

SITE DEVELOPMENT PLAN

MINI-U-STORAGE

6th ELECTION DISTRICT

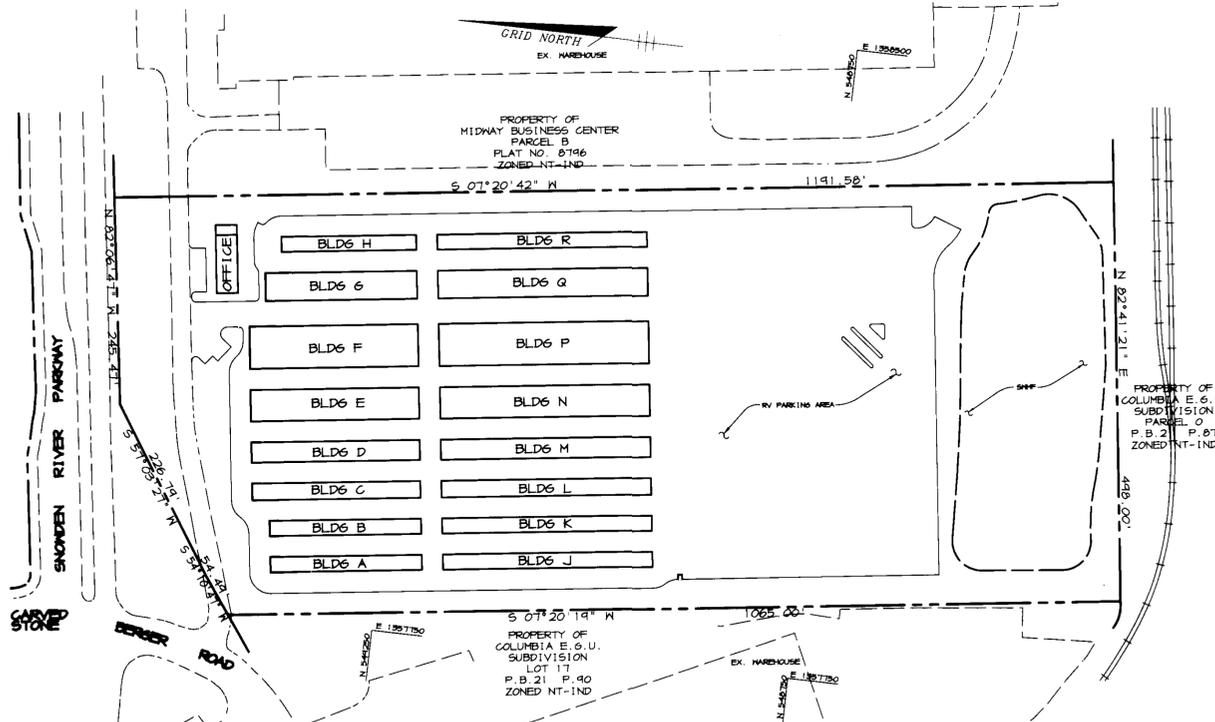
HOWARD COUNTY, MARYLAND

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GENERAL NOTES

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS, IF APPLICABLE.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/ CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-TITT AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- TRAFFIC CONTROL DEVICES, MARKINGS, AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
- ALL PLAN DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
- THE EXISTING TOPOGRAPHY IS TAKEN FROM FIELD RUN SURVEY WITH MAXIMUM TWO FOOT CONTOUR INTERVALS PREPARED BY RIEMER MUEGGE & ASSOCIATES, INC. DATED SEPTEMBER 1996 AND FROM AERIAL TOPOGRAPHY BY KING'S AERIAL MAPPING DATED FEBRUARY 1991.
- THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NOS. 42E3 AND 42B2 WERE USED FOR THIS PROJECT.
- WATER IS PUBLIC. CONTRACT NO. 24-3625-D
- SEWER IS PUBLIC. SEWER DRAINAGE AREA: PATUXENT CONTRACT NO. 24-3625-D
- THE STORMWATER MANAGEMENT FACILITY PROPOSED FOR THIS SITE IS AN EXTENDED DETENTION FACILITY, AND IS PRIVATELY OWNED AND MAINTAINED.
- APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE. EXISTING UTILITIES ARE SHOWN BASED ON THE BEST AVAILABLE INFORMATION.
- THERE IS NO 100- YEAR FLOODPLAIN ON THIS SITE.
- THE WETLANDS DELINEATION FOR THIS PROJECT IS BASED ON FIELD INVESTIGATION BY RIEMER MUEGGE IN OCTOBER 1996.
- THE TRAFFIC STUDY FOR THIS PROJECT WAS PREPARED BY SABRA & ASSOCIATES, INC. DATED NOVEMBER 1996.
- THERE IS NO NOISE STUDY REQUIRED FOR THIS PROJECT.
- A GEOTECHNICAL STUDY FOR STORMWATER MANAGEMENT FOR THIS PROJECT WAS PREPARED BY ENGINEERING CONSULTING SERVICES, INC. DATED NOVEMBER 1992 AND SUPPLEMENTED BY REPORT BY PSI DATED JANUARY 1997.
- THE BOUNDARY SURVEY FOR THIS PROJECT IS BASED ON RECORD PLAT 8745.
- SUBJECT PROPERTY ZONED NT-IND PER 10-10-93 COMPREHENSIVE ZONING PLAN.
- ALL ELEVATIONS SHOWN ARE BASED ON THE U.S.C. AND G.S. MEAN SEA LEVEL DATUM, 1929.
- SEE DEPARTMENT OF PLANNING AND ZONING FILE NO'S: FDP-10, KP-89-10, SDP-84-34c, S-84-50, F-71-31, F-84-142, KP-84-91, SDP-80-14 & KP-97-106.
- THE CONTRACTOR SHALL TEST PIT EXISTING UTILITIES AT LEAST (5) DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS.
- CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, AND SAFETY PRECAUTIONS AND PROGRAMS.
- PIPE SHALL NOT BE INSTALLED BY THE CONTRACTOR UNTIL THE LENGTH CALLED FOR AT EACH STATION HAS BEEN APPROVED BY THE ENGINEER IN THE FIELD.
- NO PIPE, EXCEPT 36" BARREL, SHALL BE LAID UNTIL LINES OF EXCAVATION HAVE BEEN BROUGHT WITHIN 6" OF FINISHED GRADE.
- ALL STORM DRAIN PIPE BEDDING SHALL BE CLASS 'C' AS SHOWN IN FIG. 11.4, VOLUME 1 OF HOWARD COUNTY DESIGN MANUAL, UNLESS OTHERWISE NOTED. FOR ADS N-12 PIPE USE SPECIFICATIONS SUPPLIED ON THESE DRAWINGS.
- ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- STORM DRAIN TRENCHES WITHIN ROAD RIGHT OF WAY SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, I.E., STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION, LATEST AMENDMENTS.
- PROFILES STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
- ALL FILL AREAS WITHIN ROADWAY AND UNDER STRUCTURES TO BE COMPACTED TO A MINIMUM OF 95% COMPACTION OF AASHTO T100.
- A WAIVER TO ALLOW ADS N-12 PLASTIC PIPE HAS BEEN APPROVED AND REINFORCED CONCRETE PIPE CAN BE USED AS AN ALTERNATE. ALL PIPE SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 908 OF THE HOWARD COUNTY STANDARDS AND SPECIFICATIONS.
- ALL BULK REQUIREMENTS AND SETBACKS SHALL BE IN ACCORDANCE WITH FDP PHASE 10.
- ALL ON-SITE LIGHTING TO BE REFLECTED/DEFLECTED AWAY FROM RESIDENTIAL AREAS AND PUBLIC ROAD RIGHTS OF WAY. THIS PLAN WILL BE SUBJECT TO THE REQUIREMENTS OF COUNCIL BILL NO. 1-1997 (ZRA-8).
- ALL ON-SITE LIGHTING TO BE BUILT MOUNTED WITH THE MINI-STORAGE UNIT LIGHTS BEING MOTION SENSITIVE ONLY. THE R/V AREA WILL BE LIGHTED BY SIX (6) POLE LIGHTS. SEE ELECTRICAL PLANS FOR DETAILS.
- KP-97-106 REQUEST TO WAIVE SECTION 10.116 (a) (1)(2) WHICH RESTRICTS THE REMOVAL OF VEGETATION AND GRADING WITHIN WETLAND BUFFERS HAS APPROVED ON APRIL 16, 1997.

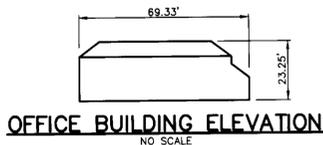
36. WETLANDS DISTURBANCE HAS BEEN APPROVED BY THE ARMY CORPS OF ENGINEERS AS PER LETTER DATED MARCH 27, 1997. PERMIT NO. 15 GENAB-OP-RE/KOPECK, DOUGLAS R.) 97-0421-4.



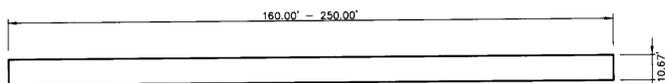
PLAN
SCALE: 1" = 100'

BLDG	SQ. FT.	NO. OF ROOMS	WIDTH x DEPTH
A	3240	18	10' x 8'
B	3240	18	10' x 8'
C	4000	20	10' x 10'
D	4000	20	10' x 10'
E	1400	7	10' x 10'
F	10000	20	10' x 20'
G	3440	18	10' x 13'
H	2880	16	10' x 10'
J	4500	20	10' x 10'
K	4500	20	10' x 10'
L	4498	20	10' x 10'
N	6000	20	10' x 13'
O	4250	20	10' x 10'
P	12500	20	10' x 25'
Q	8250	20	10' x 18'
R	4500	20	10' x 10'
TOTAL	46,000	314	TOTAL ROOMS

NOTE: ALL BUILDINGS EXCEEDING 5000 SF WILL BE SERVED BY AN AUTOMATIC FIRE SUPPRESSION SYSTEM.



OFFICE BUILDING ELEVATION
NO SCALE



STORAGE BUILDING ELEVATION
NO SCALE

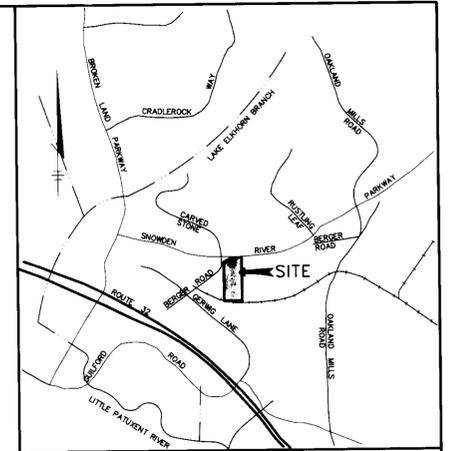
OPERATION AND MAINTENANCE SCHEDULE OF PRIVATELY OWNED AND MAINTAINED STORMWATER MANAGEMENT FACILITY EXTENDED DETENTION POND

ROUTINE MAINTENANCE

- Facility shall be inspected annually and after major storms. Inspections should be performed during wet weather to determine if the pond is functioning properly.
- Top and side slopes of the embankment shall be mowed a minimum of two (2) times a year, once in June and once in September. Other side slopes, the bottom of the pond, and maintenance access should be mowed as needed.
- Debris and litter next to the outlet structure shall be removed during regular mowing operations and as needed.
- Visible signs of erosion in the pond as well as riprap outlet area shall be repaired as soon as it is noticed.

NON-ROUTINE MAINTENANCE

- Structural components of the pond such as the dam, the riser, and the pipes shall be repaired upon the detection of any damage. The components should be inspected during routine maintenance operations.
- Sediment should be removed when its accumulation significantly reduces the design storage, interfere with the function of the riser, when deemed necessary for aesthetic reasons, or when deemed necessary by the Howard County's Department of Public Works.



VICINITY MAP
SCALE: 1" = 2000'

SITE ANALYSIS

AREA OF PARCEL A	13.25 ACRES
LIMIT OF DISTURBED AREA	12.70 ACRES
PRESENT ZONING	NT-IND
PREVIOUS DEPARTMENT OF PLANNING & ZONING REF. NOS.	FDP-10, KP-89-10, SDP-84-34c, S-84-50, F-71-31, F-84-142, KP-84-91, SDP-90-19
PROPOSED USE	ONE-STORY MANAGER OFFICE/CAKETAKER'S RESIDENCE 16 MINI-STORAGE BUILDINGS
BUILDING COVERAGE:	47,756 SF (2.24 ac) 16.9% OF SITE
OFFICE:	1756 SF
WAREHOUSE:	46,000 SF *
NO. OF EMPLOYEES	1
PARKING REQUIRED **	7
4 SP/1000 SF OF OFFICE	8
1 SP/EMPLOYEE	1 TOTAL
PARKING PROVIDED	9 (incl. 1 HC)
RECREATIONAL VEHICLE PARKING SPACES PROVIDED	163 SPACES

* SEE CHART THIS SHEET FOR BREAKDOWN

** PER HO. CO. ZONING REGULATIONS SECTION 133 PAGE 251.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING	
<i>[Signature]</i>	7/8/97
DIRECTOR	DATE
<i>[Signature]</i>	7/7/97
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE
<i>[Signature]</i>	7/8/97
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE

DATE	NO.	REVISION

OWNER/DEVELOPER	DAHN CORPORATION 18552 MacARTHUR BOULEVARD IRVINE, CALIFORNIA 92715 1-714-752-1204
PROJECT	MINI-U-STORAGE A STORAGE FACILITY
AREA	MIDWAY BUSINESS CENTER - PARCEL A ZONED NT-IND TAX MAP 42 PLAT #8795 6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND
TITLE	TITLE SHEET

RIEMER MUEGGE & ASSOCIATES, INC.
ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
8818 Centre Park Drive, Columbia, Maryland 21045
tel 410.997.8900 fax 410.997.9282

APPROVED
PLANNING AND ZONING
HOWARD COUNTY
DATE 7/10/97
[Signature]

PARCEL NO.	STREET ADDRESS
A	9425 SNODDEN RIVER PARKWAY

SUBDIVISION NAME	MIDWAY BUSINESS CENTER	BLDG #	-	PARCEL	A (P.319)						
PLAT #	8745	BLOCK #	10	ZONING	NT-IND	TAX MAP NO.	42	ELECT. DIST.	6th	GEN. TRACT.	6061.03
WATER CODE	-	SEWER CODE	-								

DATE	6.11.97	DESIGNED BY:	C.J.R.
DATE	7/8/97	DRAWN BY:	DAM
DATE	JUNE 11, 1997	PROJECT NO.:	96089 SDP1.DWG
DATE	AS SHOWN	SCALE:	AS SHOWN
DATE	7/10/97	DRAWING NO.:	1 OF 11

JAYKANT D. PAREKH #19148

SDP-97-79

LEGEND

-  9" PAVING
-  11" PAVING
-  CONCRETE PAVEMENT/SIDEWALK
-  CURB AND GUTTER TRANSITION
-  FLOW ARROWS
-  6' WROUGHT IRON FENCE
-  6' CHAIN LINK FENCE

MATCHLINE SEE SHEET 3

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE: 4/10/97
104

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Joseph S. Butler 7/8/97
DIRECTOR DATE

Robert D. Williams 7/9/97
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Cindy Hamilton 7/9/97
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

DATE	NO.	REVISION

OWNER/DEVELOPER DAHN CORPORATION
18552 MacARTHUR BOULEVARD
IRVINE, CALIFORNIA 92715
1-714-752-1224

PROJECT MINI-U-STORAGE
A STORAGE FACILITY

AREA MIDWAY BUSINESS CENTER - PARCEL A
ZONED NT-IND TAX MAP 42 PLAT #8795
6th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE SITE DEVELOPMENT PLAN

RIEMER MUEGGE & ASSOCIATES, INC.
ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
8818 Centre Park Drive, Columbia, Maryland 21045
tel 410.997.8900 fax 410.997.9282

DATE: 6-11-97

DESIGNED BY: C.J.R.

DRAWN BY: DAM

PROJECT NO: 96089
SDP2.DWG

DATE: JUNE 11, 1997

SCALE: 1" = 30'

DRAWING NO. 2 OF 11



JAYKANT D. PAREKH #19148

SDP-97-79



CARVED STONE
MINOR COLLECTOR
HO. CO. PUBLIC ROAD

BERGER ROAD
MAJOR COLLECTOR
HOWARD COUNTY PUBLIC ROAD

PROPERTY OF
COLUMBIA E & U
SUBDIVISION
LOT 17
P.B. 21 P. 40
ZONED NT-IND

PROPERTY OF
MIDWAY BUSINESS CENTER
PARCEL B
PLAT NO. 8796
ZONED NT-IND

NOTE: THIS PLAN IS FOR LANDSCAPE PURPOSES ONLY.

LANDSCAPE SCHEDULES

PERIMETER	ADJACENT TO ROADWAYS	ADJACENT TO PERIMETER PROPERTIES					
		2-A	2-B	2-C	3	4	
LANDSCAPE TYPE	B	A	A	A	A	A	
LINEAR FEET OF ROADWAY FRONTAGE/ PERIMETER	± 588 LF	± 65 LF	± 840 LF	± 176 LF	± 448 LF	± 1065 LF	
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	YES, NO EX. PIN OAK	YES, NO EX. PIN OAK	YES, NO EX. PIN OAK & RED MAPLE	NO	NO	NO	
CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NO	NO	NO	NO	NO	NO	
NUMBER OF PLANTS REQUIRED:							
SHADE TREES	1/80' ± 105	1/60' ± 11	1/60' ± 148	1/60' ± 24	1/60' ± 83	1/60' ± 176	
EVERGREEN TREES	1/40' ± 131	0	0	0	0	0	
SHRUBS	0	0	0	0	0	0	
NUMBER OF PLANTS PROVIDED:							
SHADE TREES	0	0	14*	8	0	18	
EVERGREEN TREES	0	0	22	18	0	20	
SMALL FLOWERING TREES	0	0	0	0	0	6	
SHRUBS	150	0	175	0	0	174	

*SUBSTITUTION/CREDIT NOTES:
PERIMETER 1: CREDIT TAKEN FOR RETAINING 16 LARGE PIN OAKS (18" DBH).
PERIMETER 2A: CREDIT TAKEN FOR RETAINING 1 LARGE PIN OAK (18" DBH).
PERIMETER 2B: CREDIT TAKEN FOR RETAINING 1 LARGE PIN OAK (18" DBH) AND 1 LARGE RED MAPLE.
PERIMETER 3: REQUIRED PLANTS MOVED FROM BELOW SHM EMBANKMENT TO PERIMETER 2 AND PERIMETER 4.

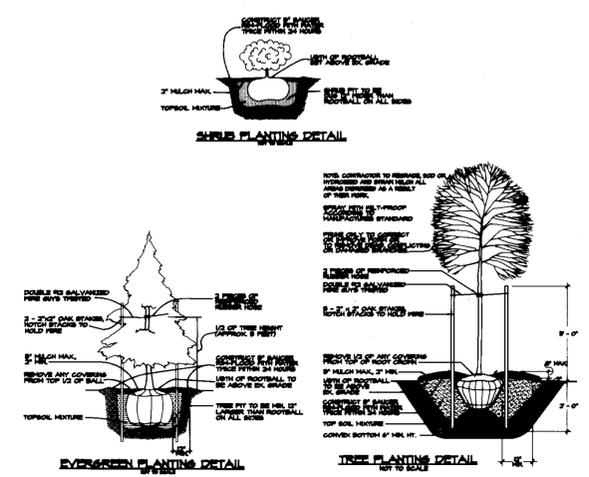
SCHEDULE B PARKING LOT INTERNAL LANDSCAPING	
NUMBER OF PARKING SPACES	4
NUMBER OF SHADE TREES REQUIRED @ 15/20 SPACES	1
NUMBER OF TREES PROVIDED:	
SHADE TREES	2
OTHER TREES (2:1 SUBSTITUTION)	1
NUMBER OF ISLANDS REQUIRED (1 ISLAND/ 20 SPACES)	1
NUMBER OF ISLANDS PROVIDED	2

ALTERNATIVE COMPLIANCE REQUIRED HRD TREE REQUIREMENTS		
INDUSTRIAL 10+ ACRES		
12 SHADE TREES PER GROSS ACRE - UNWOODED		
13.25 ACRES x 12 SHADE S.T.E./ACRE = 159		
(HRD REQUIRED SHADE TREE EQUIVALENTS, S.T.E.) = 159		
PROVIDED:	PLANTED	S.T.E.
Each Shade Tree = 1 S.T.E.	(30)	30
Each Evergreen Tree = 0.5 S.T.E.	(55)	27.5
Each Flowering Tree = 0.5 S.T.E.	(18)	9
Each Shrub = 0.1 S.T.E.	(504)	50.4
SUBTOTAL S.T.E.		116.9
Each Mature, Retained Tree = 2.0 S.T.E.	(18)	36.0
TOTAL		148.9

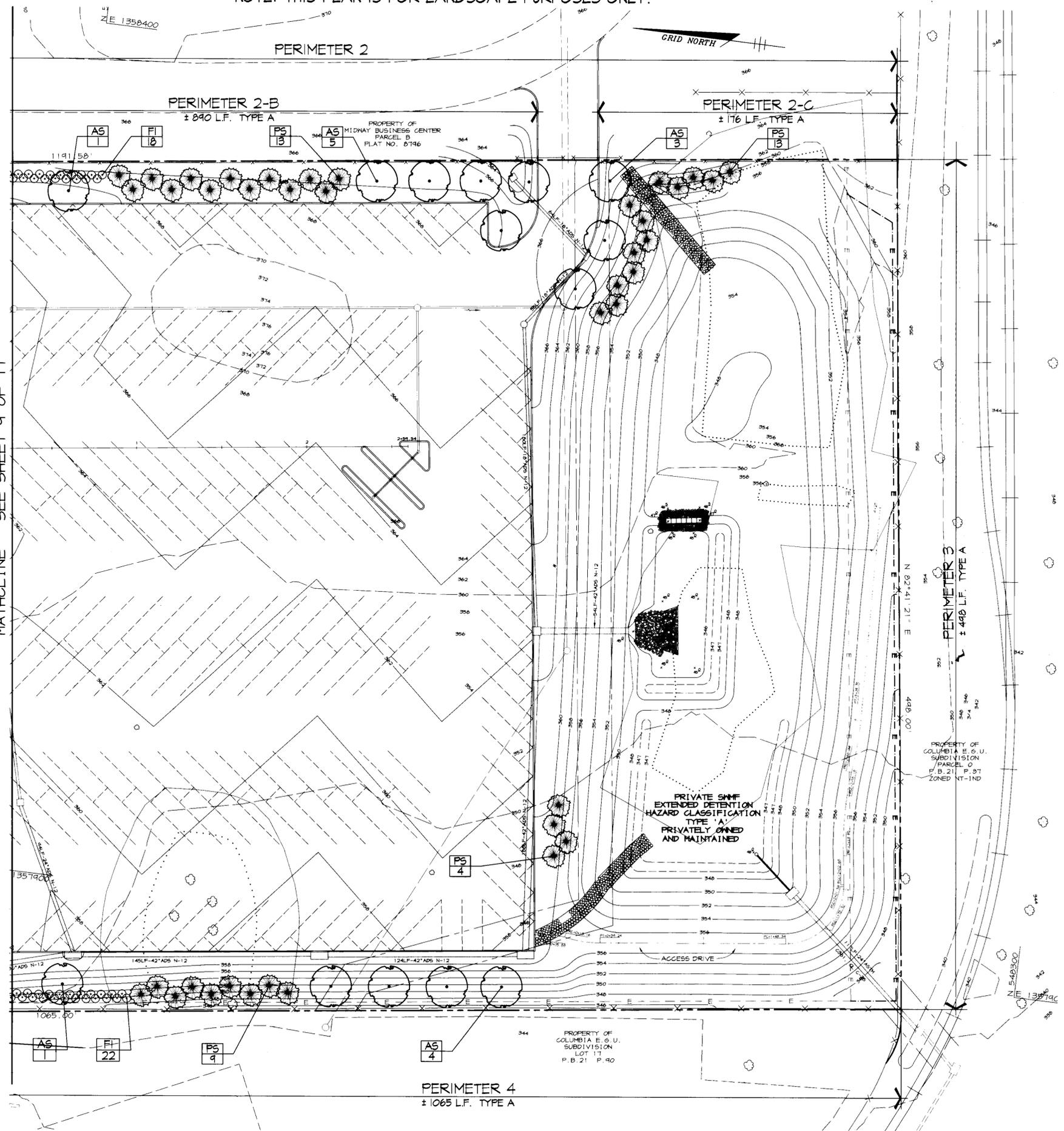
NOTES: THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.24 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.
 FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING HAS BEEN POSTED AS PART OF THE CIVIL DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$ 670,000.

KEY	QTY	BOTANICAL & COMMON NAME	SIZE	ROOT	REMARKS
DECIDUOUS TREES					
AA	6	Ameiocoche arborea Downy Serviceberry	25' - 3' Cal.	B + B	Full Crown Single Trunked
AS	30	Acer spicatum Green Mountain Great Mountain Sugar Maple	25' - 3' Cal.	B + B	Full Crown Central Leader
MS	12	Malus Crabapple	2' - 20' Cal.	B + B	Full Crown
OP	2	Quercus prinus Pin Oak	35' - 4' Cal.	B + B	Full Crown Central Leader Cont. on 2 S.T.E. each
EVERGREEN TREES					
FA	16	Ficus alba Norway Spruce	6'-8" H.	B + B	Full Form
PS	34	Pinus strobus White Pine	6'-8" H.	B + B	Sheared
SHRUBS & GROUNDCOVERS					
EA	244	Erythronium alba Burning Bush	2'-3" H.	B + B/Cont.	48" O.C.
FI	104	Forsythia x intermedia Border Forsythia	3'-4" H.	B + B/Cont.	48" O.C.
HI	225	Hedera helix English Ivy	10' - 12'	100'	6" O.C.
HX	23	Hemerocallis x Beautiful Beautiful Daylily	"	Cont.	24" O.C.
JH	40	Juncus horii plumosa Andorra Juniper	12'-16" Sprd.	Cont.	24" O.C.
MP	9	Macaranga sr. Rapid-growth Magnolia	"	Cont.	24" O.C.
PL	67	Prunus laurocerasus Cherry Laurel	2'-3" H.	B + B	36" O.C.

PLANTING DETAILS



MATHLINE SEE SHEET 9 OF 11



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 DIRECTOR: [Signature] 7/8/97 DATE
 CHIEF, DEVELOPMENT ENGINEERING DIVISION: [Signature] 7/2/97 DATE
 CHIEF, DIVISION OF LAND DEVELOPMENT: [Signature] 7/9/97 DATE

DATE	NO.	REVISION
OWNER/DEVELOPER: DAHN CORPORATION 18552 MacARTHUR BOULEVARD IRVINE, CALIFORNIA 92715 1-714-752-1284		
PROJECT: MINI-U-STORAGE A STORAGE FACILITY		
AREA: MIDWAY BUSINESS CENTER - PARCEL A ZONED NT-1ND TAX MAP 42 PLAT #8195 6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND		
TITLE: LANDSCAPE PLAN		
RIEMER MUEGGE & ASSOCIATES, INC. ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING 8818 Centre Park Drive, Columbia, Maryland 21045 tel 410.997.8900 fax 410.997.9282		
JUNE 11, 1997		REV. 2/28/97 AS PER HOWARD COUNTY COMMENTS
DATE		DESIGNED BY: C.J.R., L.O.H.
		DRAWN BY: DAM, CAK
		PROJECT NO: 96089 LSCP1.DWG
		DATE: JUNE 11, 1997
		SCALE: 1" = 30'
		DRAWING NO. 10 OF 11

4-10-97
CAK

NOTE: THIS PLAN IS FOR LANDSCAPE PURPOSES ONLY.

PERIMETER 2

PERIMETER 2-A
± 165 L.F. TYPE A

PERIMETER 2-B
± 840 L.F. TYPE A

NOTE: SEE SHEET 10 FOR LANDSCAPE SCHEDULES AND DETAILS AND PLANT LIST.

MATCHLINE SEE SHEET 10 OF 11

4-10-97
CWH

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

<i>James R. Rutter</i> DIRECTOR	7/8/97 DATE
<i>Chad Dammann</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	7/7/97 DATE
<i>Linda Hammit</i> CHIEF, DIVISION OF LAND DEVELOPMENT	7/8/97 DATE

DATE NO. REVISION

OWNER/DEVELOPER: DAHN CORPORATION, 2552 MacARTHUR BOULEVARD, IRVINE, CALIFORNIA 92715, 1-714-752-1284

PROJECT: MINI-U-STORAGE, A STORAGE FACILITY

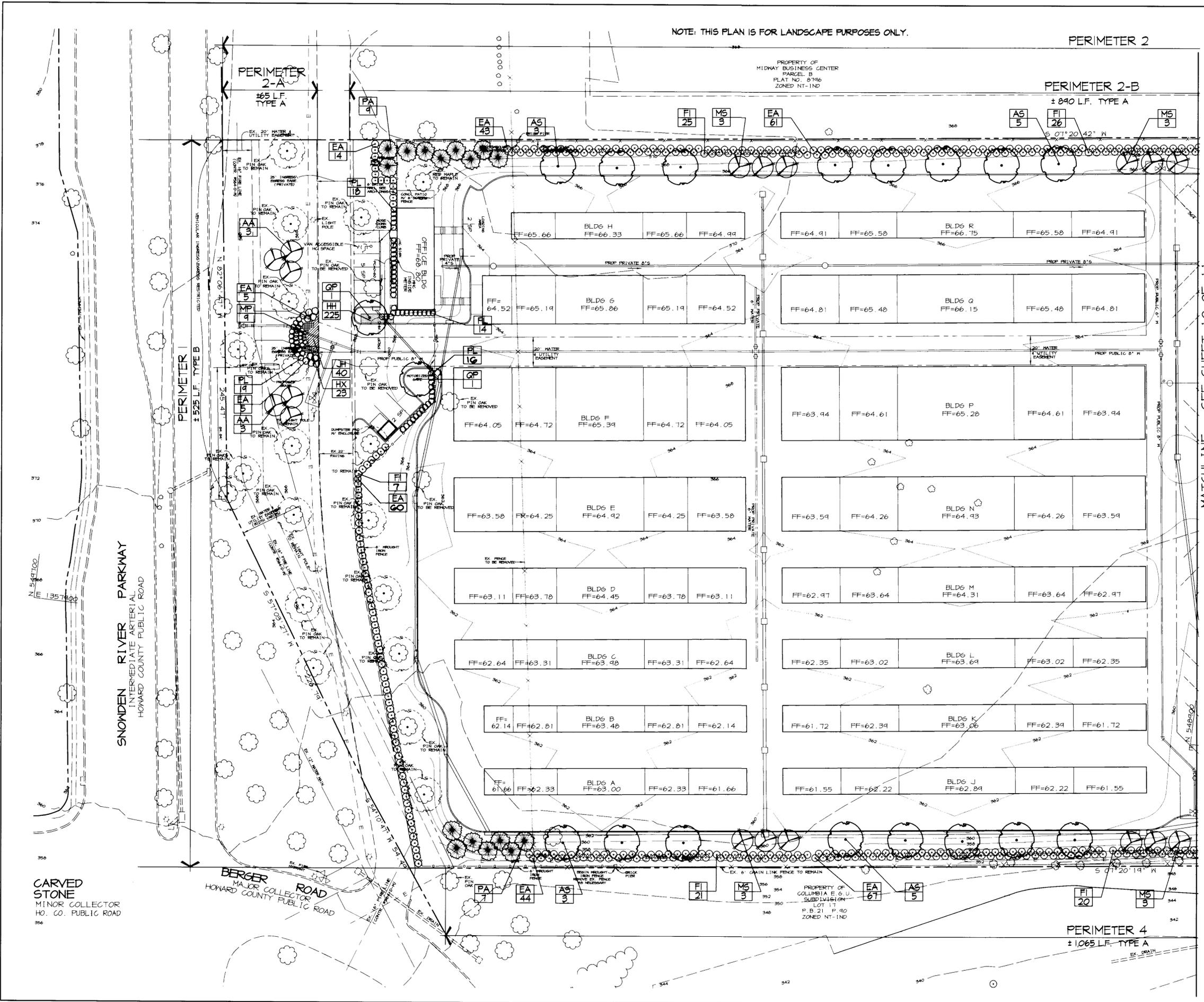
AREA: MIDWAY BUSINESS CENTER - PARCEL A, ZONED NT-IND, TAX MAP 42, PLAT #8145, 6th ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

TITLE: LANDSCAPE PLAN

RIEMER MUEGGE & ASSOCIATES, INC.
ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
8818 Centre Park Drive, Columbia, Maryland 21045
tel 410.997.8900 fax 410.997.9282

JUNE 11, 1997 DATE	REV. 2/28/97 AS PER HOWARD COUNTY COMMENTS
DESIGNED BY: C.J.R., L.O.H.	
DRAWN BY: DAM, CAK	
PROJECT NO. 96089 LSCP1.DWG	
DATE: JUNE 11, 1997	
SCALE: 1" = 30'	
DRAWING NO. 9 OF 11	

80P-97-70



CARVED STONE
MINOR COLLECTOR
HO. CO. PUBLIC ROAD

BERGER ROAD
MAJOR COLLECTOR
HOWARD COUNTY PUBLIC ROAD

SNOWDEN RIVER PARKWAY
INTERMEDIATE ARTERIAL
HOWARD COUNTY PUBLIC ROAD

N 54° 10' 00"
E 135° 7' 00"

S 51° 02' 21" N

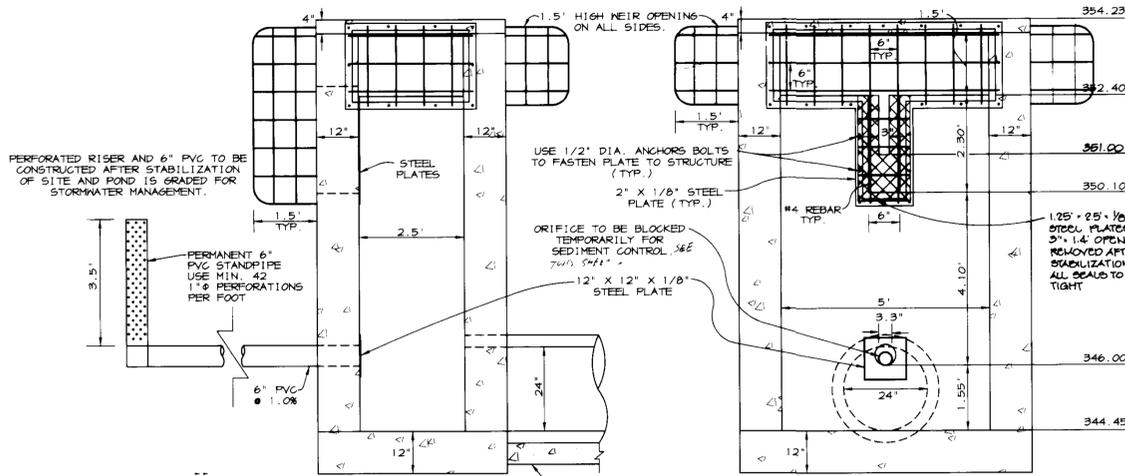
PERIMETER 4
± 1065 L.F. TYPE A

PROPERTY OF
COLUMBIA E. & U.
SUBDIVISION
LOT 17
P. B. 21 P. 40
ZONED NT-IND

PROPERTY OF
MIDWAY BUSINESS CENTER
PARCEL B
PLAT NO. 8196
ZONED NT-IND

SEQUENCE OF CONSTRUCTION

- OBTAIN GRADING PERMIT AND PERMISSION TO GRADE OFFSITE.
 - INSTALL STABILIZED CONSTRUCTION ENTRANCE, SEDIMENT BASIN NO. 1, AND SILT FENCE. EARTH DIKE TO BE GRADED INTO SITE TO PROVIDE POSITIVE DRAINAGE TO POND. PHASE 1 CONSTRUCTION WILL INCLUDE CONSTRUCTION OF A TYPE B EARTH DIKE (SEE PROFILE SHEET 7) USING SPOIL FROM THE SEDIMENT BASIN ON A 5 DAY CLEAR WEATHER FORECAST. NETLAND SO3 TO BE STOCKPILED PRIOR TO SEDIMENT BASIN NO. 1 CONSTRUCTION. (3 WEEKS)
 - CONTRACTOR TO CONSTRUCT 1-2 WITH TEMP. FLEXIBLE PIPE OUTFALL INTO BASIN AS EARLY IN GRADING PHASE AS POSSIBLE.
 - WITH PERMISSION OF HOWARD COUNTY DUMP RESTRICTION CONTROL INSPECTOR, PERFORM ROUGH GRADING, OBTAIN BUILDING PERMIT AND BEGIN BUILDING CONSTRUCTION. EARTH DIKE TO PROVIDE POSITIVE DRAINAGE TO POND AT ALL TIMES. THE STORM DRAIN CONSTRUCTION WILL GRADUALLY TAKE THE PLACE OF THE DIKE STARTING AT 1-2 AND WORKING UPSTREAM WITH THE DIKE EMPTYING INTO THE DRAIN AS NEEDED WHILE FINAL GRADE IS REACHED. (6 WEEKS)
 - AS SUBGRADE ELEVATION IS REACHED, INSTALL UTILITIES INCLUDING STORM DRAIN, WATER AND SEWER. (4 WEEKS)
 - INSTALL CURB AND GUTTER AND THEN PAVE. (3 WEEKS)
 - APPLY TOPSOIL AND STABILIZE DISTURBED AREAS AS NECESSARY IN ACCORDANCE WITH PERMANENT SEEDING NOTES. (3 DAYS)
 - INSTALL LANDSCAPING AND COMPLETE REMAINING CONSTRUCTION. (3 WEEKS)
- UPON APPROVAL OF DEPARTMENT OF INSPECTIONS, LICENSES, AND PERMITS SED. CONTROL INSPECTOR REMOVE REMAINING SED. CONTROL DEVICES AND CONVERT BASIN TO PERMANENT SHMP IN THE FOLLOWING STEPS:
- CLEAN STORM DRAIN INLETS AND FLUSH OUT PIPES.
 - PUMP OUT STANDING WATER IN BASIN USING PUMP STATION.
 - REMOVE ACCUMULATED SEDIMENT.
 - COMPLETE GRADING AND INSTALL FOREBAY AS PER SHEET 3.
 - REMOVE RIP-RAP OUTLET AS NECESSARY AND REMOVE TEMP. DENATURING DEVICE.
 - CONSTRUCT PERMANENT DENATURING DEVICE AS NECESSARY.
 - NETLAND SO3 TO BE PLACED INTO BOTTOM OF SHMP.
 - STABILIZE REMAINING AREAS IN ACCORDANCE WITH PERMANENT SEEDING NOTES.

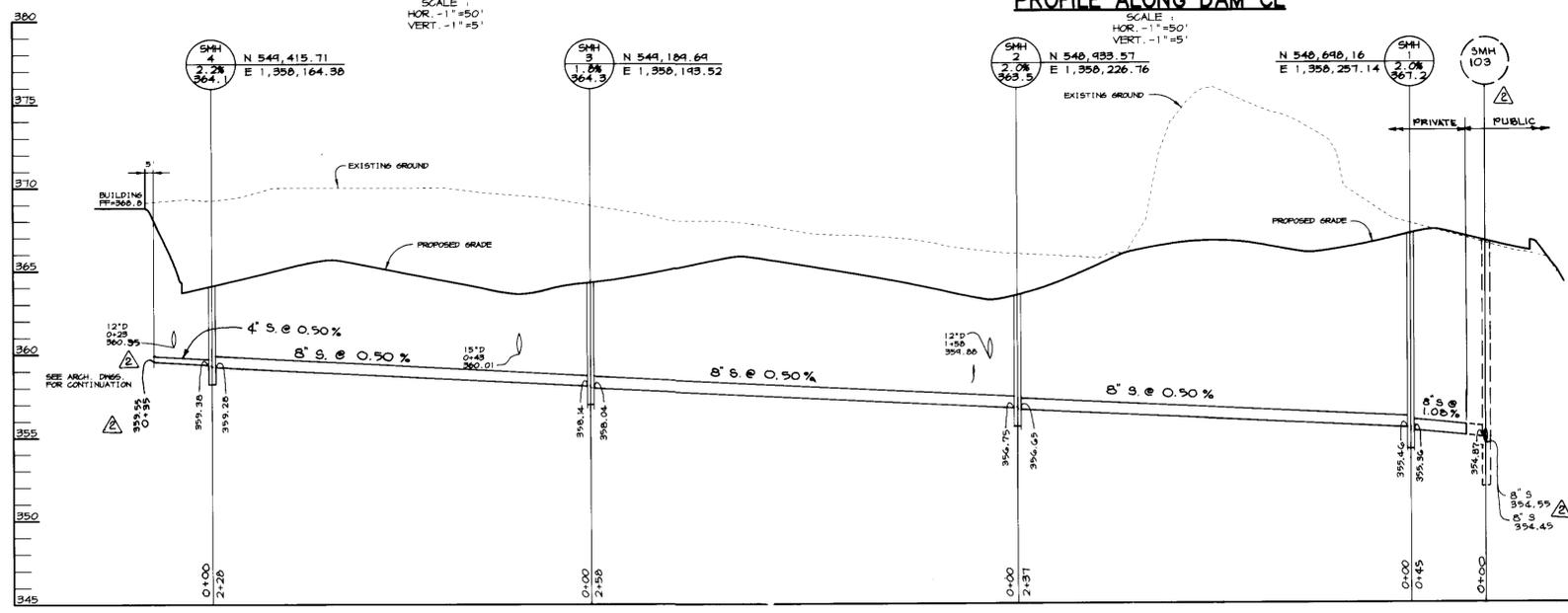
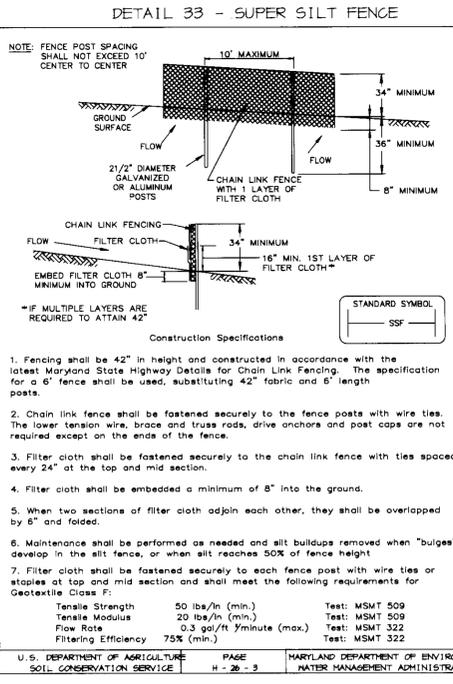
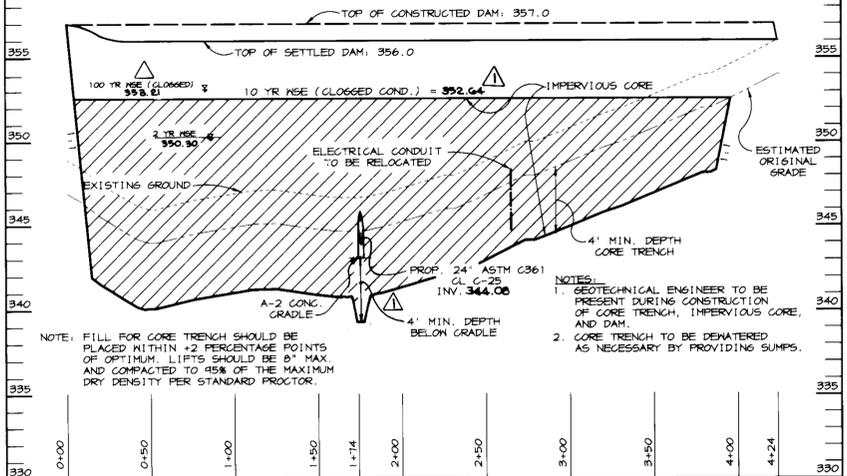
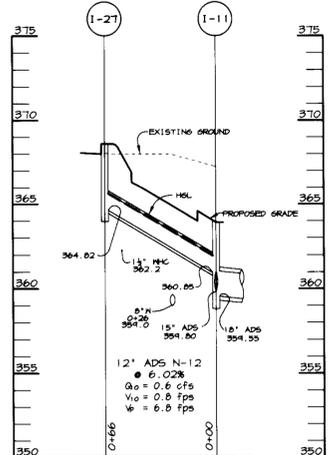
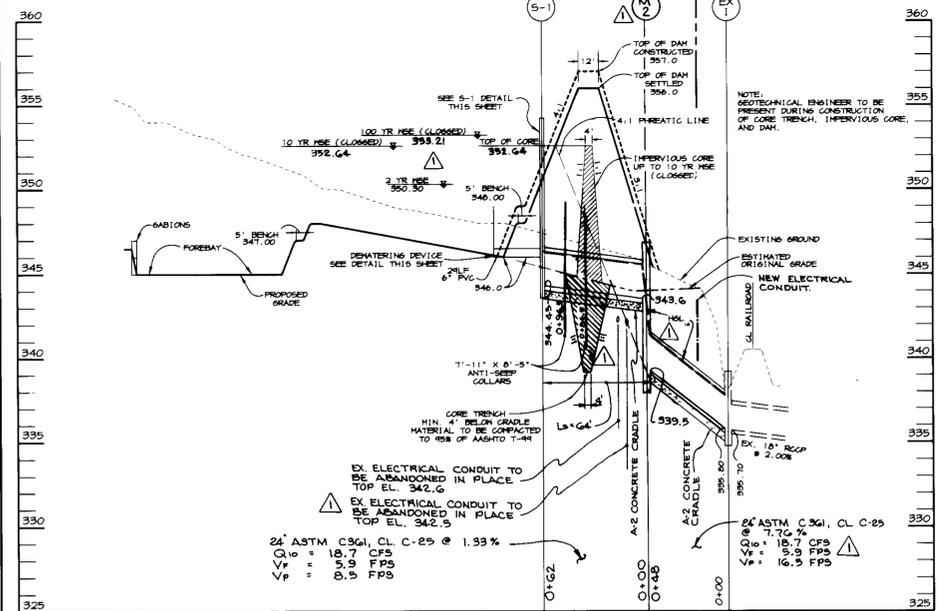


STRUCTURE SCHEDULE

STRUCTURE	TYPE	LOCATION	INV. IN	INV. OUT	TOP RIM/ CURB	STANDARD DETAIL
1-1	A-5	N 546,607.42 E 1,350,071.43	352.32(24')	340.04	362.75	HOCO SD 4.40 5' DEEP
1-2	A-10	N 546,590.47 E 1,351,041.34	344.05	344.75	350.05	HOCO SD 4.02 5' DEEP
1-3	A-10	N 546,704.11 E 1,351,075.05	350.55	350.45	357.15	HOCO SD 4.02 5' DEEP
1-4	A-10	N 546,652.40 E 1,351,057.32	355.14(24')	351.27	357.84	HOCO SD 4.02 5' DEEP
1-5	A-5	N 546,424.45 E 1,351,037.45	352.74	352.64	354.45	HOCO SD 4.40 4' DEEP
1-6	A-5	N 544,182.82 E 1,351,804.11	354.54(24')	351.21(24')	354.04	HOCO SD 4.40 4' DEEP
1-7	A-5	N 544,371.26 E 1,351,760.42	355.54	355.44	361.30	HOCO SD 4.40
1-8	A-5	N 544,405.63 E 1,351,831.45	356.01	355.91	360.60	HOCO SD 4.40
1-9	A-5	N 544,439.84 E 1,351,844.35	357.21	357.11	361.70	HOCO SD 4.40
1-10	A-5	N 544,447.94 E 1,351,844.40	357.84	357.74	361.40	HOCO SD 4.40
1-11	A-5	N 544,441.01 E 1,350,063.44	360.65(12')	354.55	365.80	HOCO SD 4.40
1-12	A-5	N 544,437.25 E 1,350,170.40	-	361.00	364.10	HOCO SD 4.40
1-13	A-5	N 544,104.42 E 1,351,054.75	356.17	356.07	360.00	HOCO SD 4.22
1-14	A-5	N 544,115.41 E 1,351,022.40	356.40	356.30	360.60	HOCO SD 4.22
1-15	A-5	N 544,201.17 E 1,351,447.08	356.80	356.70	360.30	HOCO SD 4.22
1-16	A-5	N 544,207.48 E 1,351,485.63	357.47	357.47	361.45	HOCO SD 4.22
1-17	A-5	N 544,215.36 E 1,350,057.12	354.17	354.02	362.40	HOCO SD 4.22
1-18	A-5	N 544,225.27 E 1,350,135.46	354.76	354.66	363.00	HOCO SD 4.22
1-19	A-5	N 544,235.00 E 1,350,145.43	-	360.24	360.04	HOCO SD 4.22
1-20	A-5	N 544,235.50 E 1,350,236.63	-	360.76	360.44	HOCO SD 4.22
1-21	A-5	N 546,844.37 E 1,351,440.00	355.46	354.46	354.06	HOCO SD 4.22
1-22	A-5	N 546,839.20 E 1,350,049.12	356.65	356.40	361.00	HOCO SD 4.22
1-23	A-5	N 546,448.11 E 1,350,170.36	354.41	354.16	362.43	HOCO SD 4.22
1-24	A-5	N 546,451.47 E 1,350,235.32	-	354.46	363.00	HOCO SD 4.22
1-25	A-5	N 546,604.24 E 1,350,300.18	357.22	357.12	365.60	HOCO SD 4.40
1-26	A-5	N 546,621.85 E 1,350,340.01	-	344.45	355.33	HOCO SD 4.11
1-27	A-5	N 544,578.49 E 1,350,021.74	-	354.82	360.30	HOCO SD 4.40
1-11A	A-5	N 544,440.48 E 1,350,121.36	360.76	360.01	364.10	HOCO SD 4.40
E-1	A	N 546,851.00 E 1,350,064.00	345.00	-	-	HOCO SD 5.11
M-1A	G DIA. MH	N 546,938.50 E 1,350,078.63	348.55	349.47	362.5	HOCO G-9.11
S-1	HOD. A-5	N 546,437.54 E 1,351,444.14	-	344.45	355.33	HOCO G-9.11
M-2	G DIA. MH	N 546,930.12 E 1,351,904.05	348.6	359.5	346.3	HOCO G-9.11
M-1	G DIA. MH	N 546,854.86 E 1,350,235.34	356.02	355.42	366.50	HOCO G-9.11

NOTES: 1. LOCATIONS ARE AT CENTER OF STRUCTURE (AT CURB FOR CURB INLETS).
2. ELEVATION AT GRADE, NOT TOP OF STRUCTURE.

- NOTES:
- OTHER THAN THE MODIFICATIONS SHOWN HERE, THIS STRUCTURE SHALL BE CONSTRUCTED IN ACCORDANCE WITH HO. CO. STD. DETAIL SD 4.01, HOWEVER A BRICK STRUCTURE IS NOT ALLOWED.
 - SHOP DRAWINGS TO BE SUBMITTED TO HOWARD COUNTY AND CONSULTANT PRIOR TO FABRICATION.
 - ORIFICE AT EL. 346.0 TO BE TEMPORARILY BLOCKED DURING SEDIMENT CONTROL OPERATIONS.
 - GALVANIZE RACK AFTER FABRICATION AND PAINT BATTLESHIP GRAY.



BY THE DEVELOPER:

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

4-10-97
CH

DEVELOPER: _____ DATE: _____

BY THE ENGINEER:

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

J. Farrell
6-11-97
ENGINEER: _____ DATE: _____

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

Cheryl K. Simmons
07-01-97
NATURAL RESOURCES CONSERVATION SERVICE DATE: _____

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

Howarth
7/1/97
HOWARD SOIL CONSERVATION DISTRICT DATE: _____

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

James S. Smith
7/8/97
DIRECTOR DATE: _____

John D. ...
7/7/97
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE: _____

Cindy Hammett
7/8/97
CHIEF, DIVISION OF LAND DEVELOPMENT DATE: _____

11/4/97 @ REV. SEWER PROFILE & STRUCTURE SCHEDULE
8/25/97 @ ADDED M-2 TO PRINCIPLE SPILLWAY PROFILE & STRUC. SCHED. MADE COLLATERAL ADJUSTMENTS TO DAM CL & P.S.P.
DATE NO. REVISION

OWNER/DEVELOPER: DAHN CORPORATION
18552 MACARTHUR BOULEVARD
IRVINE, CALIFORNIA 92715
1-714-752-1284

PROJECT: MINI-U-STORAGE
A STORAGE FACILITY

AREA: MIDWAY BUSINESS CENTER - PARCEL A
ZONED NT-IND TAX MAP 42 PLAT #8795
6th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE: STRUCTURE SCHEDULE,
PROFILES AND DETAIL SHEET

RIEMER MUEGGE & ASSOCIATES, INC.
ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
8818 Centre Park Drive, Columbia, Maryland 21045
tel 410.997.8900 fax 410.997.9282

6-11-97
DATE

DESIGNED BY: C.J.R.

DRAWN BY: DAM

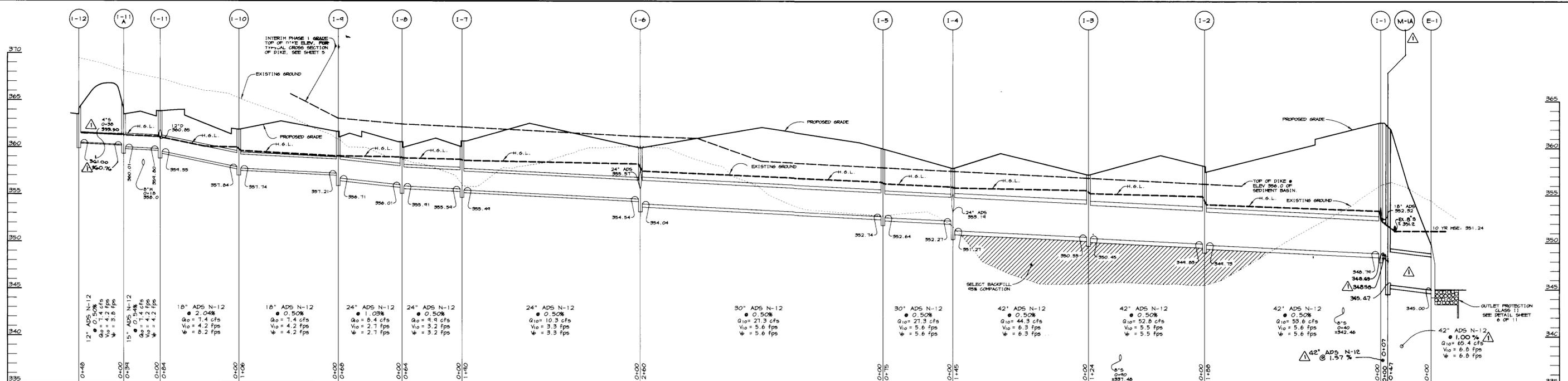
PROJECT NO: 96089
SDPB.DWG

DATE: JUNE 11, 1997

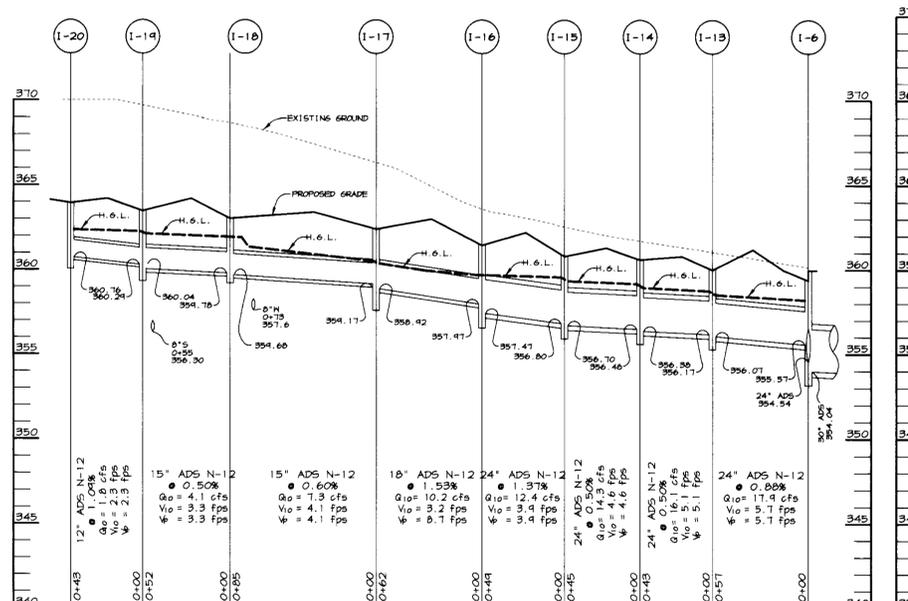
SCALE: AS SHOWN

J. Farrell
JAYKANT D. PAREKH #19148
DRAWING NO. 8 OF 11

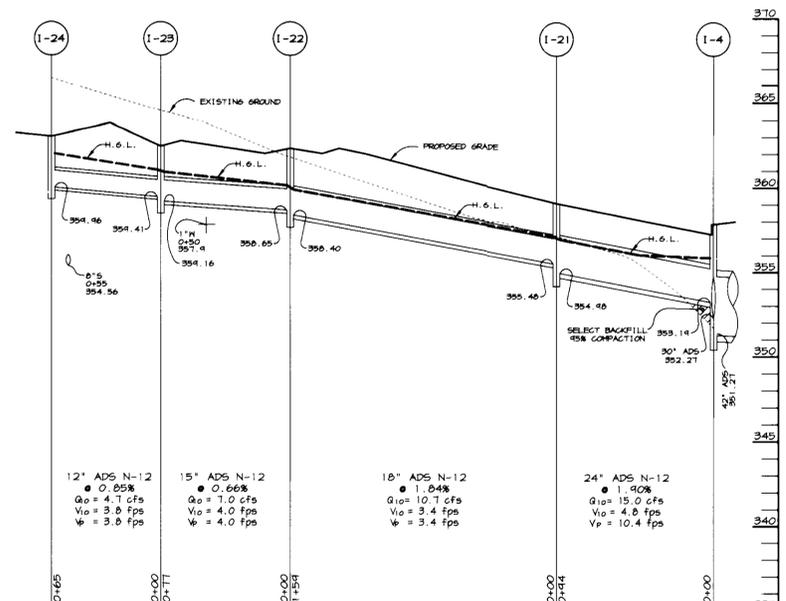
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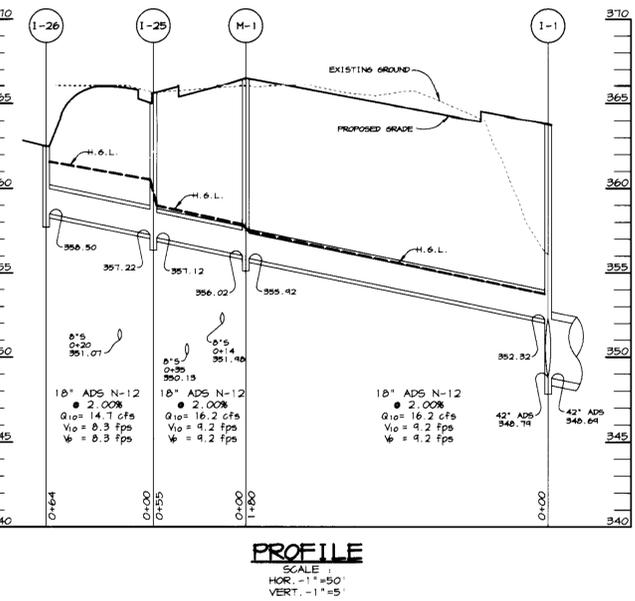
PROFILE
SCALE:
HOR. - 1"=50'
VERT. - 1"=5'



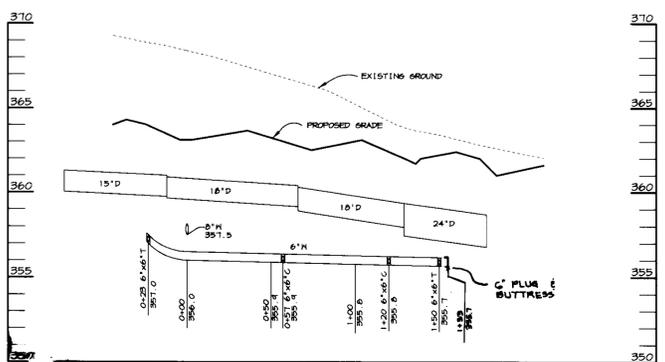
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HOR. - 1"=50'
VERT. - 1"=5'



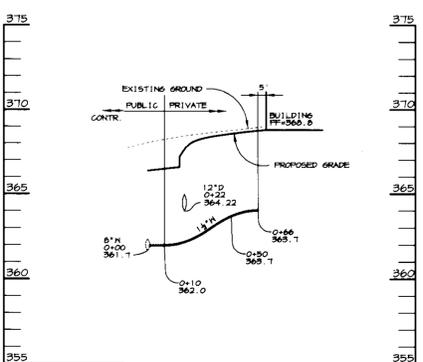
PROFILE
SCALE:
HOR. - 1"=50'
VERT. - 1"=5'



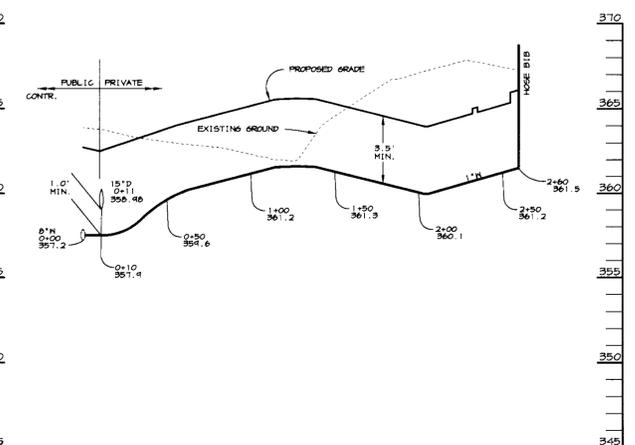
PROFILE
SCALE:
HOR. - 1"=50'
VERT. - 1"=5'



WATER PROFILE
SCALE:
HOR. - 1"=50'
VERT. - 1"=5'



WATER PROFILE
SCALE:
HOR. - 1"=50'
VERT. - 1"=5'



WATER PROFILE
SCALE:
HOR. - 1"=50'
VERT. - 1"=5'

7.10.97
CCH

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 DIRECTOR: *Joseph R. Rutter* 7/18/97 DATE
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 CHIEF, DIVISION OF LAND DEVELOPMENT: *Cindy Harshbarger* 7/14/97 DATE

DATE	NO.	REVISION
11-4-97	1	REVISED SD PROFILE - ADDED M-1A TO PROFILE.

OWNER/DEVELOPER: DAHN CORPORATION
 18552 MacARTHUR BOULEVARD
 IRVINE, CALIFORNIA 92715
 1-714-752-1284

PROJECT: MINI-U-STORAGE
 A STORAGE FACILITY

AREA: MIDWAY BUSINESS CENTER - PARCEL A
 ZONED NT-IND TAX MAP 42 FLAT #8795
 6th ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

TITLE: STORM DRAIN PROFILES

RIEMER MUEGG & ASSOCIATES, INC.
 ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
 8818 Centre Park Drive, Columbia, Maryland 21045
 tel 410.997.8900 fax 410.997.9282

DATE: 6.11.97

DESIGNED BY: C.J.R.
 DRAWN BY: DAM
 PROJECT NO: 96089
 SDP7.DWG
 DATE: JUNE 11, 1997
 SCALE: AS SHOWN
 DRAWING NO. 7 OF 11

MD-378 STANDARDS AND SPECIFICATIONS for P&M

SPECIFICATIONS

These specifications are appropriate to all ponds within the scope of the Standard for practice MD-378. All references to ASTM and AASHTO specifications apply to the most recent version.

SITE PREPARATION

Areas designated for borrow areas, embankment, and structural works shall be cleared, grubbed and stripped of topsoil. All trees, vegetation, roots and other obstructions shall be removed. Channel banks and sharp breaks shall be smoothed to no steeper than 1:1.

Areas to be covered by the reservoir will be cleared of all trees, brush, logs, stumps, rocks and other objectionable material unless otherwise designated on the plans. Trees, brush and stumps shall be cut approximately level with the ground surface. For dry streamwater management ponds, a minimum of a 50 foot radius around the line structure shall be cleared.

All cleared and grubbed material shall be disposed of outside and below the limits of the dam and reservoir as directed by the owner or his representative. When specified, a sufficient quantity of topsoil will be provided to allow for suitable location for use on the embankment and other designated areas.

EARTH FILL

Material - The fill material shall be taken from approved designated borrow areas. It shall be free of roots, stumps, wood, rubbish, stones greater than 6" diameter, and other objectionable material. Fill material for the center of the embankment and cut off trench shall conform to Unified Soil Classification Group, CL, CH, or CC. Consideration may be given to the use of other materials in the embankment if design and construction are supervised by a geotechnical engineer.

Placement - Areas on which fill is to be placed shall be scarified prior to placement of fill. Fill material shall be placed in maximum 8" lifts (before compaction) layers which are to be continuous over the entire width of the embankment. The most permeable borrow material shall be placed in the downstream portions of the embankment. The gradation of the embankment shall be maintained concurrently with fill placement and not excavated into the embankment.

Compaction - The movement of the hauling and spreading equipment over the fill shall be controlled so that the entire surface of each lift will be troweled by not less than one tread track of the equipment or compaction shall be achieved by a minimum of four passes of a minimum weight roller or vibratory roller. Fill material shall contain sufficient moisture such that the degree of compaction will be obtained with the equipment used. The fill material shall contain sufficient moisture so that if formed into a ball it will not break when the water content is increased.

Where a minimum required density is specified, it shall not be less than 95% of maximum dry density with a moisture content within +/- 2% of optimum. Each layer of fill shall be compacted to maximum to obtain that density, and it is to be certified by the Engineer at the time of construction. All compaction is to be determined by AASHTO Method T-99.

Cut-off Trench - The cutoff trench shall be excavated into impervious material (stone or gravel) to the centerline of the trench. The trench shall be excavated to a minimum depth of 24" below the bottom of the trench and shall be compacted with the equipment used for excavation, with the minimum width being four feet. The depth shall be at least four feet below existing grade or as shown on the plans. The side slopes of the trench shall be 1:1 or flatter.

The back fill shall be compacted with construction equipment, rollers, or hand tampers to ensure maximum density and minimum permeability.

TEMPORARY SEEDING NOTES

Apply to graded or cleared areas likely to be redistributed where a short-term vegetative cover is needed.

Seeding Preparation - Loosen upper three inches of soil by raking, grading or other acceptable means before seeding, if not previously loosened.

Soil Amendments - Apply 500 lbs. per acre 10-10-10 fertilizer (14 lbs. per 1000 sq.ft.).

Seeding - For the period March 1 thru April 30 and from August 1 thru November 15, seed with 2-1/2 bushels per acre of annual ryegrass (1.5 lbs. per 1000 sq.ft.). For the period May 1 thru August 1, seed with 3 lbs. per acre of seeding mixture (0.5 lb. per 1000 sq.ft.). For the period November 16 thru February 28, protect site by applying 2 tons per acre of well composted straw mulch and seed as soon as possible in the spring, or use sod.

Mulching - Apply 1-1/2 to 2 tons per acre (70 to 90 lbs. per 1000 sq.ft.) of mulch material. Apply immediately after seeding. Another mulch immediately after application with mulch anchoring tool or 2/8 gal. per acre (5 gal. per 1000 sq.ft.) of emulsified asphalt on flat areas. On slopes, 8 ft. or higher, use 347 gal. per acre (8 gal. per 1000 sq.ft.) for anchoring.

PERMANENT SEEDING NOTES

Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.

Seeding Preparation - Loosen upper three inches of soil by raking, grading or other acceptable means before seeding, if not previously loosened.

Soil Amendments - In lieu of soil test recommendations, use one of the following schedules:

- 1) Preferred - Apply 2 tons per acre dolomitic limestone (92 lbs. per 1000 sq.ft.) and 20 lbs. per acre 10-10-10 fertilizer (1.4 lbs. per 1000 sq.ft.). For the period May 1 thru August 1, seed with 3 lbs. per acre of seeding mixture (0.5 lb. per 1000 sq.ft.). For the period November 16 thru February 28, protect site by applying 2 tons per acre of well composted straw mulch and seed as soon as possible in the spring, or use sod.

Seeding - For the period March 1 thru April 30 and from August 1 thru November 15, seed with 2-1/2 bushels per acre of annual ryegrass (1.5 lbs. per 1000 sq.ft.). For the period May 1 thru August 1, seed with 3 lbs. per acre of seeding mixture (0.5 lb. per 1000 sq.ft.). For the period November 16 thru February 28, protect site by applying 2 tons per acre of well composted straw mulch and seed as soon as possible in the spring, or use sod.

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Maintenance - Inspect all seeded areas and make needed repairs, replacements and reseedings.

SEDIMENT CONTROL NOTES

1. A minimum of 48 hours notice must be given to the Howard County Department of Inspections and Permits prior to the start of any construction (313-1855).

2. All vegetative and structural practices are to be installed according to the provisions of the 1991 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL AND EROSION CONTROL FOR PERMANENT SEEDING (Sec. 51) and (Sec. 52). Temporary stabilization with mulch does not apply to any area where recommended seeding does not allow for proper germination and establishment of grasses.

All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.

7. Site Analysis: Total Area of Site 13.25 acres; Area to be seeded or paved 8.30 acres; Area to be vegetatively stabilized 10.00 acres; Total Fill 35,000 cu. yds.

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 Sediment Control Inspector.

10. Sediment will begin only after permittee sediment control measures have been installed and are in a functioning condition.

11. Grading will be removed from traps when its depth reaches clear out elevation shown on the plans.

12. Cut and fill quantities provided under site analysis do not represent bid quantities. These quantities are provided for general planning purposes only. The contractor shall determine the actual quantities of cut and fill to be required for the project.

13. On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be required upon completion of installation of permanent 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 is satisfied by the inspection agency.

14. Trenches for the construction of utilities be limited to three pipe lengths or that which can be backfilled and stabilized within one working day, whichever is shorter.

ROCK RIPRAP

All rock shall be dense, sound, and free from cracks, seams, and other defects conducive to accelerated weathering. The rock fragments shall be angular to subangular in shape. The least dimension of the rock fragment shall not be less than one-third the greatest dimension of the fragment.

The rock shall have the following properties:

- 1. Bulk specific gravity (saturated surface-dry basis) not less than 2.5.
- 2. Absorption not more than three percent.
- 3. Soundness: Weight loss in five cycles not more than 20 percent when sodium sulfate is used.

Bulk specific gravity and absorption shall be determined according to ASTM C 127. The test for soundness shall be performed according to ASTM C 88.

The riprap shall be placed on the required thickness in one operation. The rock shall be reasonably homogeneous and the larger rocks uniformly distributed and only in contact one to another with the smaller rocks filling the voids between the larger rocks. Filter cloth shall be placed under all riprap and shall meet the requirements of Maryland Department of Transportation, Highway Administration Standard Specifications for Construction and Materials, Section 918.2.

CARE OF WATER DURING CONSTRUCTION

All work on permanent structures shall be carried out in areas free from water. The contractor shall construct and maintain all temporary dikes, levees, cofferdams, drainage channels, and stream diversions necessary to protect the areas to be occupied by the permanent works. The contractor shall also furnish, install, operate, and maintain all necessary pumps and other equipment required for removal of water from the various parts of the work and for maintaining the excavations, foundation, and other parts of the work free from water or required or directed by the engineer for constructing such part of the work. After having served their purpose, all temporary protective work shall be removed or revised and graded to the extent required to prevent obstruction to the flow of water to the spillway or other parts of the work and so as not to interfere in any way with the operation or maintenance of the structure. Stream diversions shall be maintained until the full flow can be passed through the permanent works. The removal of water from the excavated and foundation shall be accomplished in a manner and to the extent that the stability of the excavated slopes and bottom of excavated areas will be maintained and will allow satisfactory performance of all construction operations. During the piling and compaction of material in required excavations, the water level at the locations being filled shall be maintained below the bottom of the excavation at such locations which may require draining the water to sumps from which the water shall be pumped.

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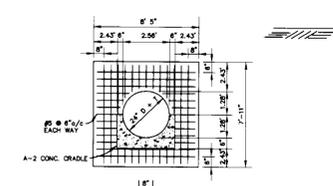
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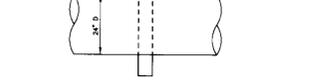
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CORE TRENCH DETAIL NO SCALE



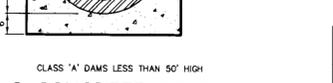
CONCRETE ANTI-SEEP COLLARS NO SCALE



TEMPORARY SEEDING NOTES NO SCALE



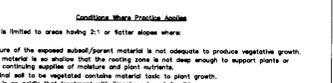
PERMANENT SEEDING NOTES NO SCALE



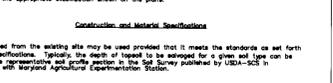
RIPPAP OUTLET PROTECTION DETAIL NO SCALE



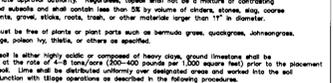
DETAIL 20A - REMOVABLE PUMPING STATION NO SCALE



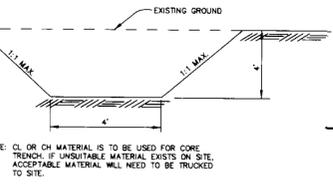
DETAIL 21 - EARTH DIKE NO SCALE



DETAIL 22 - SILT FENCE NO SCALE



DETAIL 24 - STABILIZED CONSTRUCTION ENTRANCE NO SCALE



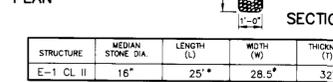
SECTION AA NO SCALE



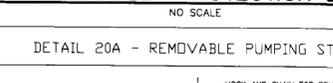
SECTION BB NO SCALE



SECTION A-A NO SCALE



SECTION NO SCALE



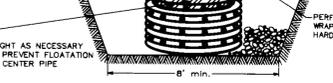
PLAN NO SCALE



SECTION NO SCALE

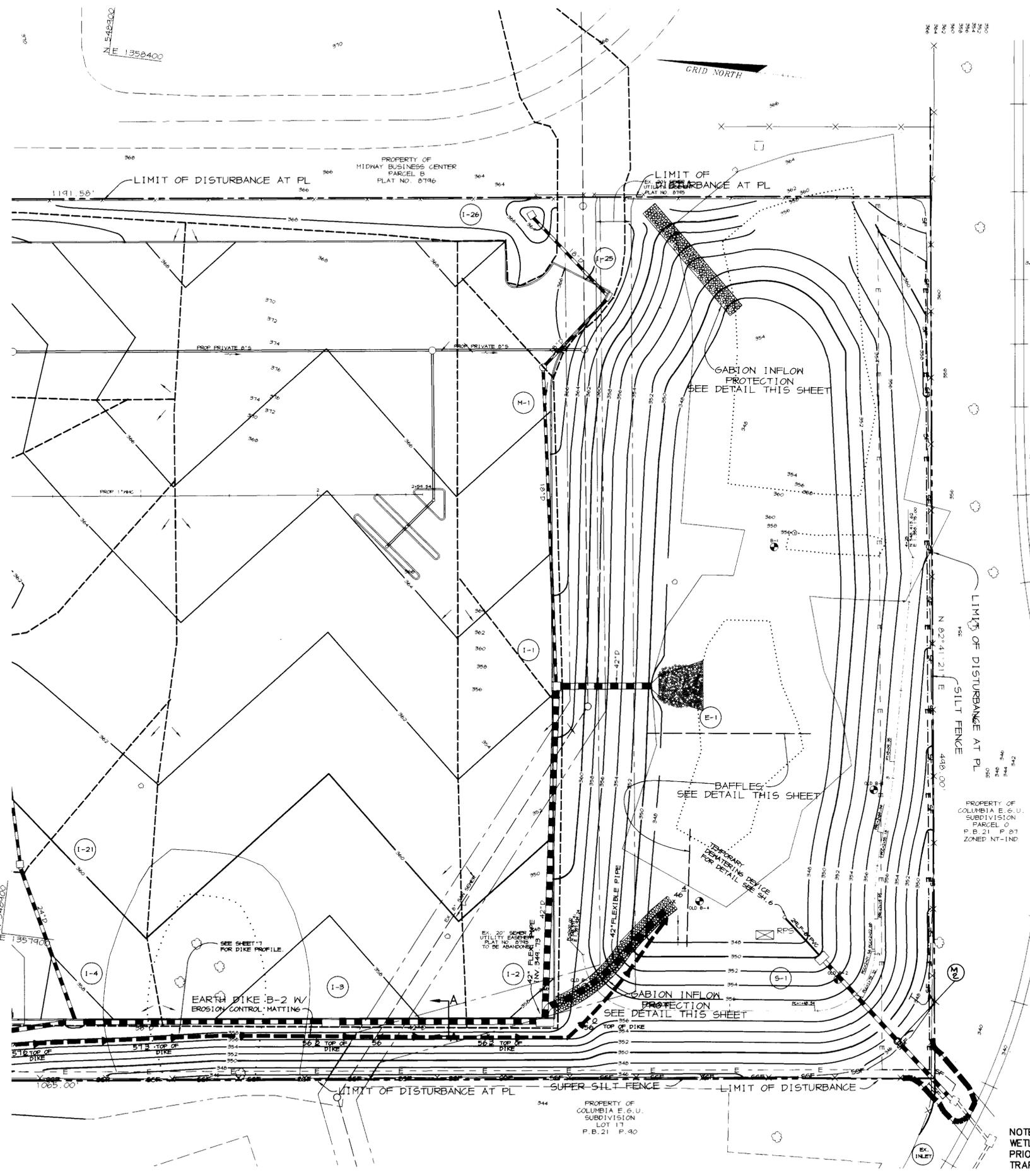


SECTION NO SCALE



SECTION NO SCALE

MATCHLINE SEE SHEET 4



OPERATION, MAINTENANCE AND INSPECTION
INSPECTION OF THE POND SHALL BE PERFORMED AT LEAST ONCE ANNUALLY, IN ACCORDANCE WITH THE CHECKLIST AND REQUIREMENTS CONTAINED WITHIN USDA "SCS" STANDARDS AND SPECIFICATION FOR PONDS (LITERATURE). THE POND OWNER AND HIS SUCCESSORS OR AGENTS SHALL BE RESPONSIBLE FOR THE SAFETY OF THE POND AND THE CONTINUED OPERATION. SURVEILLANCE, INSPECTION AND MAINTENANCE THEREOF SHALL BE PROMPTLY NOTIFIED THE SOIL CONSERVATION DISTRICT OF ANY UNUSUAL OBSERVATIONS THAT MAY BE INDICATIONS OF DANGER SUCH AS EXCESSIVE SEEPAGE, TURBID SEEPAGE, SLIDING OR SLUMPING.

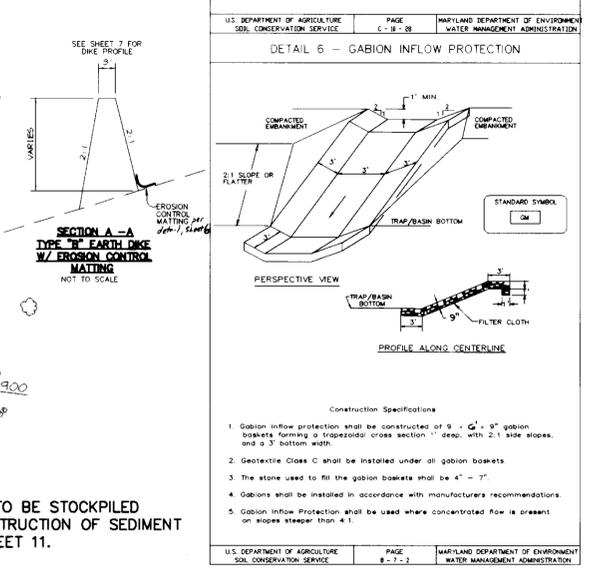
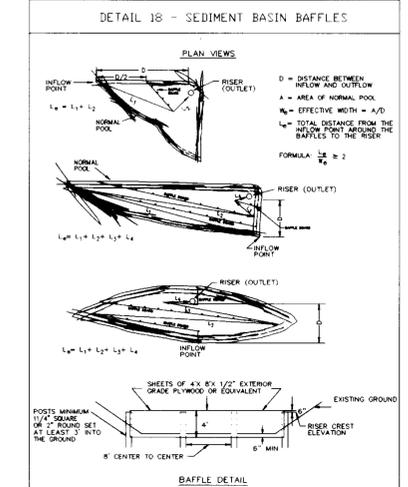
DRAINAGE DATA			
INLET NOS.	AREA IN ACRES	% IMPERVIOUS	PERCENT
1	0.21	0.86	100%
2	0.27	0.86	100%
3	1.45	0.86	100%
4	0.72	0.86	100%
5	0.10	0.86	100%
6	0.14	0.86	100%
7	0.07	0.86	100%
8	0.25	0.86	100%
9	0.18	0.76	83%
10	0.44	0.75	81%
11	0.11	0.86	100%
12	0.38	0.57	52%
13	0.25	0.86	100%
14	0.25	0.86	100%
15	0.26	0.86	100%
16	0.31	0.86	100%
17	0.38	0.86	100%
18	0.40	0.86	100%
19	0.20	0.86	100%
20	0.31	0.60	58%
21	0.71	0.86	100%
22	0.48	0.86	100%
23	0.28	0.86	100%
24	0.65	0.75	82%
25	0.22	0.80	81%
26	2.59	0.58	55%
27	0.11	0.58	55%
28	0.20	0.86	100%
11A	0.12	0.86	100%

SEDIMENT BASIN NO. 1

DRAINAGE AREA	15.05 ACRES
STORAGE VOLUME REQUIRED (WET STORAGE)	27,090 CF
STORAGE VOLUME REQUIRED (DRY STORAGE)	27,090 CF
STORAGE VOLUME AVAILABLE (WET STORAGE)	60,903 CF @ MEIR CREST
STORAGE VOLUME AVAILABLE (DRY STORAGE)	311,181 CF @ EL. 356.00
TSSM (WET STORAGE)	60,903 CF
TSSM (DRY STORAGE)	69,572 CF @ 2 YR. W.S.E.
CREST ELEVATION	350.11
TOP OF DAM	356.0
BOTTOM ELEVATION	348.0
CLEANOUT ELEVATION	348.2
SIDE SLOPES	4:1
DISTANCE FROM TOP OF RISER TO CLEANOUT	1'-8"

LEGEND

- DRAINAGE AREA
- EARTH DIKE
- SUPER SILT FENCE
- SILT FENCE
- BAFFLES
- LIMIT OF DISTURBANCE
- RPS (REMOVABLE PUMP STATION)



APPENDIX
DATE: 7-10-97
[Signature]

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

DEVELOPER: [Signature] DATE: 6/11/97

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

ENGINEER: J. Farrell DATE: 6.11.97

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

[Signature] 07-01-97
NATURAL RESOURCES CONSERVATION SERVICE DATE

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

[Signature] 7/1/97
HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

[Signature] 7/2/97
DIRECTOR DATE

[Signature] 7/7/97
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 7/8/97
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

DATE	NO.	REVISION

OWNER/DEVELOPER: DAHN CORPORATION, 18552 MacARTHUR BOULEVARD, IRVINE, CALIFORNIA 92715, 1-714-752-1284

PROJECT: MINI-U-STORAGE A STORAGE FACILITY

AREA: MIDWAY BUSINESS CENTER - PARCEL A, ZONED NT-IND, TAX MAP 42, PLAT #8795, 6TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

TITLE: SEDIMENT CONTROL PLAN AND DRAINAGE AREA MAP

RIEMER MUEGGE & ASSOCIATES, INC.
ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
8818 Centre Park Drive, Columbia, Maryland 21045
tel 410.997.8900 fax 410.997.9282

DATE: 6.11.97

DESIGNED BY: C.J.R.

DRAWN BY: DAM

PROJECT NO: 96089 SDP5.DWG

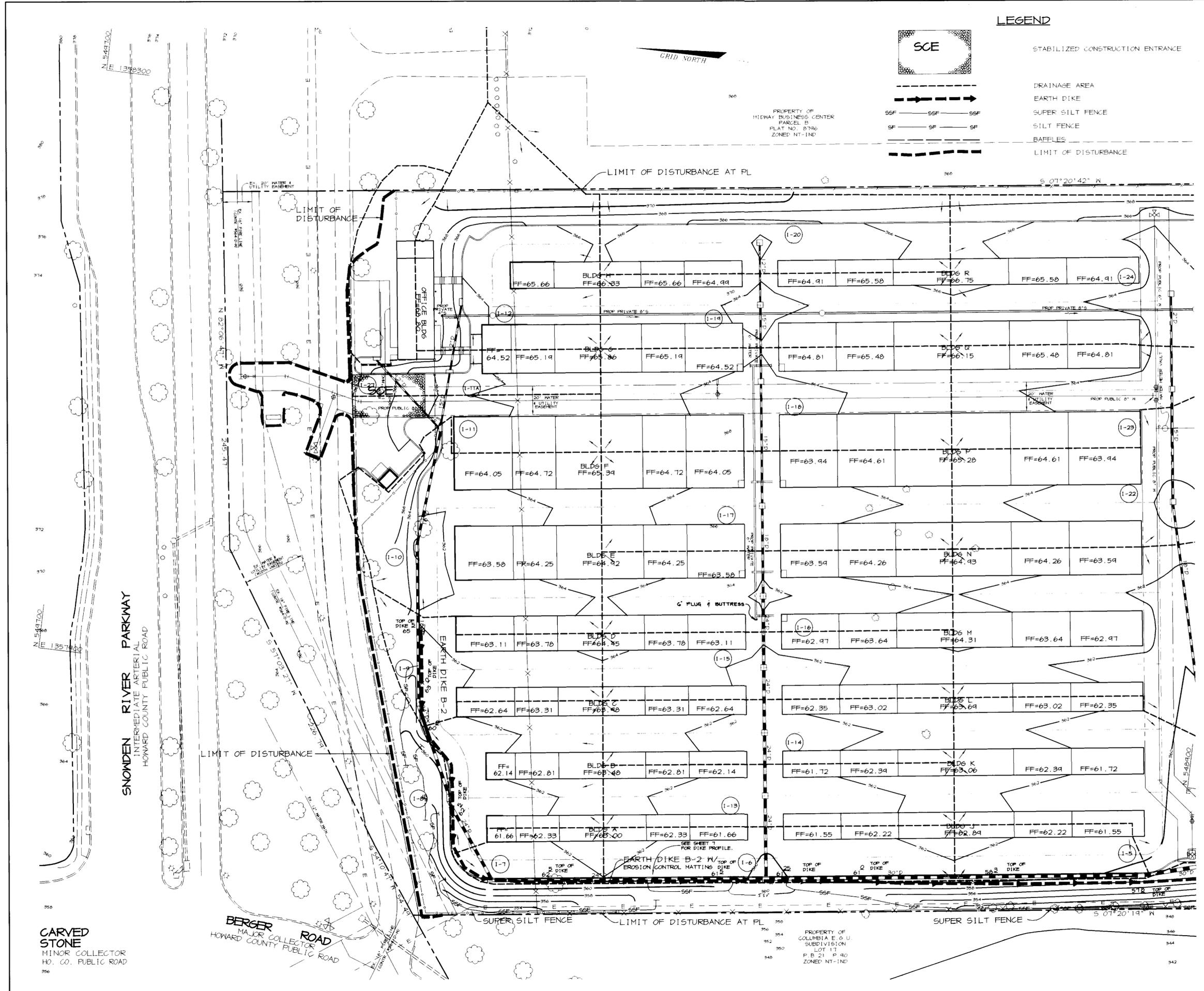
DATE: JUNE 11, 1997

SCALE: 1" = 30'

DRAWING NO. 5 OF 11

JAYKANT D. PAREKH #19148

NOTE: WETLAND SOD TO BE STOCKPILED PRIOR TO CONSTRUCTION OF SEDIMENT TRAP. SEE SHEET 11.



LEGEND

- STABILIZED CONSTRUCTION ENTRANCE
- DRAINAGE AREA
- EARTH DIKE
- SUPER SILT FENCE
- SILT FENCE
- BAFFLES
- LIMIT OF DISTURBANCE

4-10-97
COM

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

[Signature] 6/11/97
DEVELOPER DATE

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

J. Farrell 6-11-97
ENGINEER DATE

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

NATURAL RESOURCES CONSERVATION SERVICE DATE

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

HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

[Signature] 7/8/97
DIRECTOR DATE

[Signature] 7/7/97
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 7/8/97
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

DATE	NO.	REVISION

OWNER/DEVELOPER DAHN CORPORATION
18552 MACARTHUR BOULEVARD
IRVINE, CALIFORNIA 92715
1-714-752-1284

PROJECT MINI-U-STORAGE
A STORAGE FACILITY

AREA MIDWAY BUSINESS CENTER - PARCEL A
ZONED NT-IND TAX MAP 42 PLAT #8795
6th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE SEDIMENT CONTROL PLAN
AND DRAINAGE AREA MAP

RIEMER MUEGGE & ASSOCIATES, INC.
ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
8818 Centre Park Drive, Columbia, Maryland 21045
tel 410.997.8900 fax 410.997.9282

6-11-97
DATE

DESIGNED BY: C.J.R.
DRAWN BY: DAM
PROJECT NO: 96089
SDP4.DWG
DATE: JUNE 11, 1997
SCALE: 1" = 30'
DRAWING NO. 4 OF 11



JAYKANT D. PAREKH #19148

SDP-97-79

MATCHLINE SEE SHEET 5

CARVED STONE
MINOR COLLECTOR
HO. CO. PUBLIC ROAD

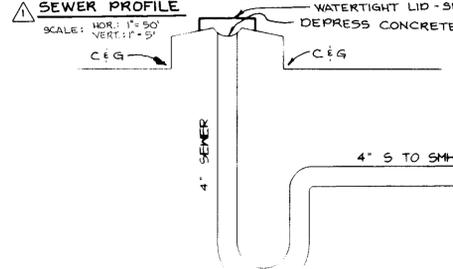
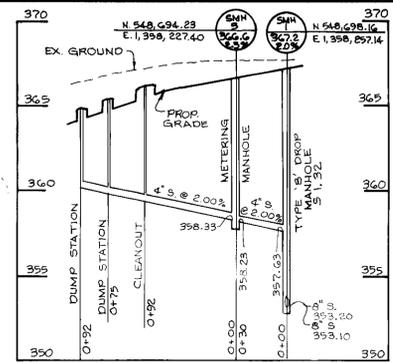
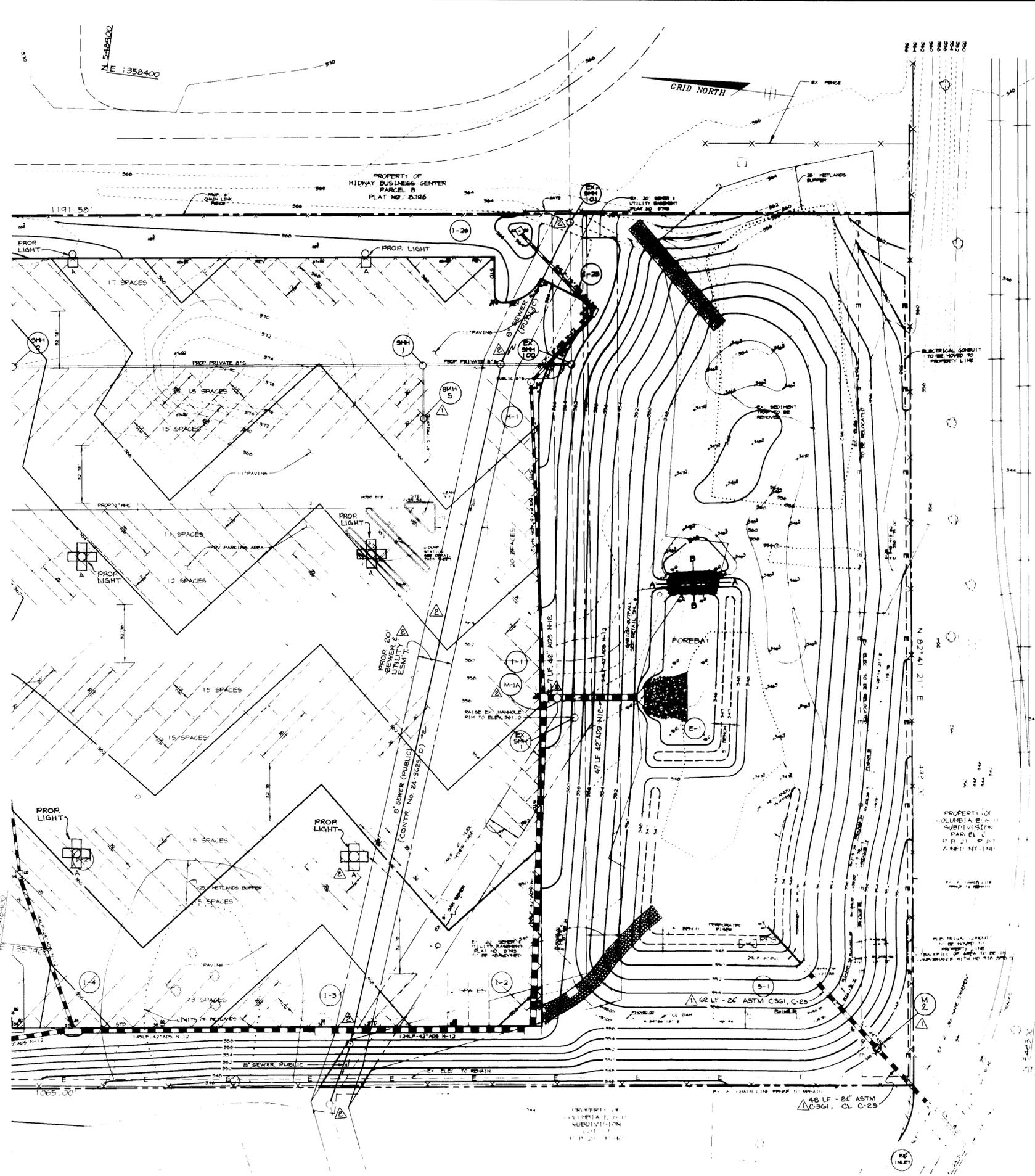
BERGER ROAD
MAJOR COLLECTOR
HOWARD COUNTY PUBLIC ROAD

SNOWDEN RIVER PARKWAY
INTERMEDIATE ARTERIAL
HOWARD COUNTY PUBLIC ROAD

PROPERTY OF
COLUMBIA E.S.U.
SUBDIVISION
LOT 17
P.B. 21 P. 30
ZONED NT-IND

PROPERTY OF
MIDWAY BUSINESS CENTER
PARCEL A
PLAT NO. 8795
ZONED NT-IND

MATCHLINE SEE SHEET 2



- LEGEND**
- 9" PAVING
 - 11" PAVING
 - CONCRETE PAVEMENT/SIDEWALK
 - CURB AND GUTTER TRANSITION
 - FLOW ARROWS
 - POLE MOUNTED HPS PARK LIGHTS ON 30" STEEL POLE, 400W HPS LAMPS, MANUFACTURED BY GARCO, MODEL No. EB-19-4-V5-400 HPS-BRA

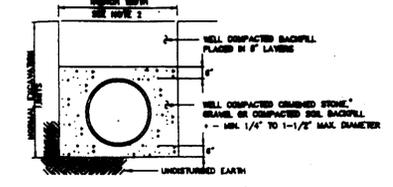
NOTE: CONTRACTOR TO SUPPLY ENGINEER WITH SHOP DRAWINGS OF DUMP STATION/LID BEFORE START OF CONSTRUCTION.

DUMP STATION DETAIL
NOT TO SCALE

SWM SUMMARY CHART

STORM	ALLOWABLE RELEASE RATE	INFLOW	DISCHARGE	ELEVATION	STORAGE
1	1.1	41.55 CFS	1.22 CFS	350.30	1.60 AC*FT
2	1.1	41.55 CFS	4.31 CFS	351.24	2.55 AC*FT
3	1.1	41.55 CFS	8.38 CFS	352.31	3.68 AC*FT

4-10-97
JH



TRENCH FOR ADS N-12 PIPE
NO SCALE

NOTES:
1. TRENCH IN ROAD FRONT OF WAY, TRENCH COMPLETION POINTS SHALL BE AS SHOWN BY A.A.S.H.T.O.
2. FOR PAY NOTES SEE DETAIL C 2.02-A T-18-A.

Applicable Specifications and Installation Guidelines

- ASTM F 408, Standard Specification for Corrugated Polyethylene Pipe and Fittings.
- ASTM F 487, Standard Specification for Large Diameter Corrugated Polyethylene Pipe and Fittings.
- AASHTO M 252, Standard Specification for Polyethylene Corrugated Drainage Pipe.
- AASHTO M 294, Standard Specification for Corrugated Polyethylene Pipe, 12 to 36" Diameter.
- ADS Installation Guidelines for Culvert and Other Heavy-Duty Drainage Applications.

Installation Recommendations

- Crushed stone, gravel or compacted soil backfill materials should be used as the bedding and surround material.
- The corrugated pipe should be laid on grade, on a layer of bedding material. If native soil is used as the bedding and backfill material, it should be well compacted in all layers under the haunches, around the pipe and above the pipe to the recommended minimum height of cover.
- Either flexible (asphalt or rigid concrete) pavements may be used as part of minimum cover requirements.
- Site conditions and availability of bedding materials often dictate the type of installation method used.
- The load bearing capability of flexible conduits is dependent on the type of backfill material used and the degree of compaction achieved. Crushed stone and gravel backfill materials typically reach a compaction level of 90-95%. AASHTO standard density without compaction. When native soils are used as backfill material, a compaction level of 85% is required. This is the same minimum compaction that is recommended by all drainage pipe manufacturers and can be achieved by either hand or machine tamping.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Howard County 7/8/97
DIRECTOR DATE

John Muegge 7/7/97
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Candy Hamilton 7/8/97
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

11/4/97 (A) ADDED PROP 8" SAN SEWER (PUBLIC) & 8" EASEMENT RELOCATED LIGHT POLE, ADDED M-1A TO SD SYSTEM.
8/25/97 (A) ADDED 3x3" E SMH'S (METER MANHOLE) ALSO SEWER PROFILE FOR SMH-5, 1

DATE NO. REVISION

OWNER/DEVELOPER: DAHN CORPORATION
4552 MACARTHUR BOULEVARD
CULVER, CALIFORNIA 92715
PHONE: 714-752-1284

PROJECT: MINI-U-STORAGE
A STORAGE FACILITY

AREA: MIDWAY BUSINESS CENTER - PARCEL A
ZONED: NT-IND TAX MAP 42 PLAT #8795
6TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE
SITE DEVELOPMENT PLAN

RIEMER MUEGGE & ASSOCIATES, INC.
ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
8818 Centre Park Drive, Columbia, Maryland 21045
tel 410.997.8900 fax 410.997.9282

6-11-97
DATE

DESIGNED BY: C.J.R.

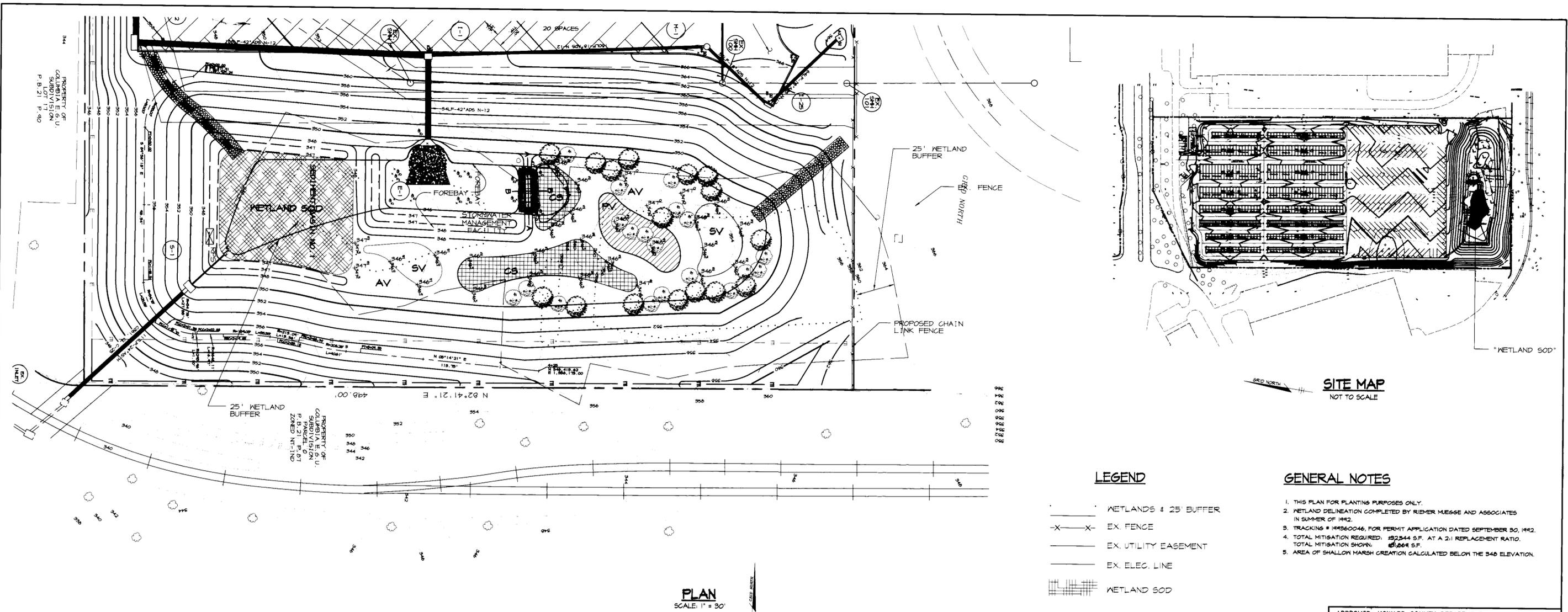
DRAWN BY: DAM

PROJECT NO: 96089
SDP3.DWG

DATE: JUNE 11 1997

SCALE: 1" = 30'

JAYKANT D. PAREKH #19148
DRAWING NO 3 OF 11



PLAN
SCALE: 1" = 30'

LEGEND

- NETLANDS & 25' BUFFER
- X-X- EX. FENCE
- EX. UTILITY EASEMENT
- EX. ELEC. LINE
- ▨ NETLAND SOD

GENERAL NOTES

1. THIS PLAN FOR PLANTING PURPOSES ONLY.
2. NETLAND DELINEATION COMPLETED BY RIEMER MUEGGE AND ASSOCIATES IN SUMMER OF 1992.
3. TRACKING # 141860046, FOR PERMIT APPLICATION DATED SEPTEMBER 30, 1992.
4. TOTAL MITIGATION REQUIRED: 282,344 S.F. AT A 2:1 REPLACEMENT RATIO. TOTAL MITIGATION SHOWN: 61,864 S.F.
5. AREA OF SHALLOW MARSH CREATION CALCULATED BELOW THE 348 ELEVATION.

PLANT MATERIAL LIST

KEY	QTY	BOTANICAL + COMMON NAME	SIZE	REMARKS	IND. STAT.
SHRUBS					
●	19	Cephalanthus occidentalis Buttonbush	18-24"	Container	OBL
●	16	Ilex verticillata Winterberry Holly	18-24"	Container	FACW
EMERGENT					
AV	548	Andropogon virginicus Broomsedge	peat pots	4' o.c.	FACW
CS	212	Carex stricta Tusock Sedge	peat pots	4' o.c.	OBL
PV	105	Panicum virgatum Switchgrass	peat pots	4' o.c.	FAC
SV	135	Scirpus validus Soft Stem Bulrush	peat pots	4' o.c.	OBL

SPECIFICATIONS

1. Seeding:

Seedbed Preparation for Disturbed Upland Areas Only:

Flat areas and slopes up to 3:1 slope shall be loose and friable to a depth of at least 3 inches.

The top layer of soil shall be loosened by raking, disking or other acceptable means before seeding.

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

Soil Amendments: use one of the following schedules.

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

In lieu of soil test results, use one of the following schedules.

1) Preferred - Apply 2 tons per acre dolomitic limestone (42 LBS/1000 SF) and 600 LBS per acre 10-10-10 fertilizer (14 LBS/1000 SF) before seeding. Harrow or disc into upper three inches of soil. At time of seeding, apply 400 lbs. per acre 30-0-0 ureaform fertilizer (01 LBS/1000SF).

2) Acceptable - Apply 2 tons per acre dolomitic limestone (42 LBS/1000 SF) and 1000 LBS per acre 10-10-10 fertilizer (28 LBS/1000 SF) before seeding. Harrow or disc into upper three inches of soil.

On slopes steeper than 3:1 slope, the lime and fertilizer shall be worked the best way possible. On sloping land, the final harrowing or disking operation should be on the contour wherever feasible. No attempt should be made to drag any disced area to make the soil surface smooth after disking.

Seeding for POND & POND EMBANKMENT ONLY:

All disturbed areas shall be seeded and mulched upon completion of all grading work, using seeding as specified.

All stabilization on pond embankment shall be of the following species:

Poa Trivialis, (Poa trivialis)	25 lbs/acre
Red Clover, (Trifolium pretense)	15 lbs/acre
Red Top, (Agrostis alba)	2 lbs/acre
Birdfoot Trefoil, (Lotus carolinianus)	10 lbs/acre
Deer Tongue Grass, (Panicum clampestum)	12 lbs/acre

These species allow for the stabilization of the site, while allowing for the voluntary revegetation of wetland species.

Kentucky-31 Fescue shall not be utilized in the shallow marsh creation areas or the pond embankment/side slopes.

Irrigation:

If soil moisture is deficient, supply new plantings with adequate water for plant growth until they are firmly

This is especially important when seedings are made late in the planting season, in abnormally dry or hot seasons, or adverse sites.

Maintenance:

Irrigation - If soil moisture becomes deficient, irrigate to prevent loss of vegetation.

Repairs - Inspect all seeded areas for failures and make necessary repairs, replacements, and reseeding within

- 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.

II. PLANTING SPECIFICATION AND NOTES

Stockpiling of Existing Hydrophytic Vegetation (NETLAND SOD)

Salvaged vegetation and topsoil from within the limits of the existing natural wetlands, indicated on the site map, shall be stored for ultimate application to the wetland creation area as shown.

1. Remove first twelve (12) inches of topsoil and hydrophytic vegetation, together in manageable sections ("Wetland Sod")

2. Store soil and vegetation, "Wetland Sod" in a suitable, shaded area. Vegetation and soil must be kept moist at all times to insure survival.

3. Excavate if necessary, areas to be planted with "Wetland Sod". Finished elevation will be as shown on the plans after sod is installed.

4. Install "Wetland Sod". Complete coverage of proposed "Wetland Sod" area is required.

5. Water thoroughly once installation is complete and until material is established.

Shallow Marsh Plant Establishment:

1. Plant species required are normally unavailable from standard landscape nursery sources. The Contractor must make arrangements with competent wetlands restoration specialists to insure a supply of the required material.

2. The Contractor and/or his subcontractor should be aware of the site design conditions and should take all prudent steps to insure that the plant material specified on the plans is acclimated to wetland conditions prior to delivery to the job site. If the plant material is available from sources where wetland conditions are duplicated at the nursery, the Contractor should favor these sources as the supplier.

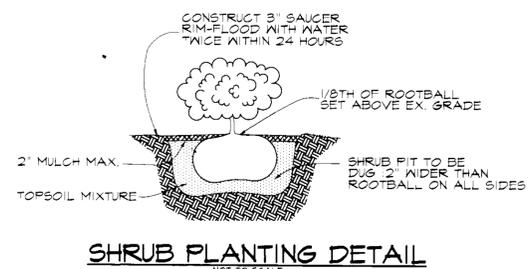
Planting Schedule:

It is recommended that planting be completed early in the Spring (or Fall, if applicable).

Planting Material:

1. Rootstock of wetland plant material must be kept moist during the transport from the source to the job site and until planted.

2. Plant material shall be planted in the soil mix specified, each planting pit shall be excavated to a size sufficient to contain the entire rootstock or root mass without cramping.



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Director: *James R. Smith* 7/8/97 DATE

Chief, Development Engineering Division: *John J. ...* 7/7/97 DATE

Chief, Division of Land Development: *Cathy Hamilton* 7/1/97 DATE

DATE	NO.	REVISION

OWNER/DEVELOPER: DAHN CORPORATION, 18552 MacARTHUR BOULEVARD, IRVINE, CALIFORNIA 92715, 714-752-1284

PROJECT: MINI-U-STORAGE, A STORAGE FACILITY

AREA: PARCEL A, PLAT NO. 8795, ZONED INT-IND, TAX MAP 42, 64th ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

TITLE: NETLAND MITIGATION PLAN

RIEMER MUEGGE & ASSOCIATES, INC.
ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
1818 Centre Park Drive, Columbia, Maryland 21045
tel 410.997.8900 fax 410.997.9282

DATE: 6-11-97

DESIGNED BY: DK,RR

DRAWN BY: RR

PROJECT NO: 96089

DATE: JUNE 11, 1997

SCALE: AS SHOWN

DRAWING NO. 11 OF 11

JAYKANT D. PAREKH #19148

50P-97-79