SEDIMENT CONTROL NOTES AND DETAILS

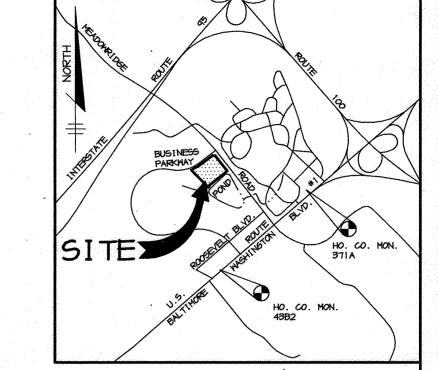
| PROFILE SHEET

LANDSCAPE PLAN

NOTES AND DETAILS

SITE DEVELOPMENT PLAN MEADOWRIDGE BUSINESS PARK

1st ELECTION DISTRICT HOWARD COUNTY, MARYLAND



VICINITY MAP

BENCHMARKS

BM 43B2 P.K. NAIL SET IN CURB N 490,906.0 E 865,758.6

BM 371A P.K. NAIL SET IN CURB

N 492,566.2 E 867,563.8

5.71 ACRES (248,816 SF)

5.25 ACRES (228,580 SF)

OFFICE/WAREHOUSE FACILITY (ONE STORY)

SITE ANALYSIS

AREA OF PARCEL DISTURBED AREA PRESENT ZONING PROPOSED USE BUILDING COVERAGE WAREHOUSE AREA OFFICE AREA

74,520 SF 8280 SF 82,800 SF (33.3% OF SITE)

OF PARKING SPACES REQUIRED WAREHOUSE AREA @ 0.5 SP/1000 SF* OFFICE AREA @ 3.3 SP/1000 SF*

TOTAL AREA

TOTAL SPACES

28 SPACES 66 SPACES

OF PARKING SPACES PROVIDED APPLICABLE REFERENCES

89 SPACES (INCLUDING 4 HC) GP-96-155, WP-96-115

38 SPACES

* PER HOWARD COUNTY ZONING REGULATIONS SECTION 133

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND CHIEF, DIVISION OF LAND DEVELOPMENT DATE 4/25/24 ADDED PROPOSED GENERATOR PAD LOCATION & EX. FEATURES PG 2-3 DATE NO. REVISION OWNER/DEVELOPER

MALAGA, LLC 7250 PARKWAY DRIVE, SUITE 130 HANOVER, MARYLAND 21076 410-712-4466

MEADOWRIDGE BUSINESS PARK PARCEL N

A WAREHOUSE BUILDING AREA TAX MAP NO. 37 ZONED M-1 PARCEL N 1st ELECTION DISTRICT

HOWARD COUNTY, MARYLAND

TITLE SHEET

Patton Harris Rust & Associates,pc Engineers. Surveyors. Planners. Landscape Architects. 8818 Centre Park Drive Columbia, MD 21045

T 410.997.8900 F 410.997.9282

ADDRESS CHART STREET ADDRESS 6605 BUSINESS PARKWAY MEADOWRIDGE BUSINESS PARK 6012 M-1

2153000

PARCEL

22

13193, 15827

DESIGNED BY : CJR DRAWN BY: DAM PROJECT NO : 97320 SDP1.DWG DATE: MAY 30, 2003 SCALE : AS SHOWN DRAWING NO. 1 OF 7 CHRISTOPHER J. REID #19949

SDP-98-75

PARCEI, N

THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.

GENERAL NOTES

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS

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

OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS, IF APPLICABLE.

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.

A PORTION OF THE EXISTING TOPOGRAPHY IS TAKEN FROM AERIAL SURVEY WITH MAXIMUM TWO FOOT CONTOUR INTERVALS PREPARED BY WINGS, INC. DATED FEBRUARY, 1994. THE REMAINDER CONSISTS OF THE PROPOSED GRADING UNDER GP-96-156, AS WELL AS SUPPLEMENTAL FIELD SURVEY PERFORMED BY RIEMER MUEGGE & ASSOCIATES INC., IN OCTOBER 1997.

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. 305 AND 306 WERE USED FOR THIS PROJECT.

WATER IS PUBLIC. CONTRACT NO. 14-1946-D.

SEWER IS PUBLIC. SEWER DRAINAGE AREA: PATAPSCO CONTRACT NO. 14-1946-D.

THE STORMWATER MANAGEMENT QUANTITY AND WATER QUALITY PROPOSED FOR THIS SITE IS EXISTING UNDER F-89-163. THE FACILITY IS AN EXTENDED DETENTION POND AND IS PRIVATELY MAINTAINED.

APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE. EXISTING UTILITIES ARE SHOWN BASED ON THE BEST AVAILABLE INFORMATION.

12. A 100-YEAR FLOODPLAIN STUDY IS NOT REQUIRED FOR THIS PROJECT.

THE WETLANDS DELINEATION FOR THIS PROJECT IS FROM RECORDED PLAT NOS. 9044, 9045 AND 12199. A PERMIT APPLICATION FOR BUFFER DISTURBANCE HAS BEEN SUBMITTED.

14. APFO TRAFFIC STUDY WAS PREPARED BY THE TRAFFIC GROUP INC. AND WAS APPROVED DECEMBER 9, 2002

15. A NOISE STUDY IS NOT REQUIRED FOR THIS PROJECT.

A GEOTECHNICAL STUDY IS NOT REQUIRED FOR THIS PROJECT

THE BOUNDARY FOR THIS PROJECT IS BASED ON PREVIOUSLY RECORDED PLAT NOS. 9044, 9045 AND 12199.

18. SUBJECT PROPERTY ZONED M-1 PER 10-18-93 COMPREHENSIVE ZONING PLAN.

19. ALL ELEVATIONS SHOWN ARE BASED ON THE U.S.C. AND G.S. MEAN SEA LEVEL DATUM, 1929.

20. SEE DEPARTMENT OF PLANNING AND ZONING FILE NOS WP-96-115, GP-96-155, WP-03-24, F-99-146, F-03-118.

THE CONTRACTOR SHALL TEST PIT EXISTING UTILITIES AT LEAST (5) DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS.

PIPE SHALL NOT BE INSTALLED BY THE CONTRACTOR UNTIL THE LENGTH CALLED FOR AT

22. CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES.

SEQUENCES, PROCEDURES, AND SAFETY PRECAUTIONS AND PROGRAMS.

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.

26. ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS.

27. ALL PIPE ELEVATIONS SHOWN ARE INVERT (ELEVATIONS.

PROFILES STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN

ALL FILL AREAS WITHIN ROADWAY AND UNDER STRUCTURES TO BE COMPACTED TO A MINIMUM OF 95% COMPACTION OF AASHTO TI80.

THIS PROJECT IS EXEMPT FROM THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION BECAUSE IT IS PART OF PLANNED BUSINESS PARK.

NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE REQUIRED WETLANDS OR

THE WETLAND BUFFER INDICATED ON THE PLAT (F-98-146, PLAT NO. 13193) DOES NOT AFFECT THE INITIAL CONSTRUCTION OF THE GRADING, BUILDING, PARKING AND UTILITIES ON A LOT OR PARCEL. IT DOES PROHIBIT SUBSEQUENT CLEARING, GRADING OR CONSTRUCTION IN BUFFERS AREA. MAINTENANCE OF BUILDINGS, PARKING, LANDSCAPING AND UTILITIES IS PERMITTED.

NO PERMIT SHALL BE GRANTED BY HOWARD COUNTY FOR ANY TYPE OF CONSTRUCTION WITHIN PARCELS SHOWN ON THE PLAT (F-98-146, PLAT NO. 13193) UNTIL A WETLAND PERMIT IS ISSUED BY THE CORPS OF ENGINEERS AND THE MARYLAND DEPARTMENT OF THE ENVIRONMENT OR UNTIL A CERTIFICATE IS SUBMITTED BY THE ENGINEER STATING THAT NO CONSTRUCTION WILL BE ALLOWED WITHIN THE DELINEATED WETLAND.

34. WP-03-24 A WAIVER WAS APPROVED BY THE DEPARTMENT OF PLANNING AND ZONING BY A LETTER DATED OCTOBER 11, 2002 TO WAIVE SECTION 16.156 (k) OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS TO REACTIVATE SDP-98-75 WHICH WAS VOIDED BY THE DEPARTMENT OF PLANNING AND ZONING ON DECEMBER 23, 1998.

APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS:

1. THE SITE DEVELOPMENT PLAN MUST BE REVISED IN ACCORDANCE WITH THE ATTACHED COMMENTS TO THE LETTER. WITHIN 45 DAYS OF THE DATE OF THE LETTER (BY NOVEMBER 25, 2002), THE DEVELOPER MUST SUBMIT 10 COPIES OF THE REVISED PLAN AND APFO STUDY FOR REVIEW BY THE STATE HIGHWAY ADMINISTRATION, THE HOWARD SOIL CONSERVATION DISTRICT, THE DEVELOPMENT ENGINEERING DIVISION AND THE DEPARTMENT OF PLANNING AND ZONING. SUBSEQUENT TO THE REVIEW AND APPROVAL OF THE PLAN BY THESE AGENCIES, AMENDED DEADLINES FOR THE SUBMISSION OF THE ORIGINAL SITE DEVELOPMENT PLAN WILL BE ESTABLISHED.

35. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL.

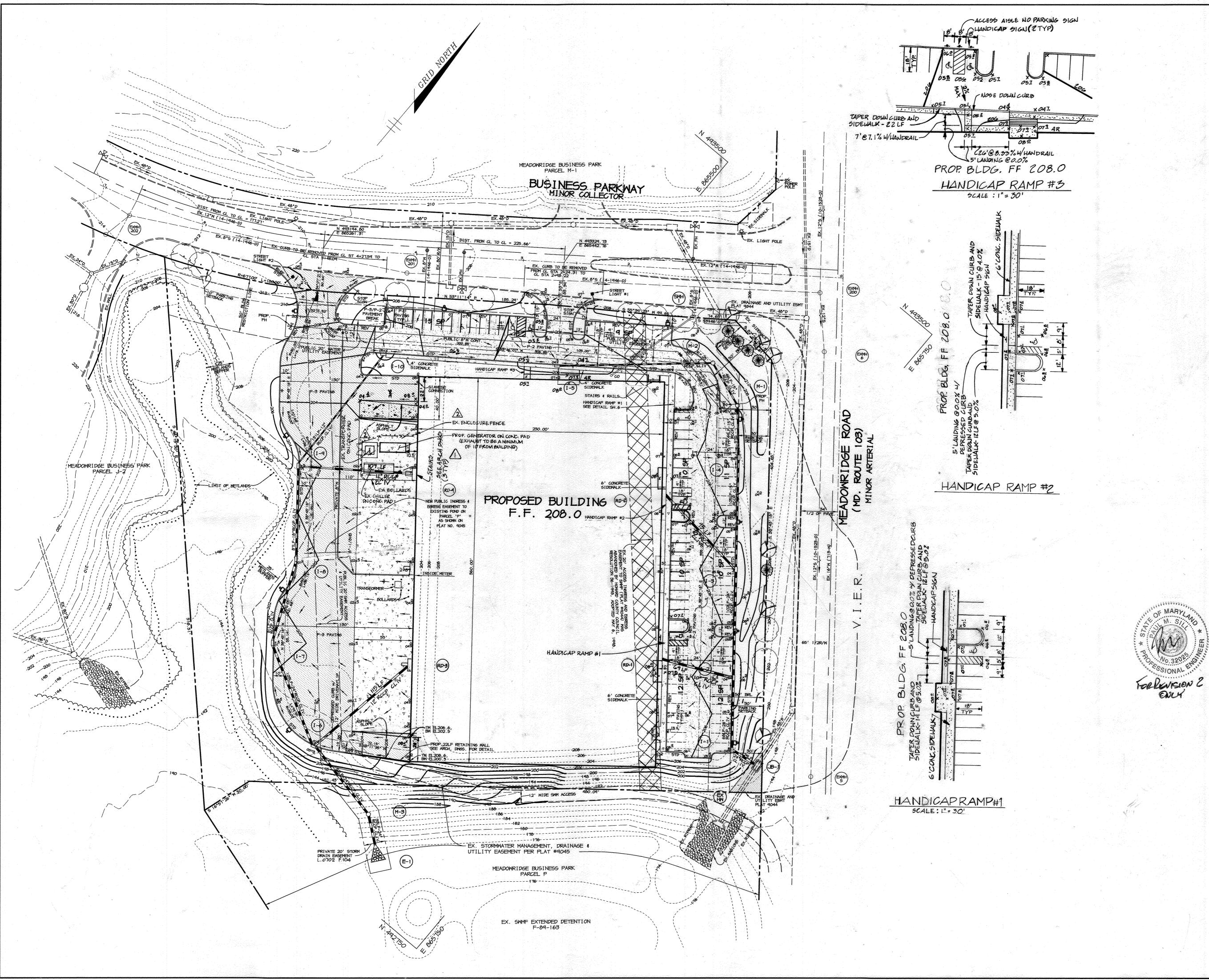
FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING HAS BEEN POSTED AS PART OF THE DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$4,600,00 FOR 38 SHADE TREES, 5 EVERGREEN TREES AND 101 SHRUBS.

N 493500 MEADOWRIDGE BUSINESS PARK PARCEL M-1 MEADOWRIDGE BUSINESS PARK MEADOWRIDGE BUSINESS PARK (SWM POND) PARCEL J-2

> <u>PLAN</u> SCALE: 1" = 100

> > F.F. 208.0

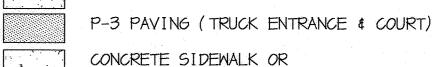
BUILDING ELEVATION NO SCALE



LEGEND

P-1 PAVING (PARKING BAYS)

-P-2 PAVING (DRIVE LANES)



CONCRETE SIDEWALK OR

CONCRETE TRUCK PAD (SEE DETAIL SHEET 4) DENOTES TRANSITION FROM STANDARD TO REVERSE CURB AND GUTTER

25' POLE SQUARE STEEL 400 WATT SHOEBOX METAL HALIDE (SEE NOTE 1)

250 WATT HPS VAPOR PENDANT FIXTURE (SAG) MOUNTED AT 30' ON A BRONZE FIBERGLASS POLE, USING A 12' ARM.

V.I.E.R. VEHICULAR INGRESS/EGRESS RESTRICTED

1. ALL LIGHTS TO BE DIRECTED/REFLECTED AWAY FROM ADJACENT PUBLIC ROADS AND RESIDENTIALLY ZONED PROPERTIES, AND BE IN ACCORDANCE WITH SECTION 134 OF THE HOWARD COUNTY ZONING REGULATIONS.

2. ALL CURB RADII ARE 5' UNLESS OTHERWISE LABELED.

3. ALL DIMENSIONS ARE TO FACE OF CURB OR BUILDING UNLESS OTHERWISE SHOWN.

4. ALL ON-SITE ROADS ARE PRIVATE.

5. SEE SHEET 1 FOR BUILDING LOCATION DIMENSIONS.

STREET LIGHT LOCATION

#1 36' LEFT OF STA. 2+30, BUSINESS PARKWAY

APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND

#2 39' LEFT OF STA. 5+20, BUSINESS PARKWAY ANGLE ARM TO CENTER OF INTERSECTION

CHIEF, DIVISIÓN OF LAND DEVELOPMENT 4/25/24 2 ADDED PROPOSED GENERATOR PAD LOCATION AND EXISTING FEATURES 4-22-04 A RELOCATED BLDG ENTRANCES, ROOF DRAINS LOADING RAMPS DATE NO. REVISION

OWNER/DEVELOPER

MALAGA, LLC 7250 PARKWAY DRIVE, SUITE 130 HANOVER, MARYLAND 21076 410-712-4466

MEADOWRIDGE BUSINESS PARK

PARCEL N A WAREHOUSE BUILDING AREA TAX MAP NO. 37 ZONED M-1 PARCEL N

1st ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SITE DEVELOPMENT PLAN

Patton Harris Rust & Associates,pc Engineers. Surveyors. Planners. Landscape Architects. 8818 Centre Park Drive Columbia, MD 21045



T 410.997.8900 F 410.997.9282



DESIGNED BY : CJR DRAWN BY: DAM

PROJECT NO : 97320 SDP2.DWG DATE: MAY 30, 2003

SCALE: 1" = 40' DRAWING NO. 2 OF 7 CHRISTOPHER J. REID #19949

STORM INLET SEDIMENT TRAP #1 (I-9)

DRAINAGE AREA 0.58 AC.

STORAGE VOLUME REQUIRED 1044 CF (WET/DRY)

STORAGE VOLUME PROVIDED 1044 CF @ 199.8 (WET) = DRAW DOWN DEVICE ELEV.

STORAGE VOLUME PROVIDED 1340 CF @ 201.5 (DRY)

WEIR ELEVATION 201.5 BOTTOM ELEVATION 198.0 CLEANOUT ELEVATION 199.5 SIDE SLOPES 1:1 CREST WIDTH BOTTOM DIMENSIONS 12'X40' 3.5'

SOIL CHART

	SYMBOL	DESCRIPTION
	AdB2	ALDINO SILT LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED
	CmC2	CHILLUM SILT LOAM, 5 TO 10 PERCENT SLOPES, MODERATELY ERODED
	Fa	FALLSINGTON LOAM
	На	HATBORO SILT LOAM
	KhC2	KEYPORT SLIT LOAM, 3 TO 10 PERCENT SLOPES, MODERATELY ERODED
,	LI	LEONARDTOWN SILT LOAM



_	NKVIIA	TUL UF	
INLET NOS.	AREA IN ACRES	'C' FACTOR	PERCENT IMPERVIOL
1 2 3 4 5 6 7 8 9 10	0.07 0.14 0.19 0.33 0.29 0.13 0.27 0.21 0.58 0.18	0.86 0.81 0.76 0.58 0.63 0.86 0.86 0.86 0.71	100% 92% 85% 57% 66% 100% 100% 16% 50%
* * 1 1	COTIC 100 100		•

* ALL SOILS ARE ASSUMED TYPE 'C' AS THE SITE HAS BEEN MASS GRADED.

I EGEND

	LEGEND			
	CIP	CURB INLET PROTECTION		
	- SSF SSF	SUPER SILT FENCE		
		LIMIT OF DISTURBANCE		
	******************	DRAINAGE AREA DIVIDE		
	-тРтР	TREE PROTECTION FENCE		
-	SCE	STABILIZED CONSTRUCTION ENTRANCE		



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.

DEVELOPER

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 AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

6.10.03

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

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

112000

APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND

CHIEF, DIVISION OF LAND DEVELOPMENT 4/25/24 /2 ADDED PROPOSED GENERATOR PAD LOCATION AND EXISTING FEATURES

4-23-04 | RELOCATED BLOGENTRANCES, ROOF DRAINS, LOADING RAMPS DATE NO. REVISION

OWNER/DEVELOPER

MALAGA, LLC 7250 PARKWAY DRIVE, SUITE 130 HANOVER, MARYLAND 21076 410-712-4466

MEADOWRIDGE BUSINESS PARK

PARCEL N A WAREHOUSE BUILDING AREA TAX MAP NO. 37 ZONED M-1 PARCEL N

1st ELECTION DISTRICT HOWARD COUNTY, MARYLAND

GRADING PLAN, SEDIMENT CONTROL PLAN, AND DRAINAGE AREA MAP

Patton Harris Rust & Associates, pc Engineers. Surveyors. Planners. Landscape Architects.

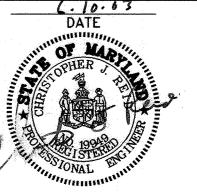
8818 Centre Park Drive Columbia, MD 21045 **T** 410.997.8900 F 410.997.9282

DESIGNED BY : CJR

PROJECT NO: 97320 SDP3.DWG

DATE: MAY 30, 2003

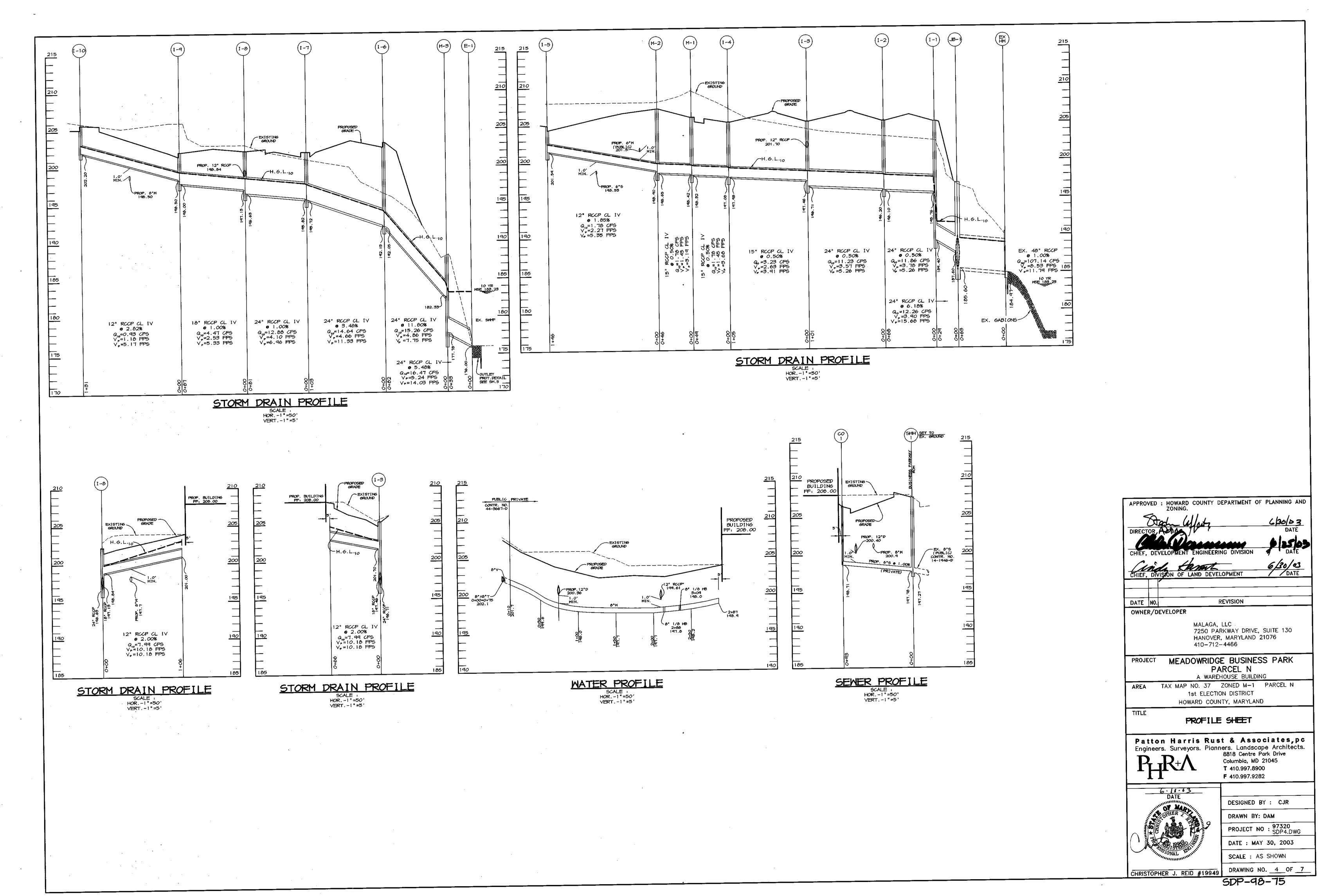
DRAWN BY: DAM



DRAWING NO. 3 OF 7 CHRISTOPHER J. REID #19949

SDP-98-75

SCALE : 1'' = 40'



P:\project\97320\SDP4.DWG, 05/30/2003 10:30:55 AM, HP750C(36).pc3

3. FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: A)7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES AND ALL SLOPES GREATER THAN 3:1, B) 14 DAYS AS TO OTHER DISTURBED 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 12, 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 1991 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL AND EROSION CONTROL FOR PERMANENT SEEDINGS (SEC. 51), SOD (SEC. 54), TEMPORARY SEEDING (SEC. 50) AND MULCHING (SEC. 52). TEMPORARY STABILIZATION WITH MULCH ALONG CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.

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.

7. SITE ANALYSIS:

AND REVISIONS THERETO.

TOTAL AREA OF SITE AREA DISTURBED AREA TO BE ROOFED OR PAVED AREA TO BE VEGETATIVELY STABILIZED TOTAL CUT TOTAL FILL		5.71 5.25 3.85 1.40 6000 6000	ACRES ACRES ACRES ACRES CU.YDS. CU.YDS.
--	--	--	--

8. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF

9. ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.

10. SITE GRADING WILL BEGIN ONLY AFTER ALL PERIMETER SEDIMENT CONTROL MEASURES HAVE BEEN INSTALLED AND ARE IN A FUNCTIONING CONDITION.

11. SEDIMENT WILL BE REMOVED FROM TRAPS WHEN ITS DEPTH REACHES CLEAN OUT

ELEVATION SHOWN ON THE PLANS. 12. 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 AFFECT THE WORK.

13. ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 AC., 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.

14. TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH CAN BE BACKFILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.

TEMPORARY SEEDING NOTES

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

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

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

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 EROSION 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 loosened.

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

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 ibs. per 1000 sq.ft.) before seeding. Harrow or disc into upper three inches of soil.

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 options:

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 with 2 tons per acre well anchored straw.

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, replacements

21.0 STANDARD AND SPECIFICATIONS FOR TOPSOIL

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

1. 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.

11. 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 stopes steeper than 2:1 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. Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority. Regardless, topsoil shall not be 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 1" in diameter.

ii. Topsoil must be free of plants or plant parts such as bermuda grass, quackgrass, Johnsongrass, 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. For sites having disturbed areas under 5 acres: i. Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization — bSection 1 — 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.

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

V. Topsoil Application

i. When topsoiling, maintain needed erosion and sediment control practices such as diversions,

ii. Grades on the areas to be topsoiled, which have been previously established, shall be maintained, albeit 4" - 8" higher in elevation.

iii. Topsoil 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.

iv. 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:

i. 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 studge 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 studge 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

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.

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

SEQUENCE OF CONSTRUCTION

1. OBTAIN GRADING PERMIT FOR SITE PLAN.

2. INSPECT/REPAIR ALL EXISTING SEDIMENT CONTROLS INSTALLED UNDER GP-96-155. RELOCATE SILT FENCE AS NOTED. (3 DAYS)

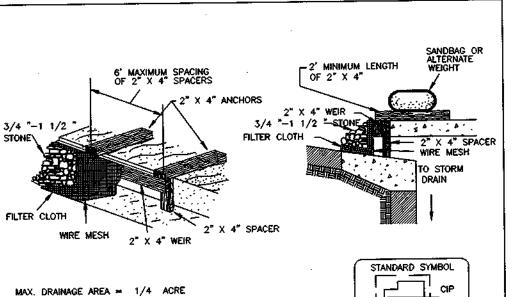
3. BEGIN BUILDING CONSTRUCTION.

4. AS SUBGRADE ELEVATIONS ARE REACHED, INSTALL STORM DRAIN SYSTEM AND WATER & SEWER, PROVIDE INLET PROTECTION AND INLET TRAP AT INLET #9 AS NECESSARY. (2 WEEKS)

5. INSTALL CURB & GUTTER AND CONCRETE PAD, THEN PAVE. (3 WEEKS)

6. STABILIZE DISTURBED AREAS AS NECESSARY AND COMPLETE REMAINING CONSTRUCTION. (16 WEEKS)

7. UPON APPROVAL OF HOWARD COUNTY DILP SEDIMENT CONTROL INSPECTOR, REMOVE TEMPORARY SEDIMENT CONTROL DEVICES AND STABILIZE REMAINING AREAS IN ACCORDANCE WITH PERMANENT SEEDING NOTES. (3 DAYS)



DETAIL 23C - CURB INLET PROTECTION

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

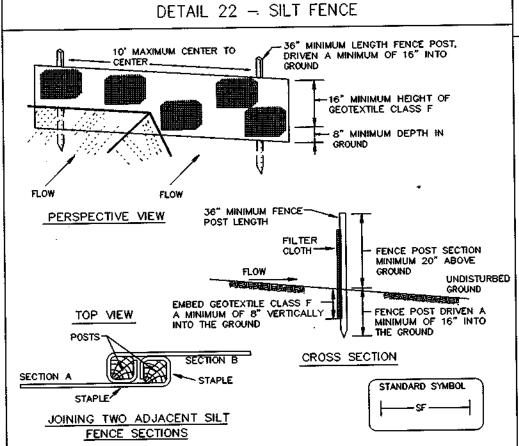
4. Place the assembly against the inlet throat and noil (minimum 2' lengths of 2" x 4" to the top of the weir at spacer locations). These 2" x 4" anchors shall extend across the inlet top and be held in place by sandbags or alternate weight. 5. The assembly shall be placed so that the end spacers are a minimum 1' beyond

both ends of the throat opening. 6. Form the 1/2 " x 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

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

entering the inlet under or around the geotextile.

earth or asphalt dike to direct the flow to the inlet. MARYLAND DEPARTMENT OF ENVIRONMENT U.S. DEPARTMENT OF AGRICULTURE WATER MANAGEMENT ADMINISTRATION SOIL CONSERVATION SERVICE



Construction Specifications 1. 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. 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

for Geotextile Class F: Test: MSMT 509 50 lbs/in (min.) Tensile Strength Test: MSMT 509 20 lbs/in (min.) Tensile Modulus 0.3 gal ft // minute (max.) Test: MSMT 322 Flow Rate Test: MSMT 322

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

N 493,081.07 E 865,855.75 | 195.76 (24")

N 493, 294.46 E 865, 684.67 | 197.08 (15")

N 493,347.43 E 865,610.16 | 198.90 (12")

4. Silt Fence shall be inspected after each rainfall event and maintained when

N 493, 133,88 E 865,813.41

N 443,212.40 E 865,750.06

N 493,252.78 E 865,499.14

N 492,834.04 E 865,553.93

N 492,882.83 E 865,463.55

N 492,956.89 E 865,429.81

1 493,024.73 E 865,375.42

N 493, 156.31 E 865, 367.48

N 443,331.84 E 865,653.44

N 442,817.20 E 865,634.55

N 493,367.54 E 865,567.78

N 492,797.34 E 865,660.29

JUNCTION N 493,085.86 E 865,884.48

TOP ELEVATION IS TOP OF CURBIGRATE/RIM.

STRUCTURE

I-2

1-3

I-4

1-5

I-6

I -7

I -8

1-9

1-10

TYPE

A-5

A-5

A-5

A-5

A-5

A-5

4' DIA.

MANHOLE

4' DIA.

MANHOLE

MANHOLE

4' DIA

MANHOLI

bulges occur or when sediment accumulation reached 50% of the fabric height. MARYLAND DEPARTMENT OF ENVIRONMENT U.S. DEPARTMENT OF AGRICULTURE WATER MANAGEMENT ADMINISTRATION SOIL CONSERVATION SERVICE

STRUCTURE SCHEDULE

196.20 (24")

197.46 (15*

192,15 (24")

195.82 (24*)

148.50 (12")

198.42 (15")

182.33 (24")

187.60 (24")

NOTES: LOCATION IS AT CENTER OF THROAT OPENING AT FACE OF CURB FOR CURB INLETS (CENTER OF GRATE FOR I-14).

INV. OUT

184.40 (24"

196.10 (24°

197.98 (15",

201.59 (12"

192.05 (24".

195.72 (24°

198.00 (18"

202.20 (12")

198.32 (15*)

198.65 (15")

197.27 (8")

176.00 (24")

185.60

10' MAXIMUM SHALL NOT EXCEED 16 CENTER TO CENTER YXYXXXXXXX FLOW GALVANIZED OR ALUMINUM WITH 1 LAYER OF CHAIN LINK FENCING-FILTER CLOTH-KIKIKIKIKI EMBED FILTER CLOTH 8"-----STANDARD SYMBOL *IF MULTIPLE LAYERS ARE Construction Specifications . Fencing shall be 42" in height and constructed in accordance with the

DETAIL 33 - SUPER SILT FENCE

latest Maryland State Highway Details for Chain Link Fencing. The specification for a 6' fence shall be used, substituting 42" fabric and 6' length 2. Chain link fence shall be fastened securely to the fence posts with wire ties.

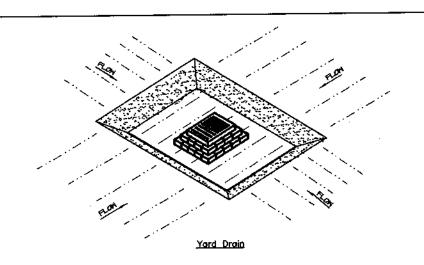
The lower tension wire, brace and truss rods, drive anchors and post caps are not required except on the ends of the fence. 3. Filter cloth shall be fastened securely to the chain link fence with ties spaced every 24" at the top and mid section.

4. Filter cloth shall be embedded a minimum of 8" into the ground. 5. When two sections of filter cloth adjoin each other, they shall be overlapped

6. Maintenance shall be performed as needed and silt buildups removed when "bulges 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 wire ties or staples at top and mid section and shall meet the following requirements for

Test: MSMT 509 50 lbs/in (min.) Tensile Strength Test: MSMT 509 20 lbs/in (min.) Tensile Modulus Test: MSMT 322 0.3 gal/ft /minute (max.) Flow Rate Test: MSMT 322 Filterina Efficiency MARYLAND DEPARTMENT OF ENVIRONMENT
WATER MANAGEMENT ADMINISTRATION SOIL CONSERVATION SERVICE

STORM INLET SEDIMENT TRAP 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

6. All cut slopes shall be 1:1 or flatter. MAXIMUM DRAINAGE AREA: 3 ACRES

205.2

205.0

202.0

202.

205.8

207.2

188.2

207.7

MARYLAND DEPARTMENT OF ENVIRONME

Construction Specifications For ST-III

1. Sediment shall be removed and then restored to its original dimensions when the sediment has accumulated to 1/2 the design depth of the trap. Removed sediment shall be deposited in a suitable area and in such a manner that it will not erode.

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

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

REMARKS

HOGO. STD. DETAIL SD 4.40

HOCO. STD. DETAIL SD 4.40

HOCO. STD. DETAIL SD 4.40

HOCO. STD. DETAIL SD 4.40

HOCO, STD. DETAIL SD 4.40

HOCO. STD. DETAIL SD 4.40

HOCO. STD. DETAIL SD 4.40

HOCO, STD. DETAIL SD 4.40

HOCO. STD. DETAIL SD 4.40

HOCO. STD. DETAIL 6 5.11

HOCO. STD. DETAIL 6 5.11

HOCO. STD. DETAIL 6 5.11

HOCO. STD. DETAIL SD 5.51

206.0 HOCO. STD. DETAIL 6 5.11

HOCO. STD. DETAIL SD 4.40 2'-6" x 5'-0

MSHA, STD. DETAIL MD 386.11 5'-0" × 8'-2"

SCOUR ADJACENT TO THE STONE WILL OCCUR.

INTERIOR DIMENSIONS

2'-6" × 5'-0

2'-6" × 5'-0

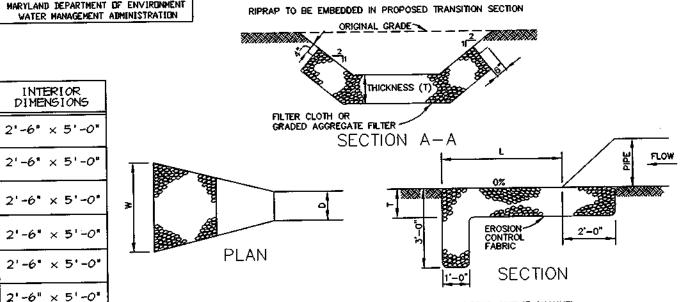
2'-6" × 5'-0

2'-6" × 5'-0

2'-6" × 5'-0

2'-6" × 5'-0

2'-6" × 5'-0



DETAIL 24 - STABILIZED CONSTRUCTION ENTRANCE

MINIMUM 6" OF 2"-3" AGGREGATE

OVER LENGTH AND WIDTH OF STRUCTURE

Construction Specification

. Width - 10' minimum, should be flored 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

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

mountable berm with 5:1 slopes and a minimum of 6" of stone over the pipe. Pipe has

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.

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

F - 17 - 3

THE SUBGRADE FOR THE FILTER, RIP-RAP, OR GABION

SHALL BE PREPARED TO THE REQUIRED LINES AND GRADES.

ANY FILL REQUIRED IN THE SUBGRADE SHALL BE COMPACTED

TO A DENSITY OF APPROXIMATELY THAT OF THE SURROUNDING

2. THE ROCK OR GRAVEL SHALL CONFORM TO THE SPECIFIED

GRADING LIMITS WHEN INSTALLED RESPECTIVELY IN THE

3. GEOTEXTILE CLASS C OR BETTER SHALL BE PROTECTED

FROM PUNCHING, CUTTING, OR TEARING. ANY DAMAGE OTHER

DAMAGED WHETHER FOR REPAIRS OR FOR JOINING TWO PIECES

PLACED BY EQUIPMENT. THEY SHALL BE CONSTRUCTED TO THE

FULL COURSE THICKNESS IN ONE OPERATION AND IN SUCH A

THAN AN OCCASIONAL SMALL HOLE SHALL BE REPAIRED BY

PLACING ANOTHER PIECE OF GEOTEXTILE FABRIC OVER THE

OF GEOTEXTILE FABRIC SHALL BE A MINIMUM OF ONE FOOT.

4. STONE FOR THE RIP-RAP OR GABION OUTLETS MAY BE

MATERIALS. THE STONE FOR RIP-RAP OR GABION OUTLETS

SHALL BE DELIVERED AND PLACED IN A MANNER THAT WILL

SMALLER STONES AND SPALLS FILLING THE VOIDS BETWEEN

MANNER TO PREVENT DAMANGE TO THE FILTER BLANKET OR

GEOTEXTILE FABRIC.HAND PLACEMENT WILL BE REQUIRED TO

5. THE STONE SHALL BE PLACED SO THAT IT BLENDS IN WITH

THEN THE FLOW WILL BE FORCED OUT OF THE CHANNEL AND

THE EXISTING GROUND. IF THE STONE IS PLACED TOO HIGH

ENSURE THAT IT IS REASONABLY HOMOGENOUS WITH THE

THE LARGER STONES. RIP-RAP SHALL BE PLACED IN A

THE EXTENT NECESSARY TO PREVENT DAMAGE TO THE

MANNER AS TO AVOID DISPLACEMENT OF UNDERLYING

RIPRAP CONSTRUCTION SPECIFICATIONS

installed through the stabilized construction entrance shall be protected with a

PROFILE

PLAN VIEW

. Length — minimum of 50° (*30° for single residence lot).

** GEOTEXTILE CLASS 'C'-

OR BETTER

LEXISTING GROUND

STANDARD SYMBOL

U.S. DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE

UNDISTURBED MATERIAL.

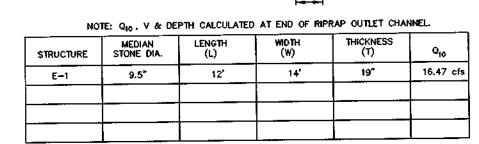
RIP-RAP OR FILTER.

PERMANENT WORKS.

SESSE

EXISTING PAVEMENT -

MARYLAND DEPARTMENT OF ENVIRONMEN'
WATER MANAGEMENT ADMINISTRATION



RIPRAP OUTLET PROTECTION DETAIL

PIPE SCHEDULE

PIPE LENGTH	SIZE	TYPE	
449	12"	RCCP CL. IV	
200	15"	RCCP CL. IV	
87	18"	RCCP CL. IV	
497	24"	RCCP CL. IV	

BY THE DEVELOPER :

/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.

6/10/03 DEVELOPER

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 AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

DATE

6.16.13

DATE

DATE

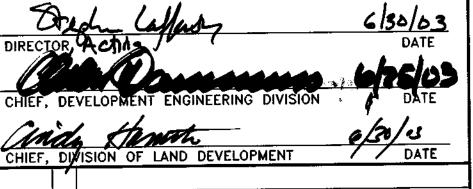
ENGINEER

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

m THIS DEVELOPMENT PLANT IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION

DISTRICT. CONSERVATION DISTRICT

APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING



OWNER/DEVELOPER

DATE NO.

MALAGA, LLC 7250 PARKWAY DRIVE, SUITE 130 HANOVER, MARYLAND 21076 410-712-4466

MEADOWRIDGE BUSINESS PARK

HOWARD COUNTY, MARYLAND

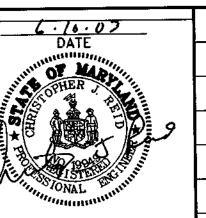
REVISION

PARCEL N A WAREHOUSE BUILDING TAX MAP NO. 37 ZONED M-1 PARCEL N. 1st ELECTION DISTRICT

SEDIMENT CONTROL NOTES AND DETAILS

Patton Harris Rust & Associates,pc Engineers. Surveyors. Planners. Landscape Architects.

8818 Centre Park Drive Columbia, MD 21045 T 410.997.8900 **F** 410.997.9282

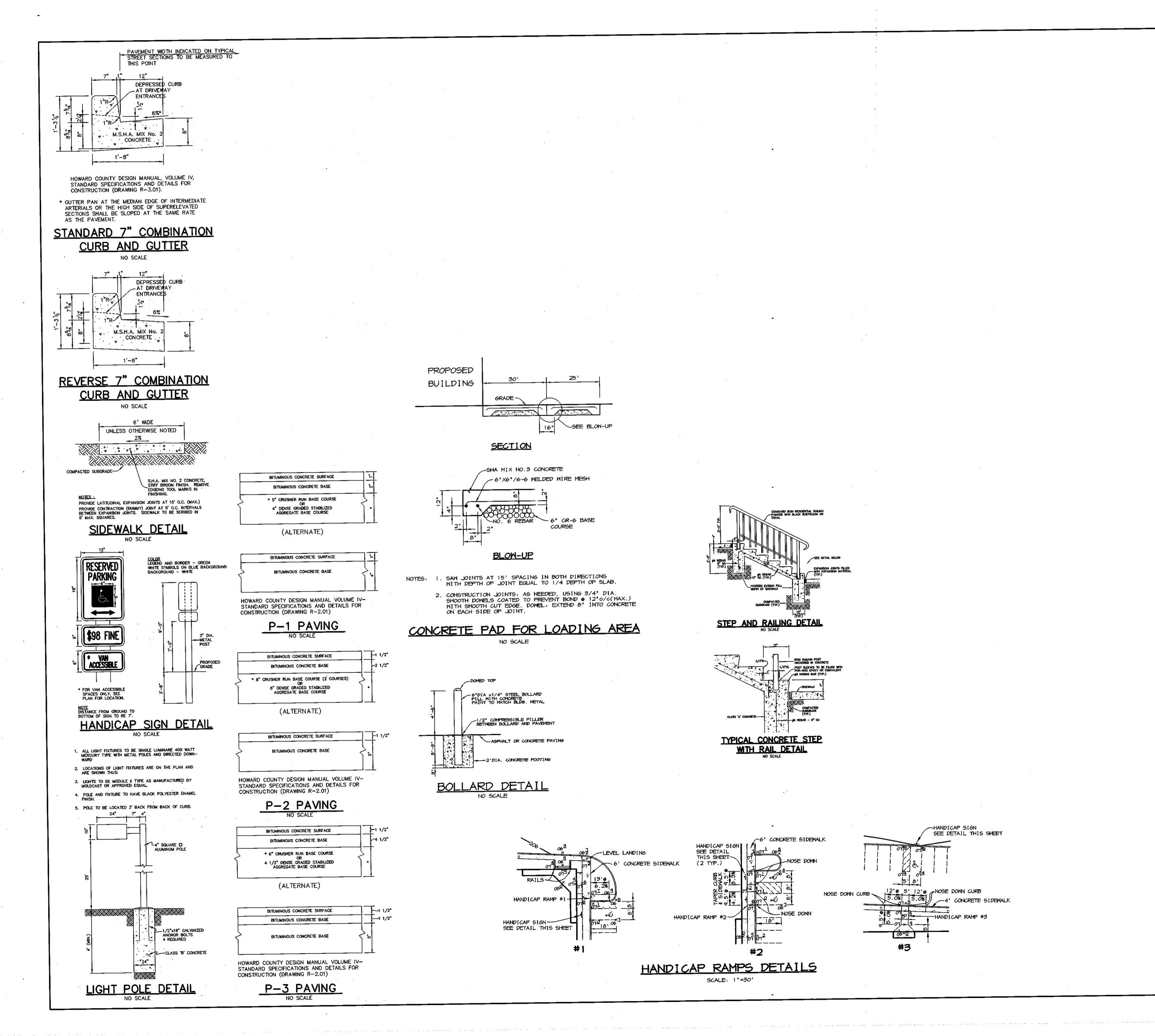


PROJECT NO : 97320 SDP5.DWG DATE: MAY 30, 2003 SCALE : AS SHOWN

DRAWN BY: DAM

DESIGNED BY : CJR

DRAWING NO. _ 5_ OF _ 7 CHRISTOPHER J. REID #19949



APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND 6/30/03 6/30/03 DATE CHIEF, DIVISION OF LAND DEVELOPMENT REVISION DATE NO. OWNER/DEVELOPER MALAGA, LLC 7250 PARKWAY DRIVE, SUITE 130 HANOVER, MARYLAND 21076 410-712-4466 MEADOWRIDGE BUSINESS PARK PARCEL N A WAREHOUSE BUILDING AREA TAX MAP NO. 37 ZONED M-1 PARCEL N 1st ELECTION DISTRICT HOWARD COUNTY, MARYLAND NOTES AND DETAILS Patton Harris Rust & Associates,pc Engineers. Surveyors. Planners. Landscape Architects. 8818 Centre Park Drive Columbia, MD 21045 T 410.997.8900 F 410.997.9282 DESIGNED BY : CJR DRAWN BY: DAM PROJECT NO : 97320 SDP6.DWG DATE: MAY 30, 2003 SCALE : AS SHOWN DRAWING NO. <u>6</u> OF <u>7</u> CHRISTOPHER J. REID #19949 SDP-98-75

P:\project\97320\SDP6.DWG, 05/30/2003 12:55:40 PM, HP750C(36).pc3

PLANTING SPECIFICATIONS

- 1. Plants, related material, and operations shall meet the detailed description as given on the plans and as
- 2. All plant material, unless otherwise specified, shall be nursery grown, uniformly branched, have a vigorous root system, and shall conform to American Association of Nurserymen (AAN) Standards. Plant material shall be healthy, vigorous, free from defects, decay, disfiguring roots, sunscald injuries, abrasions of the bark, plant disease, insect pest eggs, borers and all forms of insect infestations or objectionable disfigurements. Plant material that is weak or which has been cut back from larger grades to meet specified requirements will be rejected. Trees with forked leaders will not be accepted. All plants shall be freshly dug; no healed—in plants or plants from cold storage will be accepted.
- 3. Unless otherwise specified, all general conditions, planting operations, details and planting specification shall conform to "Landscape Specification Guidelines for Baltimore—Washington Metropolitan Areas", (hereinafter "Landscape Guidelines") approved by the Landscape Contractors Association of Metropolitan Washington and the Potomac Chapter of the American Society of Landscape Architect, latest edition, including all agenda.
- 4. Contractor shall be required to guarantee all plant material for a period of one year after date of acceptance in accordance with the appropriate section of the Landscape Guidelines. Contractor's attention is directed to the maintenance requirements found within the one year specifications including watering and replacement of specified plant material.
- 5. Contractor shall be responsible for notifying utility companies, utility contractors and "Miss Utility" a minimum of 48 hours prior to beginning any work. Contractor may make minor adjustments in spacing and location of plant material to avoid conflicts with utilities. Damage to existing structure and utilities shall be repaired at the expense of the Contractor.
- 6. Protection of existing vegetation to remain shall be accomplished by the temporary installation of 4 foot high snow fence at the drip line.
- Contractor is responsible for installing all material in the proper planting season for each plant type.
 All planting is to be completed within growing season of completion of site construction.
- B. Bid shall be based on actual site conditions. No extra payment shall be made for work arising from site conditions differing from those indicated on drawings and specifications.
- 9. Plant quantities are provided for the convenience of the contractor only. If discrepancies exist between quantities shown on plan and those shown on the plant list, the quantities on the plan take precedence.
 10. All shrubs and groundcover areas shall be planted in continuous prepared planting beds mulched with composted hardwood mulch as detailed and specified except where noted on plans.
- 11. Positive drainage shall be maintained in planting beds (minimum 2 percent slope).
- 12. Planting mix shall be as follows: Deciduous Plants Two parts topsoil, one part well—rotted cow or horse manure. Add 3 lbs of standard fertilizer per cubic yard of planting mix. Evergreen Plants two parts topsoil, one part humus or other approved organic material. Add 3 lbs. of evergreen (acidic) fertilizer per cubic yard of planting mix. Topsoil shall conform to the Landscape Guidelines.
- 13. Weed Control: Incorporate a pre-emergent herbicide into the planting bed following recommended rates on the label. Caution: Be sure to carefully check the chemical used to assure its adaptability to the specific groundcover to be treated.
- 14. Mulch: Groundcover beds should be mulched with minimum 2 inches of shredded composted hardwood, or as specified on the details, whichever is greater.
- 15. All areas within contract limits disturbed during or prior to construction not designated to receive plants and mulch shall be fine graded and seeded.
- This plan is intended for landscape use only. See other plan sheets for more information on grading, sediment control, layout, etc.

GENERAL NOTES

- 1. THIS PLAN IS FOR LANDSCAPE PURPOSES ONLY.
- 2. THE CONTRACTOR SHALL THOROUGHLY REVIEW ALL DATA SHOWN ON THE LANDSCAPE PLAN PRIOR TO SUBMITTING ANY BID FOR THIS WORK. SHOULD THERE BE ANY QUESTIONS REGARDING ANY ITEMS, CONTACT THE LANDSCAPE ARCHITECT AT 410-997-8900 FOR CLARIFICATION. OTHERWISE IT WILL BE ASSUMED THAT THE CONTRACTOR IS FULLY AWARE OF ALL OPERATIONS AND MATERIALS PERTINENT TO THE PROPER COMPLETION OF THE WORK.
- 3. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.
- 4. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING MUST BE POSTED AS PART OF THE DPW DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$4800.00.STREET TREES ARE NOT INCLUDED IN THIS AMOUNT AND WILL BE BONDED SEPARATELY.

SCHEDULE A PERIMETER LANDSCAPING					
	ADJACENT TO ROADWAYS			ADJACENT TO PROPERTIES	
PERIMETER	A	В	С	D	E
LANDSCAPE TYPE	В	E	E	NONE	NONE
LINEAR FEET OF ROADWAY FRONTAGE/ PERIMETER	± 150'	± 285'	± 600°	± 530'	± 518
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NO	NO	NO	NO .	NO
CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NO	NO	YES 470'*	NO	NO
NUMBER OF PLANTS REQUIRED: SHADE TREES EVERGREEN TREES SHRUBS	 ⊕ 1:50 = 3 ⊕ 1:40 = 4	14 1:40 = 7 1:4 = 71	3 = 3	0 -	<u>o</u> - -
NUMBER OF PLANTS PROVIDED: EXISTING STE SHADE TREES EVERGREEN TREES OTHER TREES (2:1 SUBSTITUTION) SHRUBS (10:1 SUBSTITUTION)	5 0 3 5 -	14 - 7 - - 71	15 - 15 - 30*	0 - - - -	0 - - - -

* CREDIT TAKEN FOR MIN. 3' BERM, PERIMETER C, EXCEPT FOR 130'.

STREET T	SCHED REE LANDS		UIREMENT	S	
PERIMETER	A	В	С	D	E
LENGTH	± 150'	± 285'*	± 600'	± 530'	± 518
REQUIRED NUMBER (LARGE TREES @ 1:40')	4	7	15	N/A	N/A
TREES PROVIDED	4	7	15	NA	NA
EXISTING TREES - CREDIT	4	7	15	NA	NA
ADDITIONAL TREES REQUIRED / PROVIDED	2	5	9**	0	0
SPACING	APPROX. 20'	APPROX. 20'	GROUPS	NA	NA

* PERIMETER OF 340' REDUCED BY 55' FOR TWO DRIVEWAY ENTRANCES.

** CREDIT FOR 6 SHADE TREES, 6 ORNAMENTAL AND 5 EVERGREEN TREES THAT EXIST.

SCHEDULE	С
PARKING LOT INTERNAL LANDS	CAPING REQUIREMENTS
NUMBER OF SHADE TREES REQUIRED	89 cars/20 4
NUMBER OF TREES PROVIDED SHADE TREES OTHER TREES (2:1 SUBSTITUTION)	4 4 0

KEY	QUANTITY	BOTANICAL / COMMON NAME	SIZE	REMARKS
AS	8	ACER SACCHARUM 'GREEN MOUNTAIN' /	2½" - 3" B&B	FULL CROWN CENTRAL LEADER
		GREEN MOUNTAIN SUGAR MAPLE		
AR	9	ACER RUBRUM / RED MAPLE	2½" - 3" B&B	FULL CROWN CENTRAL LEADER
EA	101	EUOMYMOUS ALATUS 'COMPACTUS' /	2' - 2½' HIGH	AVERAGE 36" OC*
		DWARF WINGED EUOMYMOUS		
P\$	5	PINUS STROBUS / WHITE PINE	8' - 10' HT. B&B	FULL FORM
L\$	6	LIQUIDAMBAR STRACIFLUA /	2½" - 3" B&⊞	FULL CROWN CENTRAL LEADER
		SWEETGUM		
QP	7	QUERCUS PALUSTRIS / PIN OAK	2½" - 3" B&B	FULL CROWN CENTRAL LEADER
QR	4	QUERCUS RUBRA / NORTHERN RED OAK	2½" - 3" B&B	FULL CROWN CENTRAL LEADER
ZS	4	ZELKOVA SERRATA 'VILLAGE GREEN'/	2½" - 3" B&B	FULL CROWN
		VILLAGE GREEN JAPANESE ZELKOVA		

DEVELOPER'S/BUILDER'S CERTIFICATION

DAVIS C. EHORY

I/ME CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOMARD COUNTY CODE AND THE COUNTY LANDSCAPE MANUAL. I/ME FURTHER CERTIFY THAT UPON COMPLETION A CERTIFICATION OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, MILL BE SUBHITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

BE DONE ACCORDING TO THE PLAN,
ANDSCAPE MANUAL. I/NE FURTHER
INSTALLATION, ACCOMPANIED BY
E SUBMITTED TO THE DEPARTMENT

ACCOMPANIED BY
DATE

DAVID TO

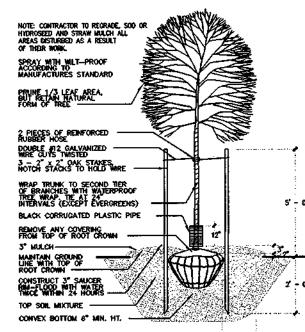
DATE

TITLE

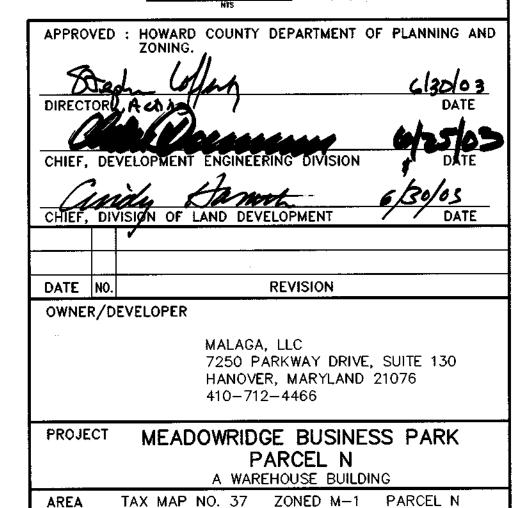
PRIVILE 1/3 LEAF AREA.

BIT TREE

PORM OF TR



TREE PLANTING DETAIL



LANDSCAPE PLAN

1st ELECTION DISTRICT HOWARD COUNTY, MARYLAND

Patton Harris Rust & Associates, pc
Engineers. Surveyors. Planners. Landscape Architects.
8818 Centre Park Drive
Columbia, MD 21045
T 410.997.8900



DESIGNED BY: DTD

DRAWN BY: DAM

PROJECT NO: 97320
SDP7.DWG

DATE: MAY 30, 2003

SCALE: 1" = 40'

DRAWING NO. 7 OF 7

SDP-98-75

oject\97320\SDP7.DWG, 05/30/2003 11:21:54 AM, HP750

LEGEND

P-1 PAVING (PARKING BAYS)

P-2 PAVING (DRIVE LANES)

P-3 PAVING (TRUCK ENTRANCE & COURT) CONCRETE SIDEWALK OR CONCRETE TRUCK PAD (SEE DETAIL SHEET 4)

DENOTES TRANSITION FROM STANDARD TO REVERSE CURB AND GUTTER

> 25' POLE SQUARE STEEL 400 WATT SHOEBOX METAL HALIDE (SEE NOTE 1)

250 WATT HPS VAPOR PENDANT FIXTURE (SAG) MOUNTED AT 30' ON A BRONZE FIBERGLASS POLE, USING A 12' ARM.

V.I.E.R. VEHICULAR INGRESS/EGRESS RESTRICTED

1. ALL LIGHTS TO BE DIRECTED/REFLECTED AWAY FROM ADJACENT PUBLIC ROADS AND RESIDENTIALLY ZONED PROPERTIES, AND BE IN ACCORDANCE WITH SECTION 134 OF THE HOWARD COUNTY ZONING REGULATIONS.

2. ALL CURB RADII ARE 5' UNLESS OTHERWISE LABELED.

3. ALL DIMENSIONS ARE TO FACE OF CURB OR BUILDING UNLESS OTHERWISE SHOWN.

4. ALL ON-SITE ROADS ARE PRIVATE.

5. SEE SHEET 1 FOR BUILDING LOCATION DIMENSIONS.

STREET LIGHT LOCATION

36' LEFT OF STA. 2+30, BUSINESS PARKWAY

39' LEFT OF STA. 5+20, BUSINESS PARKWAY ANGLE ARM TO CENTER OF INTERSECTION

APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND

CHIEF, DIVISION OF LAND DEVELOPMENT

4-22-04 A RELOCATED BLDG ENTRANCES, ROOF DRAINS LOADING RAMPS REVISION DATE NO.

OWNER/DEVELOPER

MALAGA, LLC 7250 PARKWAY DRIVE, SUITE 130 HANOVER, MARYLAND 21076 410-712-4466

MEADOWRIDGE BUSINESS PARK

PARCEL N A WAREHOUSE BUILDING

AREA TAX MAP NO. 37 ZONED M-1 PARCEL N 1st ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SITE DEVELOPMENT PLAN

Patton Harris Rust & Associates,pc Engineers. Surveyors. Planners. Landscape Architects. 8818 Centre Park Drive Columbia, MD 21045 **T** 410.997.8900



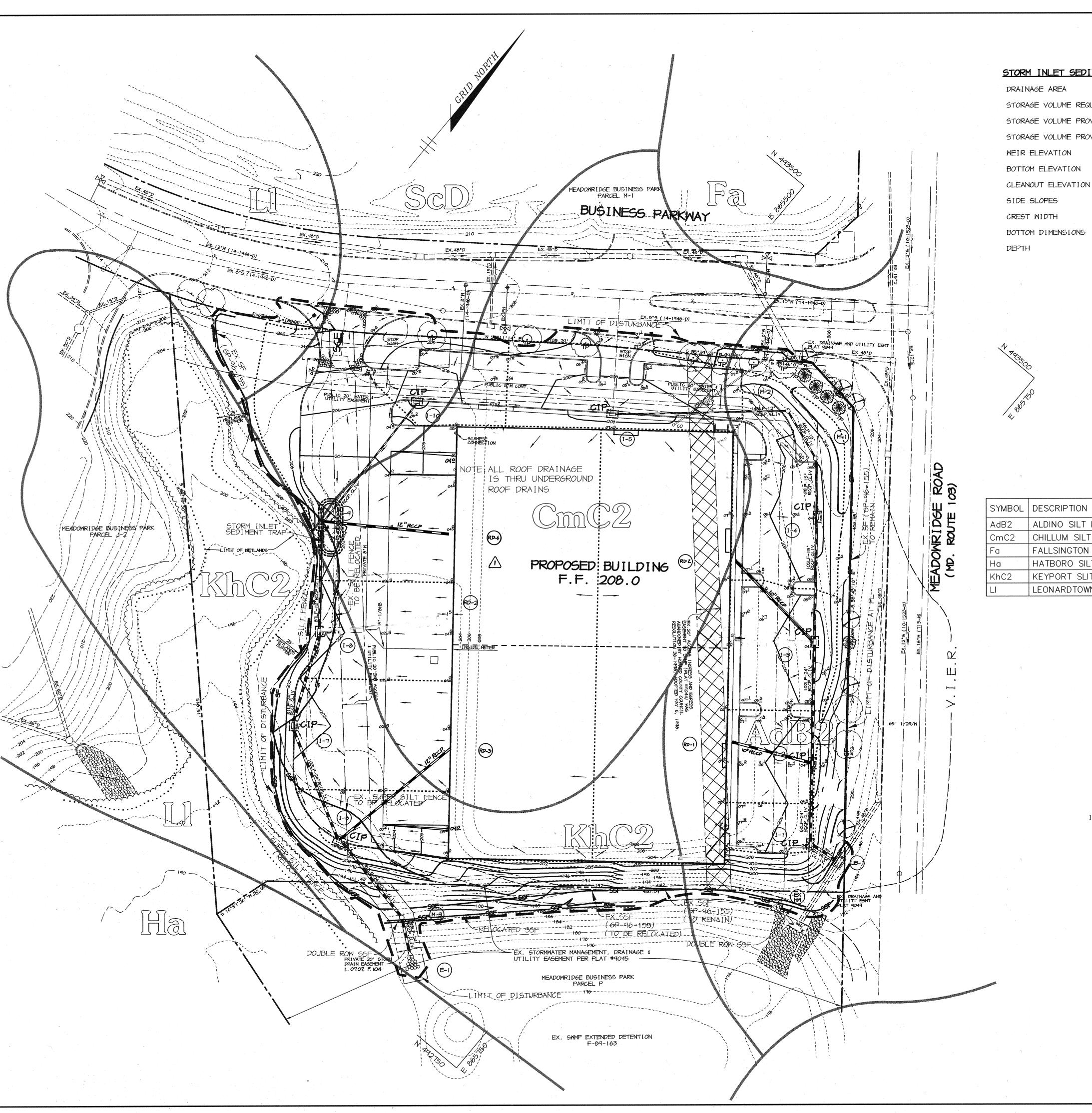
DESIGNED BY : CJR DRAWN BY: DAM PROJECT NO : 97320 SDP2.DWG

SCALE : 1" = 40'DRAWING NO. 2 OF 7 CHRISTOPHER J. REID #19949

F 410.997.9282

SDP-98-75

DATE: MAY 30, 2003



STORM INLET SEDIMENT TRAP #1 (I-9)

0.58 AC.

201.5

STORAGE VOLUME REQUIRED 1044 CF (WET/DRY)

STORAGE VOLUME PROVIDED 1044 CF @ 199.8 (WET) = DRAW DOWN DEVICE ELEV.

STORAGE VOLUME PROVIDED 1340 CF @ 201.5 (DRY)

198.0 199.5

1:1

12'X40'

3.5'

SOIL CHART

,	SYMBOL	DESCRIPTION
	AdB2	ALDINO SILT LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED
	CmC2	CHILLUM SILT LOAM, 5 TO 10 PERCENT SLOPES, MODERATELY ERODED
	Fa	FALLSINGTON LOAM
	На	HATBORO SILT LOAM
	KhC2	KEYPORT SLIT LOAM, 3 TO 10 PERCENT SLOPES, MODERATELY ERODED
	LI	LEONARDTOWN SILT LOAM

DRAINAGE DATA

INLET	AREA IN	'C'	PERCENT
NOS.	ACRES	FACTOR	IMPERVIO
1 2 3 4 5 6 7 8 9	0.07 0.14 0.19 0.33 0.29 0.13 0.27 0.21 0.58 0.18	0.86 0.81 0.76 0.58 0.63 0.86 0.86 0.86 0.71	100% 92% 85% 57% 66% 100% 100% 76% 50%

* ALL SOILS ARE ASSUMED TYPE 'C' AS THE SITE HAS BEEN MASS GRADED.

I FGFND

LEOLIND		
CIP	CURB INLET PROTECTION	
SSF	SUPER SILT FENCE	
Englishmen Englishmental Englishment	LIMIT OF DISTURBANCE	
	DRAINAGE AREA DIVIDE	
— тр ——— тр —	TREE PROTECTION FENCE	
SCE	STABILIZED CONSTRUCTION ENTRANCE	

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.

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 AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

6.10.03

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

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION

AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION

APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND

6 30/03 DATE CHIEF, DIVISION OF LAND DEVELOPMENT

4-23-04 | RELOCATED BLDG ENTRANCES, ROOF DRAINS, LOADING RAMPS

DATE NO. REVISION

OWNER/DEVELOPER

MALAGA, LLC 7250 PARKWAY DRIVE, SUITE 130 HANOVER, MARYLAND 21076 410-712-4466

MEADOWRIDGE BUSINESS PARK PARCEL N

A WAREHOUSE BUILDING AREA TAX MAP NO. 37 ZONED M-1 PARCEL N

1st ELECTION DISTRICT HOWARD COUNTY, MARYLAND

GRADING PLAN, SEDIMENT CONTROL PLAN, AND DRAINAGE AREA MAP

Patton Harris Rust & Associates, pc Engineers. Surveyors. Planners. Landscape Architects. 8818 Centre Park Drive

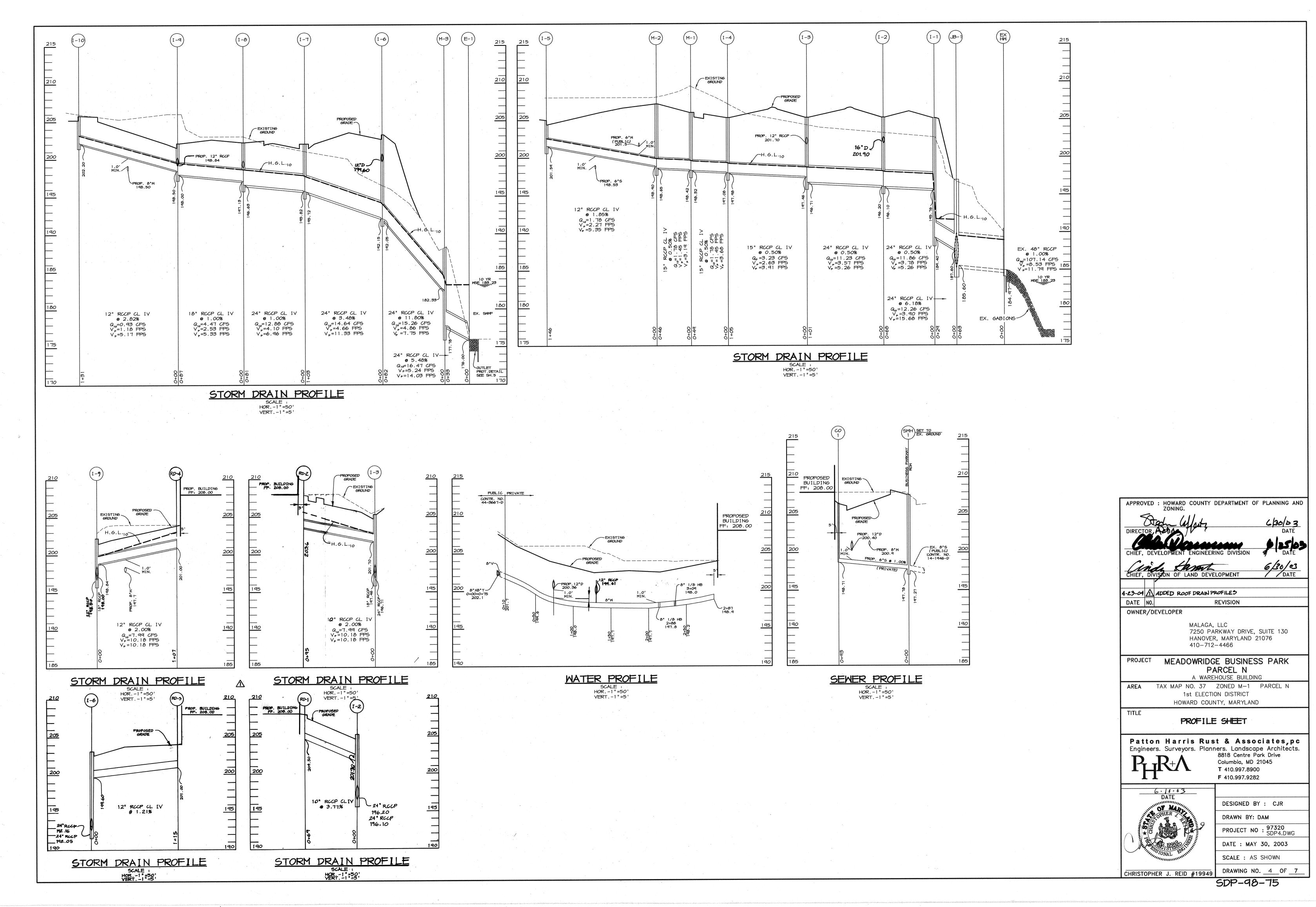
Columbia, MD 21045 **T** 410.997.8900 **F** 410.997.9282



DRAWN BY: DAM PROJECT NO : 97320 SDP3.DWG DATE: MAY 30, 2003

DESIGNED BY : CJR

SCALE : 1" = 40'DRAWING NO. 3 OF 7 CHRISTOPHER J. REID #19949



\project\97320\SDP4.DWG, 05/30/2003 10:30:55 AM, HP750C(36).pc3

- 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 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL AND EROSION CONTROL,
- 3. FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: A)7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES AND ALL SLOPES GREATER THAN 3:1, B) 14 DAYS AS TO OTHER DISTURBED 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 12, 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 1991 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL AND EROSION CONTROL FOR PERMANENT SEEDINGS (SEC. 51), SOD (SEC. 54), TEMPORARY SEEDING (SEC. 50) AND MULCHING (SEC. 52). TEMPORARY STABILIZATION WITH MULCH ALONG CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
- 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.
- 7. SITE ANALYSIS:

AND REVISIONS THERETO.

the state of the s			
TOTAL AREA OF SITE		5.71	ACRES
ARFA DISTURBED		5.25	ACRES
AREA TO BE ROOFED OR PAVED		3.85	ACRES
AREA TO BE VEGETATIVELY STABILIZED		1.40	ACRES
TOTAL CUT	•	6000	CU.YDS.
TOTAL FILL	* *	6000	CU.YDS.

- 8. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- 9. ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED. IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- 10. SITE GRADING WILL BEGIN ONLY AFTER ALL PERIMETER SEDIMENT CONTROL MEASURES HAVE BEEN INSTALLED AND ARE IN A FUNCTIONING CONDITION.
- 11. SEDIMENT WILL BE REMOVED FROM TRAPS WHEN ITS DEPTH REACHES CLEAN OUT ELEVATION SHOWN ON THE PLANS.
- 12. 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 AFFECT THE WORK.
- 13. ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 AC., 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.
- 14. TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH CAN BE BACKFILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.

TEMPORARY SEEDING NOTES

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

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

Soil Amendments: Apply 600 lbs. per acre 10-10-10 fertilizer (14 lbs. per 1000 sq.ft.).

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 EROSION 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 loosened.

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

- 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 options:

- 1) 2 tons per acre of well—anchored mulch straw and seed as soon as possible in the spring.

upper three inches of soil.

following schedules:

3) Seed with 60 lbs. per acre Kentucky 31 Tall Fescue and mulch with 2 tons per acre well anchored straw.

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, replacements and reseedings

21.0 STANDARD AND SPECIFICATIONS FOR TOPSOIL

Definition

Placement of topsoil over a prepared subsoil prior to establishment of permanent vegetation

<u>Purpose</u>

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 2:1 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. Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority. Regardless, topsoil shall not be 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 11" in diameter.
- ii. Topsoil must be free of plants or plant parts such as bermuda grass, quackgrass, Johnsongrass, 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. For sites having disturbed areas under 5 acres: i. Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization — bSection 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.
- ii. Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization — BSection I — Vegetative Stabilization Methods and Materials.

- i. When topsoiling, maintain needed erosion and sediment control practices such as diversions, Grade Stabilization Structures, Earth Dikes, Slope Silt Fence and Sediment Traps and Basins.
- ii. Grades on the areas to be topsoiled, which have been previously established, shall be maintained, albeit 4" - 8" higher in elevation.
- iii. Topsoil 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.
- iv. 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:
- i. 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
- 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. References: Guideline Specifications, Soil Preparation and Sodding. MD-VA, Pub. #1, Cooperative Extension Service, University of Maryland and Virginia Polytechnic Institutes. Revised 1973.

SEQUENCE OF CONSTRUCTION

1. OBTAIN GRADING PERMIT FOR SITE PLAN.

2. INSPECT/REPAIR ALL EXISTING SEDIMENT CONTROLS INSTALLED UNDER GP-96-155. RELOCATE SILT FENCE AS NOTED. (3 DAYS)

- 3. BEGIN BUILDING CONSTRUCTION.
- 4. AS SUBGRADE ELEVATIONS ARE REACHED, INSTALL STORM DRAIN SYSTEM AND WATER & SEWER. PROVIDE INLET PROTECTION AND INLET TRAP AT INLET #9 AS NECESSARY. (2 WEEKS)
- 5. INSTALL CURB & GUTTER AND CONCRETE PAD, THEN PAVE. (3 WEEKS)
- 6. STABILIZE DISTURBED AREAS AS NECESSARY AND COMPLETE REMAINING CONSTRUCTION. (16 WEEKS)
- 7. UPON APPROVAL OF HOWARD COUNTY DILP SEDIMENT CONTROL INSPECTOR, REMOVE TEMPORARY SEDIMENT CONTROL DEVICES AND STABILIZE REMAINING AREAS IN ACCORDANCE WITH PERMANENT SEEDING NOTES. (3 DAYS)

OF 2" X 4" - 2" X 4" ANCHORS 2" X 4" WEIR 2" X 4" SPACER 2" X 4" WEIR STANDARD SYMBOL

DETAIL 23C - CURB INLET PROTECTION

Construction Specifications

MAX DRAINAGE AREA = 1/4 ACRE

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

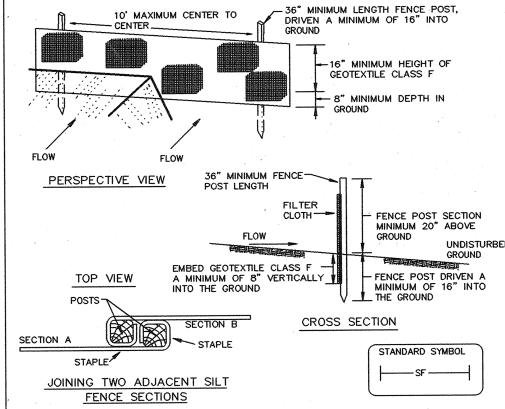
6. Form the 1/2 " x 1/2" wire mesh and the geotextile fabric to the concrete gutter and against the face of the curb on both sides of the inlet. Place clean 3/4 " x 1 1/2 " stone over the wire mesh and geotextile in such a manner to prevent water from entering the inlet under or ground the geotextile.

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 WATER MANAGEMENT ADMINISTRATION

DETAIL 22 - SILT FENCE



Construction Specifications

1. 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.

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 50 lbs/in (min.) Tensile Strength Test: MSMT 509 20 lbs/in (min.) Tensile Modulus 0.3 gal ft 2/ minute (max.) Test: MSMT 322 Flow Rate Test: MSMT 322 Filtering Efficiency 75% (min.)

3. Where ends of geotextile fabric come together, they shall be overlapped folded and stapled to prevent sediment bypass. 4. Silt Fence shall be inspected after each rainfall event and maintained when

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

- 1. Sediment shall be removed and then 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.
- pollution shall be minimized
- 6. All cut slopes shall be 1:1 or flatter
- MAXIMUM DRAINAGE AREA: 3 ACRES U.S. DEPARTMENT OF AGRICULTURE

MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

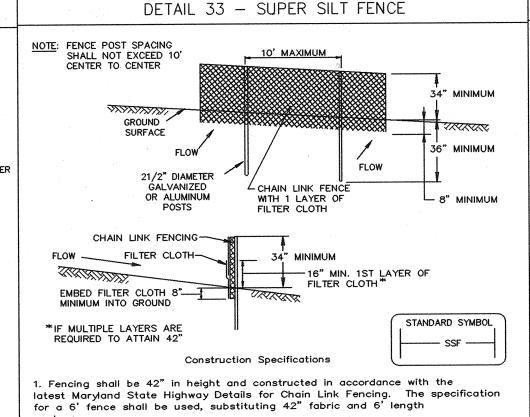
WATER MANAGEMENT ADMINISTRATION STRUCTURE SCHEDULE

MARYLAND DEPARTMENT OF ENVIRONMENT

STRUCTURE	TYPE	LOCATION	INV. IN	INV. OUT	TOP	REMARKS	INTERIOR DIMENSIONS
STRUCTURE	111-	LOOM TON	****				
I-1	A-5	N 493,081.07 E 865,855.75	195.76 (24")	189.40 (24")	205.2	HOCO. STD. DETAIL SD 4.40	2'-6" × 5'-0"
I-2	A-5	N 493,133.88 E 865,813.41	201.90 (104)	196.10 (24")	205.3	HOCO. STD. DETAIL SD 4.40	2'-6" × 5'-0"
I-3	A-5	N 493,212.90 E 865,750.06	201.70 (10") 197.46 (15")	196.71 (24")	205.3	HOCO. STD. DETAIL SD 4.40	2'-6" × 5'-0"
I-4	A-5	N 493,294.46 E 865,684.67	197.08 (15")	197.98 (15")	205.3	HOCO. STD. DETAIL SD 4.40	2'-6" × 5'-0"
I-5	A-5	N 493, 252.78 E 865, 499.14	- 1	201.59 (12")	205.0	HOCO. STD. DETAIL SD 4.40	2'-6" × 5'-0"
I-6	A-5	N 492,834.04 E 865,553.93	199.60 (12")	192.05 (24")	203.2	HOCO. STD. DETAIL SD 4.40	2'-6" × 5'-0"
I-7	A-5	N 492,882.83 E 865,463.55	195.82 (24")	195.72 (24")	202.0	HOCO. STD. DETAIL SD 4.40	2'-6" × 5'-0"
I-8	A-5	N 492,956.89 E 865,429.81	197.13 (18")	196.63 (24")	202.2	HOCO. STD. DETAIL SD 4.40	2'-6" × 5'-0"
I-9	A-5	N 493,024.73 E 865,375.42	1 98.84 (12") 198.50 (12")	198.00 (18")	202.1	HOCO. STD. DETAIL SD 4.40	2'-6" × 5'-0"
I-10	A-5	N 493,156.31 E 865,367.48	-	202.20 (12")	205.8	HOCO. STD. DETAIL SD 4.40	2'-6" × 5'-0"
M-1	4' DIA. MANHOLE	N 493,331.84 E 865,653.44	198.42 (15")	198.32 (15")	206.0	HOCO. STD. DETAIL 6 5.11	-
M-2	4' DIA. MANHOLE	N 493,347.43 E 865,610.16	198.90 (12")	198.65 (15")	207.2	HOCO. STD. DETAIL 6 5.11	_
M-3	4' DIA. MANHOLE	N 492,817.20 E 865,634.55	182.33 (24")	177.78 (24")	188.2	HOCO. STD. DETAIL 6 5.11	-
SMH-1	4' DIA. MANHOLE	N 493,367.54 E 865,567.78	197.78 (6")	197.27 (8")	207.7	HOCO. STD. DETAIL 6 5.11	-
E-1	24" END SECTION	N 492,797.34 E 865,660.29	-	176.00 (24")	_	HOCO. STD. DETAIL SD 5.51	· • • • • • • • • • • • • • • • • • • •
JB-1	JUNCTION BOX	N 493,085.86 E 865,884.48	187.60 (24")	185.60 (EX. 2-48")	197.0	MSHA. STD. DETAIL MD 386.11	5'-0" × 8'-2"'

NOTES: LOCATION IS AT CENTER OF THROAT OPENING AT FACE OF CURB FOR CURB INLETS (CENTER OF GRATE FOR I-14)

TOP ELEVATION IS TOP OF CURB/GRATE/RIM.



. Width — 10' minimum, should be flared at the existing road to provide a turning 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 required except on the ends of the fence. 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

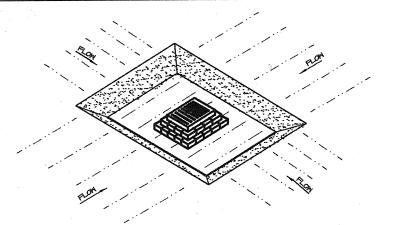
3. Filter cloth shall be fastened securely to the chain link fence with ties spaced every 24" at the top and mid section. 4. Filter cloth shall be embedded a minimum of 8" into the ground.

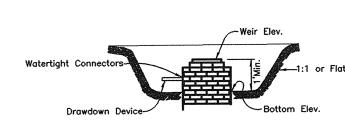
5. When two sections of filter cloth adjoin each other, they shall be overlapped 6. Maintenance shall be performed as needed and silt buildups removed when "bulges'

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 wire ties or staples at top and mid section and shall meet the following requirements for Geotextile Class F:

Test: MSMT 509 50 lbs/in (min.) Tensile Strength 20 lbs/in (min.) Test: MSMT 509 Tensile Modulus 0.3 gal/ft /minute (max.) Test: MSMT 322 Flow Rate 75% (min.) Test: MSMT 322 Filterina Efficiency MARYLAND DEPARTMENT OF ENVIRONMENT U.S. DEPARTMENT OF AGRICULTURE WATER MANAGEMENT ADMINISTRATION SOIL CONSERVATION SERVICE

STORM INLET SEDIMENT TRAP ST-III





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

. THE SUBGRADE FOR THE FILTER, RIP-RAP, OR GABION SHALL BE PREPARED TO THE REQUIRED LINES AND GRADES. ANY FILL REQUIRED IN THE SUBGRADE SHALL BE COMPACTED TO A DENSITY OF APPROXIMATELY THAT OF THE SURROUNDING UNDISTURBED MATERIAL

RIPRAP CONSTRUCTION SPECIFICATIONS

2. THE ROCK OR GRAVEL SHALL CONFORM TO THE SPECIFIED GRADING LIMITS WHEN INSTALLED RESPECTIVELY IN THE RIP-RAP OR FILTER.

DETAIL 24 - STABILIZED CONSTRUCTION ENTRANCE

PROFILE

PLAN VIEW

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

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

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

installed through the stabilized construction entrance shall be protected with a

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.

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

MINIMUM 6" OF 2"-3" AGGREGATE

OVER LENGTH AND WIDTH OF STRUCTURE

Construction Specification

** GEOTEXTILE CLASS 'C'-

OR BETTER

-FXISTING GROUND

STANDARD SYMBO

esidences to use geotextile.

U.S. DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE

SCE

EARTH FILL

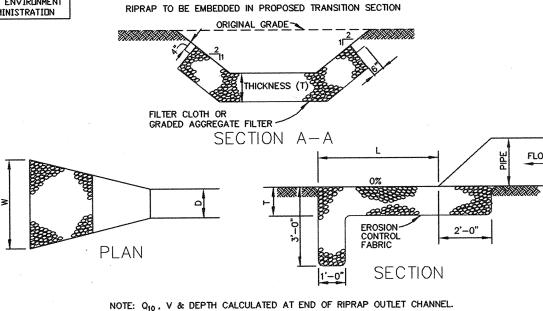
PIPE AS NECESSAR

EXISTING PAVEMENT

3. GEOTEXTILE CLASS C OR BETTER SHALL BE PROTECTED FROM PUNCHING, CUTTING, OR TEARING. ANY DAMAGE OTHER THAN AN OCCASIONAL SMALL HOLE SHALL BE REPAIRED BY PLACING ANOTHER PIECE OF GEOTEXTILE FABRIC OVER THE DAMAGED WHETHER FOR REPAIRS OR FOR JOINING TWO PIECES OF GEOTEXTILE FABRIC SHALL BE A MINIMUM OF ONE FOOT.

4. STONE FOR THE RIP-RAP OR GABION OUTLETS MAY BE PLACED BY EQUIPMENT. THEY SHALL BE CONSTRUCTED TO THE FULL COURSE THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO AVOID DISPLACEMENT OF UNDERLYING MATERIALS. THE STONE FOR RIP-RAP OR GABION OUTLETS SHALL BE DELIVERED AND PLACED IN A MANNER THAT WILL ENSURE THAT IT IS REASONABLY HOMOGENOUS WITH THE SMALLER STONES AND SPALLS FILLING THE VOIDS BETWEEN THE LARGER STONES, RIP-RAP SHALL BE PLACED IN A MANNER TO PREVENT DAMANGE TO THE FILTER BLANKET OR GEOTEXTILE FABRIC.HAND PLACEMENT WILL BE REQUIRED TO THE EXTENT NECESSARY TO PREVENT DAMAGE TO THE PERMANENT WORKS.

5. THE STONE SHALL BE PLACED SO THAT IT BLENDS IN WITH THE EXISTING GROUND. IF THE STONE IS PLACED TOO HIGH THEN THE FLOW WILL BE FORCED OUT OF THE CHANNEL AND SCOUR ADJACENT TO THE STONE WILL OCCUR.



NOTE: Q10, V & DEPTH CALCULATED AT END OF RIPRAP OUTLET CHANNEL STRUCTURE 19" 16.47 cfs 9.5" 12'

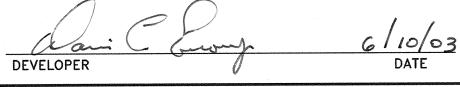
RIPRAP OUTLET PROTECTION DETAIL

PIPE SCHEDULE

	PIPE LENGTH	SIZE	TYPE
	489	12"	RCCP CL. IV
	200	15"	RCCP CL. IV
•	87	18"	RCCP CL. IV
	497	24"	RCCP CL. IV
	³ 16 4	10	RCCP CL. IY

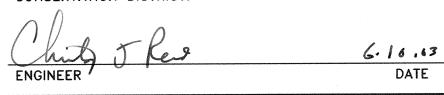
BY THE DEVELOPER

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.



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 AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.



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

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

CONSERVATION DISTRICT APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND

6/30/03

4-23-04 A REVISED STRUCTURE SCHEDULE DATE NO. REVISION

OWNER/DEVELOPER

CHIEF. DIVISION OF LAND DEVELOPMENT

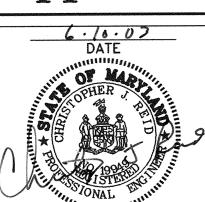
MALAGA, LLC 7250 PARKWAY DRIVE, SUITE 130 HANOVER, MARYLAND 21076 410-712-4466

MEADOWRIDGE BUSINESS PARK PARCEL N A WAREHOUSE BUILDING

TAX MAP NO. 37 ZONED M-1 PARCEL N 1st ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SEDIMENT CONTROL NOTES AND DETAILS

Patton Harris Rust & Associates,pc Engineers. Surveyors. Planners. Landscape Architects. 8818 Centre Park Drive Columbia, MD 21045 T 410.997.8900



CHRISTOPHER J. REID #19949

DESIGNED BY: CJR DRAWN BY: DAM PROJECT NO : 97320

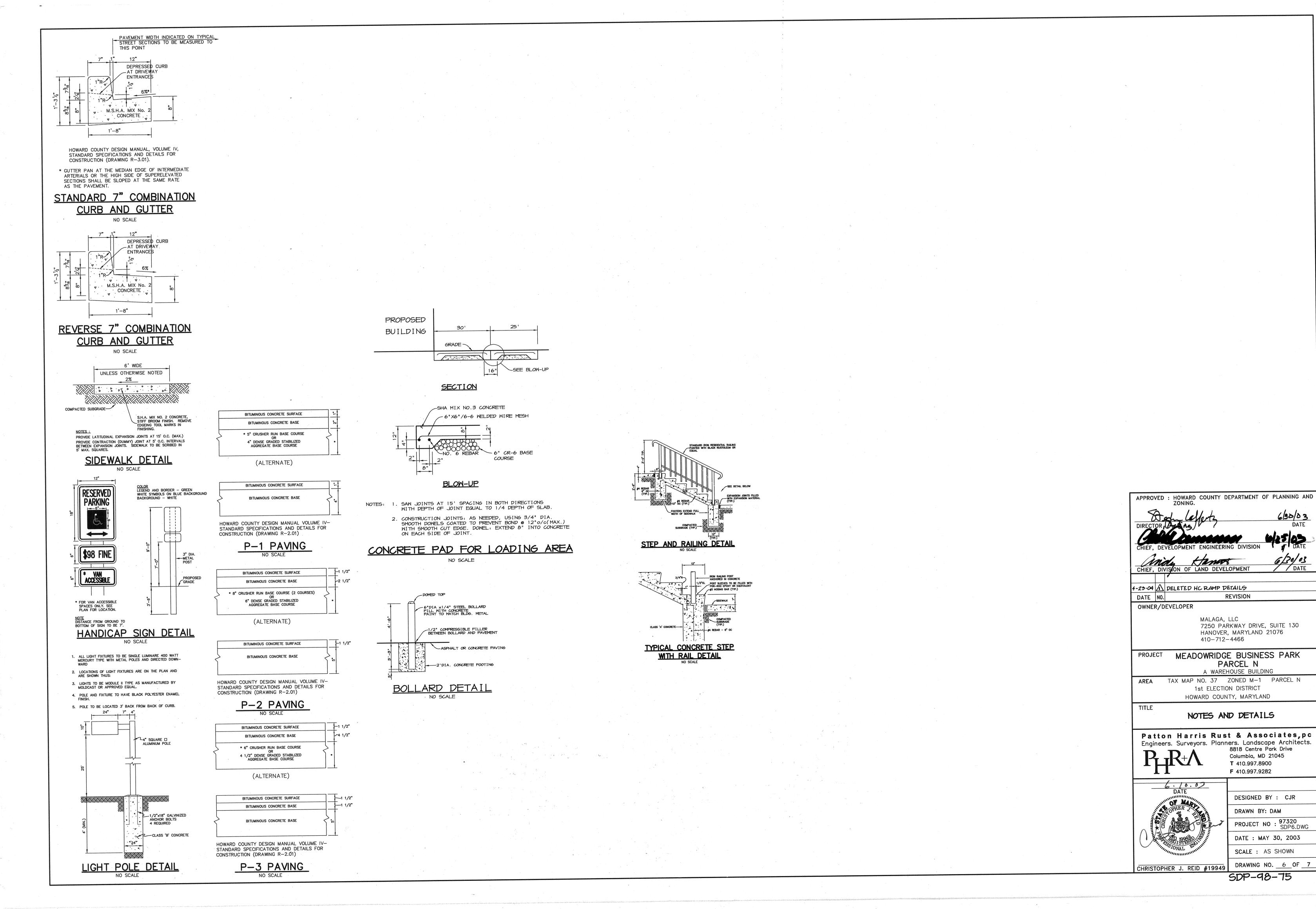
DATE: MAY 30, 2003

F 410.997.9282

/ DATE

SCALE : AS SHOWN

DRAWING NO. 5 OF 7



:\project\97320\SDP6.DWG, 05/30/2003 12:55:40 PM, HP750C(36).pc3