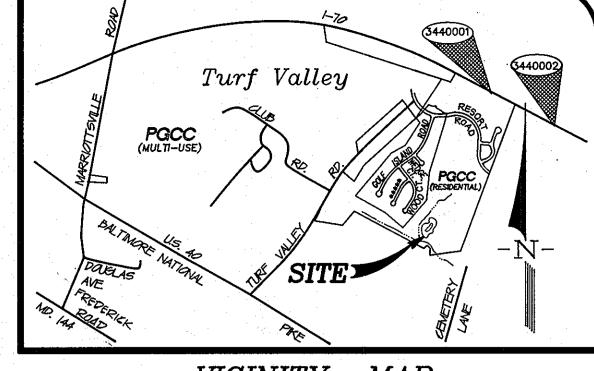
TURF VALLEY

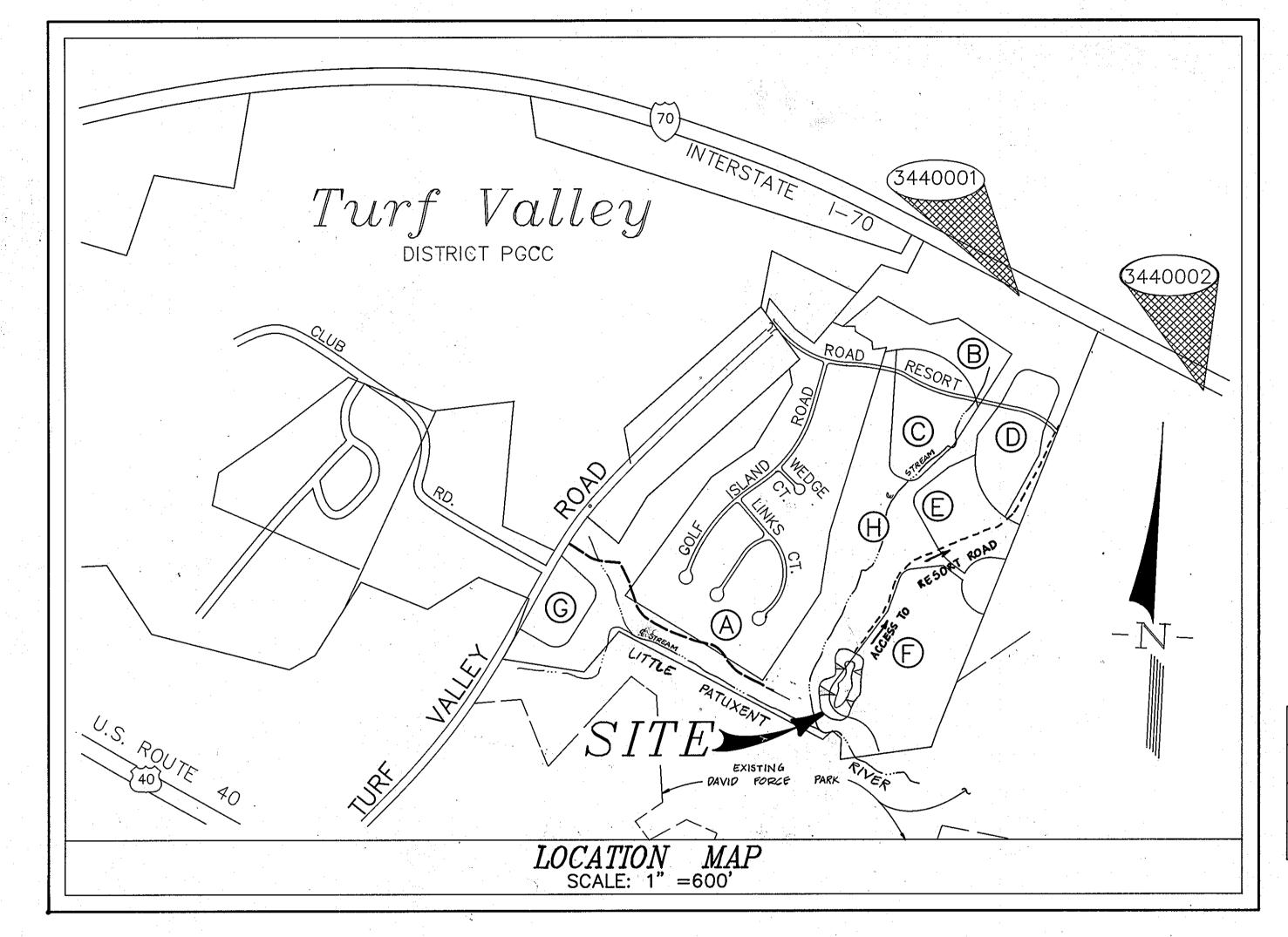
PGCC RESIDENTIAL SUBDISTRICT AND AREA H REGIONAL STORMWATER MANAGEMENT POND



VICINITY MAP

GENERAL NOTES:

- 1. The subject property is zoned PGCC Residential per the Comprehensive Zoning effective October 18, 1993.
- a. Current Zoning: PGCC Residential b. Deed Reference: Liber 920 at Folio 285
- c. Election District: 2nd
- e. Parcel: p/o Parcel 8 f. Referenced FDP: PGCC Résidential Subdistrict Area H g. Gross Area of H: 73.6 Acres
- Total Area of this submission: 4.67 Ac.
- Total Number of proposed lots: none
- j. Total Area of proposed lots: none k. Total Area of Public Road R/W: none
- 3. Topographic information established at two (2) foot contour intervals based on aerial survey performed by Wings Mapping Co., Inc. photographed April 23, 1992 and supplemental field run topography prepared by the R. M. Mochi Group, P.C. dated January 31, 1995.
- 4. Denotes slopes between 15% and 24.9 %
- Denotes slopes equal to or greater than 25% 5. There are no steep slopes equal to or greater than 25% lying in a contiguous area of 20,000 s.f. or greater within the proposed limits
- 6. Existing utilities taken from Howard County contract drawings.
- 7. Soils information taken from Maps #9 and #15, Soil Survey, Howard County, Maryland, July 1968 issue.
- 8. Survey Control is based on NAD '27 Maryland Coordinate System as projected by Howard County Geodetic Control Stations:
 - No. 3440001
 - N 534735.478 Elev. 486.341 E 836286.297
 - N 533593.800 Elev. 462.306 E 837983.249
- 9. This SWM facility will serve development pods A, p/o B,C,D,E, & F as shown on the FDP Turf Valley PGCC Residential Subdistrict. This is in accordance with study point No. 7 of the conceptual SWM study dated April 10, 1992.
- 10. This project is subject to WP-95-127 approved on August 14, 1995 in which A waiver was granted from the Howard County Subdivision & Land Development Regulations, Section 16.115.C.2, that prohibits any work within floodplain land, Section 16.116.a.2.ii, that prohibits any grading within 75 feet of A perennial stream.
- 11. The entire parcels from pod A-F shall be graded or shall be designed to drain in to the regional facility through a closed system. If this is not possible a separate pond will be designed and constructed for individual parcels at the development of each parcel.
- 12. See Previous County File References: 1. FDP, Turf Valley Residential Subdistrict Plat # 3054-A-1435 2. 2nd Amended Comprehensive Sketch Plan S-86-13
- 13. As per the geotechnical report prepared by Herbst and Assoicates dated January 4, 1995 construction of the dam embankment and core trench is not recommended during the wet season (typically December thru May) unless additional measures are taken to insure proper compaction to specified densities. Care should also be given to slope stability with the presence of ground water in certain areas after excavation. Corrective actions, if any, will depend upon field conditions and can be best evaluated at the time of construction.



ELECTION DISTRICTCOUNTY, MARYLAND HOWARD

SHEET INDEX

- COVER SHEET
- SITE PLAN OF POND
- PROFILES & DETAILS PROFILES & DETAILS
- SPECIFICATIONS & DETAILS
- S.D. PROFILES, NOTES & DETAILS
- SEDIMENT CONTROL PLAN SEDIMENT CONTROL NOTES & DETAILS

DESIGN SUMMARY

					<u> </u>
DESIGN STORM	ALLOWABLE RELEASE RATE	FACILITY INFLOW	FACILITY DISCHARGE	WATER SURFACE ELEVATION	STORAGE VOLUME (Ac. ft.)
2 YEAR	6.6 CFS	05,5	3.9 CFS	396.25	4.15
10 YEAR	54.0 CFS	<i>209.</i> 7	44.2 CF5	398. %	6.872
100 YEAR	N/A	344.9	13G.20F5	400.70	10.41

STRUCTURE CLASSIFICATION: LOW HAZARD, CLASS "A" POND STORAGE - HEIGHT PRODUCT: 8.45 Ac.ft. x 11.90'= 100.55 WATERSHED AREA TO FACILITY (ACRES): ULTIMATE 63.0 ACRES LEVEL OF MANAGEMENT PROVIDED BY FACILITY: TWO AND TEN YEAR STORMS

OWNER/DEVELOPER

MANGIONE ENTERPRISES OF TURF VALLEY 1205 York Road, Penthouse Lutherville, Maryland 21093 (410)825-8400 Attn: Mr. Louis Mangione

ENGINEER R.M. MOCHI GROUP, P.C. 3300 North Ridge Road, Suite 235 Ellicott City, Maryland 21043 (410)461-0079 Attn: Mr. Robert M. Mochi. P.E.

DEVELOPER'S CERTIFICATE "I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE COME ACCORDING TO THESE FLANS AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENMRONMENT APPROVED TRAINING PROJECT ITE CONTROL OF SEDIMENT AND EROSION BEFORE BEAINNING 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 DAY OF COMPLETION, I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT,"

ENGINEER'S CERTIFICATE "I CERTIFY THAT THIS PLAN FOR FOND CONSTRUCTION, EROSION AND SETIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONNEL KNOWLEDGE OF OF THE SITE CONSTITUTE THAN WAS PRETARED IN ACCORDANCE WITH THE REQUIREMENT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT, I HAVE NOTIFIED THE DEVELOPER THAT HE SHE MUST ENCAGE A RECONSTRUCTION PROPERSIONAL ENVINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS BUILT " PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION

SDP-95-121

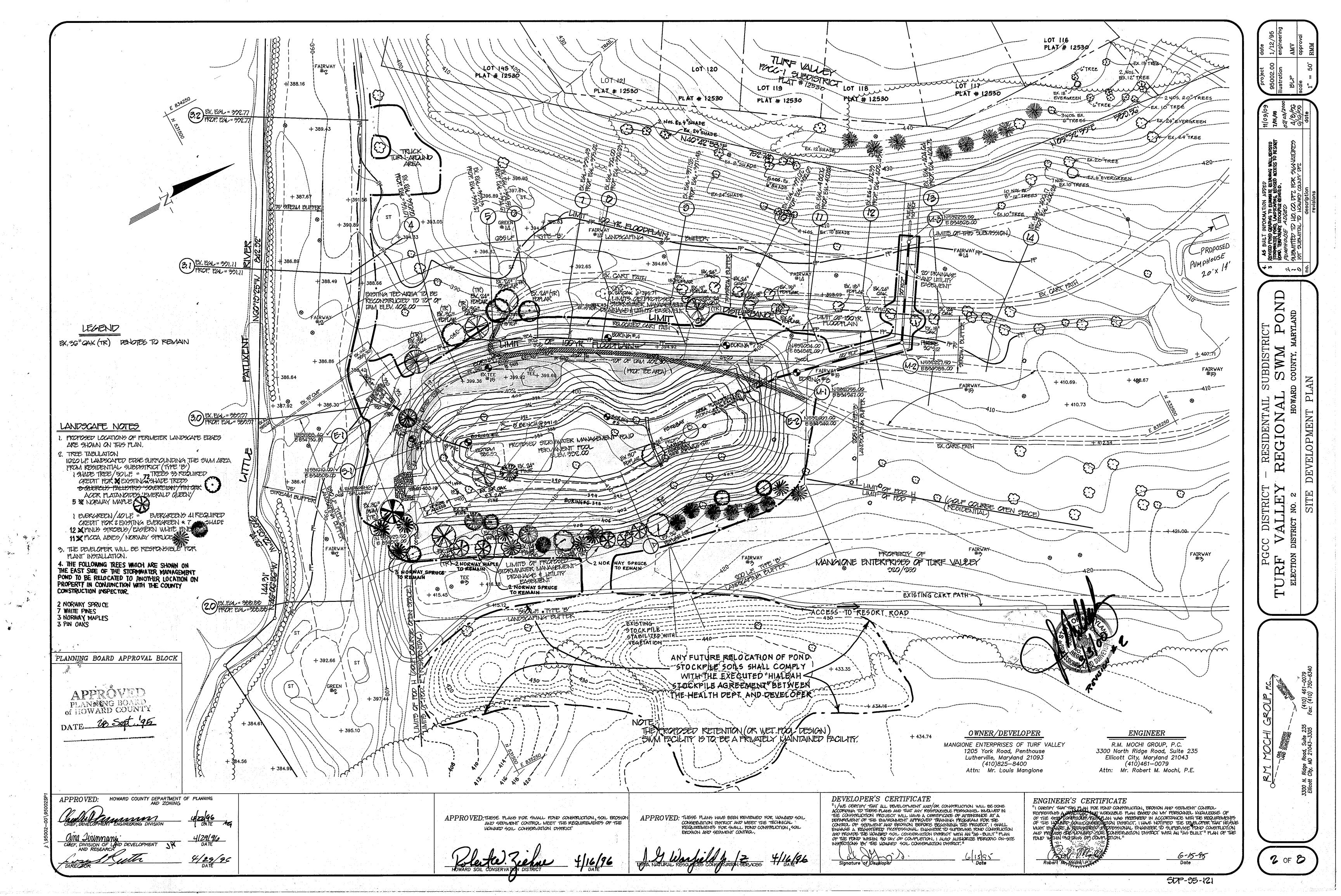
AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT

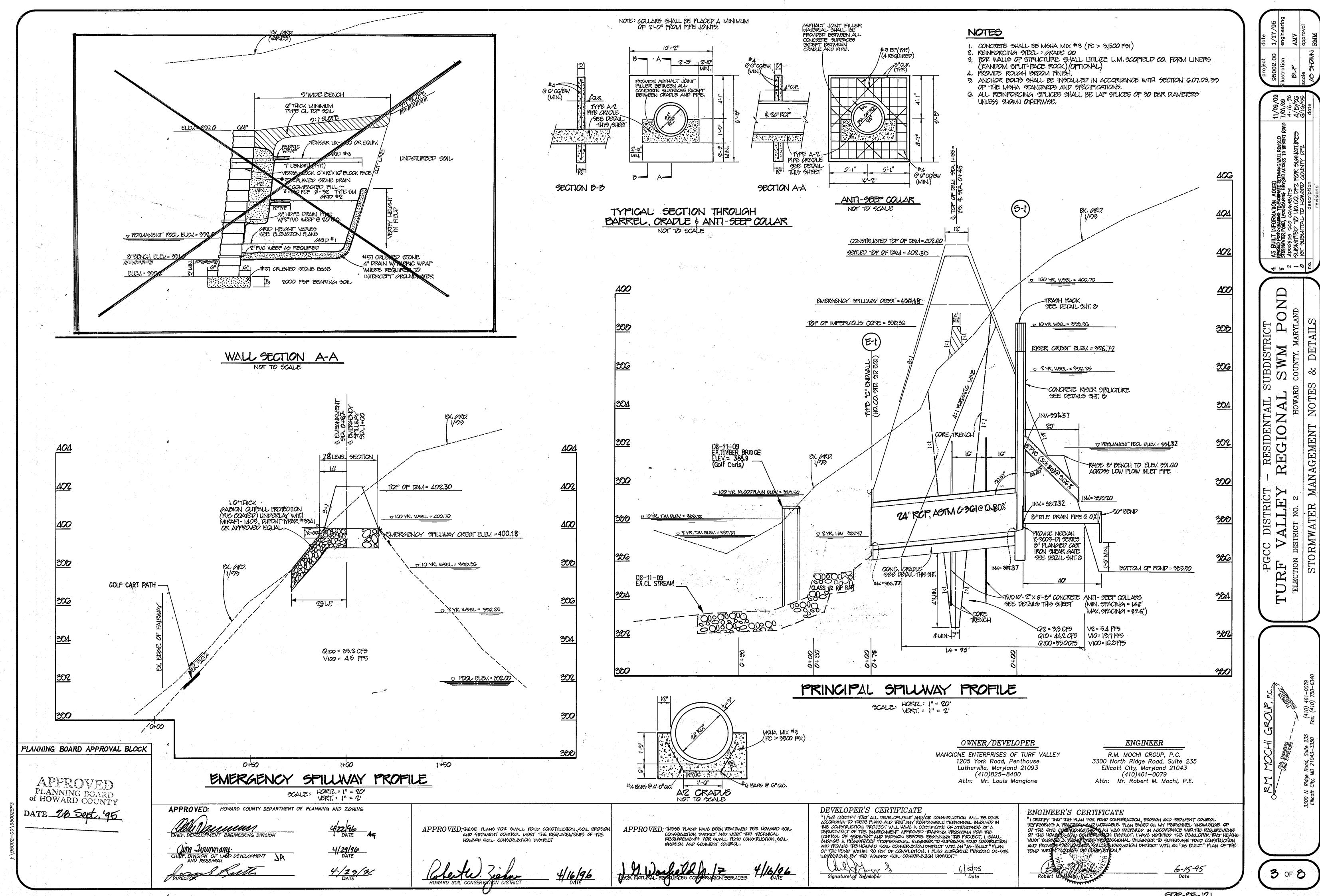
ADDRESS PERMIT INFORMATION CHART PLANNING BOARD APPROVAL BLOCK SUBDIVISION NAME: LOT/PARCEL# LOT No. STREET ADDRESS TURF VALLEY RESIDENTIAL POD H 2739 LINKS COURT BLOCK* ZONE TAX/ZONE MAP ELECT. DISTR CENSUS TRACT PGCL RG 920/285 18 Znd WATER CODE SEWER CODE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

APPROVED: THESE FLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION

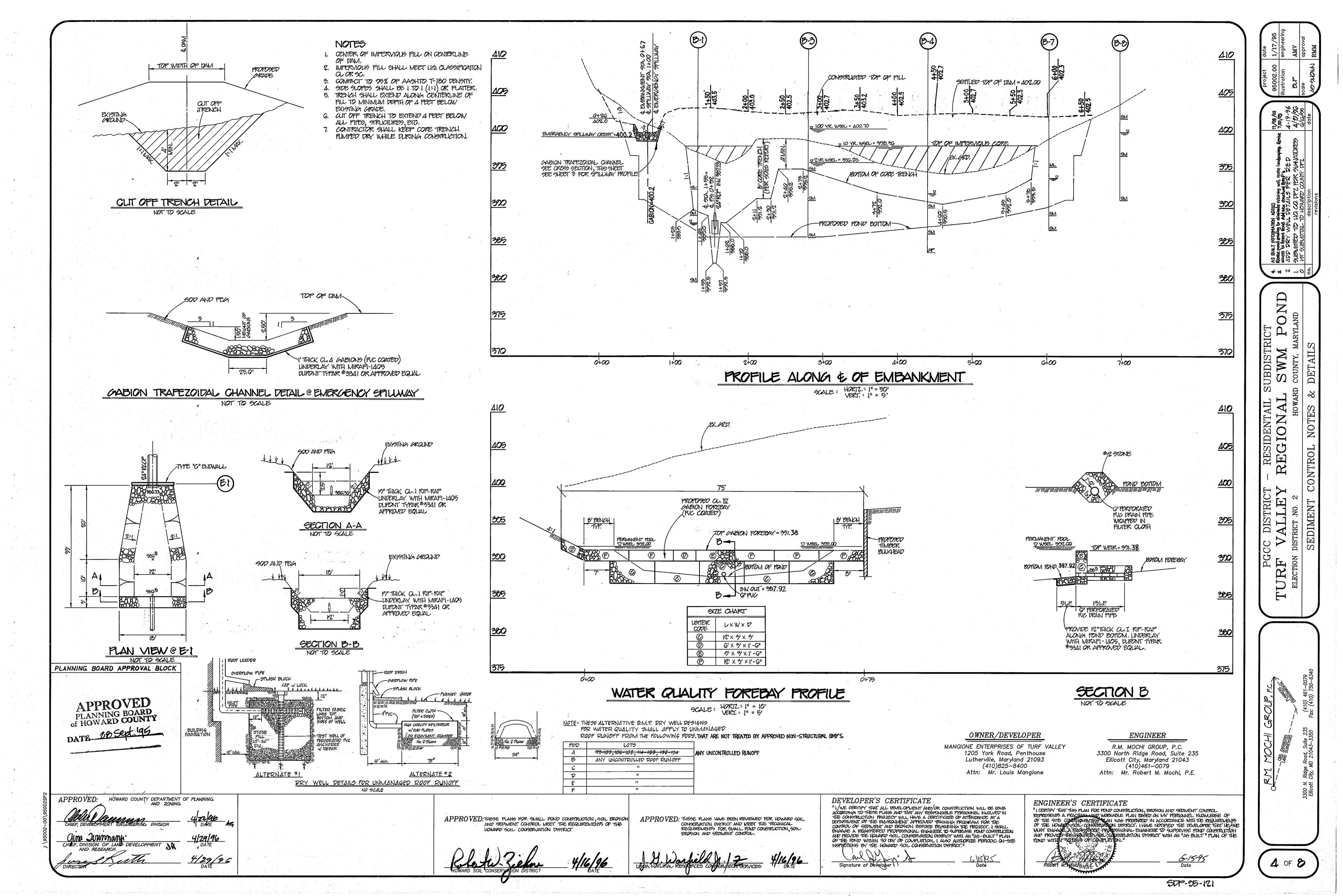
CHART

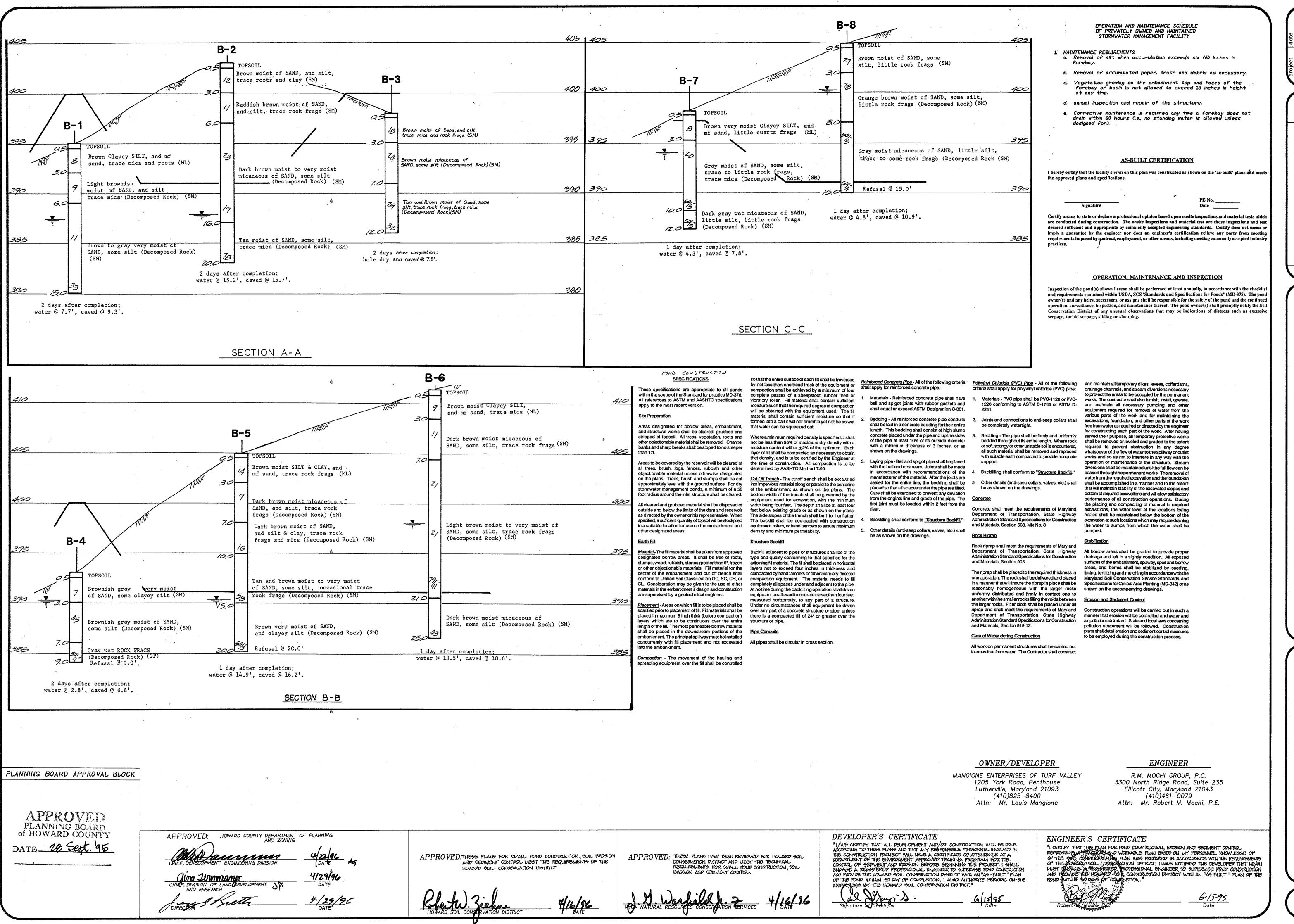
APPROVED: These plans have been reviewed for howard soil conservation district and when the technical requirements for small pond construction, soil

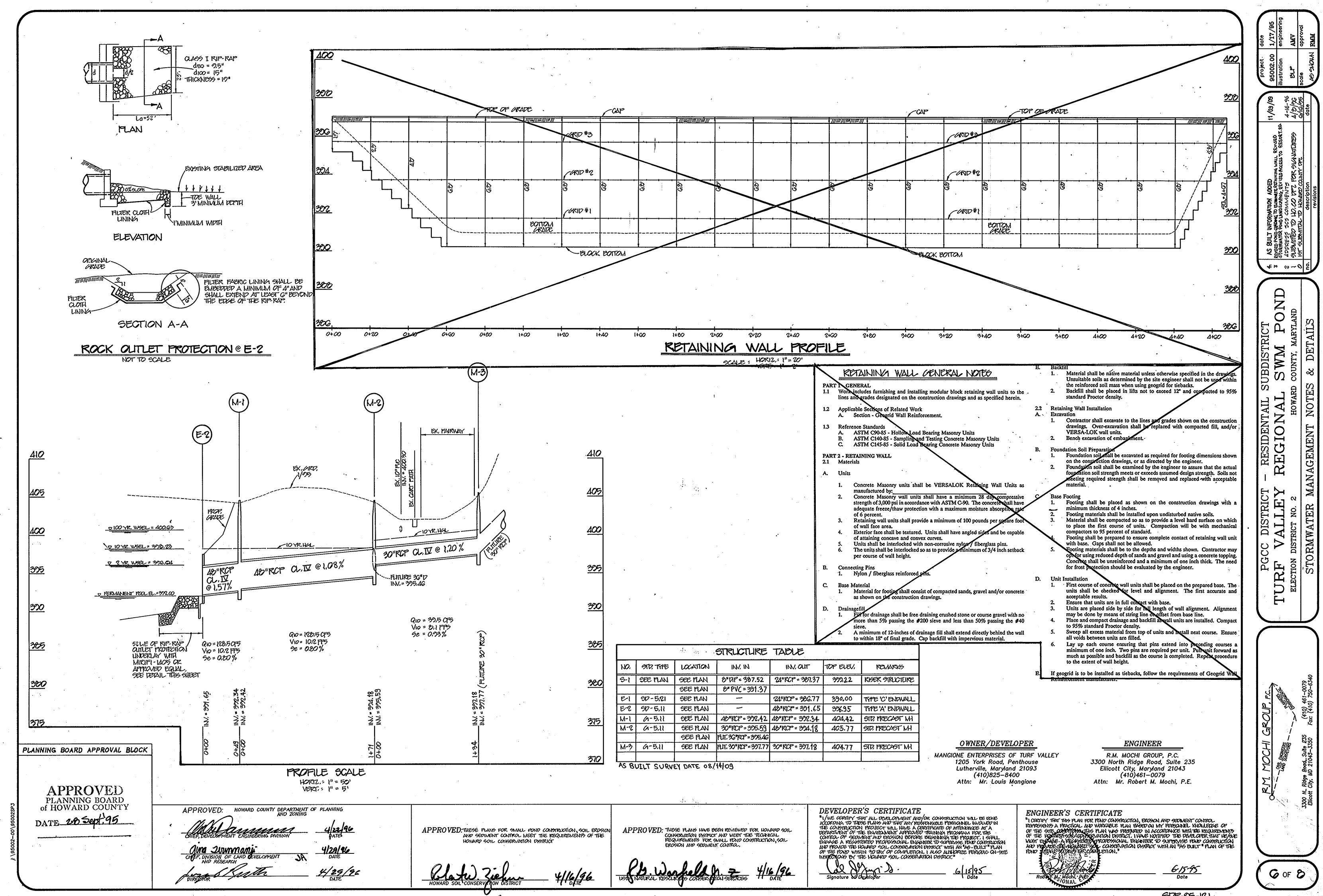




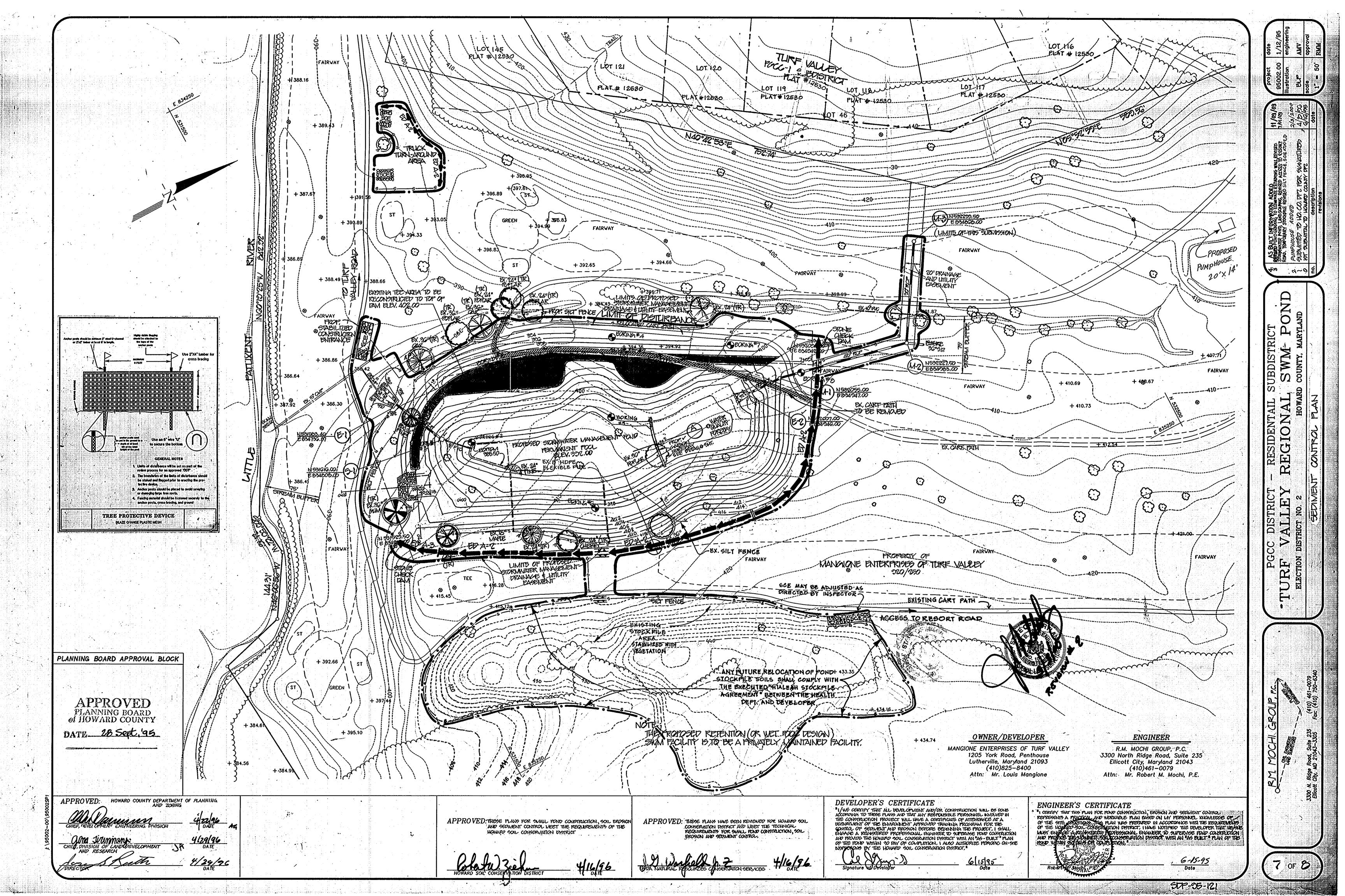
SDP-05-121







SDP-05-121



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

Seedbed Preparation: Loosen upper three inches of soil be raking, discing or other acceptable means before seeding. (If not previously loosened)

Soil Amendments: In lieu of soil test recommendations, use on the following

Harrow or disc into upper three inches of soil.

Fescue and mulch with 2 tons/acre well anchored straw.

1) Preferred - Apply 2 tons per acre dolomitic limestone (92 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 (9 lbs/1000 sf). 2) Acceptable - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sf) and 1000 lbs per acre 10-10-10 fertilizer (23 lbs/1000 sf) before seeding.

Seeding: For the periods March 1 through April 30 and August 1 through October 15. seed with 60 lbs per acre (1.4 lbs/1000 sf) of Kentucky 31 Tail Fescue. For the period May 1 through July 31, seed with 60 lbs Kentucky 31 Tall Fescue per acre and 2 lbs per acre (0.05 lbs/1000 sf) of Weeping Lovegrass. During the period of October 16 through February 28, protect site by: Option 1) 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring. Option 2) use sod. Option 3) seed with 60 lbs/acre Kentucky 31 Tall

Mulching: Apply 1-1/12 to 2 tons per acre (70 to 90 lbs/1000 sf) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sf) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sf) for anchoring.

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

TEMPORARY SEEDING NOTES

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

Seedbed Preparation: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding. (If not previously loosened)

Soil Amendments: Apply 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sf). Seeding: For periods March 1 through April 30 and from August 15 through November 15, seed with 2-1/2 bushel per acre of annual rye (3.2 lbs/1000 sf). For the period May 1 through August 14, seed with 3 lbs per acre of Weeping Lovegrass (0.07 lbs/1000 sf). For the period November 16 through February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use sod.

Mulching: Apply 1-1/2 to 2 tons per acre (70 to 90 lbs/1000 sf) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sf) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sf) for anchorina.

Refer to the 1983 Maryland Standards and Specifications for Soil Erosion and Sediment Control for rate and methods not covered.

SEDIMENT CONTROL NOTES

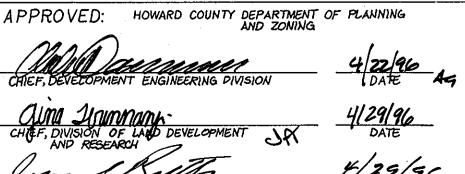
- 1. A minimum of 48 hours notice must be given to the Howard County Office of Inspections and Permits prior to the start of any construction.
- 2. All vegetative and structural practices are to be installed accordingly to the provisions of this plan and are to be in conformance with the 1983 Maryland Standards and Specifications for Soil Erosion and Sediment
- 3. Following initial soil disturbances or redisturbance, permanent or temporary stabilization shall be completed within: a) 72 hours for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1, b) 5 calendar days as to all other disturbed
- or graded areas on the project site. All disturbed areas must be stabilized within the time period specified above in accordance with the 1983 Maryland Standards and Specifications for Soil Erosion and Sediment Control for Permanent Seedings (Sec. 51) Sod (Sec. 54). Temporary Seeding (Sec. 50) and Mulching (Sec. 52). Temporary stabilization with mulch alone can only be done when recommended seeding dates do not allow for proper germination and
- establishment of grasses. 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: 4.67 Ac.± Total Area of Site: Area to be Disturbed Area to be roofed or paved:
- NONE 394 Ac.± 15,000 c.y. ± 7,500 c.y.± Area to be vegetatively stabilized: Total Cut: Offsite Waste/Borrow Area: None See Note 10 Below
- Any sediment control practice which is disturbed by grading activity fo placement of utilities must be repaired on the same day of disturbance.
- Additional sediment controls must be provided, if deemed necessary by the Howard County DILP Sediment Control Inspector.
- Quantities and estimates shown are for sediment control purposes only.
 Contractor shall prepare his/her own quantity estimates to his/her satisfaction.
 Earthwork spoil to be taken to a site with an approved sediment control plan.

SEQUENCE OF CONSTRUCTION

- 1. Obtain all required permits, approvals and licenses from appropriate agencies. 2. Notify Howard County Construction Inspection Division (313-1880) at least five (5)
- working days prior to starting work on these plans. (5 DAYS) 3. Install all tree protection fence prior to installation of sediment & erosion control devices. ((PAY)
- 4. Clear and grub for sediment and erosion control measures only. Install stabilized
- construction entrance. (2 DAYS)
- 5. Install all sediment and erosion control measures and devices only as indicated on the plans. All sediment control devices are to be inspected daily and after each rainfall. Repair sediment devices as required. (5 DAYS)
- 6. Clear and grub for the remainder of the site. (5 DAYS)
- Construct the proposed SWM facility, begin storm drain system from E-2 to M-3, After embankment is constructed. (20 DAYS) Install sump pits as required keeping disturbed areas dry at all times through
- construction by sump pit dewatering.
- 9. Tempporarily block the 12" CMP at E-1 until site is stabilized.
- 10. Stabilize all slopes immediately upon completion of grading.
- 11. When all contributing areas to the sediment control devices have been stabilized and with the permission of the sediment control inspector, the device may be removed and/or backfilled and the area brought to final design grade. Stabilize all remaining areas in accordance with permanent seeding notes. (5 DAYS)
- 12. Notify Howard County Office of Inspections and Permits for final inspection of completed project.



APPROVED PLANNING BOARD



STANDARD HOWARD COUNTY

TOP ELEV. = 300,50

-TRACH RACK-4910ES

CREST ELEV. = 307,00

FOR SCREW HANDLE

-BRCK/STONE LEDGE

JOINT SEATING COMPOUND (TYP.)

EXTEND 8"PVC TO WITHIN 1'-0"

-OF BOTTOM WITH 90° B"FVC ELBOW

PROMOE 8"AMERICAN-DARLING AWWA C500

CATE VALVE FLANGED OS-Y OR

G" × 8.7 C WITH 1/2" X G" ANCHOR BOLTS WELLED AT EACH END (TY).

#4 BARG@ 12"O.C.

EACH WAY

#4 BARS 12"O.C.

- EACH WAY

#4 BARS 6"0.6,

-EACH WAY

APPROVED EQUAL,

#G DOWELS @ G"O.C.

BENT AS SHOWN

(SCH 80)

(SEE DETAIL THIS SHEET,

FRAME AND COMER (301)

ÉHANDLE

HÓ, CO, STEPS (G-5,21)

PROVIDE.

PROFILE VIEW A

CONCRETE RISER DETAIL

NOTE: RISER STRUCTURE IS CAST-IN-PLACE AS SHOWN.

EQUIVALENT PRE-CAST ALTERNATIVE TO BE DETAILED

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

TOP ELEV. = 309,50

CKEST ELEV.=397.00

INV = 392,00

PROFILE VIEW B

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

CONCRETE RISER DETAIL

9"X9" CORNER POST

BY OTHERS.

RACK

(45IDES)

#4 BARS

WATERSTOP STIFFENER

JOINT SEATTNE

COMPOUND (TYP.)

CONC. CRADLE

#G DOWELS

@G"OC. BENT

AS SHOWN -

#G BARG @ G"O.C.

EACH WAY

SEE DETAIL SHT.3

RING

12"O.C. EACH WAY

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



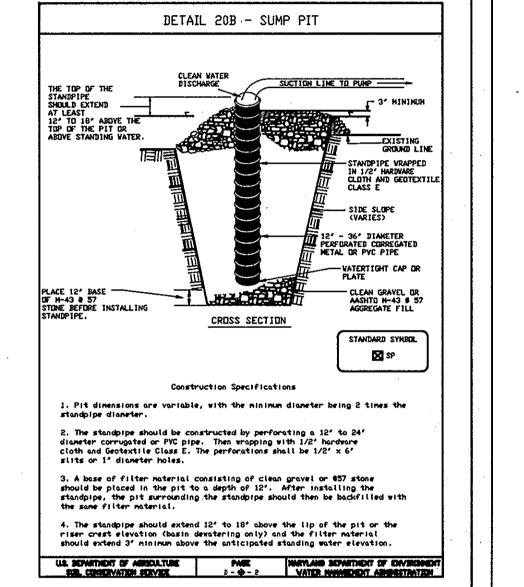
DEVELOPER'S CERTIFICATE "I/WE CERTIFY THAT ALL TEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL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

ENGINEER'S CERTIFICATE "I CORTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SETMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONNEL KNOWLEDGE OF OF THE SITE ON THE PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOMEOUS SOIL CONSEQUATION DISTRICT, I HAVE NOTIFIED THE DEVELOPER THAT HE/GHE MUST BY THE HOWERS SOFTESSIONAL ENGINEER TO SUPERIOR FOND CONSTRUCTION AND PROMOTE THE HOWERS SOIL CONSERVATION DISTRICT WITH AN "AS BUILT " PLAN OF THE POND WITHIN SO TAKES OF ECONFICTION,"

SILT FENCE Silt Fence Besign Criteria Silt Fence Length Slope Steepness Stope Length Flatter than 50:1 125 feet 50:1 to 10:1 10:1 to 5:1 100 feet 750 feet 5:1 to 3:1 500 feet 3:1 to 2:1 2:1 and steeper Note: In areas of less than 2% slope and sandy soils (USDA general classificatio system, soil Class A) maximum slope length and stilt fence length will be unlimited. In these areas a stilt fence may be the only perimeter control

bulges occur or when sediment accumulation reached 50% of the fabric height. U.S. BEPARTMENT OF AGRICULTURE PAGE HARTLAND DEPARTMENT OF ENVEXOR

STR. CONSERVATION SERVICE E - 85-- SA VATER NAMAGEBOUT ADMINISTRATIO



DETAIL 1 - EARTH DIKE

VVVV

PLAN VIEW

grade to an outlet. Spot elevations may be necessary for grades less than 1%.

2. Runoff diverted from a disturbed area shall be conveyed to a sediment

3. Runoff diverted from an undisturbed area shall outlet directly into an

shall be removed and disposed of so as not to interfere with the proper

5. The dike shall be excavated or shaped to line, grade and cross section as

required to meet the criteria specified herein and be free of bank projections or other irregularities which will impede normal flow.

7. All earth removed and not needed for construction shall be placed so that it will not interfere with the functioning of the dike.

2. Seed and cover with Erosion Control Matting or line with sod. 3. $4^{\circ}-7^{\circ}$ stone or recycled concrete equivalent pressed into

i. All temporary earth dikes shall have uninterrupted positive

undisturbed, stabilized area at a non-erosive velocity.

6. Fill shall be compacted by earth moving equipment

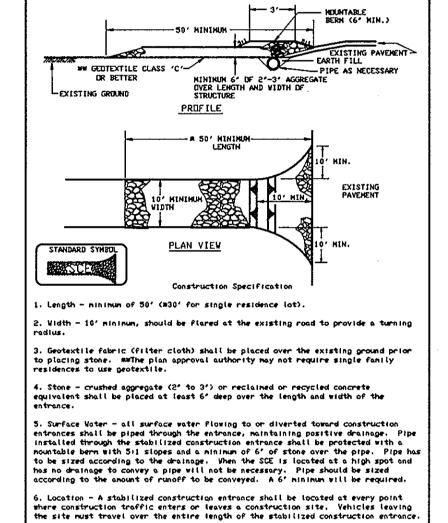
DIKE A DIKE B

A-2 8-3

b-DIKE WIDTH

c-FLOW WIDTH

d-FLOW DEPTH 12"



DETAIL 22 - SILT FENCE

1. Fence posts shall be a ninimum of 36° long driven 16° ninimum into the ground. Wood posts shall be $11/2^{\circ} \times 11/2^{\circ}$ square (ninimum) cut, or 13/4° diameter

ntninum) round and shall be of sound oughtfy hardwood. Steel posts will be

. Geotextile shall be fastened securely to each fence post with wire ties

. Where ends of geotextile fabric come together, they shall be overlapped

DETAIL 24 - STABILIZED_CONSTRUCTION ENTRANCE

FENCE POST SECTION HINIMUM 20' ABOVE GROUND

——SF ——

CROSS SECTION

50 (bs/in (min.) Test: HSMT 509 20 (bs/in (min.) Test: HSMT 509 0.3 gal ft*/ minute (max.) Test: HSMT 322

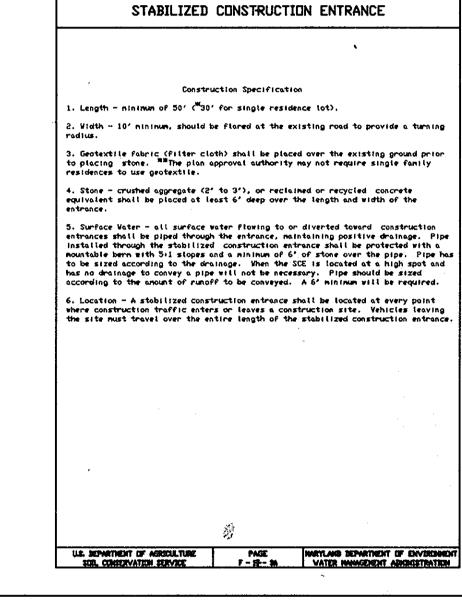
PERSPECTIVE_VIEW

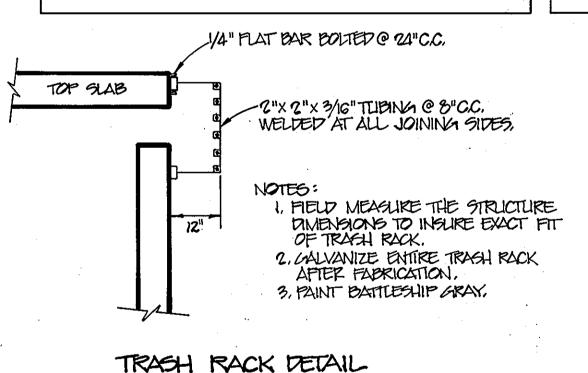
JOINING TWO ADJACENT SILT

Tensile Strength Tensile Modulus

Filtering Efficiency 75% (min.)

Flow Rate





NOT TO SCALE

1, CONCRETE SHALL BE MSHA MIX#3 (FC > 3,500 PSI) 2. REINFORCING STEEL: GRADE GO

3. FACE FORMS FOR WALLS OF OLITLET STRUCTURE SHALL UTILIZE L.M. 900FIELD CO., T-9055 FORM LINERS (RANDOM SPLIT-FACE ROCK), OPTIONAL

PROVIDE ROUGH BROOM FINISH ON TOP OF SLAB ANOHOR BOLTS SHALL BE INSTALLED IN ACCORDANCE WITH SECTION G.07.03.50

OF THE MGHA STANDARDS AND SPECIFICATIONS G, ALL EXPOSED METAL SURFACES SHALL BE PAINTED IN ACCORDANCE WITH SECTION 6,07,03,60 OF THE MSHA STANDARDS AND SPECIFICATIONS

7. ALL REINFORCING SPLICES SHALL BE LAP SPLICES OF 30 BAR DIAMETERS UNLESS SHOWN OTHERWISE,

8. ALL FILTER FABRIC SHALL BE POLY-FILTER'X' OR EQUIVALENT, 9, ALL EXPOSED EDGES OF CONCRETE TO BE CHAMPERED 1/2" X 1/2".

//==== HO, CO, STEPS 6-521-ADDITIONAL #G BARS @ 2'-0" AS SHOWN FOR CORNER TREATMENT MIN, 18" LAP) PLAN VIEW

8 ADDITIONAL #GBARS AS SHOWN 2'-6" #GBAR5@G"00 ラーク"

OWNER/DEVELOPER

MANGIONE ENTERPRISES OF TURF VALLEY 1205 York Road, Penthouse Lutherville, Maryland 21093 (410)825-8400 Attn: Mr. Louis Mangione

ENGINEER R.M. MOCHI GROUP, P.C. 3300 North Ridge Road, Suite 235 Ellicott City, Maryland 21043 (410)461-0079 Attn: Mr. Robert M. Mochi, P.E.

6-15-95

26/26 10/38 10/38

0-0

of HOWARD COUNTY

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

5DP-05-121