

SITE DEVELOPMENT PLAN DUCKETT'S RIDGE

(PHASE 1 AND 2)

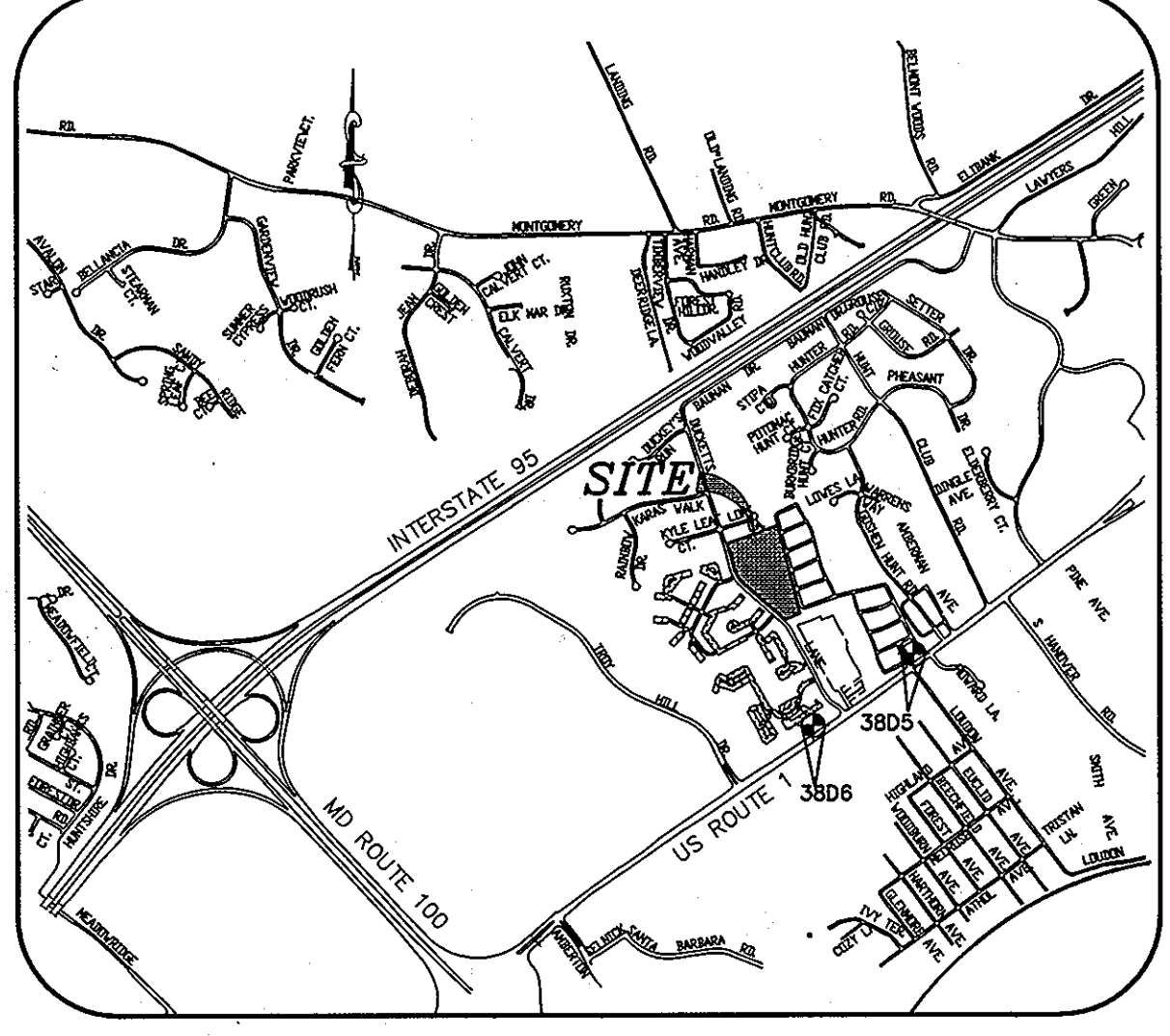
AGE RESTRICTED ADULT HOUSING UNITS 1-52 AND COMMUNITY BUILDING FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

PERMIT INFORMATION BLOCK					
SUBDIVISION NAME: THE LEGACY AT DUCKETT'S RIDGE PARCEL A		SECTION/AREA PHASE I		PARCEL: 569 PAR A	
PLAT # 13	GRID(S) 12	ZONING R-12	TAX MAP NO. 37	ELECTION DISTRICT 1ST	CENSUS TRACT 601202
WATER CODE 550			SEWER CODE 2152700		

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UNIVERSAL DESIGN REQUIREMENTS FOR AGE-RESTRICTED ADULT HOUSING IN HOWARD COUNTY

- FOR SINGLE FAMILY DETACHED AND ATTACHED DEVELOPMENT A "NO-STEP" ACCESS TO THE FRONT ENTRANCE TO THE COMMUNITY BUILDING AND ALL DWELLING.
- 36" WIDE FRONT DOOR WITH EXTERIOR LIGHTING OF THE ENTRANCE.
- ALL INTERIOR DOORWAYS AT LEAST 32" WIDE (36" IS PREFERABLE).
- HALLWAYS AT LEAST 36" WIDE (40-42" IS PREFERABLE).
- COMPLETE LIVING AREA INCLUDING MASTER BEDROOM AND BATH ON FIRST FLOOR.
- LEVER HANDLES IN INTERIOR AND EXTERIOR DOORS.
- BLOCKING FOR GRAB BARS IN WALLS IN BATHROOM WALLS NEAR TOILET AND SHOWER.



VICINITY MAP
SCALE: 1"=2000'

ADDRESS CHART

PHASING TABLE

	PHASE ONE	PHASE TWO
NO. OF UNITS	27	25
UNITS NUMBERS	1-27	28-52
OTHER	COMMUNITY BUILDING	

PHASE	# OF TENTATIVE ALLOCATIONS	ALLOCATION YEAR	SDP SUBMISSION MILESTONE DATES
I	27	2008	BY DEC. 2, 2005
II	25	2009	BETWEEN JULY 1, 2006 & NOV. 1, 2006

PHASE I

UNIT #	ADDRESS
01	6105 TAGGART TRAIL
02	6107 TAGGART TRAIL
03	6109 TAGGART TRAIL
04	6111 TAGGART TRAIL
05	6115 TAGGART TRAIL
06	6117 TAGGART TRAIL
07	6121 TAGGART TRAIL
08	6123 TAGGART TRAIL
09	6125 TAGGART TRAIL
10	6127 TAGGART TRAIL
11	6129 TAGGART TRAIL
12	6133 TAGGART TRAIL
13	6135 TAGGART TRAIL
14	6137 TAGGART TRAIL
15	6139 TAGGART TRAIL
16	6141 TAGGART TRAIL
17	6143 TAGGART TRAIL
18	6134 TAGGART TRAIL
19	6132 TAGGART TRAIL
20	6130 TAGGART TRAIL
21	6128 TAGGART TRAIL
22	6126 TAGGART TRAIL
23	6108 TAGGART TRAIL
24	6106 TAGGART TRAIL
25	6104 TAGGART TRAIL
26	6203 GREEN CHASE RUN
27	6205 GREEN CHASE RUN
COMMUNITY BUILDING 6111 KASHKA COURT	

PHASE II

UNIT #	ADDRESS
28	6207 GREEN CHASE RUN
29	6115 KASHKA COURT
30	6117 KASHKA COURT
31	6116 KASHKA COURT
32	6114 KASHKA COURT
33	6112 KASHKA COURT
34	6108 KASHKA COURT
35	6106 KASHKA COURT
36	6104 KASHKA COURT
37	6245 GREEN CHASE RUN
38	6247 GREEN CHASE RUN
39	6249 GREEN CHASE RUN
40	6248 GREEN CHASE RUN
41	6246 GREEN CHASE RUN
42	6244 GREEN CHASE RUN
43	6242 GREEN CHASE RUN
44	6220 GREEN CHASE RUN
45	6218 GREEN CHASE RUN
46	6216 GREEN CHASE RUN
47	6214 GREEN CHASE RUN
48	6212 GREEN CHASE RUN
49	6208 GREEN CHASE RUN
50	6206 GREEN CHASE RUN
51	6204 GREEN CHASE RUN
52	6202 GREEN CHASE RUN

OWNER & DEVELOPER
BRANTLY DEVELOPMENT GROUP
8835-P PARKWAY
COLUMBIA MD 21045

GENERAL NOTES:

- PROJECT BACKGROUND:
TAX MAP : 37, PARCEL: 569 GRID: 12
ADDRESS: DUCKETT'S RIDGE, ELKRIE 21075
ELECTION DISTRICT : FIRST
ZONING: R-12
DEED REFERENCE : L. 6739, F. 699
DPZ FILES: SA-04-007, HP-06-055, F-07-048
LOCATION: ALONG DUCKETT'S RIDGE, APPROXIMATELY 1.5 MILES NORTHWEST OF ROUTE 1, ACROSS FROM MARBLE HILL DEVELOPMENT.
- SITE DATA:
TOTAL TRACT AREA: 10.03 AC±
AREA OF FLOODPLAIN AND STEEP SLOPES: 0.00 AC.
NET AREA: 10.03AC± - 0.00= 10.03 AC±
NUMBER OF PARCELS: 1
NUMBER OF OPEN SPACE LOTS: 0
PROPOSED USE: AGE-RESTRICTED ADULT HOUSING
PROPOSED STRUCTURES: TWO STORY TOWNHOUSE UNITS & COMMUNITY BLDG.
NUMBER OF UNITS ALLOWED AT 6 UNITS/NET ACRE (ZONING SECTION 131.N.1.C/R-12) = 10.03*6 UNITS = 60 UNITS; NUMBER OF UNITS PROPOSED: 52 UNITS NUMBER OF PARKING SPACES REQUIRED: 2 SPA./UNITS=104 SPACES
NUMBER OF PARKING SPACES PROVIDED:
GARAGE/DRIVEWAY: 4/UNIT= 208 SPACES
ON STREET: 16 SPACES
TOTAL PARKING SPACES PROVIDED: 224 SPACES
REQUIRED OPEN AREA: 35% OF GROSS AREA * 10.03 AC = 3.511 AC.
PROVIDED OPEN AREA: 5.76 AC± (57% OF GROSS AREA)
AREA OF NON CREDITED OPEN AREA: 1.87 AC.
PROVIDED CREDITED OPEN AREA: 3.89 AC± (38.6 % OF GROSS AREA)
REQUIRED AREA FOR ON-SITE COMMUNITY BLDG:
20 SQFT/DWELLING UNIT * 52 UNITS = 1040 SQFT
COMMUNITY BLDG AREA PROVIDED: 1050 SQFT MINIMUM HOME PARK: 157 AC.
TOTAL AREA OF RECREATIONAL OPEN SPACE REQUIRED PER UNIT= 400 SQ.FT.
TOTAL AREA OF RECREATIONAL OPEN SPACE PROVIDED= 52 X 400 =20,800 SQ.FT.
- BOUNDARY & TOPOGRAPHY SHOWN HEREON IS BASED ON FIELD SURVEY PERFORMED BY MILDENBERG, BOENDER & ASSOCIATES ON OR ABOUT DECEMBER 2003.
- MINIMUM LOT SIZE AND OPEN AREA REQUIREMENTS SHOWN ABOVE ARE IN ACCORDANCE WITH SECTION 131.N.(1)(6) OF THE HOWARD COUNTY ZONING REGULATIONS (02/02/04)
- HORIZONTAL NATURAL SURFACE RELATED TO THE MARYLAND MAD 83 (HORZ) AND NAV08B (VERT) AS PROJECTED FROM HOWARD COUNTY CONTROL STATIONS NO. 3805 & 3806. CONTROL STATION CONSIST OF STAMPED DISK SET ON TOP OF CONCRETE COLUMN.
- STA. No. 3805 N 558378.602 ELEV. 192.85 E 1386524.277
STA. No. 3806 N 557165.429 ELEV. 174.525 E 1384992.26
- PROPERTY IS LOCATED WITHIN THE METROPOLITAN DISTRICT. PUBLIC WATER AND PRIVATE SEWER WILL BE UTILIZED. PRIVATE INSIDE METERS SHALL BE USED.
- PUBLIC WATER AND SEWAGE ALLOCATION WILL BE GRANTED AT THE TIME OF THE ISSUANCE OF THE BUILDING PERMIT IF CAPACITY IS AVAILABLE.
- WATER & SEWER SERVICE TO THESE LOTS WILL BE GRANTED UNDER THE PROVISIONS OF SECTION 18.122.B OF THE HOWARD COUNTY CODE.
- NOISE STUDY IS NOT REQUIRED BECAUSE THE PROJECT IS LOCATED OVER 1,000 FT FROM RT.1.
- NO STEEP SLOPES, STREAMS, OR FLOODPLAINS EXIST ON SITE.
- THE WETLANDS DELINEATION AND FOREST STAND DELINEATION WAS PREPARED BY ECO-SCIENCE PROFESSIONALS IN JANUARY 2004 AND WILL BE APPROVED WITH THIS SITE DEVELOPMENT PLAN.
- THE TRAFFIC STUDY FOR THIS PROJECT WAS PREPARED BY MARS GROUP, DATED DEC. 2003, AND WAS APPROVED WITH THIS SITE DEVELOPMENT PLAN.
- TRASH PICK-UP TO BE PROVIDED BY PRIVATE CONTRACTOR.
- SWM WILL BE PROVIDED VIA THE USE OF A MICRO-POOL HAZARDOUS CLASS A EXTENDED DETENTION POND SHEET FLOW TO BUFFER, NATURAL CONSERVATION AREA, GRASS CHANNEL CREDIT AND STONE RAY TRENCH. ALL FACILITIES ARE PRIVATELY OWNED AND MAINTAINED. 10-YEAR MANAGEMENT IS PROVIDED DUE TO DOWNSTREAM STORM DRAINS. 100-YEAR MANAGEMENT IS PROVIDED DUE TO SITE DRAINAGE TO HARWOOD PARK.
- OUTDOOR LIGHTING SHALL COMPLY WITH SECTION 134 OF THE 02/02/04 ZONING REGULATIONS.
- 10% OF THE UNITS WILL BE DEDICATED FOR MODERATE INCOME HOUSING.
PHASE I PHASE II
TOTAL UNITS PROVIDED: 27 25
MIHU UNITS REQUIRED: 3 3
MIHU UNITS PROVIDED: 3 3
- NO BURIAL GROUNDS OR HISTORIC STRUCTURES EXIST ON SITE.
- THIS PLAN IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION REGULATIONS.
THIS DEVELOPMENT IS SUBJECT TO BA-CASE # 04-030-C. PETITION WAS GRANTED ON JAN. 18, 2005 SUBJECT TO THE FOLLOWING CONDITIONS: A. THE PETITIONER WILL INSTALL A 6" FENCE ALONG THE EAST LOT LINE AND ALONG THE REAR OF LOTS 31 AND 32 OF THE GLEN COVE ESTATES SUBDIVISION IN ORDER TO PREVENT PEDESTRIAN TRAFFIC FROM THE ADJOINING MOBILE HOME PARK; B. THE PETITIONER WILL INSTALL A TYPE "C" BUFFER ALONG THE NORTH, EAST OR SOUTH SIDE OF THE PROPERTY IF ANY OF THE EXISTING VEGETATION IS DESTROYED; C. THE PETITIONER WILL INSTALL OR CAUSE TO BE INSTALLED A DECCELERATION LANE ALONG DUCKETT'S RIDGE FOR NORTHBOUND TRAFFIC ENTERING THE DRIVEWAY TO THE PROPERTY.
- SOILS INFORMATION IS BASED ON SOILS MAP 26 OF THE HOWARD COUNTY SOIL SURVEY DATED JULY 1968.
- DRIVEWAYS SHALL BE PROVIDED PRIOR TO RESIDENTIAL OCCUPANCY TO ENSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:
A) WIDTH - 12 FEET (14 FEET SERVING MORE THAN ONE RESIDENCE)
B) SURFACE - 6 INCHES OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING (1-1/2" MIN.)
C) GEOMETRY - MINIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE AND MINIMUM OF 45-FOOT RADIUS.
D) STRUCTURES (CULVERTS/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (H25 LOADING),
E) DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100-YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE.
F) STRUCTURE CLEARANCES - MINIMUM 12 FEET
G) MAINTENANCE - SUFFICIENT TO ENSURE ALL WEATHER USE.
- NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE WETLANDS, STREAMS OR THEIR REQUIRED BUFFERS, AND FOREST CONSERVATION EASEMENT AREAS, EXCEPT AS SHOWN ON APPROVED PLANS.
- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. LANDSCAPE SURETY IN THE AMOUNT OF \$76,500.00 HAS BEEN POSTED AS PART OF THE DEVELOPER'S AGREEMENT.
- FOREST CONSERVATION EASEMENT(S) HAS BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 16.200 OF HOWARD COUNTY CODE AND FOREST CONSERVATION ACT. NO CLEARING, GRADING, OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT, EXCEPT AS SHOWN ON AN APPROVED ROAD CONSTRUCTION DRAWING OR SITE DEVELOPMENT PLAN. HOWEVER, FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OF FOREST CONSERVATION EASEMENT ARE ALLOWED.
- THE FOREST CONSERVATION EASEMENT ESTABLISHED BY PROVIDING 1.51 ACRES OF ONSITE RETENTION, 0.27 ACRES OF ONSITE REFORESTATION, 1.73 ACRES OF OFFSITE REFORESTATION AT BRANTWOOD, 2/1, PRES. PARCEL F, AND THE PAYMENT OF \$21,780.00 TO THE HO. CO. FOREST CONSERVATION FUND FOR THE OUTSTANDING 1.00 ACRE OF REFORESTATION. FOREST CONSERVATION SURETY IN THE AMOUNT OF \$19,035.72 HAS BEEN POSTED AS A PART OF THE DEVELOPER'S AGREEMENT FOR THE 1.51 ACRES OF ONSITE RETENTION (\$13,155.12), THE 0.27 ACRES OF ONSITE REFORESTATION (\$5,880.60), AND FOREST CONSERVATION SURETY IN THE AMOUNT OF \$3,779.40 HAS BEEN POSTED AS A PART OF THE DEVELOPER'S AGREEMENT FOR THE 1.73 ACRES OF OFFSITE REFORESTATION.
- THIS PROJECT IS REQUIRED TO COMPLY WITH THE "UNIVERSAL DESIGN STANDARDS FOR AGE RESTRICTED ADULT HOUSING AND COVENANTS THAT CONTAIN THE AGE RESTRICTED INFORMATION ARE RECORDED AMONG THE LAND RECORD OF HOWARD COUNTY, MARYLAND AT L10752, F. 074.
- THE DOCUMENTS AND COVENANTS THAT CONTAIN THE MODERATE INCOME HOUSING INFORMATION ARE RECORDED AMONG THE LAND RECORD OF HOWARD COUNTY, MARYLAND AT L11348, F. 679.
- A KNOX BOX (FIRE DEPARTMENT ACCESS BOX) IS REQUIRED TO BE PLACED ON THE FRONT OF THE COMMUNITY BUILDING. IT SHALL BE PLACED ON THE RIGHT OF THE FRONT ENTRANCE AT THE RANGE OF 5' TO 6' LATERALLY FROM THE DOOR. THE BOX SHALL BE ELECTRONICALLY SUPERVISED TO NOTIFY THE OWNER THAT IT IS BEING ACCESSED (INTEGRATED WITH THE FIRE ALARM SYSTEM) PER NFPA-10-12.1.
- ALL OFF-STREET PARKING IS VISITOR PARKING.
- ALL PROPOSED SIDEWALK ARE 5' WIDTH.
- THIS PROJECT IS SUBJECT TO WAIVER PETITION WP-06-55 REQUESTING TO WAIVE SECTION 16.144(f)(1)(m),(p). TO NOT BE REQUIRED TO SUBMIT AND OBTAIN APPROVAL OF THE PRELIMINARY PLAN AND TO NOT BE REQUIRED TO OBTAIN APPROVAL AND RECORD A FINAL SUBDIVISION PLAN FOR MULTIFAMILY DEVELOPMENT PROJECT WITH AN APPROVED SKETCH PLAN. APPROVE ON JANUARY 24, 2006, SUBJECT TO FOLLOWING CONDITIONS: THE RED-LINE REVISION TO ADD PHASE II TO SDP-06-70 MUST BE SUBMITTED BETWEEN 7/1/06 AND 11/1/06.
- 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 ATLEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 ATLEAST 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 OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
- STREET LIGHT PLACEMENT AND THE TYPE OF FIXTURE AND POLE SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME III (1993) AND AS MODIFIED BY "GUIDELINES FOR STREET LIGHTS IN RESIDENTIAL DEVELOPMENTS (JUNE 1993)". A MINIMUM SPACING OF 20' SHALL BE MAINTAINED BETWEEN ANY STREET LIGHTS AND ANY TREE.
- ALL SIGN POSTS USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A 2" GALVANIZED STEEL PERFORATED, SQUARE TUBE POST (14 GAUGE) INSERTED INTO A 2-1/2" GALVANIZED STEEL PERFORATED, SQUARE TUBE SLEEVE (12 GAUGE) - 3' LONG. A GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON TOP OF EACH POST.
- ALL PLAN DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
- THE EXISTING TOPOGRAPHY IS TAKEN FROM FIELD SURVEY WITH TWO FOOT COUNTER INTERVALS PREPARED BY MILDENBERG, BOENDER & ASSOCIATES INC. ON OR ABOUT DECEMBER 2003.
- WATER IS PUBLIC CONTRACT 14-4341-D.
- SEWER IS MIXED PUBLIC / PRIVATE CONTRACT 14-4341-D.
- EXISTING UTILITIES ARE BASED ON EXISTING W&S CONTRACT # 768-D & EXISTING SEWER CONTRACT # 755-D.
- MDE TRACKING NUMBER: #200762320.

AS-BUILT CERTIFICATION

I HEREBY CERTIFY THAT THE FACILITY SHOWN ON THIS PLAN WAS CONSTRUCTED AS SHOWN ON THE "AS-BUILT" PLANS AND MEETS THE APPROVED PLANS AND SPECIFICATIONS.

P.E. NO.:
DATE:

SIGNATURE: _____

CERTIFY MEANS TO STATE OR DECLARE A PROFESSIONAL OPINION BASED UPON ON-SITE INSPECTIONS AND MATERIAL TESTS WHICH ARE CONDUCTED DURING CONSTRUCTION. THE ON-SITE INSPECTIONS AND MATERIAL TESTS ARE THOSE INSPECTIONS AND TESTS DEEMED SUFFICIENT AND APPROPRIATE COMMONLY ACCEPTED ENGINEERING STANDARDS. CERTIFY DOES NOT MEAN OR IMPLY A GUARANTEE BY THE ENGINEER NOR DOES ENGINEER'S CERTIFICATION RELIEVE ANY OTHER PARTY FROM MEETING REQUIREMENTS IMPOSED BY CONTRACT, EMPLOYMENT, OR OTHER MEANS, INCLUDING MEETING COMMONLY ACCEPTED INDUSTRY PRACTICES.

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 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 OF DEVELOPER: _____ DATE: 5/24/08

PRINTED NAME OF DEVELOPER: JOHN E. LEGRAW

BY THE ENGINEER:

I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. 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.

SIGNATURE OF ENGINEER: _____ DATE: 5/28/08

PRINTED NAME OF ENGINEER: R. JACOB HILKAT

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

USDA - NATURAL RESOURCES CONSERVATION SERVICE DATE: _____

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

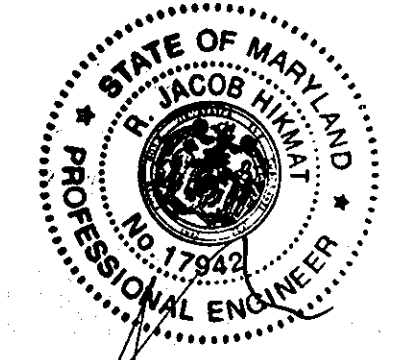
HOWARD SOIL CONSERVATION DISTRICT DATE: _____

APPROVED: DEPARTMENT OF PLANNING AND ZONING

DATE: 10/28

DATE: 2/9/09

DATE: 2/11/05



I hereby certify that these documents were prepared or approved by me and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 17942, Exp Date 9/3/08

Project	05-020	date	MAY 08
Illustration	RDB	engineering	RDB
score	RDB	approval	RDB
AS SHOWN			

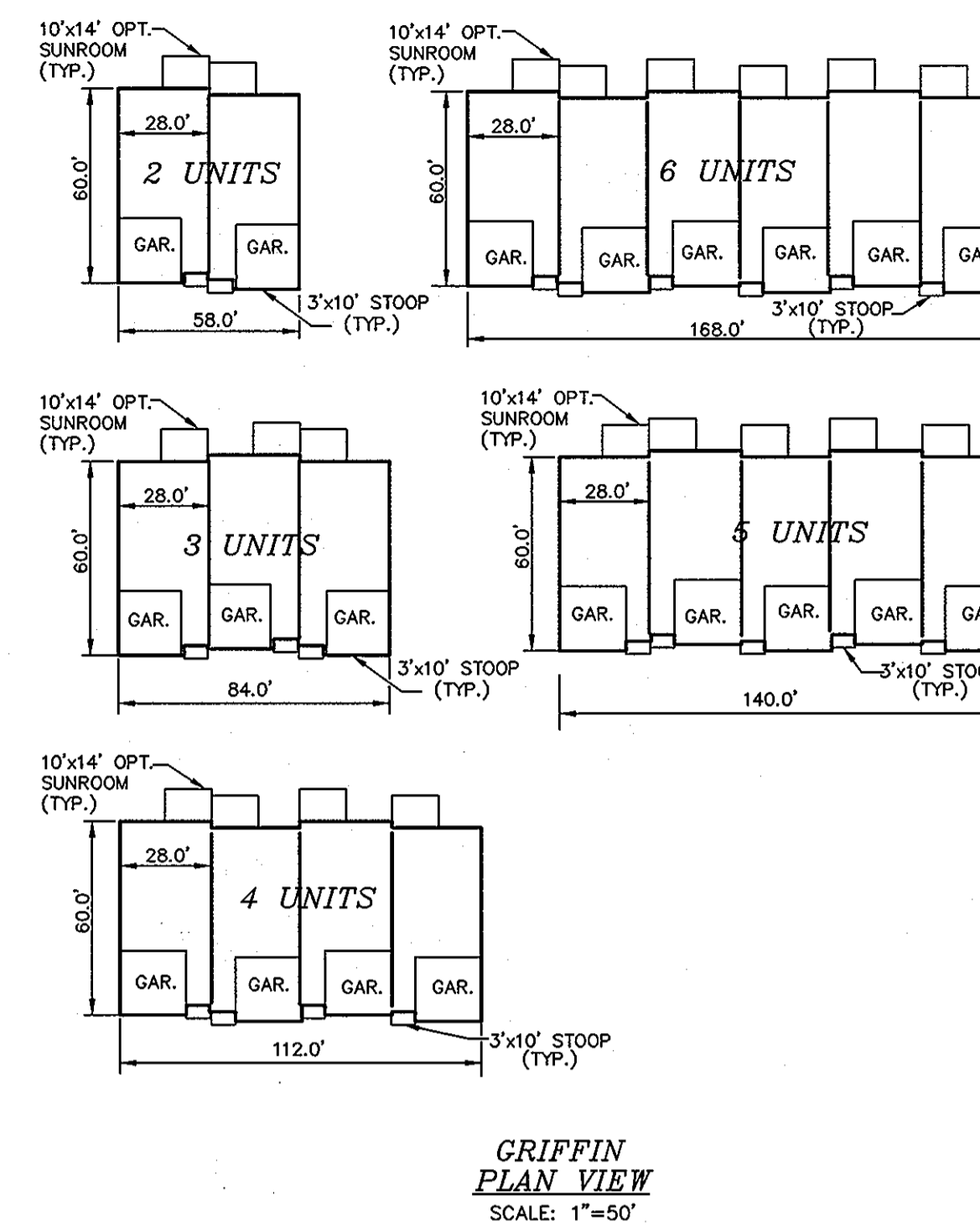
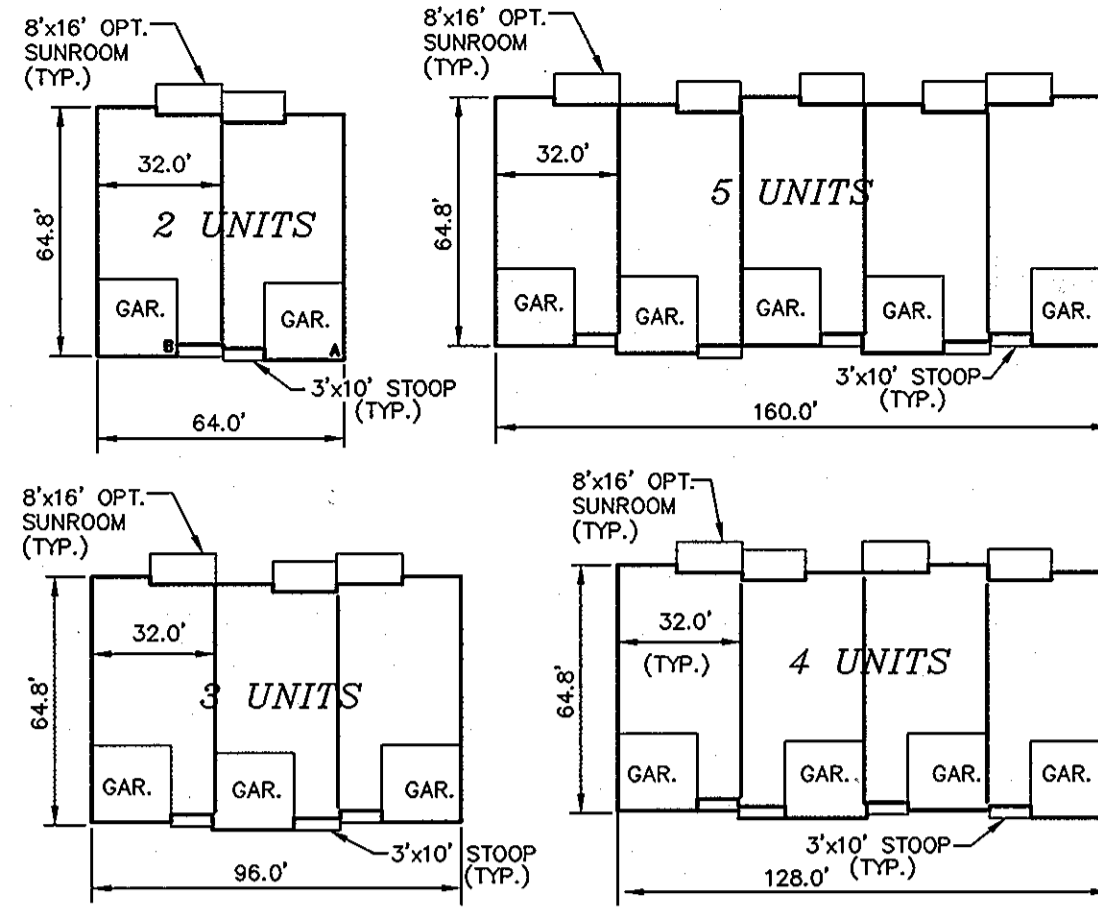
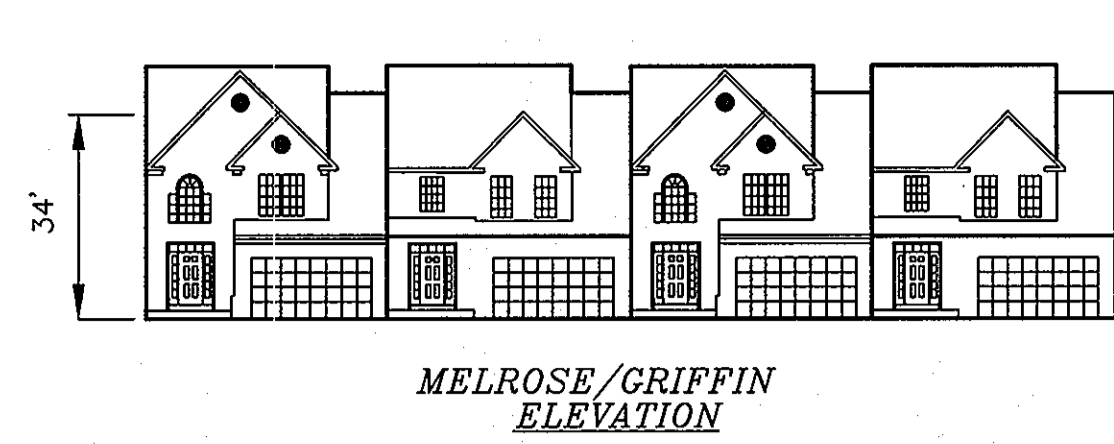
date	
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revisions	

THE LEGACY AT
DUCKETT'S RIDGE PHASE I & 2
AGE RESTRICTED ADULT HOUSING UNITS 1-52 & COMMUNITY BUILDING
PARCEL A
TAX MAP 37 - PARCEL 569 - GRID 12
FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

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

LEGEND

- DENOTES WETLANDS
- FOREST CONSERVATION EASEMENT (RETENTION)
- FOREST CONSERVATION EASEMENT (REFORESTATION)
- PUBLIC WATER EASEMENT
- DENOTES 4" CONCRETE SIDEWALK
- DENOTES AREAS DEDICATED TO RECREATIONAL OPEN SPACE
- DENOTES CREDITED OPEN SPACE
- EXISTING TREELINE
- PROPOSED TREELINE

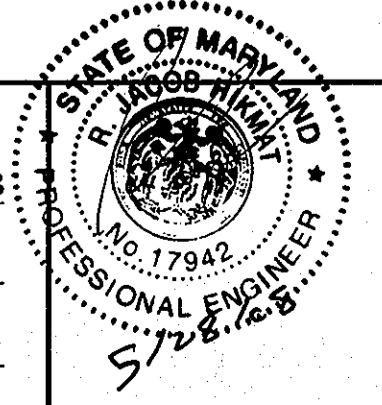


UNIVERSAL DESIGN STANDARDS:

- SITE:**
- ALL UNITS ARE INTERCONNECTED WITH SIDEWALK.
 - DUCKETTS LANE, THE COMMUNITY BUILDING AND THE COMMON AREAS ARE EASILY ACCESSIBLE TO ALL UNITS.
 - AN ACCESSIBLE PATH IS PROVIDED BETWEEN PARKING, DWELLING UNITS AND COMMON AREAS MEETING ADA STANDARDS IS PROVIDED.
 - A NO STEP ACCESS TO THE FRONT ENTRANCE OF THE COMMUNITY BUILDING AND ALL DWELLING UNITS HAS BEEN PROVIDED.
- UNITS:**
- GENERAL:**
- LEVEL OR RAMPED ACCESS
 - OPTIONAL GARAGE DOOR OPENERS
 - LEVER DOOR HANDLES
 - 3" WIDE EXTERIOR DOORS
 - OPTIONAL FRONT LOADING APPLIANCES
 - 1ST FLOOR OWNERS SUITE
- ELECTRICAL:**
- LIGHT SWITCHES 42" ABOVE FLOOR
 - OPTIONAL TOGGLE SWITCHES
 - THERMOSTATS AT EASY TO READ LOCATIONS AND ELEVATIONS
- SECURITY:**
- HOME WIRED FOR SECURITY SYSTEM
 - OPTIONAL DIRECT WIRE TO POLICE, FIRE, AND EMERGENCY MEDICAL SERVICES
- BATHROOMS:**
- EXTRA WIDE ENTRYWAYS (36")
 - OPTIONAL SHOWER DESIGNED FOR ROLL-IN ACCESS
 - OPTIONAL SHOWER SEATS
 - OPTIONAL GRAB BARS IN TOILET AND SHOWER AREAS
 - OPTIONAL HAND HELD SPRAYER FOR SHOWER
 - OPTIONAL RAISED TOILET SEATS
 - OPEN ACCESS TO TOILET AREA
- KITCHEN:**
- FRONT MOUNTED CONTROLS ON APPLIANCES
 - SINGLE LEVER FAUCETS
 - OPTIONAL CABINET PULLS
 - OPTIONAL RAISED DISHWASHER
 - ROLL OUT SHELVES IN LOWER CABINETS
 - OPTIONAL GLASS DOORS ON UPPER CABINETS
 - VERTICAL (PANTRY STYLE) CABINETS FOR MOST USED ITEMS
 - OPTIONAL SIDE-BY-SIDE REFRIGERATOR

CURVE TABLE

CURVE	RADIUS	LENGTH	TANGENT	DELTA	CHORD BEARING & DISTANCE
C1	62.00	31.56	18.13	29.00/90	S31°16'45" E 31.22
C2	45.00	69.98	43.28	89°04'31"	S25°30'30" W 63.12
C3	50.00	17.10	8.63	19°32'29"	N33°11'13" E 17.01
C4	50.00	24.71	13.35	37°44'45"	S37°15'51" W 23.98
C5	100.00	78.54	41.42	45°00'00"	N28°21'45" W 78.54
C6	100.00	187.10	135.63	107°11'57"	S86°27'43" E 180.98



OWNER & DEVELOPER
BRANTLY DEVELOPMENT GROUP
8835-P COLUMBIA 100 PARKWAY
COLUMBIA MD 21045

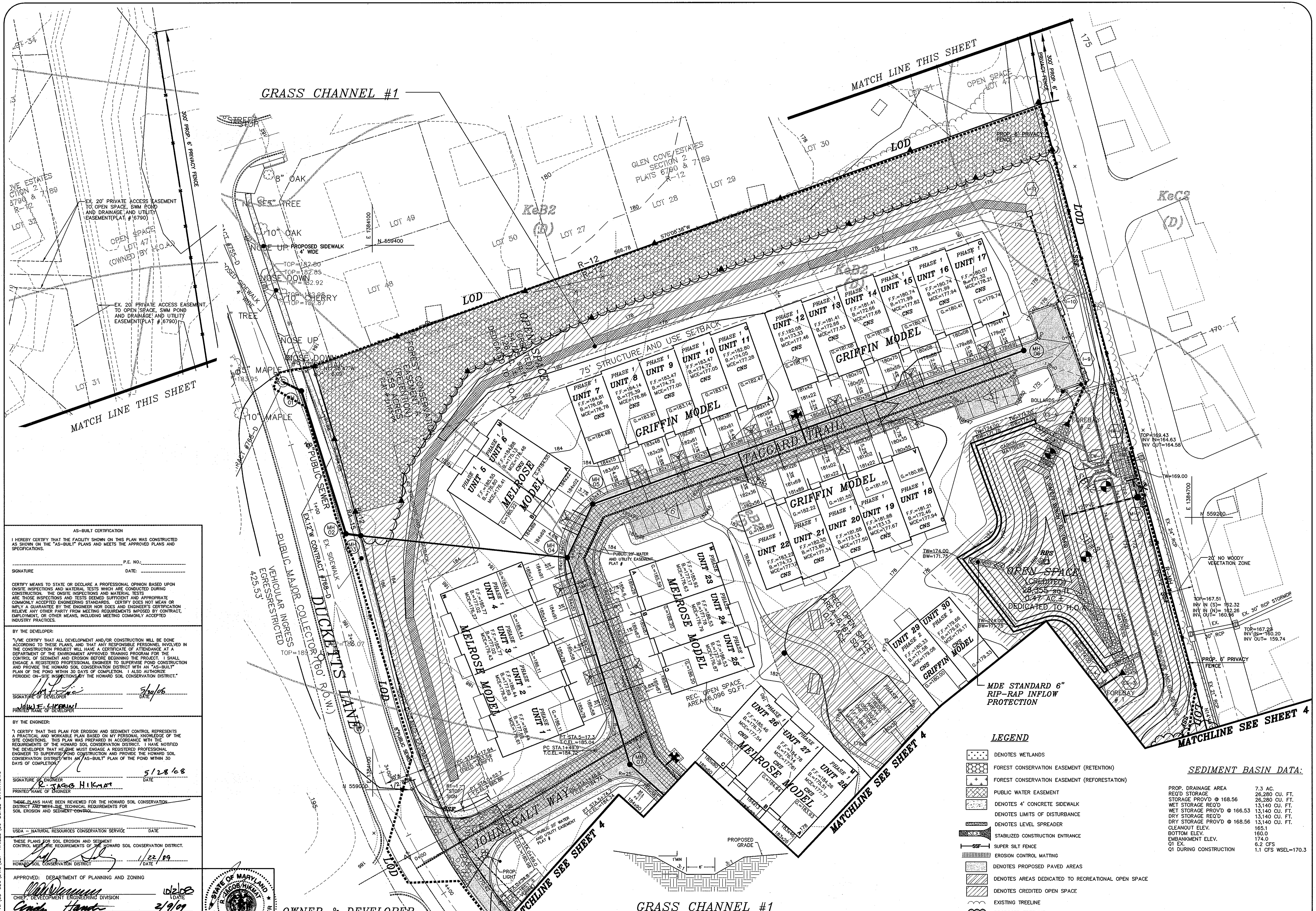
TYP. UNIVERSAL DESIGN STANDARDS

Project	05-050	date	MAY 2008
Illustration	MMM	engineering	MMM
scale	1"=50'	approval	MMM

no.	description	date

THE LEGACY AT DUCKETTS RIDGE PHASE 1 AND 2
AGE RESTRICTED ADULT HOUSING, UNITS 1-52 & COMMUNITY BUILDING
PAR 4
TAX MAP 37 - PARCEL 569 - GRID 12
HOWARD COUNTY, MARYLAND
FIRST ELECTION DISTRICT
SDP-DIMENSION PLAN

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
(410) 997-0286 Bnl. (410) 997-0238 Fax.



AS-BUILT CERTIFICATION

I HEREBY CERTIFY THAT THE FACILITY SHOWN ON THIS PLAN WAS CONSTRUCTED AS SHOWN ON THE "AS-BUILT" PLANS AND MEETS THE APPROVED PLANS AND SPECIFICATIONS.

SIGNATURE: _____ DATE: _____

P.E. NO.: _____

CERTIFY MEANS TO STATE OR DECLARE A PROFESSIONAL OPINION BASED UPON ON-SITE INSPECTIONS AND MATERIAL TESTS WHICH ARE CONDUCTED DURING CONSTRUCTION. THE ON-SITE INSPECTIONS AND MATERIAL TESTS ARE THOSE INSPECTIONS AND TESTS DEEMED SUFFICIENT AND APPROPRIATE COMMONLY ACCEPTED ENGINEERING STANDARDS. CERTIFY DOES NOT MEAN OR IMPLY A GUARANTEE BY THE ENGINEER NOR DOES THE ENGINEER'S CERTIFICATION RELIEVE ANY OTHER PARTY FROM MEETING REQUIREMENTS IMPOSED BY CONTRACT, EMPLOYMENT, OR OTHER MEANS, INCLUDING MEETING COMMONLY ACCEPTED INDUSTRY PRACTICES.

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 OF DEVELOPER: _____ DATE: 5/30/06

PRINTED NAME OF DEVELOPER: **WILHELM LIPKOWITZ**

BY THE ENGINEER:

I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. 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.

SIGNATURE OF ENGINEER: _____ DATE: 5/28/06

PRINTED NAME OF ENGINEER: **R. JACOB HIKMAT**

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

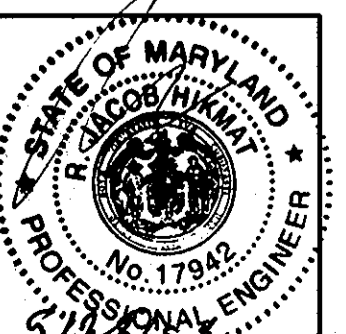
HOWARD SOIL CONSERVATION DISTRICT: _____ DATE: 1/22/09

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF DEVELOPMENT ENGINEERING DIVISION: _____ DATE: 10/2/08

CHIEF, DIVISION OF LAND DEVELOPMENT: _____ DATE: 2/9/09

DIRECTOR: _____ DATE: 4/6/09



OWNER & DEVELOPER
 BRANTLY DEVELOPMENT GROUP
 8835-P COLUMBIA 100 PARKWAY
 COLUMBIA MD 21045

GRASS CHANNEL #1
 NTS

- LEGEND**
- Denotes Wetlands
 - Denotes Forest Conservation Easement (Retention)
 - Denotes Forest Conservation Easement (Reforestation)
 - Denotes Public Water Easement
 - Denotes 4' Concrete Sidewalk
 - Denotes Limits of Disturbance
 - Denotes Level Spreader
 - Denotes Stabilized Construction Entrance
 - Denotes Super Silt Fence
 - Denotes Erosion Control Matting
 - Denotes Denotes Proposed Paved Areas
 - Denotes Denotes Credited Open Space
 - Denotes Existing Treeline
 - Denotes Proposed Treeline

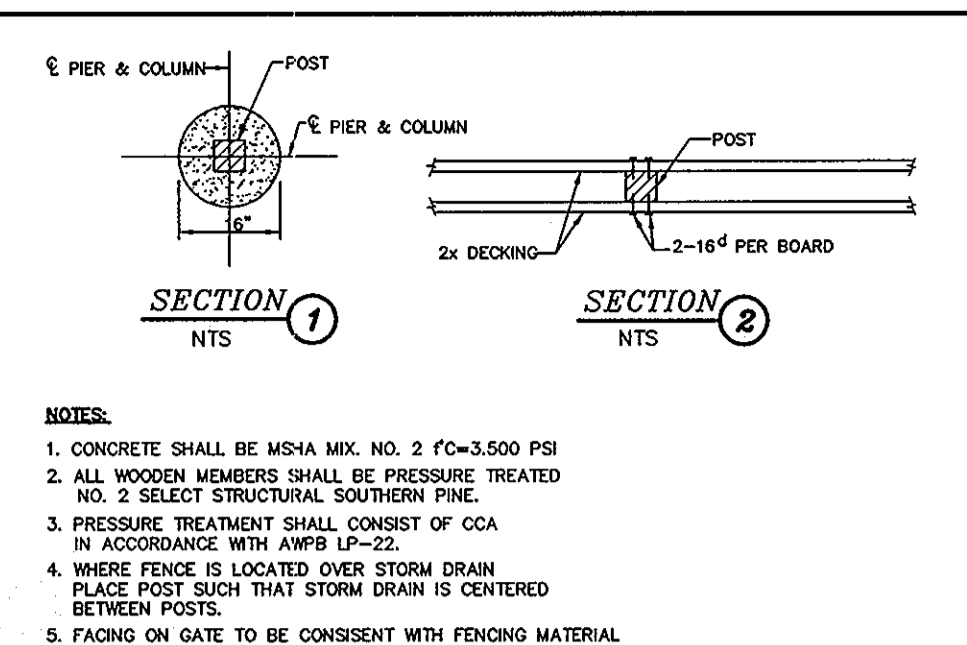
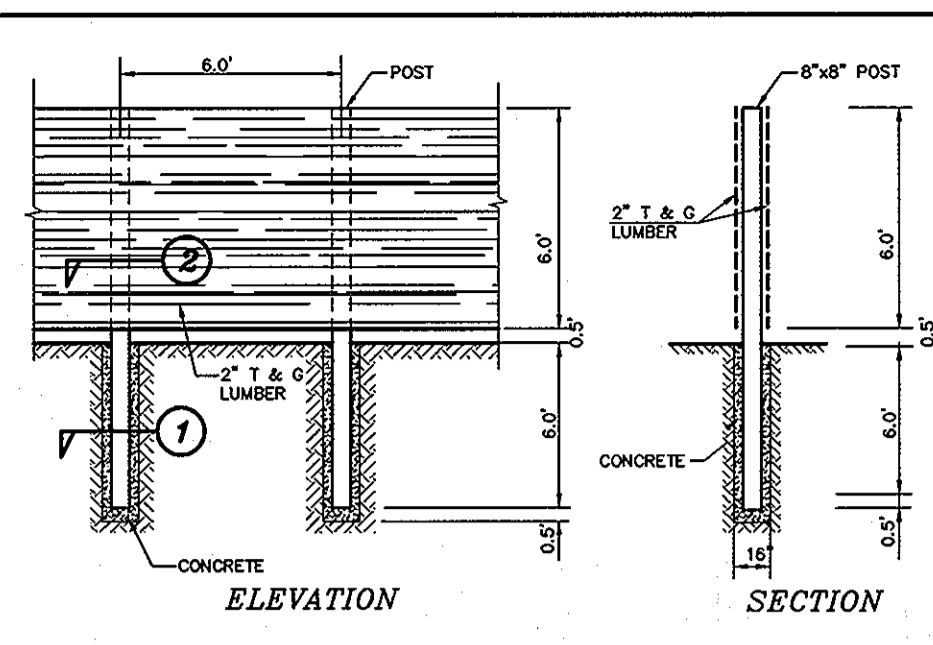
SEDIMENT BASIN DATA:

PROP. DRAINAGE AREA	7.3 AC.
REQ'D STORAGE	26,280 CU. FT.
STORAGE PROVIDED @ 168.56	26,280 CU. FT.
WET STORAGE REQ'D	13,140 CU. FT.
WET STORAGE PROVIDED @ 166.53	13,140 CU. FT.
DRY STORAGE REQ'D	13,140 CU. FT.
DRY STORAGE PROVIDED @ 168.56	13,140 CU. FT.
CLEANOUT ELEV.	165.1
BOTTOM ELEV.	160.0
EMBANKMENT ELEV.	174.0
01 EX.	6.2 CFS
01 DURING CONSTRUCTION	1.1 CFS WSEL=170.3

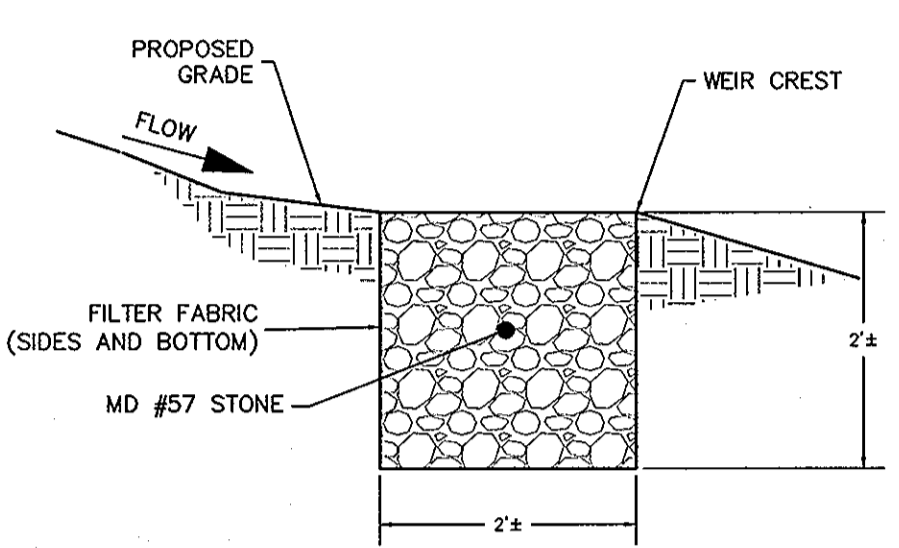
date	MAY 08
project	05-020
illustration	MMM
scale	1"=30'
description	revisions
no.	
date	

THE LEGACY AT DUCKETTS RIDGE PHASE 1 AND 2
 AGE RESTRICTED ADULT HOUSING UNITS 1-52 & COMMUNITY BUILDING
 PAR A
 TAX MAP 37 - PARCEL 569 - GRID 12
 HOWARD COUNTY, MARYLAND
 FIRST ELECTION DISTRICT

MILDENBERG, BOENDER & ASSOC., INC.
 Surveyors
 Planners
 Engineers
 5072 Doreen Hall Drive, Suite 202, Ellicott City, Maryland 21042
 (410) 997-0286 Bldg. (410) 997-0288 Fax.



- NOTES:**
1. CONCRETE SHALL BE MSHA MIX. NO. 2 FC=3500 PSI
 2. ALL WOODEN MEMBERS SHALL BE PRESSURE TREATED NO. 2 SELECT STRUCTURAL SOUTHERN PINE.
 3. PRESSURE TREATMENT SHALL CONSIST OF CCA IN ACCORDANCE WITH AWPB LP-22.
 4. WIRE FENCE IS LOCATED OVER STORM DRAIN PLACE POST SUCH THAT STORM DRAIN IS CENTERED BETWEEN POSTS.
 5. FACING ON GATE TO BE CONSISTENT WITH FENCING MATERIAL
 6. PROVIDE LOCKABLE CLOSURE FOR GATE.
 7. ALL FRAMING MEMBERS OF GATE SHALL BE 2"x6" MATERIAL



- NOTES:**
1. THE TOP OF THE STONE ELEVATION FOR EACH DEVICE SHALL BE LEVEL FOR ITS ENTIRE LENGTH.
 2. THE LOW SIDE OF THE DEVICE SHALL TYPICALLY BE INSTALLED AT THE LIMITS OF THE LOD.
 3. IF THE DRAINAGE AREA ABOVE THE SPREADER IS NOT STABILIZED AND WITH THE PERMISSION OF THE INSPECTOR, FILTER FABRIC MAY BE EXTENDED FROM THE IN FLOW SIDE AND LAID OVER THE TOP OF THE DEVICE UNTIL THE DRAINAGE AREA IS STABILIZED.

- LEGEND**
- DENOTES WETLANDS
 - ◻ DENOTES FOREST CONSERVATION EASEMENT (RETENTION)
 - ◻ DENOTES FOREST CONSERVATION EASEMENT (REFORESTATION)
 - ◻ DENOTES PUBLIC WATER EASEMENT
 - ◻ DENOTES 4' CONCRETE SIDEWALK
 - ◻ DENOTES LIMITS OF DISTURBANCE
 - ◻ DENOTES LEVEL SPREADER
 - ◻ DENOTES STABILIZED CONSTRUCTION ENTRANCE
 - ◻ DENOTES SUPER SILT FENCE
 - ◻ DENOTES EROSION CONTROL MATTING
 - ◻ DENOTES PROPOSED PAVED AREAS
 - ◻ DENOTES AREAS DEDICATED TO RECREATIONAL OPEN SPACE
 - ◻ DENOTES CREDITED OPEN SPACE
 - ◻ DENOTES EXISTING TREELINE
 - ◻ DENOTES PROPOSED TREELINE

AS-BUILT CERTIFICATION

I HEREBY CERTIFY THAT THE FACILITY SHOWN ON THIS PLAN WAS CONSTRUCTED AS SHOWN ON THE "AS-BUILT" PLANS AND MEETS THE APPROVED PLANS AND SPECIFICATIONS.

SIGNATURE: _____ P.E. NO.: _____
DATE: _____

CERTIFICATION

CERTIFY MEANS TO STATE OR DECLARE A PROFESSIONAL OPINION BASED UPON ON-SITE INSPECTIONS AND MATERIAL TESTS WHICH ARE CONDUCTED DURING CONSTRUCTION. THE ON-SITE INSPECTIONS AND MATERIAL TESTS ARE THOSE INSPECTIONS AND TESTS DEEMED SUFFICIENT AND APPROPRIATE COMMONLY ACCEPTED ENGINEERING STANDARDS. CERTIFY DOES NOT MEAN OR IMPLY A GUARANTEE BY THE ENGINEER NOR DOES THE ENGINEER'S CERTIFICATION RELIEVE ANY OTHER PARTY FROM MEETING REQUIREMENTS IMPOSED BY CONTRACT, EMPLOYMENT, OR OTHER MEANS, INCLUDING MEETING COMMONLY ACCEPTED INDUSTRY PRACTICES.

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 OF DEVELOPER: _____ DATE: 5/30/08
PRINTED NAME OF DEVELOPER: **MIKE LORUM**

BY THE ENGINEER:

"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. 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."

SIGNATURE OF ENGINEER: _____ DATE: 5/28/08
PRINTED NAME OF ENGINEER: **JACOB HIKMAT**

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

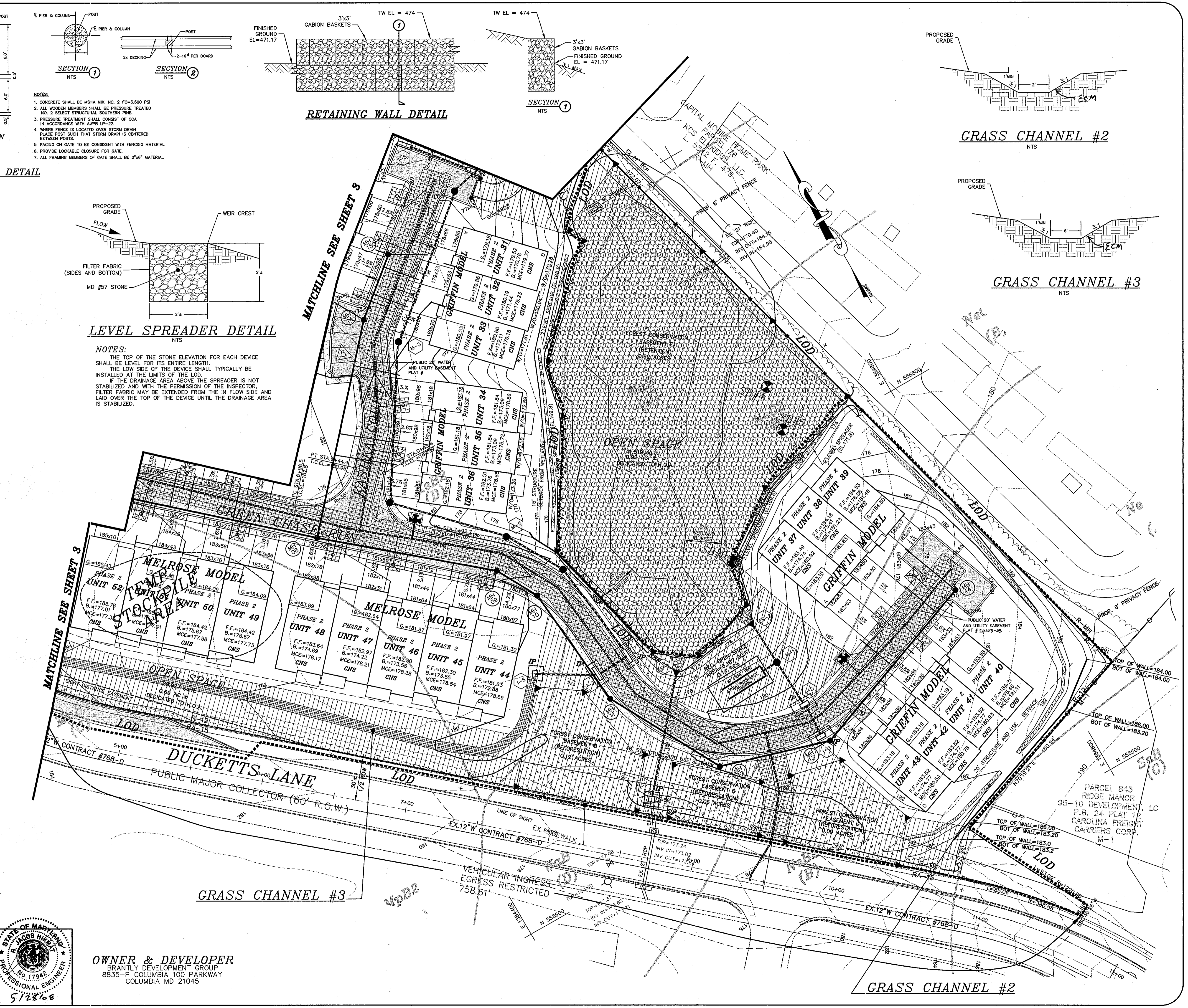
USDA - NATURAL RESOURCES CONSERVATION SERVICE DATE: _____

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

HOWARD SOIL CONSERVATION DISTRICT DATE: 1/22/09

APPROVED: DEPARTMENT OF PLANNING AND ZONING

DATE: 12/08
DATE: 2/2/09
DATE: 3/4/09

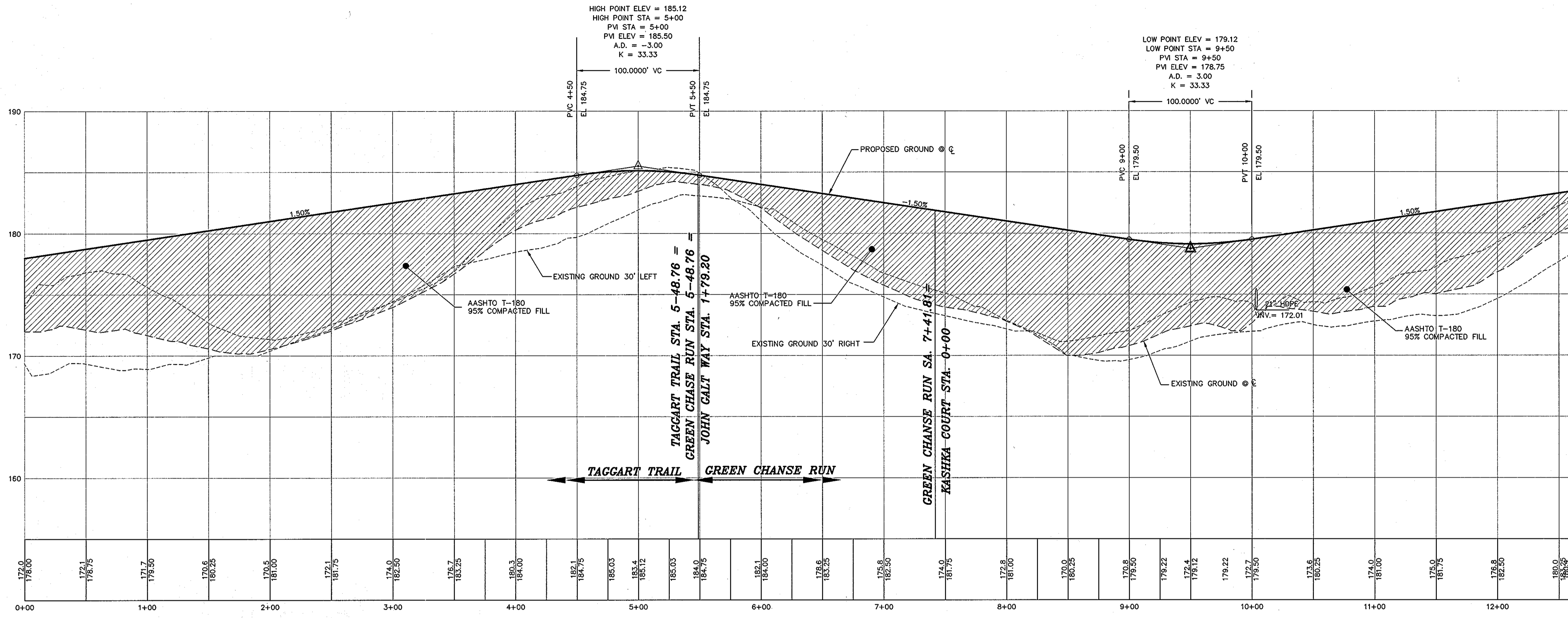


THE LEGACY AT
DUCKETTS RIDGE PHASE 1 AND 2
AGE RESTRICTED ADULT HOUSING, LOTS 1-52 & COMMUNITY BUILDING
PAR A
TAX MAP 37 - PARCEL 569 - GRID 12
FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
SITE DEVELOPMENT PLAN

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

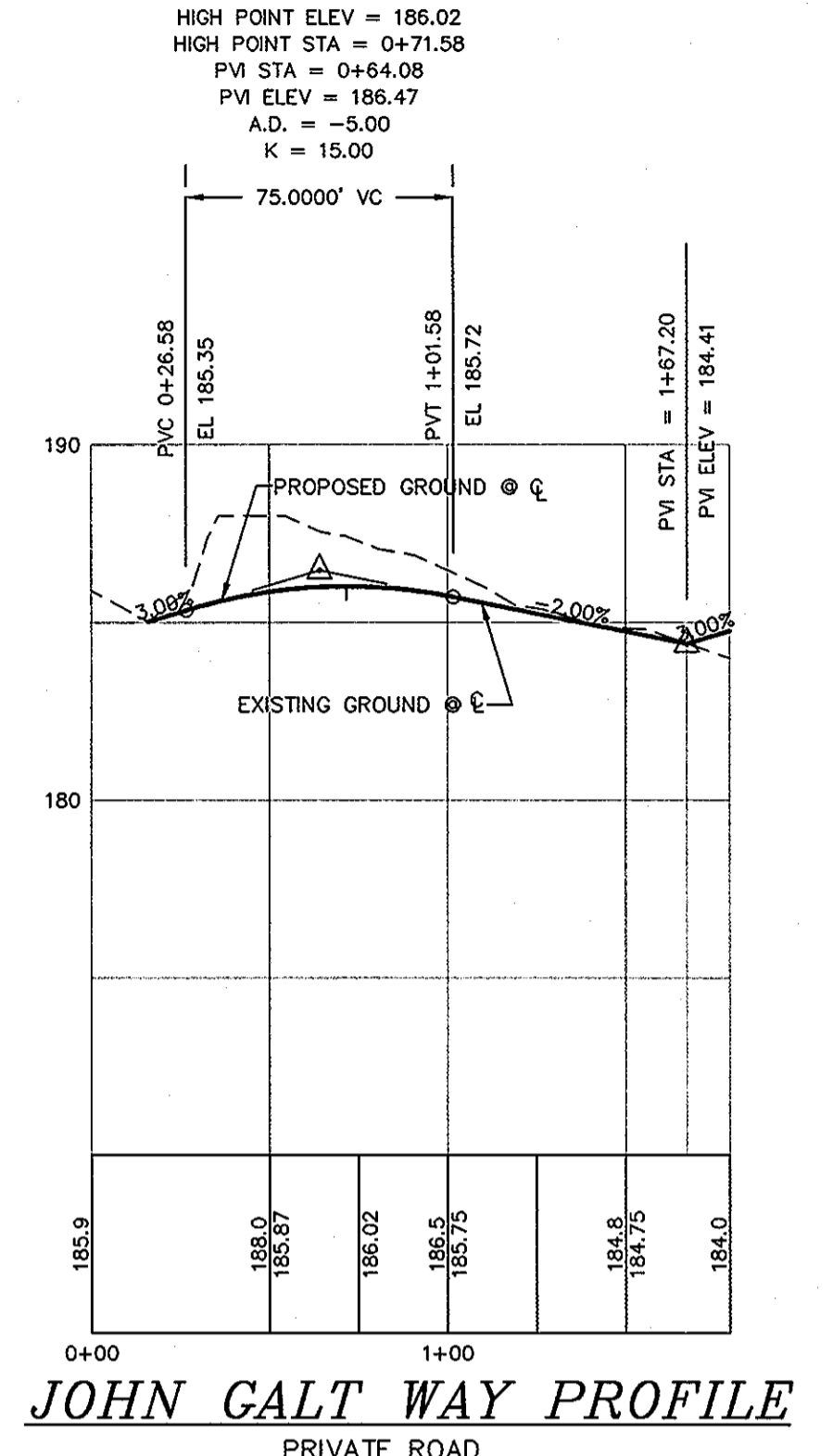
4 OF 13

SDP-06-070



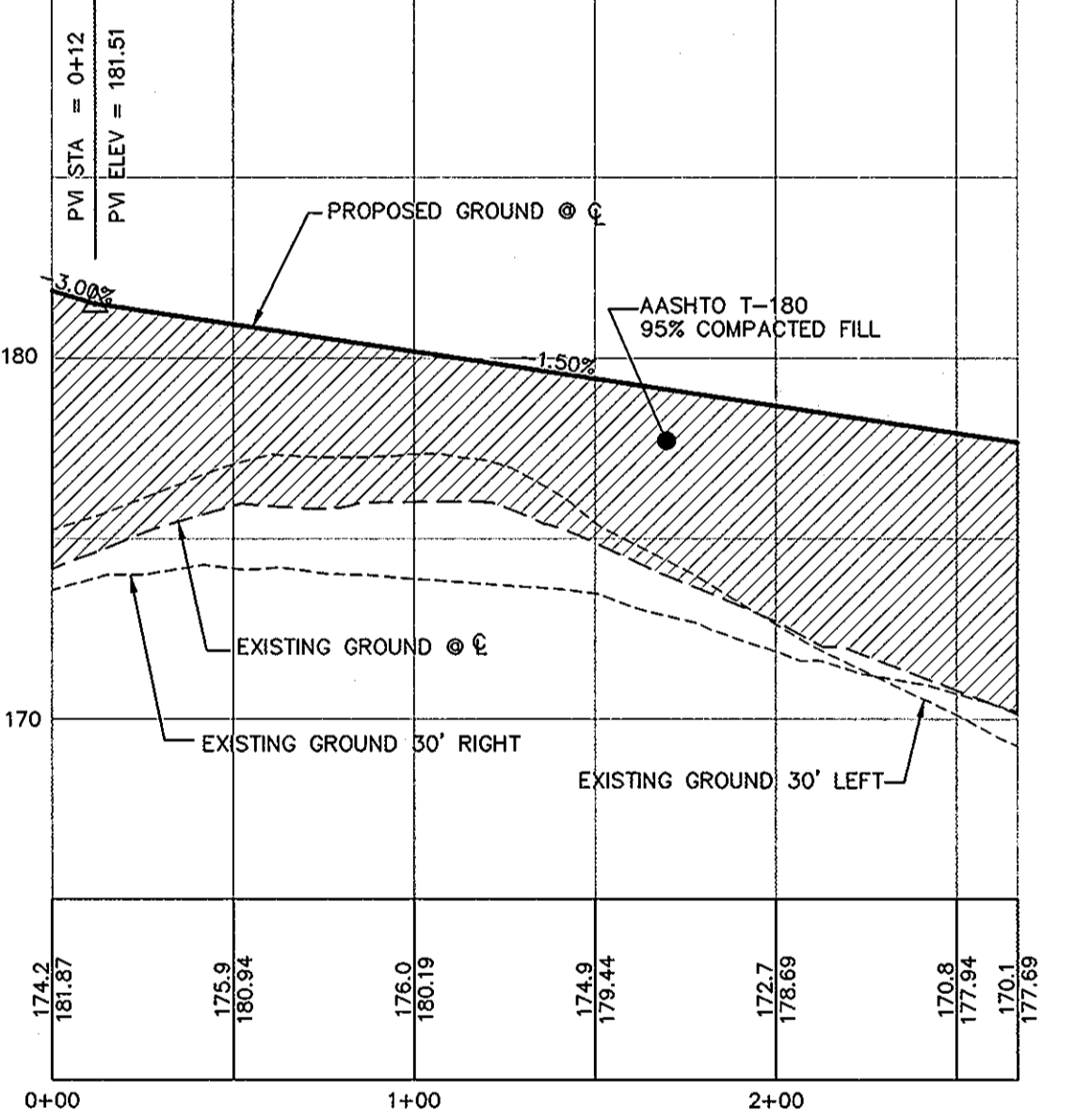
TAGGARD TRAIL AND GREE CHASE RUN PROFILE

PRIVATE ROAD
SCALE: VERT. 1" = 5'
HORI. 1" = 50'



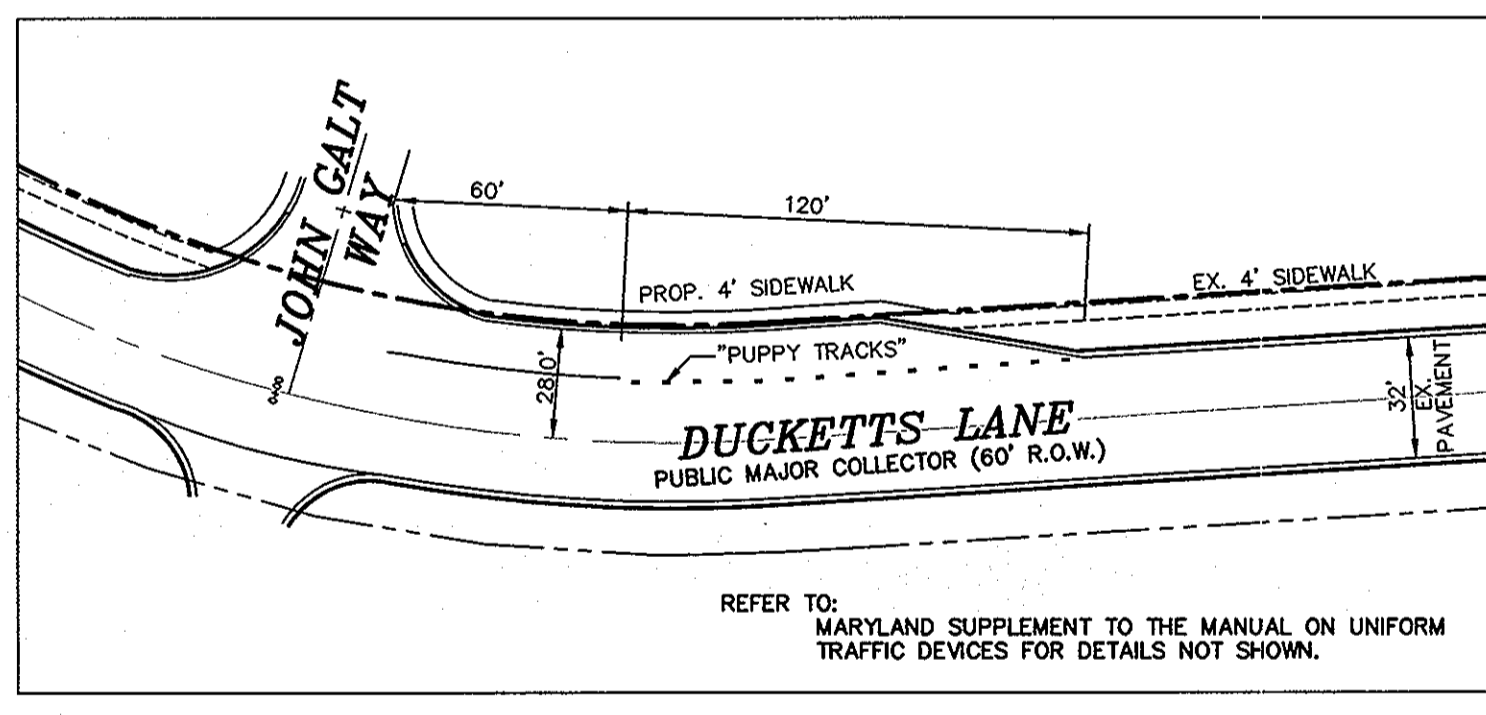
JOHN GALT WAY PROFILE

SCALE: VERT. 1" = 5'
HORI. 1" = 50'



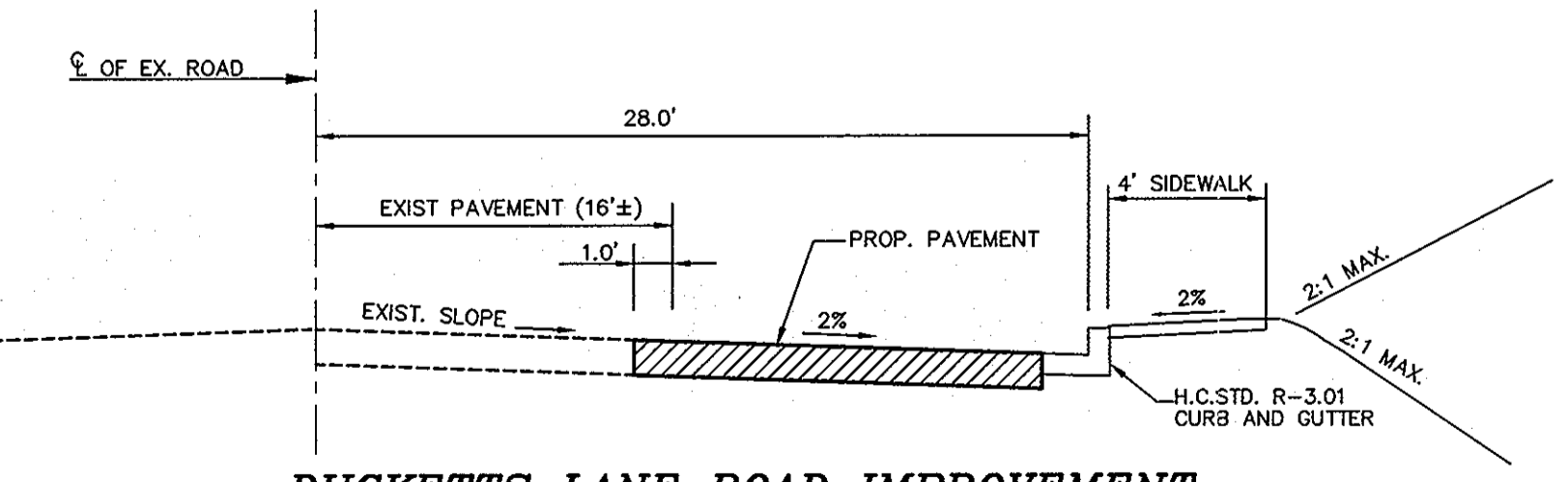
KASHKA COURT PROFILE

SCALE: VERT. 1" = 5'
HORI. 1" = 50'

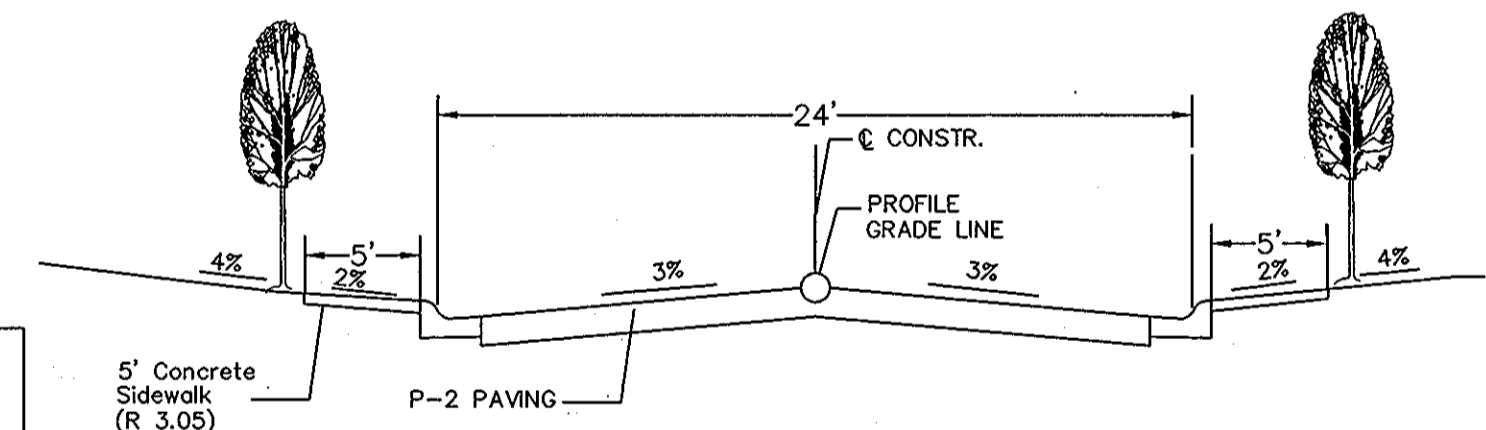
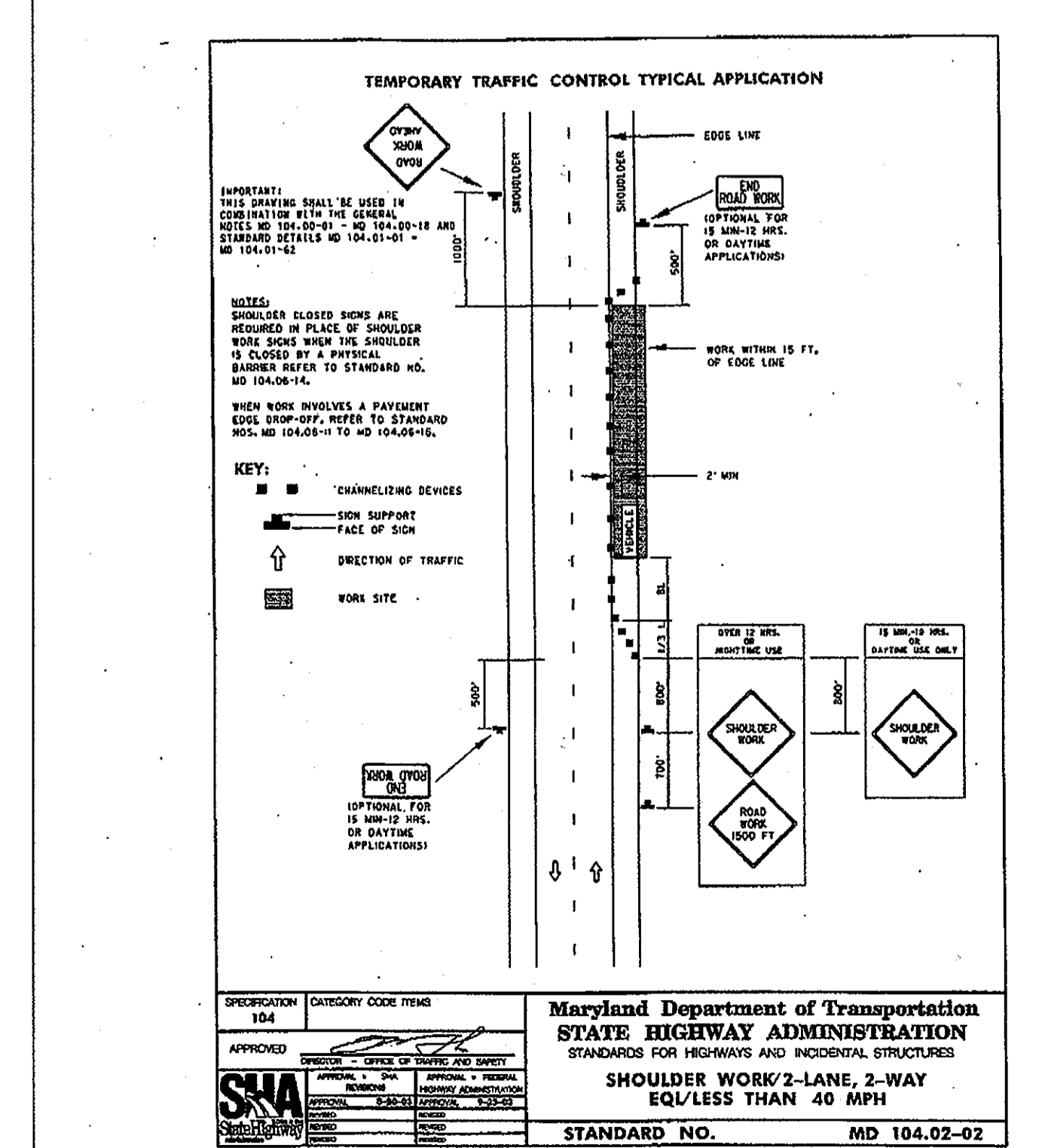


DUCKETTS LANE STRIPING PLAN

SCALE: 1" = 50'

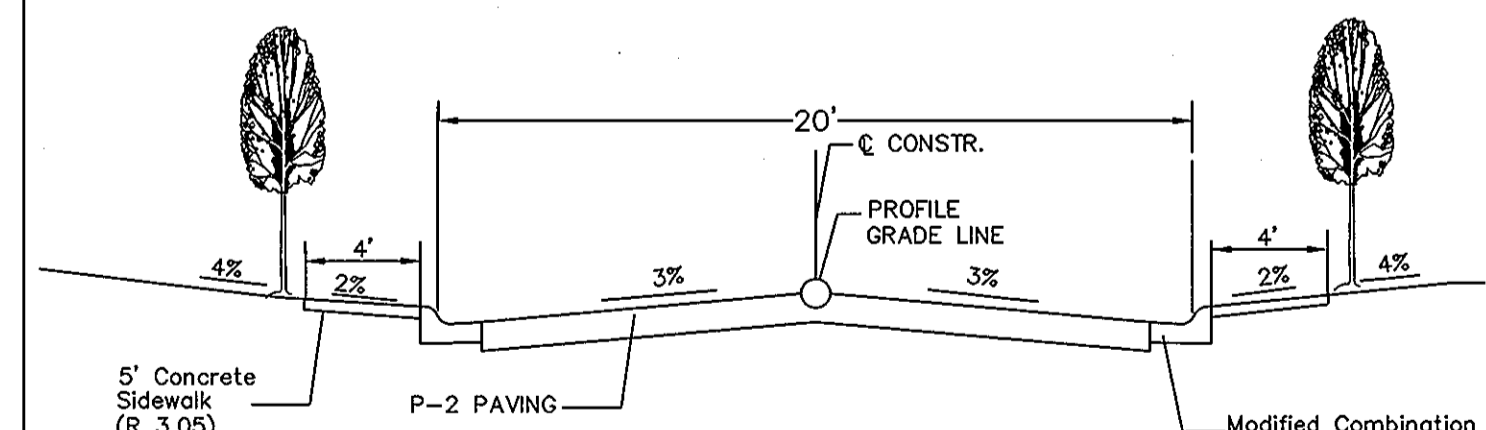


DUCKETTS LANE ROAD IMPROVEMENT TYPICAL ROADWAY SECTION



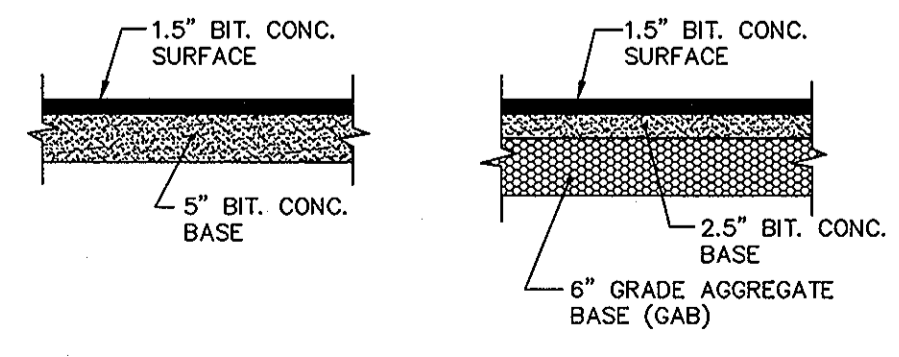
TYPICAL ROADWAY SECTION JOHN GALT WAY

SECTION NOT TO SCALE



TYPICAL ROADWAY SECTION TAGGARD TRAIL, GREEN CHASE RUN, KASHKA COURT

SECTION NOT TO SCALE



ALTERNATE "A" ALTERNATE "B" PAVING SECTION - P2

SECTION NOT TO SCALE

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 DATE: 10/2/08
 DATE: 2/9/09
 DATE: 4/15/09



OWNER & DEVELOPER
 BRANTLY DEVELOPMENT GROUP
 8835-P COLUMBIA 100 PARKWAY
 COLUMBIA MD 21045

Project	05-050	Date	MAY 08
Illustration	MMM	Engineering	MMM
Scale	AS SHOWN	Approval	MMM

No.	Description	Revisions	Date

THE LEGACY AT
DUCKETTS RIDGE PHASE 1 AND 2
 AGE RESTRICTED ADULT HOUSING UNITE 1052 AND COMMUNITY CENTER
 PAR A TAX MAP 37 - PARCEL 569 - GRID 12
 HOWARD COUNTY, MARYLAND
 FIRST ELECTION DISTRICT
 PRIVATE ROAD PROFILES

MILDENBERG, BOENDER & ASSOC., INC.
 Engineers Planners Surveyors
 5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
 (410) 997-0286, Fax: (410) 997-0288

FILE: 05-020.dwg ORIGINAL: MTLAR-SDP.DWYNY BASE.DWG

OWNER & DEVELOPER
BRANTLY DEVELOPMENT GROUP
8835-P COLUMBIA 100 PARKWAY
COLUMBIA MD 21045

APPROVED: DEPARTMENT OF PLANNING AND ZONING

John Jacob
DATE: 10/10/08
CHIEF, DEVELOPMENT ENGINEERING DIVISION

Charles H. Hester
DATE: 10/10/08
CHIEF, DIVISION OF LAND DEVELOPMENT

David S. Cagle
DATE: 10/10/08
DIRECTOR



A=0.82AC± I-8 ZONING R-12
C = 34 % IMPERVIOUS= 65

A=1.21AC± I-6 ZONING R-12
C = 36 % IMPERVIOUS= 65

A=0.88AC± I-7 ZONING R-12
C = 35 % IMPERVIOUS= 65

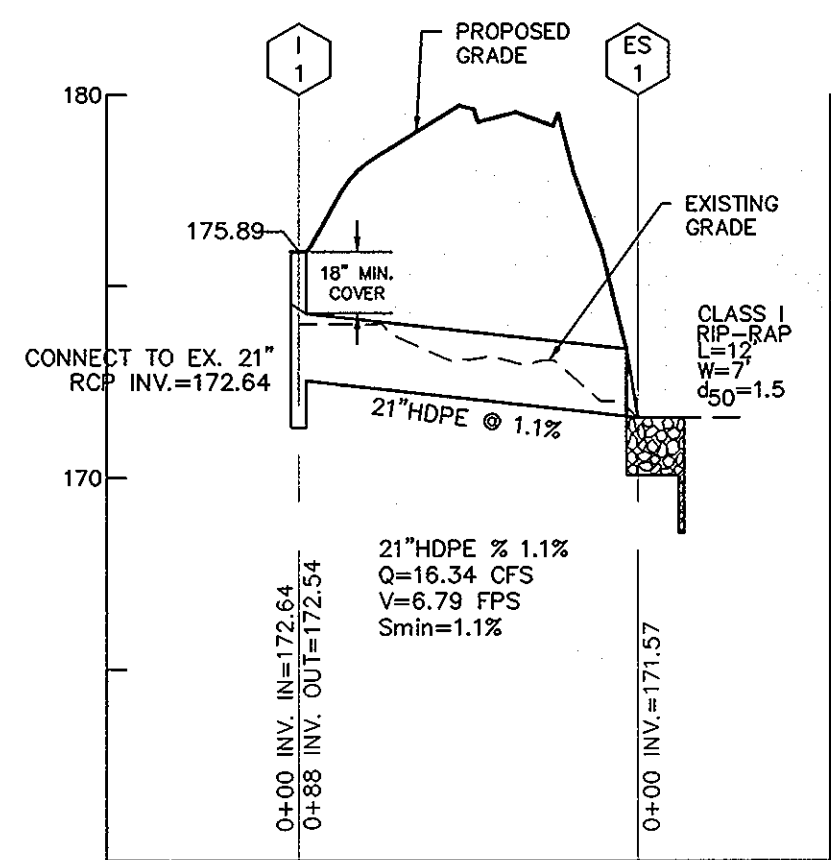


- LEGEND**
- EXISTING TREELINE
 - PROPOSED TREELINE
 - DENOTES WETLANDS
 - DENOTES "CREDITED" OPEN AREAS
 - DENOTES PROPOSED SIDEWALK
 - DENOTES RECREATIONAL OPEN SPACE

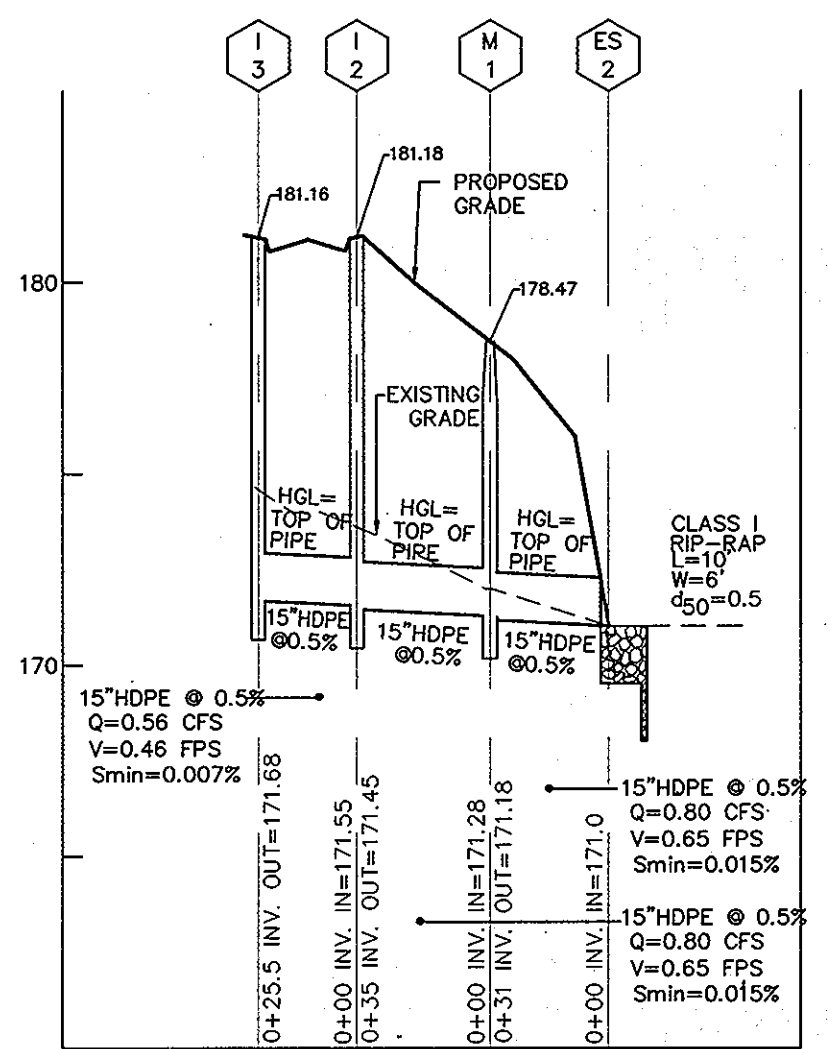
Project	05-020	date	MAY 2008
Illustration	MMK/HSP	engineering	MMK/HSP
scale	1" = 60'	approval	MMK/HSP
description		revisions	RIH

THE LEGACY AT
DUCKETT'S RIDGE, PHASE 1 AND 2
AGE RESTRICTED ADULT HOUSING, UNITS 1-52 & COMMUNITY BUILDING
PARCEL 344
TAX MAP 37 - PARCEL 569 - GRID 12
FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND
DEVELOPED CONDITIONS DRAINAGE AREA MAP

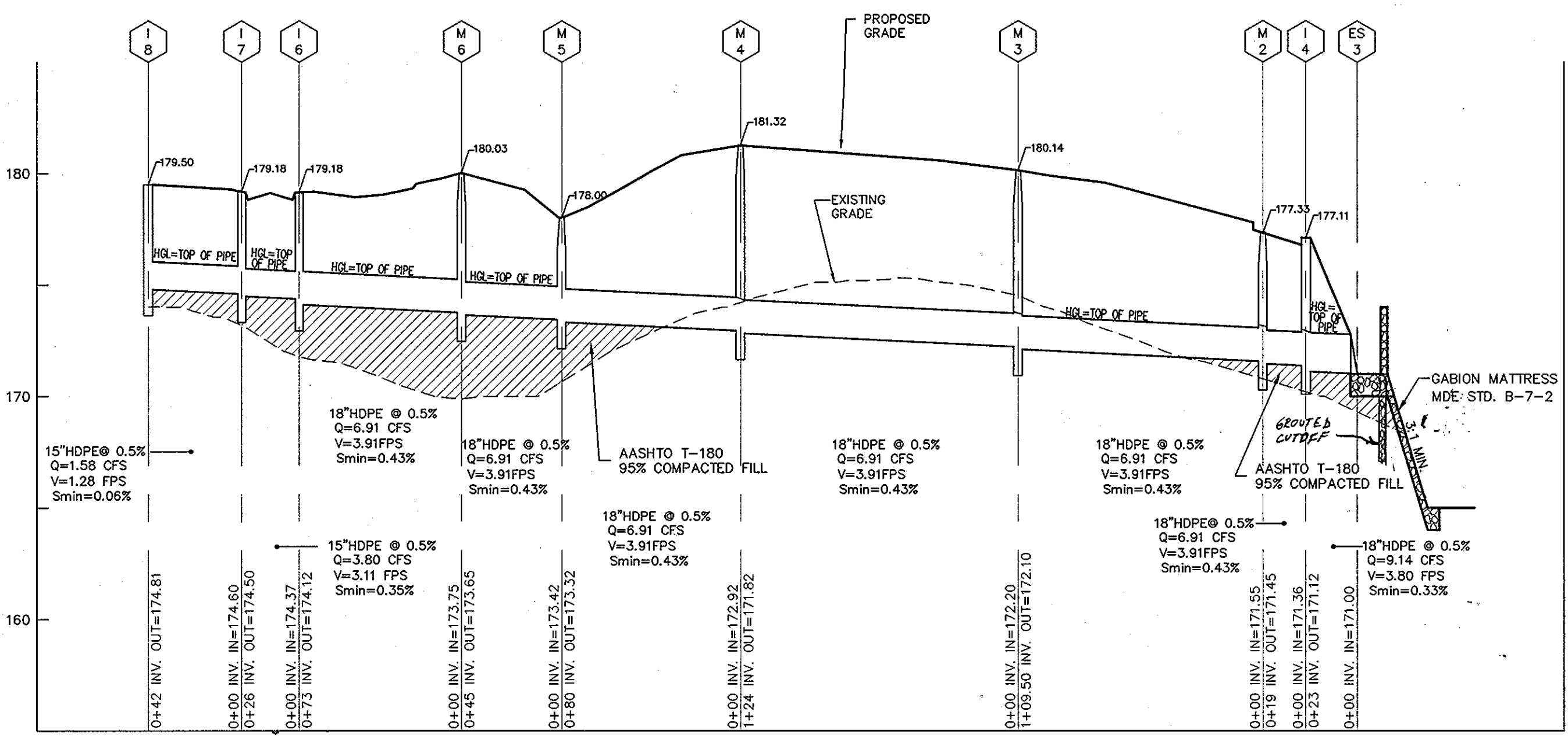
MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
(410) 997-0236 Balt. (410) 997-0236 Fax



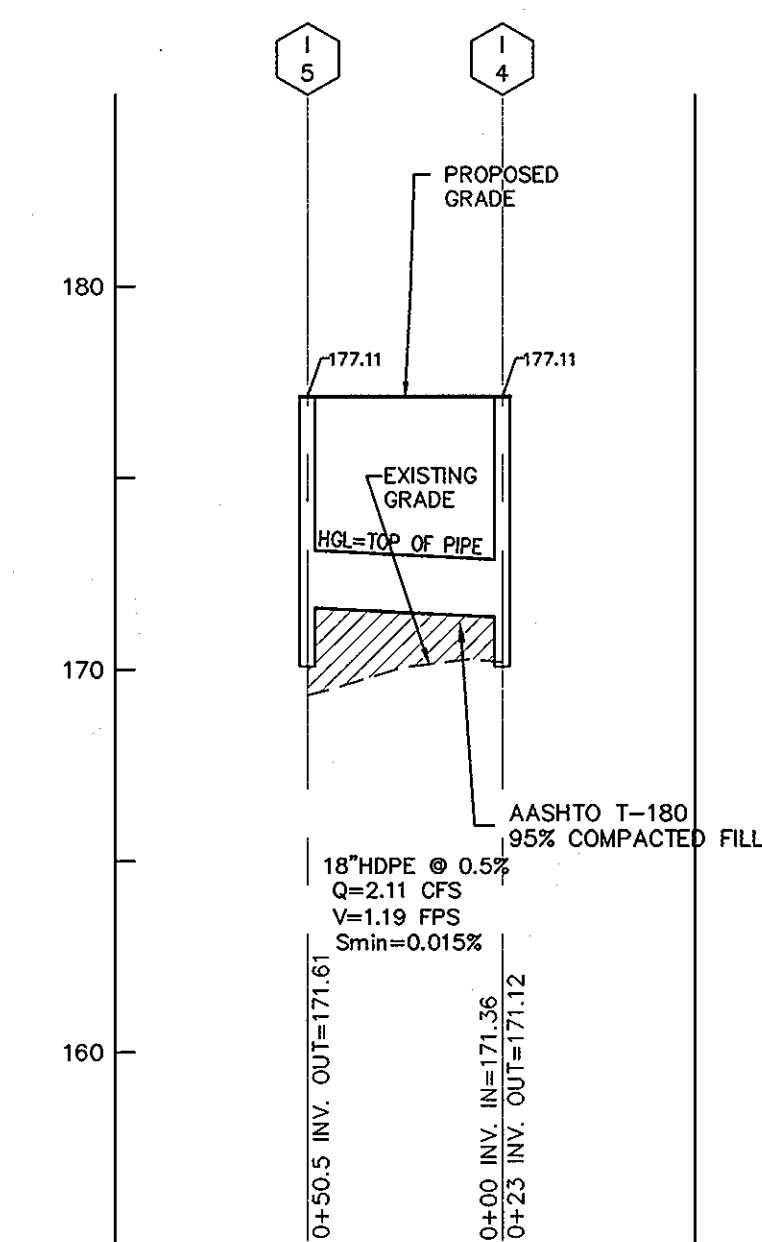
STORM DRAIN PROFILE I-1 TO ES-1
 HORIZONTAL SCALE : 1" = 50'
 VERTICAL SCALE : 1" = 5'



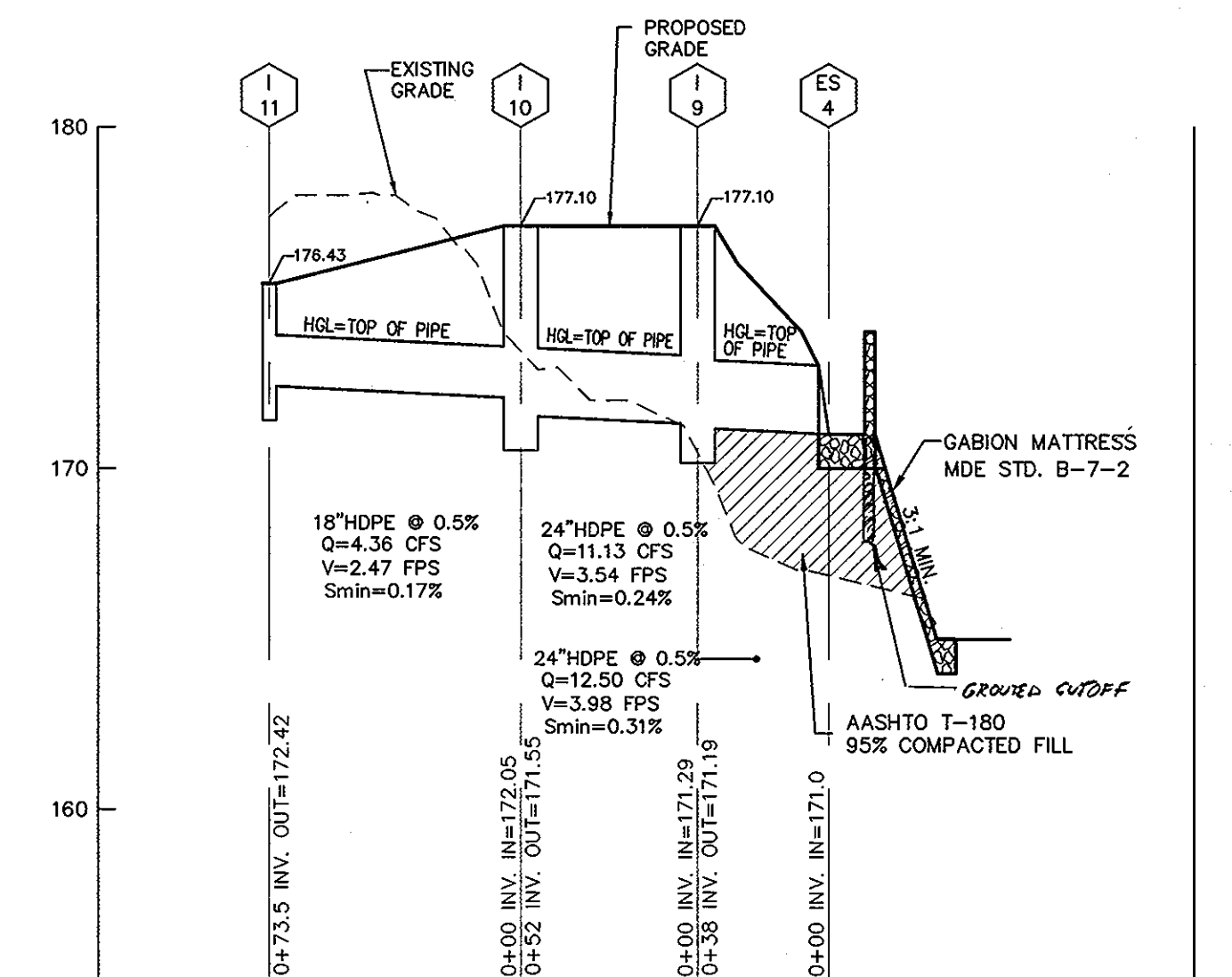
STORM DRAIN PROFILE I-3 TO ES-2
 HORIZONTAL SCALE : 1" = 50'
 VERTICAL SCALE : 1" = 5'



STORM DRAIN PROFILE I-8 TO ES-3
 HORIZONTAL SCALE : 1" = 50'
 VERTICAL SCALE : 1" = 5'



STORM DRAIN PROFILE I-5 TO I-4
 HORIZONTAL SCALE : 1" = 50'
 VERTICAL SCALE : 1" = 5'



STORM DRAIN PROFILE I-11 TO ES-4
 HORIZONTAL SCALE : 1" = 50'
 VERTICAL SCALE : 1" = 5'

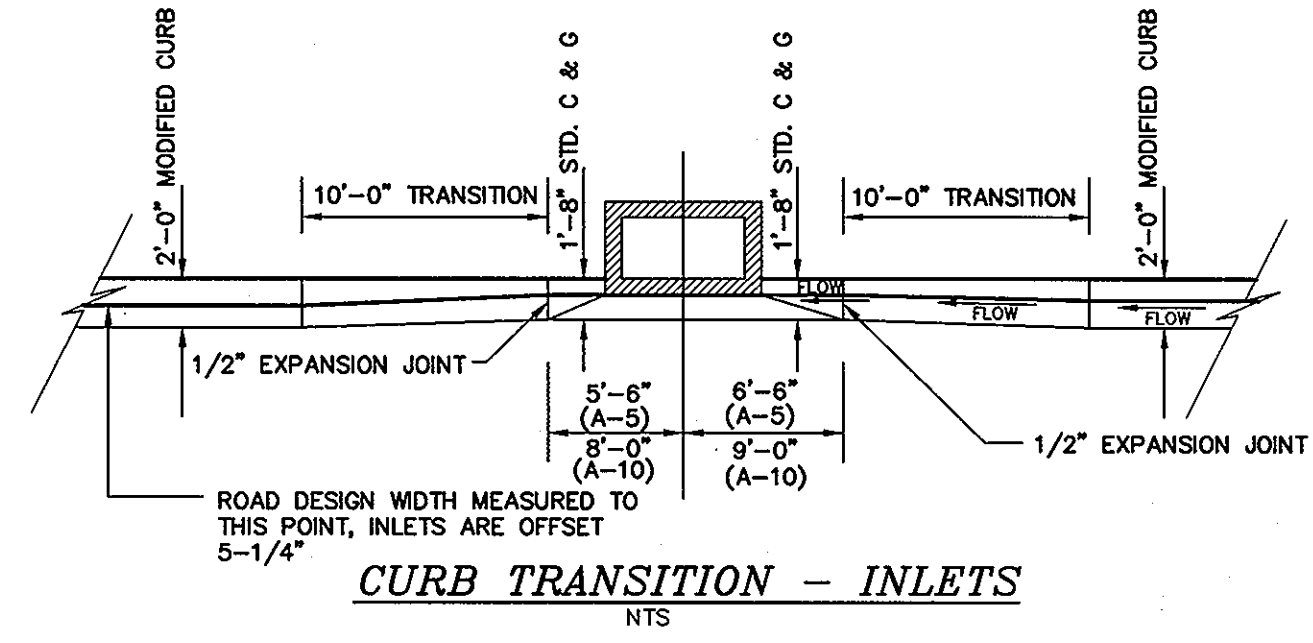
PIPE SCHEDULE

QUANTITY	PIPE SIZE
146'	15" RCP
557'	18" RCP
112'	21" RCP
76'	24" RCP

STRUCTURE SCHEDULE

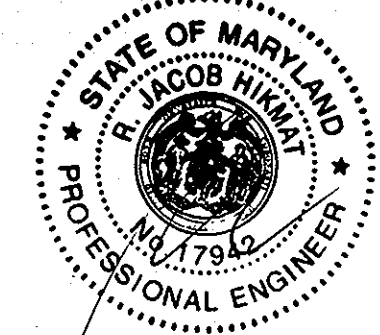
NO.	LOCATION*	TOP**	INV. IN	INV. OUT	COMMENTS
ES-1	GREEN CHASE RUN, STA. 9+89.05, 30.31' LT.	----	171.57	----	END SECTION
ES-2	GREEN CHASE RUN, STA. 10+92.27, 79.22' LT.	----	171.00	----	END SECTION
ES-3	N 559084.7175 E 1384647.9419	----	171.00	----	END SECTION
ES-4	N 559269.2543 E 1384609.6300	----	162.93	----	END SECTION
I-1	GREEN CHASE RUN, STA. 10+15.40, 53.57' RT.	175.89	172.64	172.54	YARD INLET(HO. CO. STD SD-4.14) - SUMP
I-2	GREEN CHASE RUN, STA. 11+07.22, 12.52' RT.	181.18	171.55	171.45	INLET TYPE A-5 (HO. CO. STD SD 4.40)
I-3	GREEN CHASE RUN, STA. 9+50.18, 12.52' LT.	181.16	----	171.68	INLET TYPE A-5 (HO. CO. STD SD 4.40)
I-4	N 559073.4798 E 1384628.0097	177.11	171.36	171.12	INLET TYPE A-10 (HO. CO. STD SD 4.02)
I-5	N 559112.8244 E 1384596.2256	177.11	----	171.61	INLET TYPE A-10 (HO. CO. STD SD 4.02)
I-6	GREEN CHASE RUN, STA. 9+50.18, 11.52' LT.	179.18	174.37	174.12	INLET TYPE A-10 (HO. CO. STD SD 4.02)
I-7	GREEN CHASE RUN, STA. 9+49.12, 11.52' RT.	179.18	174.60	174.50	INLET TYPE A-10 (HO. CO. STD SD 4.02)
I-8	GREEN CHASE RUN, STA. 9+26.13, 47.88' RT.	179.50	----	174.81	YARD INLET(HO. CO. STD SD-4.14) - SUMP
I-9	N 559304.4974 E 1384621.4677	177.10	171.29	171.19	INLET TYPE A-10 (HO. CO. STD SD 4.02)
I-10	N 559353.0864 E 1384604.1035	177.10	172.05	171.55	INLET TYPE A-10 (HO. CO. STD SD 4.02)
I-11	N 559422.9039 E 1384581.3807	176.43	----	172.42	YARD INLET(HO. CO. STD SD-4.14) - SUMP
M-1	GREEN CHASE RUN, STA. 11+04.80, 46.80' LT.	178.47	171.28	171.18	MH (HO. CO. STD G 5.01)
M-2	KASKA COURT, STA. 2+51.21, 17.84' RT.	177.33	171.55	171.45	MH (HO. CO. STD G 5.01)
M-3	KASKA COURT, STA. 1+36.22, 18.06' RT.	180.14	172.20	172.10	MH (HO. CO. STD G 5.01)
M-4	KASKA COURT, STA. 0+26.42, 18.35' RT.	181.32	172.92	172.82	MH (HO. CO. STD G 5.01)
M-5	GREEN CHASE RUN, STA. 8+43.07, 19.93' LT.	178.00	173.42	173.32	MH (HO. CO. STD G 5.01)
M-6	GREEN CHASE RUN, STA. 8+81.24, 15.35' LT.	180.03	173.75	173.65	MH (HO. CO. STD G 5.01)

* STATIONS GIVEN TO CENTERLINE FACE OF INLET AT TOP OF CURB FOR INLETS LOCATED WITHIN THE ROAD RIGHT-OF-WAY. STATIONS FOR YARD INLETS TO CL OF INLET. LOCATION OF MANHOLES IS TO CL OF MANHOLE COVER. END SECTION GIVEN TO THE CENTERLINE OF PIPE AT THE CONNECTION OF THE STORM DRAIN PIPE TO THE END SECTION.
 ** ELEVATIONS MEASURED TO CENTER OF ALL INLETS.



CURB TRANSITION - INLETS
 NTS

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Director: *[Signature]* 2/1/05
 Chief, Division of Land Development: *[Signature]* 2/1/05
 Chief, Development Engineering Division: *[Signature]* 10/2/08



OWNER & DEVELOPER
 BRANTLY DEVELOPMENT GROUP
 8835-P COLUMBIA 100 PARKWAY
 COLUMBIA MD 21045

Project	05-020
Date	MAY 08
Illustration	engineering
HSP	HSP
Scale	HSP
AS SHOWN	RHI

No.	
Description	
Revisions	

THE LEGACY AT
DUCKETTS RIDGE PHASE 1 AND 2
 AGE RESTRICTED ADULT HOUSING, UNITS 1-52 & COMMUNITY BUILDING
 PAR A
 TAX MAP 37 - PARCEL 569 - GRID 12
 HOWARD COUNTY, MARYLAND
 FIRST ELECTION DISTRICT

MILDENBERG, BOENDER & ASSOC., INC.
 Engineers Planners Surveyors
 5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
 (410) 987-0286 Fax (410) 987-0289 Fax

APPROVED: DEPARTMENT OF PLANNING AND ZONING

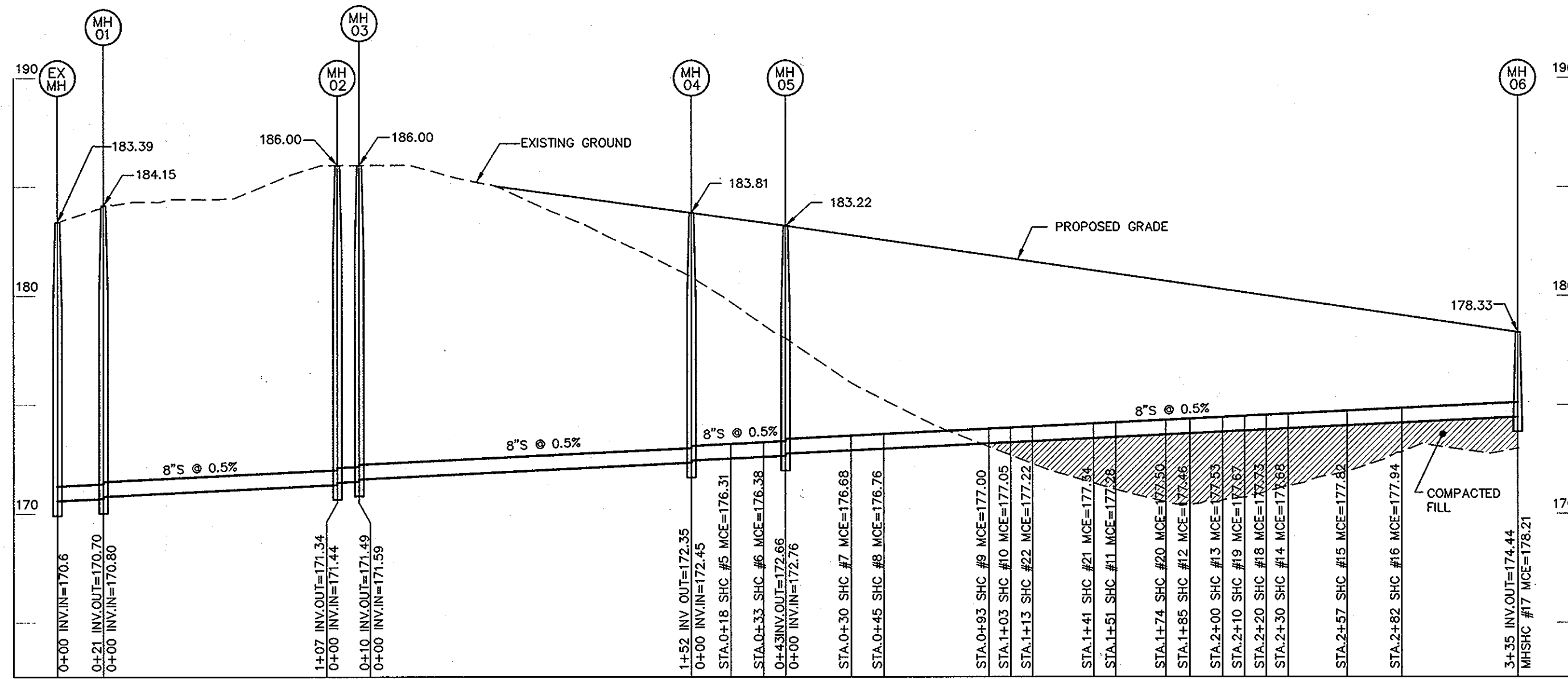
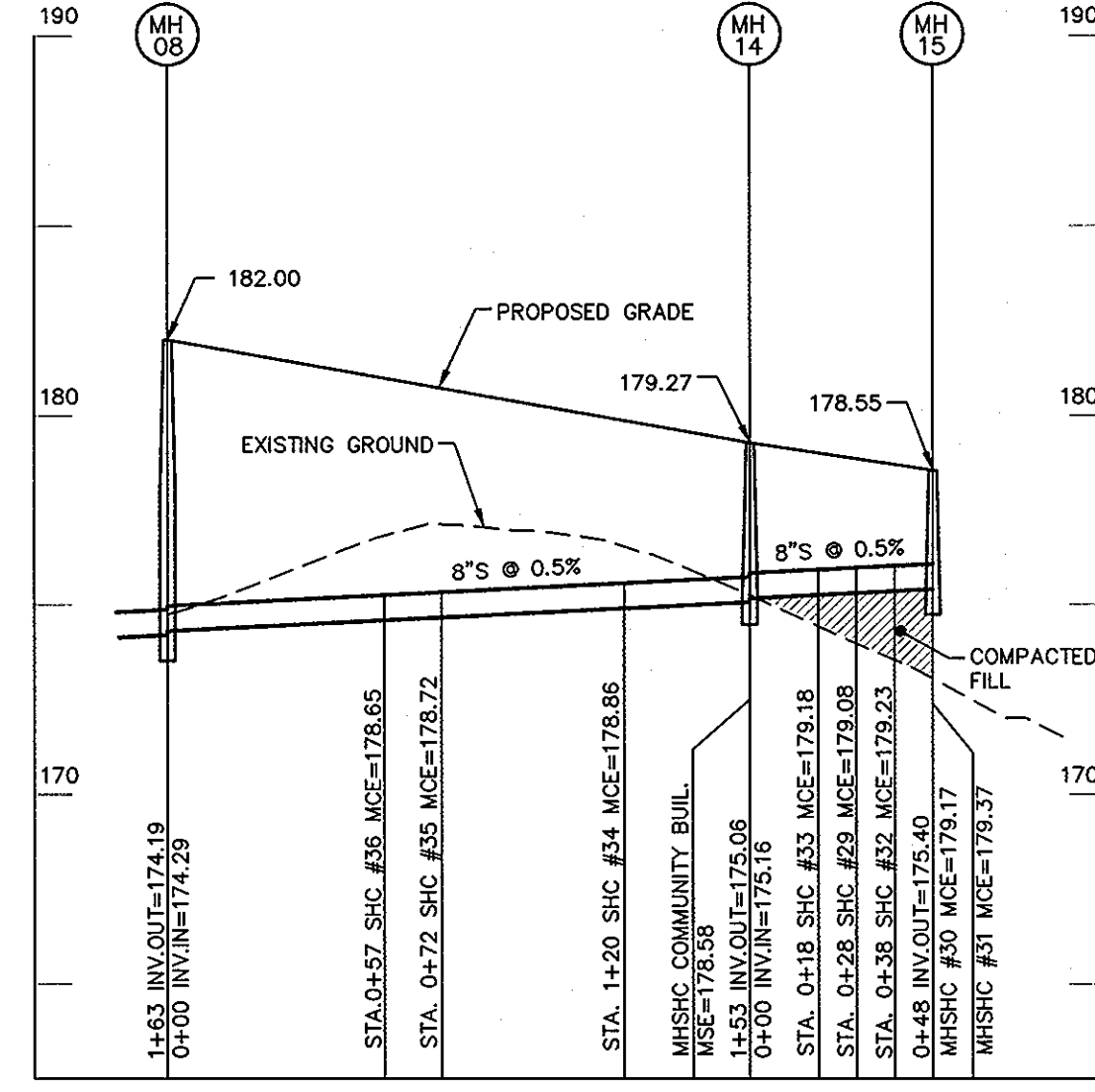
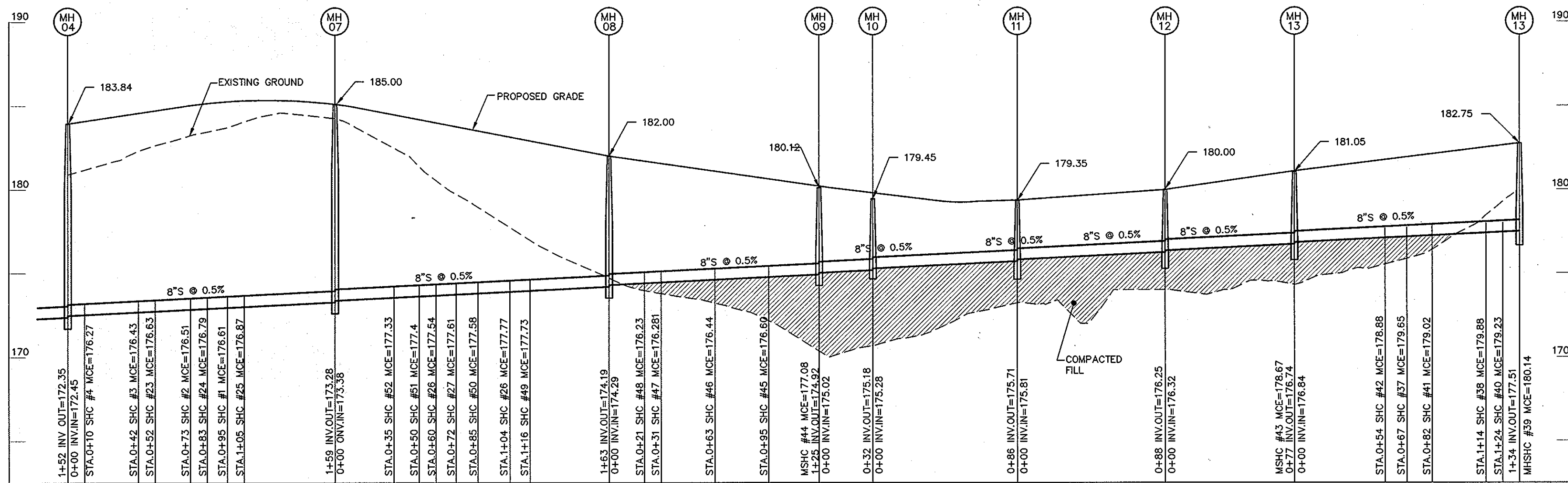
10/2/08
 DATE
 CHIEF DEVELOPMENT ENGINEERING DIVISION

2/4/09
 DATE
 CHIEF, DIVISION OF LAND DEVELOPMENT

2/4/08
 DATE
 DIRECTOR



OWNER & DEVELOPER
 BRANTLY DEVELOPMENT GROUP
 8835-P COLUMBIA 100 PARKWAY
 COLUMBIA MD 21045



UNIT #	ELEV. AT		SLOPE	MCE
	MAIN	CLEANOUT		
1	173.10	173.20	1%	176.61
2	173.00	173.10	1%	176.79
3	172.83	172.93	1%	176.43
4	172.67	172.77	1%	176.27
5	172.97	172.81	1%	176.31 (CNS)
6	172.79	172.89	1%	176.38 (CNS)
7	173.08	173.18	1%	176.68 (CNS)
8	173.16	173.26	1%	176.76 (CNS)
9	173.30	173.4	1%	177.00 (CNS)
10	173.45	173.55	1%	177.05 (CNS)
11	173.68	176.78	1%	177.23 (CNS)
12	173.86	173.96	1%	177.48 (CNS)
13	173.93	174.03	1%	177.53 (CNS)
14	174.08	174.18	1%	177.38 (CNS)
15	174.22	174.32	1%	177.83 (CNS)
16	174.34	174.44	1%	177.84 (CNS)
17	174.61	174.71	1%	178.21 (CNS)
18	174.03	174.23	1%	177.73 (CNS)
19	173.97	174.17	1%	177.67 (CNS)
20	173.80	174.00	1%	177.50 (CNS)
21	173.64	173.84	1%	177.34 (CNS)
22	173.50	173.70	1%	177.22 (CNS)
23	172.88	173.13	1%	176.63
24	173.10	173.29	1%	176.79
25	173.12	173.37	1%	176.87
26	173.84	174.04	1%	177.54 (CNS)
27	173.91	174.11	1%	177.61 (CNS)
28	174.07	174.27	1%	177.77 (CNS)
29	175.48	175.58	1%	179.08 (CNS)
30	175.57	175.67	1%	179.17 (CNS)
31	175.57	175.87	1%	179.37 (CNS)
32	175.51	175.76	1%	179.23 (CNS)
33	175.43	175.68	1%	179.18 (CNS)
34	175.08	175.36	1%	178.86 (CNS)
35	174.82	175.22	1%	178.72 (CNS)
36	174.75	175.15	1%	178.65 (CNS)
37	177.35	177.65	1%	179.65 (CNS)
38	177.58	178.08	1%	179.88 (CNS)
39	177.84	178.64	1%	180.14 (CNS)
40	177.63	177.73	1%	179.23 (CNS)
41	177.42	177.52	1%	179.02 (CNS)
42	177.28	177.38	1%	178.88 (CNS)
43	177.07	177.17	1%	178.67 (CNS)
44	175.36	175.52	1%	177.08 (CNS)
45	174.94	175.10	1%	176.60 (CNS)
46	174.78	174.94	1%	176.44 (CNS)
47	174.62	174.72	1%	176.28 (CNS)
48	174.57	174.73	1%	176.23 (CNS)
49	174.13	174.23	1%	175.73 (CNS)
50	173.98	174.08	1%	175.58 (CNS)
51	173.81	173.91	1%	175.40 (CNS)
52	173.73	173.83	1%	175.33 (CNS)
CON. BLD.	175.33	175.08	1%	178.58

Project	05-020	Date	MAY 08
Illustration	MMM	Engineering	MMM
Scale	1" = 50'	Approval	MMM

No.	Description	Date

THE LEGACY AT
DUCKETT'S RIDGE PHASE 1 AND 2
 AGE RESTRICTED ADULT HOUSING, UNITS 1-52 & COMMUNITY BUILDING
 PAR A
 TAX MAP 37 - PARCEL 569 - GRID 12
 HOWARD COUNTY, MARYLAND
 FIRST ELECTION DISTRICT
PRIVATE SEWER PROFILES

MILDENBERG, BOENDER & ASSOC., INC.
 Engineers Planners Surveyors
 5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
 (410) 997-0286 Fax (410) 997-0288 Fax

HOWARD SOIL CONSERVATION DISTRICT

PERMANENT SEEDING NOTES

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

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: 1) PREFERRED - APPLY 2 TONS PER ACRE OF ORGANIC LIQUORITE (40 LBS./1000 SQ.FT.)...

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.

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

TEMPORARY SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE RESTORED 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.

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.

REFER TO THE 1983 MANUAL STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR ADDITIONAL RULES AND METHODS NOT COVERED.

STANDARD SEDIMENT CONTROL NOTES

- 1. A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LISTS AND RECORDS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION, (313-1855).
- 2. ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT "MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL", AND REVISIONS THERETO.
- 3. FOLLOWING INITIAL SOIL DISTURBANCE OR RESTORATION, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: A) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, Dikes, PILE-UP SLIPWAYS AND ALL SLOPES GREATER THAN 3:1, B) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.

- 1. MULCHES - SEE STANDARDS FOR VEGETATIVE STABILIZATION WITH MULCHES ONLY. MULCH SHOULD BE COMPACTED OR TACKED TO PREVENT BLOWING.
- 2. SILLAGE - TO ROUNDUP SURFACE AND BRING CLODS TO THE SURFACE. THIS IS AN EMERGENCY MEASURE WHICH SHOULD BE USED BEFORE SOIL BLOWING STARTS. BEGIN PLOWING ON WINDWARD SIDE OF SITE. CHISEL-TYPE PLOWS APPLICABLE AT 12" APART, SPRING-TOOTHED HARROWS, AND SIMILAR PLOWS ARE EXAMPLES OF EQUIPMENT WHICH MAY PRODUCE THE DESIRED EFFECT.

I HEREBY CERTIFY THAT THE FACILITY SHOWN ON THIS PLAN WAS CONSTRUCTED AS SHOWN ON THE "AS-BUILT" PLANS AND MEETS THE APPROVED PLANS AND SPECIFICATIONS.

AS-BUILT CERTIFICATION section containing fields for Signature, Date, P.E. No., and a section for the Developer to certify that the plan was constructed as shown.

Signature block for the Engineer, including fields for Signature, Date, and Title, along with a section for the Director and a circular professional seal.

STANDARD AND SPECIFICATIONS FOR TOPSOIL

PLACEMENT OF TOPSOIL OVER A PREPARED SURFACE PRIOR TO ESTABLISHMENT OF PERMANENT VEGETATION.

DEFINITION: TOPSOIL - A MIXTURE OF SUBSTRATA, INCLUDING BUT NOT LIMITED TO: CLAY, SILT, SAND, AND ORGANIC MATTER.

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.

DEFINITION: TOPSOIL - A MIXTURE OF SUBSTRATA, INCLUDING BUT NOT LIMITED TO: CLAY, SILT, SAND, AND ORGANIC MATTER. PURPOSE: TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH.

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TEMPORARY DUST CONTROL MEASURES

DEFINITION: MULCHES - SEE STANDARDS FOR VEGETATIVE STABILIZATION WITH MULCHES ONLY. MULCH SHOULD BE COMPACTED OR TACKED TO PREVENT BLOWING.

DEFINITION: SILLAGE - TO ROUNDUP SURFACE AND BRING CLODS TO THE SURFACE. THIS IS AN EMERGENCY MEASURE WHICH SHOULD BE USED BEFORE SOIL BLOWING STARTS.

DEFINITION: IRRIGATION - THIS IS GENERALLY DONE AS AN EMERGENCY TREATMENT. IT IS SPRINKLED WITH WATER UNTIL THE SURFACE IS MOIST. REPEAT AS NEEDED.

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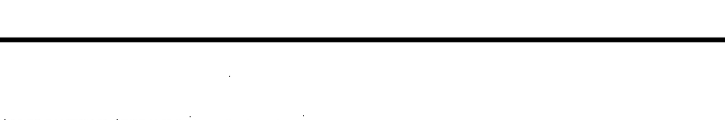
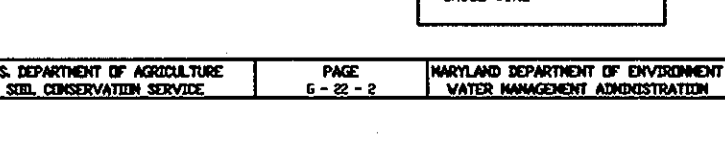
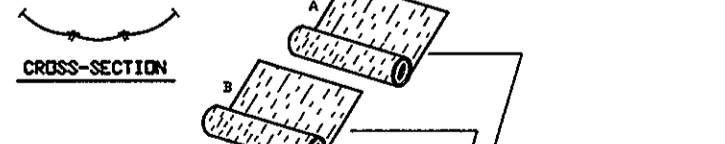
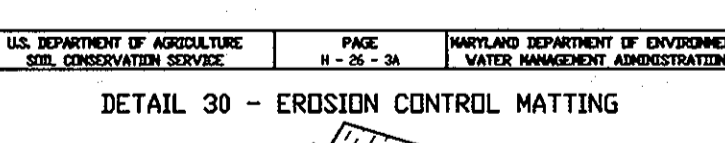
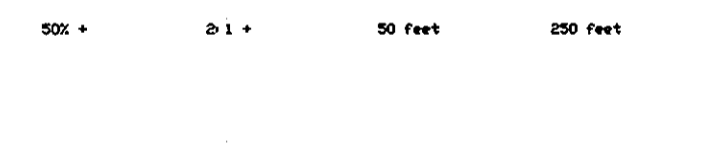
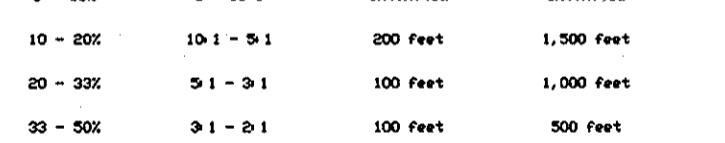
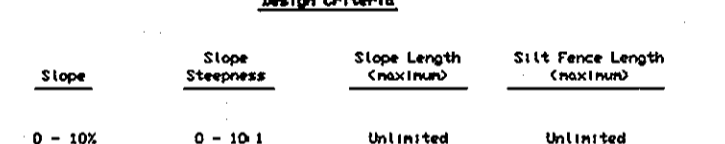
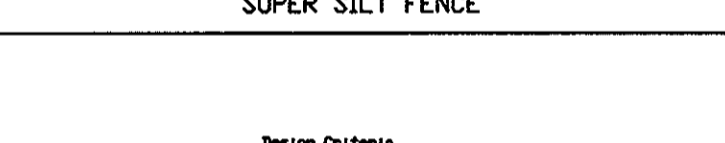
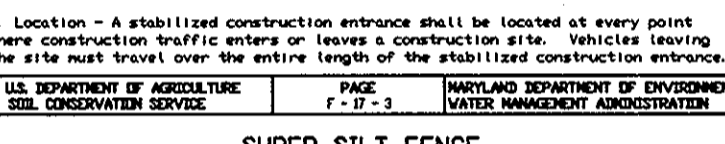
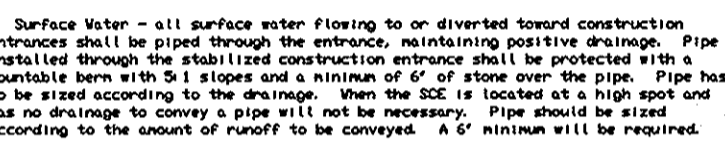
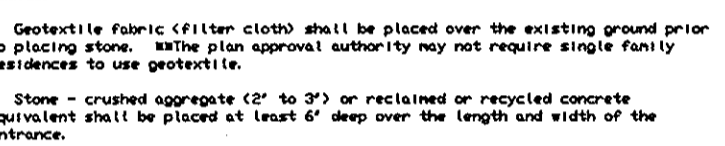
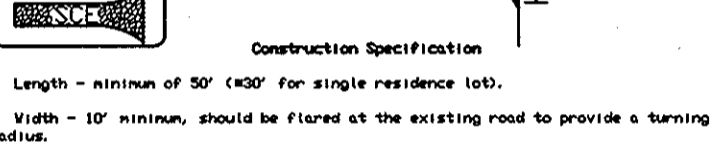
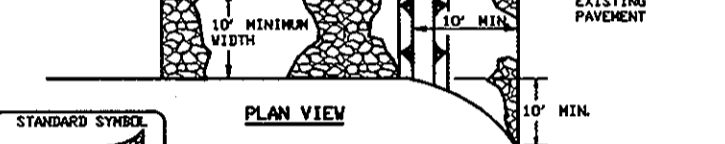
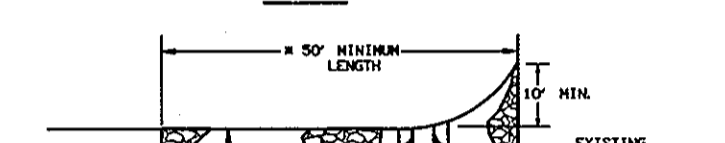
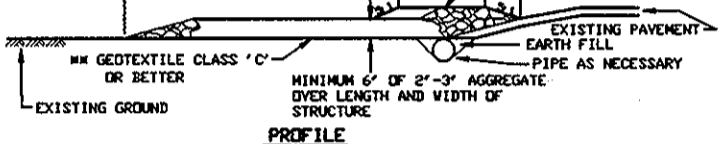
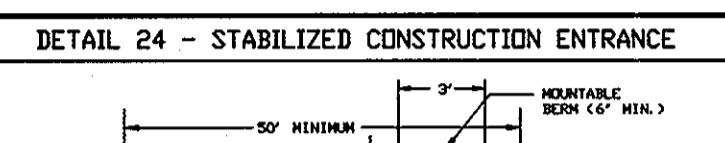
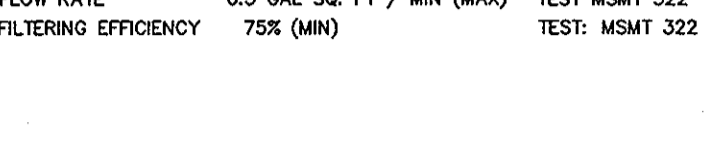
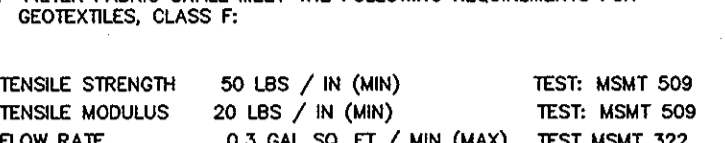
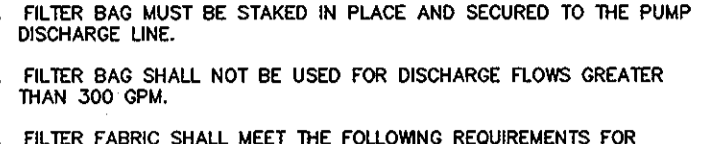
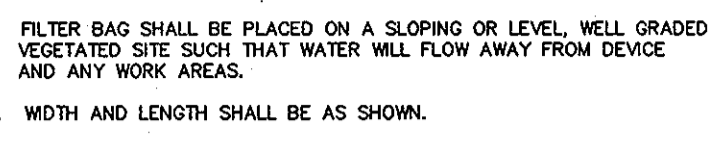
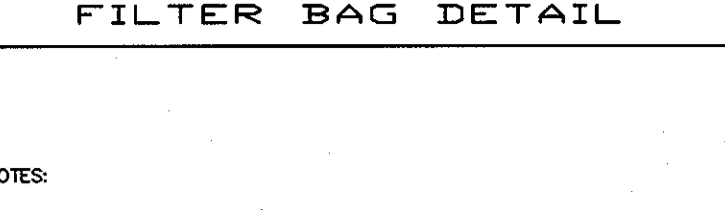
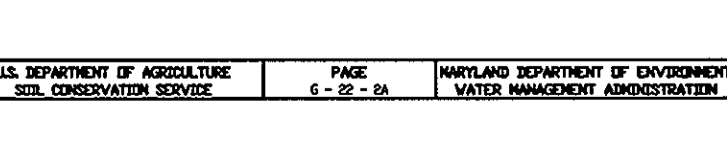
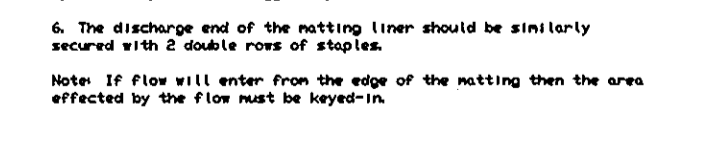
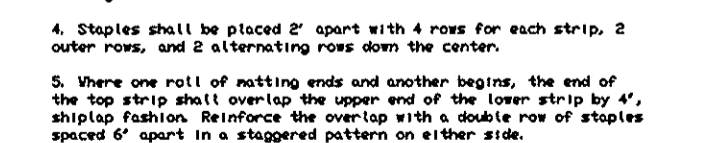
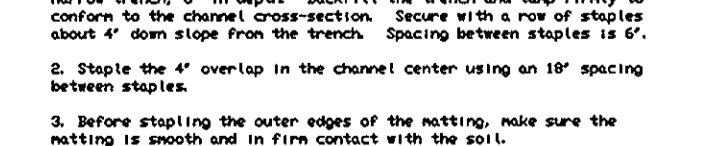
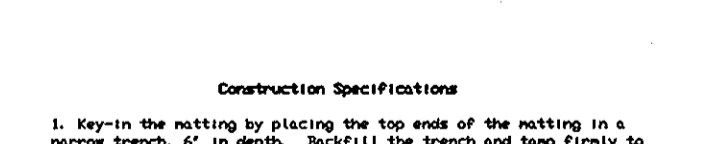
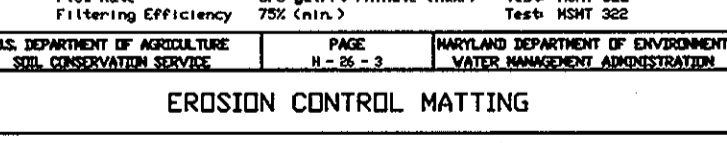
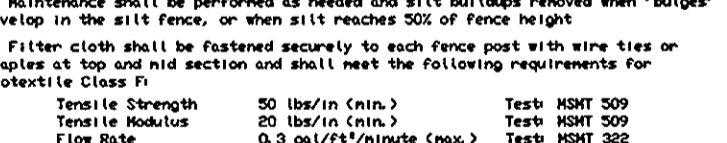
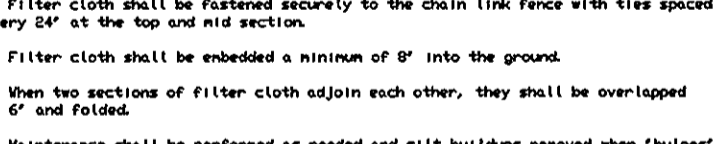
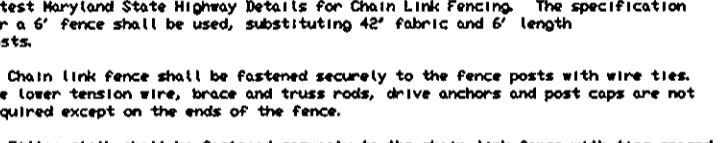
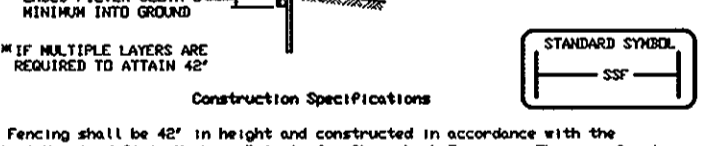
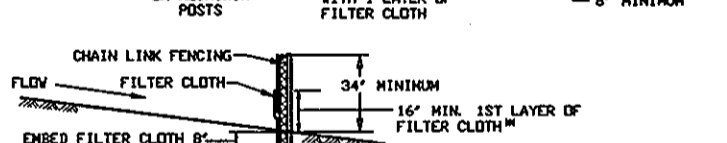
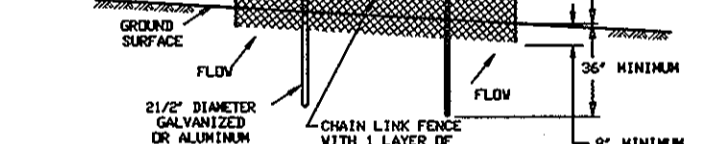
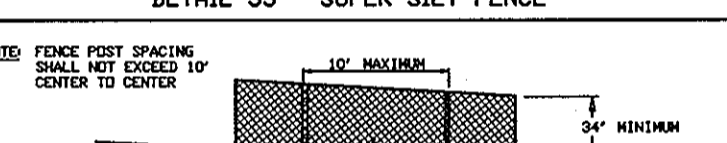
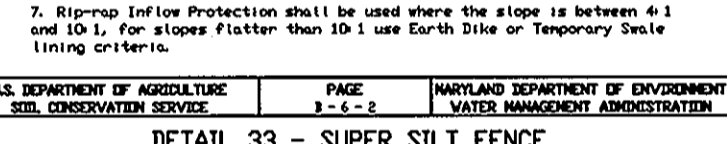
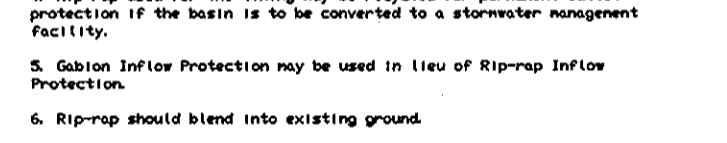
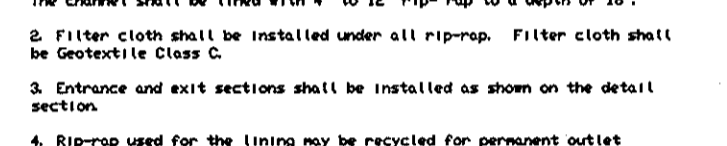
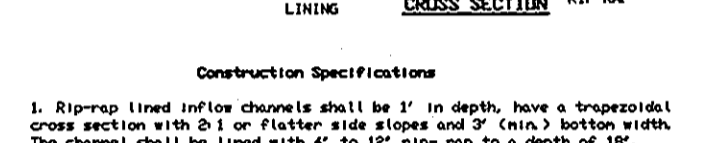
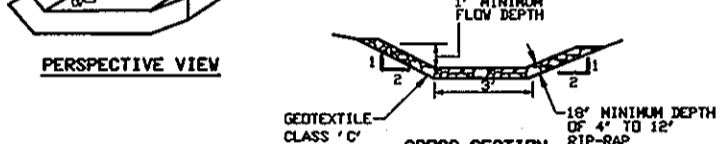
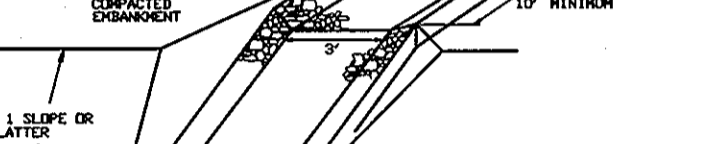
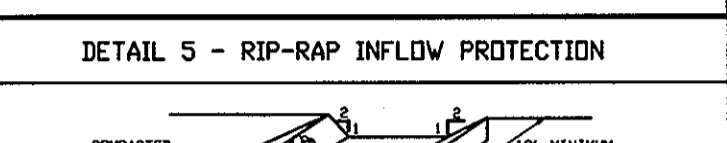
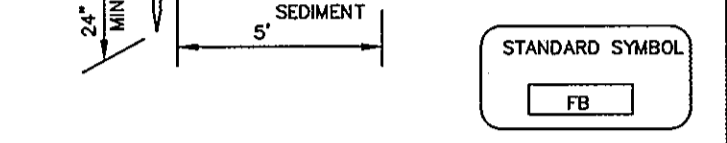
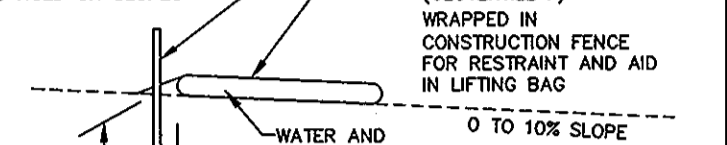
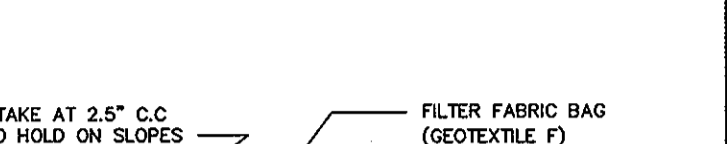
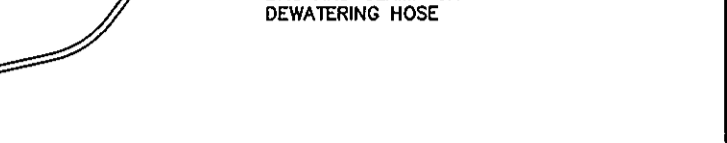
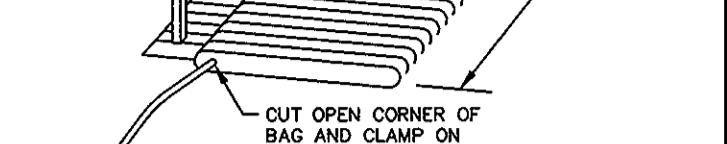
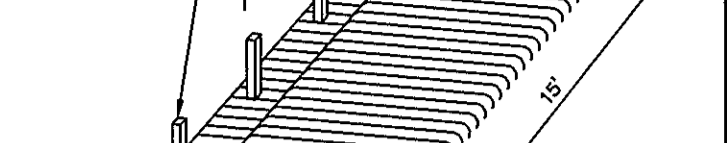
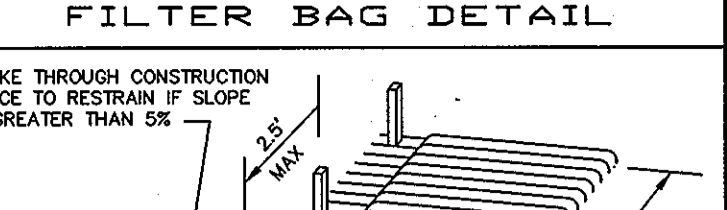
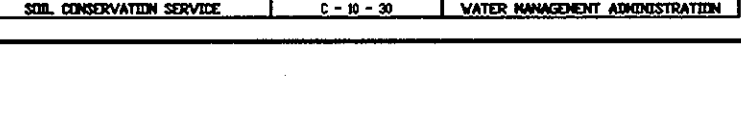
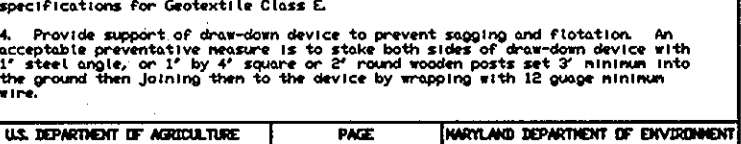
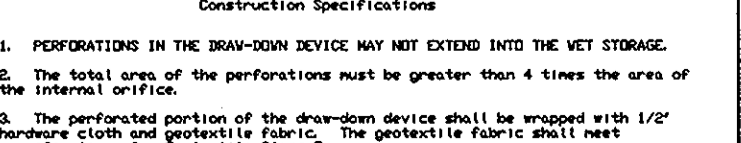
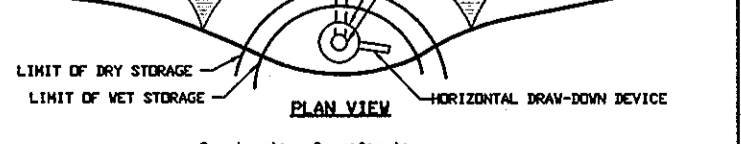
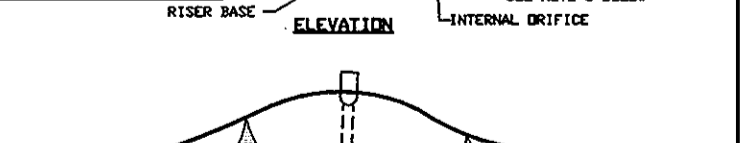
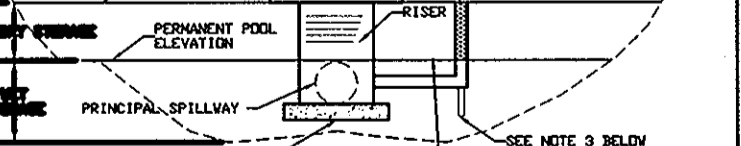
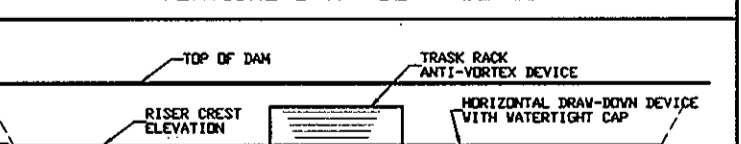
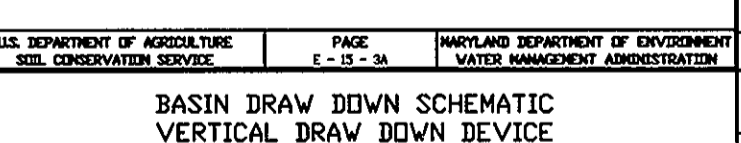
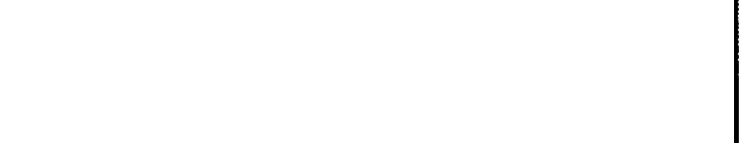
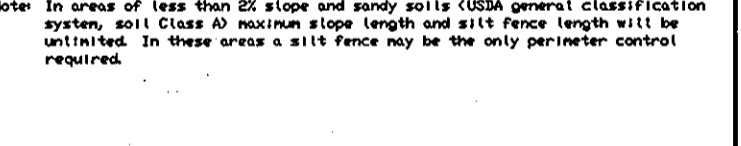
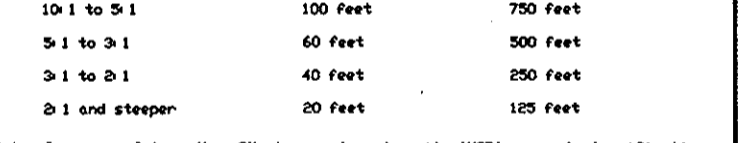
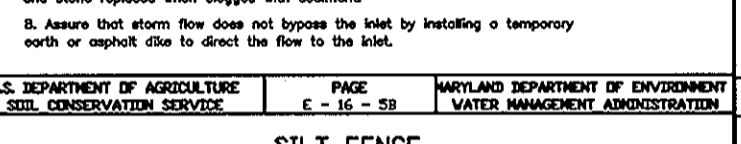
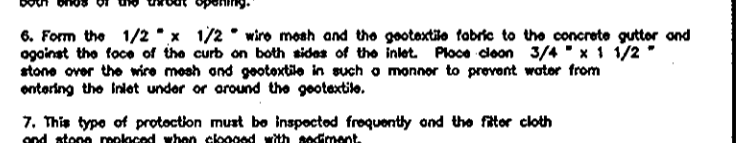
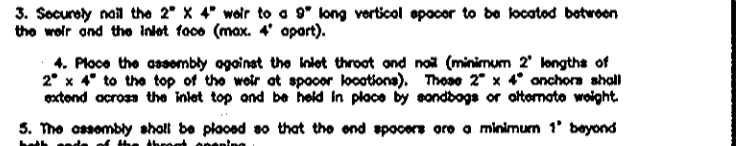
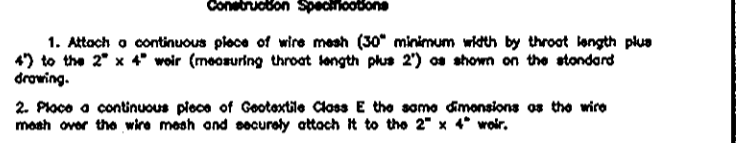
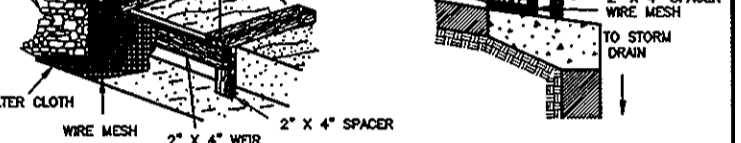
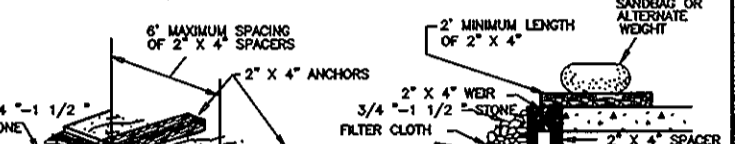
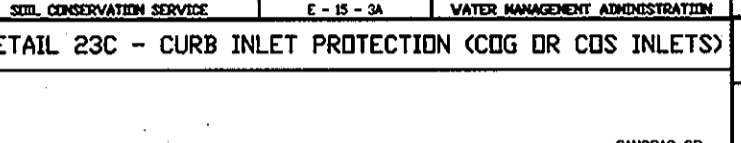
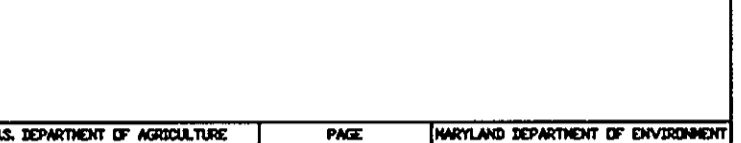
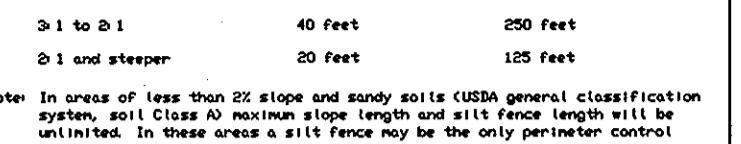
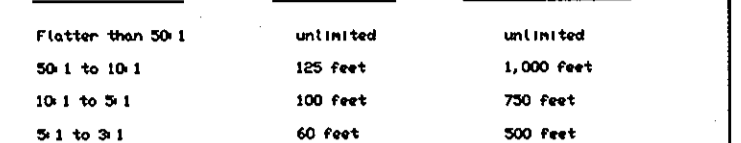
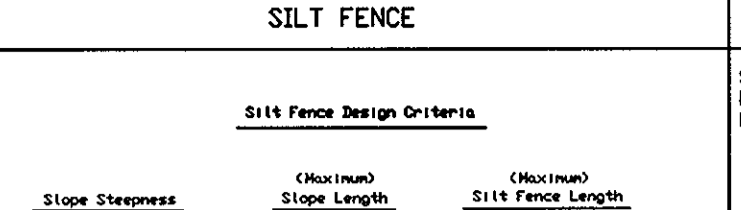
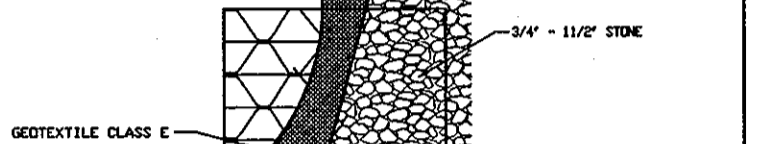
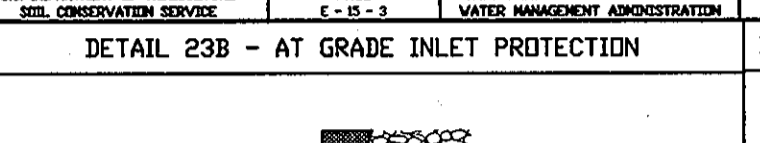
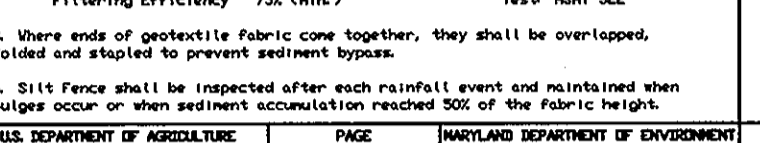
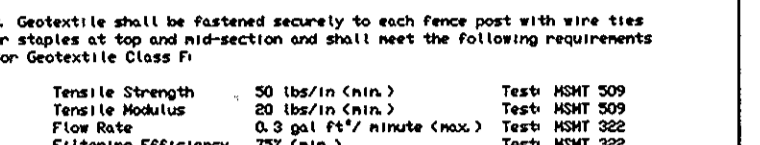
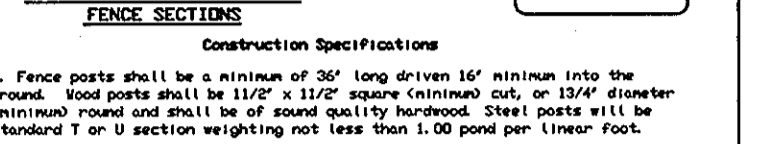
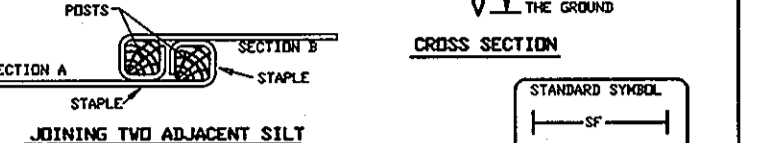
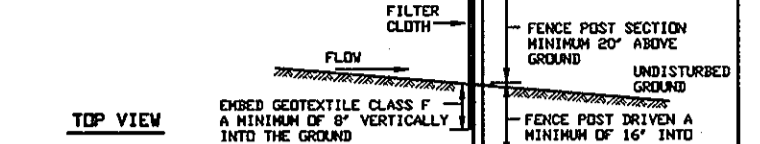
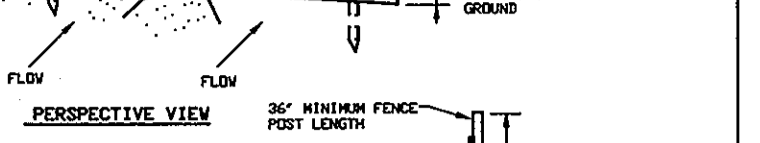
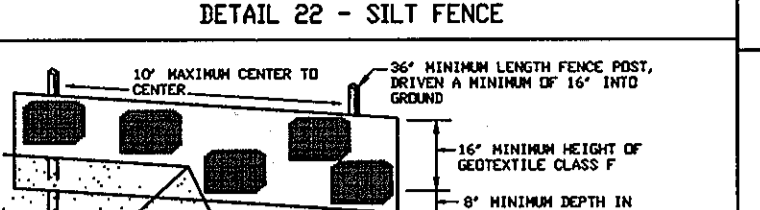
DEFINITION: IRRIGATION - THIS IS GENERALLY DONE AS AN EMERGENCY TREATMENT. IT IS SPRINKLED WITH WATER UNTIL THE SURFACE IS MOIST. REPEAT AS NEEDED.

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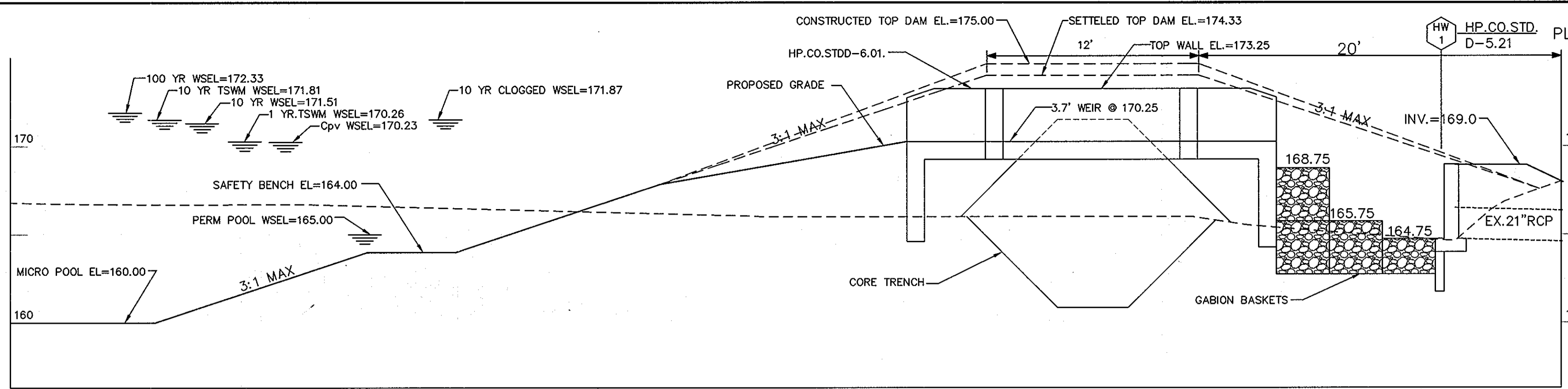
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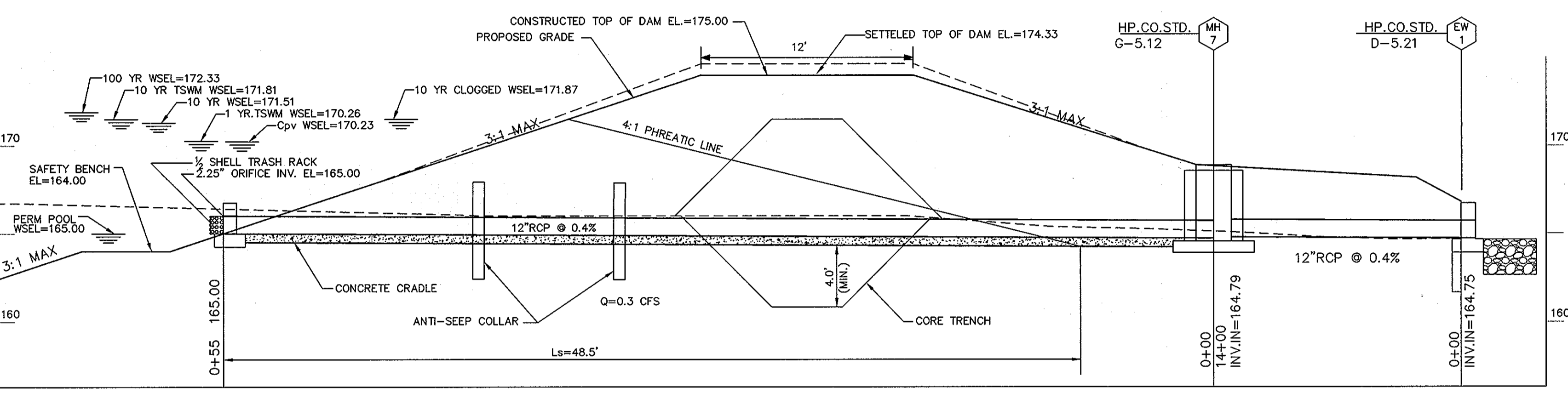
Project Information Table with columns for Date (05-08-2008), Project (05-050), Description (SILT FENCE), Scale (MM), and Approval (AS SHOWN).

Vertical banner text: 'THE LEGACY AT DUCKETT'S RIDGE PHASE 1 AND 2 DUCKETT'S RIDGE PHASE 1 AND 2 DUCKETT'S RIDGE PHASE 1 AND 2'.

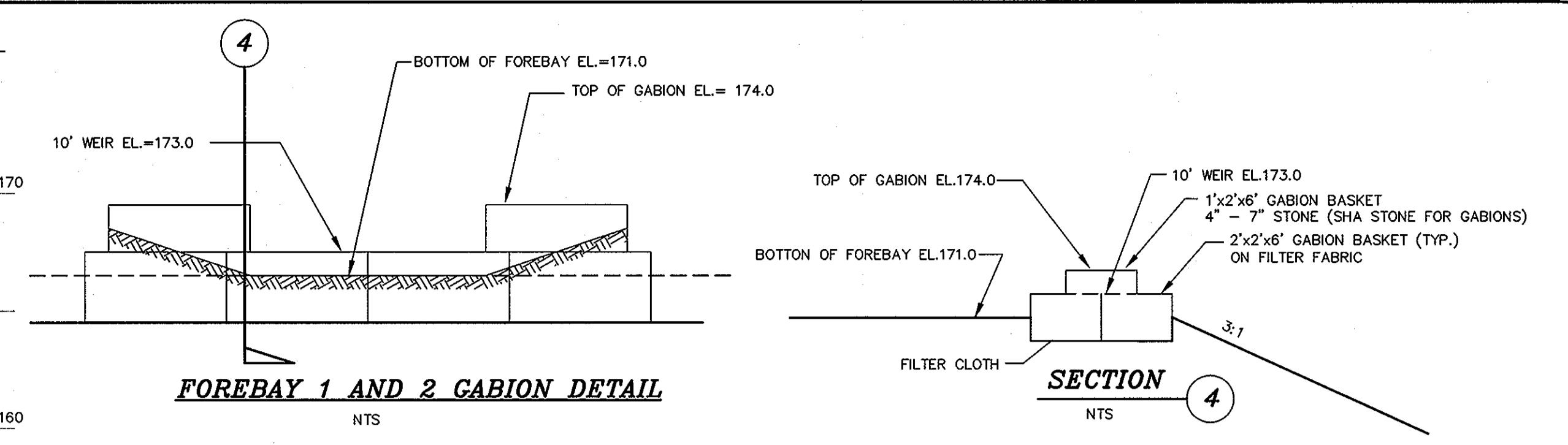
MILDENBERG, BOENDER & ASSOC., INC. logo and contact information: 5072 Donesy Hill Drive, Suite 202, Elkridge, MD 21042. Phone: (410) 997-0296. Fax: (410) 997-0298.



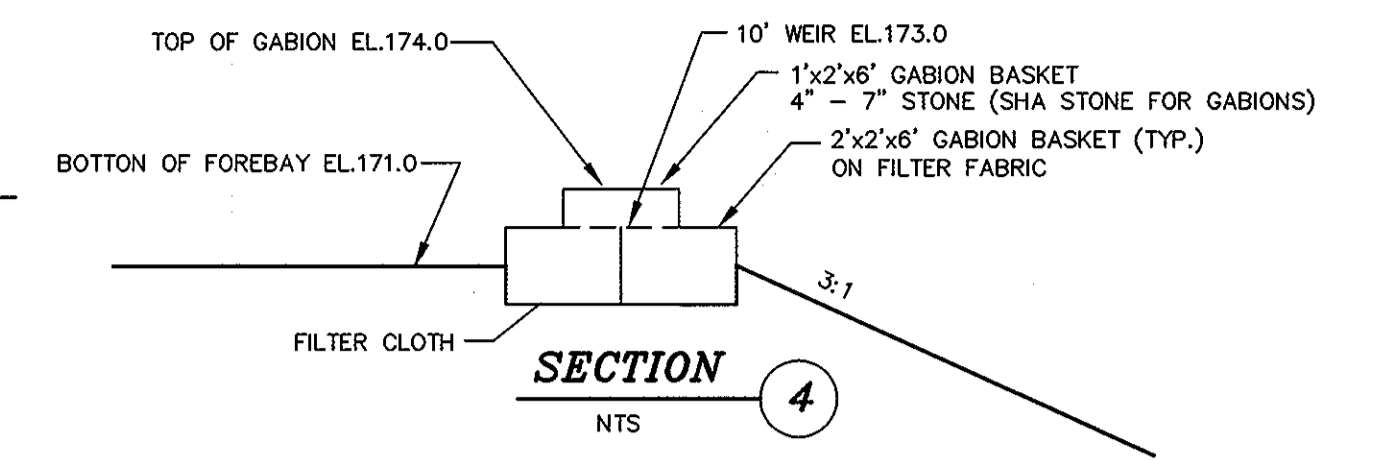
SWM POND PROFILE
1"=5'



LOW FLOW PIPE PROFILE
1"=5'



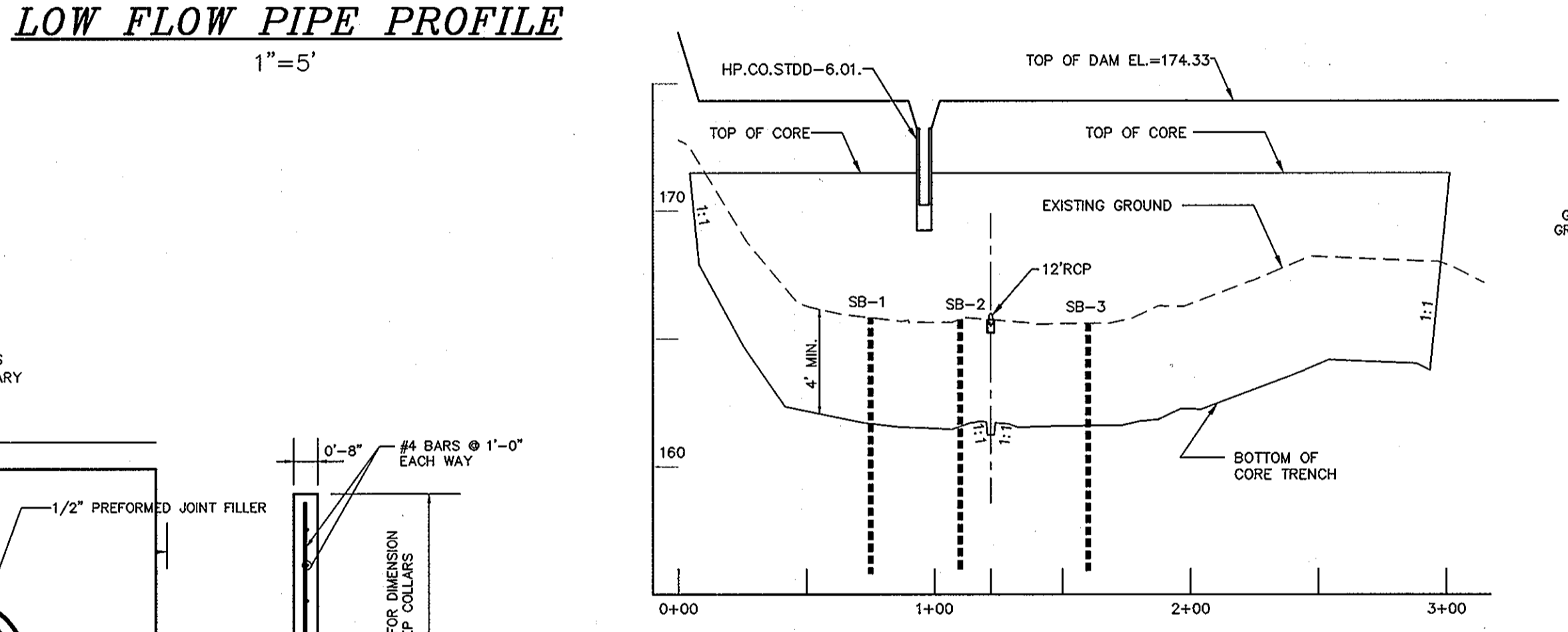
FOREBAY 1 AND 2 GABION DETAIL
NTS



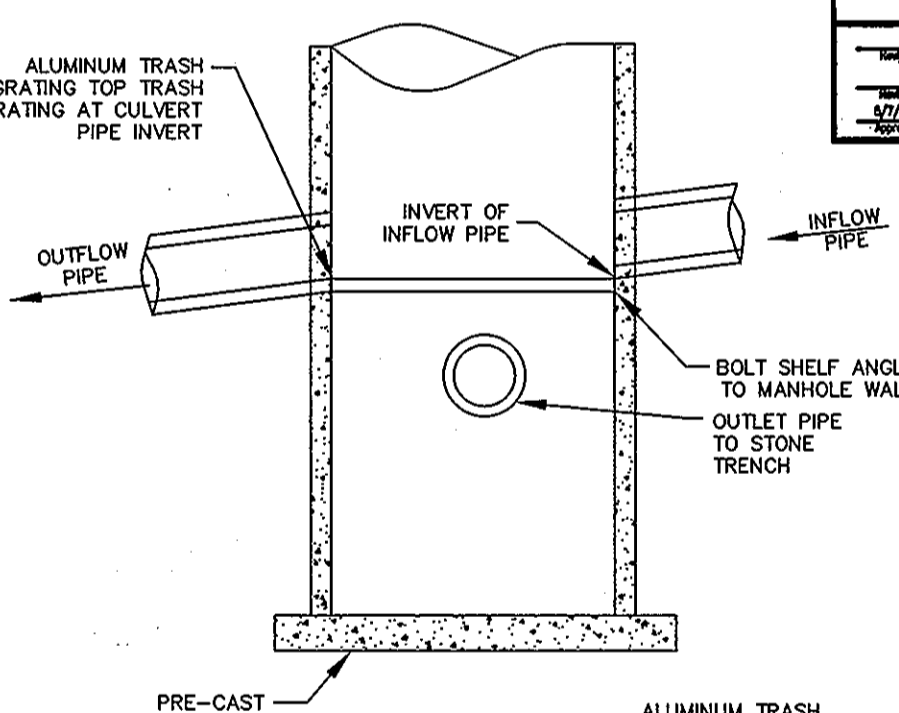
SECTION 4
NTS

STORMWATER MANAGEMENT POND MAINTENANCE SCHEDULE PRIVATE FACILITY

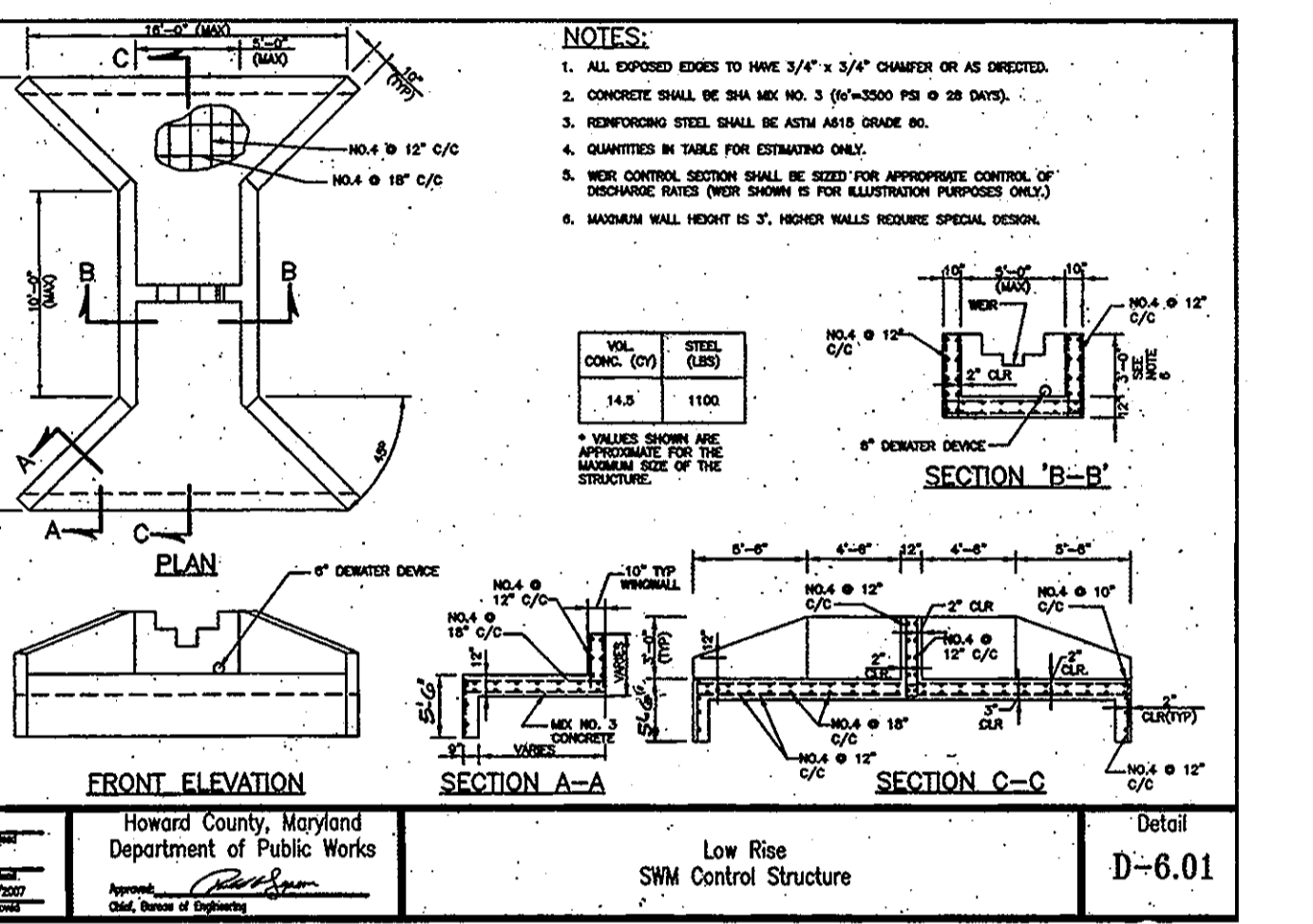
- PRIVATE ROUTINE MAINTENANCE**
- FACILITY SHALL BE INSPECTED ANNUALLY AND AFTER MAJOR STORMS. INSPECTIONS SHOULD BE PERFORMED DURING WET WEATHER TO DETERMINE IF THE POND IS FUNCTIONING PROPERLY.
 - TOP AND SIDE SLOPES OF THE EMBANKMENT SHALL BE MOWED A MINIMUM OF TWO (2) TIMES A YEAR, ONCE IN JUNE AND 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 RIP-RAP OUTLET AREA SHALL BE REPAIRED AS SOON AS IT IS NOTICED.
- PRIVATE NON-ROUTINE MAINTENANCE**
- STRUCTURAL COMPONENTS OF THE POND SUCH AS THE DAM, RISER STRUCTURE AND THE PIPES SHALL BE REPAIRED UPON THE DETECTION OF ANY DAMAGE. THE COMPONENTS SHOULD BE INSPECTED DURING MAINTENANCE OPERATIONS.
 - SEDIMENT SHOULD BE REMOVED WHEN ITS ACCUMULATION SIGNIFICANTLY REDUCES THE DESIGN STORAGE, INTERFERES WITH THE FUNCTION OF THE RISER, WHEN DEEMED NECESSARY FOR AESTHETIC REASONS, OR WHEN DEEMED NECESSARY BY HOWARD COUNTY'S DEPARTMENT OF PUBLIC WORKS.



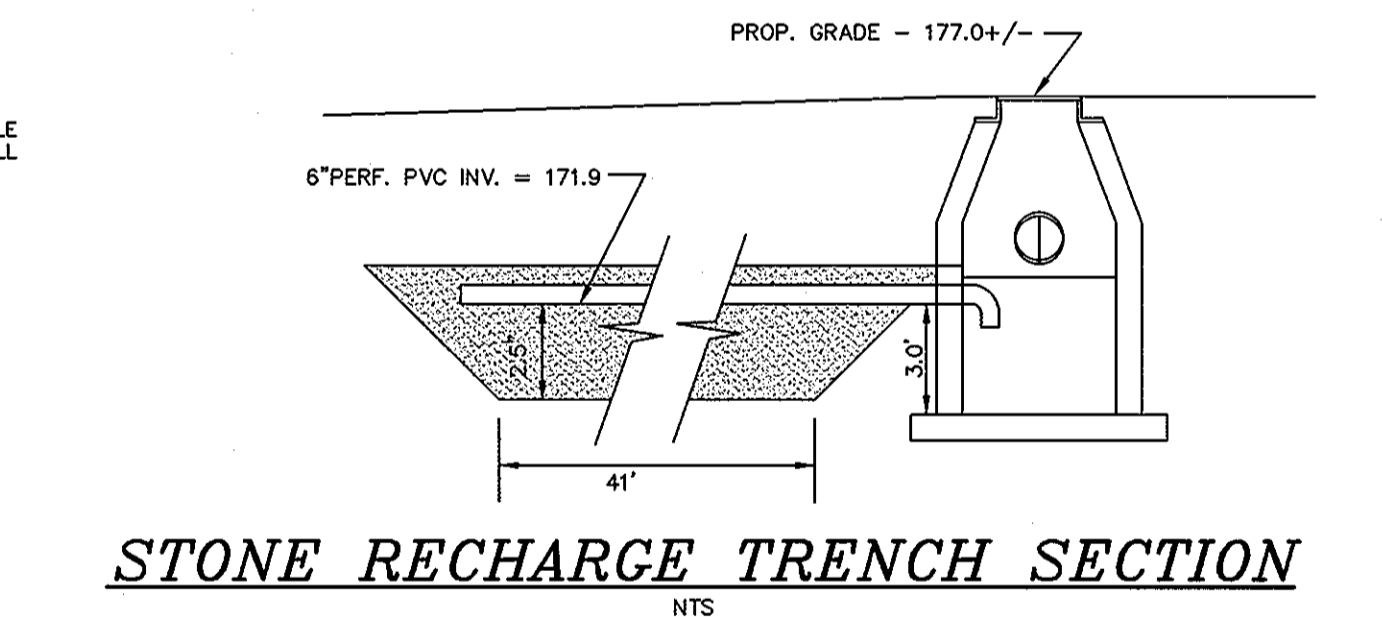
CENTERLINE DAM PROFILE
SCALE: HOR. 1"=50' VER. 1"=5'



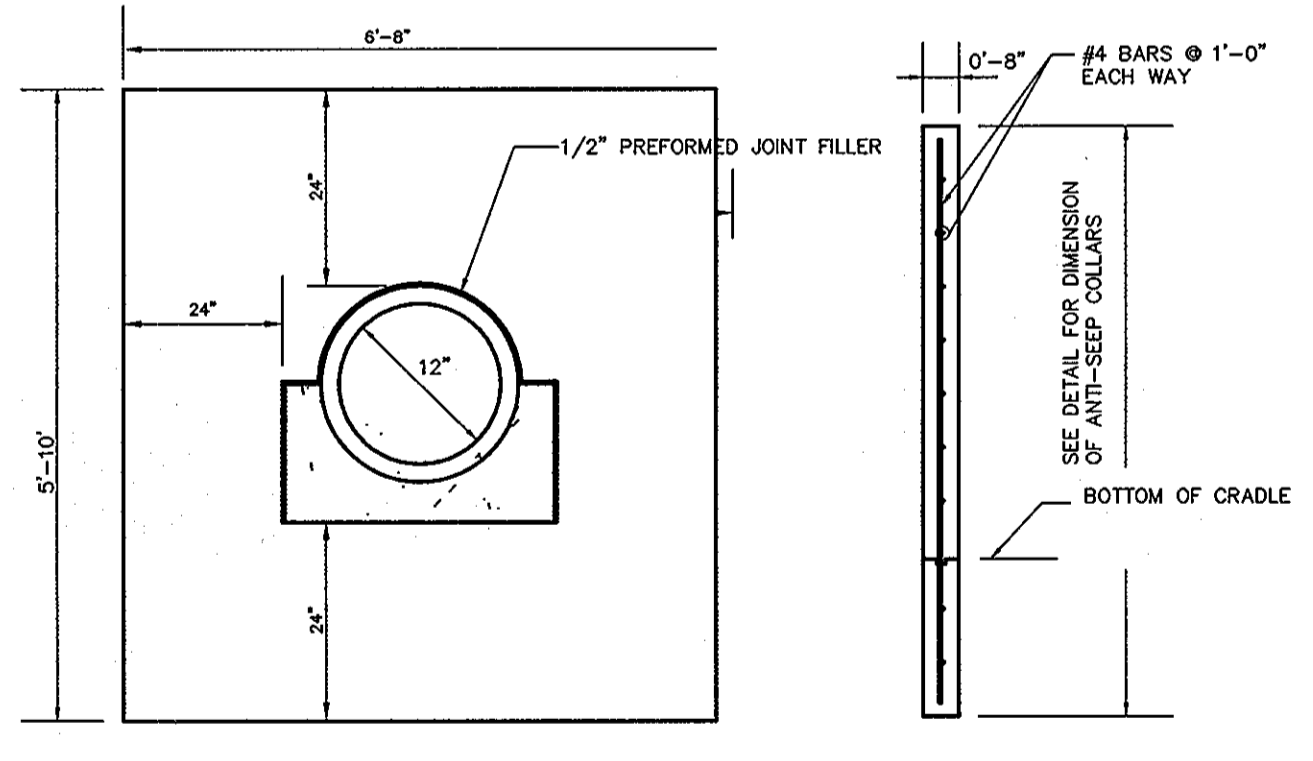
ISOLATION/DIVERSION PRE-TREATMENT MH #7
NTS



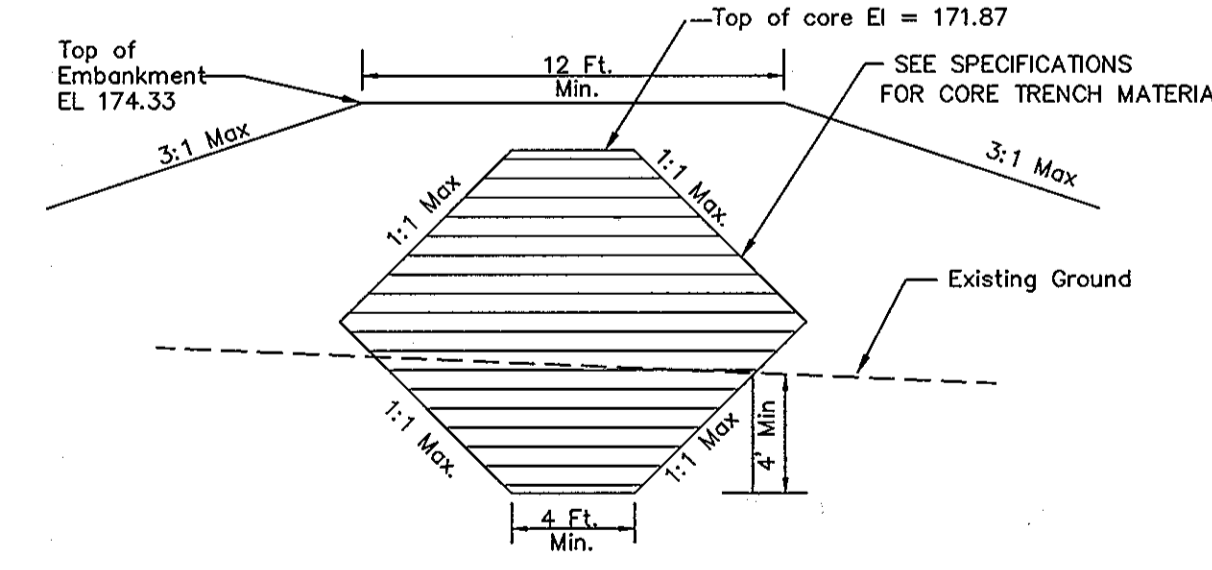
Low Rise SWM Control Structure D-6.01



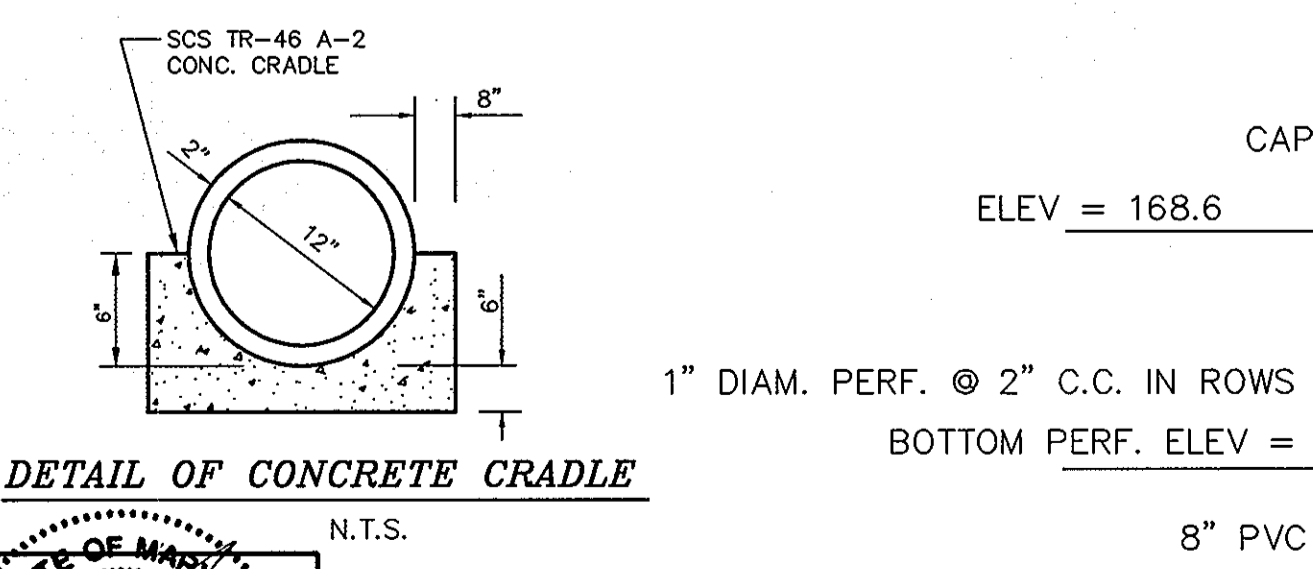
STONE RECHARGE TRENCH SECTION
NTS



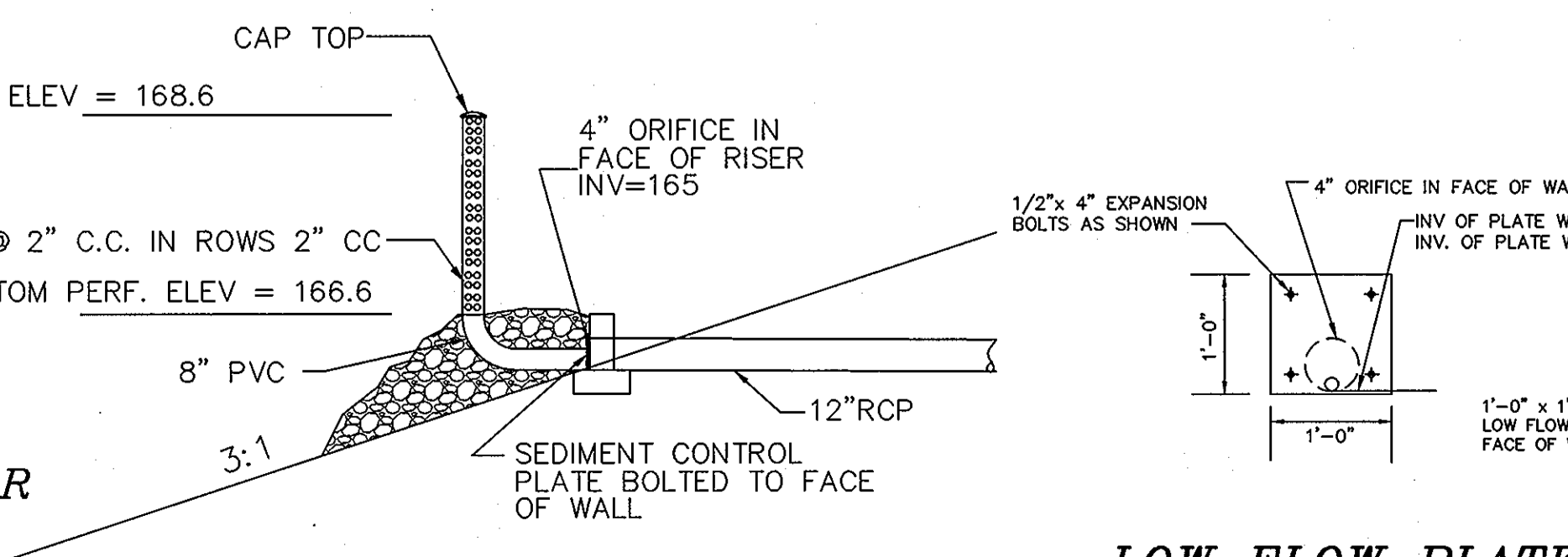
ANTI-SEEP COLLAR DETAIL SECTION
N.T.S.



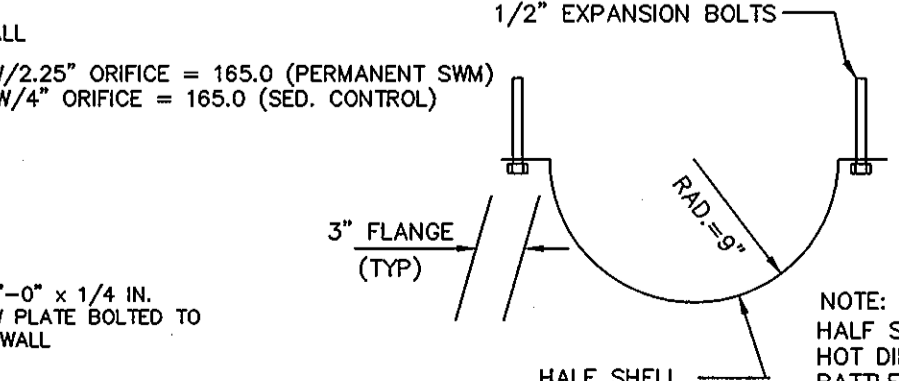
CORE TRENCH DETAIL (TYPICAL SECTION OF EMBANKMENT)
N.T.S.



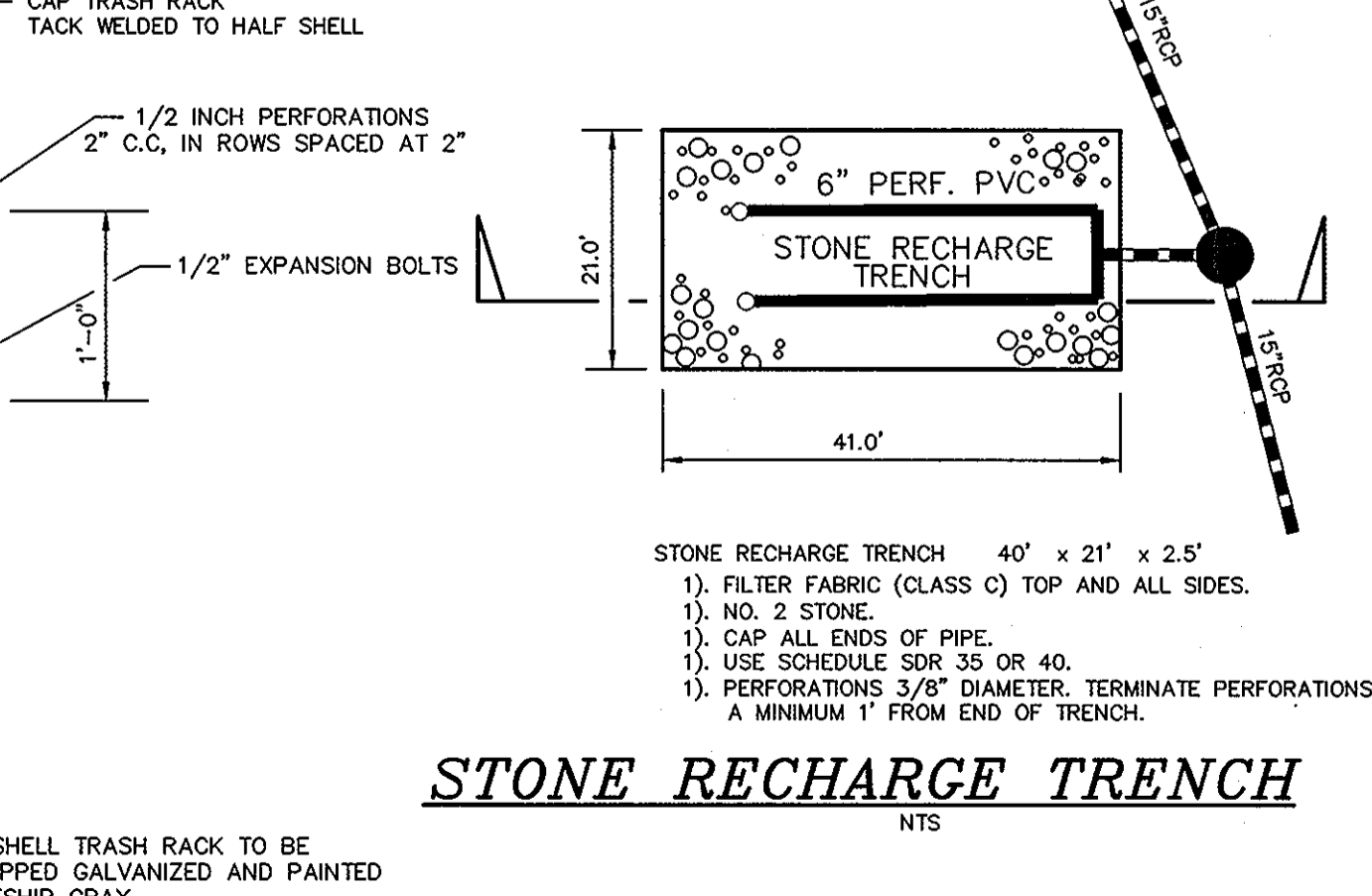
DETAIL OF CONCRETE CRADLE
N.T.S.



SEDIMENT PHASE (DEWATER PIPE)
N.T.S.



LOW FLOW PLATE
N.T.S.



HALF SHELL TRASH RACK
1"=1'

AS-BUILT CERTIFICATION

I HEREBY CERTIFY THAT THE FACILITY SHOWN ON THIS PLAN WAS CONSTRUCTED AS SHOWN ON THE "AS-BUILT" PLANS AND MEETS THE APPROVED PLANS AND SPECIFICATIONS.

DATE: 5/20/08

CERTIFY MEANS TO STATE OR DECLARE A PROFESSIONAL OPINION BASED UPON ON-SITE INSPECTIONS AND MATERIAL TESTS WHICH ARE CONDUCTED DURING CONSTRUCTION. THE ON-SITE INSPECTIONS AND MATERIAL TESTS ARE THOSE INSPECTIONS AND TESTS DEEMED SUFFICIENT AND APPROPRIATE COMMONLY ACCEPTED ENGINEERING STANDARDS. CERTIFY DOES NOT MEAN OR IMPLY A GUARANTEE BY THE ENGINEER NOR DOES THE ENGINEER'S CERTIFICATION RELIEVE ANY OTHER PARTY FROM MEETING REQUIREMENTS IMPOSED BY CONTRACT, EMPLOYMENT, OR OTHER MEANS, INCLUDING MEETING COMMONLY ACCEPTED INDUSTRY PRACTICES.

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.

DATE: 5/28/08

BY THE ENGINEER:

I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. 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.

DATE: 5/28/08

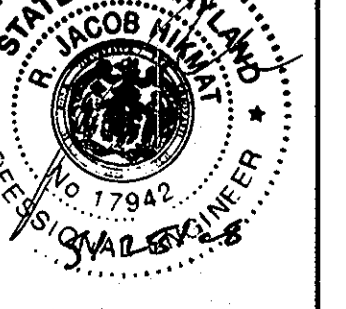
THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.

DATE: 1/20/09

APPROVED: DEPARTMENT OF PLANNING AND ZONING

DATE: 10/2/09

DATE: 2/10/09



OWNER & DEVELOPER
BRANTLY DEVELOPMENT GROUP
8835-P COLUMBIA 100 PARKWAY
COLUMBIA MD 21045

Project	05-020	Date	MAY 2008
Illustration	MMM	Engineering	MMM
Scale	MMM	Approval	MMM
AS SHOWN		Revisions	

description	revisions
no.	date

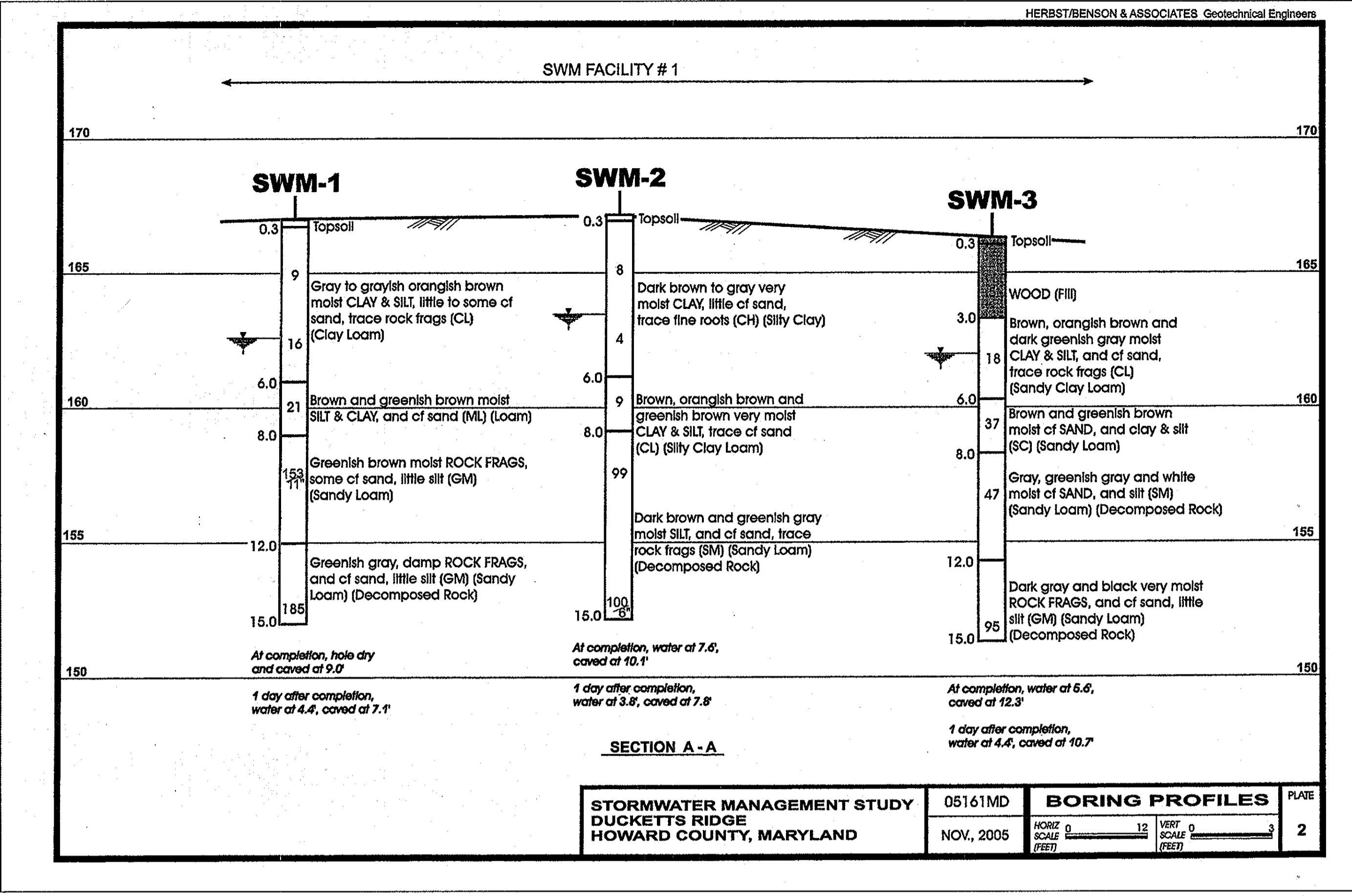
THE LEGACY AT DUCKETTS RIDGE PHASE 1 AND 2
AGE RESTRICTED ADULT HOUSING, UNITS 1-52 & COMMUNITY BUILDING
PAR A
TAX MAP 37 - PARCEL 569 - GRID 12
HOWARD COUNTY, MARYLAND
FIRST ELECTION DISTRICT

STORMWATER MANAGEMENT DETAILS

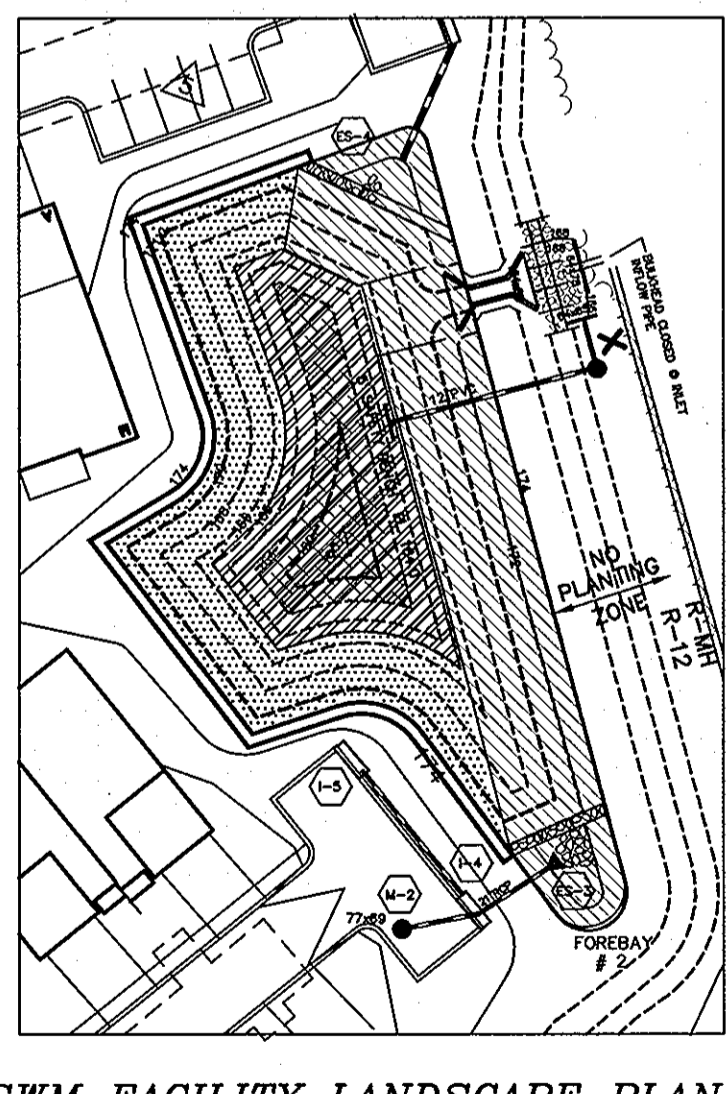
MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
(410) 997-0296 Fax: (410) 997-0299

Project information table with columns for Project, Date, Illustration, Scale, Approval, and AS SHOWN.

Revision table with columns for Date, Description, and Revision number.



CONSTRUCTION SPECIFICATIONS, SITE PREPARATION, EARTH FILL, STRUCTURAL BACKFILL, PIPE CONDUIT, OPERATION MAINTENANCE AND INSPECTION, OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED SURFACE STORMWATER FILTRATION SYSTEM, GEOTECHNICAL RECOMMENDATIONS.



- PLANTING LIST table with columns for Zone, Surface Area, Common Name, and Scientific Name.

AS-BUILT CERTIFICATION, SIGNATURE, DATE, and various approval stamps including the State of Maryland Professional Engineer seal.

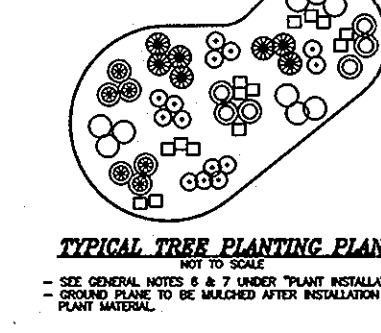
THE LEGACY AT DUCKETTS RIDGE PHASE 1 AND 2 AGE RESTRICTED ADULT HOUSING, UNITS 1-52 % COMMUNITY BUILDING. TAX MAP 37 - PARCEL 569 - GRID 12. HOWARD COUNTY, MARYLAND. SWM NOTES & DETAILS.

MILDENBERG, BOENDER & ASSOC., INC. Engineers Planners Surveyors. 5072 Dorsey Hall Drive, Suite 202, Elkridge City, Maryland 21042. (410) 997-0296. FAX: (410) 997-0296. 11 OF 13

OWNER & DEVELOPER BRANTLY DEVELOPMENT GROUP 8835-P COLUMBIA 100 PARKWAY COLUMBIA MD 21045

LEGEND

- DENOTES WETLANDS
- FOREST CONSERVATION EASEMENT (RETENTION)
- FOREST CONSERVATION EASEMENT (REFORESTATION)
- PUBLIC WATER EASEMENT
- DENOTES 4' CONCRETE SIDEWALK
- DENOTES LIMITS OF DISTURBANCE
- DENOTES LEVEL SPREADER
- STABILIZED CONSTRUCTION ENTRANCE
- SUPER SILT FENCE
- EROSION CONTROL MATTING
- DENOTES PROPOSED PAVED AREAS
- DENOTES AREAS DEDICATED TO RECREATIONAL OPEN SPACE
- DENOTES CREDITED OPEN SPACE
- EXISTING TREELINE
- PROPOSED TREELINE



NOTE: THIS PLAN IS TO BE USED FOR LANDSCAPE AND FOREST CONSERVATION PURPOSES ONLY.

REFORESTATION PLANT LIST (FCE B)

ALTERNATIVE 1	SHADE	MOIST.	WET.	MIN.O.C.	SIZE & SPACING	REMARKS
QTY. SPECIES	VT	D-W	FAC	15'	CONT/B & B 1" CALIPER	
11 Acer rubrum Red Maple	I	D-M	FAC	15'	CONT/B & B 1" CALIPER	
5 Corya glabra Pignut Hickory	I	D-M	FAC	15'	CONT/B & B 1" CALIPER	
4 Liriodendron tulipifera Tuliptree	MT	D-M	FAC	15'	CONT/B & B 1" CALIPER	
4 Quercus alba White Oak	I	D-M	FACU	15'	CONT/B & B 1" CALIPER	
TOTAL	24 TREES					

REFORESTATION PLANT LIST (FCE C)

ALTERNATIVE 1	SHADE	MOIST.	WET.	MIN.O.C.	SIZE & SPACING	REMARKS
QTY. SPECIES	VT	D-W	FAC	15'	CONT/B & B 1" CALIPER	
6 Acer rubrum Red Maple	I	D-M	FAC	15'	CONT/B & B 1" CALIPER	
3 Corya glabra Pignut Hickory	I	D-M	FAC	15'	CONT/B & B 1" CALIPER	
3 Liriodendron tulipifera Tuliptree	MT	D-M	FAC	15'	CONT/B & B 1" CALIPER	
TOTAL	12 TREES					

REFORESTATION PLANT LIST (FCE D)

ALTERNATIVE 1	SHADE	MOIST.	WET.	MIN.O.C.	SIZE & SPACING	REMARKS
QTY. SPECIES	VT	D-W	FAC	15'	CONT/B & B 1" CALIPER	
4 Acer rubrum Red Maple	I	D-M	FAC	15'	CONT/B & B 1" CALIPER	
4 Corya glabra Pignut Hickory	I	D-M	FAC	15'	CONT/B & B 1" CALIPER	
4 Liriodendron tulipifera Tuliptree	MT	D-M	FAC	15'	CONT/B & B 1" CALIPER	
4 Quercus alba White Oak	I	D-M	FACU	15'	CONT/B & B 1" CALIPER	
TOTAL	16 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. LANDSCAPE SURETY IN THE AMOUNT OF \$76,500.00 HAS BEEN POSTED AS PART OF THE DEVELOPER'S AGREEMENT.
- FOREST CONSERVATION EASEMENTS (FCE) HAS BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 16.120 OF HOWARD COUNTY CODE AND FOREST CONSERVATION ACT. NO CLEARING, GRADING, OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT.
- THE FOREST CONSERVATION FOR THIS PLAN HAS BEEN STATED BY PROVIDING 1.51 ACRES OF ONSITE RETENTION, 0.27 ACRES OF ONSITE REFORESTATION, 1.73 ACRES OF OFFSITE REFORESTATION AT BRANTWOOD, 2/1, PRES. PARCEL F, AND THE PAYMENT OF \$21,780.00 TO THE HO. CO. FOREST CONSERVATION FUND FOR THE OUTSTANDING 1.00 ACRE OF REFORESTATION. FOREST CONSERVATION SURETY IN THE AMOUNT OF \$19,055.72 HAS BEEN POSTED AS A PART OF THE DEVELOPER'S AGREEMENT AS PART OF THE FOREST RETENTION (\$13,155.12), THE 0.27 ACRES OF ONSITE REFORESTATION (\$5,880.60), AND FOREST CONSERVATION SURETY IN THE AMOUNT OF \$3,779.40 HAS BEEN POSTED AS A PART OF THE DEVELOPER'S AGREEMENT FOR THE 1.73 ACRES OF OFFSITE REFORESTATION.
- THE TIME OF PLANT INSTALLATION, ALL TREES LISTED AND APPROVED ON THE LANDSCAPE PLAN, SHALL COMPLY WITH THE PROPER HEIGHT REQUIREMENT IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPE MANUAL. IN ADDITION, NO SUBSTITUTIONS OR RELOCATIONS OF THE REQUIRED PLANTINGS MAY BE MADE WITHOUT PRIOR REVIEW AND APPROVAL FROM THE DEPARTMENT OF PLANNING AND ZONING. ANY DEVIATIONS FROM THE APPROVED LANDSCAPE PLAN WILL RESULT IN DENIAL OR DELAY IN THE RELEASE OF THE LANDSCAPE SURETY UNTIL SUCH TIME AS ALL REQUIRED MATERIALS ARE PLANTED AND/OR REVISIONS ARE MADE TO THE ROAD DRAWING PLANS.
- THE OWNER, TENANTS AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED PERIMETER LANDSCAPING. ALL PLANT MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION, AND WHEN NECESSARY, REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED.

PLANTING SPECIFICATIONS AND NOTES

- ALL FOREST RETENTION AREAS SHALL BE TEMPORARILY PROTECTED BY WELL ANCHORED BLAZE ORANGE PLASTIC MESH FENCING AND STORAGE AS INDICATED ON PLANS. THE FENCING SHALL BE INSTALLED ALONG THE FOREST RETENTION BOUNDARY PRIOR TO ANY LAND CLEARING, GRUBBING, OR GRADING ACTIVITIES. THE FENCING SHALL BE INSTALLED AT A DISTANCE OF 5' FROM THE CRITICAL ROOT ZONES OF ALL TREES WITHIN THE FOREST RETENTION AREA. THE FENCING SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION, INCLUDING SILT FENCE BEING USED AS PROTECTIVE FENCING. THE FENCING SHALL BE REMOVED UPON COMPLETION OF CONSTRUCTION. ATTACHMENT SIGNS, OR ANY OTHER OBJECTS TO TREES IS PROHIBITED. NO CONSTRUCTION, MACHINERY, VEHICLES, MATERIALS OR EXCESSIVE PEDESTRIAN TRAFFIC SHALL BE ALLOWED WITHIN THESE PROTECTED AREAS. INSTALLATION AND MAINTENANCE OF PROTECTION AND SIGNAGE SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. THE GENERAL CONTRACTOR SHALL TAKE THE MOST CARE TO PROTECT TREE ROOT SYSTEMS DURING ALL CONSTRUCTION ACTIVITIES. TREE ROOT SYSTEMS SHALL BE PROTECTED FROM SMOTHERING, FLOODING, EXCESSIVE WETTING FROM DE-WATERING OPERATIONS, OFF-SITE RUN OFF, SPLASH AND DRAINAGE OF MATERIALS THAT MAY BE HARMFUL TO TREES.
- THE GENERAL CONTRACTOR SHALL PREPARE AND MAINTAIN CONSTRUCTION VEHICLES AND EQUIPMENT, AND THE STORAGE OF BUILDING SUPPLIES OR STOCKPILING OF EARTH WITHIN FOREST CONSERVATION EASEMENTS. REMOVAL OF TOPSOIL OR ROOT MAT WITHIN THE TREE PRESERVATION AREA SHALL BE PROHIBITED.
- CONSTRUCTION SHALL BE HELD RESPONSIBLE FOR ANY TREES DAMAGED OR DESTROYED WITHIN THE FOREST CONSERVATION AREAS. ROOT PRUNING SHALL BE LIMITED TO THE LIMIT OF DISTURBANCE OR LIMIT OF GRADING WITHIN AND ADJACENT TO ALL PRESERVATION AREAS, AS NECESSARY.

FOREST CONSERVATION WORKSHEET
VERSION 1.0

NET TRACT AREA:
 A. Total tract area = 10.03
 B. Area within 100 year floodplain = -0.00
 C. Area to remain in agricultural production or utility ROW = -0.00
 D. Net tract area = 10.03

LAND USE CATEGORY:
 (from table 3.2.1, page 40, Manual) Input the number "1" under the appropriate land use, and limit to only one entry.

ARA MDR IDA HDR MPO CIA
 0 0 0 1 0 0

E. Afferestation Threshold: 15' x D = 1.50
 F. Conservation Threshold: 20' x D = 2.01

EXISTING FOREST COVER:
 G. Existing forest cover (including floodplain) = -10.03
 H. Area of forest above afforestation threshold = -8.53
 I. Area of forest above conservation threshold = -8.02

BREAK DOWN POINTS:
 J. Forest retention above threshold with no mitigation = -3.61
 K. Clearing permitted without mitigation = -6.42
 L. Total area of forest to be cleared = -8.52
 M. Total area of forest to be retained = -1.51

PLANTING REQUIREMENTS:
 N. Reforestation for clearing above conservation threshold = -2.01
 O. Reforestation for clearing below conservation threshold = -0.99
 P. Credit for retention above conservation threshold = -3.00
 R. Total reforestation required = -3.00
 S. Total afforestation required = -0.00
 T. Total reforestation and afforestation required = -3.00
 U. Total reforestation provided on-site = -0.27
 V. Total off-site reforestation = -1.00
 W. Total off-site reforestation = -1.73 acres



INTERNAL LANDSCAPING & PARKING PLANTING SCHEDULE

QUANTITY	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE
54		PRUNUS SARGENTII	SARGENT SHERRY	2 1/2" - 3" CAL.
TOTAL				
54				STREET TREES (86 SHADE TREES)

STREET TREE PLANTING SCHEDULE

QUANTITY	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE
101		ACER RUBRUM 'RED SUNSET'	RED SUNSET RED MAPLE	2 1/2" - 3" CAL.
TOTAL				
101				STREET TREES (86 SHADE TREES)

PERIMETER PLANTING SCHEDULE

QUANTITY	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE
45		ACER SACCHARUM 'GREEN MOUNTAIN'	GREEN MOUNTAIN SUGAR MAPLE	2 1/2" - 3" CAL.
90		PINUS STROBUS	EASTERN WHITE PINE	6' - 8" HT
TOTAL				
135				TREES (45 SHADE TREES AND 90 EVERGREENS)

SCHEDULE B: PARKING LOT INTERNAL LANDSCAPING

NUMBER OF PARKING SPACES	16
NUMBER OF PLANTING ISLANDS REQUIRED	2
NUMBER OF PLANTING ISLANDS PROVIDED	2
NUMBER OF TREES REQUIRED	2 SHADE TREES
NUMBER OF TREES PROVIDED	2 SHADE TREES
NUMBER OF TREES PROVIDED (1-DU SUBSTITUTION)	2 SHADE TREES 0 TREES

SCHEDULE C: RESIDENTIAL DEVELOPMENT INTERNAL LANDSCAPING

NUMBER OF DWELLING UNITS	52
NUMBER OF TREES REQUIRED (1-DU SFA)	52 SHADE TREES
NUMBER OF TREES PROVIDED	52 SHADE TREES

SCHEDULE A: PERIMETER LANDSCAPED EDGE

CATEGORY	ADJACENT TO PERIMETER PROPERTIES	ADJACENT TO ROADWAYS	TOTAL	
LANDSCAPE TYPE	C (PERIMETER 1)	C (PERIMETER 2)	C (PERIMETER 3)	C (PERIMETER 4)
LINEAR FEET OF PERIMETER	567 LF	972 LF	244 LF	988 LF
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET)	YES, 567 LF OF EX. TREES TO REMAIN	YES, 300 LF OF EX. TREES TO REMAIN	NONE	YES, 115 LF OF EX. TREES TO REMAIN
NUMBER OF PLANTS REQUIRED	0 SHADE TREES 34 EVERGREEN TREES 0 SHRUBS	17 SHADE TREES 34 EVERGREEN TREES 0 SHRUBS	6 SHADE TREES 12 EVERGREEN TREES 0 SHRUBS	22 SHADE TREES 44 EVERGREEN TREES 0 SHRUBS
CREDIT FOR EXISTING VEGETATION	N/A	N/A	N/A	N/A
PLANTING TYPE	TYPE C	TYPE C	TYPE C	TYPE C
SHADE TREE REQ. RATIO	1:40 LF	1:40 LF	1:40 LF	1:40 LF
EVERGREEN TREE REQ. RATIO	1:20 LF	1:20 LF	1:20 LF	1:20 LF
SHRUB REQ. RATIO	NONE	NONE	NONE	NONE
NUMBER OF PLANTS PROVIDED	0 SHADE TREES 34 EVERGREEN TREES 0 SHRUBS	17 SHADE TREES 34 EVERGREEN TREES 0 SHRUBS	6 SHADE TREES 12 EVERGREEN TREES 0 SHRUBS	22 SHADE TREES 44 EVERGREEN TREES 0 SHRUBS

SCHEDULE D: SWM AREA LANDSCAPING

LINEAR FEET OF PERIMETER	N/A
CREDIT FOR EXISTING VEGETATION (NO, YES AND LINEAR FEET)	YES 260 LF. (C PERIMETER 2)
NUMBER OF TREES REQUIRED	6 SHADE TREES 8 EVERGREEN TREES
NUMBER OF TREES PROVIDED	6 SHADE TREES 8 EVERGREEN TREES 0 TREES (0 SUBSTITUTION)

REFORESTATION FOREST CONSERVATION EASEMENTS

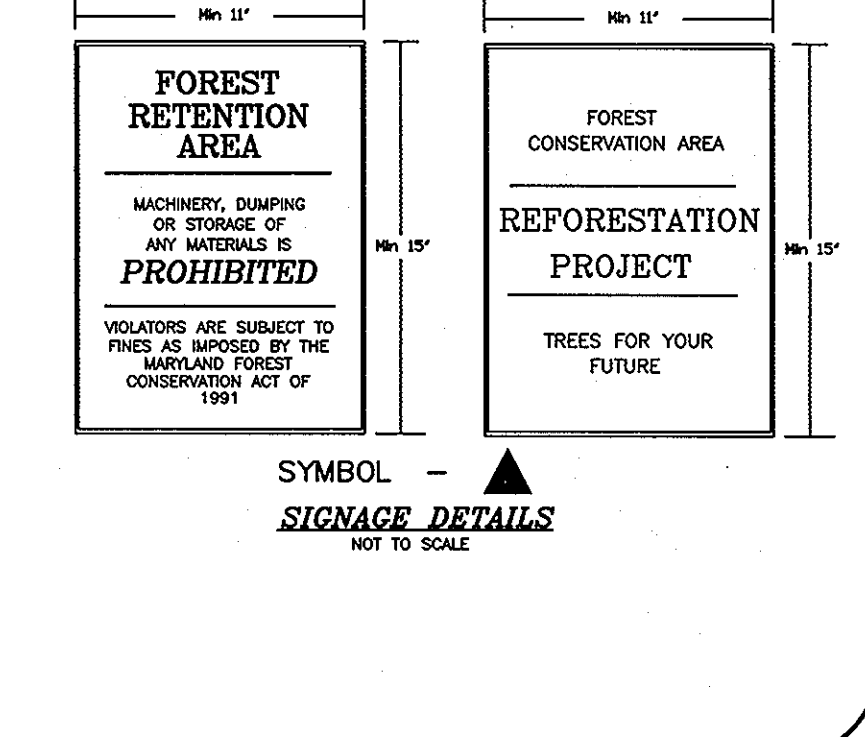
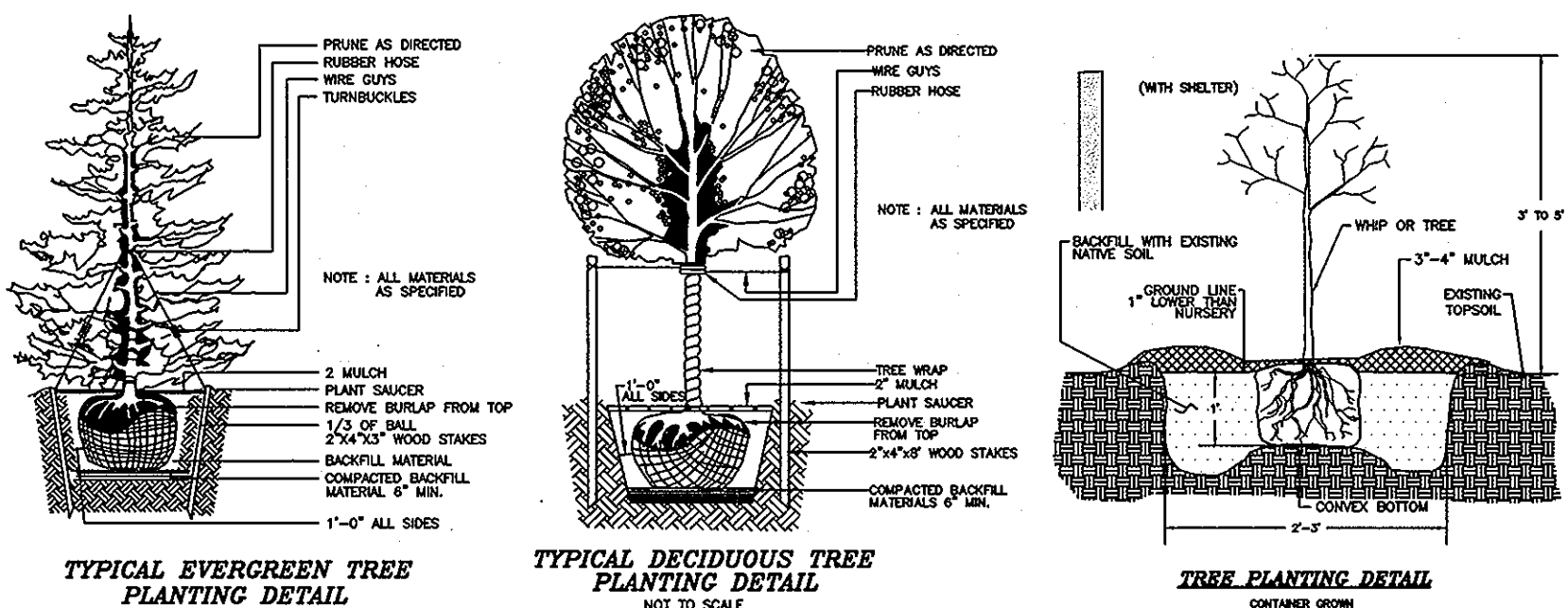
	ALTERNATIVE 1	ALTERNATIVE 2
FCE B 0.12 AC	24 TREES REQUIRED	44 TREES REQUIRED
FCE C 0.06 AC	12 TREES REQUIRED	22 TREES REQUIRED
FCE D 0.09 AC	18 TREES REQUIRED	32 TREES REQUIRED
TOTAL 0.27 AC	54 TREES REQUIRED	98 TREES REQUIRED

RETENTION FOREST CONSERVATION EASEMENTS

	RETENTION
FCE A	0.59 AC
FCE E	0.92 AC
TOTAL	1.51 AC

STREET TREE CALCULATIONS

DUCKETT'S RIDGE RD - 360'	
TAGGARD TRAIL/BRAND ROAD - 2500' / 40' = 62	
ROAK RUN - 600'	
DUCKETT'S LANE - 600' / 40' = 15	
TOTAL TREES REQUIRED = 101 TREES	
TOTAL TREES PROVIDED = 101 TREES	



MD DNR QUALIFIED PROFESSIONAL
Walter J. Gray 9/28/08

OWNER & DEVELOPER
 BRANTLY DEVELOPMENT GROUP
 8835-P COLUMBIA 100 PARKWAY
 COLUMBIA, MD, 21045

APPROVED: DEPARTMENT OF PLANNING AND ZONING
W. Damm 10/2/08
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
Andy Hart 2/19/09
 CHIEF, DIVISION OF LAND DEVELOPMENT
David A. Leight 2/10/09
 DIRECTOR

STATE OF MARYLAND
 PROFESSIONAL ENGINEER
 NO. 17942

DATE: MAY 2008
 PROJECT: 05-050 (DWG) SDP - RAISED 30' - SCALE - DANNY.DWG
 ILLUSTRATION: MAM
 APPROVAL: MAM
 SCALE: 1" = 50'

DESCRIPTION: REVISIONS
 NO. DATE

THE LEGACY AT DUCKETT'S RIDGE PHASE 1 AND 2
 AGE RESTRICTED ADULT HOUSING, UNITS 1-52 & COMMUNITY BUILDING
 PHASE A TAX MAP 37 - PARCEL 569 - GRID 12
 FIRST ELECTION DISTRICT - HOWARD COUNTY, MARYLAND
LANDSCAPE & FOREST CONSERVATION PLAN

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

12 OF 13
 SDP-06-070

NOTE : THIS PLAN IS TO BE USED FOR LANDSCAPE AND FOREST CONSERVATION PURPOSES ONLY.

REFORESTATION PLANT LIST (PCE 5)

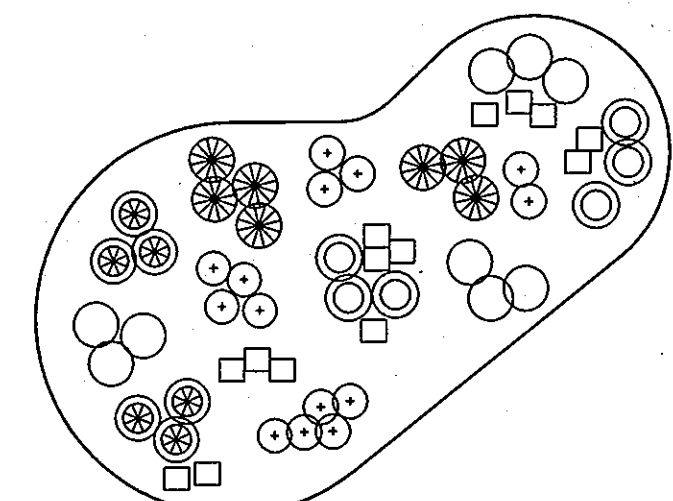
QTY.	SPECIES	SHADE	MOIST.	WET.	MIN.O.C.	SIZE & SPACING	REMARKS
110	Acer rubrum Red Maple	VT	D-W	FAC	15'	CONT/B & B 1" CALIPER	
60	Liriodendron styraciflua American Sweet Gum	I	M-W	FAC	15'	CONT/B & B 1" CALIPER	
60	Liriodendron tulipifera Tuliptree	MT	D-M	FAC	15'	CONT/B & B 1" CALIPER	
60	Nyssa sylvatica/carya glabra Black Gum	T	M-W	FAC	15'	CONT/B & B 1" CALIPER	
56	Quercus alba White Oak	I	D-M	FACU	15'	CONT/B & B 1" CALIPER	

TOTAL TREES 346 TREES

ALTERNATIVE 2

QTY.	SPECIES	SHADE	MOIST.	WET.	MIN.O.C.	SIZE & SPACING	REMARKS
240	Acer rubrum Red Maple	VT	D-W	FAC	11"	SEEDLING/WHP W/ TREE SHELTER	
120	Carya glabra/Pignolia Hickory	I	D-M	FAC	11"	SEEDLING/WHP W/ TREE SHELTER	
120	Liriodendron tulipifera Tuliptree	MT	D-M	FAC	11"	SEEDLING/WHP W/ TREE SHELTER	
126	Quercus alba White Oak	I	D-M	FACU	11"	SEEDLING/WHP W/ TREE SHELTER	

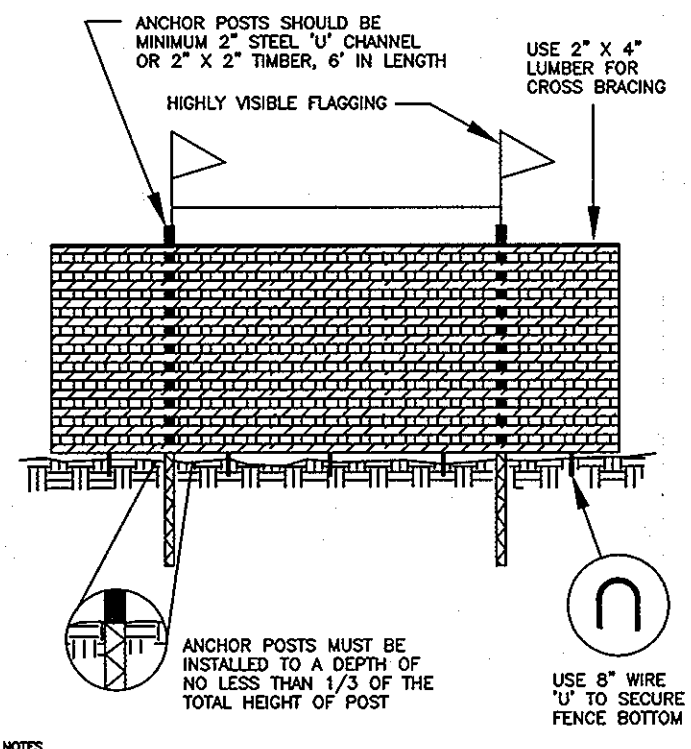
TOTAL 606 WHIPS WITH TREE SHELTERS



TYPICAL TREE PLANTING PLAN

NOT TO SCALE
- SEE GENERAL NOTES 6 & 7 UNDER "PLANT INSTALLATION"
- GROUND PLANE TO BE MULCHED AFTER INSTALLATION OF PLANT MATERIAL.

PROTECTIVE FENCE DETAIL
BLAZE ORANGE PLASTIC MESH



ANCHOR POSTS SHOULD BE MINIMUM 2" STEEL 1/2" CHANNEL OR 2" X 2" TIMBER, 6' IN LENGTH
HIGHLY VISIBLE FLAGGING
USE 2" X 4" LUMBER FOR CROSS BRACING
ANCHOR POSTS MUST BE INSTALLED TO A DEPTH OF NO LESS THAN 1/3 OF THE TOTAL HEIGHT OF POST
USE 8" WIRE TO SECURE FENCE BOTTOM

FOREST CONSERVATION WORKSHEET
VERSION 1.0

NET TRACT AREA:

A. Total tract area	=10.03
B. Area within 100 year floodplain	=0.00
C. Area to remain in agricultural production or utility ROW	=0.00
D. Net tract area	=10.03

LAND USE CATEGORY:
(from table 3.2.1, page 40, Manual) Input the number "1" under the appropriate land use zoning, and limit to only one entry.

ARA	MOR	IDA	HDR	MPO	CA
0	0	1	0	0	0

E. Afforestation Threshold = 15 % x D = 1.50
F. Conservation Threshold = 20 % x D = 2.01

EXISTING FOREST COVER:

G. Existing forest cover (excluding floodplain)	=10.03
H. Area of forest above afforestation threshold	=8.53
I. Area of forest above conservation threshold	=8.02

BREAK EVEN POINT:

J. Forest retention above threshold with no mitigation	=-3.61
K. Clearing permitted without mitigation	=-8.42

PROPOSED FOREST CLEARING:

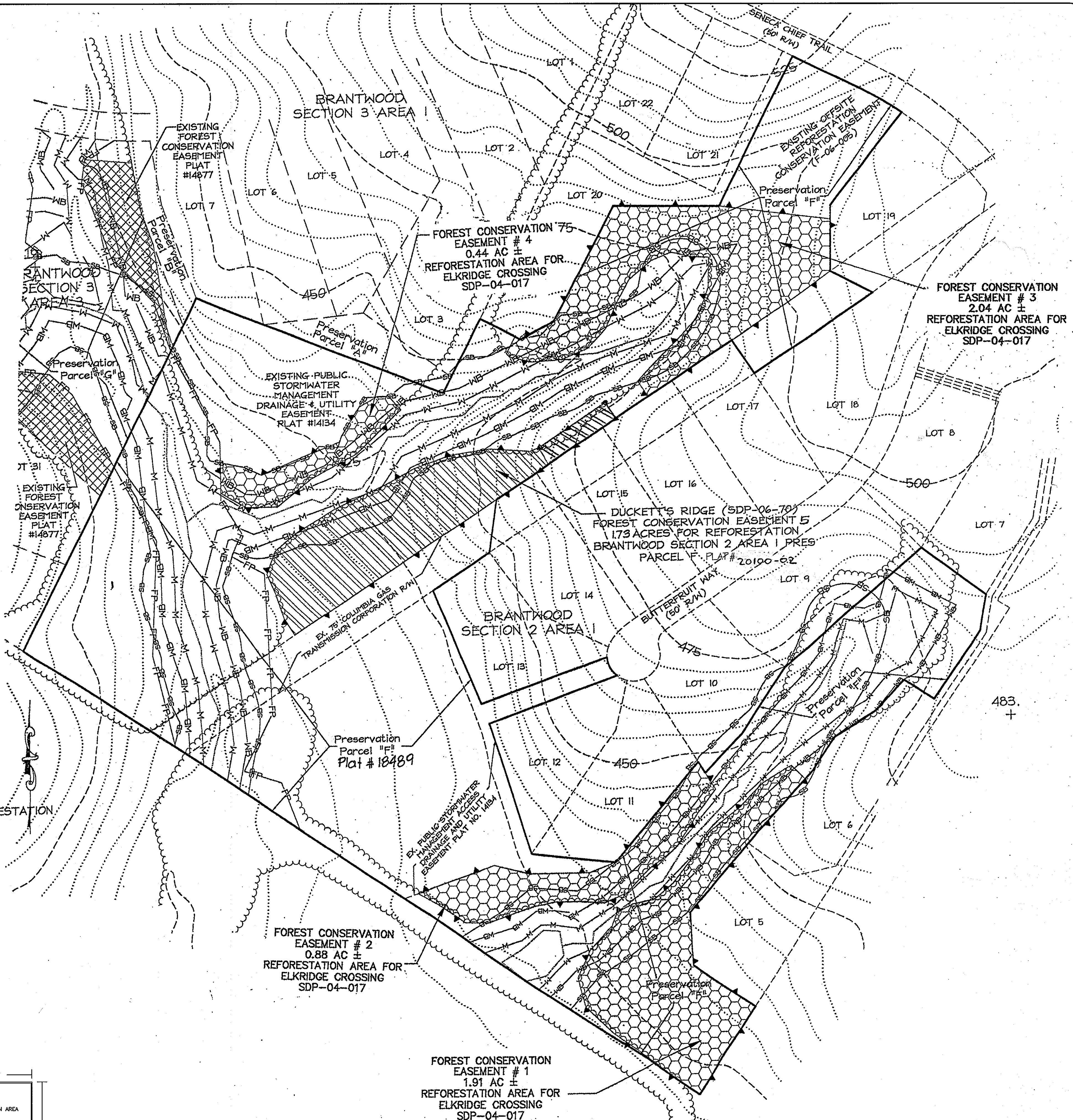
L. Total area of forest to be cleared	=-5.52
M. Total area of forest to be retained	=-1.51

PLANTING REQUIREMENTS:

N. Reforestation for clearing above conservation threshold	=-2.01
P. Reforestation for clearing below conservation threshold	=-0.99
Q. Credit for retention above conservation threshold	=-0.00
R. Total reforestation required	=-3.00
S. Total afforestation required	=-3.00
T. Total reforestation and afforestation required	=-6.00
U. Total reforestation provided on-site	=-0.27
V. Total fee-in-lieu of reforestation	=-1.00
W. Total off-site reforestation	=-1.73 acres

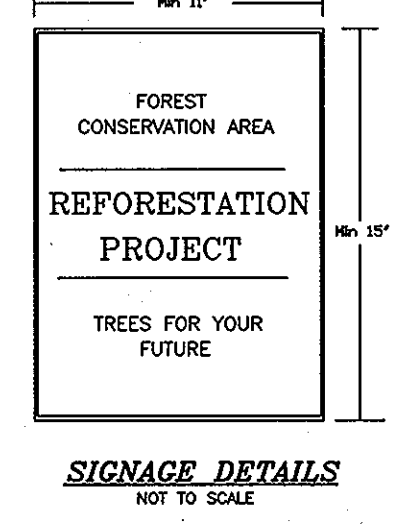
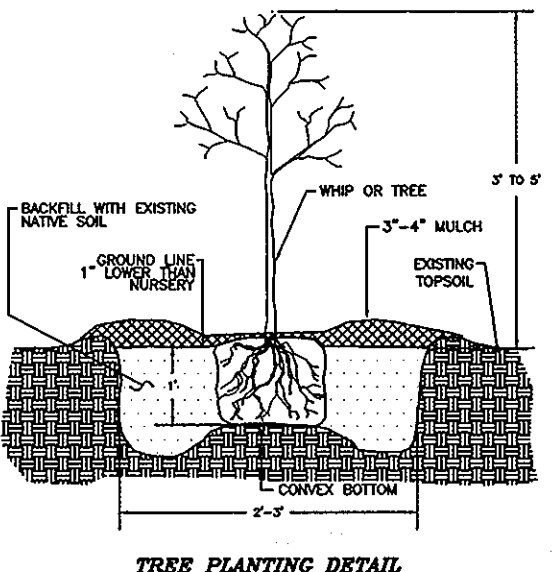
LEGEND

- PERMANENT PROTECTIVE SIGNAGE
- PROPOSED FCE FOR ELK RIDGE CROSSING - REFORESTATION
- PROPOSED FCE FOR DUCKETT'S RIDGE (SDP-06-70) - REFORESTATION
- EXISTING FCE F01-67
- EXISTING WETLAND
- EXISTING 25' WETLAND BUFFER
- EXISTING STREAM
- EXISTING 75' STREAM BUFFER
- EXISTING 100 YEAR FLOODPLAIN



MD DNR QUALIFIED PROFESSIONAL
Handwritten signature
DATE 5/28/08
CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE 2/1/09
CHIEF, DIVISION OF LAND DEVELOPMENT
DATE 2/1/09
DIRECTOR

OWNER & DEVELOPER
BRANTLY DEVELOPMENT GROUP
8835-P COLUMBIA 100 PARKWAY
COLUMBIA MD 21045



Project	05-050	date	MAY 2008
Illustration	MMM	engineering	MMM
scale	1"=100'	approval	RH

description	revisions	date

THE LEGACY AT DUCKETT'S RIDGE PHASE 1 AND 2
PAR A OFF-SITE REFORESTATION AT BRANTWOOD, SECTION 2, AREA 1, PRESERVATION PARCEL F
TAX MAP 16 & 23 - P/O PARCEL 214 - GRID 21/22 & 3/4
THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND
OFF-SITE FOREST CONSERVATION PLAN

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
(410) 997-0286 Fax: (410) 997-0288 Fax