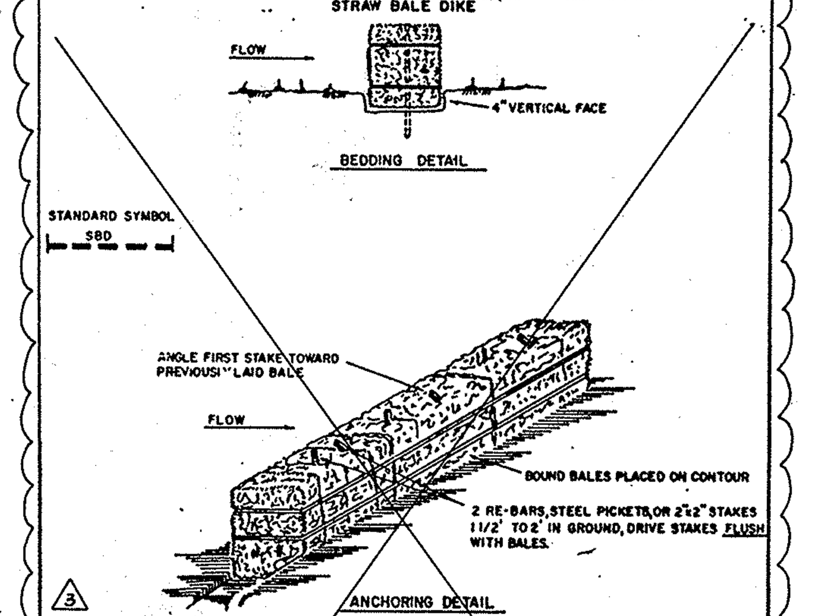
SEQUENCE OF CONSTRUCTION (3)

1) OBTAIN GRADING PERMIT.
2) NOTIFY THE DEPARTMENT OF ~~PUBLIC WORKS'~~ LICENCES, INSPECT. & PERMITS, SEDIMENT CONTROL INSPECTOR FOR HOWARD COUNTY 24 HOURS PRIOR TO BEGINNING ANY CONSTRUCTION.
3) STAKE OUT LIMITS OF DISTURBANCE AND SEDIMENT AND EROSION CONTROL DEVICES (PROVIDE SEDIMENT AND EROSION CONTROL).
4) WITH THE PERMISSION OF THE DEPARTMENT OF PUBLIC WORKS' SEDIMENT CONTROL INSPECTOR, BEGIN CONSTRUCTION.
5) STAKE OUT ~~BUILDING ADDITION AND~~ REVISED PARKING AREAS.
6) BEGIN DEMOLITION OF EXISTING STRUCTURES, BITUMINOUS CONCRETE AND APPURTENANCES AS REQUIRED.
7) CLEAR AND GRUB AREAS TO BE GRADED.
8) ~~GRADE FOR NEW BUILDING ADDITION.~~
9) BRING ALL AREAS TO SUBGRADE.
10) BEGINNING AT THE UPSTREAM PORTION OF THE DRAINAGE AREA, STABILIZE ALL DISTURBED AREAS BEFORE ALLOWING RUNOFF TO ENTER THE WATER QUALITY STRUCTURES.
11) ~~CONTINUE THIS PROCESS AND REMOVE EXISTING STORM DRAIN STRUCTURES AS SHOWN UNTIL STORM DRAIN SYSTEM IS COMPLETED.~~
12) CONTRACTOR IS GIVEN 15 DAYS FROM THE TIME THE AREA IS DISTURBED UNTIL THE AREA IS STABILIZED. CONTRACTOR SHALL STABILIZE ALL AREAS NOT TO BE PAVED BY SEEDING. REFER TO TEMPORARY AND PERMANENT SEEDING NOTES.
13) WITH THE PERMISSION OF THE DEPARTMENT OF PUBLIC WORKS' SEDIMENT CONTROL INSPECTOR, REMOVE SEDIMENT CONTROL MEASURES AND STABILIZE REMAINING AREAS.

STATE OF MARYLAND JASON LEE THOMPSON NO. 3172 LANDSCAPE ARCHITECT — FOR REV. #6

STATE OF MARYLAND MERRIL ELIOT PLATT NO. 17225 REGISTERED PROFESSIONAL ENGINEER

STRAW BALE DIKE

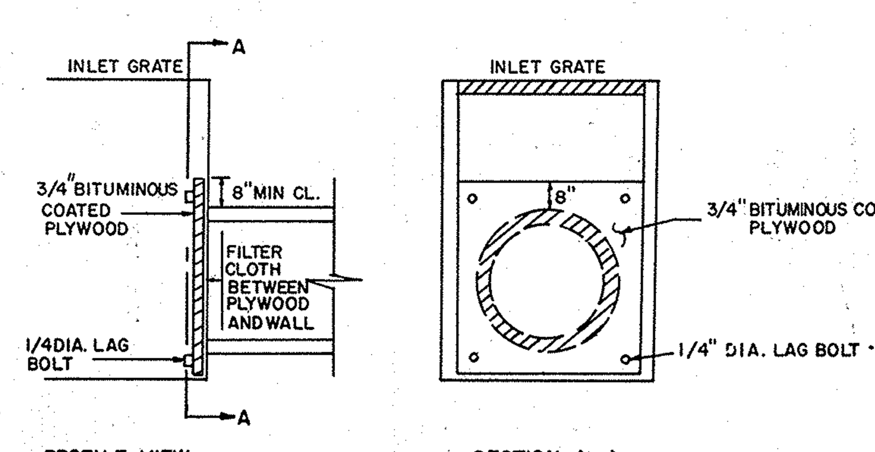


CONSTRUCTION SPECIFICATIONS

1. BALES SHALL BE PLACED AT THE TOE OF A SLOPE OR ON THE CONTOUR AND IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
2. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF (4) INCHES, AND PLACED SO THE BINDINGS ARE HORIZONTAL.
3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY EITHER TWO STAKES OR RE-BARS DRIVEN THROUGH THE BALE. THE FIRST STAKE IN EACH BALE SHALL BE DRIVEN TOWARD THE PREVIOUSLY LAID BALE AT AN ANGLE TO FORCE THE BALES TOGETHER. STAKES SHALL BE DRIVEN FLUSH WITH THE BALE.
4. INSPECTION SHALL BE FREQUENT AND REPAIR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
5. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

STRAW BALE DIKE

NOT TO SCALE



TEMPORARY BLOCKING DETAIL

NOT TO SCALE

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

James M. Helm 7/27/90
U.S. CONSERVATION SERVICE — DATE

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

John R. Robertson 7/27/90
HOWARD S.C.D. — DATE

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

Joyce M Boyd 10/23/90
COUNTY HEALTH OFFICER — DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

PLANNING DIRECTOR — 11.1.90 DATE

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — 10/26/90 DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Acting DIRECTOR — 10/16/90 DATE

William E. Riley 8/7/90
CHIEF, BUREAU OF ENGINEERING — DATE

Date	No	Revision Description
4-2-90	1	REVISED PER HOWARD CO. COMMENTS
7-5-90	2	REVISED PER HOWARD CO. COMMENTS

OWNER/DEVELOPER (301) 381-0020

COLUMBIA ASSOCIATION
9861 BROKEN LAND
SUITE 300
COLUMBIA, MARYLAND 21046

SUPREME COURT/SKATELAND

LOT D-11 — LOT D-6

CENTURY ENGINEERING, INC.
(301) 823-8070
CONSULTING ENGINEERS • PLANNERS
32 WEST ROAD
TOWSON, MARYLAND 21204

AREA: RECORD PLAT REFERENCE NO. 3337, 4240
VILLAGE OF OWEN BROWN
SECTION 2 AREA 2 LOTS D6 & D11
ELECTION DISTRICT NO. 6 HOWARD COUNTY, MD

TITLE

GRADING AND SEDIMENT EROSION CONTROL DETAILS

Des By NAM	Scale AS SHOWN	Proj No 89-064
Drn By MAG	Date DEC. 26, 1989	Drawing No.
Chk By DDS	Approved CSC	7 OF 14 (6)

Date	No.	Revision Description
4-1-16	6	REVISE TOTAL SHEETS
April 1995	3	PARKING EXPANSION

NO.	DATE	REVISION
5	10-20-04	ADDED CANOPY BETWEEN BLDG'S A&B, ADDED 6" FIRE CONN., UPDATED EX. CONDITIONS

FOR COUNTY USE ONLY

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 7-5-90

7/23/90
Date

STATE OF MARYLAND CHARLES SAMUEL CARNAGGIO No. 10963 REGISTERED PROFESSIONAL ENGINEER

Professional Engr. No. 10863

BY THE ENGINEER:

"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

4.26.95
7/23/90
ENGINEER: CHARLES S. CARNAGGIO — DATE

BY THE DEVELOPER:

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT & EROSION BEFORE BEGINNING THE PROJECT." I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

7-24-90
DEVELOPER — DATE

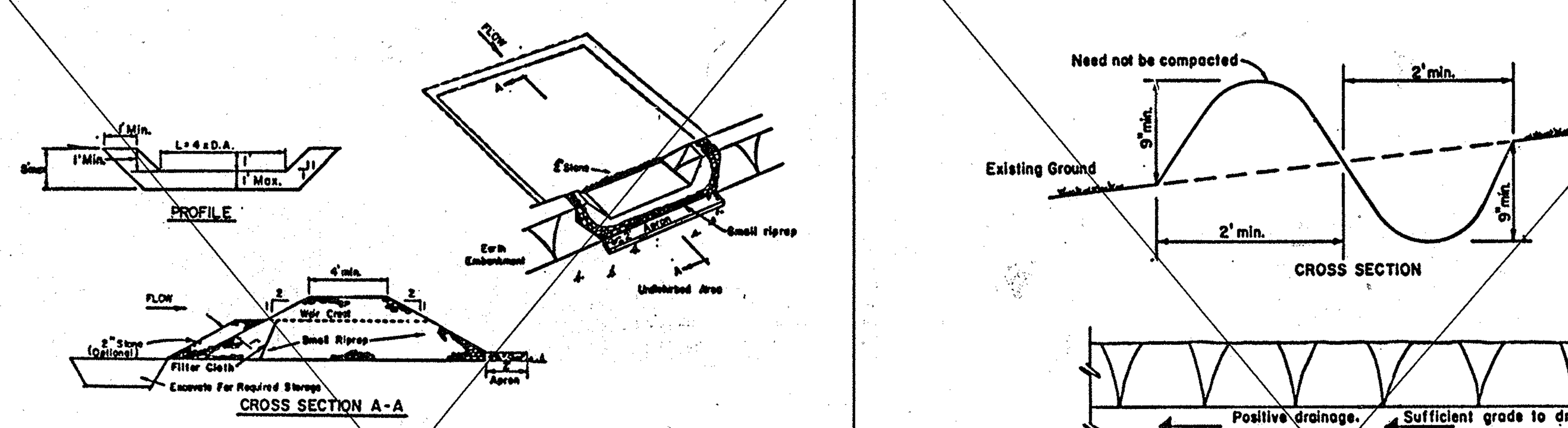
ADDRESS CHART

LOT NO.	ADDRESS
D6	7060 DEEPAGE DRIVE
D11	7080 DEEPAGE DRIVE

SUBDIVISION NAME: VILLAGE OF OWEN BROWN			SECT./AREA 2/2	LOT/PARCEL NO. D6 & D11	
PLAT NO. 337, 240	BLOCK NO. 4	ZONE NEW TOWN COMMERCIAL	TAX ZONE-MAP 42	ELECT. DIST. 6	CENSUS TR 6061.03
WATER CODE E-11			SEWER CODE 53303006		

STATE OF MARYLAND JOHNNIE RAY ... REGISTERED PROFESSIONAL ENGINEER (5)
11-19-04

SDP-90-124



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

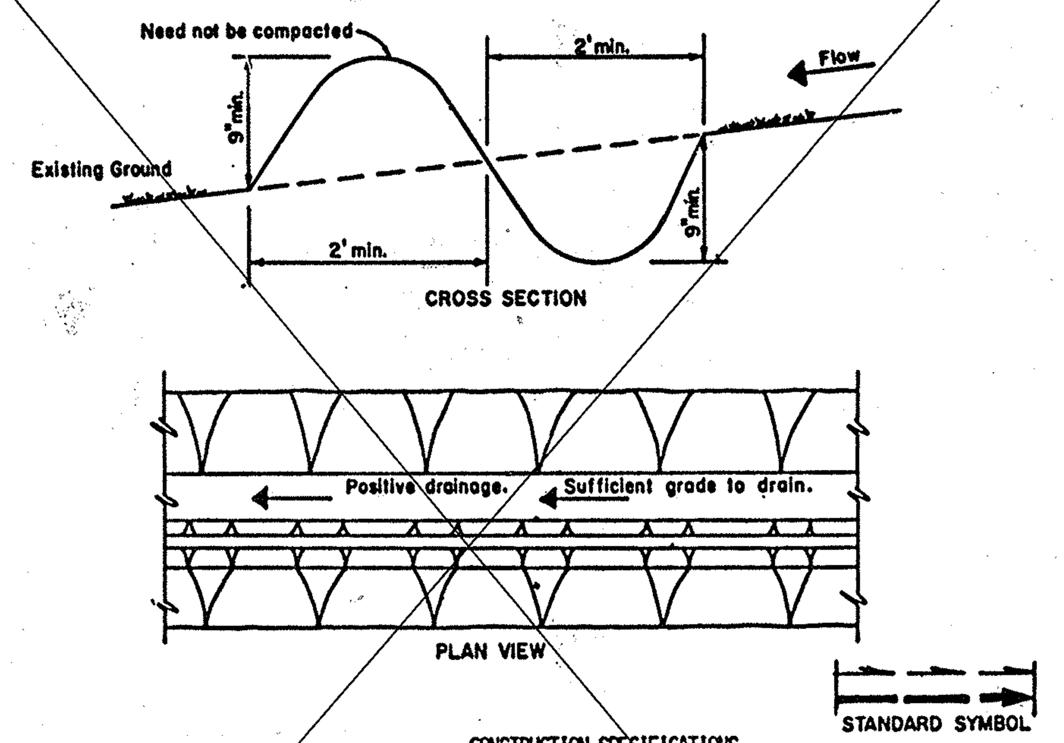
1. Area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The pool area shall be cleared.
2. The fill material for the embankment shall be free of roots and other woody vegetation as well as over-sized stones, rocks, organic material or other objectionable material. 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 than 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

STONE OUTLET SEDIMENT TRAP V

SCALE: NTS

3



CONSTRUCTION SPECIFICATIONS

1. ALL PERIMETER DIKE/SWALE SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET.
2. DIVERTED RUNOFF FROM A DISTRUBED AREA SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE.
3. DIVERTED RUNOFF FROM AN UNDISTURBED AREA SHALL OUTLET INTO AN UNDISTURBED STABILIZED AREA AT NON-EROSION VELOCITY.
4. THE SWALE SHALL BE EXCAVATED OR SHAPED TO LINE, GRADE, AND CROSS SECTION AS REQUIRED TO MEET THE CRITERIA SPECIFIED IN THE STANDARD.
5. STABILIZATION OF THE AREA DISTURBED BY THE DIKE AND SWALE SHALL BE DONE IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SEED AND STRAW MULCH, AND SHALL BE DONE WITHIN 10 DAYS.
6. PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.

Max. Drainage Area Limit: 2 Acres

PERIMETER DIKE/SWALE

SCALE: NTS

STANDARD AND SPECIFICATIONS
FOR
VEGETATIVE STABILIZATION
PERMANENT SEEDINGS

Definition

Planting vegetation such as grasses and legumes on critical areas.

Purpose

To stabilize the soil; to reduce damages from sediment and runoff to downstream areas; improve wildlife habitat; enhance natural beauty.

Conditions Where Practices Apply

Graded or cleared areas subject to erosion and where a permanent, long-lived vegetative cover is needed.

SPECIFICATIONS

Vegetation cannot be expected to provide an erosion control cover and prevent soil slippage on a soil that is not stable due to its texture, structure, water movement or excessivly steep slope.

Minimum soil conditons needed for the establishment and maintenance of a long-lived vegetative cover:

A. Enough fine-grained materials (over 30 percent silt plus clay) to provide the capacity to hold at least a moderate amount of available moisture. Noticeable exception would be planting lovegrass and serecia lespedeza which can be planted on a sandy soil.

B. Sufficient pore space to permit adequate root penetration.

C. The soil shall be free from any material harmful to plant growth.

D. If these conditions cannot be met, see specification, Topsoiling (57.01).

I. Site Preparation

A. Install needed erosion and sediment control practices such as dikes, contour ripping, erosion stops, channel liners, sediment basins, or other practices.

B. Grade as needed and feasible to permit the use of conventional equipment for seedbed preparation, seeding, mulch application, anchoring and maintenance.

II. Soil Preparation

When the area to be seeded has been recently loosened to the extent that an adequate seed bed exists, no additional treatment is required.

Flat areas and slopes up to 3 to 1 grade shall be loose and friable to a depth of at least 3 inches. The top layer of soil shall be loosened by raking, discing or other acceptable means before seeding.

Slopes steeper than 3 to 1 shall have the top 1-3 inches of soil loose and friable before seeding.

III. Soil Amendments

Lime and fertilize according to soil tests. Lime and fertilizer needs can be determined by a soil testing laboratory, such as the University of Maryland's Soil Testing Laboratory.

In lieu of soil test results, apply two tons dolomitic limestone per acre and one of the following rates of fertilizer: 1,000 pounds 10-10-10 or equivalent per acre. For a longer lasting fertilizer treatment apply 600 pounds 10-10-10 or equivalent per acre and disk in and at time of seeding apply an additional 400 pounds of a ureaform fertilizer of a grade of at least 30-0-0 per acre. Apply the lime and fertilizer before seeding and harrow or disk uniformly into the soil to a mininum depth of 3 inches on slopes flatter than 3:1. On slopes steeper than 3:1 grade, the lime and fertilizer shall be worked the best way possible. On sloping land, the final harrowing or discing operation should be on the contour wherever feasible. No attempt should be made to drag any disked area to make the soil surface smooth after disking.

Note. The slow release ureaform fertilizer will supply nitrogen over a longer period of time.

IV. Seeding

A. Select a mixture from table 51-1.

B. Apply seed uniformly with a cyclone seeder, drill, cultipacker seeder or hydroseeder (slurry includes seed and fertilizer) on a firm, moist seedbed. Maximum seeding depth should be 1/4 inch on clayey soils and 1/2 inch on sandy soils, when using other than hydroseeder method of application. Note: If hydroseeding is used and the seed and fertilizer is mixed, they will be mixed on site and the seeding shall be immediate without interruption.

V. Mulching

Mulch materials are listed in order of their effectiveness. Mulch mattings are normally only used on critical areas such as waterways or steep slopes.

A. Materials and Amounts

1. Mulch mattings - such as jute or excelsior blanket shall be stapled to the surface in waterways and on steep slopes. Lighter materials of paper, plastic and cotton mulch mattings may be used where erosion hazard is not severe. If the area is to be mowed, do not use metal staples.

2. Straw - Straw shall be unrotted small grain applied at the rate of 1½ to 2 tons per acre, or 70 to 90 (two bales) pounds per 1,000 square foot. Mulch materials shall be relatively free of all kinds of weeds and shall be free of prohibited noxious weeds such as: thistles, Johnsongrass and quackgrass.

Spread uniformly by hand or mechanically. For uniform distribution of hand spread mulch, divide area into approximately 1,000 square feet section and place 70-90 pounds of mulch in each section.

3. Wood chips - at the rate of approximately 6 tons per acre or 275 pounds per 1,000 square foot may be used when available and when feasible. These are particularly well-suited for utility and road rights-of-way. If wood chips are used, increase the application rate of nitrogen fertilizer by 20 pounds (200 pounds 10-10-10 or 66 pounds 30-0-0).

4. Wood cellulose fiber - mulch at the rate of 1,500 pounds per acre or 35 pounds per 1,000 square foot may be applied by hydroseeding.

B. Mulch anchoring shall be accomplished immediately after mulch placement to minimize loss by wind or water. This may be done by one of the following methods, (listed by preference) depending upon size of area, erosion hazard, and cost. On sloping land, practice No. 1 below, should be done on the contour whenever possible. Contouring of all operations applies to all straw and wood chip practices on more critical sites, except "tracking" should be done up and down the slope with 1½ inch cleat marks running across the slope.

1. Mulch Anchoring Tool and Tracking. A mulch anchoring tool is a tractor drawn implement designed to punch and anchor mulch into the surface 2 inches of soil. This practice affords maximum erosion control but is limited to flatter slopes where equipment can operate safely. "Tracking" is primarily used on 3:1 or steeper cut and fill slopes to cut the mulch into the soil by 1½" track cleats of a bulldozer making groves across the slope.

2. Mulch Nettings - Staple lightweight biodegradable paper, plastic or cotton nettings over the mulch according to manufacturer's recommendations. Netting is usually available in rolls 4 feet wide and up to 300 feet long.

3. Liquid Mulch Binders - Applications of liquid binders should be heavier at edges where wind catches mulch, in valleys, and at crests of banks. Remainder of area should be uniform in appearance. Caution should be used with asphalt in residential and similar areas.

a. Cutback asphalt - rapid curing (RC-70, RC-250, and RC-800) or medium curing (MC-250 or MC-800). Apply 5 gallons per 1,000 square feet or 200 gallons per acre on flat areas and on slopes less than 8 feet high. On slopes 8 feet or more high, use 8 gallons per 1,000 square feet or 348 gallons per acre.

b. Emulsified asphalt - (SS-1, CSS-1, CMS-2, MS-2, RS-1, RS-2, CRS-1, and CRS-2). Apply 5 gallons per 1,000 square feet or 200 gallons per acre on flat areas and on slopes less than 8 feet high. On slopes 8 feet or more high, use 8 gallons per 1,000 square feet or 348 gallons per acre.

All asphalt designations are from the asphalt Institute Specifications.

c. Synthetic binders - Synthetic binders such as Acrylic DLR (Agri-Tac), DCA-70, Petroset or Terra Tac II or Terra Tack AR may be used at rates recommended by the manufacturer to anchor mulch material.

4. Wood cellulose fiber - Wood cellulose fiber may be used for anchoring straw. The fiber binder shall be applied at a net dry weight of 750 pounds/acre. The wood cellulose fiber shall be mixed with water and the mixture shall contain a maximum of 50 pounds of wood cellulose fiber per 100 gallons.

5. Peg and Twine - Drive 8-to 10-inch wooden pegs to within 2 to 3 inches of the soil surface every 4 feet in all directions. Stakes may be driven before or after applying mulch. Secure mulch to soil surface by stretching twine between pegs in a criss-cross within a square pattern. Secure twine around each peg with two or more complete turns.

Note: All names given above are registered trade names. This does not constitute a recommendation of these products to the exclusion of other products.

VI. Irrigation

If soil moisture is deficient, supply new seedings with adequate water for plant growth until they are firmly established, if feasible. This is especially true when seedings are made late in the planting season, in abnormally dry or hot seasons, or on adverse sites.

VII. Maintenance

Maintenance is a vital factor in maintaining an adequate vegetative erosion control cover.

A. Irrigation - If soil moisture becomes deficient, irrigate to prevent loss of stand of protective vegetation, if feasible.

B. Repairs - Inspect all seeded areas for failures and make necessary repairs, replacements, and reseedings within the planting season, if possible.

1. If stand is inadequate for erosion control, overseed and fertilize using half of the rates originally applied.

2. If stand is over 60% damaged, reestablish following original lime, fertilizer, seedbed preparation and seeding recommendations.

TABLE 51-1
Permanent Seeding and Seeding Dates

Mix No.	SEEDING MIXTURES (Use Certified Seed if available)	SEEDING RATE Lbs/Acre	Lbs/1000 Sq.Ft.	OPTIMUM SEEDING DATES (d) COASTAL PLAIN 2/1-4/30	5/1-8/14	8/15-10/31	PIEDMONT 3/1-4/30	5/1-7/31	8/1-10/15	MOUNTAINS 3/1-5/31	6/1-7/31	8/1-9/30
1	'Kentucky 31' Tall Fescue*	60	1.38	x	-	x	x	-	x	x	-	x
2	'Kentucky 31' Tall Fescue* 'Boer''Lehmans'(a) Weeping Lovegrass	60 2	1.38 .05	-	x	-	-	x	-	-	x	-
3	'Kentucky 31' Tall Fescue* 'Korean' lespedeza (b)inoculated(h)	50 15	1.15 .34	x	-	-	x	-	-	-	-	-
4	'Kentucky 31' Tall Fescue* 'Interstate' Sericea lespedeza(b)(h) inoculated(h)	40 20	.92 .46	x	-	x	x	-	x	x	-	x
5	'Kentucky 31' Tall Fescue* Birdsfoot trefoil, inoculated(h)	40 10	.92 .23	-	-	-	-	-	-	x 2000' elev. & above	-	-
6	Chemung Crownvetch, inoculated (h) Redtop	15 3	.34 .07	x	-	-	x	-	-	x	-	x
7	Chemung Crownvetch, inoculated(h) 'Kentucky 31' Tall Fescue*	15 40	.46 .92	x	-	-	x	-	-	x	-	-
8	'Kentucky 31' Tall Fescue (75%) Redtop (5%) Canada Bluegrass (10%) Kentucky Bluegrass (10%)(e)	90	2	x	-	x	x	-	x	x	-	x
9	Kentucky Bluegrass (50%) 'Pennlawn' Creeping Red Fescue(40%) Redtop (10%)(e)	90	2	x	-	x	x	-	x	x	-	x
	Droughty Areas											
10	'Kentucky 31' Tall Fescue* Redtop	30 5	.69 .11	x	-	x	x	-	x	x	-	x
11	Weeping lovegrass Serecia lespedeza (b)inoculated(h)	2 20	.05 .46	x	x	-	x	x	-	x	x	-
	Poorly Drained Areas											
12	'Kentucky 31' Tall Fescue*	30	.69	x	-	x	x	-	x	x	-	x
13	Reed canarygrass (c)	10	.23	-	-	x	-	-	x	-	-	x
	Shaded Areas											
14	'Kentucky 31' Tall Fescue*	60	1.38	x	-	x	x	-	x	x	-	x
15	Red Fescue 'Jamestown' or 'Pennlawn'	40	.92	x	-	x	x	-	x	x	-	x
	Lawns & High Maintenance Areas											
16	'Plush','Birka','Parade','Vantage') 'Columbia','Merion','Adelphi','South)** Dakota','Kenblue',Kentucky Bluegrass) Red Fescue, 'Pennlawn' or 'Jamestown'	90 10	2 .23	x	-	x	x	-	x	x	-	x
17	'Kentucky 31' Tall Fescue*(g)	220-260	5-6	x	x(f)	x	x	x(f)	x	x	x(f)	x

*Use Certified Seed Only
**Any three(3) varieties at 30 lbs. each to make the 90 lb min.

Footnotes - Table 51-1

Permanent Seedings and Seeding Dates (Cont'd)

(a) Use Weeping lovegrass to provide a stand of grass for erosion control during summer.

(b) Use hulless seed.

(c) Preferable to seed in fall with seed from current year's crop.

(d) Mixtures 1,3,4,5,6,7,8,10,11,12,13 and 14 may be seeded during winter months in an emergency if 2 tons per acre of a well-anchored mulch is used.

(e) Approved State Highway Administration Mixtures.

(f) Can be seeded during this period if irrigation water is used. Use 2 tons per acre of well-anchored straw mulch.

(g) Can use 10 percent Kentucky bluegrass. (MD AGRON MEMO #72).

(h) Leguminous Seeds. All leguminous seeds shall be inoculated or treated with unexpired approved culture for the specific legume in the proper proportions as specified on the package label. The inoculant shall be stored at room temperatures, out of direct sunlight and away from heating units. When seeding dry with mechanical seeders, the following method of mixing the inoculant with the seed shall be followed. The culture in powder form is preferred and shall be thoroughly mixed with the seed by using a very small quantity of water; just enough to dampen the seeds before the culture is powdered on. The leguminous seed is then mixed with the other seeds of the formula. Seeds inoculated with the powder shall be sown within 48 hours after treatment. Seeds inoculated with the liquid culture shall be sown within 24 hours after treatment. Inoculated seed not used within these time periods shall be reinoculatd. Inoculant and seed treated with inoculant shall not be exposed to sunlight for more than one hour prior to seeding. When seed is applied by hydraulic seeders, 10 times the quantity of inoculant recommended for dry leguminous seed application shall be used. Inoculated seed shall not be held in a slurry with fertilizer for more than one hour, otherwise reinoculation will be required before applying the seed.

Notes: (1) Scientific names of these plants are in Appendix B-1.02.

TABLE 51-2
Maintenance Fertilization for Permanent Seedings
Use Soil Test Recommendations or Rates Shown Below

Mixture No.	Seeding Mixture	Formulation	Lbs. Per Acre	Lbs Per 1,000 Sq. Ft.	Time	Mowing
1,2,3,7,8 10	Tall fescue makes up 70% or more of cover.	10-10-10 or 38-0-0 10-10-10	500 400 600	11.5 9.2 13.8	Yearly, or as needed Fall Yearly, or as needed	*Not closer than 3" if occasional mowing is desired.
4,5,6,7	Crownvetch Sericea lespedeza Birdsfoot trefoil	0-20-20	400	9.2	Spring the year following establishment and every 4-5 years thereafter.	Do not mow crownvetch.
4,5	Fairly uniform stand of tall fescue and sericea lespedeza, or birdsfoot trefoil.	5-10-10	500	11.5	Fall the year following establishment and every 4-5 years thereafter.	Not required. Not closer than 4" if occasional mowing is desired, and then in fall after seed has matured.
11	Weeping loverass & sericea lespedeza Fairly uniform plant distribution.	5-10-10	500	11.5	Spring the year following establishment and every 3-4 years thereafter.	Not required. Not closer than 4" if occasional mowing is desired, and fall after sericea has matured.
9,12,13,14	Red fescue:	20-10-10	250	5.8	September, 30 days later.	Mow no closer than 2" for red fescue and Ky bluegrass: and closer than 3" for fescue.
15,17	Kentucky bluegrass-red fescue mixture; 'Ky-31' tall fescue	20-10-10 20-10-10 20-10-10	250 250 100	5.8 5.8 2.3	December, May 20-June 30, if needed.	

STANDARD AND SPECIFICATIONS
FOR
VEGETATIVE STABILIZATION
TEMPORARY SEEDING

Definition

Planting short-term vegetation on critical areas.

Purpose

To temporarily stabilize the soil; to reduce damages from sediment and runoff to downstream areas; improve wildlife habitat; enhance natural beauty.

Conditions Where Practice Applies

Graded or cleared areas which are subject to erosion for a period of 14 days or more.

SPECIFICATIONS

I. Site Preparation

A. Prior to seeding, install needed erosion and sediment control practices such as diversions, grade stabilization structures, berms, dikes, grassed waterways, and sediment basins.

B. Final grading and shaping has usually not been completed for temporary seedings.

II. Soil Amendments

For temporary seedings, fertilizer shall be applied at the rate of 600 lbs/ac. or 15 lbs/1,000 sq. ft., using 10-10-10 or equivalent. Soils which are highly acid should be limed.

III. Seedbed Preparation

When the area to be seeded has been recently loosened to the extent that an adequate seedbed exists, no additional treatment is required

However, when the area to be seeded is packed, crusted, and hard, the top layer of soil shall be loosened by discing, raking or other acceptable means before seeding.

IV. Seeding

A. Select a mixture from Table 50-1.

B. Apply seed uniformly with a cyclone seeder, drill, cultipacker seeder or hydroseeder (slurry includes seed and fertilizer).

V. Mulching

When seedings are made on critical sites or adverse soil conditions, mulch material will be applied immediately after seeding. Seedings made during optimum seeding dates and with favorable soils on very flat areas may not need to be mulched. Mulch materials are listed in order of their effectiveness.

A. Materials and Amounts

1. Mulch mattings - such as jute or excelsior blanket shall be stapled to the surface in waterways and on steep slopes. Lighter materials of paper, plastic and cotton mulch mattings may be used where erosion hazard is not severe. If the area is to be mowed, do not use metal staples.

2. Straw - Material shall be unrotted small grain straw applied at the rate of 1½ to 2 tons per acre, or 70 to 90 (two bales) pounds per 1,000 sq. ft. Mulch materials shall be relatively free of all kinds of weeds and shall be free of prohibited noxious weeds such as: thistles, Johnsongrass and quackgrass.

Spread uniformly by hand or mechanically. For uniform distribution of hand spread mulch, divide area into approximately 1,000 sq. ft. section and place 70-90 lbs. of mulch in each section.

3. Wood chips - at the rate of approximately 6 tons per acre or 275 lbs. per 1,000 sq. ft. may be used when available and when feasible to use.

4. Wood cellulose fiber - mulch at the rate of 1,500 pounds per acre or 35 pounds per 1,000 sq. ft. may be applied by hydroseeding.

B. Mulch anchoring shall be accomplished immediately after mulch placement to minimize loss by wind or water. This may be done by one of the following methods (listed by preference), depending upon size of area, erosion hazard, and cost. On sloping land, practice No. 1 below, should be done on the contour wherever possible, except "tracking" should be done up and down the slope with 1½ inch cleat marks running across the slope.

1. Mulch Anchoring Tool and Tracking. A mulch anchoring tool is a tractor drawn implement designed to punch and anchor mulch into the surface 2 inches of soil. This practice affords maximum erosion control but is limited to flatter slopes where equipment can operate safely. Tracking is primarily used on steeper than 3:1 cut and fill slopes to cut the mulch into the soil with cleated bulldozer tracks.

2. Mulch Nettings - Staple lightweight biodegradable paper, plastic or cotton nettings over the mulch according to manufacturer's recommendations. Netting is usually available in rolls 4-feet wide and up to 300-feet long.

3. Liquid Mulch Binders
Application of liquid binders should be heavier at edges where wind catches mulch, in valleys, and at crests of banks. Remainder of area should be uniform in appearance. Caution should be used with asphalt in residential and similar areas.

a. Cutback asphalt - rapid curing (RC-70, RC-250, and RC-800) or medium curing (MC-250 or MC-800). Apply 5 gallons per 1,000 square feet or 218 gallons per acre on flat areas, and on slopes less than 8-feet high. On slopes 8-feet or more high, use 8 gallons per 1,000 square feet or 348 gallons per acre.

b. Emulsified asphalt - (SS-1, CSS-1, CMS-2, MS-2, RS-1, RS-2, CRS-1, and CRS-2). Apply 5 gallons per 1,000 square feet or 218 gallons per acre on flat areas and on slopes less than 8-feet high. On slopes 8-feet or more high, use 8 gallons per 1,000 square feet or 348 gallons per acre.

All asphalt designations are from the Asphalt Institute Specifications.

c. Synthetic binders - Synthetic binders such as Acrylic DLR (Agri-Tac), DCA-70, Petroset or Terra Tack may be used at rates recommended by the manufacturer to anchor mulch material.

4. Wood cellulose fiber - Wood cellulose fiber may be used for anchoring straw. The fiber binder shall be applied at a net dry weight of 750 pounds/acre. The wood cellulose fiber shall be mixed with water and the mixture shall contain a maximum of 50 pounds of wood fiber per 100 gallons.

5. Peg and Twine - Drive 8-to 10-inch wooden pegs to within 2 to 3 inches of the soil surface every 4 feet in all directions. Stakes may be driven before or after applying mulch. Secure mulch to soil surface by stretching twine between pegs in a criss-cross within a square pattern. Secure twine around each peg with two or more round turns.

Note: All names given above are registered trade names. This does not constitute a recommendation of these products to the exclusion of other products.

TABLE 50-1

Temporary Seedings by Rates, Depths and Dates

Species 3/	Seeding Rate Per Acre	Lbs/1000 Sq. Ft.	Planting Depth 2/ (Inches)	Seeding Dates 6/ COASTAL PLAIN 2/1-4/30	5/1-8/14	8/15-11/30	PIEDMONT 3/1-4/30	5/1-8/14	8/15-11/15	MOUNTAINS 3/15-5/31	6/1-7/31	8/1-10/31
Choose one:												
Barley	2½ bu.	2.8	1-2	5/ x	-	By 10/15	5/ x	-	By 10/15	x	-	By 10/1
Oats	3 bu.	2.2	2-2	x	-	-	x	-	-	x	-	-
Rye	2½ bu.	3.2	1-2	x	-	x	x	-	x	x	-	x
Italian or perennial ryegrass 1/	40 lbs.	.92	¼-½	5/ x	-	By 11/1	5/ x	-	By 11/1	x	-	By 8/15
Millet	40 lbs.	.92	½	-	x	-	-	x	-	-	x	-
Weeping, Boer, or Lehmann's lovegrass	3 lbs.	.07	¼-½	-	x	-	-	x	-	-	x	-
Sudangrass 4/	40 lbs.	.92	1-2	-	x	-	-	x	-	-	x	-

1/ Use only on areas where seed stalks and volunteer growth are acceptable.
2/ Applicable on slopes 3:1 or less.
3/ Use varieties currently recommended for Maryland. Use certified seed when available.
4/ Use common sudangrass varieties only. Do not use hybrids.
5/ Twenty pounds per acre of annual lespedeza may be added to ½ the seeding rate of any species used for seedings.
6/ Between fall and spring seeding dates, use mulching only or sodding practices.
x Applicable during entire period.
- Not applicable in period.

STATE OF MARYLAND — JASON LEE THOMPSON — NO. 3172 — LANDSCAPE ARCHITECT — FOR REV.#4

STATE OF MARYLAND — MERRIL ELIOT PLAIT — NO. 17225 — REGISTERED PROFESSIONAL ENGINEER

Date	No.	Revision Description
4-1-16	4	REVISE TOTAL SHEETS
April 1995	3	PARKING EXPANSION

ADDRESS CHART

LOT NO.	ADDRESS
D6	7060 DEEPAGE DRIVE
D-II	7080 DEEPAGE DRIVE

SUBDIVISION NAME			SECT./AREA		LOT PARCEL NO.
VILLAGE OF OWEN BROWN			2/2		D-6 & D-11
PLAT NO. 3337 4240	BLOCK NO. 4	ZONE NEW TOWN COMMERCIAL	TAX/ZONE-MAP 42	ELECT. DIST. 6	CENSUS TR 6061.03
WATER CODE E-11			SEWER CODE 53303006		

BY THE ENGINEER:
"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

4.26.95
7/23/90
ENGINEER: CHARLES S. CARNAGGIO — DATE

BY THE DEVELOPER:
"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT & EROSION BEFORE BEGINNING THE PROJECT."
I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

7-24-90
DEVELOPER — DATE

FOR COUNTY USE ONLY

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 7-5-90

7/23/90
Date

STATE OF MARYLAND — CHARLES SAMUEL CARNAGGIO — No. 10963 REGISTERED PROFESSIONAL ENGINEER

Professional Engr. No. 10963

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

7/27/90
U S SOIL CONSERVATION SERVICE — DATE

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

7/27/90
HOWARD S.C.D. — DATE

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

10/23/90
COUNTY HEALTH OFFICER — DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

11.1.90
PLANNING DIRECTOR — DATE

10/26/90
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE

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

10/16/90
Acting DIRECTOR — DATE

8/2/90
CHIEF, BUREAU OF ENGINEERING — DATE

Date	No	Revision Description
4-2-90	1	REVISED PER HOWARD COUNTY COMMENTS
7-5-90	2	REVISED PER HOWARD COUNTY COMMENTS

OWNER/DEVELOPER (301) 381-0C20

COLUMBIA ASSOCIATION
9861 BROKEN LAND
SUITE 300
COLUMBIA, MARYLAND 21046

SUPREME COURT/SKATELAND

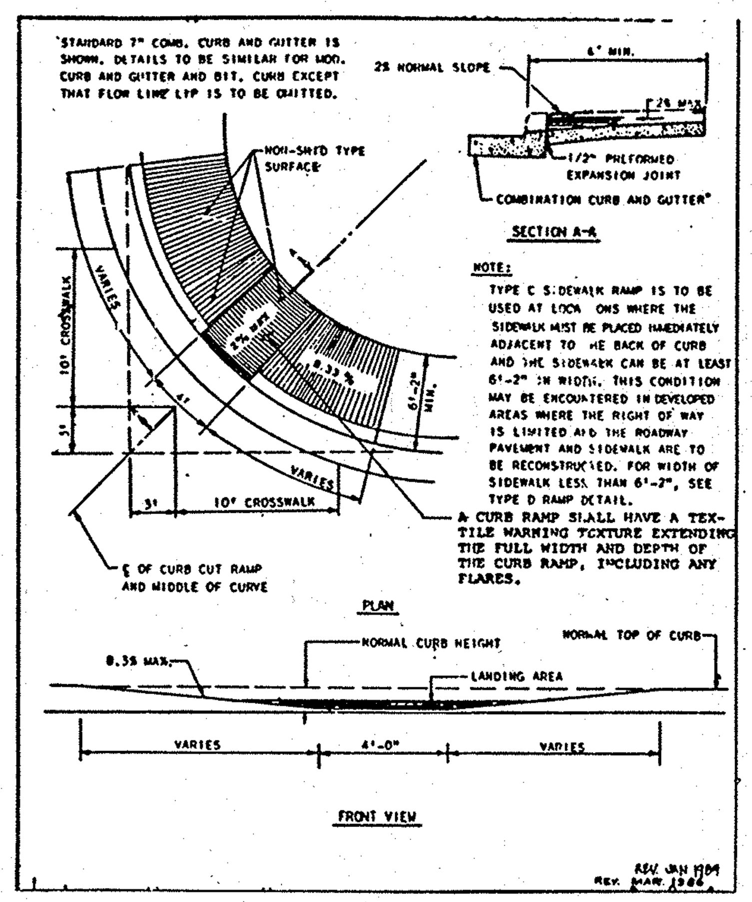
CENTURY ENGINEERING, INC.
CONSULTING ENGINEERS • PLANNERS
32 WEST ROAD
TOWSON, MARYLAND 21204

AREA
RECORD PLAT REFERENCE NO. 3337, 4240
VILLAGE OF OWEN BROWN
SECTION 2 AREA 2 PARCELS D6 & D11
ELECTION DISTRICT NO. 6 HOWARD COUNTY, MD

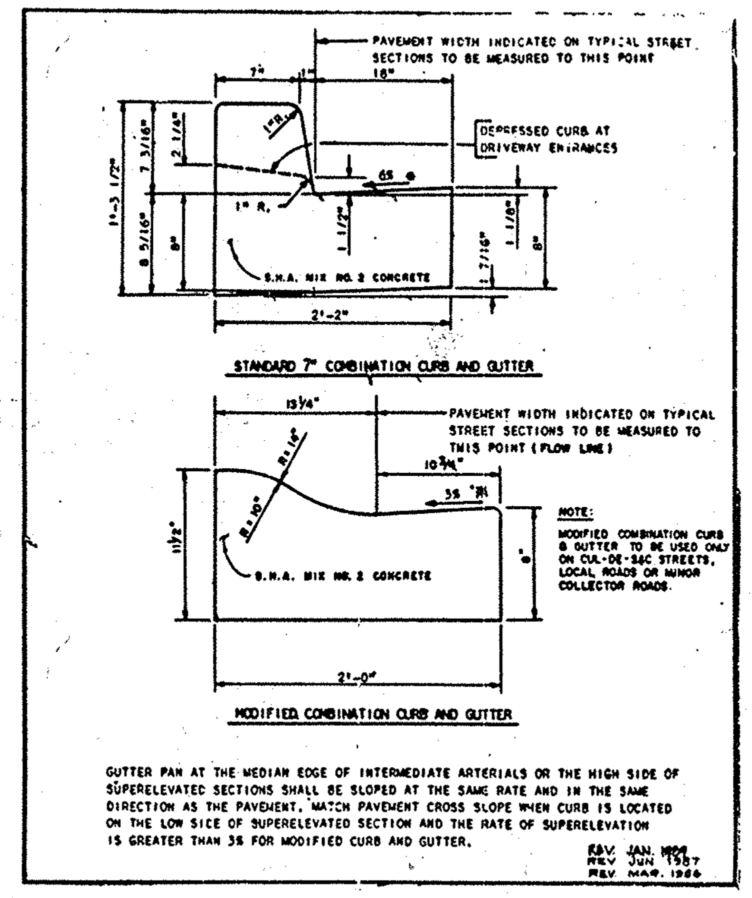
TITLE
GRADING AND SEDIMENT EROSION CONTROL DETAILS

Des By CEI	Scale AS NOTED	Proj No 89-064
Drn By CEI	Date MARCH 8, '90	Drawing No.
Chk By RFM	Approved CSC	8 OF 14

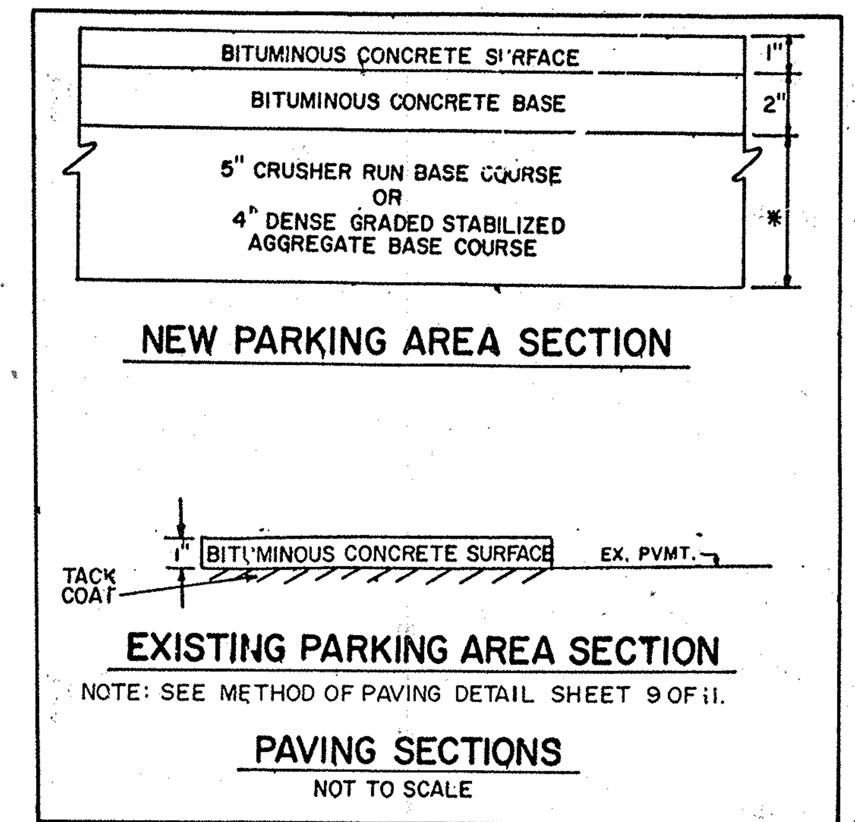
SDP 90.124

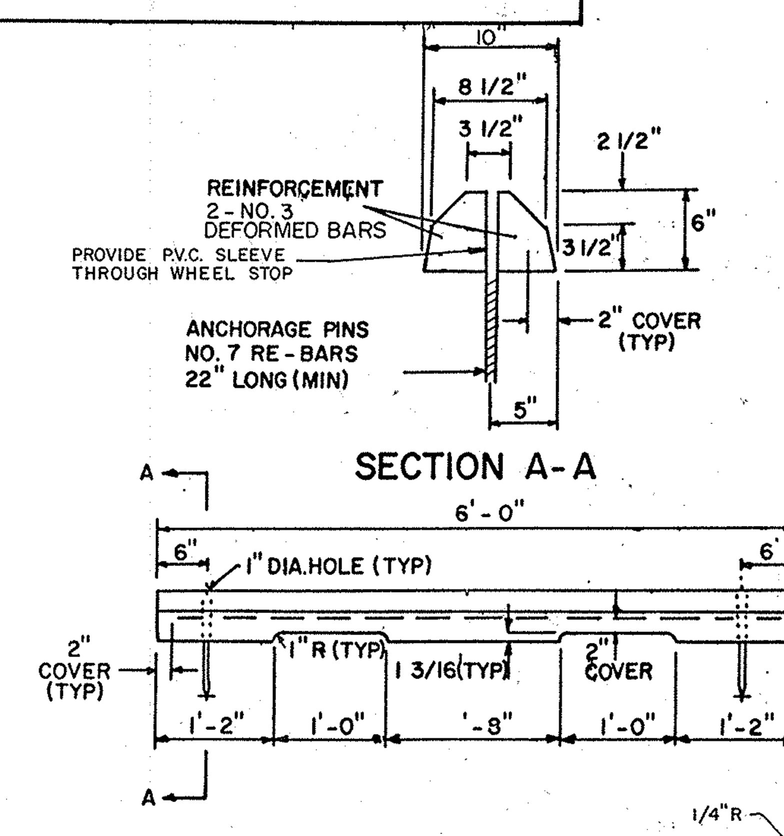


SIDEWALK RAMP
NOT TO SCALE

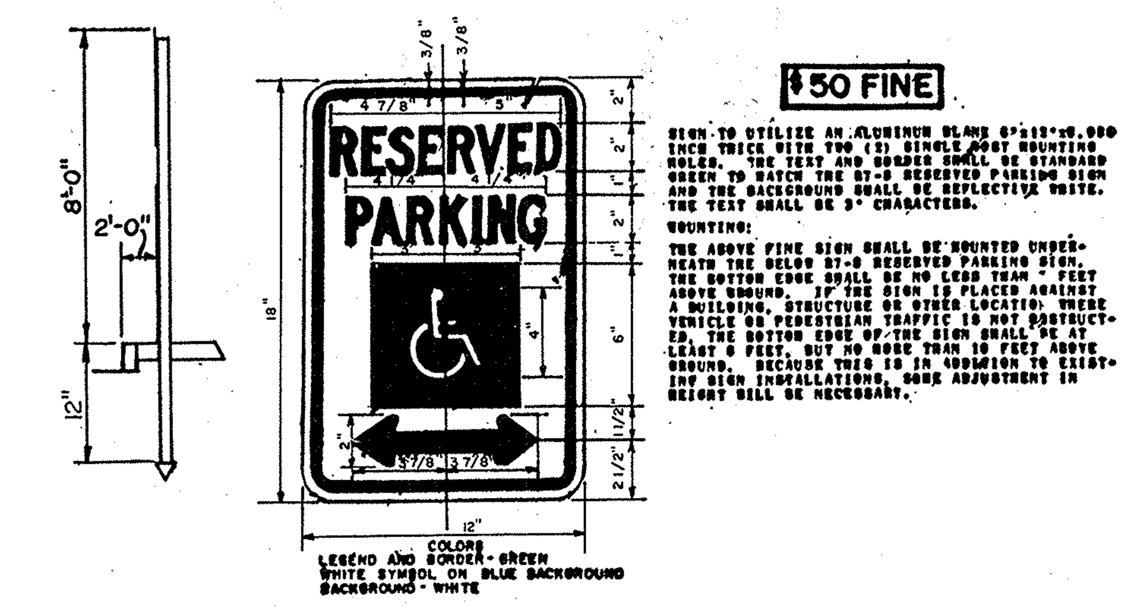


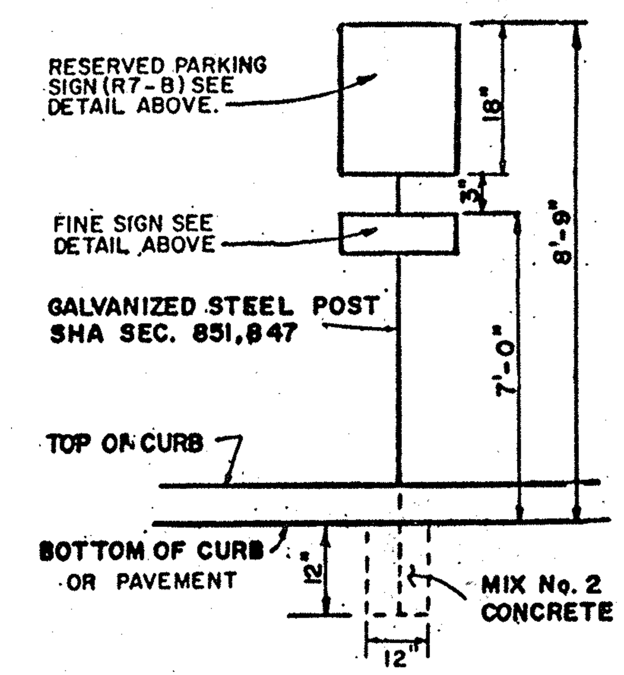
COMBINATION CURB & GUTTER
NOT TO SCALE





WHEEL STOPS
NOT TO SCALE



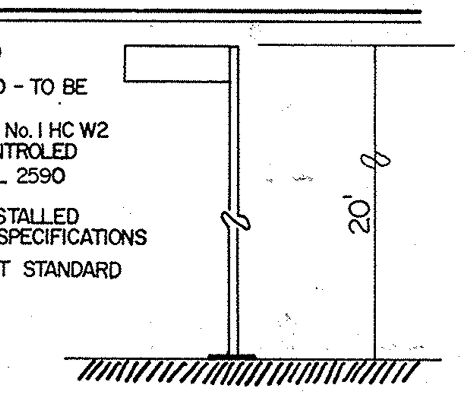


NUTS AND BOLTS ASTM B 211, ALLOY T4, 6262 T9 OR 6061 T6
FLAT WASHERS ASTM B 209, ALLOY 2024 T4
LOCK WASHERS ASTM B 211, ALLOY 7075 T6
ELASTIC NUT STOPS ASTM B 211, ALLOY 2017 T4

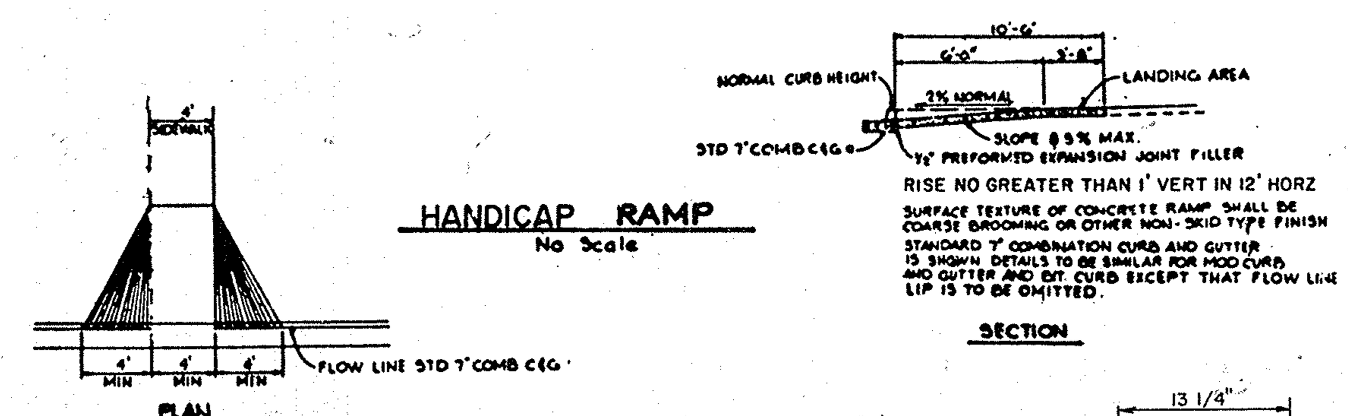
HANDICAP SIGN AND PLACEMENT DETAILS
NOT TO SCALE

LIGHTING SCHEDULE

- EXISTING LIGHT STANDARD
- PROPOSED LIGHT STANDARD - TO BE SAME AS EXISTING i.e. CROUSE-HINDS MODEL ASL No. 1 HC W2 175 W MERCURY VAPOR CONTROLED "CUT-OFF" LIGHT WITH ML 2590 PHOTOELETRIC CONTROL MOUNTED ON 20' POLE INSTALLED AS PER MANUFACTURER'S SPECIFICATIONS
- RELOCATED EXISTING LIGHT STANDARD

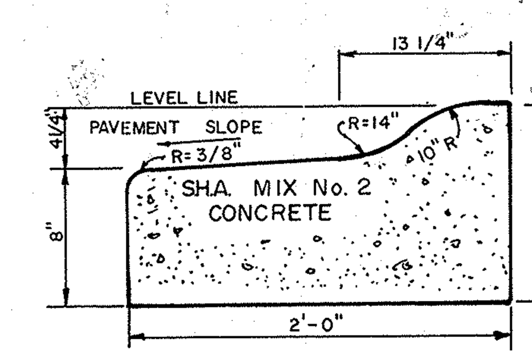


TYPICAL POLE STANDARD
NO SCALE

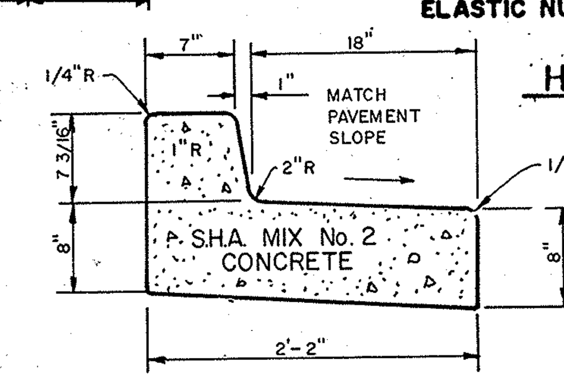


HANDICAP RAMP
No Scale

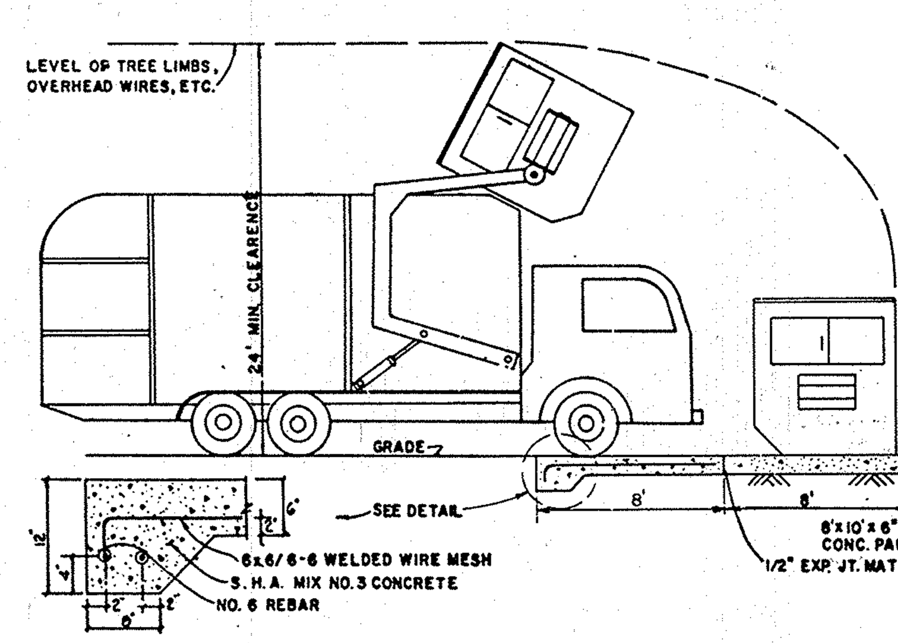
RISE NO GREATER THAN 1' VERT IN 12' HORZ
SURFACE TEXTURE OF CONCRETE RAMP SHALL BE COARSE BROOMING OR OTHER NON-SKID TYPE FINISH
STANDARD 7" COMBINATION CURB AND GUTTER IS SHOWN DETAILS TO BE SIMILAR FOR MOD CURB AND GUTTER AND BIT. CURB EXCEPT THAT FLOW LINE LIP IS TO BE OMITTED.



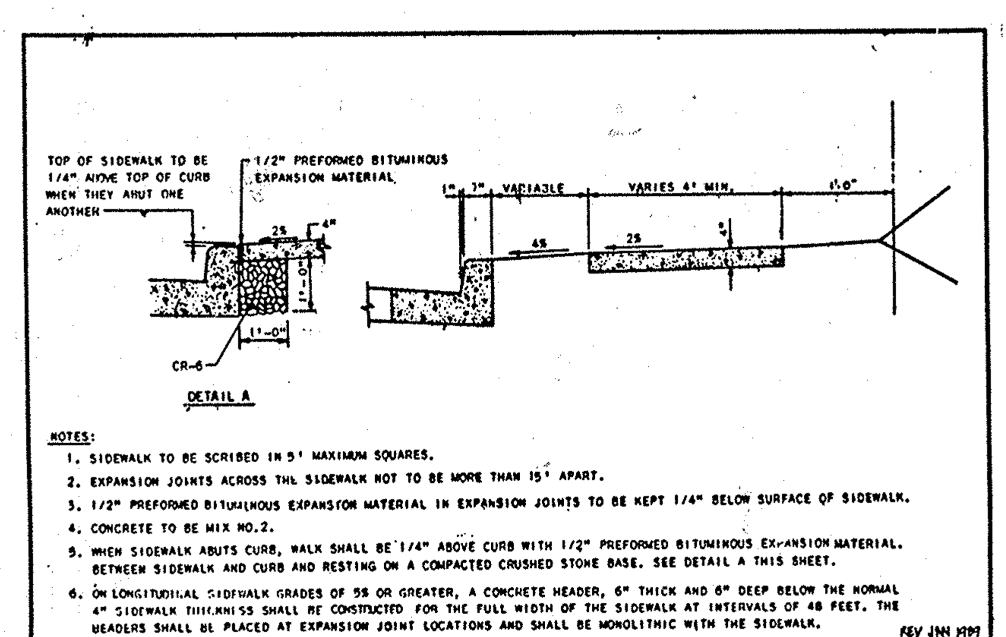
REVERSE MODIFIED CURB & GUTTER
NOT TO SCALE



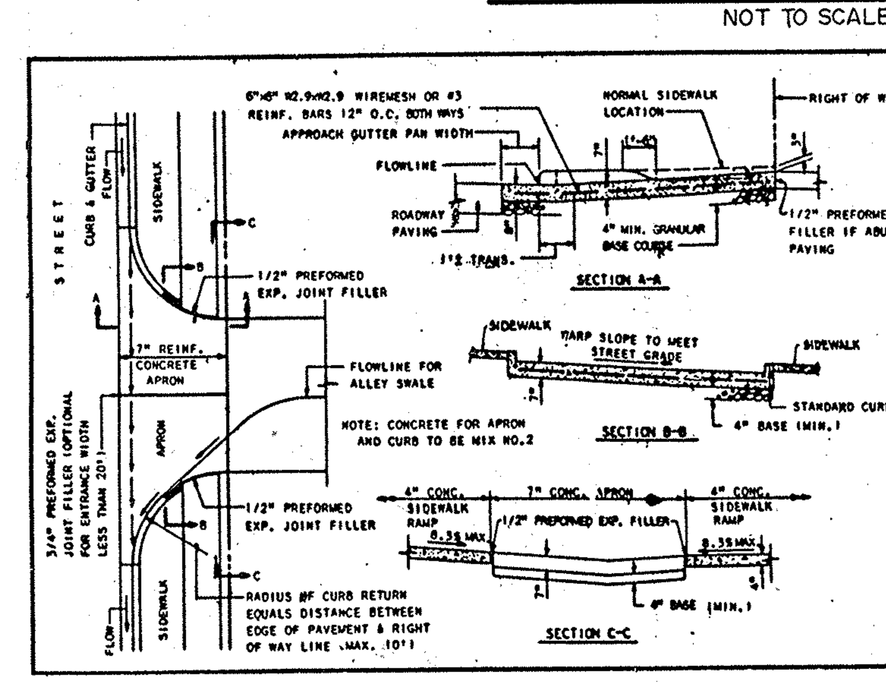
REVERSE STD. CURB & GUTTER
NOT TO SCALE



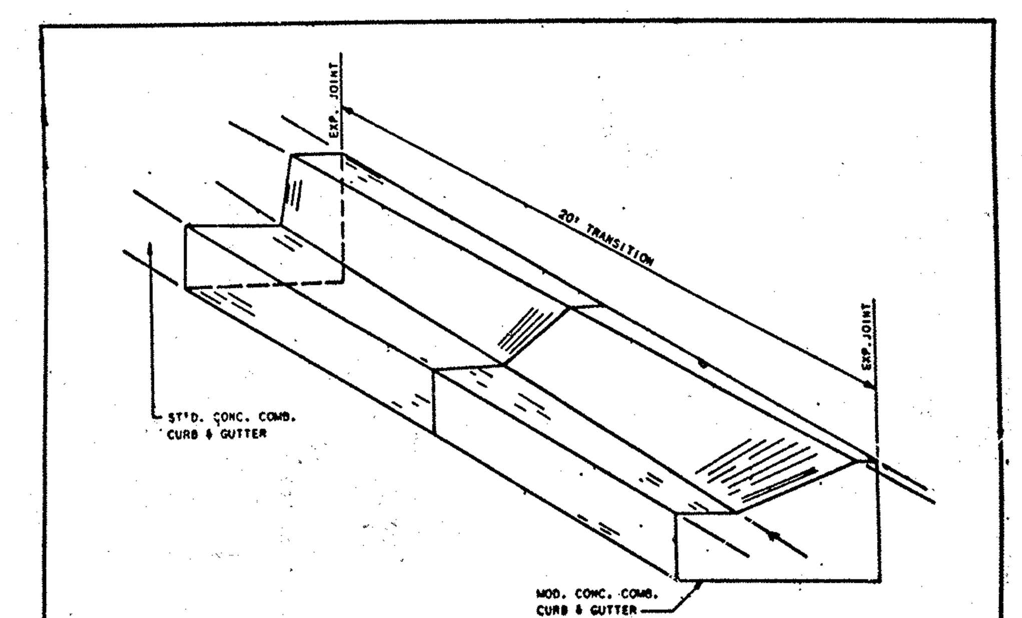
DUMPSTER PAD
NOT TO SCALE



CONCRETE SIDEWALK
NOT TO SCALE



CONCRETE APRON FOR COMMERCIAL INDUSTRIAL APARTMENT ENTRANCE
NOT TO SCALE



CONCRETE CURB AND GUTTER TRANSITION
NOT TO SCALE

STATE OF MARYLAND JASON LEE THOMPSON LANDSCAPE ARCHITECT No. 3172 — FOR REV. #3

REVIEWED FOR HOWARD COUNTY S.C.D. AND MEETS TECHNICAL REQUIREMENTS
James M. Holmes — U.S. SOIL CONSERVATION SERVICE — 7/27/90 DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT
John R. Robertson — HOWARD S.C.D. — 7/27/90 DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
Joyce M Bozdudper — COUNTY HEALTH OFFICER — 10/23/90 DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
PLANNING DIRECTOR — 11.1.90 DATE
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — 10/26/90 DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Acting DIRECTOR — 10/16/90 DATE
William E. Riley — CHIEF, BUREAU OF ENGINEERING — 8/7/90 DATE

Date	No	Revision Description
4-2-90	1	REVISED PER HOWARD CO. COMMENTS
7-5-90	2	REVISED PER HOWARD CO. COMMENTS

OWNER/DEVELOPER (301) 381-0020
COLUMBIA ASSOCIATION
9861 BROKEN LAND
SUITE 300
COLUMBIA, MARYLAND 21046

SUPREME COURT/SKATELAND
LOT D-11 LOT D-6

CENTURY ENGINEERING, INC.
(301) 823-8070
CONSULTING ENGINEERS • PLANNERS
32 WEST ROAD
TOWSON, MARYLAND 21204

AREA: RECORD PLAT REFERENCE NO. 3337, 4240
VILLAGE OF OWEN BROWN
SECTION 2 AREA 2 LOTS D-6 & D11
ELECTION DISTRICT NO. 6 HOWARD COUNTY, MD.

TITLE: SITE DEVELOPMENT DETAILS

Des By NAM	Scale AS SHOWN	Proj No 89-064
Drn By MAG	Date DEC. 26, 1989	Drawing No.
Chk By DDS	Approved CSC	9 OF 14 △3

ADDRESS CHART	
LOT NO.	ADDRESS
D6	7060 DEEPAGE DRIVE
D11	7080 DEEPAGE DRIVE

SUBDIVISION NAME			SECT./AREA		LOT PARCEL NO.
VILLAGE OF OWEN BROWN			2/2		D-6 & D-11
PLAT NO. 3337 4240	BLOCK NO. 4	ZONE NEW TOWN COMMERCIAL	TAX/ZONE-MAP 42	ELECT. DIST. 6	CENSUS TR 6061.03
WATER CODE E-11			SEWER CODE 5330300		

BY THE ENGINEER:
"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."
ENGINEER: CHARLES S. CARNAGGIO — 7/23/90 DATE

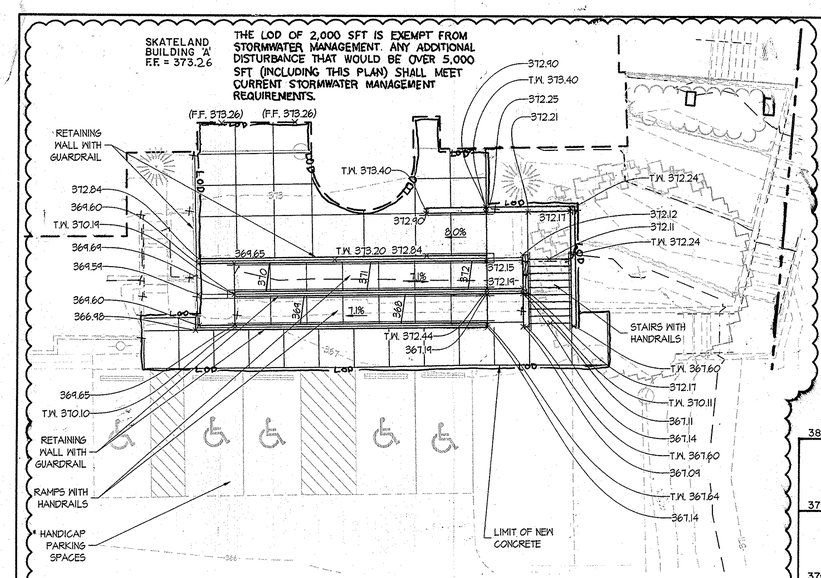
No.	DATE	REVISION DESCRIPTION
△3	4-1-16	REVISE TOTAL SHEETS

BY THE DEVELOPER:-
"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT & EROSION BEFORE BEGINNING THE PROJECT." I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.
DEVELOPER — 7-24-90 DATE

FOR COUNTY USE ONLY
APPROVED PLANNING BOARD of HOWARD COUNTY
DATE 7-5-90

7/23/90 Date
STATE OF MARYLAND CHARLES SAMUEL CARNAGGIO No. 10963 REGISTERED PROFESSIONAL ENGINEER
Professional Engr. No. 10963

SDP 90 124

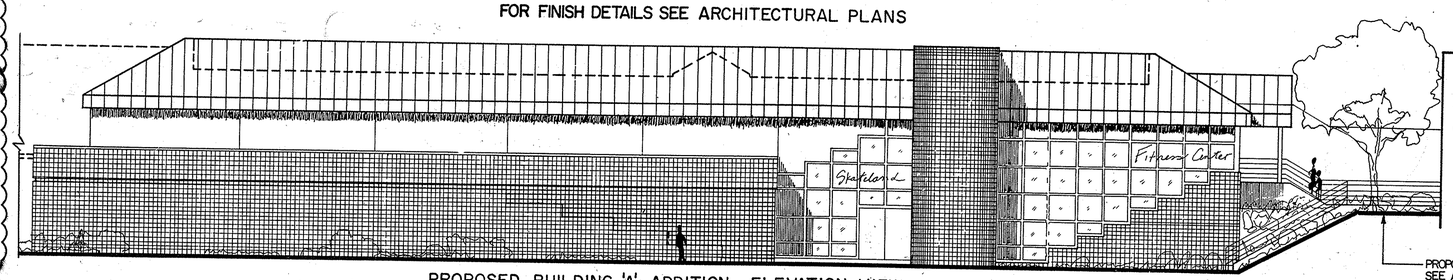


BUILDING 'A' - HANDICAP ACCESS DETAIL

SCALE: 1"=20'

* THESE HANDICAP SPACES WERE REBUILT IN COMPLIANCE WITH THE CURRENT ADA CODE IN 2014. THE PROPOSED RAMP DOES NOT DISTURB THE EXISTING HANDICAP SPACES.

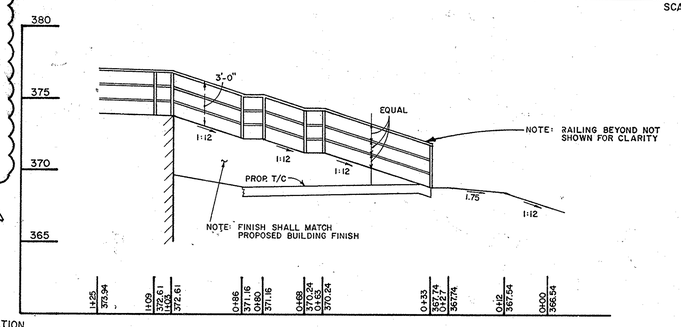
FOR FINISH DETAILS SEE ARCHITECTURAL PLANS



PROPOSED BUILDING 'A' ADDITION - ELEVATION VIEW

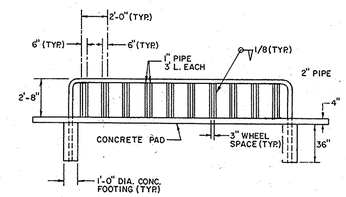
SCALE: NTS

4 4-25-2012 RED LINE REVISION
1. PROPOSED ADDITION (10 BS, 6 sq.ft.) TO BUILDING B



PROFILE ℄ HANDICAP RAMP

SCALE: HOR. 1"=20'
VER. 1"=5'



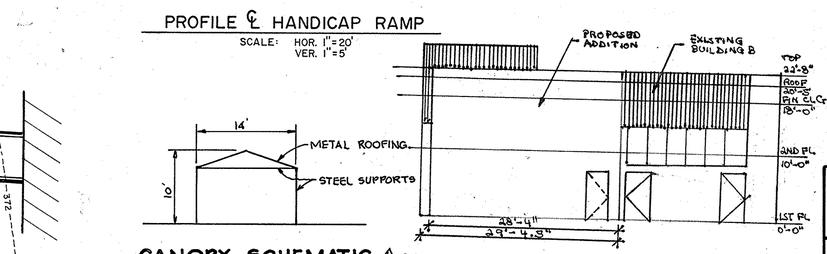
NOTES

1.) RACK TO BE CONSTRUCTED OF SCH 40 STEEL PIPE PAINTED BROWN TO MATCH FENCE BY MANUFACTURERS RECOMMENDATION.

2.) DRILL UNDERSIDE OF FRAME TO ACCEPT 1" PIPES. WELD IN PLACE AS SHOWN. EACH PIPE SHOULD EXTEND TO BOTTOM OF PAD (APPROX. 3' L. EACH)

BIKE RACK DETAIL

NOT TO SCALE



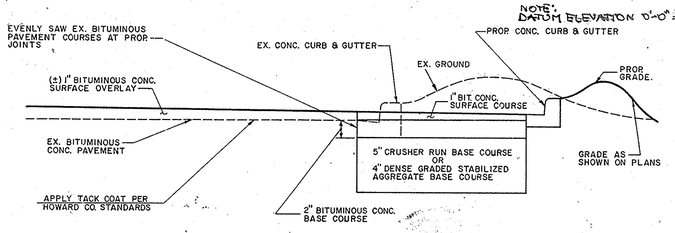
CANOPY SCHEMATIC

SCALE: 1"=10'

4 PROPOSED ADDITION - ELEVATION VIEW WEST

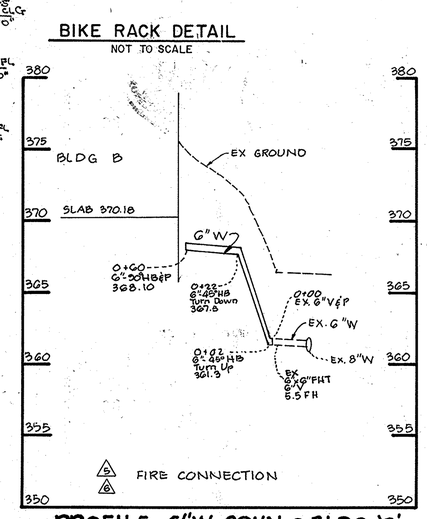
SCALE: NTS

NOTE: DATUM ELEVATION 0'-0" = 370.28'



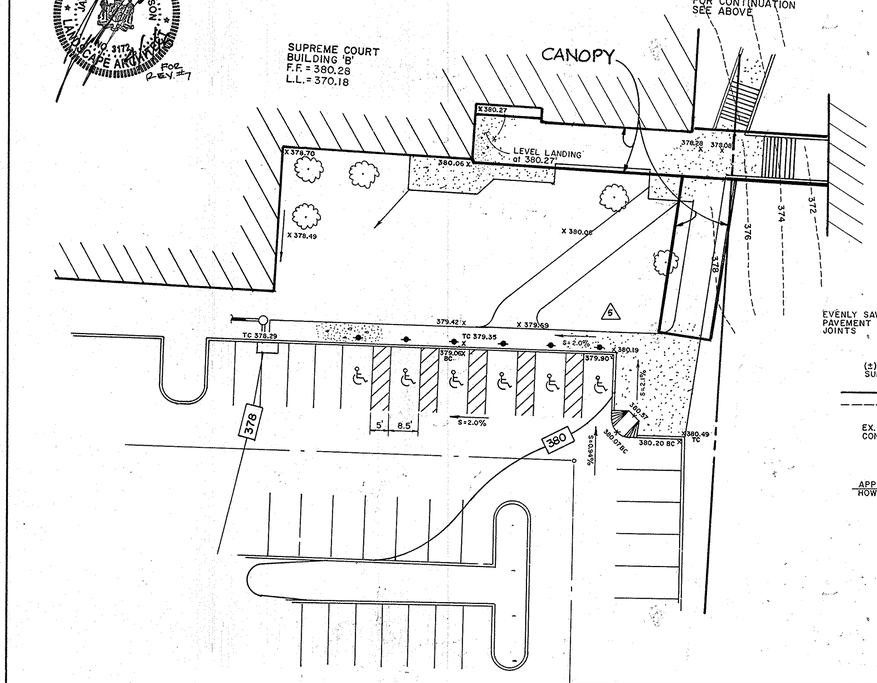
METHOD OF PAVEMENT LAYOUT

SCALE: NTS



PROFILE 6" W. CONN @ BLDG 'B'

SCALE: H: 1"=50
V: 1"=5'



BUILDING 'B' - HANDICAP ACCESS DETAIL

SCALE: 1"=20'

ADDRESS CHART	
LOT NO.	ADDRESS
D6	7060 DEEPAGE DRIVE
D11	7080 DEEPAGE DRIVE

NO	DATE	REVISION
3	4-1-16	REVISE BLDG 'A' ACCESS & TOTAL SHEETS
2	11-10-04	REVISED 6" FIRE CONN. LOCATION
1	10-20-04	ADDED CANOPY BETWEEN BLDG'S A & B, ADDED 6" FIRE CONN., AND UPDATED EX. CONDITIONS

SUBDIVISION NAME			SECT./AREA	LOT PARCEL NO.
VILLAGE OF OWEN BROWN			2/2	D-6 & D-11
PLAT NO.	BLOCK NO.	ZONE	TAX ZONE-MAP	ELECT. DIST.	CENSUS TR
3337 4240	4	NEW TOWN COMMERCIAL	42	6	6061.03
WATER CODE			SEWER CODE	
E-11			53303006	

BY THE ENGINEER:

"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

Charles S. Camaggio — 7/23/90
ENGINEER CHARLES S. CAMAGGIO — DATE

BY THE DEVELOPER:

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT & EROSION BEFORE BEGINNING THE PROJECT." I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

DEVELOPER — 7-24-90
DATE

FOR COUNTY USE ONLY

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 7-5-90

7/23/90
Date

Charles S. Camaggio
Professional Engr. No. 10963

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

James M. Helm — 7/27/90
U.S. SOIL CONSERVATION SERVICE — DATE

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

John R. Robertson — 7/27/90
HOWARD S.C.D. — DATE

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

Joyce M. Beveridge — 10/23/90
COUNTY HEALTH OFFICER — DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

PLANNING DIRECTOR — DATE

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Acting DIRECTOR — 10/16/90
DATE

William E. Riley — 8/7/90
CHIEF, BUREAU OF ENGINEERING — DATE

Date	No	Revision Description
4-2-90	1	REVISED PER HOWARD CO. COMMENTS
7-5-90	2	REVISED PER HOWARD CO. COMMENTS

OWNER/DEVELOPER (301) 381-0020

COLUMBIA ASSOCIATION
9881 BROKEN LAND
SUITE 300
COLUMBIA, MARYLAND 21046

SUPREME COURT/SKATELAND
LOT D-11 LOT D-6

CENTURY ENGINEERING, INC.
CONSULTING ENGINEERS • PLANNERS
32 WEST ROAD
TOWSON, MARYLAND 21204
(301) 823-8070

AREA: RECORD PLAT REFERENCE NO. 3337, 4240
VILLAGE OF OWEN BROWN
SECTION 2 AREA 2 LOTS D-6 & D11
ELECTION DISTRICT NO. 6 HOWARD COUNTY, MD.

TITLE: SITE DEVELOPMENT DETAILS

Des By NAM	Scale AS SHOWN	Proj No 89-064
Drn By FLP	Date DEC. 26, 1989	Drawing No. 10 OF 14
Chk By DDS	Approved CSC	

SDP 90 124

PLANT LIST- SITE PLANTING PLAN

NO	SYM	QNT	PLANT NAME	SIZE	ROOTS	REMARKS	ADDITION	RELOCATE
1		12	ACER RUBRUM 'SUNSET' GLORY RED OCTOBER GLORY MAPLE	2½-3" CAL 12-14 HT	B&B	FULL HEAD	ADD 1 MAPLE	2
2		12	CRATAEGUS VIRID. 'WINTER KING' WINTER KING HAWTHORN	2-2½ CAL 8-10 HT	B&B	FULL HEAD		
3		6	CORNUS FLORIDA FLOWERING DOGWOOD	2-2½ CAL 8-10 HT	B&B			
4		50	PINUS STROBUS WHITE PINE	2-2½ CAL 6-8 HT	B&B	FULL FORM	ADD 14 PINES	9
5		42	PLATANUS OCCIDENTALIS AMERICAN SYCAMORE	2½-3 CAL 12-14 HT	B&B	FULL HEAD	ADD 2 SYCAMORE	4
6		40	TAXUS M HICKSI HICK'S YEW	30" HT	B&B	TRIM INP HEDGE	PLANT 36" O.C.	
			EXISTING TREE TO BE SAVED					
			EXISTING TREE TO BE REMOVED					

LANDSCAPE REQUIREMENTS
(AS REQUIRED BY HOWARD RESEARCH & DEVELOPMENT CORP)

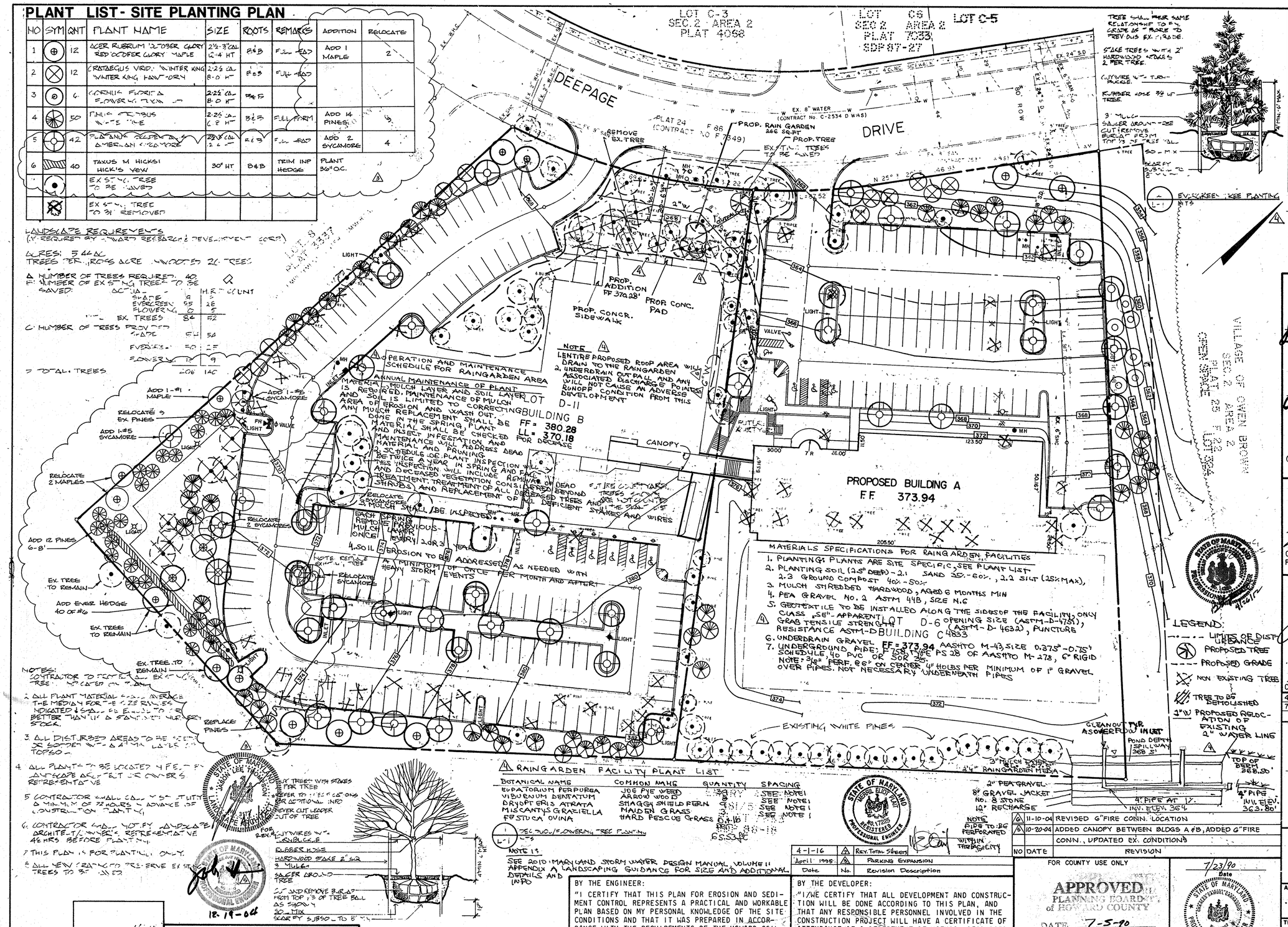
ACRES: 5.44 AC
TREES PER ACRE 4 SHADE TREES 20 TREES

A. NUMBER OF TREES REQUIRED: 40
B. NUMBER OF EXISTING TREES TO BE SAVED:

	ACTUAL	MIN. REQ'D COUNT
SHADE	9	5
EVERGREEN	95	26
FLOWERING	0	5
TOTAL EX. TREES	82	52

C. NUMBER OF TREES PROVIDED

SHADE	54	50
EVERGREEN	50	25
FLOWERING	12	9
D. TOTAL TREES	206	140



4-25-2012 RED LINE REVISION

VICINITY MAP
SCALE: 1" = 2000'

1. PROPOSED ADDITION (1085 SQ. FT) TO BUILDING B
2. PROPOSED RAIN GARDEN (266 SQ. FT)
3. RELOCATION OF EX. 2" WATER LINE

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

James M. Helm 7/27/90
U.S. SOIL CONSERVATION SERVICE, DATE

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

John R. Robertson 7/27/90
HOWARD S.C.D. DATE

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

Joyce M Boyland 10/23/90
COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

PLANNING DIRECTOR DATE 11-1-90

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE 11-1-90

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

DIRECTOR 10/16/90
DATE

William E. Riley 8/7/90
CHIEF, BUREAU OF ENGINEERING DATE

Date	No	Revision Description
4-2-90	1	REVISED PER HOWARD CO. COMMENTS
7-5-90	2	REVISED PER HOWARD CO. COMMENTS

OWNER/DEVELOPER (301) 381-0020
COLUMBIA ASSOCIATION
9861 BROKEN LAND
SUITE 300
COLUMBIA, MARYLAND 21046

SUPREME COURT/SKATELAND
D-11 D-6

NO	DATE	REVISION
6	11-10-04	REVISED 6" FIRE CONN. LOCATION
5	10-20-04	ADDED CANOPY BETWEEN BLDGS A & B, ADDED 6" FIRE
		CONN., UPDATED EX. CONDITIONS

Date	No.	Revision Description
4-1-16	4	REV. TOTAL SHEETS
April 1995	3	PARKING EXPANSION

CENTURY ENGINEERING, INC.
(301) 823-8070
CONSULTING ENGINEERS • PLANNERS
32 WEST ROAD
TOWSON, MARYLAND 21204

AREA: RECORD PLAT REFERENCE NO. 3337, 4240
VILLAGE OF OWEN BROWN
SECTION 2 AREA 2 PARCELS D6 & D11
ELECTION DISTRICT NO. 6 HOWARD COUNTY, MD.

TITLE: LANDSCAPING PLAN

Des By NAM	Scale 1" = 30'	Proj No 89-064	
Drn By ETJ	Date DEC. 26. 1989	Drawing No. 11 OF 14	
Chk By DDS	Approved CSC		

Professional Engr. No. 10863

ADDRESS CHART	
LOT NO.	ADDRESS
D6	7060 DEEPAGE DRIVE
D11	7080 DEEPAGE DRIVE

SUBDIVISION NAME				SECT. AREA	LOT PARCEL NO.
VILLAGE OF OWEN BROWN				2/2	D6 & D11
PLAT NO.	BLOCK NO.	ZONE	TAX ZONE	ELECT. DIST.	CENSUS TR
3337 4240	4	NEW TOWN COMMERCIAL	42	6	6061.03
WATER CODE			SEWER CODE		
E-11			53303006		

BY THE ENGINEER:
"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

Charles S. Camaggio 4-26-95
ENGINEER: CHARLES S. CAMMAGGIO 7/23/90 DATE

BY THE DEVELOPER:
"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT & EROSION BEFORE BEGINNING THE PROJECT." I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

DEVELOPER 7-24-90
DATE

FOR COUNTY USE ONLY
APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 7-5-90

7/23/90
Date

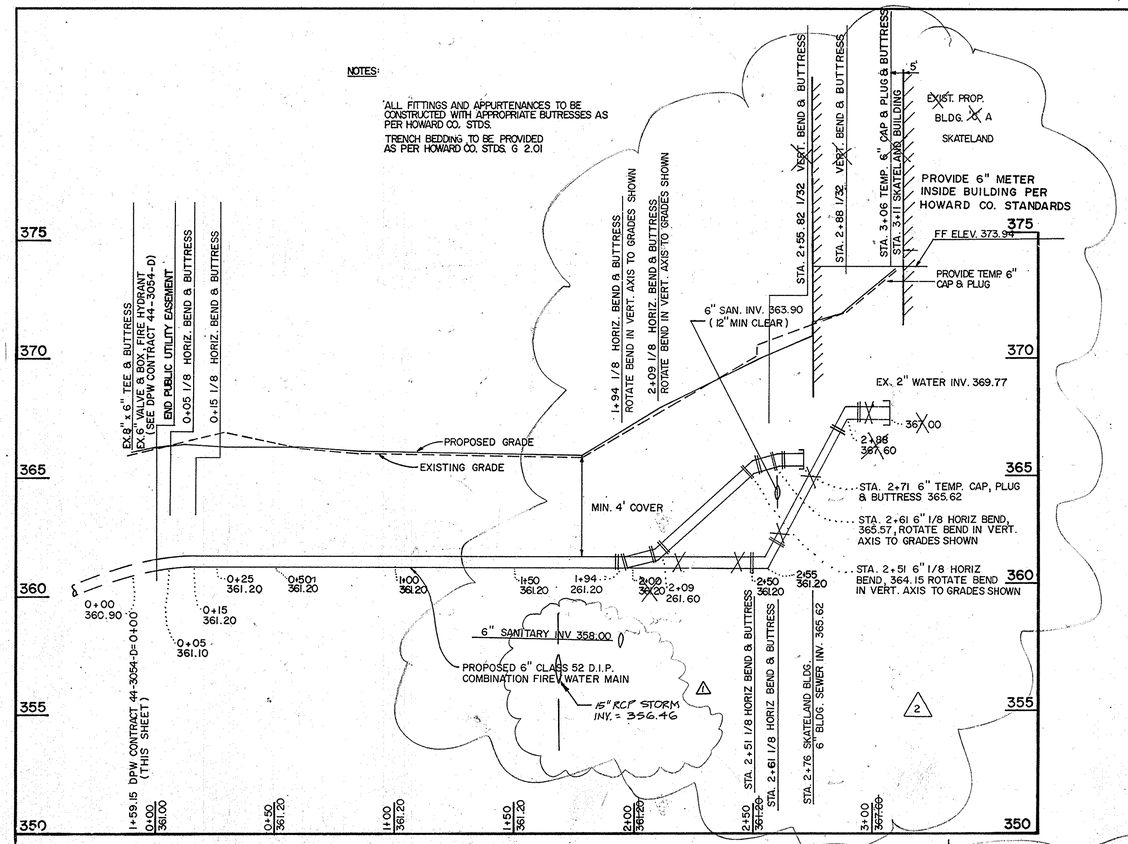
Charles S. Camaggio
Professional Engr. No. 10863

SDP 90-124

NOTES:

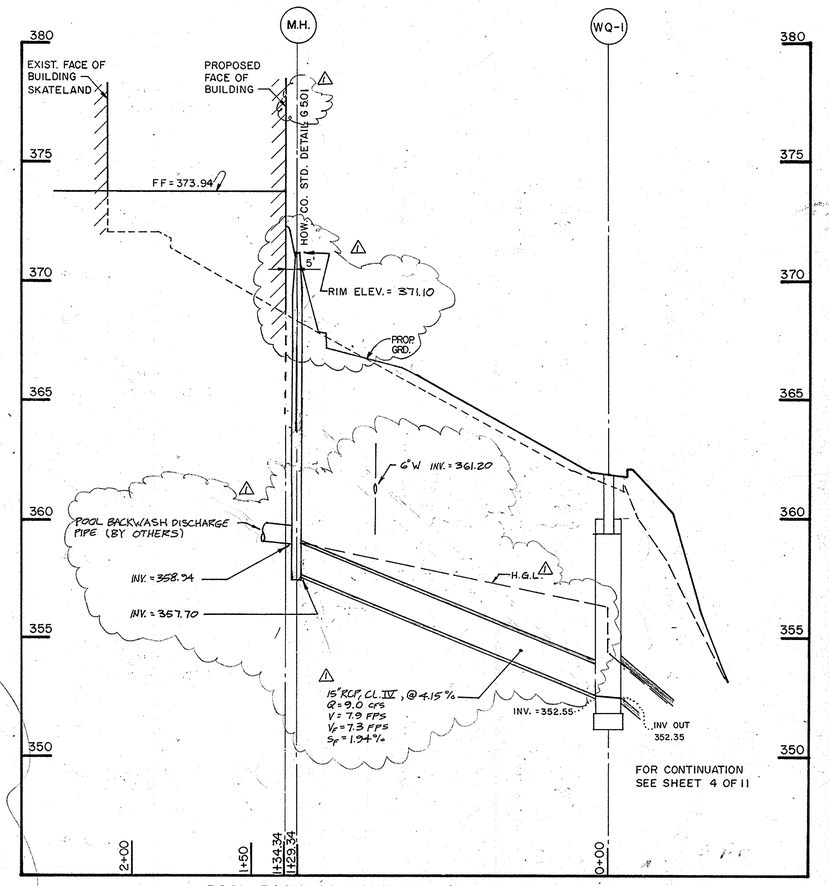
ALL FITTINGS AND APPURTENANCES TO BE CONSTRUCTED WITH APPROPRIATE BUTRESSES AS PER HOWARD CO. STDS.

TRENCH BEDDING TO BE PROVIDED AS PER HOWARD CO. STDS. G 2.01



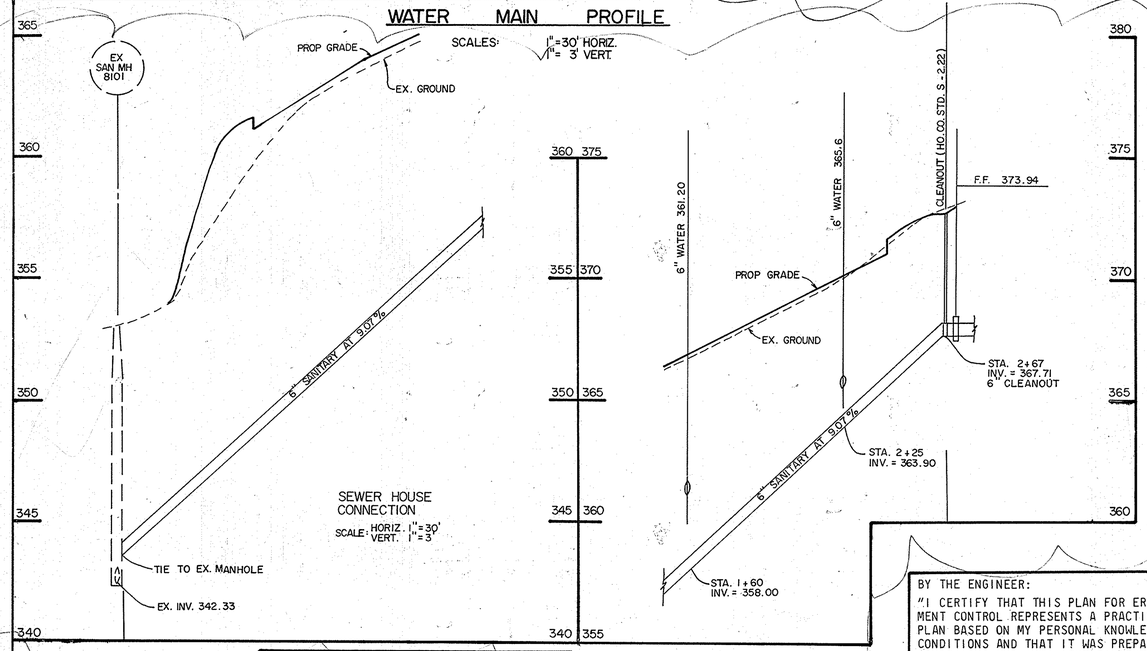
WATER MAIN PROFILE

SCALES: 1" = 30' HORIZ. 1" = 3' VERT.



POOL BACKWASH AND ROOFLEADER DRAIN PROFILE

SCALES: 1" = 30' HORIZ. 1" = 3' VERT.



PROCEDURE FOR ABANDONMENT OF EXISTING 2" WATER HOUSE CONNECTION

1. CUT PAVEMENT IN DEEPAGE DRIVE AND EXCAVATE TO LOCATE 2" WHC / CORPORATE ASSEMBLY AT 8" WATER MAIN
2. CLOSE CORPORATION STOP AND UNION 2" WHC. PLUG END OF 2" WHC WITH CONCRETE, MIN. 12" LENGTH OF PLUG
3. BACKFILL AND COMPACT PER HO. CO. STD. SPECS.
4. PATCH PAVEMENT PER HO. CO. STD. DRAWING #G-4.01
5. EXCAVATE AND REMOVE EX. WATER METER, SEVERING 2" WHC PIPE INTO AND OUT OF METER. PLUG ENDS OF BOTH PIPES WITH 12" LENGTH OF CONCRETE. METER SHALL BE RETURNED TO HO. CO. BUREAU OF UTILITIES, METER SECTION
6. BACKFILL, COMPACT, AND STABILIZE

5-7-91 For Revision 1 & 2

STATE OF MARYLAND JAMES ALAN ROGERS REG. 16713 REGISTERED PROFESSIONAL ENGINEER

STATE OF MARYLAND JASON LEE THOMPSON No. 31724 LICENSED LANDSCAPE ARCHITECT For REV. #3

No.	Date	Revision Description
2	4-1-16	REVISE TOTAL SHEETS

NUMBER	REVISION	DATE	INITIALS
2	ADD 2" WHC NOTES, REVISE WATER PROFILES, ADD SEWER PROFILE	1/91	JR
1	LOWER POOL BACKWASH DISCHARGE PIPE & M.H.	1/91	JR

ADDRESS CHART	
LOT NO.	ADDRESS
D6	7060 DEEPAGE DRIVE
D7	7080 DEEPAGE DRIVE

SUBDIVISION NAME			SECT./AREA	LOT/PARCEL NO.
VILLAGE OF OWEN BROWN			2/2	D6 & D11
PLAT NO.	BLOCK NO.	ZONE	TAX/ZONE MAP	ELECT. DIST.	CENSUS TR
4240	4	NEW TOWN COMMERCIAL	42	6	6061.03
WATER CODE			SEWER CODE	
E-11			53303006	

BY THE ENGINEER:

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Charles S. Camaggio — ENGINEER - CHARLES S CAMAGGIO — 7/23/90 DATE

BY THE DEVELOPER:

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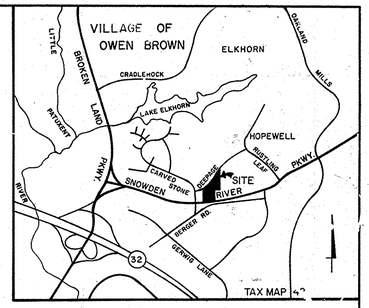
DEVELOPER — 7-24-90 DATE

APPROVED PLANNING BOARD of HOWARD COUNTY DATE 7-5-90

7/23/90 Date

STATE OF MARYLAND CHARLES SCHOOT CAMAGGIO No. 10963 PROFESSIONAL ENGINEER

Charles S. Camaggio — Professional Engr. No. 10963



VICINITY MAP
SCALE: 1" = 2000'

REVIEWED FOR HOWARD COUNTY G.C.D. AND MEETS TECHNICAL REQUIREMENTS

James M. Helm — U.S. CONSERVATION SERVICE — 7/27/90 DATE

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

John P. Robertson — HOWARD S.C.D. — 7/27/90 DATE

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

Joyce M. Boyd for Phillip J. Sun — COUNTY HEALTH OFFICER — 10/23/90 DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

PLANNING DIRECTOR — 11-1-90 DATE

Donald W. Trawick — CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — 11/1/90 DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Acting DIRECTOR — 10/16/90 DATE

William E. Riley for — CHIEF, BUREAU OF ENGINEERING — 8/7/90 DATE

Date	No	Revision Description
4-2-90	1	REVISED PER HOWARD CO. COMMENTS
7-5-90	2	REVISED PER HOWARD CO. COMMENTS

OWNER/DEVELOPER (301) 381-6020

COLUMBIA ASSOCIATION
9881 BRUKEN LAND
SUITE 300
COLUMBIA, MARYLAND 21046

SUPREME COURT/SKATELAND

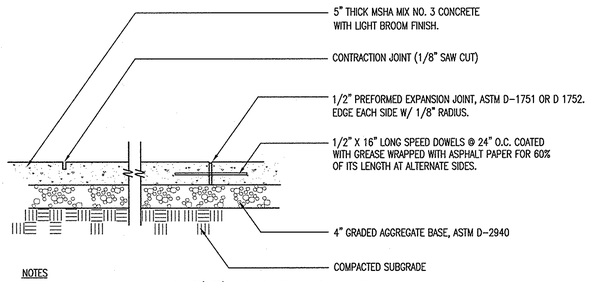
CENTURY ENGINEERING, INC.
(301) 823-8070
CONSULTING ENGINEERS • PLANNERS
32 WEST ROAD
TOWSON, MARYLAND 21204

AREA: RECORD PLAT REFERENCE NO. VILLAGE OF OWEN BROWN SECTION 2 AREA 3 PARCELS D7 & D8 ELECTION DISTRICT NO. 6 HOWARD COUNTY, MD.

TITLE: UTILITY PROFILES

Des By	NAM	Scale	1" = 30'	Proj No	89-064
Drn By	FLP	Date	DEC. 26, 1989	Drawing No.	12 OF 14
Chk By	DDS	Approved	CSC		

SDP 90 124

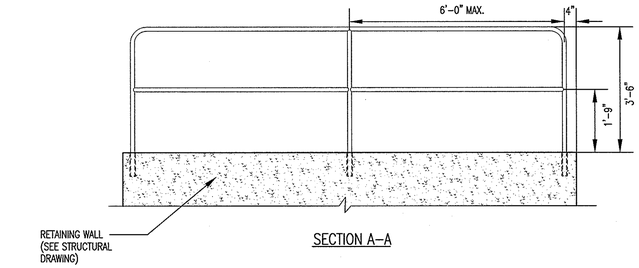


NOTES

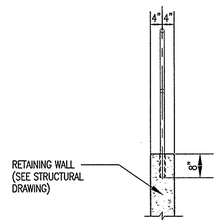
1. Place expansion joints not more than 20'-25' apart and at the end of each contiguous pour.
2. Place saw cut contraction joints at interval matching width of sidewalk but not more than 6' apart.
3. Provide expansion joints where pour meets existing concrete paving or curb.
4. Expansion joints to be recessed 1/4" below surface of sidewalk.
5. When sidewalk abuts back of street curb, walk shall be 1/4" above top of curb.
6. When sidewalk abuts existing concrete walk, core drill and install dowels per detail.
7. Match score pattern of adjacent sidewalk where practical.
8. Unless otherwise shown on plan, contractor to submit layout of proposed contraction expansion joints for approval prior to pouring concrete.

1 CONCRETE SIDEWALK DETAIL

NOT TO SCALE



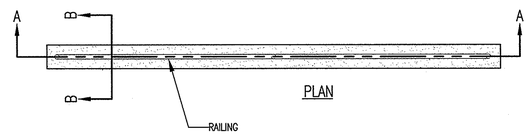
SECTION A-A



SECTION B-B

NOTES:

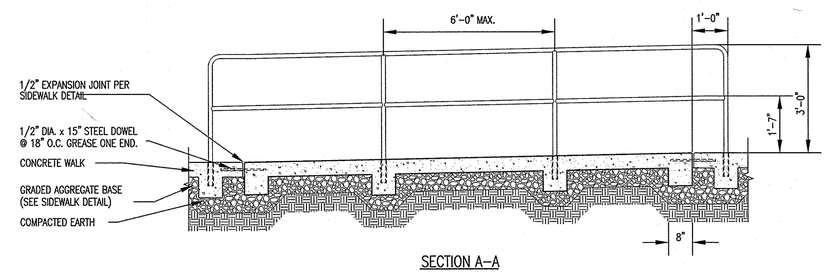
1. RAILINGS & POST TO BE SHOP FABRICATED OF 1-1/2" O.D. STAINLESS STEEL TUBING WITH ALL JOINTS CONTINUOUSLY WELDED.
2. TOP OF RAILING TO BE 42" ABOVE WALKING SURFACE.
3. ALL EXPOSED CONCRETE EDGE RADII SHALL BE 1/2".
4. ALL RAILING EXTERIOR RADII SHALL BE 4".
5. RAILING POSTS SHALL BE INSTALLED AT A DEPTH OF 8" INTO CONCRETE. CONCRETE SHALL BE CORE DRILLED AND POST SET WITH NON-SHRINK GROUT.



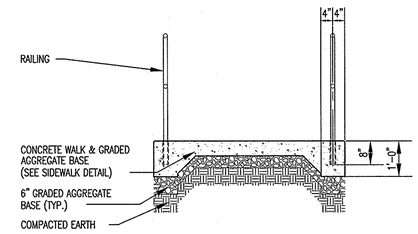
PLAN

2 RAILING DETAIL FOR REAINING WALL

SCALE: 1/2" = 1'-0"



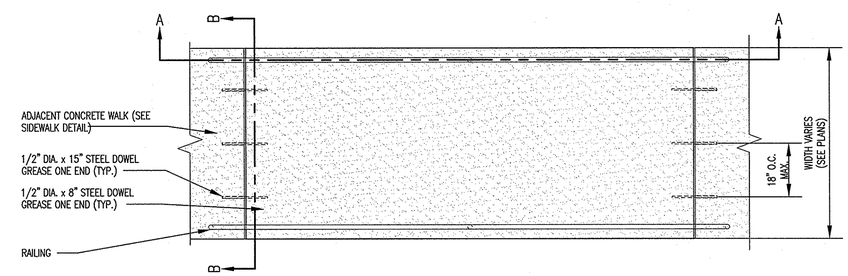
SECTION A-A



SECTION B-B

NOTES:

1. RAILINGS & POST TO BE SHOP FABRICATED OF 1-1/2" O.D. STAINLESS STEEL TUBING WITH ALL JOINTS CONTINUOUSLY WELDED.
2. TOP OF RAILING TO BE 36" ABOVE WALKING SURFACE.
4. ALL CONCRETE TO BE SHA MIX NO. 3.
5. ALL EXPOSED CONCRETE EDGE RADII SHALL BE 1/2".
6. ALL RAILING EXTERIOR RADII SHALL BE 4".
7. RAILING POSTS SHALL BE INSTALLED AT A DEPTH OF 8" INTO CONCRETE. CONCRETE SHALL BE CORE DRILLED AND POST SET WITH NON-SHRINK GROUT.
8. WALKING SURFACE TO RECEIVE LIGHT BRUSHED NON-SLIP FINISH THAT IS PERPENDICULAR TO THE DIRECTION OF PEDESTRIAN TRAVEL. (SEE SPECS)
9. UNLESS OTHERWISE SHOWN ON PLAN, ALL REBAR SHALL HAVE A MINIMUM CLEARANCE OF 3" FROM SURFACE.
10. EXPANSION AND CONTRACTION JOINTS SHALL BE SPACED IN ACCORDANCE WITH CONCRETE SIDEWALK DETAIL.
11. ALL EXPANSION JOINTS ON RAMP SHALL BE DOVELED AS SHOWN.



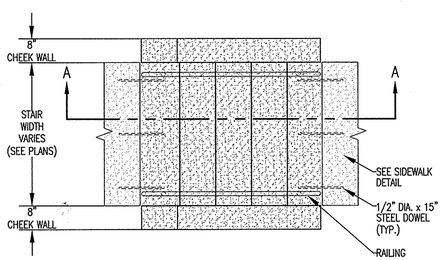
PLAN

3 CONCRETE RAMP & HANDRAILS

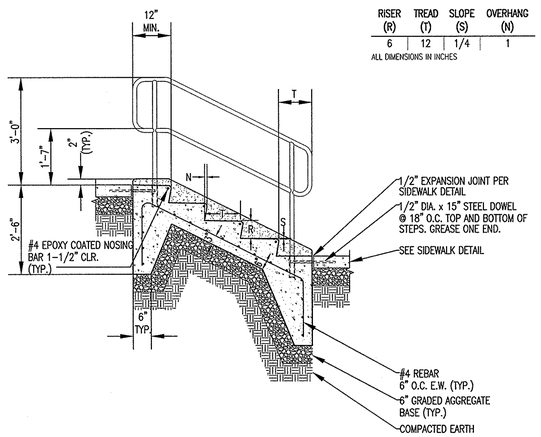
SCALE: 1/2" = 1'-0"

NOTES:

1. RAILINGS & POST TO BE SHOP FABRICATED OF 1-1/2" O.D. STAINLESS STEEL TUBING WITH ALL JOINTS CONTINUOUSLY WELDED.
2. TOP OF RAILING TO BE 36" ABOVE WALKING SURFACE AND STAIR NOSE.
3. RAILING TO EXTEND A MINIMUM OF 12" BEYOND BOTTOM AND TOP RISER.
4. ALL CONCRETE TO BE SHA MIX NO. 3.
5. ALL CHEEK WALL AND STAIR NOSE RADII SHALL BE 1/2".
6. CHEEK WALL SHALL BE 2" ABOVE STAIR NOSE AND WALKING SURFACE.
7. ALL RAILING EXTERIOR RADII SHALL BE 4".
8. RAILING POSTS SHALL BE INSTALLED AT A DEPTH OF 8" INTO STAIR TREAD. STAIR TREAD SHALL BE CORE DRILLED AND POST SET WITH NON-SHRINK GROUT.
9. RAILING POSTS SHALL BE A MAXIMUM SPACING OF 6'.
10. STAIR TREADS TO RECEIVE LIGHT BRUSHED NON-SLIP FINISH. (SEE SPECS)
11. UNLESS OTHERWISE SHOWN ON PLAN, ALL REBAR SHALL HAVE A CLEARANCE OF 3" FROM SURFACE.
12. COORDINATE WITH STRUCTURAL PLANS FOR CHEEK WALL LOCATIONS.



PLAN



RISER (R)	TREAD (T)	SLOPE (S)	OVERHANG (N)
6	12	1/4	1

ALL DIMENSIONS IN INCHES

SECTION A-A

4 CONCRETE STAIRS WITH HANDRAILS AND CHEEK WALLS

SCALE: 1/2" = 1'-0"

ADDRESS CHART	
LOT NO.	ADDRESS
D-6	7060 DEEPAGE DRIVE
D-11	7080 DEEPAGE DRIVE

SUBDIVISION NAME			SECT./AREA	LOT PARCEL NO.	
VILLAGE OF OWEN BROWN			2/2	D-6 & D-11	
SECT./AREA	BLOCK NO.	ZONE	TAX ZONE MAP	ELECT. DIST.	CENSUS TRACT
3337 4240	4	NEW TOWN COMMERCIAL	42	6	6061.03
WATER CODE			SEWER CODE		
E-11			53303006		

FOR COUNTY USE ONLY

SEAL

STATE OF MARYLAND JASON LEE THOMPSON No. 3173 LICENSED LANDSCAPE ARCHITECT

APPROVED: DEPARTMENT OF PLANNING & ZONING

DIRECTOR		DATE 4-27-16
CHIEF, DEVELOPMENT ENGINEERING DIVISION		DATE 4-25-16
CHIEF, DIVISION OF LAND DEVELOPMENT		DATE 4-27-16

Date	No	Revision Description

OWNER/DEVELOPER (301) 381-0020

COLUMBIA ASSOCIATION
9450 GERWIG LANE
COLUMBIA, MD 21046

SUPREME COURT/SKATELAND
LOT D-11 LOT D-6

SITE RESOURCES incorporated
Comprehensive Land Planning & Site Design Services
14315 Jarrettsville Pike • Phoenix, Maryland 21131
(410) 683-3388 • fax (410) 683-3389

AREA RECORD PLAT REFERENCE NO. 3337, 4240
VILLAGE OF OWEN BROWN
SECTION 2 AREA 2 LOTS D-6 & D-11
ELECTION DISTRICT NO. 6, HOWARD COUNTY, MD

TITLE
HANDICAP AND PATIO DETAILS

Des By	EAM/JLT	Scale AS SHOWN	Proj No 15073
Drn By	EAM/RSW	Date April 1, 2016	Drawing No.
Chk By	JLT	Approved JLT	13 OF 14

SDP-90-~~124~~ 124

GENERAL NOTES

FOUNDATION AND SLAB ON GRADE:

NOTE: 1
FOOTINGS ARE DESIGNED FOR A BEARING CAPACITY OF 3000 PSF. FOOTINGS SHALL BEAR ON NATURAL UNDISTURBED SOIL 1'-0" BELOW ORIGINAL GRADE OR ON STRUCTURALLY COMPACTED FILL. BOTTOM OF EXTERIOR FOOTINGS SHALL BE 2'-6" BELOW FINISHED GRADE. A GEOTECHNICAL ENGINEER REGISTERED IN THE LOCAL JURISDICTION SHALL VERIFY THE SOIL PRESSURE IN THE FIELD. IF FOUND TO BE LESS THAN THE REQUIRED BEARING PRESSURE, THE FOOTINGS WILL HAVE TO BE REDESIGNED.

NOTE: 2
DO NOT BACKFILL AGAINST WALLS UNTIL SUPPORTING SLABS ARE IN PLACE AND HAVE ATTAINED REQUIRED STRENGTH.

NOTE: 3
CANTILEVER RETAINING WALLS HAVE NOT BEEN DESIGNED FOR SURCHARGE LOADINGS ASSOCIATED WITH CONSTRUCTION TRAFFIC, TEMPORARY STORAGE, ETC. THE CONTRACTOR SHALL KEEP CONSTRUCTION SURCHARGES AWAY FROM THE INFLUENCE LINE OF THESE WALLS OR THE CONTRACTOR SHALL INSTALL TEMPORARY BRACING FOR THESE WALLS. DESIGN OF THE TEMPORARY BRACING IS THE RESPONSIBILITY OF THE CONTRACTOR.

CONCRETE:

NOTE: 1
ALL CONCRETE, EXCEPT AS NOTED, SHALL BE f'c=3000 PSI NORMAL WEIGHT CONCRETE AT 28 DAYS. ALL CONCRETE EXPOSED TO THE WEATHER AND WALLS SHALL BE f'c=4500 PSI NORMAL WEIGHT CONCRETE AND SHALL BE AIR ENTRAINED FOR SEVERE EXPOSURE PER ACI 318, "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE" (LATEST LOCAL APPROVED EDITION).

NOTE: 2
ALL REINFORCING STEEL SHALL BE DEFORMED BILLET STEEL CONFORMING TO ASTM DESIGNATION A615 (LATEST LOCAL APPROVED EDITION), GRADE 60. ALL REINFORCING STEEL SHALL BE DETAILED, FABRICATED AND PLACED IN ACCORDANCE WITH ACI 315, "MANUAL OF STANDARD PRACTICE FOR DETAILING CONCRETE STRUCTURES" (LATEST LOCAL APPROVED EDITION).

NOTE: 3
ALL SPLICES IN REINFORCING SHALL BE CLASS "B" SPLICES IN ACCORDANCE WITH ACI 318, "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE" (LATEST LOCAL APPROVED EDITION) EXCEPT AS OTHERWISE NOTED.

NOTE: 4
UNLESS OTHERWISE NOTED ON STRUCTURAL DRAWINGS, PROVIDE CONCRETE PROTECTION FOR REINFORCING AS FOLLOWS:
CAST AGAINST EARTH — 3"
EXPOSED TO EARTH OR WEATHER:
NO. 5 AND SMALLER BARS — 1 1/2"

NOTE: 5
CONSTRUCTION JOINTS IN WALLS SHALL BE LOCATED MIDWAY BETWEEN SUPPORTS. BEFORE FRESH CONCRETE IS POURED AGAINST CONCRETE IN PLACE, THE CONTACT SURFACES SHALL BE THOROUGHLY CLEANED, ALL LAITANCE SHALL BE REMOVED AND THE CONTACT SURFACES SHALL BE THOROUGHLY SLUSHED WITH GROUT CONSISTING OF ONE PART SAND TO ONE PART CEMENT WITH A MINIMUM AMOUNT OF WATER.

NOTE: 6
CONSTRUCTION JOINTS SHALL HAVE THE SURFACE OF THE FIRST POUR ROUGHENED TO 1/4" AMPLITUDE, UNLESS OTHERWISE NOTED.

NOTE: 7
THE CONTRACTOR MUST SUBMIT A CONCRETE DESIGN MIX IN ACCORDANCE WITH ACI 318 (LATEST LOCAL APPROVED EDITION). SUCH DESIGN MIX SHALL BE ACCOMPANIED BY THE APPROPRIATE GRAPHS AND BACKGROUND DATA. CONCRETE DESIGN MIX SHALL INDICATE 7 AND 28 DAY STRENGTHS, CEMENT CONTENT, WATER-CEMENT RATIO, FINE AND COARSE AGGREGATES AND ADMIXTURES FOR EACH DESIGN STRENGTH. THE ADDITION OF WATER AT THE PLANT OR IN THE FIELD GREATER THAN THE SPECIFIED WATER CONTENT IS STRICTLY PROHIBITED.

NOTE: 8
ALL CONCRETE WORK SHALL CONFORM TO THE LATEST LOCAL APPROVED EDITIONS OF THE FOLLOWING ACI AND ASTM DOCUMENTS:
- ACI-301 SPECIFICATIONS FOR STRUCTURAL CONCRETE
- ACI-318 CODE
- ACI-214 COMPRESSIVE TEST
- ACI-306 COLD WEATHER
- ACI-315 DETAILING
- ACI-347 FORMWORK
- ACI-305 HOT WEATHER
- ACI-211 PROPORTIONS OF CONCRETE
- ACI-304 PLACING CONCRETE
- ATSM C-94 READY-MIX CONCRETE

NOTE: 9
ALL FIELD AND LAB TESTING OF CONCRETE SHALL CONFORM TO THE LATEST LOCAL APPROVED EDITIONS OF ASTM:
- ASTM C-31 FIELD CYLINDER SPECIMENS
- ASTM C-143 SLUMP TEST
- ASTM C-231 AIR CONTENT (WHEN REQUIRED)
- ASTM C-39 LAB TESTING CYLINDERS
- ASTM C-172 SAMPLING FRESH CONCRETE
- ASTM C-42 HARDENED CORES (WHEN REQUIRED)

TEST RESULTS SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE LOCAL JURISDICTION.

NOTE: 10
ALL FORMWORK SHALL BE IN ACCORDANCE WITH ACI 347, "GUIDE TO FORMWORK FOR CONCRETE" (LATEST LOCAL APPROVED EDITION).

NOTE: 11
CONCRETE FORMWORK SHALL NOT BE DISTURBED UNTIL THE CONCRETE HAS HARDENED SUFFICIENTLY TO SUPPORT ITS OWN WEIGHT PLUS 20 PSF MINIMUM CONSTRUCTION LOAD. AS A MINIMUM, FORMS MUST REMAIN IN PLACE FOR THE LENGTH OF TIME RECOMMENDED BY ACI 347, "GUIDE TO FORMWORK FOR CONCRETE" (LATEST LOCAL APPROVED EDITION). FORM REMOVAL REQUIRES SIMULTANEOUS RESHORING. RESHORING SHALL REMAIN IN PLACE UNTIL THE CONCRETE HAS ATTAINED THE SPECIFIED DESIGN STRENGTH. IN LIEU OF THE RECOMMENDATIONS ESTABLISHED IN ACI 347, THE CONTRACTOR MAY TEST FIELD CURED CYLINDERS TO CONFIRM EARLY CONCRETE DESIGN STRENGTH. THE CONTRACTOR SHALL HAVE A FORMWORK PLAN AT THE SITE SHOWING THE SIZE AND STRENGTH OF FORMWORK, SEQUENCE OF CONSTRUCTION, AND A TEMPERATURE DEPENDENT FORMWORK REMOVAL AND RESHORING PROCEDURE. THE PLANS SHALL BE PREPARED AND SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE LOCAL JURISDICTION.

EXISTING CONSTRUCTION:

NOTE: 1
COLUMBIA ENGINEERING INC. HAS PREPARED THESE PLANS BASED ON A LIMITED AMOUNT OF FIELD EXPLORATION. THE CONTRACTOR SHALL VERIFY THAT THE EXISTING WALLS SHOWN IN THE PLANS MATCH EXISTING AS BUILT CONDITIONS. IF THE AS BUILT CONDITIONS DO NOT CONFORM TO THE INFORMATION SHOWN IN THE PLANS, OR IF ANY STRUCTURAL MEMBER IS FOUND TO BE IN POOR CONDITION, THE CONTRACTOR SHALL INFORM COLUMBIA ENGINEERING INC. OF THE ACTUAL SIZES AND/OR CONDITION. RE-DESIGN AND ADDITIONAL FRAMING MAY BE REQUIRED IN THAT CASE.

MISCELLANEOUS:

NOTE: 1
ITEMS AND CONDITIONS NOTED OR IDENTIFIED IN SECTIONS AND DETAILS APPLY TO AREAS SIMILAR IN CONDITION TO THOSE DENOTED BY THE SECTION CUT OR DETAIL MARK.

NOTE: 2
THE CONTRACTOR SHALL NOTIFY THE ARCHITECT AND STRUCTURAL ENGINEER OF ANY DISCREPANCIES BETWEEN THE STRUCTURAL DOCUMENTS AND ANY OTHER DOCUMENTS OR EXISTING CONDITIONS FOR RESOLUTION PRIOR TO PROCEEDING WITH FABRICATION OR CONSTRUCTION.

NOTE: 3
SHOP DRAWINGS FOR ALL STRUCTURAL ITEMS MUST BE SUBMITTED BY THE CONTRACTOR. IF A CONTRACTOR OR OWNER FAILS TO SUBMIT THE SHOP DRAWINGS, THE FIRM COLUMBIA ENGINEERING, INC., WILL NOT BE RESPONSIBLE FOR THE STRUCTURAL CERTIFICATION AND/OR THE DESIGN OF THE PROJECT.

NOTE: 4
REPRODUCTION OF CONTRACT DOCUMENTS WILL NOT BE ACCEPTED AS SHOP DRAWINGS.

NOTE: 5
SHOP DRAWINGS FOR THE FOLLOWING ITEMS SHALL BE SUBMITTED FOR ARCHITECT/ENGINEER REVIEW:
a. CONCRETE MIX DESIGNS
b. CONCRETE REINFORCING STEEL

NOTE: 6
THE FOLLOWING ITEMS SHALL BE DESIGNED FOR LOADS INDICATED IN THE LOCAL BUILDING CODE:
a. HANDRAILS AND GUARDRAILS
SHOP DRAWINGS AND CALCULATIONS SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE LOCAL JURISDICTION AND SUBMITTED FOR REVIEW.

NOTE: 7
ALL SHOP DRAWINGS USED FOR WORK SHALL BEAR THE STAMP OF THE ARCHITECT/ENGINEER, AND SHALL BE MARKED "REVIEWED" OR "REVIEWED AS NOTED."

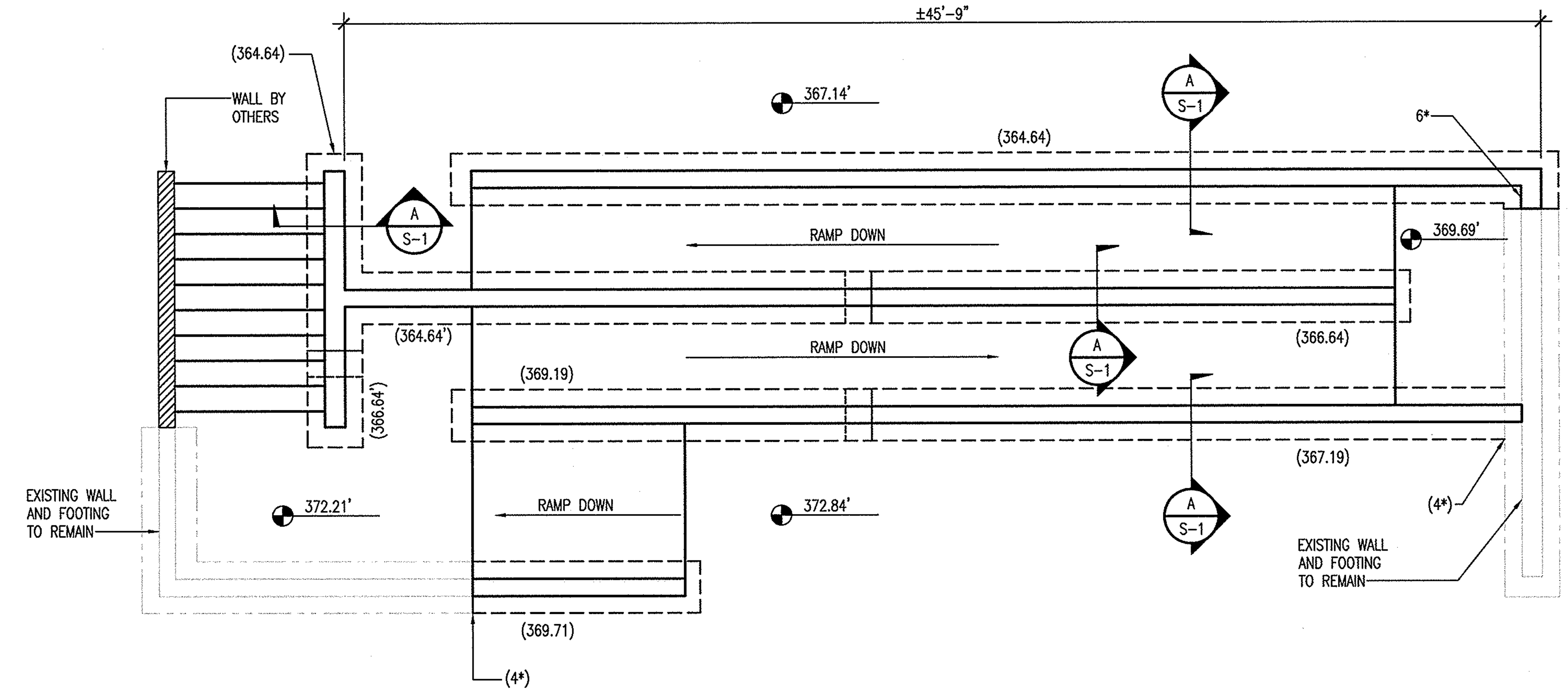
NOTE: 8
THE CONTRACTOR SHALL SUPPORT ADJACENT STRUCTURES, UTILITIES, AND EXCAVATIONS. CONTRACTOR SHALL HAVE ALL TEMPORARY FORMWORK, SHEETING, SHORING, UNDERPINNING, ETC., AS PART OF THE CONTRACTOR'S WORK, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE LOCAL JURISDICTION.

NOTE: 9
ALL WORK SPECIFIED HEREIN SHALL BE INSPECTED IN ACCORDANCE WITH IBC CHAPTER 17 (EXCEPTIONS NOTED SHALL NOT BE EXCLUDED) AND ALL LOCAL ORDINANCES. THE OWNER SHALL HIRE AN EXPERIENCED, QUALIFIED INSPECTOR TO PERFORM ALL THE REQUIRED INSPECTION WORK. THE ENGINEER WILL NOT PERFORM THE REQUIRED INSPECTION AS A PART OF HIS DESIGN SERVICE. THE ENGINEER MAY VISIT THE SITE TO ASCERTAIN GENERAL CONFORMANCE TO THE CONTRACT DOCUMENTS, AND SUCH VISITS ARE NOT TO BE CONSTRUED AS MEETING INSPECTION REQUIREMENTS UNLESS THE ENGINEER SPECIFICALLY SO STATES IN WRITING.

NOTE: 10
LEGAL USE OF DOCUMENTS
THE PLANS, SPECIFICATIONS AND OTHER INFORMATION CONTAINED IN THESE DRAWINGS (COLLECTIVELY THE "DRAWINGS") WERE PREPARED BY COLUMBIA ENGINEERING, INC. AND ARE INSTRUMENTS OF PROFESSIONAL SERVICES RENDERED AND DELIVERED PURSUANT TO THE TERMS AND CONDITIONS OF A WRITTEN AGREEMENT (THE "AGREEMENT") ONLY TO THE RECIPIENT NAMED THEREIN. ANY USE OF THE DRAWINGS BY ANY PARTY WHICH IS INCONSISTENT WITH THE TERMS AND CONDITIONS OF THE AGREEMENT IS EXPRESSLY PROHIBITED. COLUMBIA ENGINEERING, INC. EXPRESSLY RESERVES ITS COPYRIGHT AND ALL INTELLECTUAL PROPERTY AND OTHER RIGHTS IN THE DRAWINGS. NO PORTION OF THE DRAWINGS ARE TO BE REPRODUCED, CHANGED OR OTHERWISE USED IN ANY FORM OR MANNER WHATSOEVER WHICH IS INCONSISTENT WITH EITHER THE AGREEMENT OR THE PURPOSES FOR WHICH THEY WERE ORIGINALLY PREPARED, NOR ARE THEY TO BE DEEMED ASSIGNED TO ANY PERSON OR ENTITY WITHOUT OBTAINING THE EXPRESS PRIOR WRITTEN PERMISSION AND CONSENT OF COLUMBIA ENGINEERING, INC. THE RECIPIENT OF THE DRAWINGS AGREES TO INDEMNIFY AND HOLD HARMLESS COLUMBIA ENGINEERING, INC., ITS EMPLOYEES, OFFICERS, DIRECTORS AND AGENTS, FROM AND AGAINST ANY AND ALL DAMAGES WHICH ARISE OUT OF OR IN CONNECTION WITH ANY VIOLATION OF THE FOREGOING.

DESIGN CODES:

1. INTERNATIONAL BUILDING CODE:
   2015
2. BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE:
   ACI 318-11

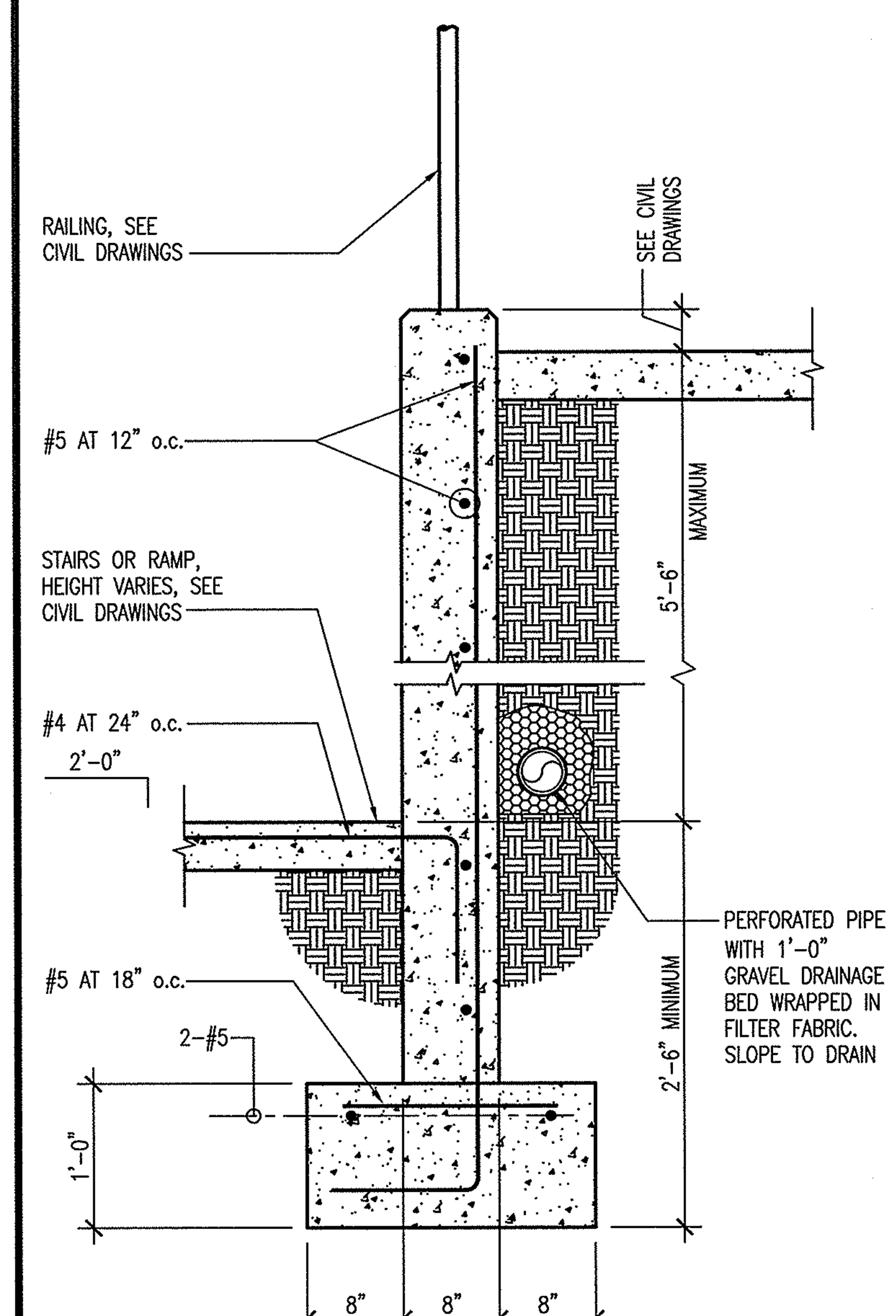


PLAN

SCALE: 1/4"=1'-0"

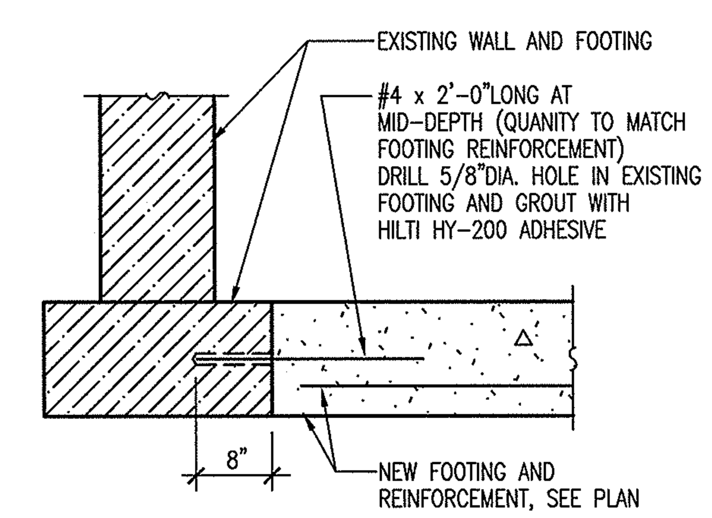
NOTES:

1.) SEE SITE GRADING PLAN FOR DIMENSIONS.
2.) SPOT ELEVATIONS ARE APPROXIMATE. SEE SITE GRADING PLAN FOR ACTUAL DIMENSIONS.
3.) BOTTOM OF EXTERIOR FOOTING ELEVATION SHALL BE MINIMUM 2'-6" BELOW FINISHED GRADE. TOP OF FOOTING NOTED THUS: (....) ON PLAN. TOP OF FOOTING ELEVATIONS ARE FOR BID PURPOSES ONLY AND MAY HAVE TO BE FIELD ADJUSTED.
4.) (4*) DENOTES BOTTOM OF NEW FOOTING TO MATCH EXISTING. ADJUST FOOTINGS AS REQUIRED. MAINTAIN 2'-6" MINIMUM FROST DEPTH. DOWEL NEW FOOTING TO EXISTING. SEE C/S-1.
5.) REFER TO CI.03 FOR TOP OF WALL AND SPOT ELEVATIONS.
6.) (6*) DENOTES DRAIN PIPE THROUGH WALL. SEE D/S-1.

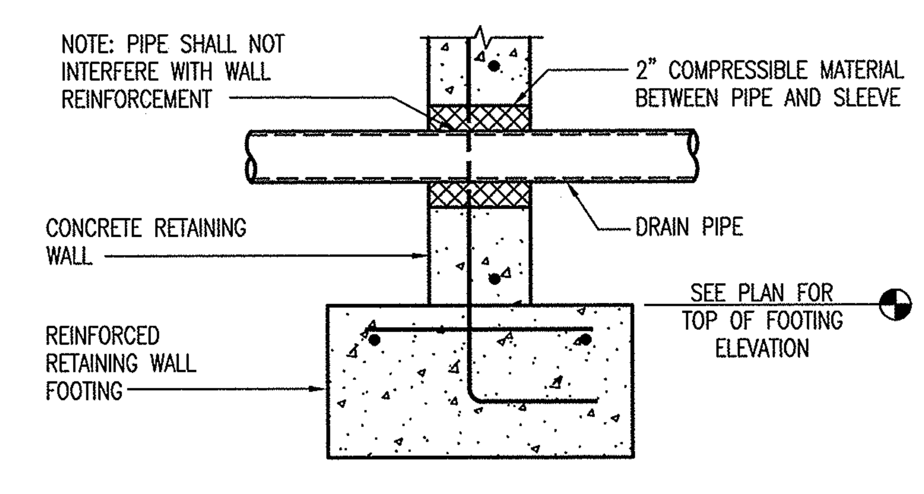


SECTION (A / S-1)

SCALE: 1"=1'-0"



TYPICAL FOOTING AT EXISTING WALL DETAIL (B / S-1)



TYPICAL PIPE THROUGH CONCRETE WALL DETAIL (C / S-1)

ADDRESS CHART	
LOT NO.	ADDRESS
D-6	7060 DEEPAGE DRIVE
D-11	7080 DEEPAGE DRIVE

SUBDIVISION NAME			SECT./AREA	LOT PARCEL NO.	
VILLAGE OF OWEN BROWN			2/2	D-6 & D-11	
SECT./AREA	BLOCK NO.	ZONE	TAX ZONE MAP	ELECT. DIST.	CENSUS TRACT
3337 4240	4	NEW TOWN COMMERCIAL	42	6	6061.03
WATER CODE			SEWER CODE		
E-11			53303006		

FOR COUNTY USE ONLY

SEAL

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 14479, EXPIRATION DATE: 06/22/17.

APPROVED: DEPARTMENT OF PLANNING & ZONING

DIRECTOR	DATE 4-27-16
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE 4-25-16
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE 4-27-16

Date	No	Revision Description

OWNER/DEVELOPER (301) 381-0020

COLUMBIA ASSOCIATION
9450 GERWIG LANE
COLUMBIA, MD 21046

SUPREME COURT/SKATELAND
LOT D-11 LOT D-6

SITE RESOURCES incorporated
Comprehensive Land Planning & Site Design Services
14315 Jarrettsville Pike • Phoenix, Maryland 21131
(410) 683-3388 • fax (410) 683-3389

AREA: RECORD PLAT REFERENCE NO. 3337, 4240
VILLAGE OF OWEN BROWN
SECTION 2 AREA 2 LOTS D-6 & D-11
ELECTION DISTRICT NO. 6, HOWARD COUNTY, MD

TITLE: RETAINING WALL DETAILS

Des By EAM/JLT	Scale AS SHOWN	Proj No 15073
Drn By EAM/RSW	Date April 1, 2016	Drawing No.
Chk By RC	Approved JC	14 OF 14

SDP-90-~~154~~ 124

CEI#15155