SITE DEVELOPMENT PLAN

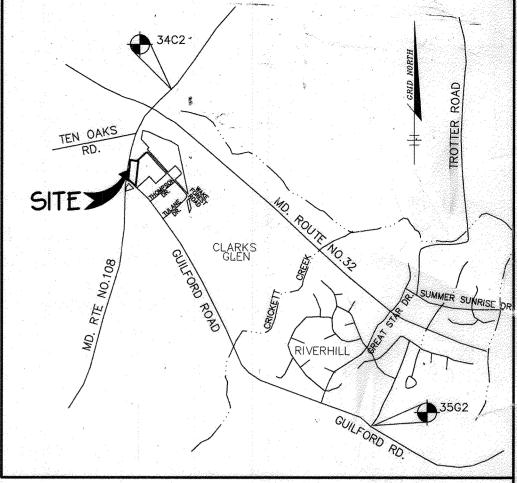
CLARKS GLEN NORTH PARCHI B-1

5th ELECTION DISTRICT HOWARD COUNTY, MARYLAND

BENCHMARKS

HOWARD COUNTY SURVEY CONTROL STATION: 34C2 N 562,322.972 E 1,329,753.353 ELEV. 475.76 FT.

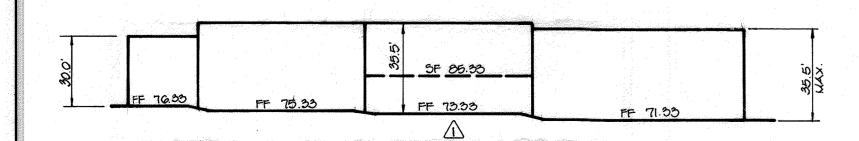
HOWARD COUNTY SURVEY CONTROL STATION: 3562 N 554, 966, 770 E 1, 332, 937, 606 ELEV. 371.60 FT.



VICINITY MAP

GENERAL NOTES

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS, IF APPLICABLE.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/ CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AY LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- TRAFFIC CONTROL DEVICES, MARKINGS, AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
- ALL PLAN DIMENSIONS ARE TO FACE OF CURB AND FACE OF BUILDING UNLESS OTHERWISE NOTED
- THE EXISTING TOPOGRAPHY IS TAKEN FROM AERIAL SURVEY WITH MAXIMUM TWO FOOT CONTOUR INTERVALS PREPARED BY WINGS MAPPING, INC. DATED JANUARY, 1997 IN ADDITION TO THE FINAL ROAD CONSTRUCTION PLANS.
- THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NOS. 41GC AND 41GA WERE USED FOR THIS PROJECT.
- WATER IS PUBLIC. CONTRACT NO. 34-3669-D.
- SEWER IS PUBLIC. SEWER DRAINAGE AREA: MIDDLE PATUXENT CONTRACT NO. 30-3690-D
- THE STORMWATER MANAGEMENT QUANTITY AND WATER QUALITY PROPOSED FOR THIS SITE WILL BE ACHIEVED VIA AN UNDERGROUND DETENTION FACILITY AND BAYSAVERS AND WILL BE PRIVATELY
- APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE. EXISTING UTILITIES ARE SHOWN BASED ON THE BEST AVAILABLE INFORMATION.
- 12. A 100-YEAR FLOODPLAIN STUDY IS NOT REQUIRED FOR THIS PROJECT.
- 13. THERE ARE NO WETLANDS ON THIS SITE.
- A CHAPTER 5 TRAFFIC STUDY HAS BEEN PREPARED BY THE LEE CUNNINGHAM & ASSOCIATES, INC.
- 15. A NOISE STUDY IS NOT REQUIRED FOR THIS PROJECT
- 16. A GEOTECHNICAL STUDY HAS BEEN PREPARED BY ECS INC., APRIL 1999.
- THE BOUNDARY SURVEY FOR THIS PROJECT HAS BEEN PREPARED BY RIEMER MUEGGE & ASSOC.
- SUBJECT PROPERTY ZONED B-2 PER 10-18-93 COMPREHENSIVE ZONING PLAN.
- ALL ELEVATIONS SHOWN ARE BASED ON THE U.S.C. AND G.S. MEAN SEA LEVEL DATUM, 1929.
- SEE DEPARTMENT OF PLANNING AND ZONING FILE NOS F-99-52, P-98-20, S-97-15, F-00-121
- THE CONTRACTOR SHALL TEST PIT EXISTING UTILITIES AT LEAST (5) DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS.
- CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES. SEQUENCES, PROCEDURES, AND SAFETY PRECAUTIONS AND PROGRAMS.
- PIPE SHALL NOT BE INSTALLED BY THE CONTRACTOR UNTIL THE LENGTH CALLED FOR AT EACH STATION HAS BEEN APPROVED BY THE ENGINEER IN THE FIELD.
- NO PIPE SHALL BE LAID UNTIL LINES OF EXCAVATION HAVE BEEN BROUGHT WITHIN 6" OF FINISHED GRADE.
- ALL STORM DRAIN PIPE BEDDING SHALL BE CLASS 'C' AS SHOWN IN FIG. 11.4, VOLUME 1 OF HOWARD COUNTY DESIGN MANUAL UNLESS OTHERWISE NOTED.
- ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS.
- 27. ALL PIPE ELEVATIONS SHOWN ARE INVERT CELEVATIONS.
- PROFILES STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
- ALL FILL AREAS WITHIN ROADWAY AND UNDER STRUCTURES TO BE COMPACTED TO A MINIMUM OF 95% COMPACTION OF AASHTO TI80.
- THE PAVEMENT DETAILS SHOWN FOR THIS SITE REFLECT THE HOWARD COUNTY STANDARD PAVEMENT SECTIONS AND ARE NOT BASED ON SITE SPECIFIC CONDITIONS. PRIOR TO PAVING THE FINAL PAVEMENT SECTIONS SHALL BE DETERMINED BY A QUALIFIED GEOTECHNICAL ENGINEER BASED ON IN-SITU TESTING OF THE FINISHED SUBGRADE
- 31. FOREST CONSERVATION REQUIREMENTS FOR THIS PARCEL WERE MET UNDER F-99-52.
- 32. ALL OUTDOOR LIGHTING SHALL COMPLY WITH THE REQUIREMENTS OF ZONING SECTION 134.



6 SPACES/1,000 SF

5 SPACES/1,000 SF

RETAIL - 7,223 SF

5 SPACES/1,000 SF

OFFICE - 4,000 SF (2ND FLOOR)

MONTESSORI SCHOOL - 6,003 SF

1 SPACE/6 STUDENTS/100 MAX.

MEDICAL OFFICE - 2,925 5F

3.3 SPACES/400 SF = 2 SPACES

6 SPACES

12 SPACES

12 SPACES

7 SPACES

8 SPACES 22 SPACES

14 SPACES

15 SPACES

17 SPACES

36 SPACES

TOTAL REGUIRED PARKING = 93 SPACES

TOTAL PROVIDED PARKING = 89 SPACES

6 SPACES

100%

14 SPACES

15 SPACES

100%

17 SPACES

55 SPACES 74 SPACES 74 SPACES

89 SPACES | 89 SPACES | 89 SPACES

6 SPACES

100%

14 SPACES

15 SPACES

17 SPACES

22 SPACES

14 SPACES

2 SPACES

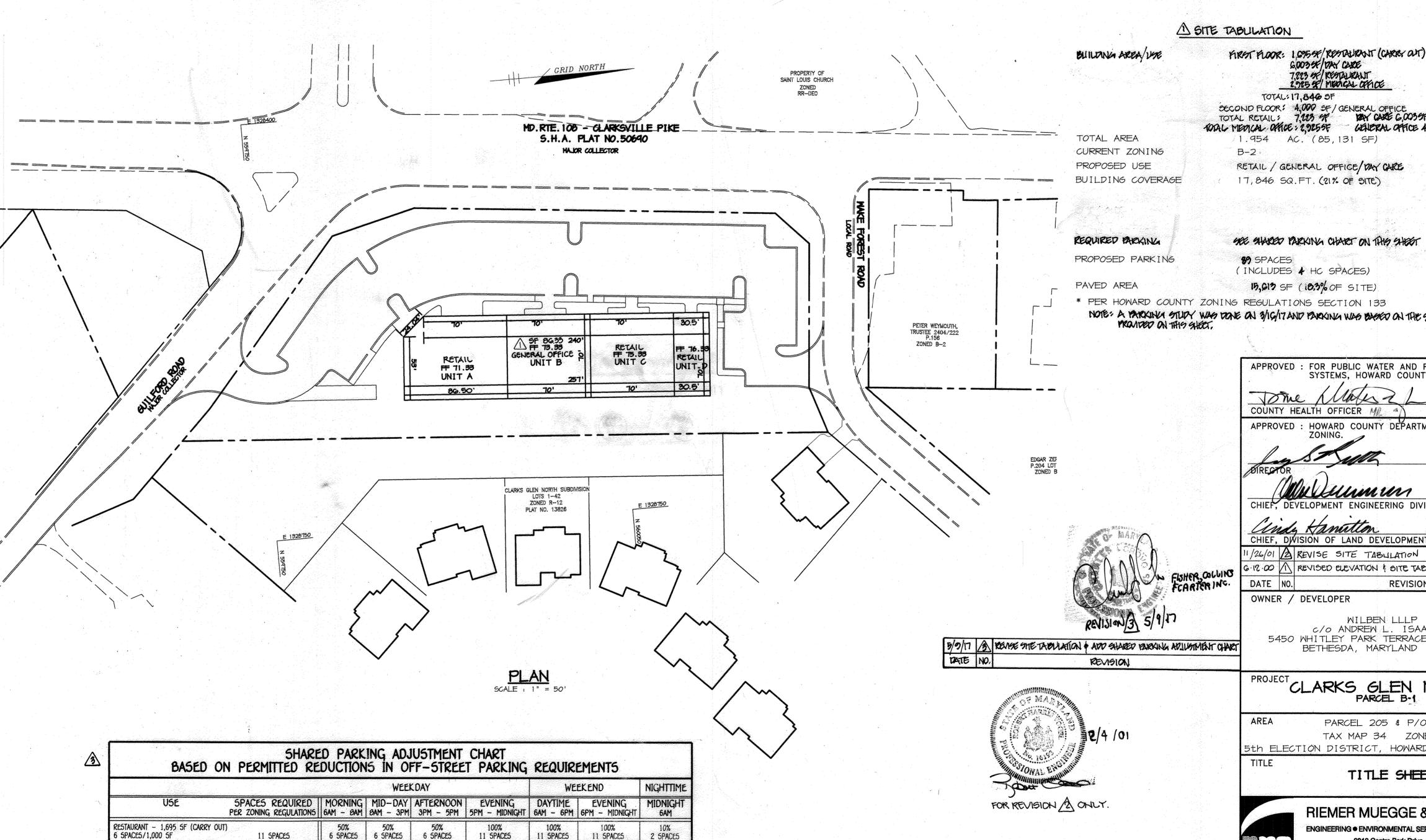
17 SPACES

33 SPACES

77 SPACES PEAK

89 SPACES

BUILDING ELEVATION



11 SPACES

1 SPACE

1 SPACE

2 SPACES

26 SPACES

41 SPACES

69 SPACES

2 SPACES

2 SPACES

17 SPACES

36 SPACES

89 SPACES

68 SPACES

2 SPACES

1 SPACE

1 SPACE

2 SPACES

2 SPACES

8 SPACES

SECOND FLOOR: 4,000 SF/GENERAL OFFICE
TOTAL RETAIL: 7,123 SF DAY CARE G.0039F RESTLARANT 1,0959F
1001 MEDICAL OFFICE: 2,9259F CANERAL OFFICE 4,000 9F 1.954 AC. (85,131 SF)

GOODSE/DAY CARDE

RETAIL / GENERAL OFFICE/DAY CARE 17,846 SQ.FT. (21% OF SITE)

GOE SHARED PARKING CHART ON THIS SHOOT

89 SPACES (INCLUDES & HC SPACES)

15,619 SF (18,3% OF SITE)

* PER HOWARD COUNTY ZONING REGULATIONS SECTION 133

NOTE: A PARKING STUDY WAS DONE ON 3/15/17 AND PARKING WAS BASED ON THE STUDY

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT COUNTY HEALTH OFFICER MD 4 DATE HOWARD COUNTY DEPARTMENT OF PLANNING AND DEVELOPMENT ENGINEERING DIVISION CHIEF, DWISION OF LAND DEVELOPMENT A REVISE SITE TABULATION

REVISED ELEVATION & SITE TABULATION & ADDRESS REVISION OWNER / DEVELOPER

WILBEN LLLP c/o ANDREW L. ISAACSON 5450 WHITLEY PARK TERRACE SUITE 410 BETHESDA, MARYLAND 20814

CLARKS GLEN NORTH PARCEL B-1

PARCEL 205 & P/O 204 TAX MAP 34 ZONED B-2 5th ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

TITLE SHEET



RIEMER MUEGGE & ASSOCIATES INC. ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING 8818 Centre Park Drive, Columbia, MD 21045

tel 410.997.8900 fax 410.997.9282

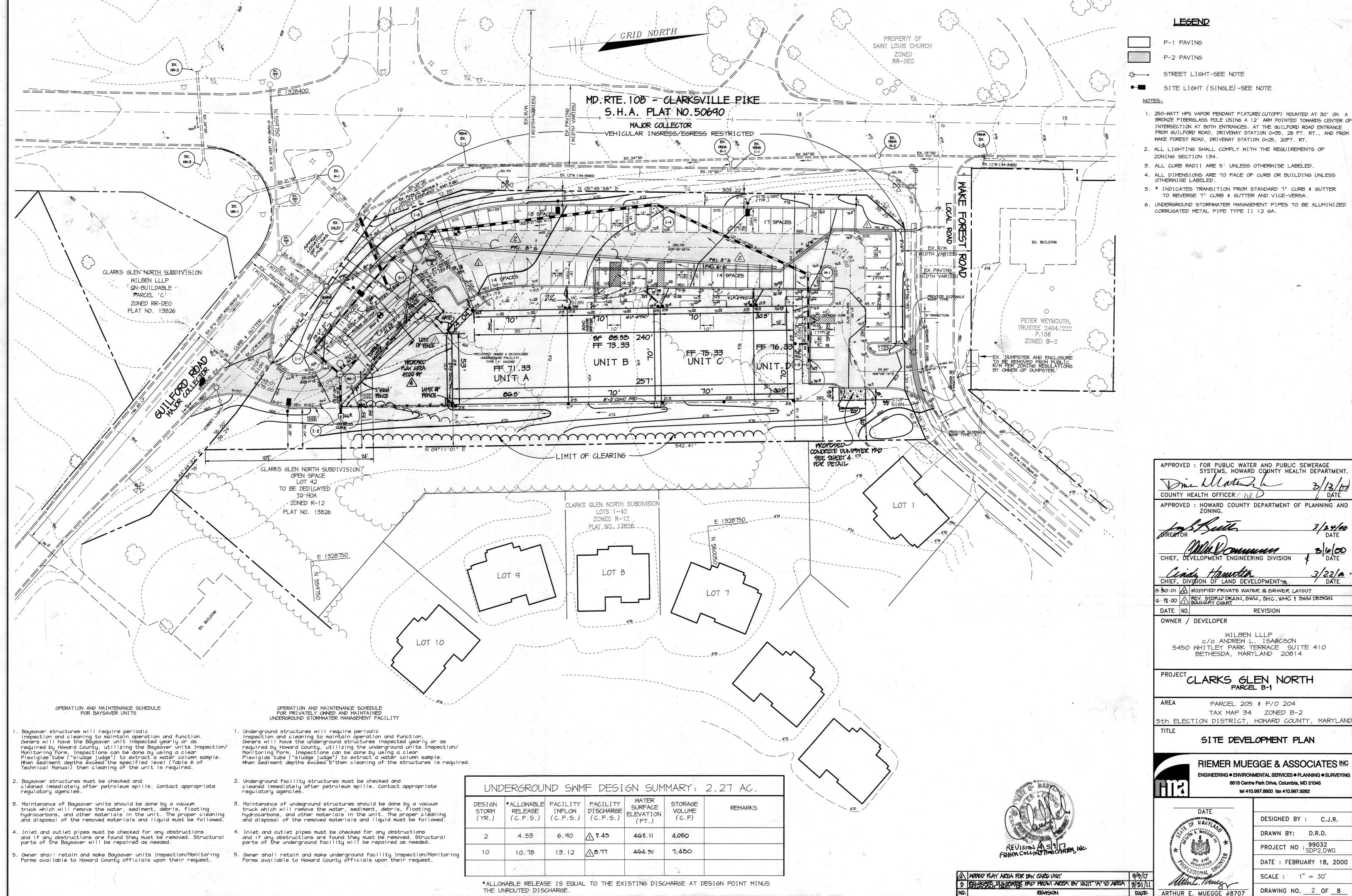
ADDRESS CHART PARCEL STREET ADDRESS 12345 WAKE FOREST ROAD CLARKS GLEN NORTH BLOCK #: ZONE: TAX MAP NO .: ELECT. DIST. CENSUS TRACT: 12 B-2 5 TH WATER CODE SEWER CODE:

I-11

6650000

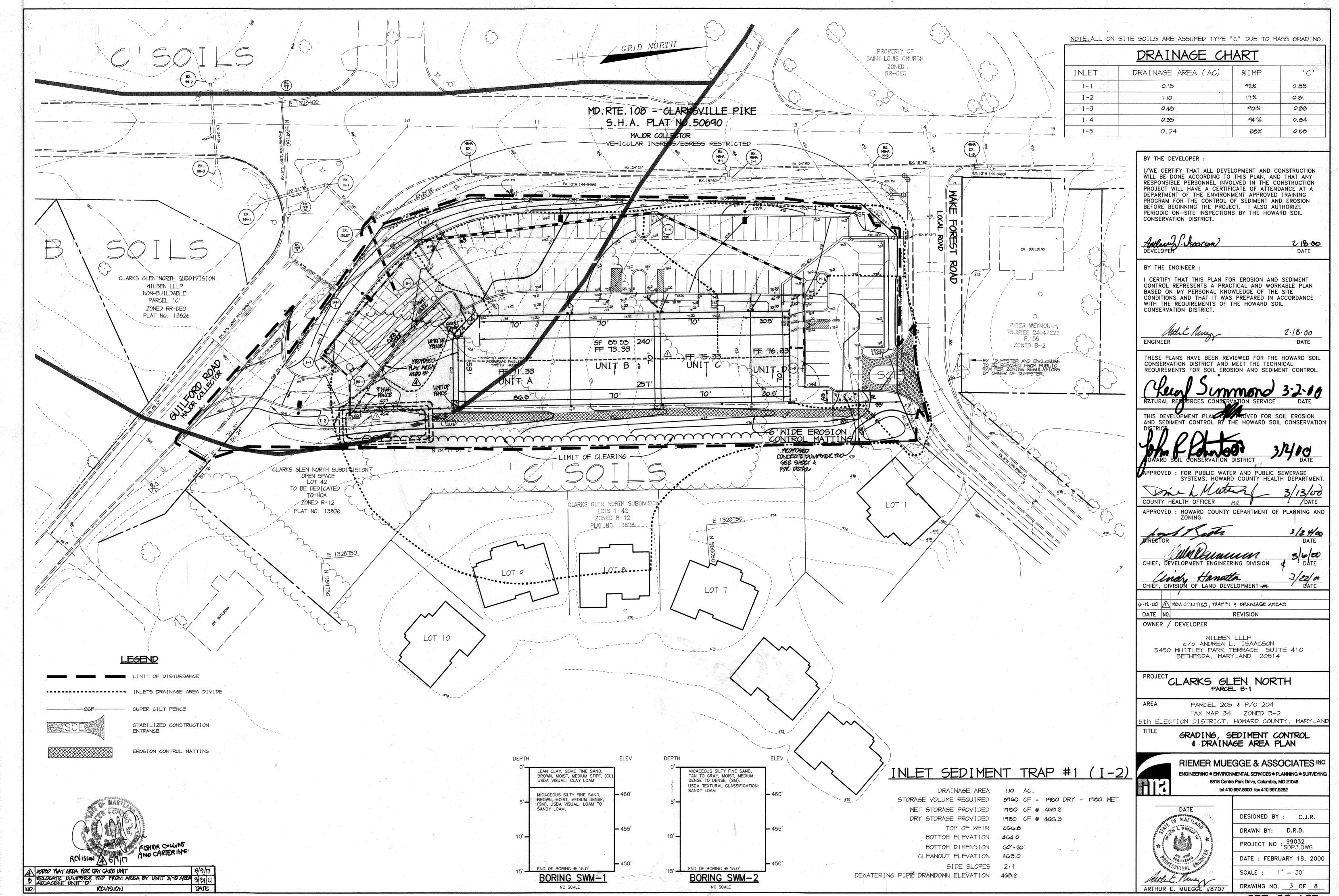
DATE ARTHUR E. MUEGGE #8707

DESIGNED BY : C.J.R. DRAWN BY: D.R.D. PROJECT NO : 99032 SDP1.DWG DATE: FEBRUARY 18, 2000 SCALE : AS SHOWN DRAWING NO. 1 OF 8

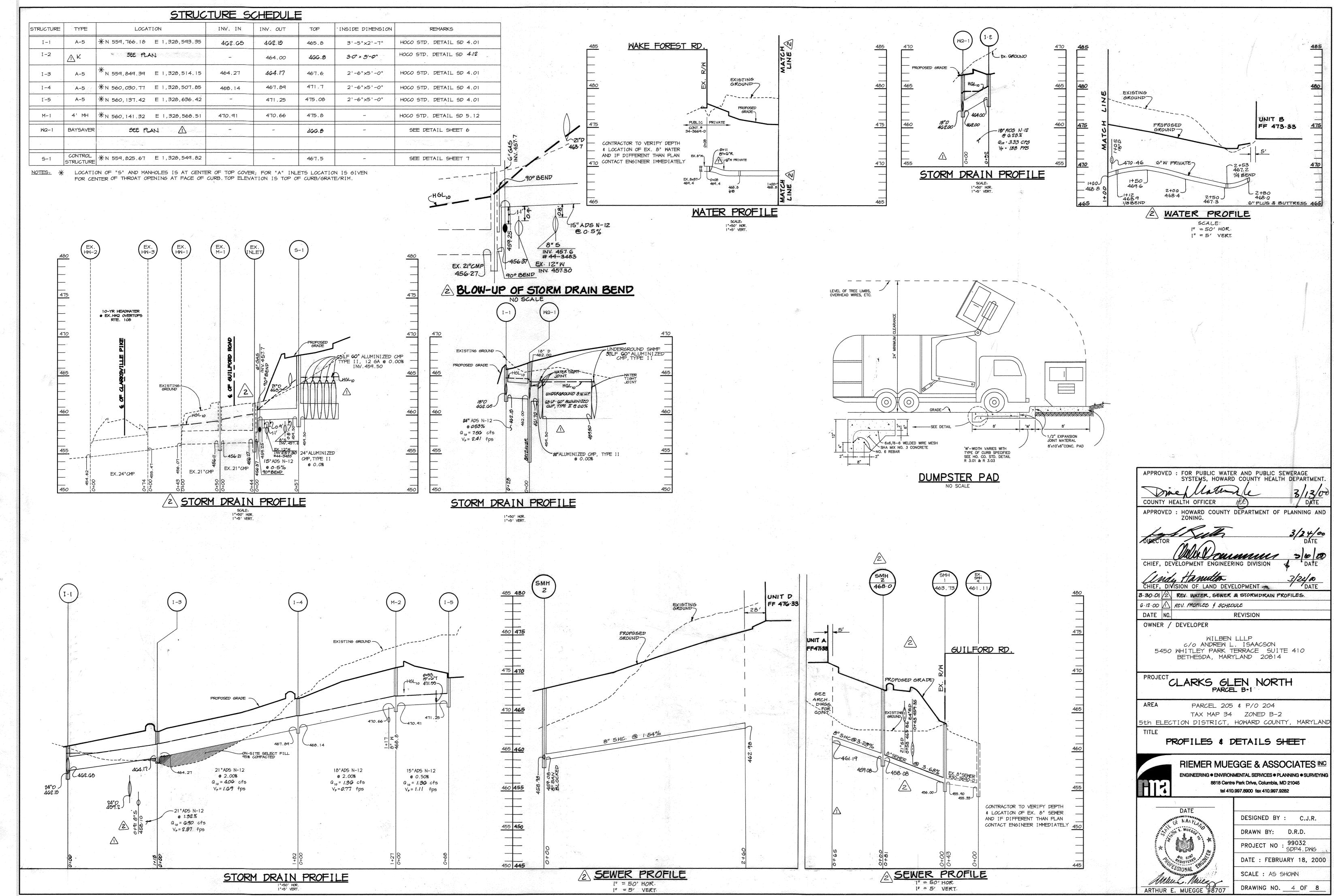


DRAWING NO. 2 OF 8

DATE



F.\PRA.JFCT\99032\SAP3 NWG Tue Feb 15 13:54.51 2000



F. \PBD, JFCT\99032\SNP4 NWG Tue Feh 15

<u>Seedbed Preparation: Loosen upper three inches of soil by raking.</u>
discing or other acceptable means before seeding, if not previously

Soil Amendments: Apply 600 lbs. per acre 10-10-10 fertilizer (14

Seeding: For periods March 1 thru April 30 and from August 15 thru November 15, seed with 2-1/2 bushels per acre of annual rye (3.2 lbs per 1000 sq.ft.). For the period May 1 thru August 14, seed with 3 lbs. per acre of weeping lovegrass (0.07 lbs. per 1000 sq.ft.). For the period November 16 thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use sod.

Mulching: Apply 1-1/2 to 2 tons per acre (70 to 90 lbs. per 1000 sq.ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal. per acre (5 gal. per 1000 sq.ft.) of emulsified asphalt on flat areas. On slopes, 8 ft. or higher, use 347 gal. per acre (8 gal. per 1000 sq.ft.) for anchoring.

Refer to the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL FROSION AND SEDIMENT CONTROL for rate and methods not covered.

PERMANENT SEEDING NOTES

Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed. Seedbed Preparation: Loosen upper three inches of soil by raking. discing or other acceptable means before seeding, if not previously

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

- 1) Preferred Apply 2 tons per acre dolomitic limestone (92 lbs. per 1000 sq.ft.) and 600 lbs. per acre 10-10-10 fertilizer (14 lbs. per 1000 sq.ft.) before seeding. Harrow or disc into upper three inches of soil. At time of seeding, apply 400 lbs. per acre 30-0-0 ureaform fertilizer (9 lbs. per 1000 sq.ft.).
- 2) Acceptable Apply 2 tons per acre dolomitic limestone (92 lbs. per 1000 sq.ft.) and 1000 lbs. per acre 10-10-10 fertilizer (23 lbs. per 1000 sq.ft.) before seeding. Harrow or disc into

Seeding: For the period March 1 thru April 30 and from August 1 thru October 15, seed with 60 lbs. per acre (1.4 lbs. per 1000 sq.ft., of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs. Kentucky 31 Tall Fescue per acre and 2 lbs. per acre (0.05 lbs. per 1000 sq.ft.) of weeping lovegrass. During the period October 16 thru February 28, protect site by one of the following

- 1) 2 tons per acre of well-anchored mulch straw and seed as soon as possible in the spring.
- 3) Seed with 60 lbs. per acre Kentucky 31 Tall Fescue and mulch

Mulching: Apply 1-1/2 to 2 tons per acre (70 to 90 lbs. per 1000 sq.ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal. per acre (5 gal. per 1000 sq.ft.) of emulsified asphalt on flat areas. On slopes, 8 ft. or higher, use 347 gal. per acre (8 gal. per 1000 sq.ft.) for anchoring.

Maintenance: Inspect all seeded areas and make needed repairs,

STANDARD SEDIMENT CONTROL NOTES 1. A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY

DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (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 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISIONS THERETO
- 3. FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: A) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES DIKES PERIMETER SLOPES OR GRADED AREAS ON THE PROJECT SITE.
- 4. ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THE PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 7, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE
- 5. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING, SOD, TEMPORARY SEEDING, AND MULCHING (SEC. G.). TEMPORARY STABILIZATION WITH MULCH ALONE SHALL ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHED
- 6. ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.

1.954 ACRES

1 99 ACRES

1.2 ACRES

11000 CU. YARD

11000 CU. YARDS

0.79 ACRES

TOTAL AREA OF SITE AREA DISTURBED AREA TO BE ROOFED OR PAVED AREA TO BE VEGETATIVELY STABILIZED

OFFSITE WASTE/BORROW AREA LOCATION

- 8. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF
- 9. ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR. 10. ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE
- INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
- 11. TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.
- 12. SITE GRADING WILL BEGIN ONLY AFTER ALL PERIMETER SEDIMENT CONTROL MEASURES HAVE BEEN INSTALLED AND ARE IN A FUNCTIONING CONDITION.
- 13. SEDIMENT WILL BE REMOVED FROM TRAPS WHEN ITS DEPTH REACHES CLEAN OUT ELEVATION SHOWN ON THE PLANS.
- 14. CUT AND FILL QUANTITIES PROVIDED UNDER SITE ANALYSIS DO NOT REPRESENT BID QUANTITIES. THESE QUANTITIES DO NOT DISTINGUISH BETWEEN TOPSOIL, STRUCTURAL FILL OR EMBANKMENT MATERIAL, NOR DO THEY REFLECT CONSIDERATION OF UNDERCUTTING OR REMOVAL OF UNSUITABLE MATERIAL. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH SITE CONDITIONS WHICH MAY

SEQUENCE OF CONSTRUCTION

- 1. OBTAIN GRADING PERMIT
- 2. INSTALL STABILIZED CONSTRUCTION ENTRANCE AND SUPER SILT FENCE. (2 DAYS)
- 3. WITH PERMISSION OF HOWARD COUNTY DILP SEDIMENT CONTROL INSPECTOR,
- PERFORM ROUGH GRADING. (3 WEEKS) 4. INSTALL BAYSAVERS AND UNDERGROUND STORMWATER MANAGEMENT SYSTEM. (3 WEEKS)
- 5. BEGIN BUILDING CONSTRUCTION 6. AS SUBGRADE ELEVATIONS ARE ESTABLISHED, INSTALL UTILITIES, SEWER, WATER
- AND STORM DRAINS. INSTALL INLET TRAP AT INLET 2. (3 WEEKS)
- 7. INSTALL CURB AND GUTTER, LIGHT POLES, THEN PAVE. (2 WEEKS) 8. APPLY TOPSOIL AND STABILIZE DISTURBED AREAS AS NECESSARY IN
- ACCORDANCE WITH PERMANENT SEEDING NOTES. (3 DAYS)
- 9. UPON APPROVAL OF SEDIMENT CONTROL INSPECTOR REMOVE TRAP AT INLET 2. COMPLETE DUMPSTER ENCLOSURE, ANY PIPING, PAVING AND CURB AND GUTTER AFFECTED. (1 WEEK)
- 10. INSTALL LANDSCAPING AND SIDEWALKS. (3 WEEKS)
- 9. UPON APPROVAL OF HOWARD COUNTY DILP SEDIMENT CONTROL INSPECTOR, REMOVE ALL REMAINING SEDIMENT CONTROL DEVICES AND STABILIZE REMAINING DISTURBED AREAS IN ACCORDANCE WITH PERMANENT SEEDING NOTES. (2 DAYS)

21.0 STANDARD AND SPECIFICATIONS FOR TOPSOIL

<u>Definition</u> Placement of topsoil over a prepared subsoil prior to establishment of permanent vegetation.

To provide a suitable soil medium for vegetative growth. Soils of concern have low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or unacceptable soil gradation.

Conditions Where Practice Applies

I. This practice is limited to areas having 2:1 or flatter slopes where:

- a. The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth.
- b. The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish continuing supplies of moisture and plant nutrients. c. The original soil to be vegetated contains material toxic to plant growth.
- d. The soil is so acidic that treatment with limestone is not feasible.
- II. For the purpose of these Standards and Specifications, areas having slopes steeper than 2:1 require special consideration and design for adequate stabilization. Areas having slopes steeper than 2: shall have the appropriate stabilization shown on the plans.

Construction and Material Specifications

- I. Topsoil salvaged from the existing site may be used provided that it meets the standards as set forth in these specifications. Typically, the depth of topsoil to be salvaged for a given soil type can be found in the representative soil profile section in the Soil Survey published by USDA-SCS in cooperation with Maryland Agricultural Experimentation Station.
- II. Topsoil Specifications Soil to be used as topsoil must meet the following:
- I. Topsol shall be a loam, sandy loam, clay loam, slit loam, sandy clay loam, loamy sand. Other soils may be used if recommended by an aaronomist or soil scientist and approved by the appropriate approval authority. Regardless, topsoil shall not be a mixture of contrasting textured subsoils and shall contain less than 5% by volume of cinders, stones, slag, coarse
- fragments, gravel, sticks, roots, trash, or other materials larger than 1½" in diameter.
- nutsedge, poison ivy, thistle, or others as specified. iii. Where subsoil is either highly acidic or composed of heavy clays, ground limestone shall be spread at the rate of 4-8 tons/acre (200-400 pounds per 1,000 square feet) prior to the placement of topsoil. Lime shall be distributed uniformly over designated areas and worked into the soil in conjunction with tillage operations as described in the following procedures.

ii. Topsoil must be free of plants or plant parts such as bermuda grass, quackgrass, Johnsongrass,

- For sites having disturbed areas under 5 acres:
- 1. Place topsoil (if required) and apply soil amendments as specified in 20.0 Yeaetative Stabilization - Section I - Vegetative Stabilization Methods and Materials.
- III. For sites having disturbed areas over 5 acres:
- I. On soil meeting Topsoil specifications, obtain test results dictating fertilizer and lime amendments required to bring the soil into compliance with the following:
- a. pH for topsoil shall be between 6.0 and 7.5. If the tested soil demonstrates a pH of less than 6.0, sufficient lime shall be prescribed to raise the pH to 6.5 or higher.
- b. Organic content of topsoil shall be not less than 1.5 percent by weight.
- c. Topsoil having soluble salt content greater than 500 parts per million shall not be used.

d. No sod or seed shall be placed on soil which has been treated with soil sterilants or chemicals used for weed control until sufficient time has elapsed (14 days min.) to permit dissipation of phyto-toxic materials.

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

Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section I - Vegetative Stabilization Methods and Materials.

V. Topsoll Application

- 1. When topsoiling, maintain needed erosion and sediment control practices such as diversions, Grade Stabilization Structures, Earth Dikes, Slope SIIt Fence and Sediment Traps and Basins.
- Grades on the areas to be topsoiled, which have been previously established, shall be maintained, albeit 4" 8" higher in elevation.
- 111. Topsoll shall be uniformly distributed in a 4" 8" layer and lightly compacted to a minimum thickness of 4". Spreading shall be performed in such a manner that sodding or seeding can proceed with a minimum of additional soil preparation and tillage. Any irregularities in the surface resulting from topsoiling or other operations shall be corrected in order to prevent the formation of depressions or water pockets.
- ly. Topsoil shall not be placed while the topsoil or subsoil is in a frozen or muddy condition, when the subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading and seedbed preparation.
- VI. Alternative for Permanent Seeding instead of applying the full amounts of lime and commercial fertilizer, composted sludge and amendments may be applied as specified below:

Composted Sludge Material for use as a soil conditioner for sites having disturbed areas over 5 acres shall be tested to prescribe amendments and for site having disturbed areas under 5 acres shall conform to the following requirements:

- a. Composted sludge shall be supplied by, or originate from, a person or persons that are permitted (at the time of acquisition of the compost) by the Maryland Department of the Environment under COMAR 26.04.06.
- b. Composted sludge shall contain at least 1 percent nitrogen, 1.5 percent phosphorus, and 0.2 percent potassium and have a pH of 7.0 to 8.0. If compost does not meet these requirements, the appropriate constituents must be added to meet the requirements prior to use.
- c. Composted sludge shall be applied at a rate of 1 ton/1,000 square feet.
- d. Composted sludge shall be amended with a potassium fertilizer applied at the rate of 4 lb/1,000 square feet, and 1/3 the normal lime application rate.

STORM INLET SEDIMENT TRAP ST-III

Construction Specifications For ST-III

3. The structure shall be inspected after each rain and repairs made as needed.

4. Construction operations shall be carried out in such a manner that erosion and water

5. The sediment trap shall be removed and the area stabilized when the construction drainage

in a suitable area and in such a manner that it will not erode.

pollution shall be minimized

U.S. DEPARTMENT OF AGRICULTURE

area has been properly stabilized

6. All cut slopes shall be 1:1 or flatter

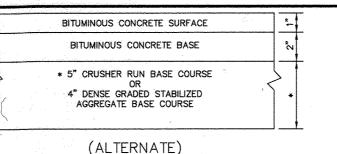
MAXIMUM DRAINAGE AREA: 3 ACRES

. Sediment shall be removed and the restored to its original dimensions when the sediment

has accumulated to 1/2 the design depth of the trap. Removed sediment shall be deposited

2. The volume of sediment storage shall be 3600 cubic feet per acre of contributory drainage.

References: Guideline Specifications, Soil Preparation and Sodding. MD-VA, Pub. #1, Cooperative Extension Service, University of Maryland and Virginia Polytechnic Institutes. Revised 1973.



BITUMINOUS CONCRETE SURFACE

BITUMINOUS CONCRETE BASE

HOWARD COUNTY DESIGN MANUAL VOLUME IV-

STANDARD SPECIFICATIONS AND DETAILS FOR

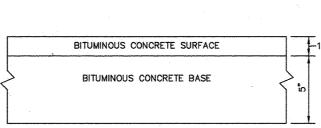
P-1 PAVING

CONSTUCTION (DRAWING R-2.01)

BITUMINOUS CONCRETE BASE * 8" CRUSHER RUN BASE COURSE (2 COURSES) 6" DENSE GRADED STABILIZED AGGREGATE BASE COURSE

BITUMINOUS CONCRETE SURFACE

(ALTERNATE)



HOWARD COUNTY DESIGN MANUAL VOLUME IV-STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (DRAWING R-2.01)

P-2 PAVING

4" OVERLAP OF MATTING STRIPS WHERE TWO OR MORE STRIP WIDTHS ARE REQUIRED, ATTACH

STAPLES ON 18" CENTE

TYPICAL STAPLES NO. 1 GAUGE WIRE

SEDIMENT TRAP AND BASIN DRAWDOWN SCHEMATIC

HORIZONTAL DRAW DOWN DEVICE

ELEVATION

PLAN VIEW

Construction Specifications

. The total area of the perforation must be greater than 2 times the area of the internal orifice.

. Provide support of drawdown device to prevent sagging and floatation. An acceptable preventative

2. The perforated portion of the drawdown device shall be wrapped with 1/2" hardware cloth and

TRASH RACK

-WATERTIGHT

HORIZONTAL DRAWDOWN DEVICE

MARYLAND DEPARTMENT OF ENVIRONME

WATER MANAGEMENT ADMINISTRATION

EROSION CONTROL MATTING

Construction Specifications

1. Key-in the matting by placing the top ends of the matting in a narrow trench 6" in depth. Backfill the trench and tamp firmly to conform to the channel cross-section. Secure with a row of staples about 4" down slope from the trench. Spacing between staples is 6".

- 2. Staple the 4" overlap in the channel center using an 18" spacing 3. Before stapling the outer edges of the matting, make sure the
- matting is smooth and in firm contact with the soil. 4. Staples shall be placed 2' apart with 4 rows for each strip, 2 outer rows, and 2 alternating rows down the center.
- 5. Where one roll of matting ends and another begins, the end of the top strip shall overlap the upper end of the lower strip by 4", shiplap fashion. Reinforce the overlap with a double row of staples spaced 6" apart in a staggered pattern on either side.
- 6. The discharge end of the matting liner should be similarly secured with 2 double rows of staples Note: If flow will enter from the edge of the matting then the area

effected by the flow must be keyed-in

CROSS-SECTION

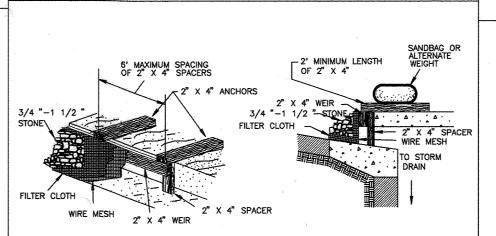
RISER CREST ELEV.

LIMIT OF DRY STORAGE-

WET STORAGE -

PERMANENT POOL ELEV.

MARYLAND DEPARTMENT OF ENVIRONMENT U.S. DEPARTMENT OF AGRICULTURE DETAIL 30 - EROSION CONTROL MATTING



DETAIL 23C - CURB INLET PROTECTION

COLOR LEGEND AND BORDER - GREEN

BACKGROUND - WHITE

WHITE SYMBOLS ON BLUE BACKGROUND

4"x4"

PROPOSED ✓ GRADE

---WOODEN

RESERVED

PARKING

 \leftrightarrow

\$98 FIN

* VAN ACCESSIBLE

* FOR VAN ACCESSIBLE

SPACES ONLY, SEE PLAN FOR LOCATION

DISTANCE FROM GROUND TO BOTTOM OF SIGN TO BE 7'.

HANDICAP SIGN DETAIL

MAX. DRAINAGE AREA = 1/4 ACRE

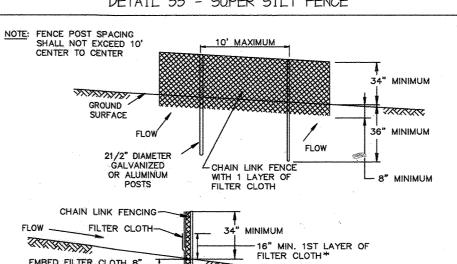
Construction Specifications 1. Attach a continuous piece of wire mesh (30" minimum width by throat length plus 4') to the 2" x 4" weir (measuring throat length plus 2') as shown on the standard

2. Place a continuous piece of Geotextile Class E the same dimensions as the wire mesh over the wire mesh and securely attach it to the 2" x 4" weir. 3. Securely nail the 2" X 4" weir to a 9" long vertical spacer to be located between the weir and the inlet face (max. 4' apart).

4. Place the assembly against the inlet throat and nail (minimum 2' lengths of 2" x 4" to the top of the weir at spacer locations). These 2" x 4" anchors shall extend across the inlet top and be held in place by sandbags or alternate weight. 5. The assembly shall be placed so that the end spacers are a minimum 1' beyond both ends of the throat opening. 6. Form the 1/2 " \times 1/2 " wire mesh and the geotextile fabric to the concrete gutter and against the face of the curb on both sides of the inlet. Place clean 3/4 " x 1 1/2 "

stone over the wire mesh and geotextile in such a manner to prevent water from entering the inlet under or ground the geotextile. 7. This type of protection must be inspected frequently and the filter cloth and stone replaced when clogged with sediment. 8. Assure that storm flow does not bypass the inlet by installing a temporary earth or asphalt dike to direct the flow to the inlet.

MARYLAND DEPARTMENT OF ENVIRONMENT SOIL CONSERVATION SERVICE WATER MANAGEMENT ADMINISTRATION DETAIL 33 - SUPER SILT FENCE



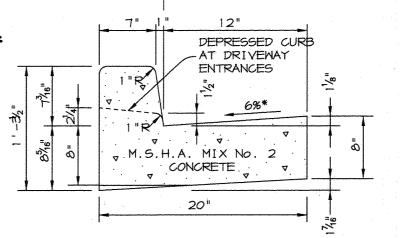
5. Maintenance shall be performed as needed and silt buildups removed when "builges' develop in the silt fence, or when silt reaches 50% of fence height 7. Filter cloth shall be fastened securely to each fence post with wife ties or staples at top and mid section and shall meet the following requirements for

Test: MSMT 509 Test: MSMT 509 Test: MSMT 32: Test: MSMT 322

DEPRESSED CURE - AT DRIVEWAY ENTRANCES M.S.H.A. MIX No. 2 CONCRETE 20"

REVERSE 7" COMBINATION CURB AND GUTTER NO SCALE

PAVEMENT WIDTH INDICATED ON TYPICAL STREET SECTIONS TO BE MEASURED TO THIS POINT

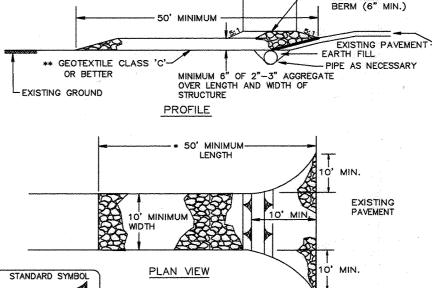


HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (DRAWING R-3.01)

* GUTTER PAN AT THE MEDIAN EDGE OF INTERMEDIATE ARTERIALS OR THE HIGH SIDE OF SUPERELEVATED SECTIONS SHALL BE SLOPED AT THE SAME RATE AS THE PAVEMENT.

STANDARD 7" COMBINATION CURB AND GUTTER

NO SCALE DETAIL 24 - STABILIZED CONSTRUCTION ENTRANCE



Construction Specification . Length - minimum of 50' (*30' for single residence lot).

2. Width - 10' minimum, should be flared at the existing road to provide a turning 3. Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. **The plan approval authority may not require single family residences to use geotextile.

4. Stone — crushed aggregate (2" to 3") or reclaimed or recycled concrete equivalent shall be placed at least 6" deep over the length and width of the

5. Surface Water — all surface water flowing to or diverted toward construction entrances shall be piped through the entrance, maintaining positive drainage. Pipe installed through the stabilized construction entrance shall be protected with a mountable berm with 5:1 slopes and a minimum of 6" of stone over the pipe. Pipe ha to be sized according to the drainage. When the SCE is located at a high spot and has no drainage to convey a pipe will not be necessary. Pipe should be sized

according to the amount of runoff to be conveyed. A 6" minimum will be required. 6. Location — A stabilized construction entrance shall be located at every point where construction traffic enters or leaves a construction site. Vehicles leaving

the site must travel over the entire length of the stabilized construction entrance U.S. DEPARTMENT OF AGRICULTURE MARYLAND DEPARTMENT OF ENVIRONME

PAGE F - 17 - 3 WATER MANAGEMENT ADMINISTRATIO SOIL CONSERVATION SERVICE OWNER / DEVELOPER DETAIL 22 - SILT FENCE

DRIVEN A MINIMUM OF 16" INTO -16" MINIMUM HEIGHT OF MINIMUM FENCE-FENCE POST SECTION MINIMUM 20" ABOVE

FENCE SECTIONS Construction Specifications . Fence posts shall be a minimum of 36" long driven 16" minimum into the ground. Wood posts shall be 11/2" x 11/2" square (minimum) cut, or 13/4" diameter (minimum) round and shall be of sound quality hardwood. Steel posts will be standard T or U section weighting not less than 1.00 pond per linear foot.

Tensile Strength 50 lbs/in (min.) 20 lbs/in (min.) Tensile Modulus Flow Rate Filtering Efficiency 75% (min.)

bulges occur or when sediment accumulation reached 50% of the fabric height.

E - 15 - 3 WATER MANAGEMENT ADMINISTRATION

6' WIDE UNLESS OTHERWISE NOTED 2% MAX. CROSS SLOPE δ οτ Δ COMPACTED SUBGRADE S.H.A. MIX NO. 2 CONCRETE, STIFF BROOM FINISH. REMOVE

EDGEING TOOL MARKS IN NOTES PROVIDE LATITUDINAL EXPANSION JOINTS AT 15' O.C. (MAX.) PROVIDE CONTRACTION (DUMMY) JOINT AT 5' O.C. INTERVALS BETWEEN EXPANSION JOINTS. SIDEWALK TO BE SCRIBED IN

SIDEWALK DETAIL

BY THE DEVELOPER

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

2.18.00

DATE

BY THE ENGINEER

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

Mill. Muen 2.18.00 **ENGINEER** DATE

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

WARD SOIL CONSERVATION

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

3/17/00 COUNTY HEALTH OFFICER DATE APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND

ZONING. 124/00

CHIEF, DIVISION OF LAND DEVELOPMENT 7 REVISION

WILBEN LLLP c/o ANDREW L. ISAACSON 5450 WHITLEY PARK TERRACE SUITE 410 BETHESDA, MARYLAND 20814

CLARKS GLEN NORTH PARCEL B-1

PARCEL 205 & P/0 204 TAX MAP 34 ZONED B-2

> SEDIMENT CONTROL NOTES AND DETAILS

5th ELECTION DISTRICT, HOWARD COUNTY, MARYLANI



DATE

DESIGNED BY : C.J.R.

DRAWN BY:

PROJECT NO SDP5.DWG DATE: FEBRUARY 18, 2000

D.R.D.

measure is to stake both sides of drawdown device with 1" steel angle, or 1" by 4" square or 2" round wooden posts set 3' minimum into the ground then joining them to the device by MARYLAND DEPARTMENT OF ENVIRONMENT U.S. DEPARTMENT OF AGRICULTURE MARYLAND DEPARTMENT OF ENVIRONMENT U.S. DEPARTMENT OF AGRICULTURE WATER MANAGEMENT ADMINISTRATION | SOIL CONSERVATION SERVICE

geotextile fabric. The geotextile fabric shall meet the specifications for Geotextile Class E.

WITH WATERTIGHT CAP CHAIN LINK FENCING-WATERTIGHT CONNECTION KKKKKKK EMBED FILTER CLOTH 8"______MINIMUM INTO GROUND *IF MULTIPLE LAYERS ARE REQUIRED TO ATTAIN 42"

> Fencing shall be 42" in height and constructed in accordance with the for a 6' fence shall be used, substituting 42" fabric and 6' length

> 4. Filter cloth shall be embedded a minimum of 8" into the ground.

Tensile Strength 50 lbs/in (min.) Tensile Modulus 20 lbs/in (min.) Flow Rate 0.3 gal/ft /minute (max.) Filtering Efficiency 75% (min.)

STANDARD SYMBOL

latest Maryland State Highway Details for Chain Link Fencing. The specification 2. Chain link fence shall be fastened securely to the fence posts with wire ties. The lower tension wire, brace and truss rods, drive anchors and post caps are not

5. Filter cloth shall be fastened securely to the chain link fence with ties spaced every 24" at the top and mid section. 5. When two sections of filter cloth adjoin each other, they shall be overlapped

EMBED GEOTEXTILE CLASS F
A MINIMUM OF 8" VERTICALLY INTO THE GROUND - FENCE POST DRIVEN A MINIMUM OF 16" INTO POSTS~ SECTION B STANDARD SYMBOL ____SF ____ JOINING TWO ADJACENT SILT

2. Geotextile shall be fastened securely to each fence post with wire ties or staples at top and mid-section and shall meet the following requirements Test: MSMT 509 Test: MSMT 509 0.3 gal ft / minute (max.) Test: MSMT 322

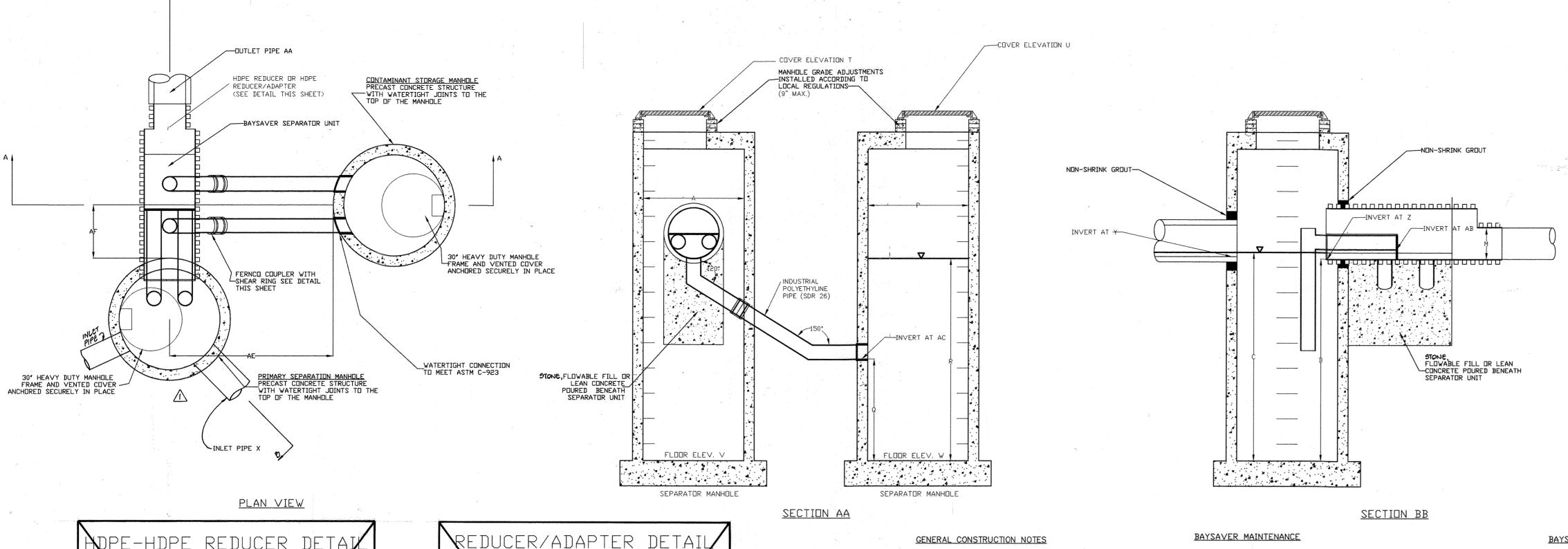
Test: MSMT 322 3. Where ends of geotextile fabric come together, they shall be overlapped, folded and stapled to prevent sediment bypass.

UNDISTURBED

Mac. Muse. ARTHUR E. MUEGGE #8707

SCALE : AS SHOWN

DRAWING NO. 5 OF 8



BAYSAVER SYSTEMS MUST BE INSPECTED AND MAINTAINED PERIODICALLY. INSPECTION IS MADE BY CHECKING THE DEPTH OF SEDIMENT IN EACH MANHULE WITH A GRADE STICK OR SIMILAR DEVICE. MAINTENANCE IS REQUIRED WHEN THE SEDIMENT DEPTH IN EITHER MANHULE EXCEEDS 2 FEET. MINIMUM INSPECTION IS REQUIRED TWICE A YEAR TO MAINTAIN OPERATION AND FUNCTION OF BAYSAVER.

MAINTENANCE CONSISTS OF THE FOLLOWING

A. CONTAMINANT STORAGE MANHOLE

1. REMOVE THE ENTIRE VOLUME OF THE CONTAMINATED WATER BY VACUUM TRUCK.

2. CLEAN THE MANHOLE WALLS AND FLUSH OUT THE MANHOLE USING A HIGH PRESSURE HOSE AND REMOVE FLUSHING WATER BY VACUUM TRUCK. MAKE CERTAIN MANHULE IS CLEAN.

B. PRIMARY SEPARATION MANHOLE

1. USING A SUBMERSIBLE PUMP, PUMP THE CLEAN WATER FROM THE CENTER OF THE MANHOLE DIRECTLY INTO THE EMPTY STORAGE MANHOLE UNTIL THE WATER LEVEL FALLS TO 1 FOOT ABOVE THE

2, REMOVE THE SETTLED SEDIMENT AND REMAINING WATER BY VACUUM

3. CLEAN THE MANHOLE WALLS AND FLUSH OUT THE MANHOLE USING A HIGH PRESSURE HOSE AND REMOVE FLUSHING WATER BY VACUUM TRUCK, MAKE CERTAIN MANHOLE IS CLEAN.

4. CONTAMINATED MATERIAL REMOVED FROM THE MANHOLES MUST BE DISPOSED OF RESPONSIBLY AND LEGALLY BY THE OPERATOR OF THE VACUUM TRUCK.

BAYSAVER INSTALLATION INSTRUCTIONS

1. EXCAVATION MUST PROVIDE ADEQUATE SPACE TO CONNECT INLET AND OUTLET PIPES TO SEPARATOR MANHOLE AND BAYSAVER UNIT. INSTALL PRECAST DROP STRUCTURES ON SOLID GROUND AS VERIFIED BY A GEOTECHNICAL ENGINEER.

2. VERIFY THE SUBGRADE ELEVATION AGAINST THE MANHOLE DIMENSIONS AND CONNECTING STORM DRAIN INVERTS.

3. MAKING SURE THE BASES ARE LEVEL AND THE STORAGE MANHOLE OPENINGS ARE ALIGNED WITH THE SEPARATOR UNIT, INSTALL PRIMARY AND STURAGE MANHULES. INSTALL RUBBER GASKETS ON BASE UNITS AND COAT WITH LUBRICATING GREASE. INSTALL ADDITIONAL MANHOLE SECTIONS AS REQUIRED. SEAL LIFT HOLES WITH NON-SHRINK GROUT.

4. BACKFILL BASE SECTIONS OF MANHOLES TO INVERT OF STORAGE MANHOLE CONNECTING PIPES. USING APPROVED BACKFILL MATERIAL, BACKFILL AND COMPACT IN 8 INCH LIFTS. BACKFILL AND COMPACTION SHOULD BE MONITORED BY A GEDTECHNICAL ENGINEER.

5. INSTALL BAYSAVER SEPARATOR UNIT AND CONNECTING PIPES. SEAL ALL CONNECTING JOINTS AND INSTALL SEPARATOR UNIT/STORM DRAIN JOINT COLLAR. CUT EXCESS LENGTH OFF CONNECTING PIPES INSIDE STORAGE MANHOLE.

6. BACKFILL SEPARATOR UNIT AND MANHOLES. AREAS NOT ACCESSIBLE TO COMPACTION EQUIPMENT MUST BE BACKFILLED WITH LEAN CONCRETE OR FLOWABLE FILL.

7. INSTALL AND SET MANHOLE COVER GRADE ADJUSTMENT RINGS AS NECESSARY.

8. INSTALL AND SET MANHOLE FRAME AND COVER UNITS.

Stage (X = Approval Required)	Developer's/Engineer Approval		Inspector		Geotechnical Engineer	
	Initials	Date	Initials	Date	Initials	Date
. Pre-Construction Meeting.	X		X		X	
. Install Manholes and associated storm drainage: a. Obtain approval of subgrade from Geotechnical Engineer. (Subgrade to have a minimum of 95% compaction)). /*			X	
b. Installation of precast base, lower tank and lower piping.	X		X			
 c. Backfill and min. 95% compaction around lower tank and lower piping. 					×	
 d. Installation of precast middle section(s) with separator unit and remaining piping. 	X	<i>i</i>	X		•	
e. Installation of precast top slab.	X		X			
f. Installation of adjustment rings and frame and cover.	X		X			
g. Installation of flowable fill or concrete backfill.					Χ	
. Backfilling operation and compaction.					X	
. Site is permanently stabilized. Sediment control measures removed and all sediment and debris removed from dual manhole separators.			×		-	-0
. Final inspection.			Χ			

Baysaver Separator Unit	Baysaver Manhole Sizes (prim. x stor.)	Maximum Treatment (cfs)*1	Maximum Treatment (gpm)*1	Impervious Area (acres)
1K Baysaver Separator	48x48 48x50 48x72 60x60	2.4 2.4 2.4 2.4 2.4	1076 1076 1076 1076	1.2 1.4 1.6 1.5
3K Baysaver Separator	60x60 60x72 60x84 72x72	7.2 7.2 7.2 7.2	3231 3231 3231 3231	3.6 4.1 4.6 4.4
5K Baysaver Separator	72×72 72×84 72×96 96×96	11.1 11.1 11.1 11.1	4981 4981 4981 4981	5.5 6.5 7.5 8.0

1. ALL WORK MUST BE DONE WITH REGARD FOR THE

2. ALL WORK AND MATERIALS MUST COMPLY WITH

UNDERGROUND UTILITIES BEFORE EXCAVATION BEGINS.

APPLICABLE STATE AND LOCAL REGULATIONS.

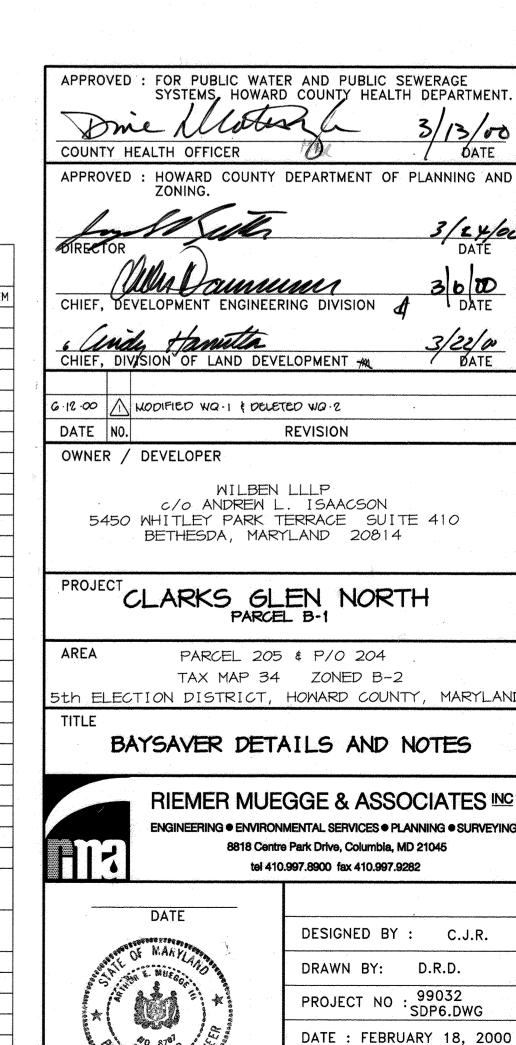
3. KNOW THE LOCATION AND DEPTH OF ANY

SAFETY OF THE CONSTRUCTION CREW.

BAYSAVERS ARE TO BE INSTALLED WITH THE STORM DRAIN SYSTEM AND WILL FUNCTION AS SECONDARY SEDIMENT CONTROL DEVICES. UPON COMPLETION OF SITE STABILIZATION. EACH BAYSAVER SYSTEM SHALL BE FLUSHED CLEAN & THE MANHOLES CLEANED OUT AND REFILLED WITH CLEAN WATER.

NOTE: DIMENSIONAL SHOP DRAWINGS ARE TO BE APPROVED BY THE DESIGN ENGINEER

	DESCRIPTION	1K SYSTEM	3K SYSTEM	5K SYSTEM
	SEPARATOR MANHOLE DIM	ENSIONS		
Α	PRIMARY MANHOLE DIAMETER	48"	60*	72"
В	MANHOLE DEPTH BELOW OUTLET	8' - 0"	8′ - 0 ″	8' - 0 "
С	MINIMUM FLUID DEPTH	8′ - 3″	8' - 4 1/2"	8' - 6"
	STANDARD SEPARATOR UNIT	DIMENSIONS		
D	SEPARATOR UNIT ID	24"	36 ′	48"
E	SEPARATOR UNIT LENGTH	60 "	78.2 *	75.4"
F	BYPASS PLATE LENGTH	34"	45″	45 ″
G	WEIR/BYPASS PLATE THICKNESS	3/4"	3/4"	3/4"
Н	ELBOW AND CONNECTING PIPE OD	7.125*	10.75*	12.75″
I	ELBOW LENGTH	48"	48*	48"
J	WEIR HEIGHT ABOVE INVERT	3″	4"	6 "
К	BYPASS PLATE HEIGHT ABOVE INVERT	12"	18*	24"
L	WIDTH OF WEIR AT BASE	3*	4 1/2"	6 "
М	DUTLET PIPE DIAMETER	М	М	М
N	ELBOW INVERT HEIGHT ABOVE UNIT INVERT	4 1/2"	7 1/2"	11"
	ELBOW PIPE OVERHANG	12"	18"	24"
	STORAGE MANHOLE DIME	NSIONS		
Р	STORAGE MANHOLE DIAMETER	48"	60*	72 "
Q	MANHOLE DEPTH BELOW INLET/OUTLET	48″	48″	48″
R	FLUID DEPTH	8' - 0 "	8' - 0"	8' - 0 "
S	TOTAL STORAGE VOLUME	200 CF	300 CF	450 CF
	SYSTEM DIMENSIONS AND E	LEVATIONS		
Т	SEPARATOR MANHOLE COVER ELEVATION	Т	Т	Ţ
U	STORAGE MANHOLE COVER ELEVATION	U	U	U
V	SEPARATOR MANHOLE FLOOR ELEVATION	V	V	V
W	STORAGE MANHOLE FLOOR ELEVATION	W	W	
X	INLET PIPE ID AND MATERIAL	X1 X2	X1 X2	X1 X2
Y	INLET PIPE INVERT	Y1 Y2	Y1 Y2	Y1 Y2
Z	SEPARATOR UNIT INVERT	Ž	Z	Z
AA	DUTLET PIPE ID AND MATERIAL	AA	AA	AA
AB	ELBOW INVERT ELEVATION	AB	AB	АВ
AC	CONNECTING PIPE INVERT ELEVATION	AC	AC	AC
AD	CONNECTION PIPE SPACING	20"	24"	24"
AE	STORAGE MANHOLE SIDE OFFSET	72 ± 6″	72 ± 6"	72 ± 6"
AF	STORAGE MANHOLE DOWNSTREAM OFFSET	23*	31*	25 ′



ARTHUR E. MUEGGE #8707

FERNCO FITTING DETAIL (NOT TO SCALE)

FERNCO NO.

1055-66

1056-1010

1004-1010

SHEAR RING

SR-27

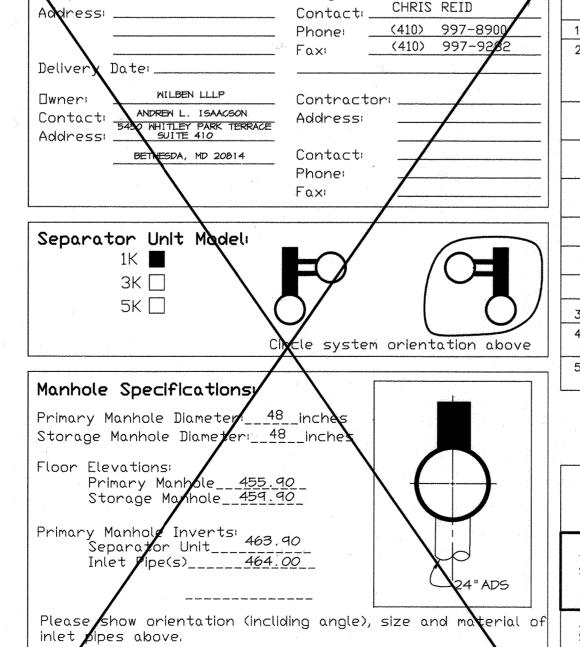
SR-39

SR-44

DISTANCE AC

12.73*

7.10*



This order can be faxed to Bay Saver, Inc. at (301) 829-3747

WQ-2/WQ-2A

Elevations:

Primary Manhole 467.8

Storage Manhole <u>468.1</u>

FOR USE WITH DUTLET PIPES OTHER THAN

24" CORRUGATED_

GASKETED COLLAR

MANUFACTURER)

(FROM HDPE →

HDPE PIPE

NOT TO SCALE

MORTAR

DUTLET

PARCEL B Designer:___

PIPE ID

DUTLET PIPE WALL THICKNESS

► RCP OUTLET PIPE

FOR USE WITH HDPE OUTLET PIPES

GASKETED COLLAR

CHRIS REID

(410) 997-8900

MANUFACTURER)

- (FROM HOPE

NOT TO SCALE

SECTION AA

Designer

Contact

Contact

Phone:

Faxi

Contractor: ____

Circle system orientation above

MQ-1/MQ-1A

Faxi

*ᡎᢦᠵᡳ*ᡳ

24" CORRUGATED_

GASKETED COLLAR

MANUFACTURER)

Delivery Date: ___

WILBEN LLLP

BETHESDA, MD 20814

Contact: ANDREW L. 10770000

Address: SUITE 410

Separator Unit Modeli

3K 🗌

Manhole Specifications:

Floor Elevations:

inlet pipes above.

Cover Elevations:

Primary Manhole Diameter: 48_inches

Storage Manhole Diameter:__48__inches

Primary Manhole 453.90 Storage Manhole 457.90

Separator Unit____

Inlet Pipe(s)______462.00 (24")

462.00 (18")

Please show orientation (incliding angle), size and material of

This order can be faxed to Bay Saver, Inc. at (301) 829-3747

Primary Manhole Inverts: 461.90

Primary Manhole _466.8

Storage Manhole <u>466.7</u>

(FROM HDPE ✓

DRAWING NO. 6 OF 8

ÓATE

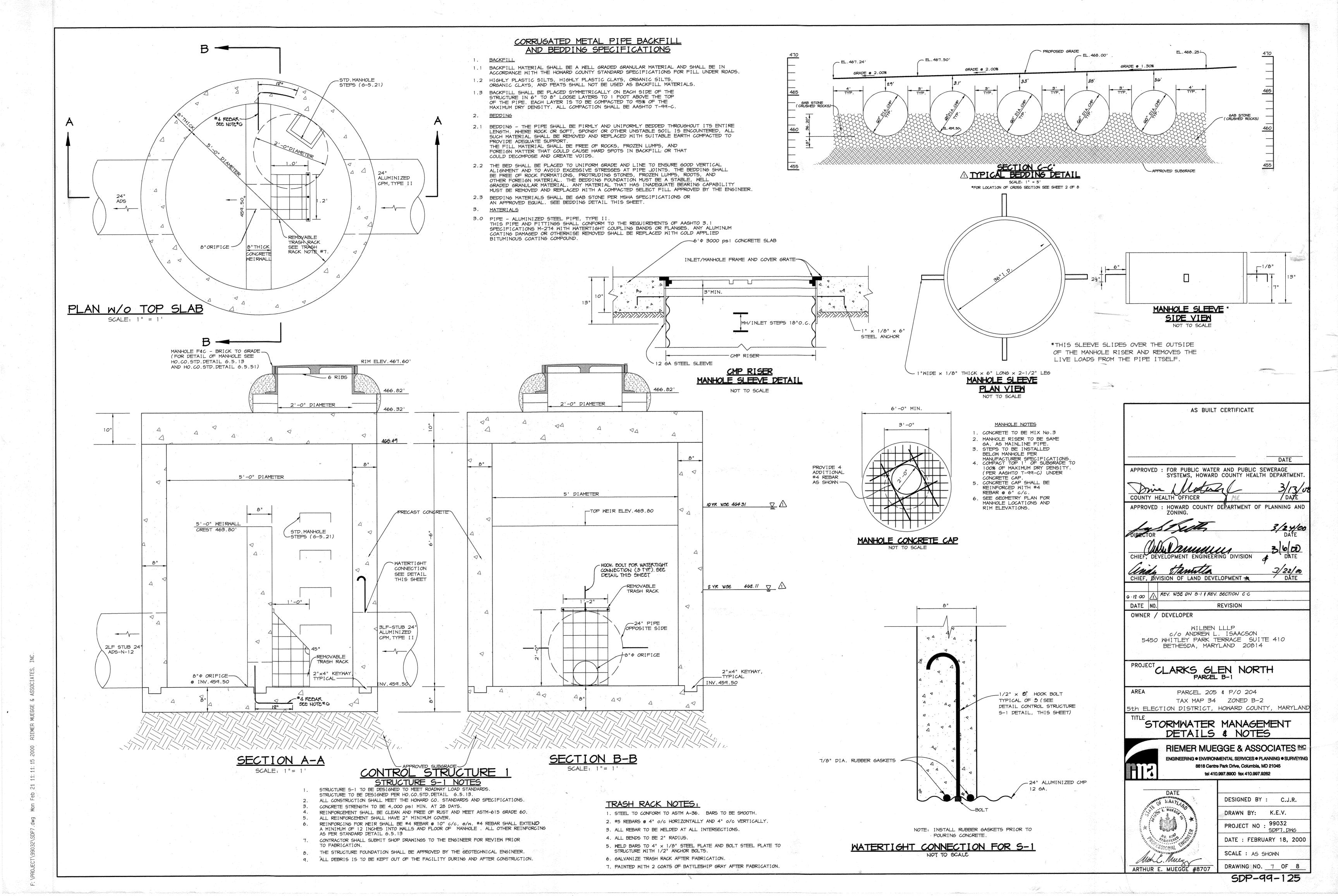
3/EY/OU DATE

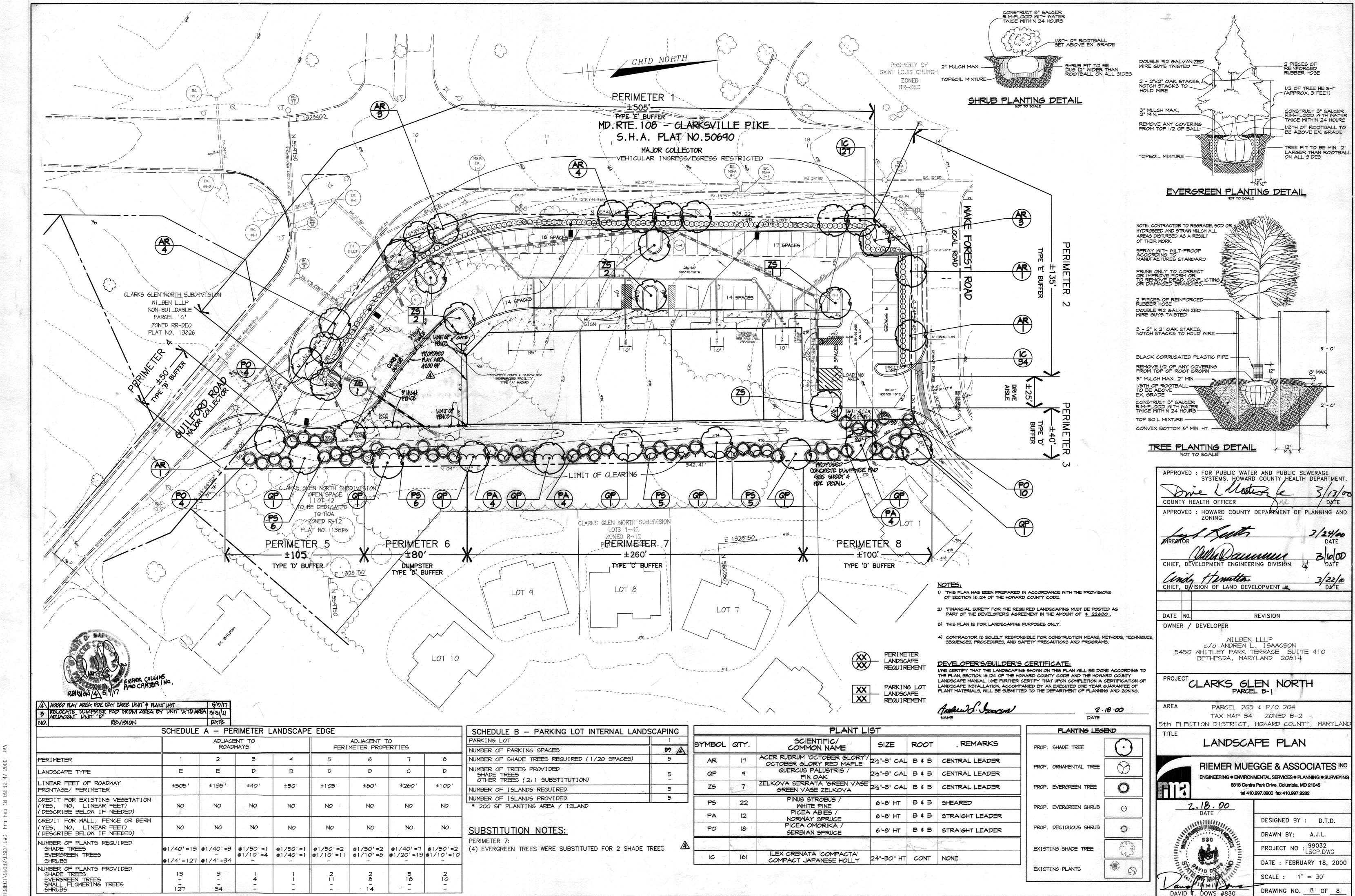
DATE

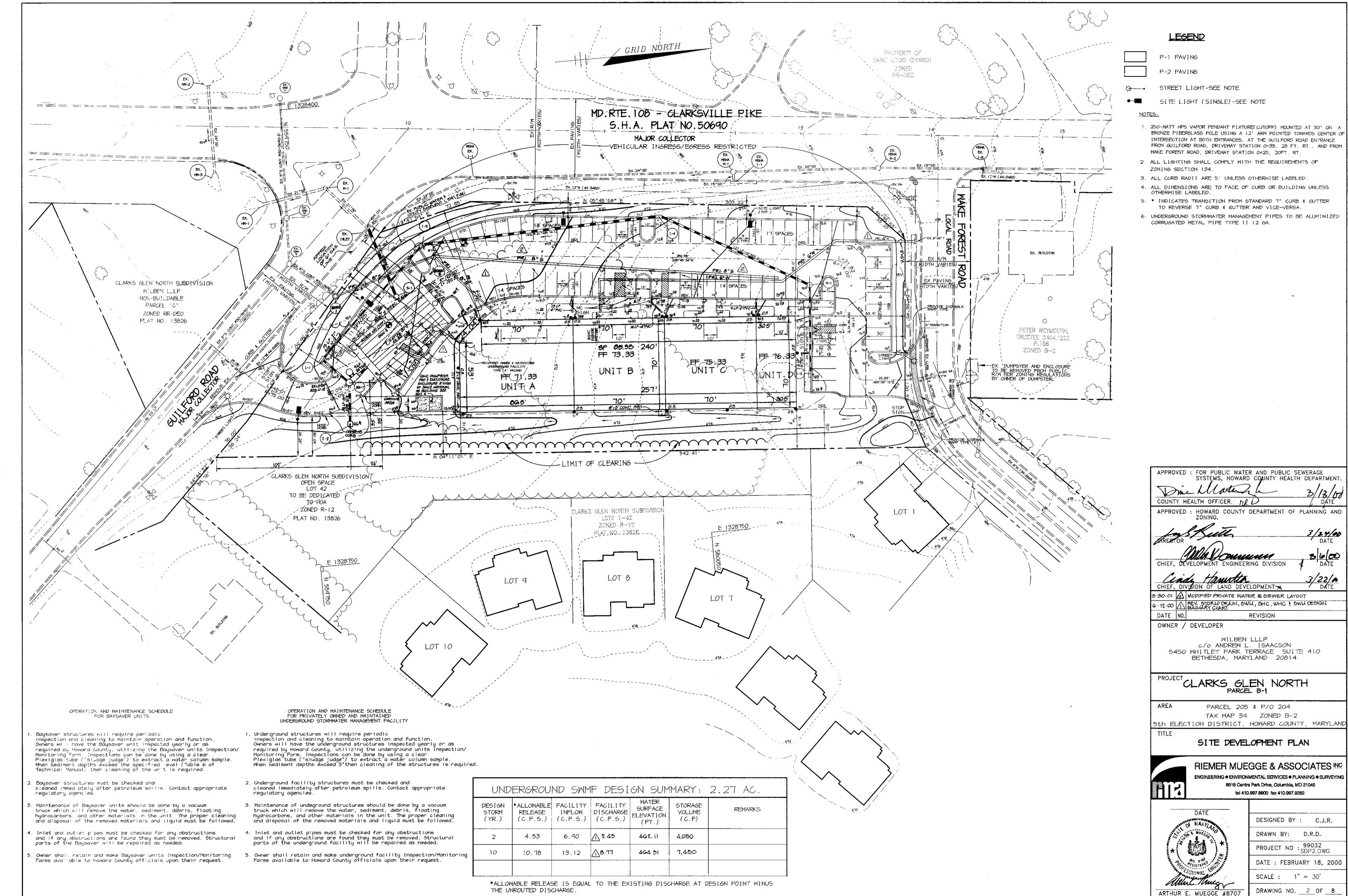
3/22/00 DATE

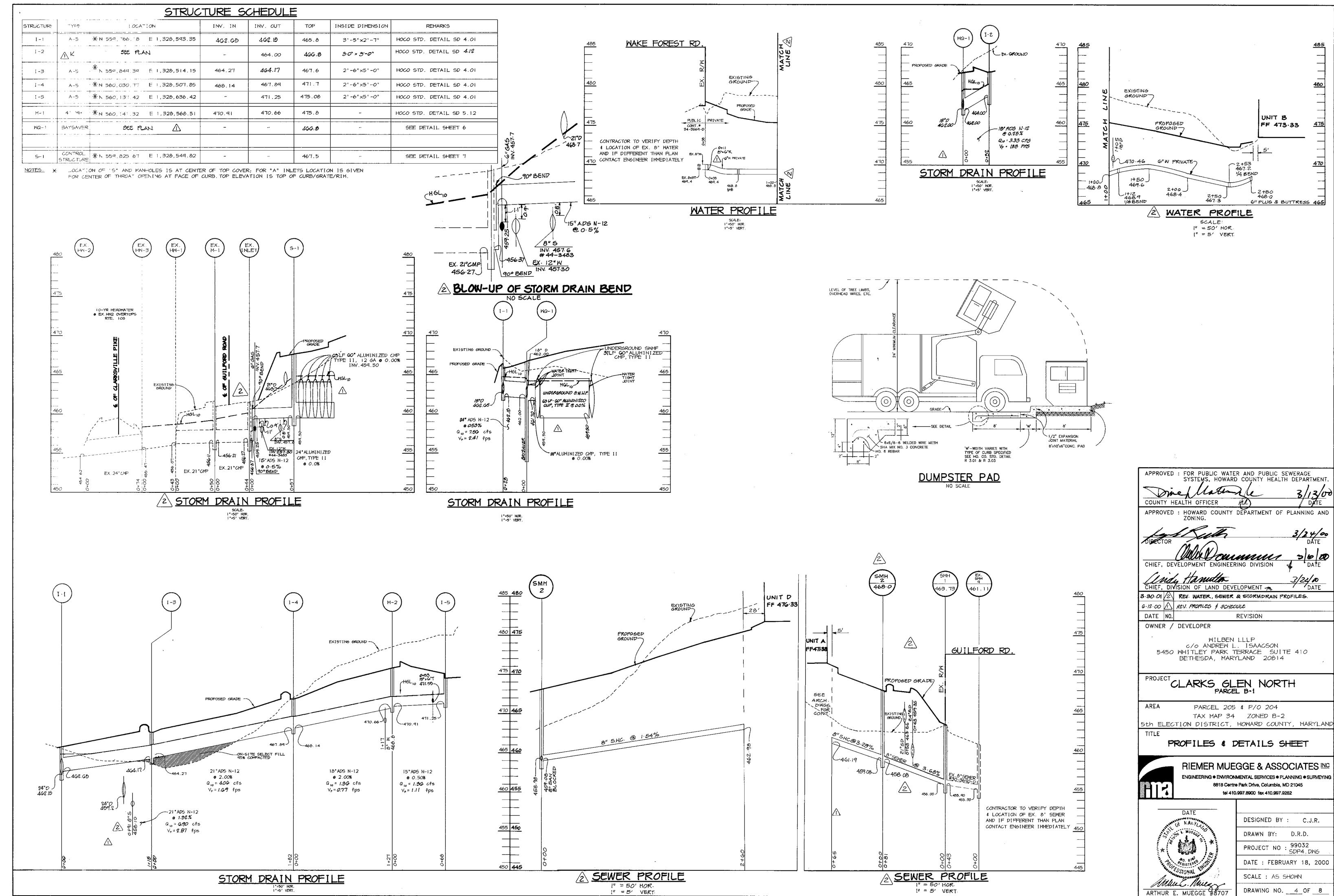
SDP-99-125

SCALE : AS SHOWN









F:\PBN.FF1\GG012\\GND4\BWG\\Tue\Feb\15\13:56:07\2000