

SITE ANALYSIS DATA CHART

PURPOSE OF SDP		TO PROVIDE A SITE DEVELOPMENT PLAN FOR CONSTRUCTION OF A RELIGIOUS FACILITY AS PER REQUIREMENTS STATED IN BOARD OF APPEALS CASE #BA 94-37E	
TOTAL AREA OF PROJECT / SUBMISSION	6.79 AC ± / 295,772 SF ±		
LIMIT OF DISTURBED AREA	1.52 AC ±		
EXISTING ZONING	RC-DEO		
PROPOSED USE	RELIGIOUS FACILITY		
	EXISTING	ADDITIONAL FOR PHASE I	TOTAL PHASE I
FLOOR SPACE	1,400 SF	0	1,400 SF
BUILDING COVERAGE	0.5%	0	0.5%
PARKING SPACES REQUIRED (10 SPACES / 1000 SF FLOOR SPACE)	N/A	14	14
PARKING SPACES PROVIDED	N/A	41 (incl. 2 H/C)	41 (incl. 2 H/C)
HANDICAPPED SPACES REQ'D	N/A	2	2
HANDICAPPED SPACES PRVD	N/A	2	2

JAMES T. TRUBY
TAX MAP 29
PARCEL 11, LOT 2
BLOCK 11
L 1304/F 597

WILLIAM STEVENS
TAX MAP 29
PARCEL 11, LOT 1
BLOCK 11
L 220/F 182

JAMES D. SAGMILLER
TAX MAP 29
PARCEL 301
BLOCK 11
L 1133/F 98

JAMES E. GOODMAN
TAX MAP 29
PARCEL 269
BLOCK 11
L 484/F 438

POND DATA

HAZARD CLASSIFICATION - N/A
DRAINAGE AREA - 2.7 Ac
PROPOSED RCN - 81
PROPOSED Tc - 0.32 hrs
WATER QUALITY TYPE - EXTENDED DETENTION

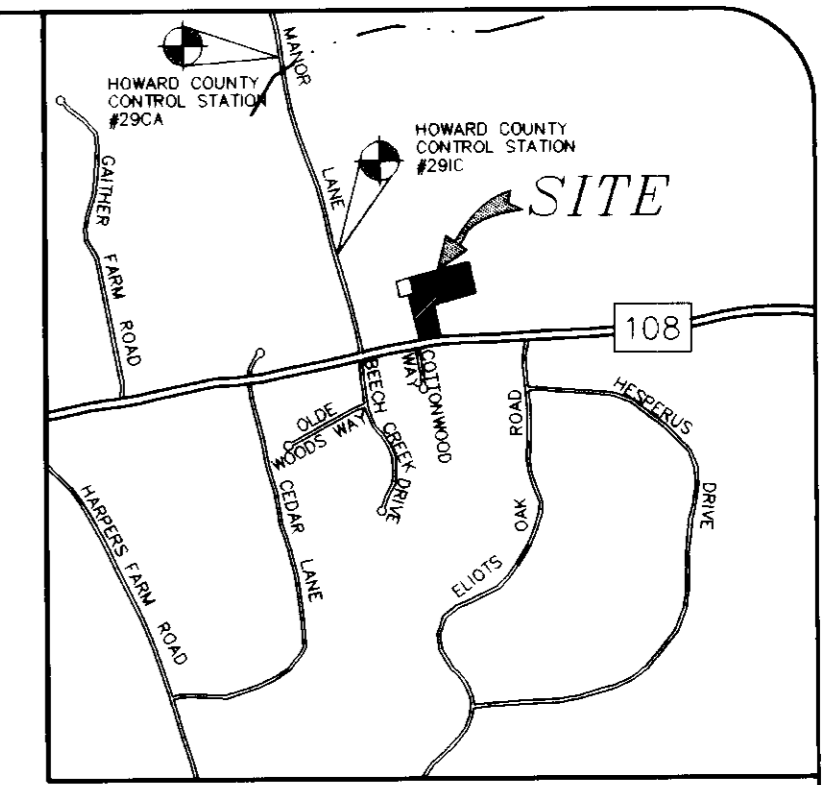
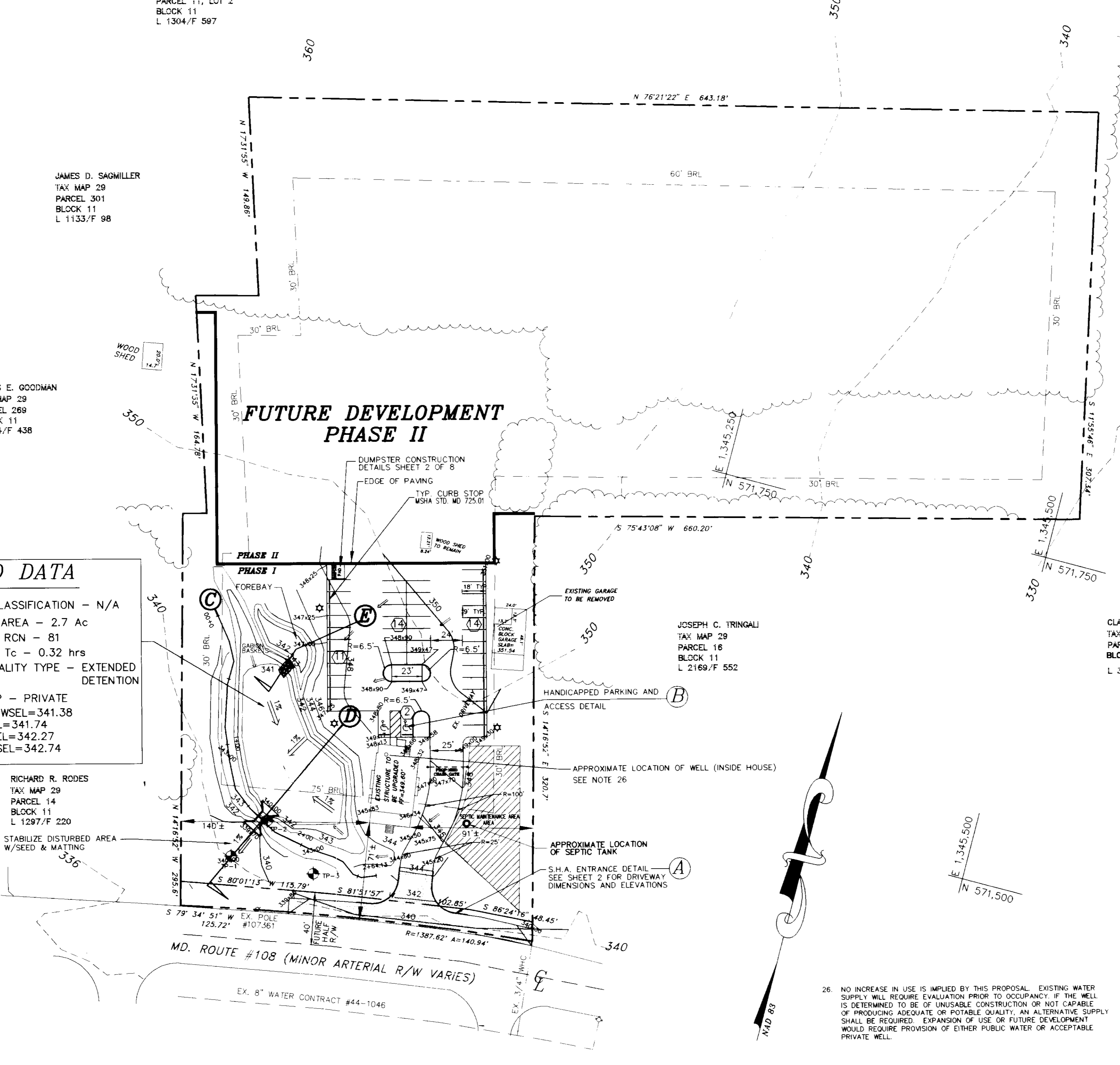
OWNERSHIP - PRIVATE
EXT. DET. WSEL=341.38
2 YR WSEL=341.74
10 YR WSEL=342.27
100 YR WSEL=342.74

RICHARD R. RODES
TAX MAP 29
PARCEL 14
BLOCK 11
L 1297/F 220

STABILIZE DISTURBED AREA W/SEED & MATTING

JOSEPH C. TRINGALI
TAX MAP 29
PARCEL 16
BLOCK 11
L 2169/F 552

CLARK FARM CORP.
TAX MAP 29
PARCEL 337
BLOCK 6
L 3456/F 1



GENERAL NOTES:

- THIS PLAN SUBMITTED FOR REVIEW AND APPROVAL FOR THE CONSTRUCTION OF A PARKING LOT AND REQUIRED STORMWATER MANAGEMENT.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY AND SHA.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) DAYS PRIOR TO THE START OF WORK.
- COORDINATES BASED ON NAD 83, MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY CONTROL STATIONS NO. 29CA AND 29C.
STA. No. 29CA N 574,526.1048 E 1,343,533.7490
STA. No. 29C N 572,323.5403 E 1,344,112.2704
- STORMWATER MANAGEMENT FACILITIES WILL BE PRIVATELY OWNED AND MAINTAINED.
- AN EXTENDED DETENTION POND WILL BE USED FOR STORMWATER MANAGEMENT QUALITY CONTROL.
- THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE (5) DAYS PRIOR TO ANY EXCAVATION WORK:
MISS UTILITY 1-800-257-7777
CAP TELEPHONE COMPANY 725-9976
HOWARD COUNTY BUREAU OF UTILITIES 313-4900
AT&T CABLE LOCATION DIVISION 393-3533
BALTIMORE GAS & ELECTRIC COMPANY 685-0123
STATE HIGHWAY ADMINISTRATION 531-5533
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS/CONSTRUCTION INSPECTION DIVISION 313-1880
- NO WETLANDS, FLOODPLAINS, OR BURIAL SITES EXIST ON THE SITE.
- THIS PROJECT IS EXEMPT FROM FOREST CONSERVATION REQUIREMENTS AS PER SECTION 16.1202(b)(2)(i)(i) OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS PROVIDED THAT TOTAL CLEARING OF EXISTING FOREST RESOURCES DOES NOT EXCEED 40,000 SQUARE FEET. A NOTICE OF INTENT HAS BEEN SUBMITTED PER SECTION 1202 (k)(i) OF THE REGULATIONS WHICH REQUIRES COMPLIANCE WITH FOREST CONSERVATION PROGRAM FOR THE WHOLE SITE IF DEVELOPMENT OCCURS WITHIN FIVE YEARS OF MAY 1, 1997.
- THIS PROJECT IS SUBJECT TO BOARD OF APPEALS CASE #BA 94-37E WHICH IS A SPECIAL EXCEPTION TO ALLOW THE CONSTRUCTION OF A RELIGIOUS FACILITY ON A PARCEL OF LAND ZONED RC-DEO PROVIDED THAT:
 - THE PETITIONER SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE, AND COUNTY LAWS AND REGULATIONS, INCLUDING THE REQUIREMENTS OF THE STATE HIGHWAY ADMINISTRATION CONCERNING ACCESS AND ROAD IMPROVEMENTS.
 - THE PETITIONER SHALL INSTALL A GATE OR CHAIN ACROSS THE ENTRANCE TO THE FACILITY, SO AS TO PREVENT ACCESS DURING HOURS WHEN THE FACILITY IS NOT IN USE.
 - THE APPROVAL FOR PHASE 2 SHALL BECOME VOID UNLESS A BUILDING PERMIT FOR THE PHASE 2 IMPROVEMENTS IS OBTAINED ON OR BEFORE DECEMBER 31, 2000.
 - THE EASTERN, WESTERN AND SOUTHERN LOT LINES SHALL BE SCREENED AS INDICATED ON PETITIONER'S "REVISED PLAN FOR PHASE 1 AND 2", DATED 1-11-95, WITH TYPE "D" LANDSCAPING IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPING MANUAL.
 - THE GRANTED SPECIAL EXCEPTION SHALL APPLY SOLELY TO THE PROPOSED RELIGIOUS FACILITY AS INDICATED IN THE "REVISED PLAN FOR PHASE 1 AND 2", AND NOT TO ANY OTHER STRUCTURES, ADDITIONS, ACTIVITIES, OR USES.
 - THE PHASE 2 STRUCTURE SHALL BE LOCATED AS INDICATED ON PETITIONER'S "REVISED PLAN FOR PHASE 1 AND 2", SET BACK AT LEAST ONE HUNDRED (100) FEET FROM ALL LOT LINES.
 - ALL EXTERIOR LIGHTING SHALL BE LOW LEVEL "BOLLARD" STYLE FIXTURES, DIRECTED DOWNWARD AND INWARD SO AS NOT TO SHINE OR REFLECT ONTO ADJACENT PROPERTIES OR ROADS.
 - NO BELLS OR OUTDOOR AMPLIFICATION SHALL BE USED ON SITE.
- PETITION GRANTED MAY 25, 1995.
- BOUNDARY AND TOPOGRAPHY SURVEY PERFORMED BY NTT ASSOCIATES, INC. ON OR ABOUT AUGUST 1995.
- THERE ARE NO NATURALLY EXISTING STEEP SLOPES, WETLANDS, OR FLOODPLAINS ON SITE.
- ☼ DENOTES EXTERIOR PARKING LOT LIGHTING. ALL LIGHTS ARE TO BE DESIGNED IN ACCORDANCE WITH DECISION AND ORDER CONDITION 7 OF BA-94-37E.
- TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF 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.
- WATER IS PUBLIC (CONTRACT #44-1046)
- SEWER IS PRIVATE
- EXISTING UTILITIES BASED ON HOWARD COUNTY AS-BUILT WATER AND SEWER PLANS.
 - DENOTES AREAS OF HOWARD COUNTY P-1 PAVING
 - DENOTES AREAS OF MD SHA PAVING
- SOILS INVESTIGATION PERFORMED BY HILUS CARNES INC. ON OR ABOUT APRIL, 1997.
- DENOTES AREAS OF SEPTIC EASEMENT
- EXISTING STRUCTURE IS A SINGLE FAMILY RESIDENCE
- THIS PROJECT COMPLIES WITH APFO ROAD REQUIREMENTS BASED ON THE FACT THAT THE NORMAL OPERATIONS OF THIS FACILITY WILL BE BETWEEN 6pm and 10pm DAILY AND BETWEEN 1pm and 3pm ON FRIDAY. THESE TIMES ARE OUTSIDE THE PEAK HOURS OF 7pm-9pm AND 4pm-6pm.
- EXISTING SEPTIC SYSTEM MUST BE EVALUATED BY HOWARD COUNTY HEALTH DEPARTMENT SEPTIC SYSTEM MAY HAVE TO BE UPGRADED OR REPAIRED AS REQUIRED BY HOWARD COUNTY HEALTH DEPARTMENT.
- EXISTING WELL MUST BE PROPERLY ABANDONED AS REQUIRED BY HOWARD COUNTY HEALTH DEPARTMENT STANDARDS PRIOR TO THE START OF ANY CONSTRUCTION ON SITE.
- NO EXTENSIONS OR ADDITIONS MAY BE CONSTRUCTED ON THE EXISTING BUILDING WITHOUT APPROVAL OF THE BOARD OF APPEALS.

SHEET INDEX

1	SITE AND GRADING PLAN
2	CONSTRUCTION DETAILS
3	SWM PROFILES AND DETAILS
4	SEDIMENT CONTROL PLAN
5	SEDIMENT CONTROL NOTES AND DETAILS
6	POND SPECIFICATIONS
7	PROPOSED DRAINAGE AREA MAP
8	LANDSCAPE PLAN

PERMIT INFORMATION BLOCK

PROJECT NAME DAR AL TAQWA	SECT./AREA (N/A)	PARCEL 12
LIBER/FOLIO 9113	BLOCK # 11	ZONE RC-DEO
TAX/ZONE MAP 29	ELECT. DIST 2ND	CENSUS TRK 6023.01
WATER CODE (N/A)	SEWER CODE (N/A)	

ADDRESS CHART

LOT NUMBER	STREET ADDRESS
PARCEL 12	10740 ROUTE 108, ELLICOTT CITY, MD 21042

OWNER/DEVELOPER
DAR AL TAQWA, INC.
10740 ROUTE 108
ELLICOTT CITY, MD 21042

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

Signature: Sayed Hassan 12-24-97
DATE
PRINTED NAME OF DEVELOPER: Sayed Hassan, President

ENGINEER'S CERTIFICATE
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 NATURAL RESOURCE CONSERVATION SERVICE.

Signature: R. JACOB HILKAT 12/24/97
DATE
PRINTED NAME OF ENGINEER: R. JACOB HILKAT

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

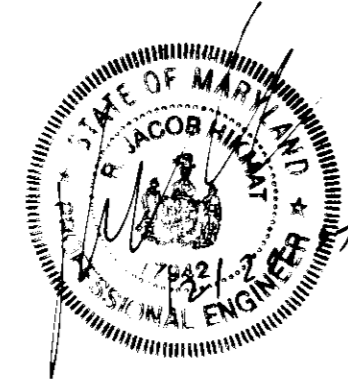
USDA - NATURAL RESOURCE CONSERVATION SERVICE _____ DATE _____

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

HOWARD SOIL CONSERVATION DISTRICT _____ DATE _____

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Chief, Development Engineering Division: 1/2/98 DATE
Chief, Division of Land Development: 2/1/98 DATE
Director: 2/13/98 DATE

APPROVED: FOR PRIVATE WATER AND SEWER
HOWARD COUNTY HEALTH DEPARTMENT.
1-29-98 DATE

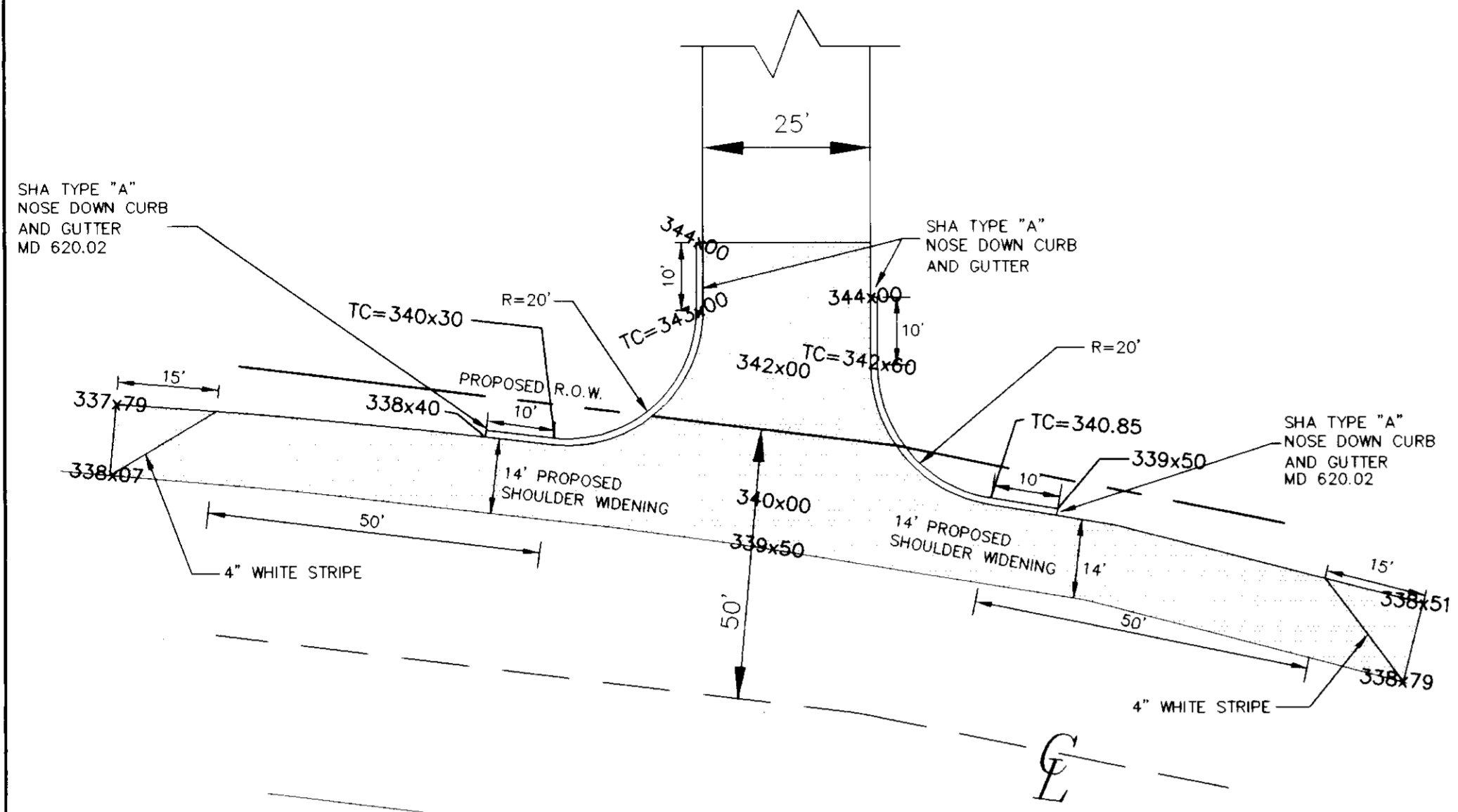


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project	96098	illustration	RCJ	scale	1"=50'
revision	012996	description	ADD GABION TO POND	revision	RJH

date	012996	description	ADD GABION TO POND	revision	RJH
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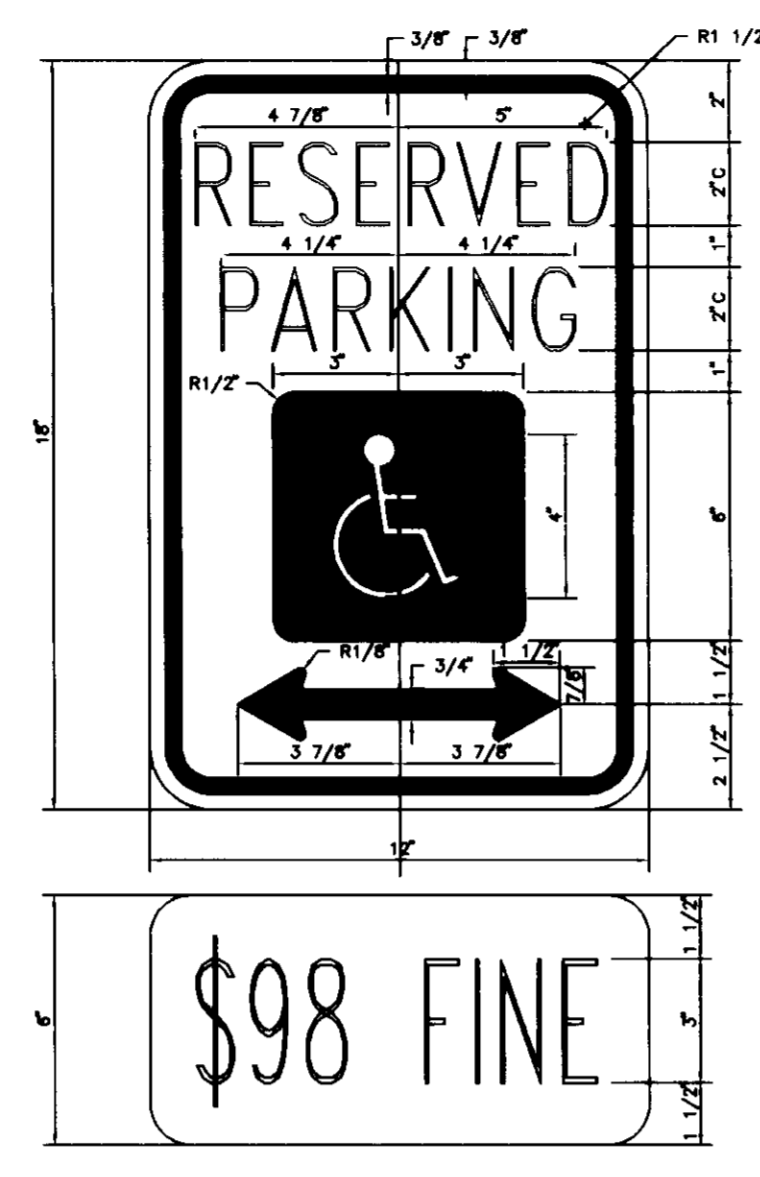
TAX MAP 29 PARCEL 12
DAR AL TAQWA - PHASE I
HOWARD COUNTY, MARYLAND
SECOND ELECTION DISTRICT
SITE AND GRADING PLAN

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

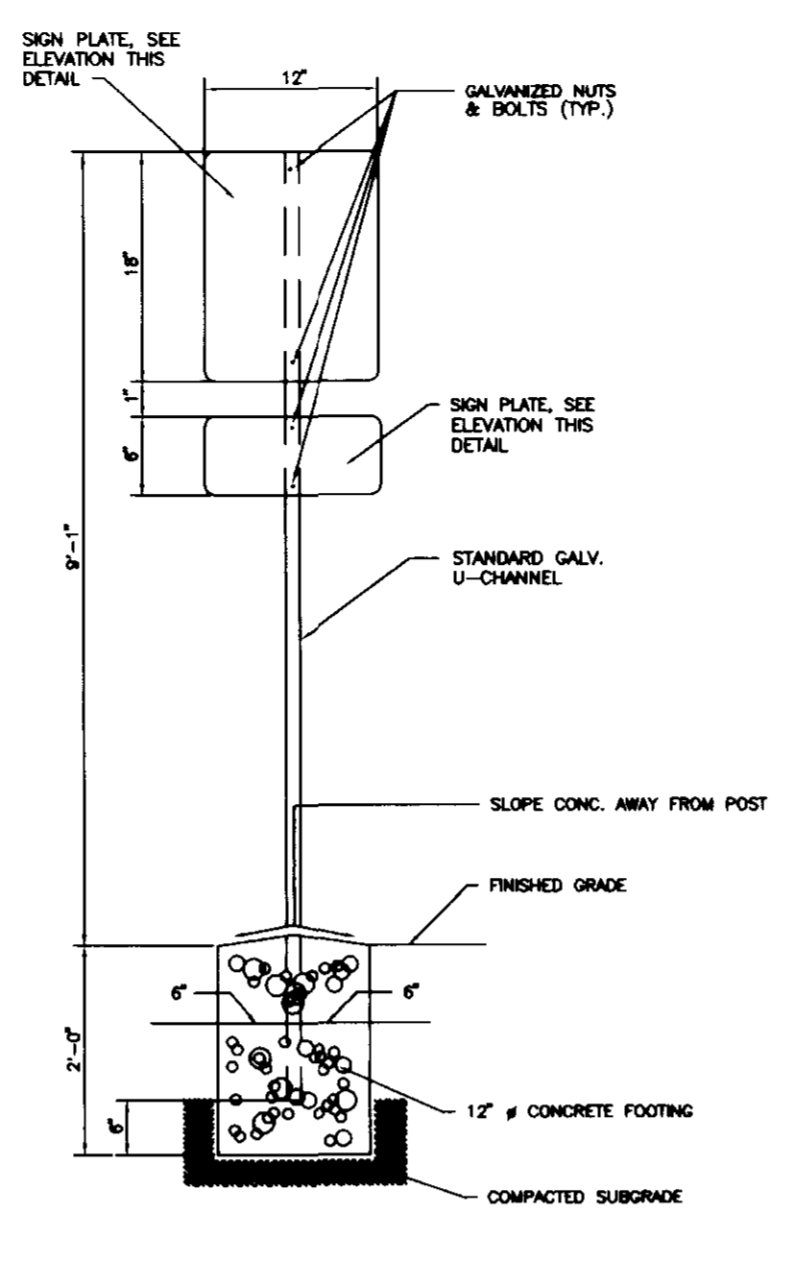


NOTE: ALL DIMENSIONS AREA TO FACE OF CURB UNLESS OTHERWISE NOTED

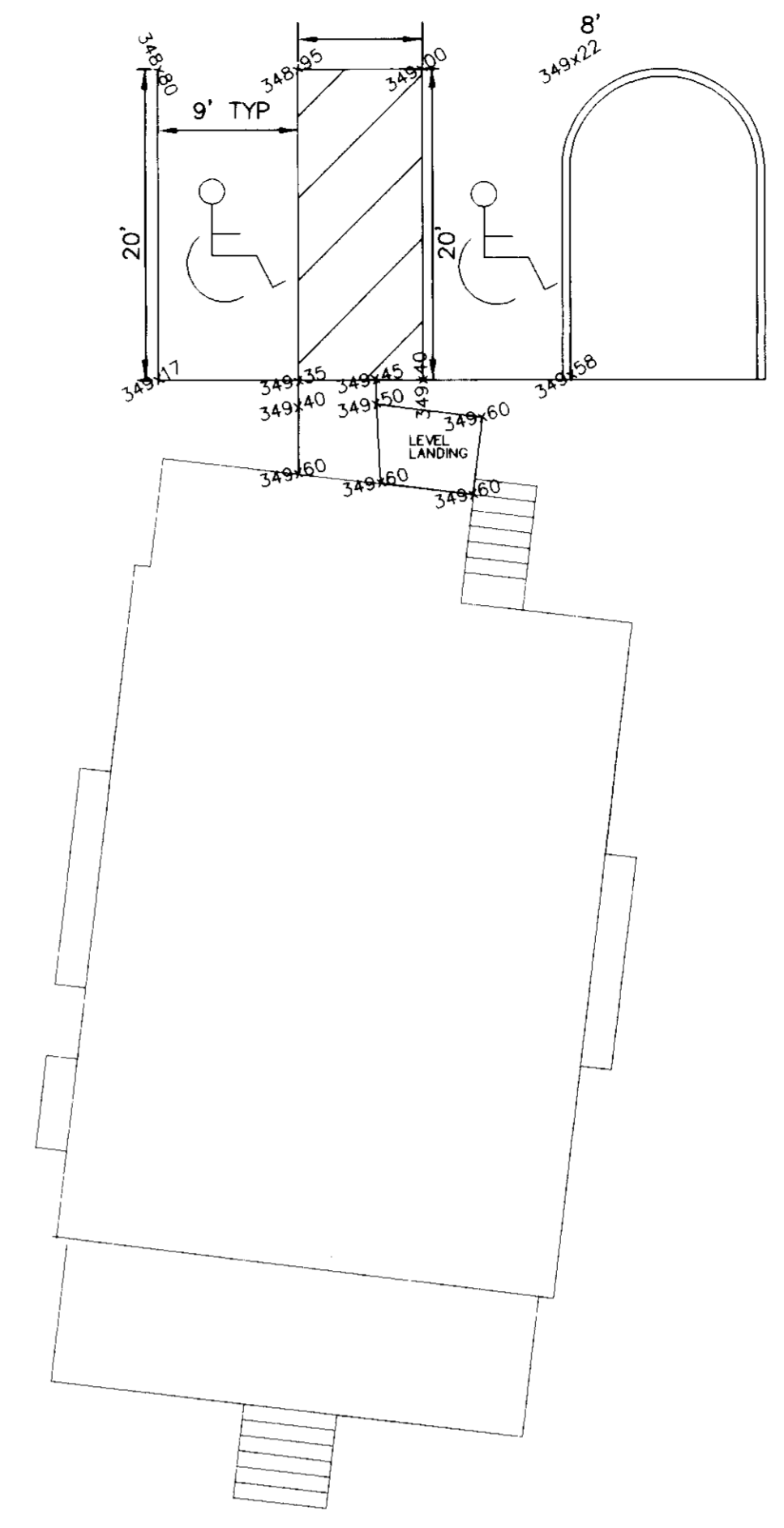
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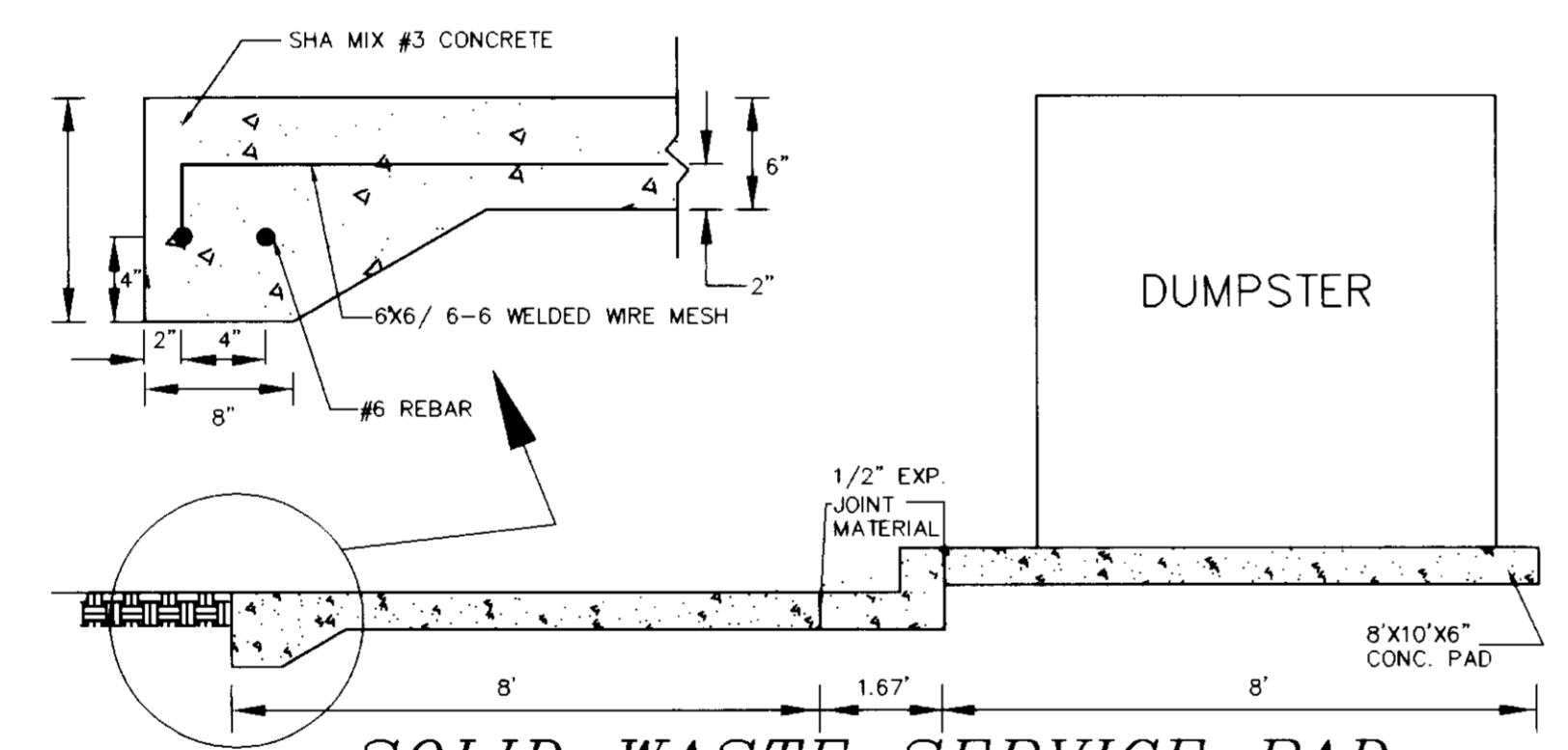
HANDICAPPED SIGN AND POST
NOT TO SCALE



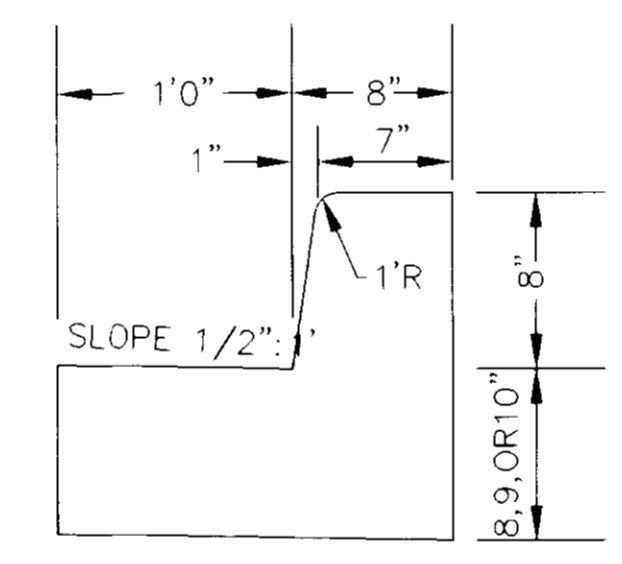
NOTE: PROVIDE ONE SIGN AND POST PER HANDICAPPED PARKING SPACE. SEE PLAN



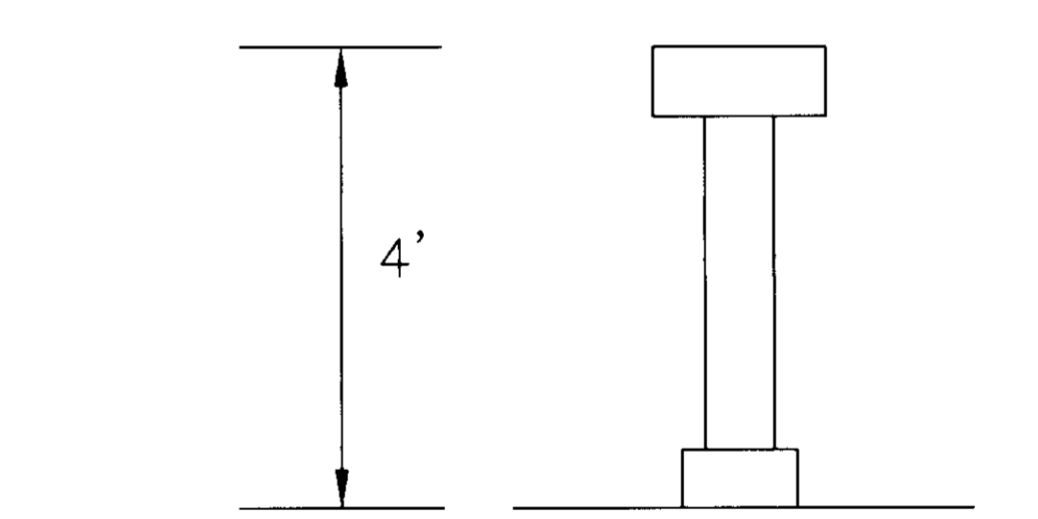
B HANDICAPPED PARKING AND ACCESS DETAIL
SCALE: 1"=10'



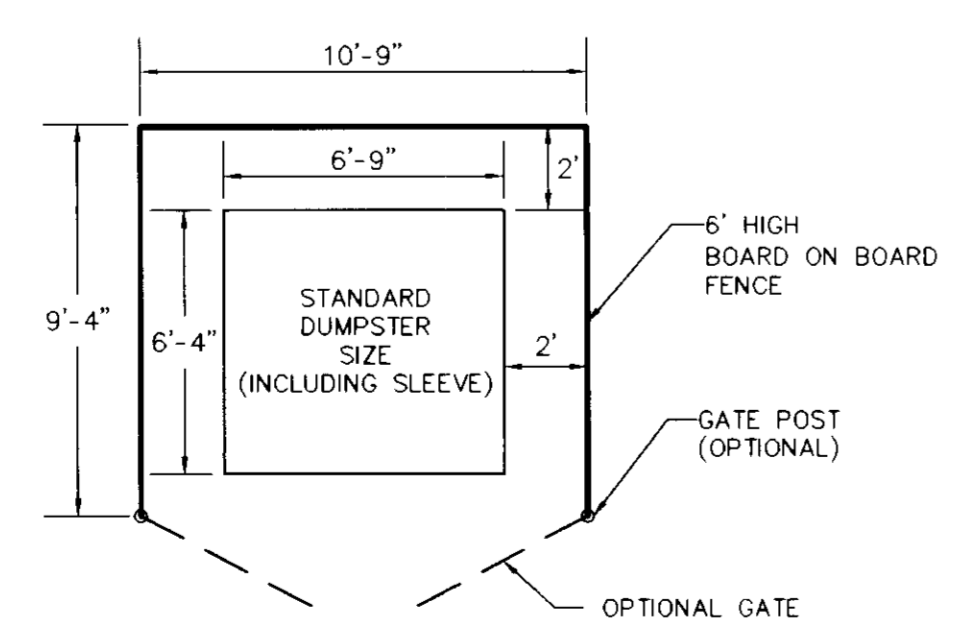
SOLID WASTE SERVICE PAD
HOWARD COUNTY STANDARD R 11.01
(NOT TO SCALE)



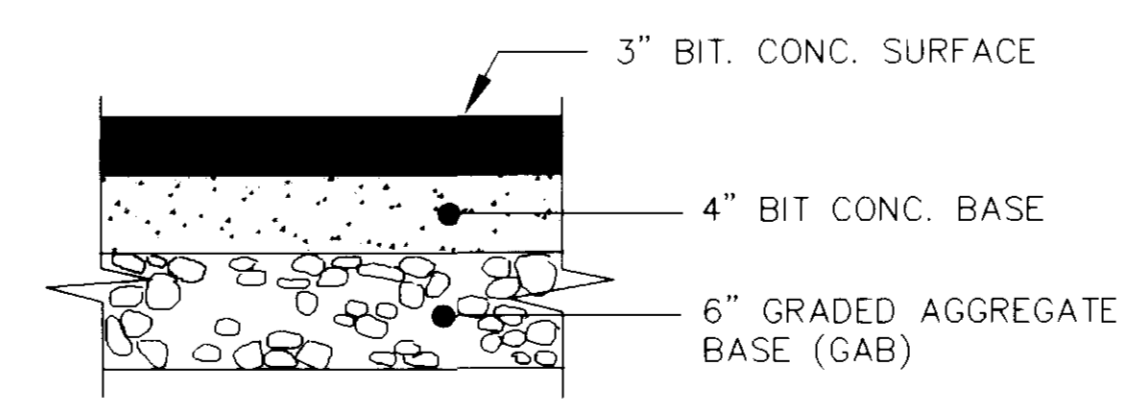
MD. S.H.A. TYPE \"/>



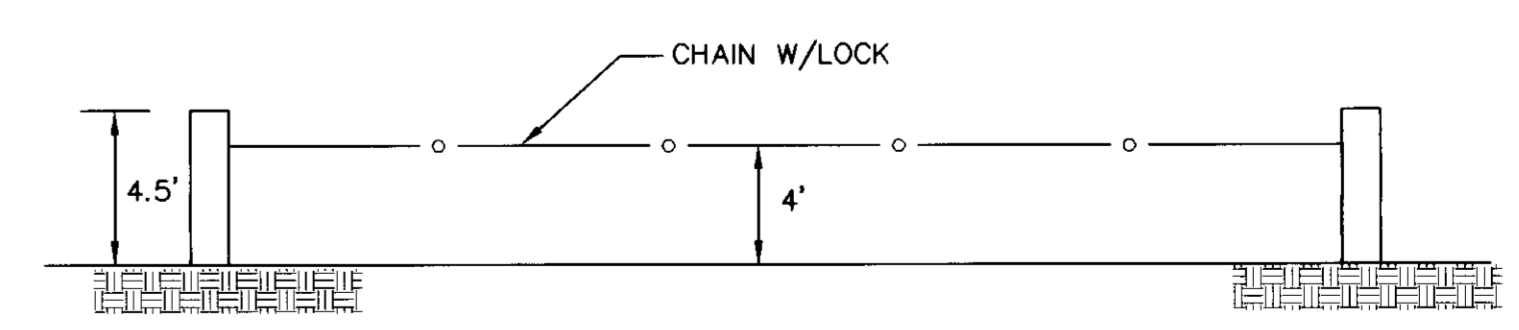
PROPOSED LIGHTING DETAIL
Low Level Pedestal
NOT TO SCALE



SOLID WASTE CONTAINER ENCLOSURE (TYP.)
NTS



MD. S.H.A. PAVING SECTION
NOT TO SCALE
NOTE: CONFORM TO EXISTING GRADE OF ±1%.



FENCE DETAIL
NOT TO SCALE

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

Signature: *Sayed Hassan* DATE: 12-24-97
 SAYED HASSAN, President
 PRINTED NAME OF DEVELOPER

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

Signature: *R. Jacob Hillmat* DATE: 12/24/97
 R. JACOB HILMAT
 PRINTED NAME OF ENGINEER

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

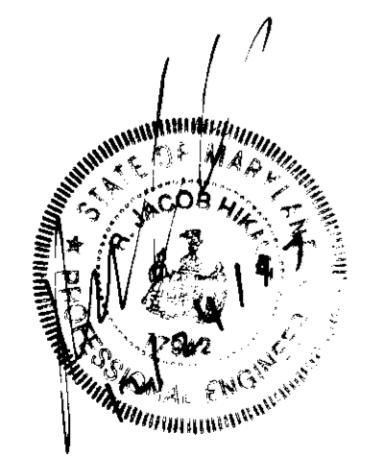
USDA - NATURAL RESOURCE CONSERVATION SERVICE DATE: _____

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

HOWARD SOIL CONSERVATION DISTRICT DATE: _____

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Chief, Development Engineering Division: *John J. Smith* DATE: 1/2/98
 Chief, Division of Land Development: *Carol Hentze* DATE: 2/1/98
 Director: *James J. Smith* DATE: 2/1/98

APPROVED: FOR PRIVATE WATER AND SEWER
 HOWARD COUNTY HEALTH DEPARTMENT.
John M. Beden DATE: 1-29-98
 HOWARD COUNTY HEALTH OFFICER



OWNER/DEVELOPER
 DAR AL TAQWA, INC.
 10740 ROUTE 108
 ELLICOTT CITY, MD 21042

date	APR 97
Project	96098
Illustration	JS
Scale	1"=50'
Engineering	JS
Approval	RJH

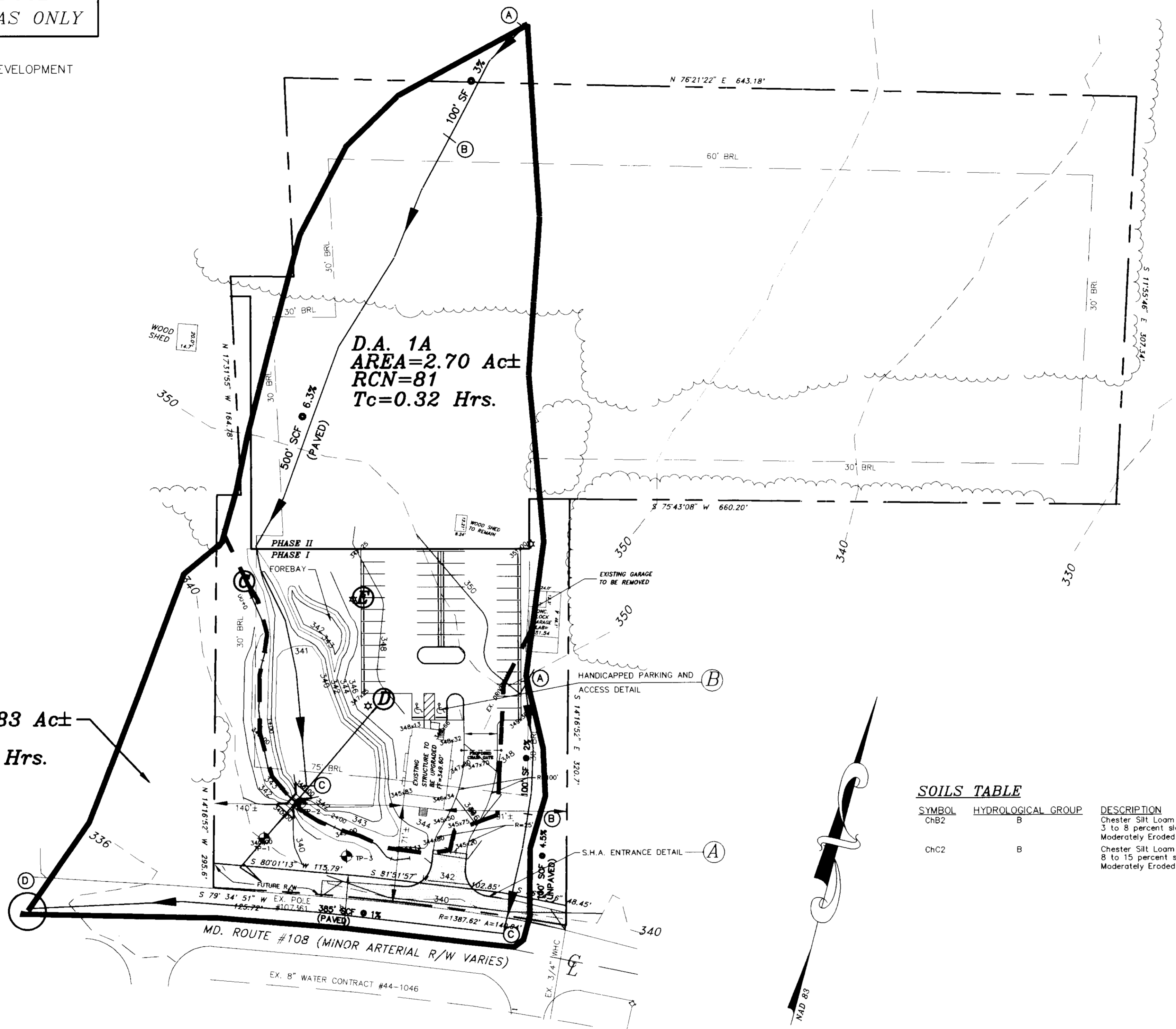
no.	date	description	revisions

TAX MAP 29 PARCEL 12
 DAR AL TAQWA - PHASE I
 HOWARD COUNTY, MARYLAND
 SECOND ELECTION DISTRICT
 CONSTRUCTION DETAILS

MILDENBERG, & ASSOC., INC.
 Engineers Planners Surveyors
 5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
 (410) 997-0296 Balt. (301) 621-5321 Wash. (410) 997-0298 Fax

THIS PLAN IS FOR THE PURPOSE
OF DELINEATING DRAINAGE AREAS ONLY

NOTE : PROPOSED CONDITIONS REFLECT ULTIMATE DEVELOPMENT
OF THE SITE DRAINING TO THE POND.



SOILS TABLE

SYMBOL	HYDROLOGICAL GROUP	DESCRIPTION
CH2	B	Chester Silty Loom 3 to 8 percent slopes Moderately Eroded
CHC2	B	Chester Silty Loom 8 to 15 percent slopes Moderately Eroded

FLOW DATA

	AT STUDY POINT		AT POND	
	Q(CFS)-EXISTING	Q(CFS)-PROPOSED	VOLUME (CF)	WSEL (FT)
EXT. DETENTION	N/A	0.28	7,213	341.38
2 YEAR STORM	0.88	0.48	9,095	341.74
10 YEAR STORM	4.10	3.78	12,454	342.27
100 YEAR STORM	N/A	8.32	15,934	342.74

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

Sayed Hassan 12-24-97
SIGNATURE OF DEVELOPER DATE
Sayed Hassan, President
PRINTED NAME OF DEVELOPER

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

R. JAGONS HILKANT 1/24/98
SIGNATURE OF ENGINEER DATE
R. JAGONS HILKANT
PRINTED NAME OF ENGINEER

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

Cheryl Simms Lee 1/29/98
USDA - NATURAL RESOURCE CONSERVATION SERVICE DATE

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

1/29/98
HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

1/22/98
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

2/1/98
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

2/15/98
DIRECTOR DATE

APPROVED: FOR PRIVATE WATER AND SEWER.
HOWARD COUNTY HEALTH DEPARTMENT.

1-29-98
HOWARD COUNTY HEALTH OFFICER DATE



OWNER/DEVELOPER
DAR AL TAQWA, INC.
10740 ROUTE 108
ELICOTT CITY, MD 21042

Project: 96098 APR 1997
Illustration: JS engineering
Scale: 1"=50' JS
Approval: R/H

TAX MAP 29 PARCEL 12
DAR AL TAQWA - PHASE I
SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND
PROPOSED DRAINAGE AREA MAP

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
(410) 987-0288 Fax (301) 821-5521 Wash. (410) 997-0288 Fax

7 OF 8

POND SPECIFICATIONS

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

SITE PREPARATION

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

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

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

EARTH FILL

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

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

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

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

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

STRUCTURE BACKFILL

BACKFILL ADJACENT TO PIPES OR STRUCTURES SHALL BE OF THE TYPE AND QUALITY CONFORMING TO THAT SPECIFIED FOR THE ADJOINING FILL MATERIAL. THE FILL MATERIAL SHALL BE PLACED IN HORIZONTAL LAYERS NOT TO EXCEED FOUR INCHES IN THICKNESS AND COMPACTED BY HAND TAMPERS OR OTHER MANUALLY DIRECTED COMPACTION EQUIPMENT. THE MATERIAL NEEDS TO BE COMPLETELY ALL SPACES UNDER AND ADJACENT TO THE PIPE. AT NO TIME DURING THE BACKFILLING OPERATION SHALL DRIVEN EQUIPMENT BE ALLOWED TO OPERATE CLOSER THAN FOUR FEET, MEASURED HORIZONTALLY, TO ANY PART OF A STRUCTURE. UNDER NO CIRCUMSTANCES SHALL EQUIPMENT BE DRIVEN OVER ANY PART OF A CONCRETE FILL OF 24" OR GREATER OVER THE STRUCTURE OR PIPE.

PIPE CONDUITS

ALL PIPES SHALL BE CIRCULAR IN CROSS SECTION.

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

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

MATERIALS- (ALUMINUM PIPE)- THIS PIPE AND ITS APPURTENANCES SHALL CONFORM TO THE REQUIREMENTS OF AASHTO SPECIFICATION M-196 OR M-211 WITH WATER TIGHT COUPLINGS BANDS OR FLANGES. ALUMINUM SURFACES THAT ARE TO BE IN CONTACT WITH CONCRETE SHALL BE PAINTED WITH ONE COAT OF ZINC CHROMIUM PRIMER. DIE GALVANIZED BOLTS MAY BE USED FOR CONNECTIONS. THE PH OF THE SURROUNDING SOILS SHALL BE BETWEEN 4 AND 9.

2. COUPLING BANDS, ANTI-SEEP COLLARS, END SECTIONS, ETC., MUST BE COMPOSED OF THE SAME MATERIAL AS THE PIPE. METALS MUST BE INSULATED FROM DISSIMILAR MATERIALS WITH USE RUBBER OR PLASTIC INSULATING MATERIALS AT LEAST 24 MILS IN THICKNESS.

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

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

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

4. BEDDING- THE PIPE SHALL BE FIRMLY AND UNIFORMLY BEDDED THROUGHOUT ITS ENTIRE LENGTH WHERE ROCK OR SOFT, SPONGY OR OTHER UNSTABLE SOIL IS ENCOUNTERED ALL SUCH MATERIAL SHALL BE REMOVED AND REPLACED WITH SUITABLE EARTH COMPACTED TO PROVIDE ADEQUATE SUPPORT.

5. BACKFILLING SHALL CONFORM TO "STRUCTURE BACKFILL."

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

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

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

2. BEDDING- ALL REINFORCED CONCRETE PIPE CONDUITS SHALL BE LAID IN A CONCRETE BEDDING FOR THEIR ENTIRE LENGTH. THIS BEDDING SHALL CONSIST OF HIGH SLUMP CONCRETE PLACED UNDER THE PIPE AND UP THE SIDES OF THE PIPE AT LEAST 10% OF ITS OUTSIDE DIAMETER WITH A MINIMUM THICKNESS OF 3 INCHES, OR AS SHOWN ON THE DRAWINGS.

3. LAYING PIPE- BELL AND SPIGOT PIPE SHALL BE PLACED WITH THE BELL END UPSTREAM. JOINTS SHALL BE MADE IN ACCORDANCE WITH RECOMMENDATIONS OF THE MANUFACTURER OF THE MATERIAL. AFTER THE JOINTS ARE SEALED FOR THE ENTIRE LINE, THE BEDDING SHALL BE PLACED SO THAT ALL SPACES UNDER THE PIPE ARE FILLED. CARE SHALL BE EXERCISED TO PREVENT ANY DEVIATION FROM THE ORIGINAL LINE AND GRADE OF THE PIPE. THE FIRST JOINT MUST BE LOCATED WITHIN 2 FEET FROM THE RISER.

4. BACKFILLING SHALL CONFORM TO "STRUCTURE BACKFILL."

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

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

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

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

3. BEDDING- THE PIPE SHALL BE FIRMLY AND UNIFORMLY BEDDED THROUGHOUT ITS ENTIRE LENGTH WHERE ROCK OR SOFT, SPONGY OR OTHER UNSTABLE SOIL IS ENCOUNTERED. ALL SUCH MATERIAL SHALL BE REMOVED AND REPLACED WITH SUITABLE EARTH COMPACTED TO PROVIDE ADEQUATE SUPPORT.

4. BACKFILLING SHALL CONFORM TO "STRUCTURE BACKFILL."

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

CONCRETE

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

THE RIPRAP SHALL BE PLACED TO THE REQUIRED THICKNESS IN ONE OPERATION. THE ROCK SHALL BE DELIVERED AND PLACED IN A MANNER THAT WILL INSURE THE RIPRAP IN PLACE SHALL BE REASONABLY HOMOGENEOUS WITH THE LARGER ROCKS UNIFORMLY DISTRIBUTED AND FIRMLY IN CONTACT ONE TO ANOTHER WITH THE SMALLER ROCKS FILLING THE VOIDS BETWEEN THE LARGER ROCKS. FILTER CLOTH SHALL BE REPLACED UNDER ALL RIPRAP AND SHALL MEET THE REQUIREMENTS OF MARYLAND DEPARTMENT OF TRANSPORTATION, STATE HIGHWAY ADMINISTRATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, SECTION 919.12.7

CARE OF WATER DURING CONSTRUCTION

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

STABILIZATION

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

EROSION AND SEDIMENT CONTROL

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

DEVELOPER'S CERTIFICATE

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

Sayed Hassan 12-24-97
SIGNATURE OF DEVELOPER DATE

Sayed Hassan, President
PRINTED NAME OF DEVELOPER

ENGINEER'S CERTIFICATE

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

R. JACOB HILMAI 12/24/97
SIGNATURE OF ENGINEER DATE

R. JACOB HILMAI
PRINTED NAME OF ENGINEER

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

Cheryl Sumner GCS 1/20/98
USDA - NATURAL RESOURCE CONSERVATION SERVICE DATE

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

Shirley Seebach 1/20/98
HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

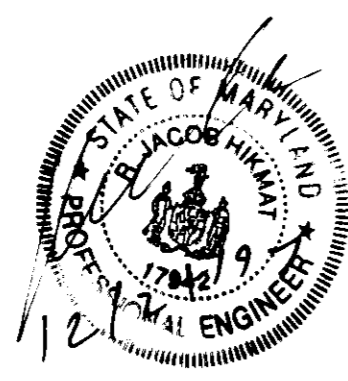
John D. ... 1/22/98
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

... .. 2/3/98
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

... .. 2/15/98
DIRECTOR DATE

APPROVED: FOR PRIVATE WATER AND SEWER. HOWARD COUNTY HEALTH DEPARTMENT.

... .. 1-29-98
HOWARD COUNTY HEALTH OFFICER DATE



Project	date
96098	APR 1997
illustration	engineering
JS	JS
scale	approval
NTS	RJH

NO.	DESCRIPTION	DATE

TAX MAP 29 PARCEL 12
DAR AL TAQWA - PHASE I
SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND
POND SPECIFICATIONS & BORINGS

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
(410) 997-0296 Balt. (301) 621-5521 Wash. (410) 997-0288 Fax.

STANDARD AND SPECIFICATIONS FOR TOPSOIL

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

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

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

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

Construction and Material Specifications

- Topsoil salvaged from the existing site may be used provided that it meets the standards as set forth in these specifications. Typically the depth of topsoil to be salvaged for a given soil type can be found in the representative soil profile section in the Soil Survey published by USDA-SSCS in cooperation with Maryland Agricultural Experiment Station.
- Topsoil Specifications - Soil to be used as topsoil must meet the following:
 - Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority. Regardless, topsoil shall not be mixture of contrasting textured subsoils and shall contain less than 5% by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger than 1 1/2" in diameter.
 - Topsoil must be of plants or plant parts such as bermuda grass, quackgrass, Johnsongrass, nutsedge, poison ivy, thistle, or others as specified.
 - Where the subsoil is either highly acidic or composed of heavy clays, ground limestone shall be spread at the rate of 4-8 tons/acre (200-400 pounds per 1,000 square feet) prior to the placement or topsoil. Limestone shall be distributed uniformly over designated areas and worked into the soil in conjunction with tillage operations as described in the following procedures:
 - Place topsoil (if required) and add soil amendments as specified in 20.0 Vegetative Stabilization - Section 1 - Vegetative Stabilization Methods and Materials
 - On soil meeting Topsoil specifications, obtain test results dictating fertilizer and lime amendments required to bring the soil into compliance with the following:
 - pH for topsoil shall be between 6.0 and 7.5. If the tested soil demonstrates a pH of less than 6.0, sufficient lime shall be prescribed to raise the pH to 6.5 or higher.
 - Organic content of soil shall be not less than 1.5% by weight.
 - Topsoil having soluble salt content greater than 500 parts per million shall not be used.
 - No sod or seed shall be placed on soil which has been treated with soil sterilants or chemicals used for weed control until sufficient time has elapsed (14 days min.) to permit dissipation of phytotoxic materials.

HOWARD SOIL CONSERVATION DISTRICT

PERMANENT SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE COVER IS NEEDED.

SEEDING PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

SOIL AMENDMENTS: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING SCHEDULES:

- PREFERRED - APPLY 2 TONS PER ACRE OF DOLOMITIC LIMESTONE (92 LBS./1000 SQ.FT.) AND 800 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS./1000 SQ.FT.) BEFORE SEEDING.
- ACCEPTABLE - APPLY 2 TONS PER ACRE OF DOLOMITIC LIMESTONE (92 LBS./1000 SQ.FT.) AND 1000 LBS. PER ACRE 10-10-10 FERTILIZER (21 LBS./1000 SQ.FT.) BEFORE SEEDING.
- HARROW OR DISK INTO UPPER THREE INCHES OF SOIL.

SEEDING - FOR THE PERIODS MARCH 1 THRU APRIL 30, AND AUGUST 1 THRU OCTOBER 15, SEED WITH 60 LBS. PER ACRE 14 LBS./1000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU AUGUST 31, SEED WITH 60 LBS. PER ACRE 14 LBS./1000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE AND 2 LBS. PER ACRE (20 LBS./1000 SQ.FT.) OF WEeping LONGGRASS. DURING THE PERIOD OF OCTOBER 16 THRU FEBRUARY 28, PREPARE SITE BY: OPTION (1) - 2 TONS PER ACRE OF WELL-ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING. OPTION (2) - USE 500, OPTION (3) - SEED WITH 60 LBS./ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS/ACRE WELL-ANCHORED STRAW.

MULCHING - APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 LBS./1000 SQ.FT.) OF UNROTTED SMALL GRASS STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL, OR 218 GALLONS PER ACRE (5 GAL./1000 SQ.FT.) OF UNMULCHED ASPHALT ON FLAT AREAS. ON SLOPES 8 FEET OR HIGHER, USE 348 GALLONS PER ACRE (6.9 GAL./1000 SQ.FT.) FOR ANCHORING.

MAINTENANCE - INSPECT ALL SEEDING AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

TEMPORARY SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.

SEEDING PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

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

SEEDING - FOR PERIODS MARCH 1 THRU APRIL 30, AND FROM AUGUST 15 THRU OCTOBER 15, SEED WITH 2-1/2 BUSHEL PER ACRE OF ANNUAL RYE (3.2 LBS./1000 SQ.FT.) FOR THE PERIOD MAY 1 THRU AUGUST 14, SEED WITH 3 LBS. PER ACRE OF WEeping LONGGRASS (7 LBS./1000 SQ.FT.). FOR THE PERIOD NOVEMBER 16 THRU NOVEMBER 30, PREPARE SITE BY: OPTION (1) - 2 TONS PER ACRE OF WELL-ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OR USE 500.

MULCHING - APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 LBS./1000 SQ.FT.) OF UNROTTED SMALL GRASS STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL, OR 218 GAL. PER ACRE (5 GAL./1000 SQ.FT.) OF UNMULCHED ASPHALT ON FLAT AREAS. ON SLOPES 8 FEET OR HIGHER, USE 348 GAL. PER ACRE (6.9 GAL./1000 SQ.FT.)

NOTE: THE 1985 MAINTENANCE STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR ADDITIONAL RATES AND METHODS NOT COVERED.

HOWARD SOIL CONSERVATION DISTRICT

STANDARD SEDIMENT CONTROL NOTES

- A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION. (19-1005)
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, AND REVISIONS THEREOF.
- FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: A) 7 CALENDAR DAYS FOR ALL PERMITS; SEDIMENT CONTROL STRUCTURES, DICES, PERMETER SLOPES AND ALL SLOPES GREATER THAN 3:1; B) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING (SEC. 21), 500 (SEC. 54), TEMPORARY SEEDING (SEC. 50) AND MULCHING (SEC. 55). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO 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.
- SITE ANALYSIS:**

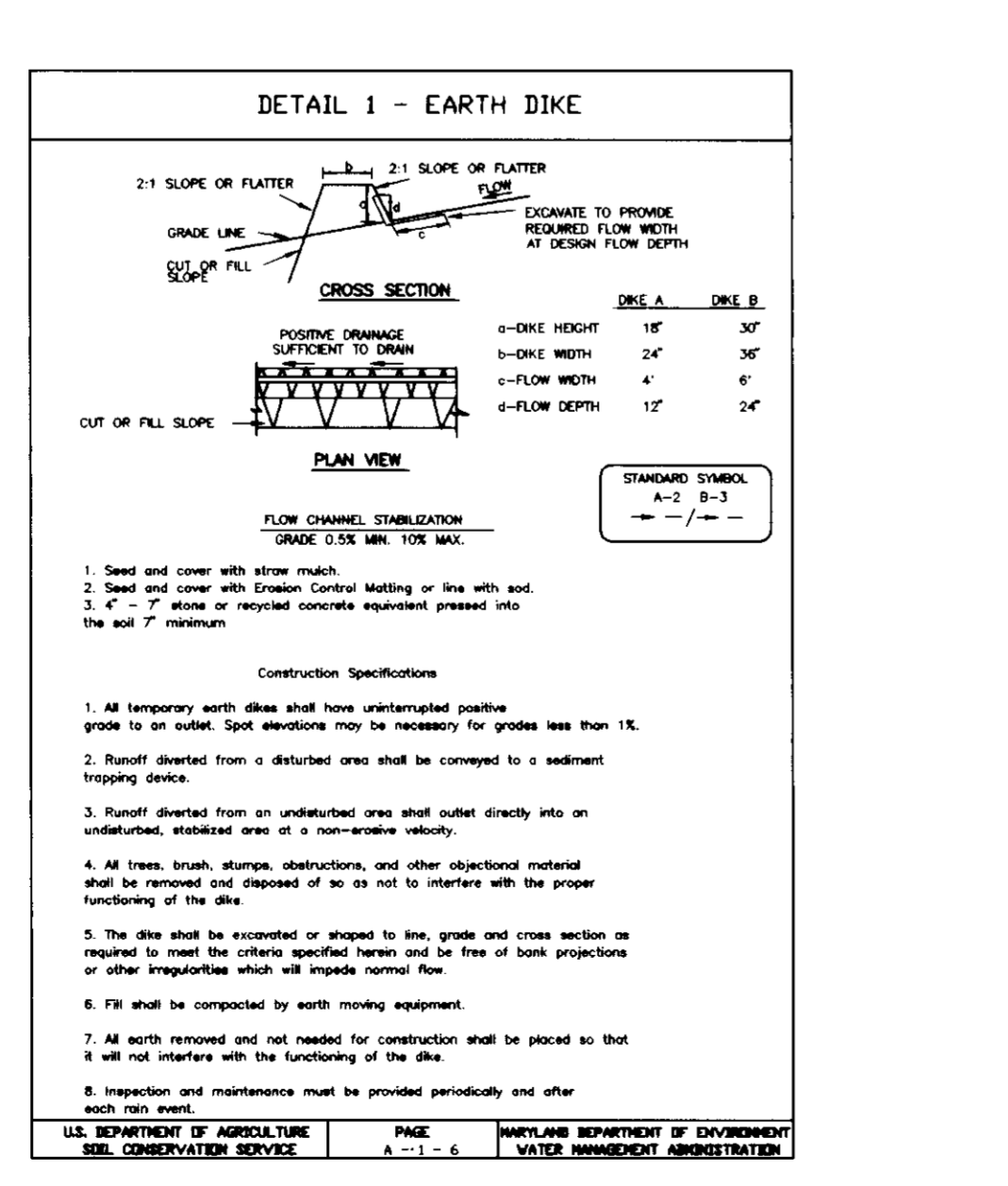
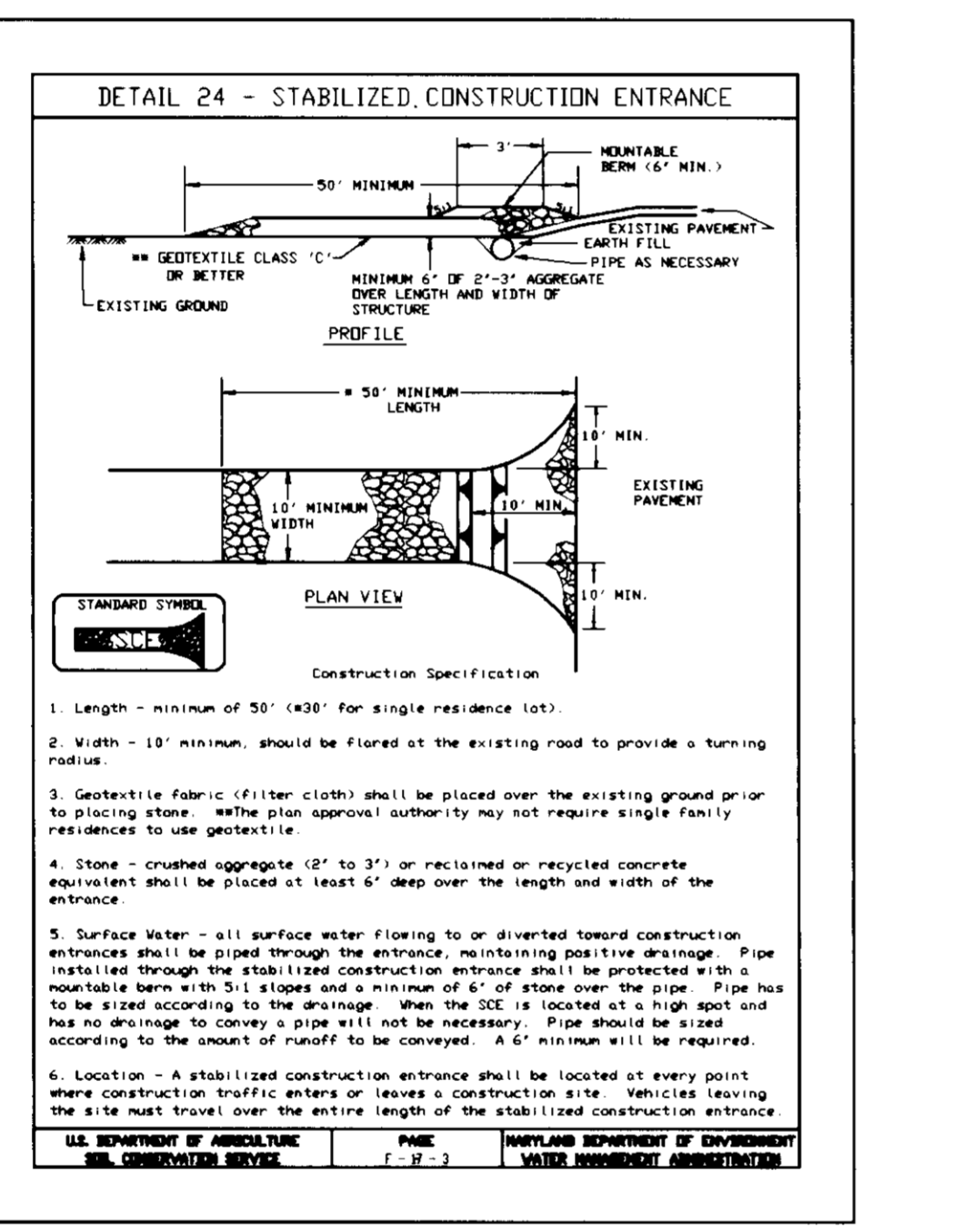
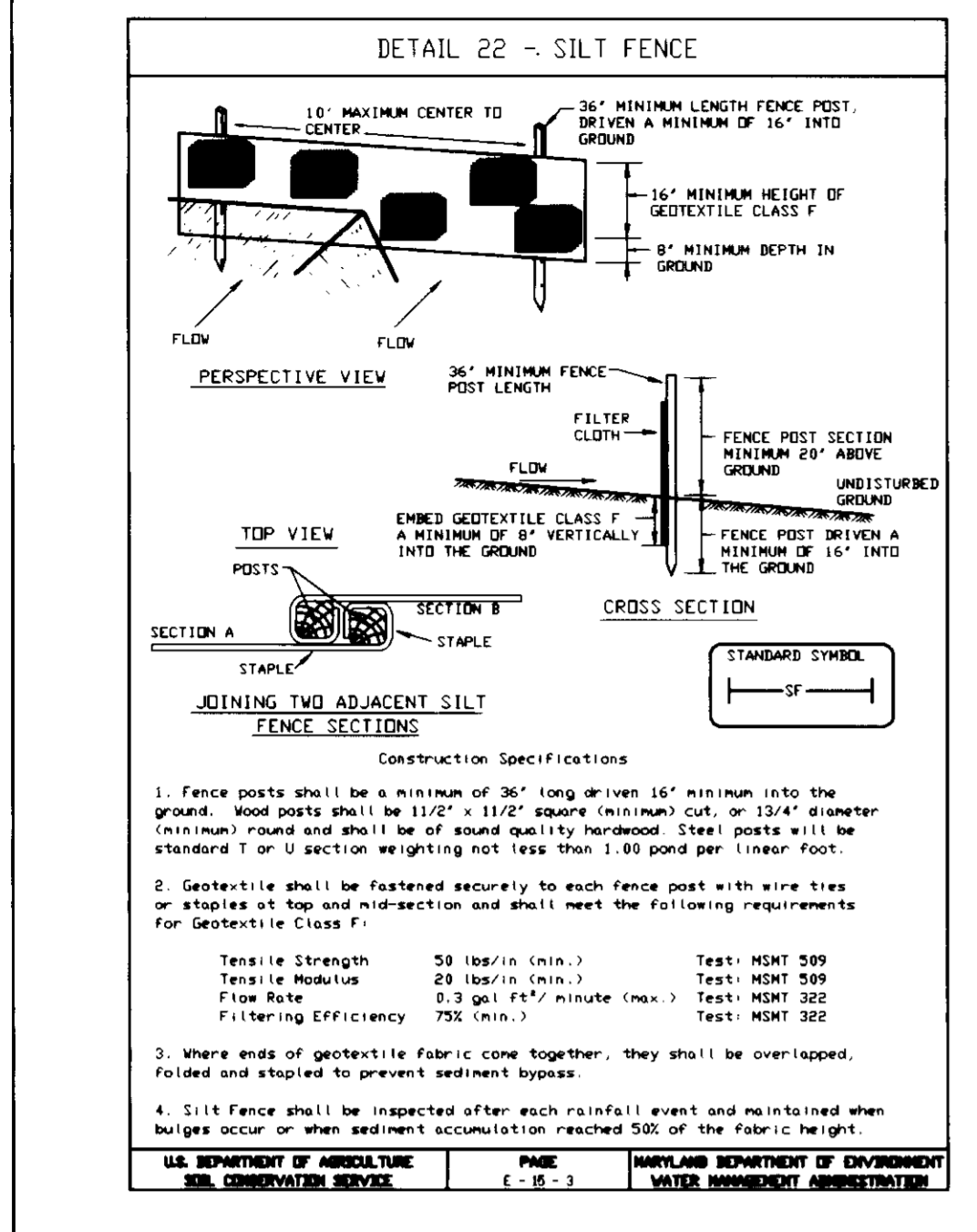
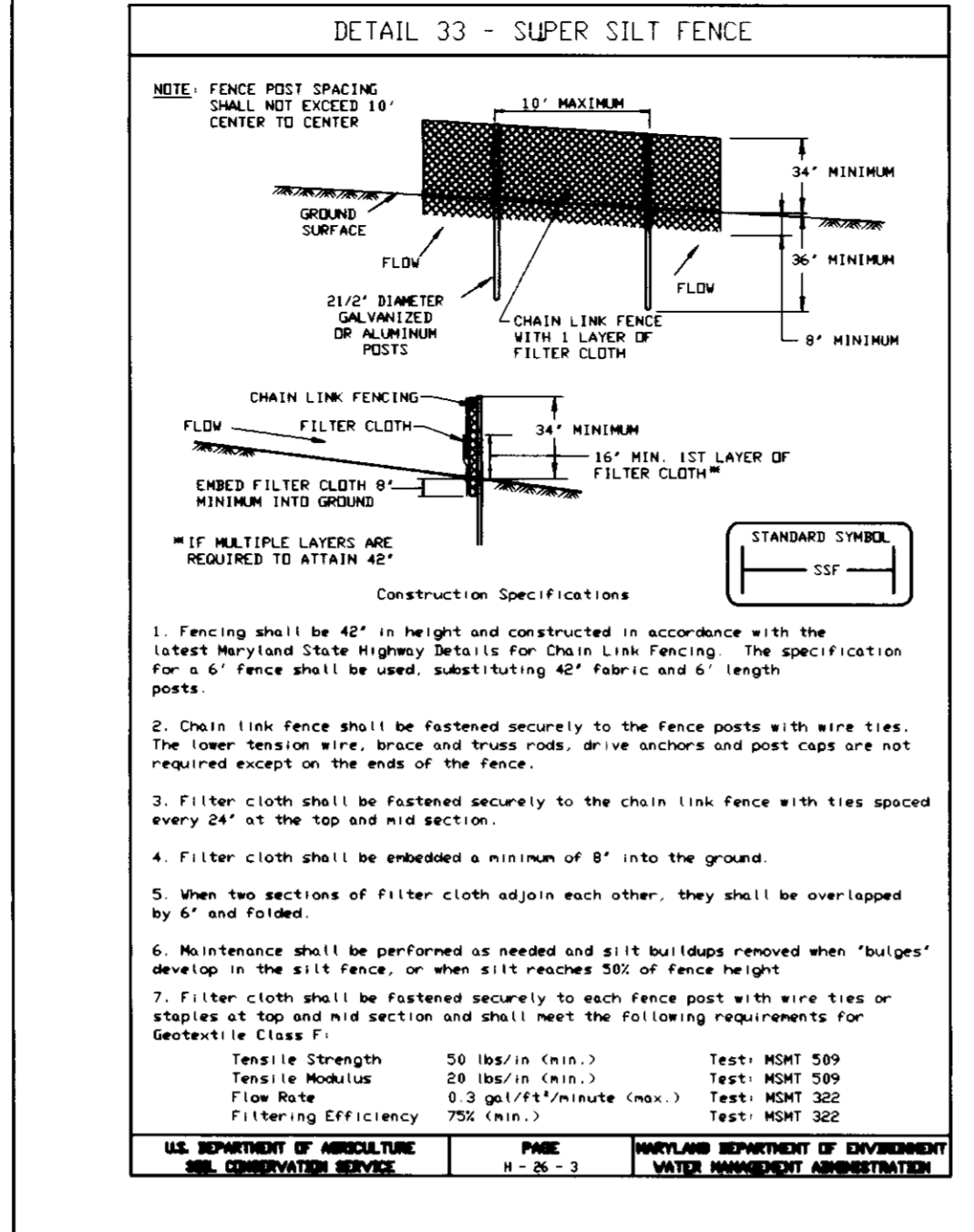
TOTAL AREA OF SITE:	6.79 ACRES
AREA DISTURBED:	1.52 ACRES
AREA TO BE ROCKED OR PAVED:	0.42 ACRES
AREA TO BE VEGETATIVELY STABILIZED:	1.13 ACRES
TOTAL CUT:	3,200 CU YDS
TOTAL FILL:	1,200 CU YDS
TOTAL WASTE/BORROW AREA LOCATION:	N/A
- ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE OBTAINED UPON COMPLETION OF INSTALLATION OF PERMETER SEDIMENT CONTROL STRUCTURES, 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.
- TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH CAN BE BACK FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.

OPERATION, MAINTENANCE AND INSPECTION

INSPECTION OF THE POND(S) SHOWN HEREON SHALL BE PERFORMED AT LEAST ANNUALLY, IN ACCORDANCE WITH THE CHECKLIST AND REQUIREMENTS CONTAINED WITH USDA, SSCS STANDARDS AND SPECIFICATIONS FOR POND(S) (80-378). THE POND OWNER(S) AND ANY HEIRS, SUCCESSORS, OR ASSIGNS SHALL BE RESPONSIBLE FOR THE SAFETY OF THE POND AND THE CONTINUED OPERATION, MAINTENANCE, INSPECTION, AND MAINTENANCE THEREOF. THE POND OWNER(S) SHALL PROMPTLY NOTIFY THE SOIL CONSERVATION DISTRICT OF ANY ORIGINAL OBSERVATIONS THAT MAY BE INDICATIONS OF DISTRESS SUCH AS EXCESSIVE SEEPAGE, TURBID SEEPAGE, SLUING, OR SLUMPING.

SEQUENCE OF CONSTRUCTION

- PROPERLY ABANDON EXISTING WELL IN ACCORDANCE WITH HOWARD COUNTY HEALTH DEPARTMENT GUIDELINES (2 DAYS)
- OBTAIN GRADING PERMIT (1 DAY)
- INSTALL STABILIZED CONSTRUCTION ENTRANCES (2 DAYS)
- CONSTRUCT EARTH DIKES AS SHOWN ON PLAN (2 DAYS)
- CONSTRUCT SILT FENCES AS SHOWN (2 DAYS)
- CONSTRUCT POND TRAP TO GRADES INDICATED (5 DAYS) (BLOCK 1.5" ORIFICE WITH SANDBAGS AND SET WEIR TO SEDIMENT CONTROL GRADES)
- REMOVE EXISTING DRIVEWAY AND GARAGE(1 DAY)
- GRADE DRIVEWAY AND PARKING LOT AS REQUIRED (14 DAYS)
- WHEN ALL CONTRIBUTING AREAS HAVE BEEN STABILIZED AND UPON APPROVAL FROM SEDIMENT CONTROL INSPECTOR, REMOVE SEDIMENT CONTROL DEVICES AND STABILIZE REMAINING AREAS
- REMOVE SEDIMENT FROM POND AND REGRADE TO PROPOSED GRADES. UNBLOCK ORIFICE AND INSTALL TRASH RACK (3 DAYS)
- RAISE SWM WEIR TO PERMANENT GRADES (1 DAY)
- PAVE PARKING LOT AND DRIVEWAY AS REQUIRED (3 DAYS)



DEVELOPERS CERTIFICATE

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

Sayed Hassan, President
 12-24-97
 SIGNATURE OF DEVELOPER DATE
 PRINTED NAME OF DEVELOPER

ENGINEER'S CERTIFICATE

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

R. JACOB HIKMAT
 1/24/97
 SIGNATURE OF ENGINEER DATE
 PRINTED NAME OF ENGINEER

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

USDA - NATURAL RESOURCE CONSERVATION SERVICE
 1/20/98
 DATE

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

HOWARD SOIL CONSERVATION DISTRICT
 1/20/98
 DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION
 1/22/98
 DATE
 Cindy Hammita
 CHIEF, DIVISION OF LAND DEVELOPMENT
 2/9/98
 DATE
 DIRECTOR
 2/13/98
 DATE

APPROVED: FOR PRIVATE WATER AND SEWER.
 HOWARD COUNTY HEALTH DEPARTMENT.
 1-29-98
 DATE
 HOWARD COUNTY HEALTH OFFICER

STATE OF MARYLAND
 PROFESSIONAL ENGINEER
 R. JACOB HIKMAT

LEGEND

- SF— SILT FENCE
- A-2 EARTH DIKE
- STABILIZED CONSTRUCTION ENTRANCE
- LIMIT OF DISTURBANCE

THIS PLAN IS FOR THE PURPOSE OF SEDIMENT CONTROL ONLY.

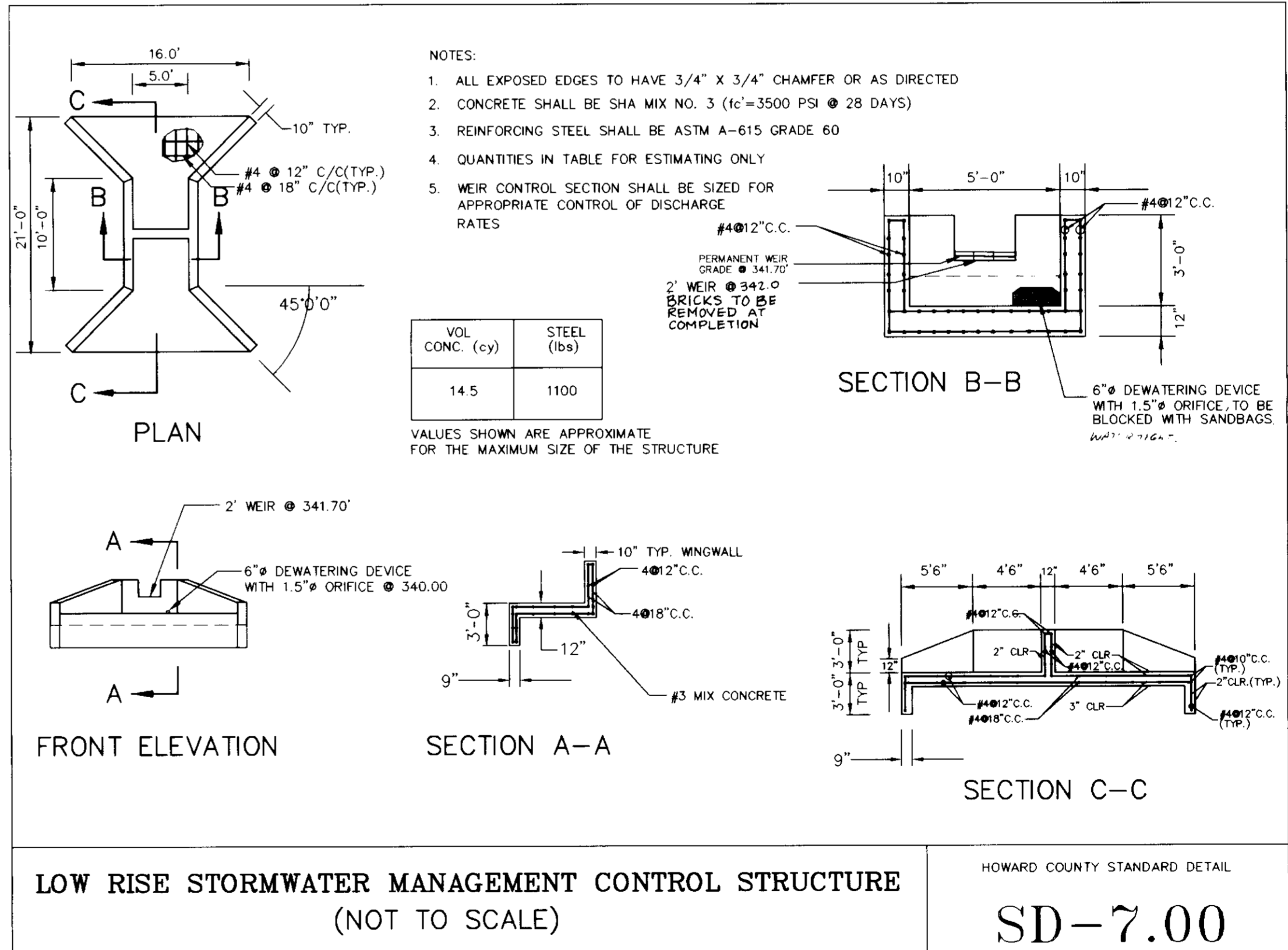
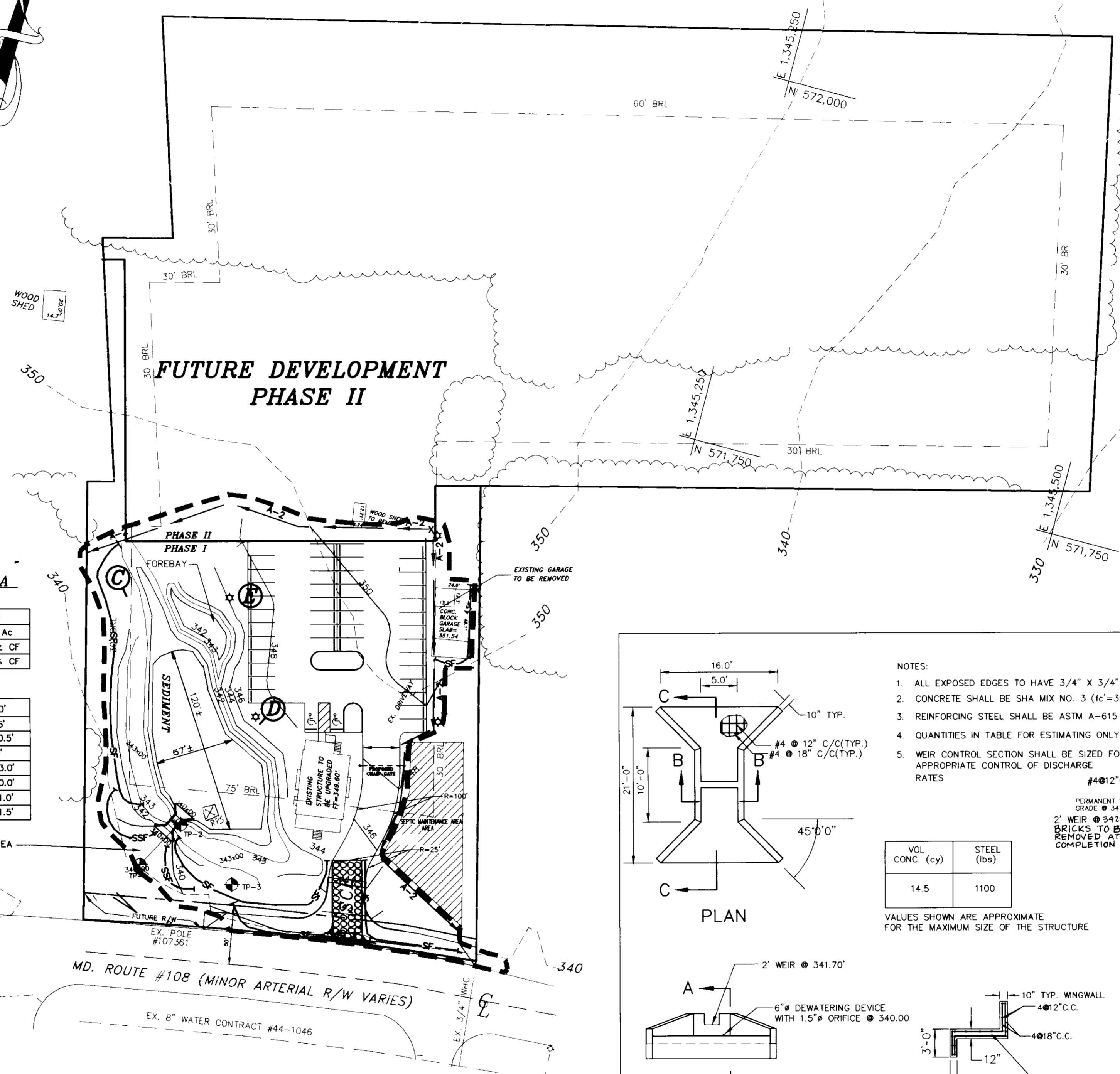
SEDIMENT TRAP DATA

TRAP NUMBER	1
DRAINAGE AREA	1.7 Ac
STORAGE REQUIRED	9.92 CF
STORAGE PROVIDED	10.26 CF

WEIR LENGTH	2.0'
STORAGE DEPTH BELOW OUTLET	1.5'
CLEANOUT ELEVATION	340.5'
EMBANKMENT HEIGHT	3'
EMBANKMENT ELEVATION	343.0'
TRAP BOTTOM ELEVATION	340.0'
EX. GROUND @ OUTLET	341.0'
CREST ELEVATION	341.5'

STABILIZE DISTURBED AREA W/SEED & MATTING

MD. ROUTE #108 (MINOR ARTERIAL R/W VARIES)
EX. 8" WATER CONTRACT #44-1046
EX. 3/4" CONC. CURB



- NOTES:
- ALL EXPOSED EDGES TO HAVE 3/4" X 3/4" CHAMFER OR AS DIRECTED
 - CONCRETE SHALL BE SHA MIX NO. 3 (f_c = 3500 PSI @ 28 DAYS)
 - REINFORCING STEEL SHALL BE ASTM A-615 GRADE 60
 - QUANTITIES IN TABLE FOR ESTIMATING ONLY
 - WEIR CONTROL SECTION SHALL BE SIZED FOR APPROPRIATE CONTROL OF DISCHARGE RATES

VOL CONC. (cy)	STEEL (lbs)
14.5	1100

VALUES SHOWN ARE APPROXIMATE FOR THE MAXIMUM SIZE OF THE STRUCTURE

LOW RISE STORMWATER MANAGEMENT CONTROL STRUCTURE (NOT TO SCALE)
HOWARD COUNTY STANDARD DETAIL
SD-7.00

THIS DETAIL IS APPLICABLE TO SEDIMENT CONTROL ONLY

OWNER/DEVELOPER
DAR AL TAQWA, INC.
10740 ROUTE 108
ELLCOTT CITY, MD 21042

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

Signature: *Sayed Hassan* 12-24-97
DATE
Signature of Developer
Sayed Hassan, President
PRINTED NAME OF DEVELOPER

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

Signature: *R. Saeed Hikmat* 1/21/97
DATE
Signature of Engineer
R. Saeed Hikmat
PRINTED NAME OF ENGINEER

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
Signature: *Clay Simas* 1/20/98
DATE
USDA - NATURAL RESOURCE CONSERVATION SERVICE

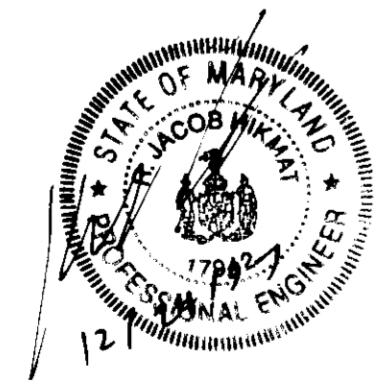
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
Signature: *[Signature]* 1/20/98
DATE
HOWARD SOIL CONSERVATION DISTRICT

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Signature: *[Signature]* 1/20/98
DATE
CHIEF, DEVELOPMENT ENGINEERING DIVISION

Signature: *[Signature]* 2/19/98
DATE
CHIEF, DIVISION OF LAND DEVELOPMENT

Signature: *[Signature]* 2/13/98
DATE
DIRECTOR

APPROVED: FOR PRIVATE WATER AND SEWER.
HOWARD COUNTY HEALTH DEPARTMENT.
Signature: *[Signature]* 1-29-98
DATE
HOWARD COUNTY HEALTH OFFICER

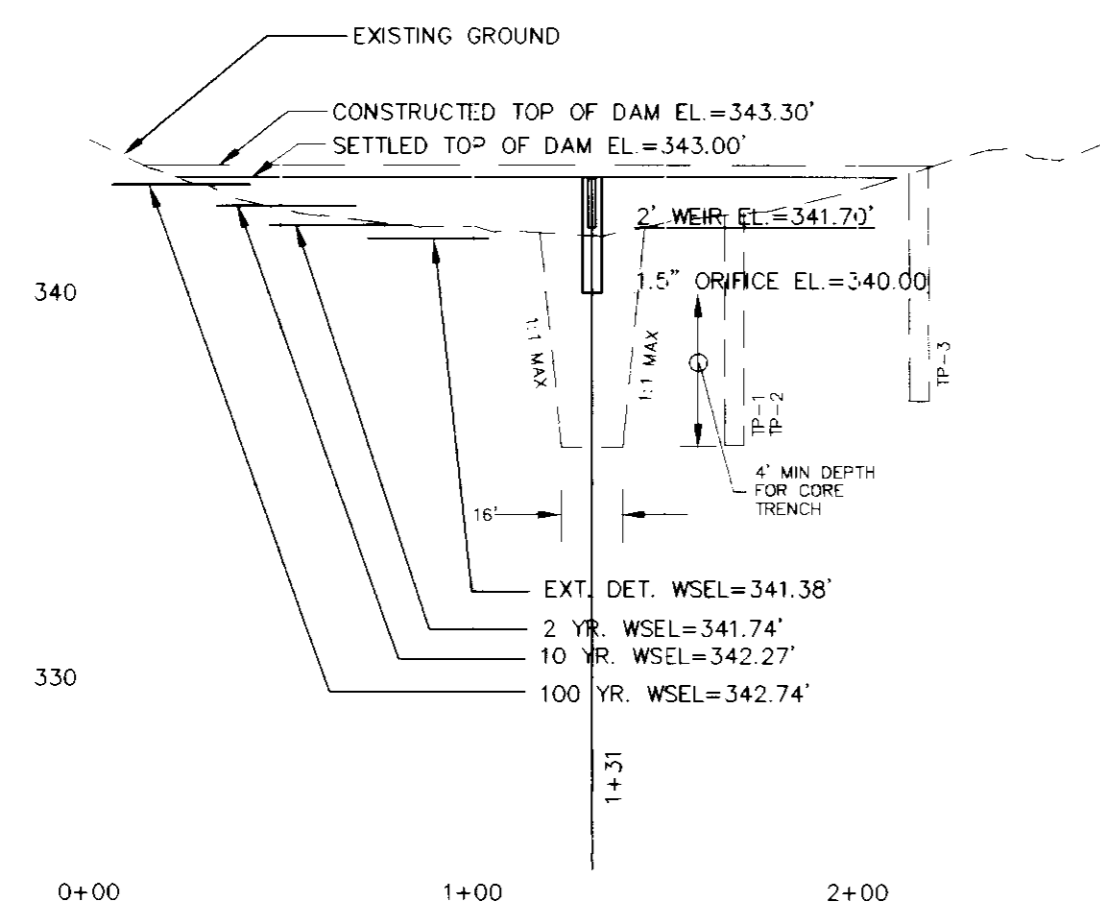


date	APR 97
project	96098
illustration	JS
scale	1"=50'
approval	JS
revision	RH

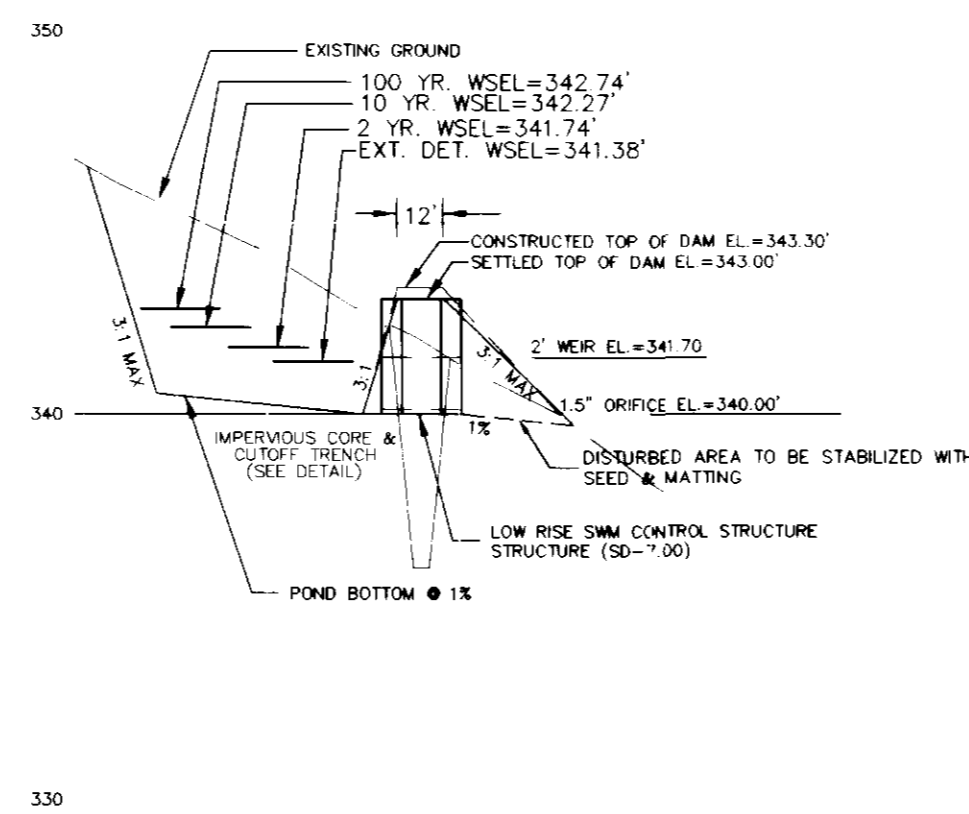
no.	1
description	REMOVE WET & DRY STORAGE TO SECT B-B ADD 341 CONTOUR IN POND, REMOVE 340
revisions	
date	012098

TAX MAP 29 PARCEL 12
DAR AL TAQWA - PHASE I
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
SEDIMENT CONTROL PLAN

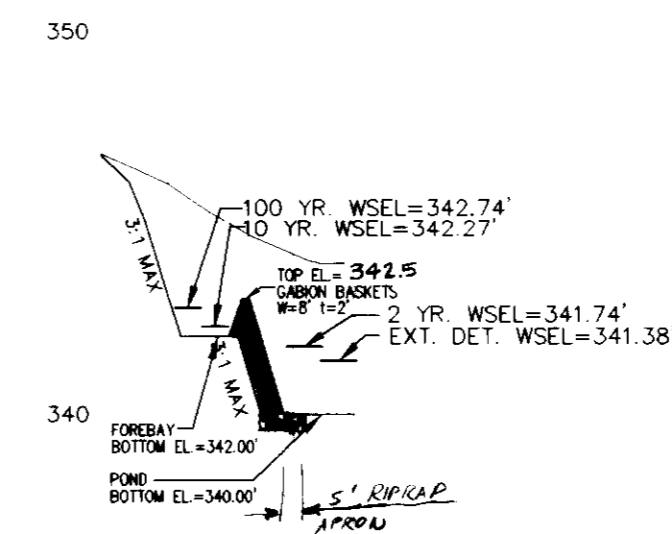
MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
(410) 997-0296 Fax: (301) 621-5521 Wash. (410) 997-0298 Fax



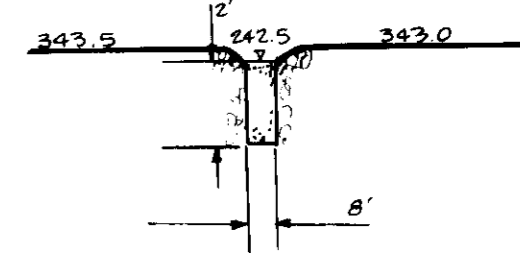
C PROFILE - CENTERLINE OF DAM
SCALE: 1"=50' HOR
1"=5' VER



D PROFILE - PRINCIPAL SPILLWAY
SCALE: 1"=50' HOR
1"=5' VER



E PROFILE - FOREBAY
SCALE: 1"=50' HOR
1"=5' VER



F SECTION - FOREBAY
SCALE: 1"=50' HOR
1"=5' VER

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

Sayed Hassan 12-24-97
SIGNATURE OF DEVELOPER DATE
Sayed Hassan, President
PRINTED NAME OF DEVELOPER

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

R. JACOB HIKMAT 12/24/97
SIGNATURE OF ENGINEER DATE
R. JACOB HIKMAT
PRINTED NAME OF ENGINEER

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

Chad Simms/cs 1/20/98
USDA - NATURAL RESOURCE CONSERVATION SERVICE DATE

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

Howard Soil Conservation District 1/20/98
DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

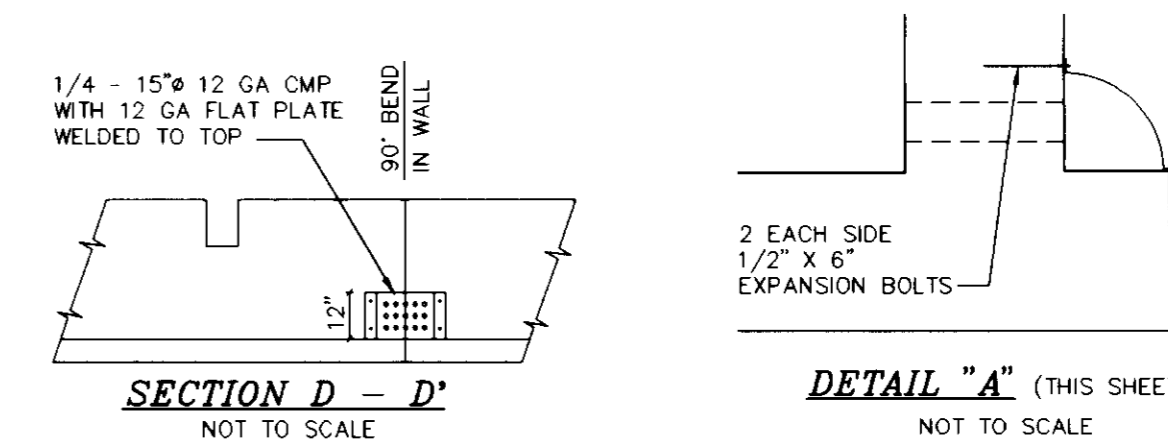
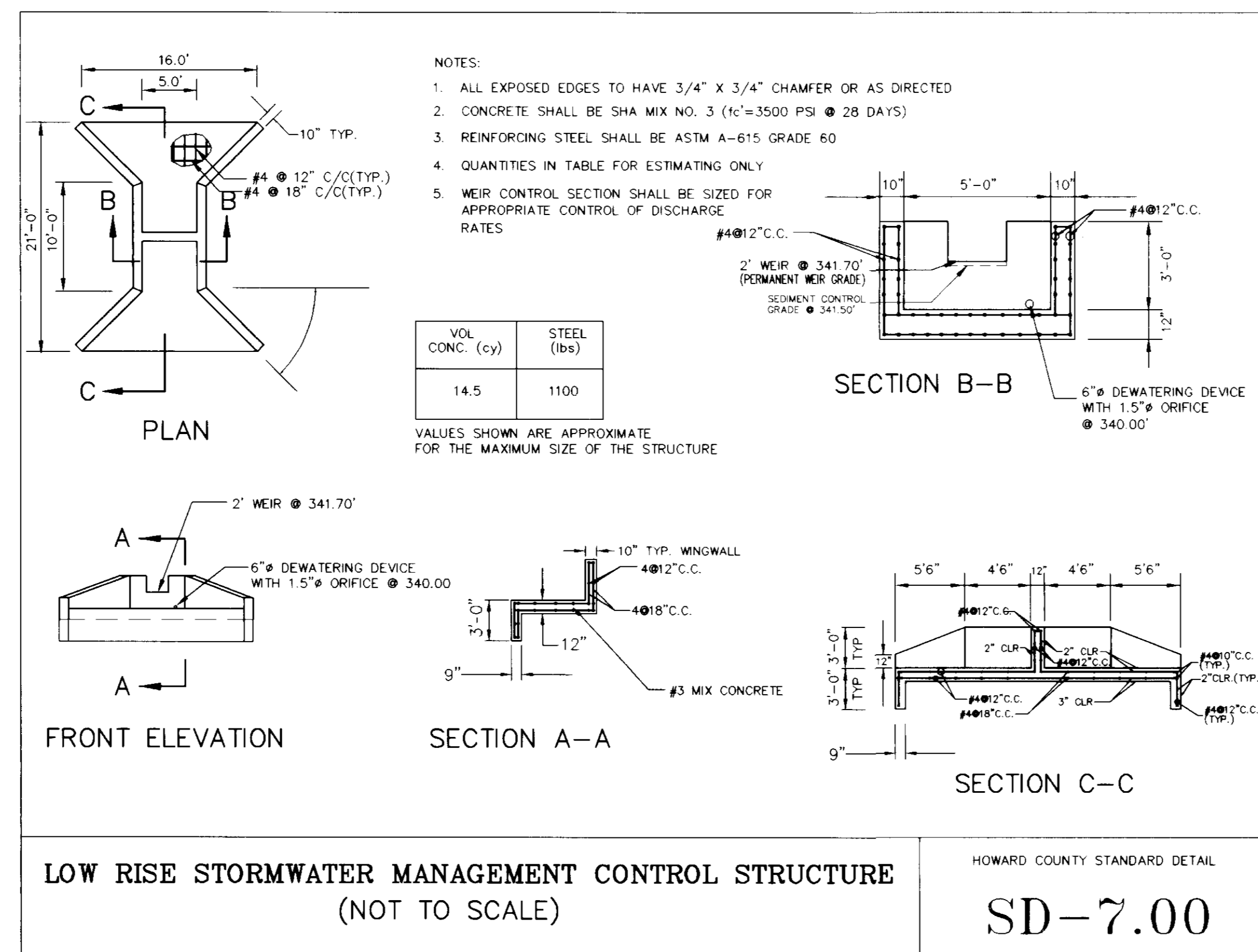
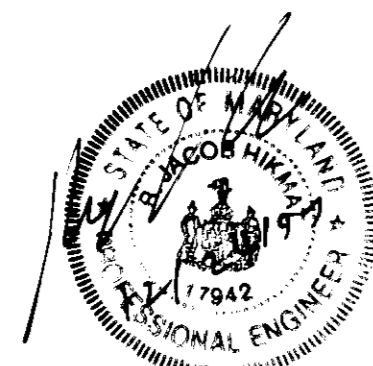
Allen Dammicus 1/20/98
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Candice Brumby 2/19/98
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

2/13/98
DATE

APPROVED: FOR PRIVATE WATER AND SEWER.
HOWARD COUNTY HEALTH DEPARTMENT.

Howard County Health Officer 1-29-98
DATE



TRASH RACK DETAIL
(ADD TO STD DETAIL SD-7.00)

SWM POND MAINTENANCE REQUIREMENTS

- a. SILT SHALL BE REMOVED WHEN ACCUMULATION EXCEEDS SIX (6) INCHES IN BASIN OR FOUR (4) INCHES IN THE FOREBAY.
- b. ACCUMULATED PAPER, TRASH AND DEBRIS SHALL BE REMOVED AS NECESSARY.
- c. ANNUAL INSPECTION AND REPAIR, IF REQUIRED, OF THE STRUCTURE SHALL BE PERFORMED.

F:\96098\DWG\098-SWM.DWG

Project	96098	date	APR 1997
Illustration	JS	engineering	JS
Scale	SHOWN	approval	RHJ

Fig.	1	ADD SECTION F	description	revisions
date	01/20/98			

TAX MAP 29 PARCEL 12
DAR AL TAQWA - PHASE I
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
SWM PROFILES AND DETAILS

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
5072 Dorsey Hill Drive, Suite 202, Ellicott City, Maryland 21042
(410) 997-0236, Fax (410) 997-0238

PERIMETER	EDGE TYPE
PERIMETER 1	N/A
ENTRANCE - 25 LF	
SWM & PARKING TO ROAD - 241.66 LF	D
1 SHADE TREE / 60 LF	4
1 EVERGREEN / 10 LF	24
PERIMETER 2	D
NON-RES TO SFD - 277.22 LF	
1 SHADE TREE / 60 LF	5
1 EVERGREEN / 10 LF	28
PERIMETER 3	D
NON-RES TO SFD - 18.09 LF	
1 SHADE TREE / 60 LF	0
1 EVERGREEN / 10 LF	2
PERIMETER 4	N/A
SFD TO SFD - 164.78 LF	
1 SHADE TREE / 60 LF	3
1 EVERGREEN / 10 LF	16
PERIMETER 5	D
PARKING TO SFD - 305.90 LF	
1 SHADE TREE / 60 LF	5
1 EVERGREEN / 10 LF	31
TOTAL PLANTING OBLIGATION	
SHADE TREES	17
EVERGREEN TREES	101
SHRUBS	0

SWM PERIMETER	EDGE TYPE
SWM PERIMETER A - 135 LF	B
CREDIT FOR PERIMETER #1 LANDSCAPING	
SWM PERIMETER B - 191 LF	B
CREDIT FOR PERIMETER #2 LANDSCAPING	
SWM PERIMETER C - 50 LF	B
1 SHADE TREE / 50 LF	1
1 EVERGREEN / 40 LF	1
SWM PERIMETER D - 240 LF	B
1 SHADE TREE / 50 LF	5
1 EVERGREEN / 40 LF	6
TOTAL PLANTING OBLIGATION	
SHADE TREES	6
EVERGREEN TREES	7
SHRUBS	0

SCREEN CALCULATIONS

SCREEN "A"

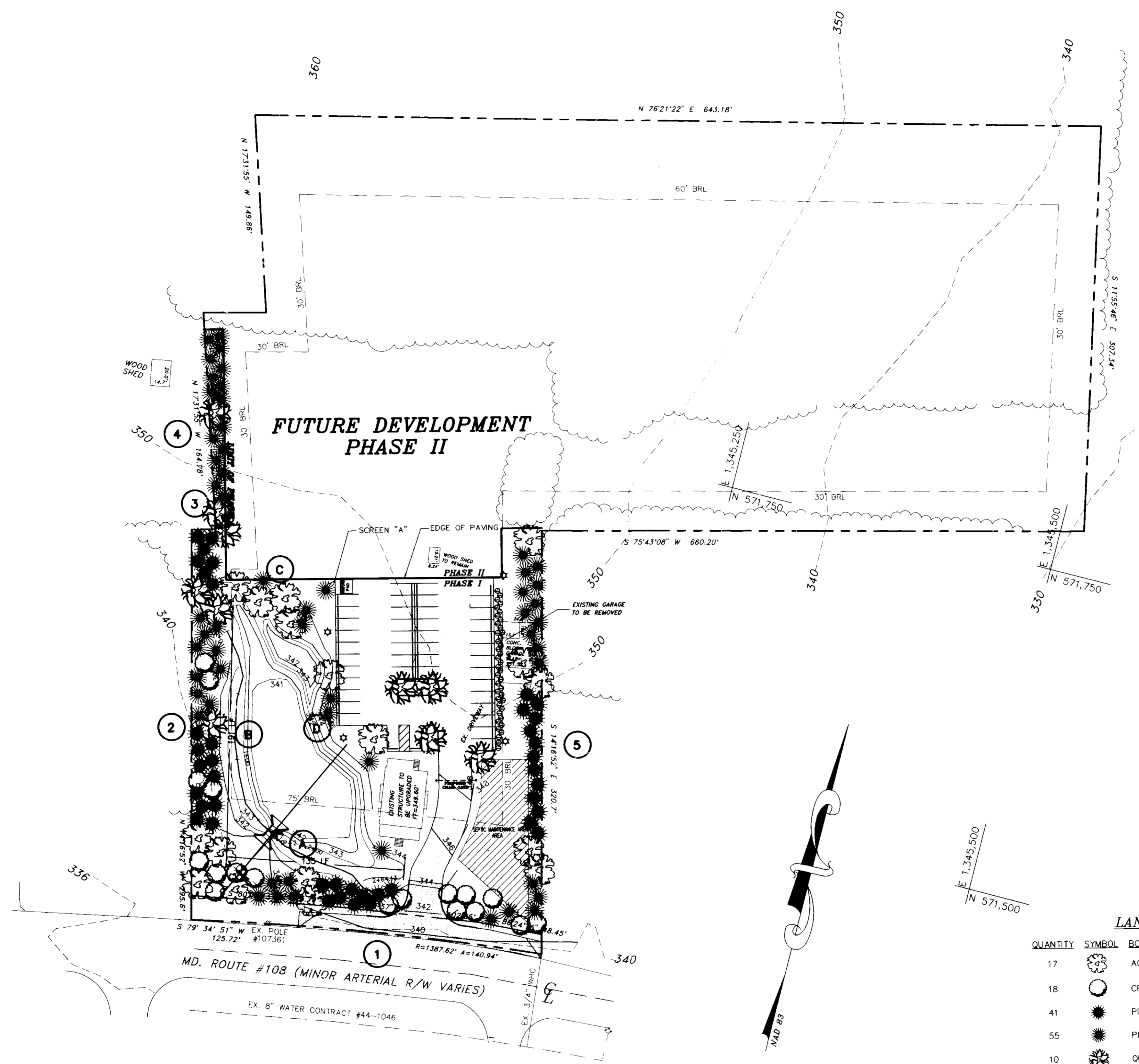
DUMPSTER - 10 LF - TYPE D BUFFER

0 SHADE TREE AND 1 EVERGREENS REQUIRED

0 SHADE TREE AND 1 EVERGREENS PROVIDED

SCHEDULE B: PARKING LOT INTERNAL LANDSCAPING

NUMBER OF PARKING SPACES	42
NUMBER OF PLANTING ISLANDS REQUIRED	2
NUMBER OF PLANTING ISLANDS PROVIDED	3
NUMBER OF TREES REQUIRED	2 SHADE TREES
SHADE TREES	
NUMBER OF TREES PROVIDED	4 SHADE TREES
SHADE TREES	
OTHER TREES (2:1 SUBSTITUTION)	0 TREES



- NOTES:**
- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.
 - FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING HAS BEEN POSTED AS PART OF THE DPW DEVELOPERS AGREEMENT IN THE AMOUNT OF \$13,300.00.
 - TYPE D BUFFER IS SHOWN AS REQUIRED BY BA-93-37E.

LANDSCAPE REQUIREMENT PLANTING SCHEDULE

QUANTITY	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE
17		ACER RUBRUM 'RED SUNSET'	RED SUNSET RED MAPLE	2 1/2" - 3" CAL.
18		CRATAEGUS LAEVIGATA 'CRIMSON CLOUD'	CRIMSON CLOUD HAWTHORN	1 1/2" - 2" CAL.
41		PICEA ABIES	NORWAY SPRUCE	6' - 8' HT.
55		PINUS STROBUS	EASTERN WHITE PINE	6' - 8' HT.
10		QUERCUS RUBRA	RED OAK	2 1/2" - 3" CAL.
40		TAXUS MEDIA 'HICKSII'	HICKS YEW	2 1/2" - 3" HT.
TOTAL				
181 PLANTS				(27 SHADE TREES, 96 EVERGREEN TREES, 18 SMALL DECIDUOUS TREES, 40 SHRUBS)

SCHEDULE A: PERIMETER LANDSCAPED EDGE

CATEGORY	ADJACENT TO ROADWAYS	ADJ. TO PERIMETER PROPERTIES
LANDSCAPE TYPE	D (PERIMETER 1)	D (PERIMETERS 2 THRU 5)
LINEAR FEET OF PERIMETER	241.66 LF	765.99 LF
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET)	NO	NO
CREDIT FOR WALL, FENCE, OR BERM (YES, NO, LINEAR FEET)	NO	NO
NUMBER OF PLANTS REQUIRED		
SHADE TREES	4 SHADE TREES	13 SHADE TREES
EVERGREEN TREES	24 EVERGREEN TREES	77 EVERGREEN TREES
SHRUBS	0 SHRUBS	0 SHRUBS
NUMBER OF PLANTS PROVIDED		
SHADE TREES	4 SHADE TREES	13 SHADE TREES
EVERGREEN TREES	17 EVERGREEN TREES	71 EVERGREEN TREES
OTHER TREES (2:1 SUBSTITUTION)	7 SUBSTITUTION TREES (14 SMALL TREES)	4 SUBSTITUTION TREES (4 SMALL TREES)
SHRUBS (10:1 SUBSTITUTION)	0 SHRUBS	4 SUBSTITUTION TREES (40 SHRUBS)

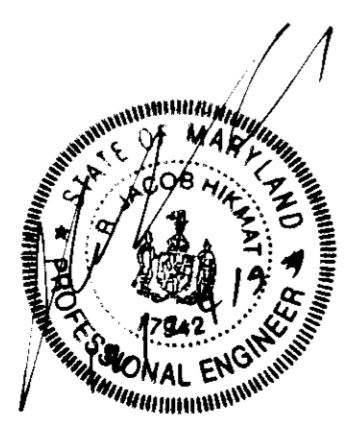
SCHEDULE D: STORMWATER MANAGEMENT AREA LANDSCAPING

LINEAR FEET OF PERIMETER	616 LF
CREDIT FOR EXISTING VEGETATION (NO, YES AND LINEAR FEET)	NO
CREDIT FOR OTHER LANDSCAPING (NO, YES AND X)	YES, 326 LF
NUMBER OF TREES REQUIRED	
SHADE TREES	6 SHADE TREES
EVERGREEN TREES	7 EVERGREEN TREES
NUMBER OF TREES PROVIDED	
SHADE TREES	6 SHADE TREES
EVERGREEN TREES	7 EVERGREEN TREES
OTHER TREES (2:1 SUBSTITUTION)	0 TREES (0 SUBSTITUTION TREES)

NOTE: THIS DRAWING IS TO BE USED FOR LANDSCAPE PLAN PURPOSES ONLY.

OWNER/DEVELOPER
DAR AL TAQWA, INC.
10740 ROUTE 108
ELICOTT CITY, MD 21042

APPROVED: DEPARTMENT OF PLANNING AND ZONING
[Signature] 1/25/08
CHIEF, DEVELOPMENT ENGINEERING DIVISION
[Signature] 2/4/08
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH
[Signature] 2/15/08
DIRECTOR
APPROVED: FOR PRIVATE WATER AND SEWER
HOWARD COUNTY HEALTH DEPARTMENT.
[Signature] 1-29-08
HOWARD COUNTY HEALTH OFFICER



project	date	description	revision
96008	APR 1997	engineering	
RCJ	SJD	approval	
		scale	1"=50'

project	date

TAX MAP 29 PARCEL 12
DAR AL TAQWA - PHASE I
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
LANDSCAPE PLAN

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