SITE DEVELOPMENT PLAN RELIABLE STORES CORPORATION PARKING LOT ADDITION TO SDP 78-111C

SHEET INDEX TITLE SHEET SITE DEVELOPMENT PLAN SEDIMENT EROSION CONTROL AND DRAHAGE AREA MAP

992-2366 BALTIMORE GAS & ELECTRIC COMPANY 685-0123 STATE HIGHWAY ADMINISTRATION 531-5533 792-7272 HOWARD COUNTY CONSTRUCTION/INSPECTION SURVEY DIVISION (24 HOURS NOTICE PRIOR TO COMMENCEMENT OF WORK)

- 4. TOPO TAKEN FROM FIELD RUN SURVEY DATED AUGUST 1988 BY THE RIEMER
- 5. ALL PLAN DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED

SITE TABULATION

As per FDP No. 149-A-1

Design Criteria for Section 5, Area 1 of the Village of Owen Brown

Zoning: Employment Center Land Use Area - Commerical Proposed Use: Parking Lot Expansion to Parcel D-2 Total Area Parcel D-2 = 5.913 Ac.Area of Submission 1.33 Ac+ Existing Building

Coverage Existing Net Leasable 39,000 SF Number of Employees

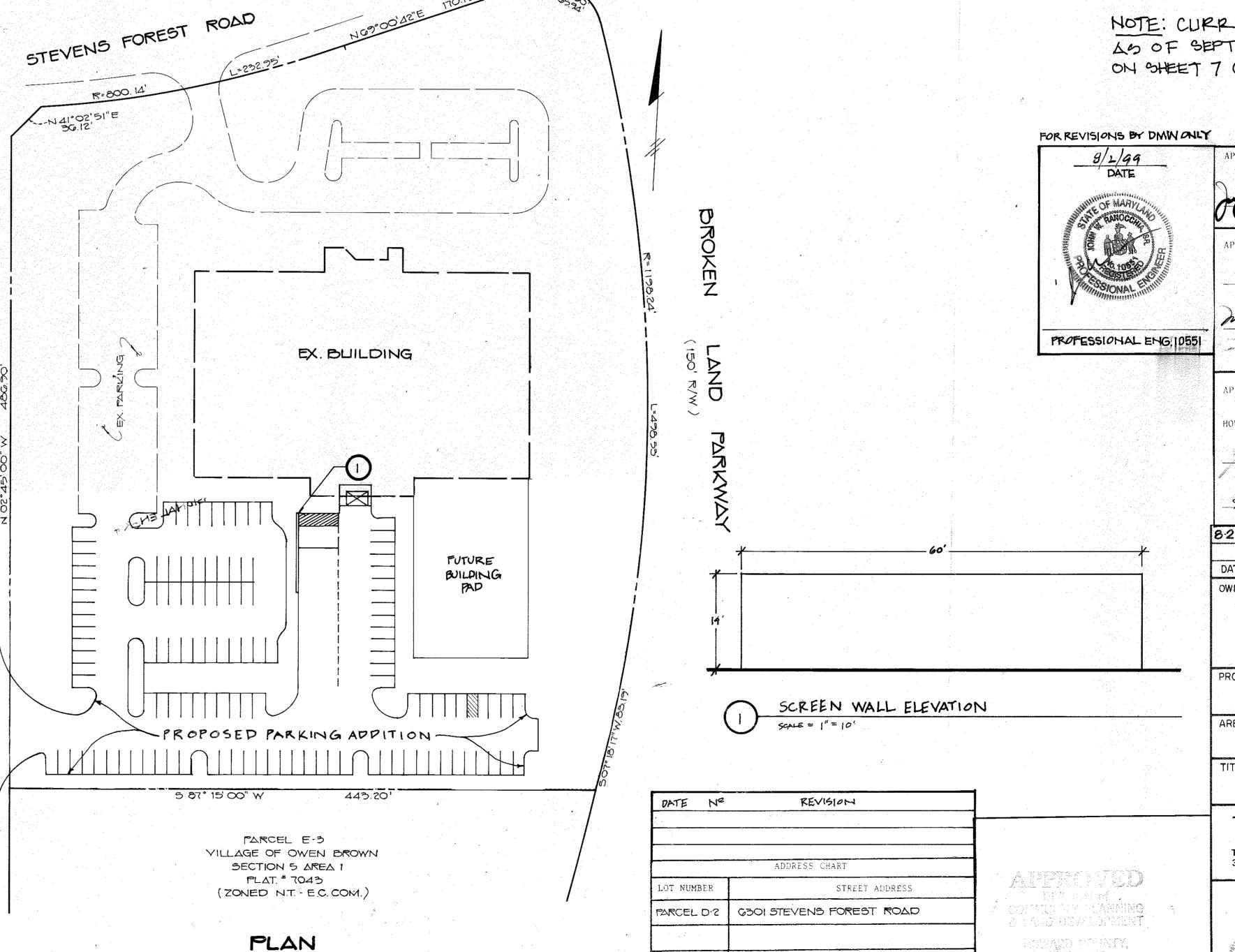
Existing Building

177 Spaces (INCLUDING 7 HAMPICAPPED STACES) Parking Required Existing Parking 106 Spaces (including 5 New Handicap Spaces) Parking Proposed 103 Spaces (INCLUDING 2 HANDICAPPED SPACES) New Total Parking 209 Spaces (INCLUDING 7 HANDICAPPED SPACES) Provided

VILLAGE OF OWEN BROWN SECTION 5 AREA 1

HOWARD COUNTY MARYLAND

1"=50'

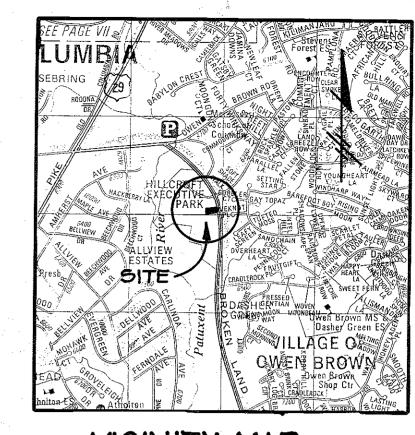


UBDIVISION NAME

G750 WATER CODE

VILLAGE OF OWEN BROWN

E-13



VICINITY MAP

BE INCLUDED ON THIS SHEET

NOTE: CURRENT SITE CONDITIONS, AS OF SEPTEMBER 2016, CAN BE FOUND ON SHEET 7 OF SDP-78-111.

COMMUNITY PLANNING AND LAND DEVELOPMENT APPROVED: FOR PUBLIC WATER, PUBLIC SEVERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC-ROADS. HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS DATE 3-6-89 8-2-99 | REV. PKGLOT LAYOUT, SHEET INDEX, ADDED SCREEN WALL REV. OWNER DEVELOPER. BY DMW INC. DATE NO REVISION OWNER / DEVELOPER WELLSFORD COMMERCIAL HOLDINGS, LLC % CRYSTAL HILL DEVELOPMENT 10015 OLD COLUMBIA ROAD COLUMBIA, MARYLAND 21046 PROJECT: RELIABLE STORES PARKING LOT ADDITION AREA TAX MAP 3G PARCEL D-2 PLAT "G75G G" ELECTION DISTRICT, COLUMBIA HOWARD COUNTY, MD. TITLE: TITLE SHEET THE RIEMER GROUP, INC. The Riemer Group, Inc. A Land Planning, Design & Civil Engineering Firm 3105 North Ridge Road, Ellicott City, Maryland 21043 (301) 461-2690 'REF: SDP 78-111C

11-17-88

SECT./AREA

5/1

OT/PARCEL #

5450000

PARCEL D.2

DRAWING NO. 1 OF 7 SDP 89-45

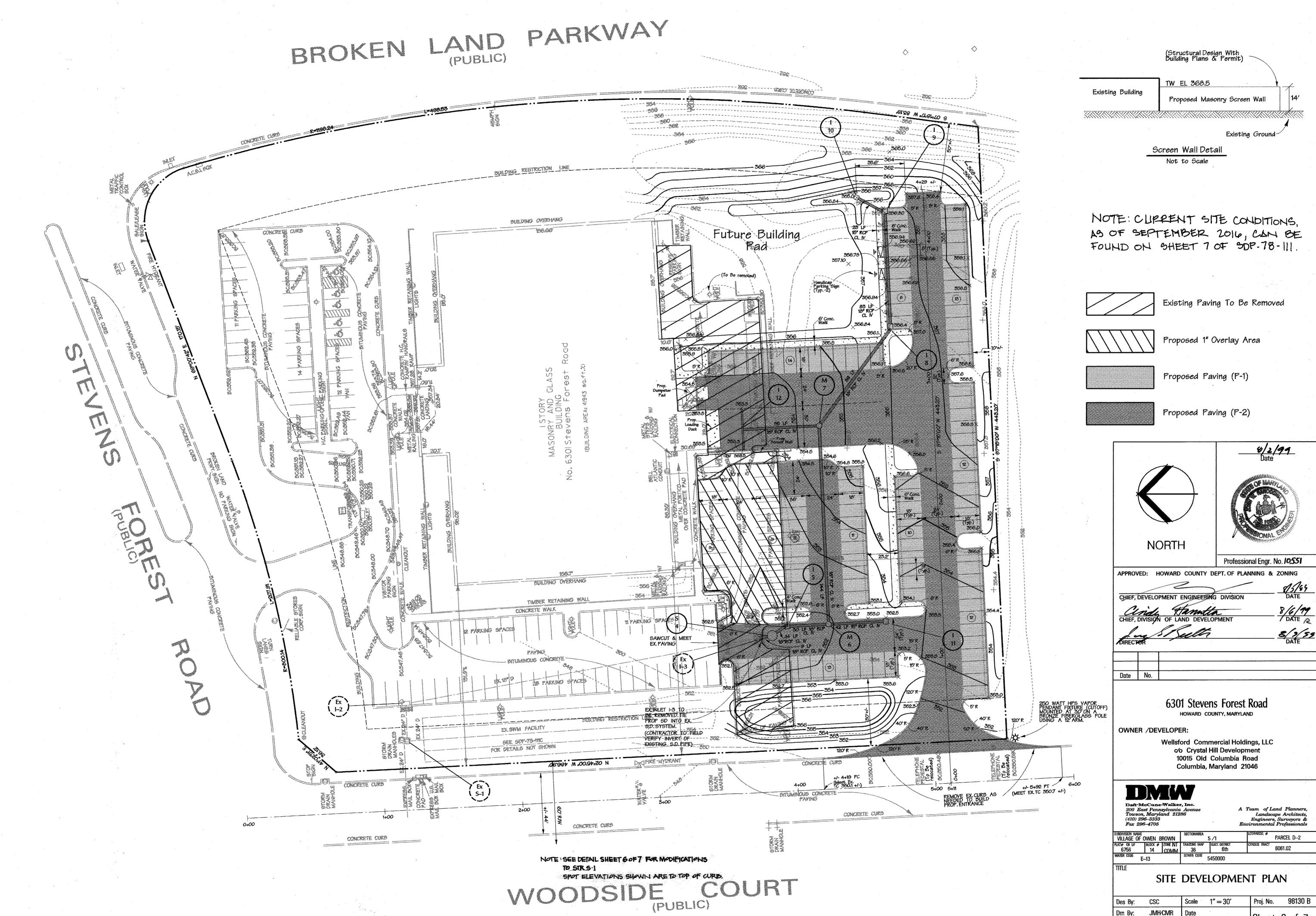
SCALE: AS SHOWN

DESIGNED BY: PR.

DRAWN BY: D.B.S.

PROJECT NO: 54401

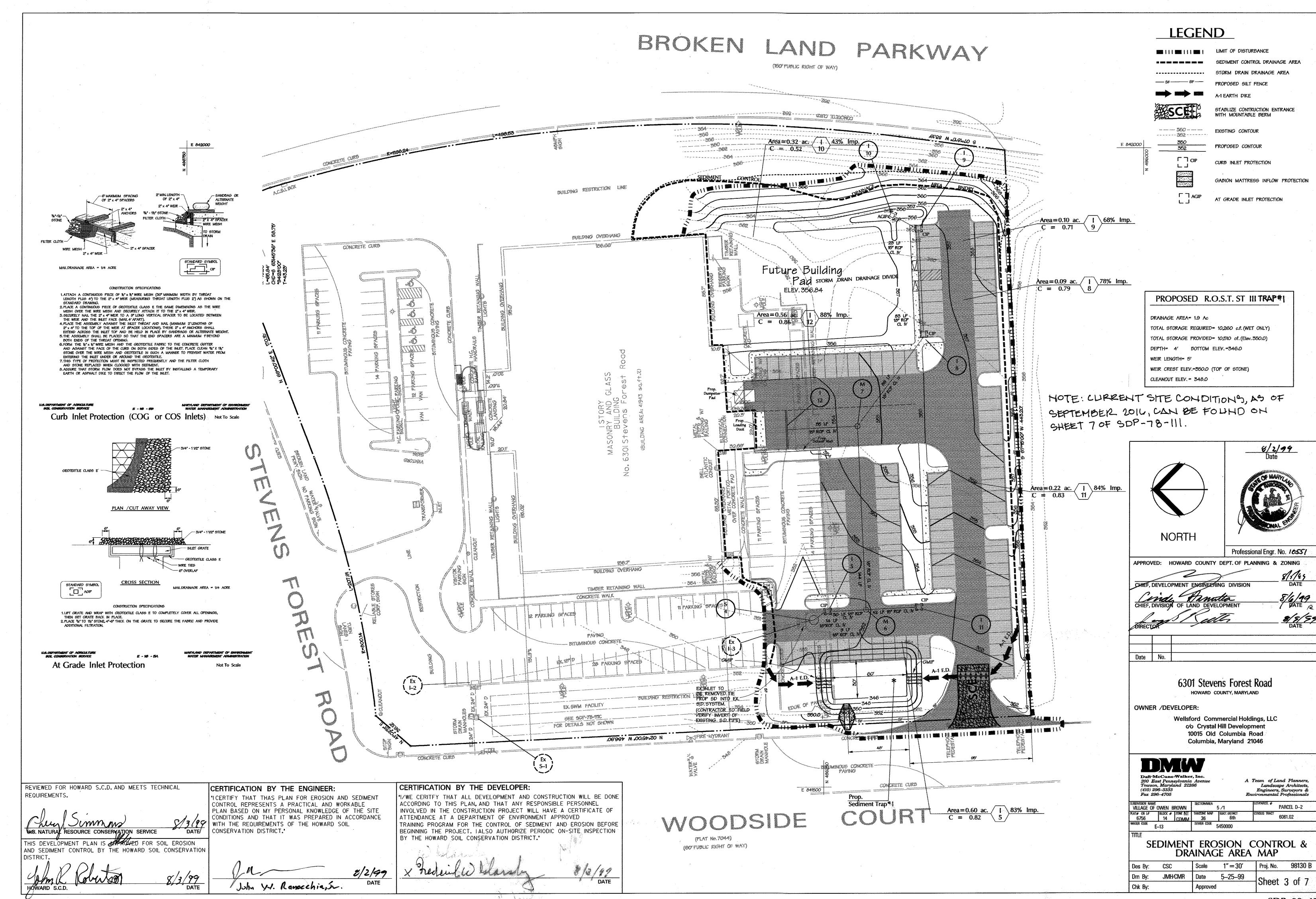
DATE: ALIGLIST 20, 1988



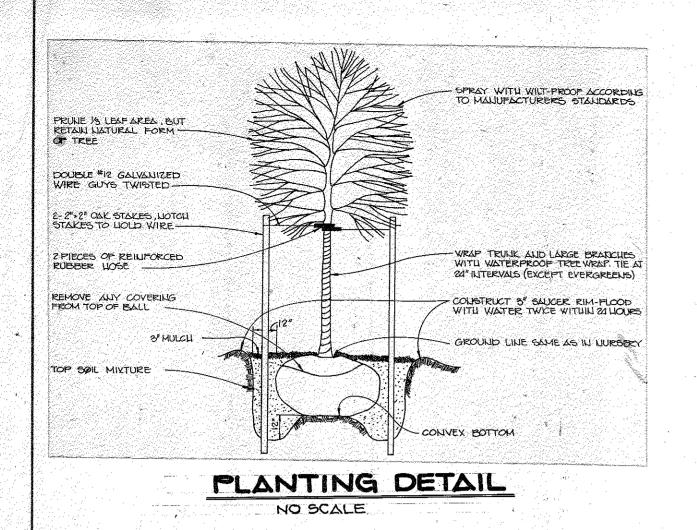
8/3/59 DATE

Proj. No. 98130 B Scale 1'' = 30'CSC Drn By: JMH/CMR Sheet 2 of 7 Chk By:

Mon Aug 2 11/2:29 1999 n:\98130b\98130b.sp2 SDP 89-45



Mon Aug 2 11:53:26 1999 n:\98130b\98130b\sci SDP 89-45



SCHEPULE'A

CATEGORY	LANDSCAPE TYPE	ADJ. TO ROADWAYS	FORMULA
PARKING	E	442 LF	I SHADE /40; ISHRUB,
CREDIT FOR EXIS (YES/NO, LINEA (DESCRIBE BELOY	-	No	
CREDIT FOR WAL (YES/NO LINEA (DESCRIBE BELO		367LF	
NUMBER OF PO SHAPE T EVERGR SHRUBS	EENS	0 19	•
NUMBER OF P SHADET EVERGE OTHER	REEMS	2 3 0	.

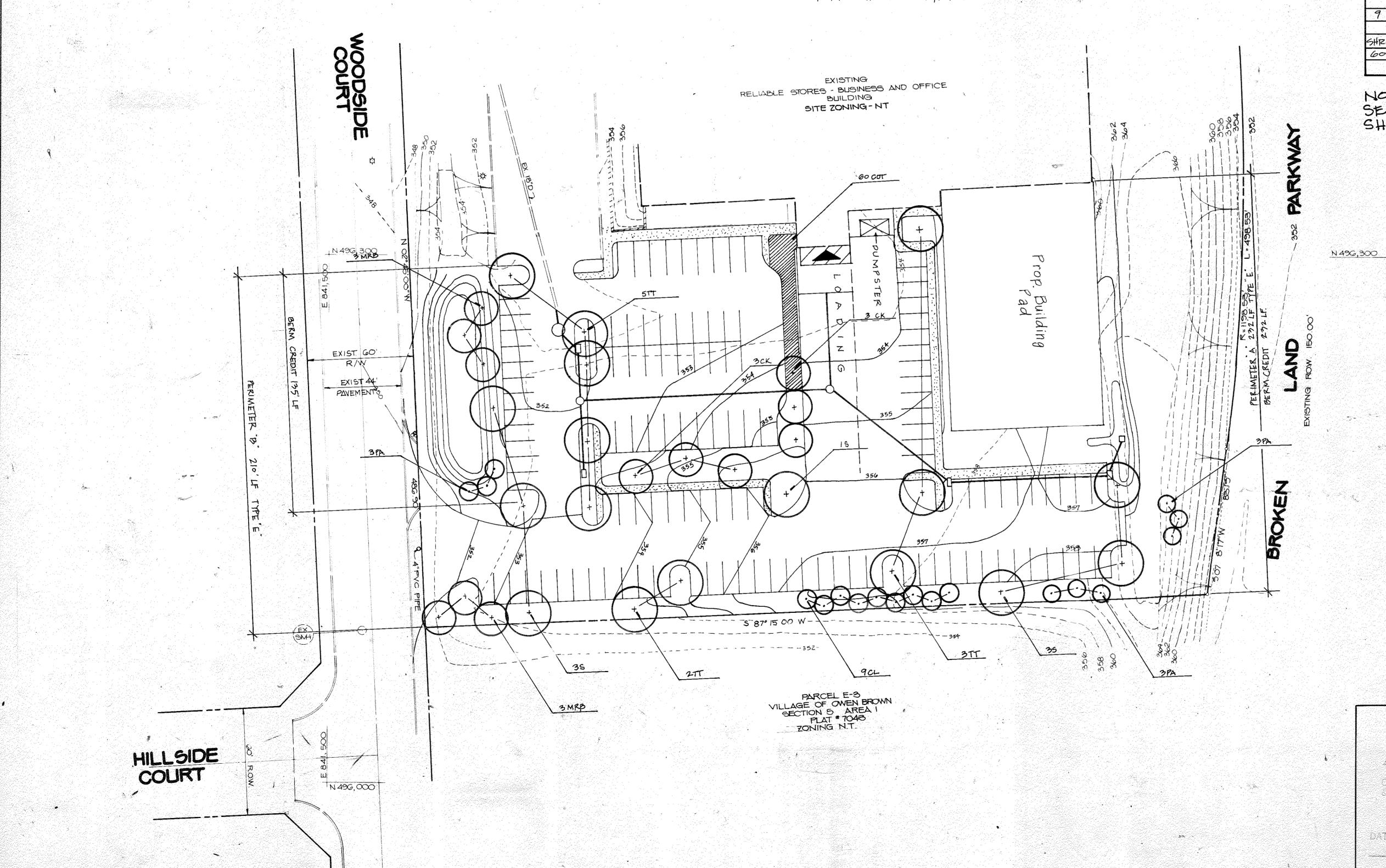
. SUBSTITUTIONS: 3 EVERGREENS TREES HAVE BEEN SUBSTITUTED FOR 19 SHRVBS,

SCHEDULE B'
PARKING LOT INTERNAL LANDSCAPING

NUMBER OF PARKING SPACES	119
NUMBER OF TREES REQUIRED	01:205F = 6
NUMBER OF TREES PROVIDED	6
SHAPE TREES	E 1 4 7 7
OTHER TREES (2: SUBSTITUTION)	
NUMBER OF ISLANDS REQUIRED @ 1/204	6
NUMBER OF ISLANDS PROVIDED	6

THIS PROJECT WILL BE CONSTRUCTED UNDER ALTERNATE COMPLIANCE- HRD STANDARDS. THE LANDSCAPE CALCULATIONS SHOWN HAVE BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS IN SECTION 16.124 OF THE HOWARD CO. LANDSCAPE MANUAL FOR BONDING. PURPOSES ONLY. BONDING AMOUNT: B SHADETREES & 300.00 = 2400 9 SHRUBS @ 3000 TOTAL 7.970

FINANCIAL SECURITY FOR THE REQUIRED LANDSCAPING WILL BE POSTED IN THE AMOUNT OF \$ 2,970.00



PLANT LIST

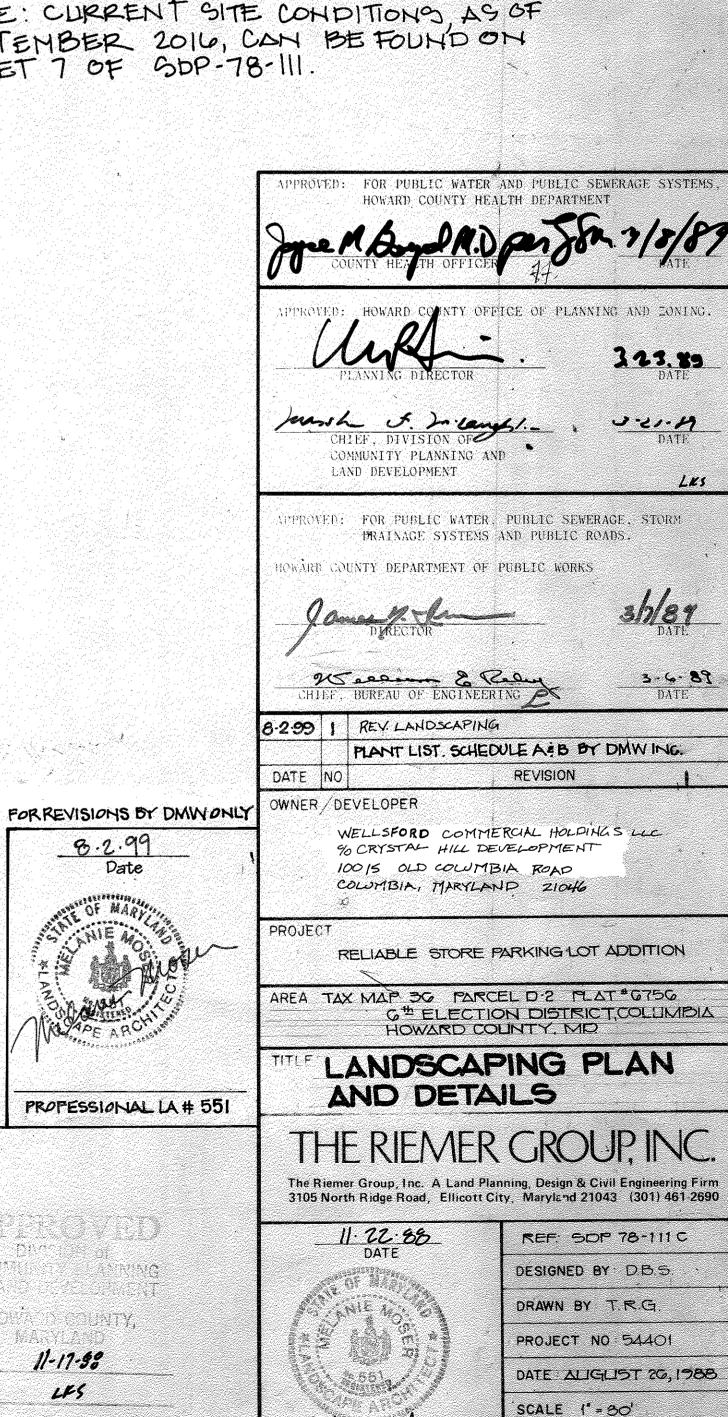
MAUD	SYM.	PLANT MATERIAL	REMARKS 1
SHADE	TREES		
7	5	SOPHORA JAPONICA REGENT	2/2":3" CAL
·		RECENT PAGODA TREE	B!B: FULLHEAD
10	TT	THA TOMENTOSA GREEN MOUNTAIN	25-3"CAL
		GREEN MOUNTAIN LINDEN	B&B:FULCHEAD
FLOW	ering ti	ZEE5	
6	CK	CORNUS KOUSA	8:10'HT
		KOUSA TOGWOOD	BIP !
6	MRB	MALUS RED BARON	8.10 HT
		RED BARON CRABAPPLE	B{B
EVER	GREENS		
9	CL	CHAMAECTPARIS LEYLANDII	6-8'H
		LEYLAND CYPRESS	1943
9	PA	PICEA ABIES	6.8'HT
		NOTEWAY SPRUCE	B! B
SHIZU	BS.		
60	COT	COTONEASTER SALKIFOLIA REPENS	18":24"5PD, CON
		DWF WILLOW LEAF COTON EASTER	

NOTE: CURRENT SITE CONDITIONS, AS OF SEPTEMBER 2016, CAN BE FOUND ON SHEET 7 OF SOP-78-111.

8.2.99

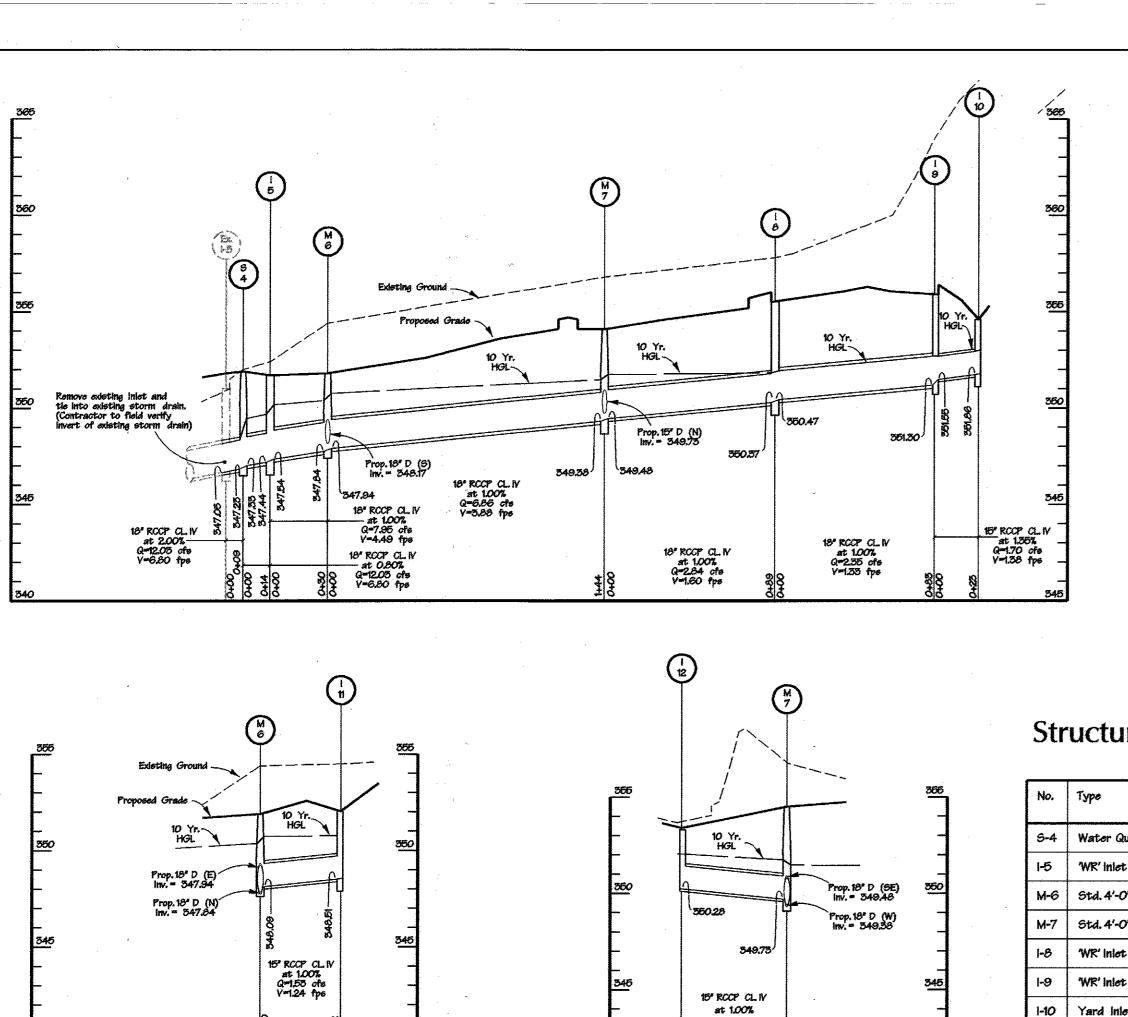
11-17-98

LFS



SDP 89-45

PRAWING NO. 4 OF 7



Structure Schedule

No.	Туре	Inv. In	Inv. Out	Top Elev.	Remarke
6-4	Water Quality Structure	347.33	347.25	350.95	Stormceptor Model STC 1800
1-5	WR' Inlet	347.54	347.44	* 351.20	Ho. Co. Std. SD-4.37
М-6	Std. 4'-0" Manhole	347.94	347.84	351.90	Ho. Co. Std. G-5.01
M-7	Std. 4'-0" Manhole	349.48	349.38	354.50	Ho. Co. Std. G-5.01
I-8	WR' Inlet	350.47	350.37	* 356.40	Ho. Co. Std. SD-4.37
I-9	'WR' Inlet	351,55	351.30	* 356.80	Ho. Co. Std. SD-4.37
1-10	Yard Inlet		351.86	355,00	Ho. Co. Std. SD-4.14
I -11	'WR' Inlet		348.51	* 352.50	Ho. Co. Std. SD-4.37
1-12	'C' Inlet		350.28	353.30	Ho. Co. Std. SD-4.15

* Denotes Top Headplece @ Center

PIPE SCHEDULE

LENGTH

120

TYPE

RCCP CL IV

RCCP CL IV

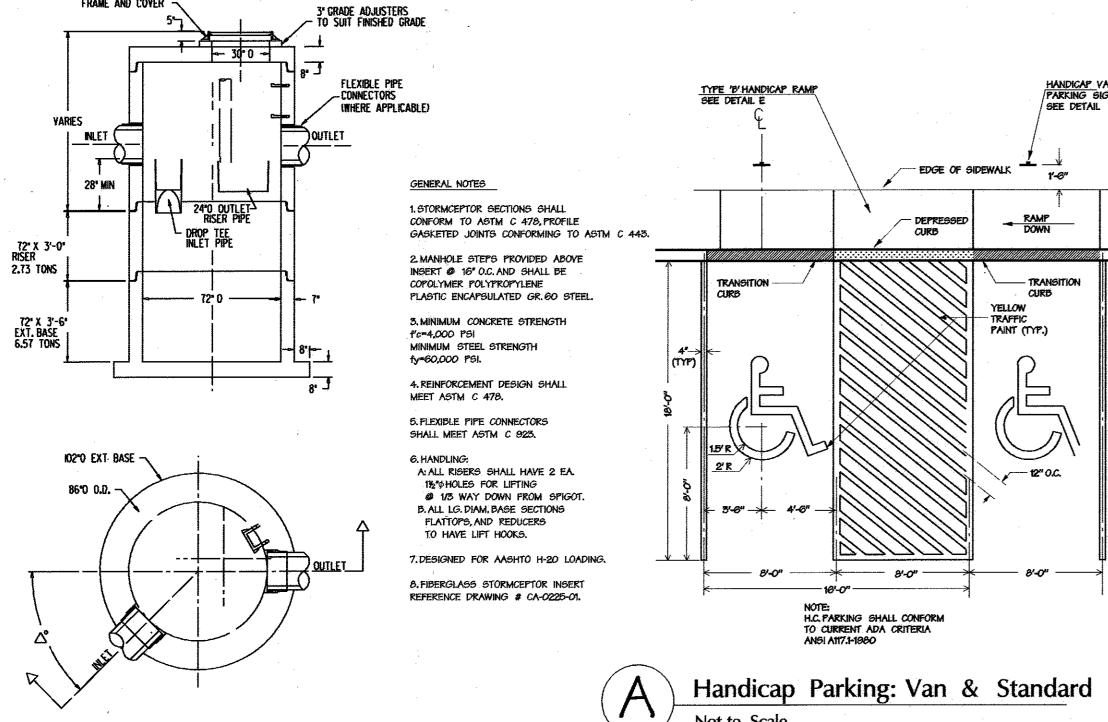
SIZE

15"

Storm Drain Profiles

Q=4.68 cfs

V=5.80 fps



Precast Concrete Stormceptor – STC 1800

Handicap Parking Space

Not to Scale

TYPE "B" HANDICAPPED RAMP NOT TO SCALE LEVEL OF TREE LIMBS. OVERHEAD WIRES, ETC. _ 1" R ONLY WHERE NO SIDEWALK ABUTS CURB PLAN REVERSE CURB SECTION REVERSE CURI PAYEMENT WIDTH INDICATED ON TYPICAL STREET SECTIONS TO BE MEASURED TO THIS PO PLAN STANDARD CURB SECTION STANDARD CURE Concrete Curb, Typical

OPERATION AND MAINTENANCE SCHEDULE FOR

STORMCEPTOR WATER QUALITY DEVICE

1. The Stormceptor water quality structure shall be periodically inspected and cleaned to maintain operation and function. The owner shall inspect the Stormceptor unit yearly at

2. The Stormceptor water quality structure shall be checked and cleaned immediately after

3. The maintenance of the Stormcaptor unit shall be done using a vacuum truck which will remove the water, sediment, debris, floating hydrocarbons and other materials in the unit. Proper cleaning and disposal of the removed materials and liquid must be followed by the

4. The inlet and outlet pipes shall be checked for any obstructions at least once every six months. If obstructions are found the owner shall have them removed. Structural parts

5. The owner shall retain and make the Stormceptor Inspection/Monitoring Forms available

- CONCRETE WALK

-concrete curb & gutter

- EXPANSION JOINT

- CONTROL JOINT

DEPRESSED CURB

HEAVY BROOM

—1½ª EXPANSION ↓ JOINT MATERIAL

— CONCRETE CURB & GUTTER

- 1.5" BIT. CONC. SURFACE COURSE (SF) - 2.5" BIT. CONC. BASE - 6" GRADED AGGREGATE BASE (GAB) - COMPACTED SUBGRADE

8'-0"

- S.H.A. MIX NO.3 CONCRETE

- 6" CR-6 CRUSHED STONE

-1" BIT, CONG, SURFACE COURSE (SF) -2.0" BIT. CONG, BASE

Paving

Not to Scale

4" GRADED AGGREGATE BASE (GAB)

FINISH TYP.

a minimum, utilizing the Stormceptor Inspection/Monitoring form. Inspections shall be

petroleum spille. The owner shall contact the appropriate regulatory agencies.

ISOMETRIC

Technical Manual, the unit must be cleaned.

of the Stormceptor unit shall be repaired as needed.

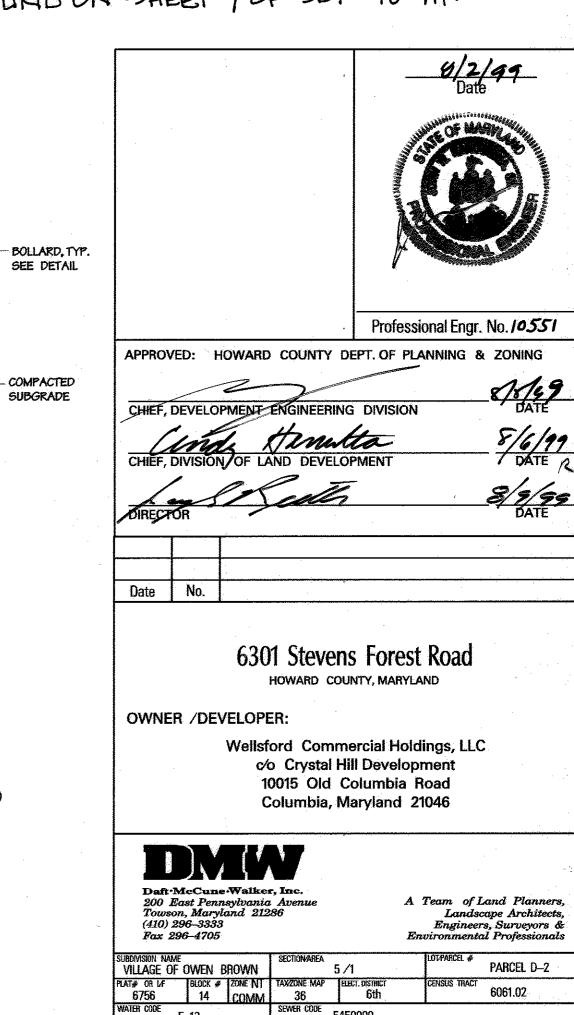
to the Howard County officials upon their request.

done using a clear Plexiglass tube ("sludge judge") to extract a water column sample. When the sediment depths exceed the level specified in Table 6 of the Stormceptor

Service Pad & Dumpster Bin

Concrete Stormceptor Order Request Form **Contractor Information Owner Information** Welleford Commercial Holdings, LLC outlet Name clo Crystal Hill Development Please draw orientation (angle) of inlet pipes (max 2) and outlet pipe (1) on diagram along with pipe inside diameter (in.) and invert elevation (ft). Clearly mark inlet pipes with an I and oulet pipes with an O and provide the inlet/outlet pipe angle in degrees. IMPERVIOUS DRAINAGE AREA FOR THIS UNIT 5-4 351.50 Top Elevation (ft) 347,33 Inlet Pipe Invert (ft) DISC Outlet Pipe Invert (ft) 347.25 Inlet Pipe Inside Diameter (ID) Inlet Pipe Outside Diameter (OD) _____18.46 CUSTOM Outlet Pipe Inside Diameter (ID) 18 Outlet Pipe Outside Diameter (OD) 18.46 6301 STEVENS FOREST ROAD DAFT MCCUNE WALKER, Inc. Mr. Robert Fernandez Phone (410) 296 - 3333 Fax (410) 296 - 4705 Hydro Conduit PLEASE FILL OUT COMPLETELY AND FAX TO: ATTN: ED O'MALLEY FAX: (703)922-3659, PHONE: (703)313-6389 FOR TECHNICAL ASSISTANCE PLEASE CALL MIKE BARG, PHONE (703)313-6399

NOTE: CURRENT SITE CONDITIONS, AS OF SEPTEMBER 2016, CAN BE FOUND ON SHEET 7 OF SDP-78-111.



21.0 STANDARD AND SPECIFICATIONS **TOPSOIL**

DEFINITION

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

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 subsoll/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
- 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

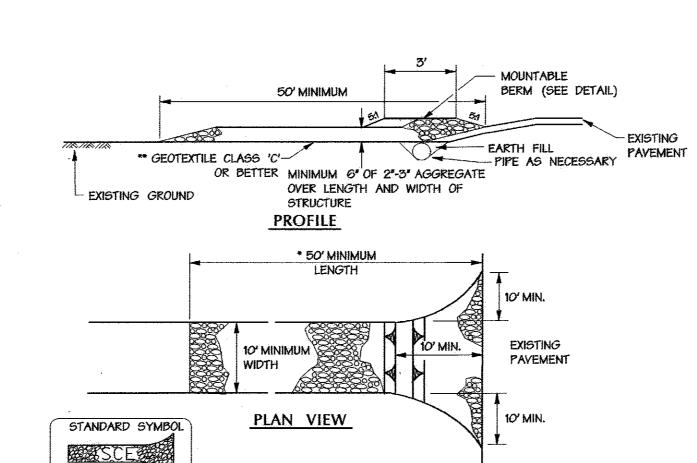
- 1. Topsoil salvages from the existing site may be used provided that is meets the standards as set forth in these specifications. Typically, the depth of topsoil to be salvaged for a given soil type can be found in the representative soil profile section in the Soil Survey published by USDA-909 in cooperation with Maryland Agricultural Experimental Station.
- II. Topsoil Specifications Soil to be used as topsoil must meet the following:
- Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by the appropriate 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 1-1/2% in diameter.
- il. Topsoil must be free of plants or plant parts such as bermuda grass, quackgrass, Johnsongrass, nutsedge, poison ky, thistle, or others as
- iii. Where the subsoil is either highly acidic or composed of heavy clays, ground limestone shall be spread at the rate of 4-8 tons/acre (200-400 pounds per 1,000 square feet) prior to the placement 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. On soil meeting Topsoil specifications, obtain test results dictating fertilizer and lime amendments required to bring the soil into compliance with the following:
- a. oH 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
- Topsoil having soluble salt content greater than 500 parts per
- 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

agronomist or soil scientist and approved by the appropriate approval authority, may be used in lieu of natural topsoil.

Note: Topsoil substitutes or amendments, as recommended by a qualified

- ii. Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section 1 - Vegetative Stabilization Methods and Materials.
- V. Topsoil Application
- 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%6 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
- 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
- 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 eites having disturbed areas under 5 acres shall conform to the
 - 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
 - Composted sludge shall be applied at a rate of 1 ton/1,000 square
- iv. Composted sludge shall be amended with a potassium fertilizer applied at a rate of 4 lb/1,000 square feet, and 1/3 the normal lime application

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



CONSTRUCTION SPECIFICATIONS

- 1. 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 CLASS C (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 51 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. 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

CERTIFICATION BY THE DEVELOPER:

MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

Stabilized Construction Entrance

Not To Scale

BY THE HOWARD SOIL CONSERVATION DISTRICT."

"I/WE CERITFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE

TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE

BEGINNING THE PROJECT. FALSO AUTHORIZE PERIODIC ON-SITE INSPECTION

INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF

ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL

ATTENDANCE AT A DEPARTMENT OF ENVIRONMENT APPROVED

~ 2:1 SLOPE OR FLATTER 2:1 SLOPE OR FLATTER EXCAVATE TO PROVIDE REQUIRED FLOW WIDTH GRADE LINE AT DESIGN FLOW DEPTH CUT OR FILL SLOPE DIKE A DIKE B

POSITIVE DRAINAGE SUFFICIENT TO DRAIN CUT OR FILL SLOPE PLAN VIEW

> FLOW CHANNEL STABILIZATION GRADE 0.5% MIN. 10% MAX.

1. SEED AND COVER WITH STRAW MULCH. 2. SEED AND COVER WITH EROSION CONTROL MATTING OR LINE WITH SOD. 3.4" - 7" STONE OR RECYCLED CONCRETE EQUIVALENT PRESSED INTO THE SOIL 7" MINIMUM.

CONSTRUCTION SPECIFICATIONS

- 1. ALL TEMPORARY EARTH DIKES SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET, SPOT ELEVATIONS MAY BE NECESSARY FOR GRADES LESS THAN 1%. 2. RUNOFF DIVERTED FROM A DISTURBED AREA SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE.
- 3. RUNOFF DIVERTED FROM AN UNDISTURBED AREA SHALL OUTLET DIRECTLY INTO AN UNDISTURBED, STABILIZED AREA AT A NON-EROSIVE VELOCITY.
- 4. ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONAL MATERIAL SHALL BE REMOVED AND DISPOSED OF SO AS NOT TO INTERFERE WITH THE PROPER FUNCTIONING OF THE DIKE.
- 5. THE DIKE SHALL BE EXCAVATED OR SHAPED TO LINE, GRADE AND CROSS SECTION AS REQUIRED TO MEET THE CRITERIA SPECIFIED HEREIN AND BE FREE OF BANK PROJECTIONS OR OTHER IRREGULARITIES WHICH WILL IMPEDE NORMAL FLOW. 5. FILL SHALL BE CONPACTED BY EARTH MOVING EQUIPMENT.
- 7. ALL EARTH REMOVED AND NOT NEEDED FOR CONSTRUCTION SHALL BE PLACED SO THAT IT WILL NOT INTERFERE WITH THE FUNCTIONING OF THE DIKE. 8. INSPECTION AND MAINTENANCE MUST BE PROVIDED PERIODICALLY AND AFTER EACH RAIN EVENT.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE

A -1-6

MARYLAND DEPARTMENT OF ENVIRONMENT

STANDARD SYMBOL A-2 B-3

→ -/**→** -

Earth Dike

Not To Scale

SILT FENCE DESIGN CRITERIA

SLOPE STEEPNESS	(MAXIMUM) SLOPE LENGTH	(MAXIMUM) SILT FENCE LENGTH
FLATTER THAN 50:1 (2%)	UNLIMITED	UNLIMITED
50:1 TO 10:1 (2-10%)	125 FEET	1,000 FEET
10:1 TO 5:1 (10-20%)	100 FEET	750 FEET
5:1 TO 3:1 (20-33%)	60 FEET	500 FEET
3:1 TO 2:1 (33-50%)	40 FEET	250 FEET
2:1 AND STEEPER (* 50%)	20 FEET	125 FEET

NOTE: IN AREAS OF LESS THAN 2% SLOPE AND SANDY SOILS (USDA GENERAL CLASSIFICATION SYSTEM, SOIL CLASS A) MAXIMUM SLOPE LENGTH AND SILT FENCE LENGTH WILL BE UNLIMITED. IN THESE AREAS A SILT FENCE MAY BE THE ONLY PERIMETER CONTROL REQUIRED

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE

Silt Fence

E - 15 - 3A

MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

Not To Scale

DUST CONTROL SPECIFICATIONS

- TEMPORARY METHODS: 1. MULCHES - SEE STANDARDS FOR VEGETATIVE STABILIZATION WITH MULCHES ONLY. MULCH SHOULD BE CRIMPED OR TACKED TO PREVENT BLOWING.
- 2. VEGETATIVE COVER SEE STANDARDS FOR TEMPORARY VEGETATIVE COVER. 3.TILLAGE - TO ROUGHEN SURFACE AND BRING CLODS TO THE SURFACE, THIS IS AN EMERGENCY MEASURE WHICH SHOULD BE USED BEFORE SOIL BLOWING STARTS, BEGIN PLOWING ON WINDWARD SIDE OF SITE. CHISEL-TYPE PLOWS SPACED ABOUT 12 INCHES APART, SPRING-TOOTHED HARROWS, AND SIMILAR PLOWS ARE EXAMPLES OF EQUIPMENT WHICH MAY PRODUCE THE
- DESIRED EFFECT. 4. IRRIGATION - THIS IS GENERALLY DONE AS AN AN EMERGENCY TREATMENT. SITE IS SPRINKLED WITH WATER UNTIL THE SURFACE IS MOIST, REPEAT AS NEEDED, AT NO TIME SHOULD THE SITE BE IRRIGATED TO THE POINT THE RUNOFF BEGINS TO FLOW. 5. BARRIERS - SOLID BOARD FENCES, SNOW FENCES, BURLAP FENCES, STRAW BALES, AND
- SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING, BARRIERS PLACED AT RIGHT ANGLES TO PREVAILING CURRENTS AT INTERVALS OF ABOUT 10 TIMES THEIR HEIGHT ARE AFFECTIVE IN CONTROLLING SOIL BLOWING. 6. CALCIUM CHLORIDE - APPLY AT A RATE THAT WILL KEEP SURFACE MOIST. MAY NEED RETREATMENT.
- PERMANENT METHODS:
- 1. PERMANENT VEGETATION SEE STANDARDS FOR PERMANENT YEGETATIVE COVER, AND PERMANENT STABILIZATION WITH SOD. EXISTING TREES OR LARGE SHRUBS MAY AFFORD VALUABLE PROTECTION IF LEFT IN PLACE,
- 2. TOPSOILING COVERING WITH LESS EROSIVE SOIL MATERIALS, SEE STANDARDS FOR
- 3. STONE COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL.

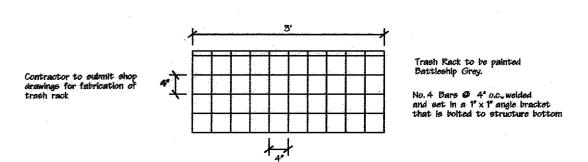
U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE

H - 50 -1

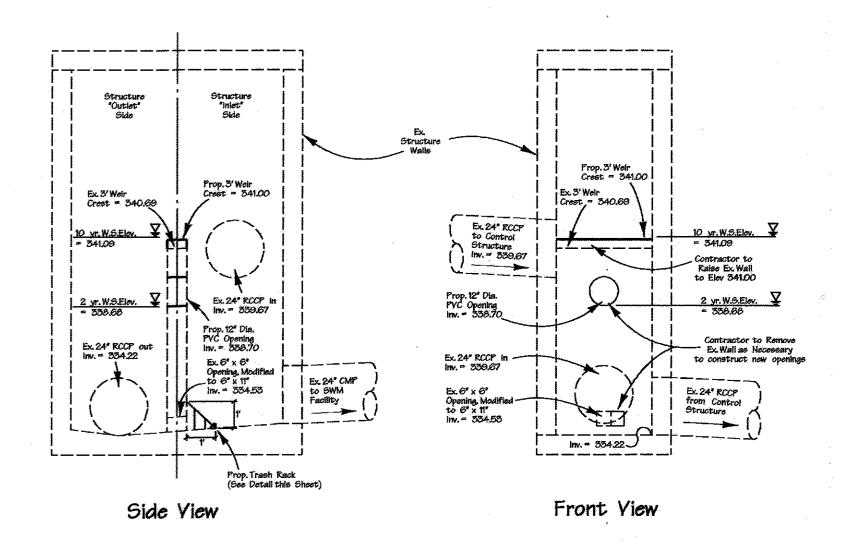
MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

Dust Control Specifications

Not To Scale

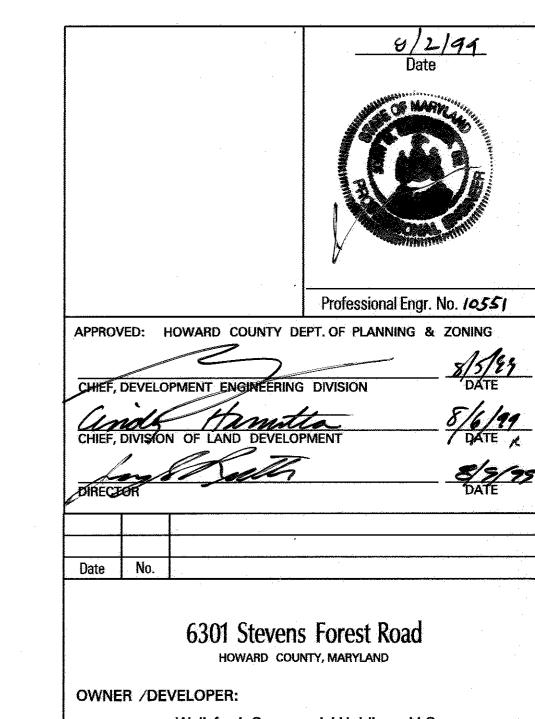


Trash Rack Detail



Modified Control Structure (S-1)

NOTE: CURRENT SITE CONDITIONS, AS OF SEPTEMBER 2016, CAN BE FOUND ON SHEET 7 OF SDP-78-111.



Wellsford Commercial Holdings, LLC c/o Crystal Hill Development 10015 Old Columbia Road Columbia, Maryland 21046

Daft·McCune·Walker, Inc. 200 East Pennsylvania Avenue Towson, Maryland 21286

(410) 296-3333 Fax 296-4705

PARCEL D-2 VILLAGE OF OWEN BROWN PLAT# OR LF BLOCK # ZONE N 6756 14 COMM 5450000

EROSION & SEDIMENT CONTROL DETAILS & SPECIFICATIONS

Scale AS SHOWN Proj. No. 98130 B Dm By: JMH/CMR 5-26-99 Date Chk By: Approved

Mon Aug 2 09:41:49 1999 n:\98130b\98130bdt2 SDP 89-45

A Team of Land Planners,

Landscape Architects Engineers, Surveyors &

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

REQUIREMENTS.

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL

John W. Ranuchia, S.

CERTIFICATION BY THE ENGINEER:

CONSERVATION DISTRICT.

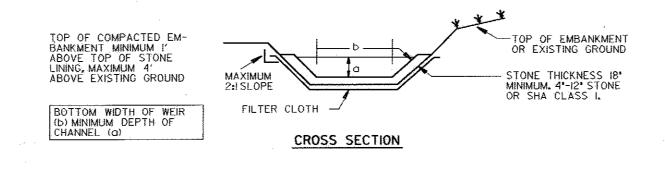
"ICERTIFY THAT THAS PLAN FOR EROSION AND SEDIMENT

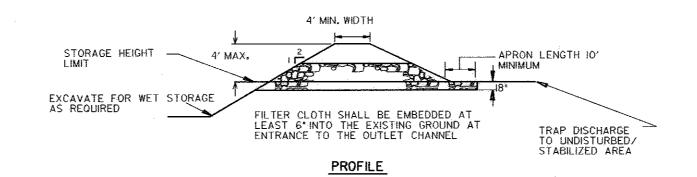
PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE

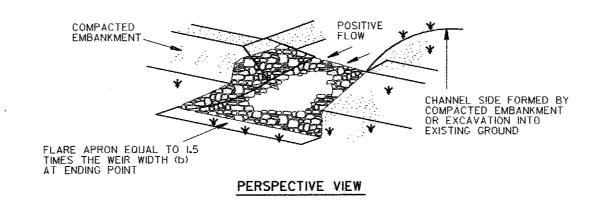
CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE

CONTROL REPRESENTS A PRACTICAL AND WORKABLE

WITH THE REQUIREMENTS OF THE HOWARD SOIL







NOTE: MAXIMUM DRAINAGE AREA= 10 oc.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE

C - 9 - 13

MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

RIP-RAP OUTLET SEDIMENT TRAP - ST III

Constuction Specifications

i. The area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The poolarea shallbe cleared.

2. The fillmaterial for the embankment shall be free of roots or other woody vegetation as well as over-sized stones, rocks, organic material or other objectionable material. The embankment shall be compacted by traversing with equipment while it is being constructed. Maximum height of embankment shall be 4', measured at centerline of embankment.

3. All cut and fill slopes shall be 2:1 or flatter.

4. Elevation of the top of any dike directing water into trap must equal or exceed the height of trap embankment.

5. Storage area provided shall be figured by computing the volume measured from top of excavation. (For storage requirements see Table 10).

6. Filter cloth shall be placed over the bottom and sides of the outlet channel prior to placement of stone. Section of fabric must overlap at least I' with section negrest the entrance placed on top. Fabric shall be embedded at least 6 into existing ground at entrance of outlet channel.

7. Stone used in the outlet channel shall be 4" - 7" placed 18" thick.

8. Outlet - An outlet shall be provided, which includes a means of conveying the discharge in an erosion free manner to an existing stable channel. Protection against scour at the discharge end shall be provided as necessary.

9. Outlet channelmust have positive drainage from the trap.

10. Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to $\frac{1}{4}$ of the wet storage depth of the trap (1350 cf/ac). Removed sediment shallbe deposited in a suitable area and in such a manner that it will not erode.

II. The structure shall be inspected periodically after each rain and repaired

12. Construction of traps shall be carried out in such a manner that sediment pollution is abated. Once constructed, the top and outside face of the embankment shall be stabilized with seed and mulch. Points of concentrated inflow shall be protected in accordance with Grade Stabilization Structure criteria. The remainder of the interior slopes should be stabilized (one time) with seed and mulch upon trap completion and monitored and maintained erosion free during the life of the trap.

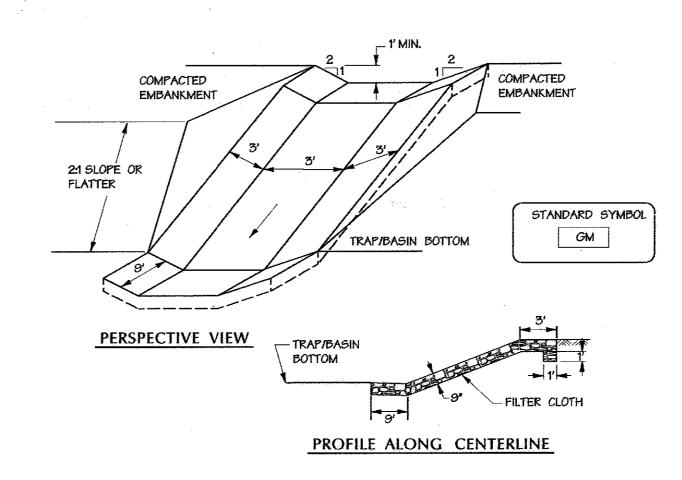
13. The structure shall be dewatered by approved methods, removed and the area stabilized when the drainage area has been properly stabilized.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE

C - 9 - 13A

MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

RIP-RAP OUTLET SEDIMENT TRAP - ST III



CONSTRUCTION SPECIFICATIONS

1. GABION INFLOW PROTECTION SHALL BE CONSTRUCTED OF 9'X 3'X 9" GABION BASKETS FORMING A TRAPEZOIDAL CROSS SECTION 1'DEEP, WITH 2:1 SIDE SLOPES, AND A 3'BOTTOM WIDTH.

2. GEOTEXTILE CLASS C SHALL BE INSTALLED UNDER ALL GABION BASKETS. 3. THE STONE USED TO FILL THE GABION BASKETS SHALL BE 4" - 7".

U.S. DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE

Gabion Inflow Protection

4. GABIONS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS. 5. GABION INFLOW PROTECTION SHALL BE USED WHERE CONCENTRATED FLOW IS PRESENT ON SLOPES STEEPER THAN 4:1.

B -7-2

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 YEGETATIVE 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

3. FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:

PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 34. B. FOURTEEN DAYS AS TO ALL OTHER DISTURBED OF GRADED AREAS ON THE PROJECT SITE 4. ALL SEDIMENT TRAPS/BASING SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL.1. CHAPTER 12. OF THE "HOWARD COUNTY DESIGN MANUAL", STORM DRAINAGE,

A SEVEN CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES,

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 SEEDINGS, SODS, TEMPORARY SEEDING AND MULCHING (SECTION G). TEMPORARY STABILIZATION WITH MULCH ALONE 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: 5.91 ACRES TOTAL AREA OR SITE 2.2 ACRES AREA DISTURBED AREA TO BE ROOFED OR PAVED 1.2 ACRES AREA TO BE VEGETATIVELY STABILIZED 1.0 ACRES TOTAL CUT 7705 CUBIC YARDS TOTAL FILL CUBIC YARDS

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

OFF-SITE WASTE/BORROW AREA LOCATION WASTE = N/A

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.

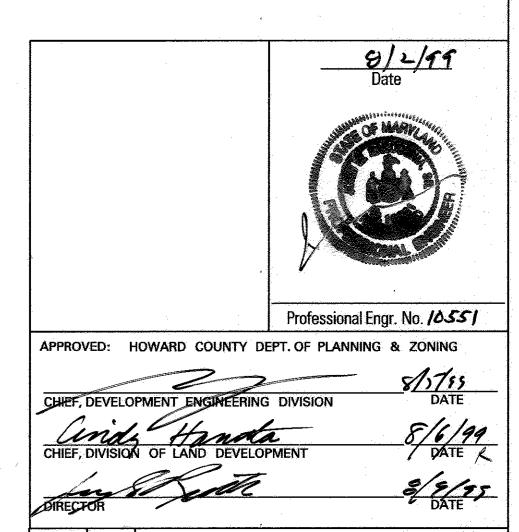
11. TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.

MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

Not To Scale

Sediment Control General Notes

NOTE: CUPPENT SITE CONDITIONS AS OF SEPTEMBER 2016, CAN BE FOUND ON SHEET 7 OF SDP-78-111.



6301 Stevens Forest Road HOWARD COUNTY, MARYLAND

OWNER /DEVELOPER:

Date No.

Wellsford Commercial Holdings, LLC c/o Crystal Hill Development 10015 Old Columbia Road Columbia, Maryland 21046

Fax 296-4705

VILLAGE OF OWEN BROWN PARCEL D-2 14 COMM 36 E-13

EROSION & SEDIMENT CONTROL

DETAILS & SPECIFICATIONS Scale AS SHOWN Proj. No. 98130 B Des By: CSC JMH/CMR Date 5-26-99 Sheet 7 of 7

TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. IALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

"I/WE CERITFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE

INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF

ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL

ATTENDANCE AT A DEPARTMENT OF ENVIRONMENT APPROVED

CERTIFICATION BY THE DEVELOPER:

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL

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REQUIREMENTS.

CERTIFICATION BY THE ENGINEER:

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John W. Ranucchia

WITH THE REQUIREMENTS OF THE HOWARD SOIL

Tue Jul 20 16:24:45 1999 n:\9816\\\98130b:dt3

Chk By:

SDP 89-45