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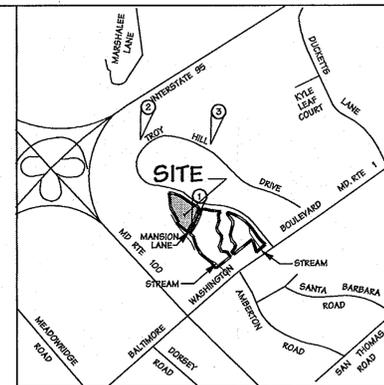
SITE DEVELOPMENT PLAN

for

Troy Hill Corporate Center

Parcel A-12

Howard County, Maryland



VICINITY MAP

SCALE: 1"=2000'

BENCHMARK
DESCRIPTION

1. The courses and coordinates shown hereon are referred to the system of coordinates established in the Maryland Coordinate System - NAD 27, and are based on the following control stations:

DESIGNATION	NORTH (±FT)	EAST (±FT)
106	497923.68269	868870.53079
108	497910.68320	868644.53291

2. All utilities shown hereon are based solely on field location. No comparison to, or enhancement has been made from any utility drawings. The location of any underground utility shown hereon is approximate and must be verified.

3. ELEVATIONS shown hereon are referred to the North American Vertical Datum 1929 (NAVD 29) and are based on the following control stations, provided by the HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS, SURVEY DIVISION:

DESIGNATION	ELEVATION (±FT)
37A	195.762
3805	193.718

4. Boundary information shown hereon is based upon an ALTA Survey performed by Daft-McCune-Walker on August 26, 1999.

BENCHMARK #1	IRON PIN @ TRAVERSE #1066	N 496601.3597 E 868134.4576
BENCHMARK #2	IRON PIN @ TRAVERSE #1061	N 498026.68427 E 868791.1502
BENCHMARK #3	IRON PIN @ TRAVERSE #1034	N 497636.7437 E 868835.6586

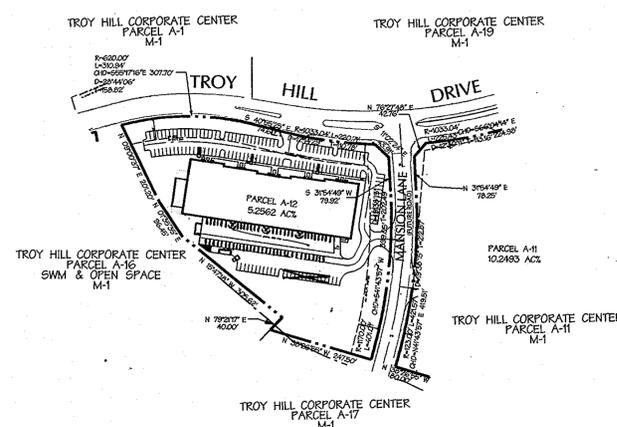
Address Chart

Parcel	Street Address
A-12	7145 Troy Hill Drive

General Notes

- All construction shall be performed in accordance with the latest standards and specifications of Howard County, plus MSHA standards and specifications if applicable or as specified.
- Approximate location of existing utilities are based solely on available records. Contractor shall verify the location of any utilities which may be impacted by the work. 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.
- The contractor shall test existing utilities at least five (5) days before starting work shown on these drawings to verify their location and elevation. The contractor shall notify the engineer immediately if location of utilities is other than shown.
- The contractor shall notify 'Miss Utility' at 1-800-257-7777 at least 48 hours prior to any excavation work being done, and shall notify the Department of Public Works/Bureau of Engineering/Construction Inspection Division at (410) 313-1800 at least five (5) working days prior to the start of work.
- 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.
- Any damage caused by the Contractor to existing public right-of-way, existing paving, existing curb and gutter, existing utilities, etc. shall be repaired at the Contractor's expense.
- The existing topography inside property line per mass grading as shown on SDP-98-149
- All hydraulic data is for the 10-year storm unless otherwise noted.
- All fill areas shall be compacted to a minimum of 95% of the maximum dry density as determined and verified in accordance with AASHTO T-100.
- All plan dimensions are to face of curb unless otherwise noted. Numerically written dimensions take precedence over scaled dimensions.
- The coordinates shown hereon are based upon the Howard County geodetic control which is based upon NAD 27 Howard County monument nos 106 and 108 were used for this project.
- Quantity SWM is provided by Pond #1 as shown on SDP-98-149 and #2, as shown on F-98-103. Both SWM Ponds are Detention Ponds Hazard Class A with Water Quality provided via Stormceptors. Privately owned and maintained.
- Public water (Contract # 44-39140) and Public sewer (Contract # 14-3715-D) to service the site.
- There are 100 year floodplain and wetlands on this site, study performed by George W. Stephens
- There are no known cemeteries or burial grounds on this site.
- A traffic report update has been prepared by I.T.S.
- Exterior Lighting will be in conformance with Section 134, Zoning Regulations
- Electric, gas, cable and telephone lines designed by others.
- All curb 5' radius unless otherwise noted.
- This project is exempt from the forest conservation requirements per Section 16.1202(p)(1)(v) of the Howard County Code, because this is a planned business park of at least 75 acres that received preliminary plan approval prior to 12/31/92.
- No clearing, grading or construction is permitted within the required wetlands, stream(s) or their buffers.
- Construction and grading for the proposed retaining wall shall be under the direct supervision of Professional Engineer. Refer to the Ryan and Associates report dated August 2000, for minimum wall specifications.
- Hand rails shall be constructed along the retaining wall in accordance with current BOCA Code section 1021.0.
- Bonding for A-10, A-11, and A-12 were executed under SDP-01-30. The improvements for A-12 are now under SDP-01-92 but were bonded under SDP-01-30.

- The Knox Box shall be placed to the right of the main entrance at a range of 4' to 5' in height and no more than 4' laterally from the door.
- The Knox Box shall be electronically supervised to notify the owner that it being accessed (integrated with the fire alarm system). NFPA-112, 12.1
- A Knox Box shall be provided at all gates in the complex with keys to allow emergency access.
- Removable ballands shall be provided at the main entrance as an alternate means of emergency ingress/egress in lieu of landscape planters. See detail SA.
- Key to ballands shall be kept onsite within the Knox Box.
- This redline plan is valid for one year from the approval date of the redline plan (approval date is 8/14/07).
- The dumpster shall be located a minimum of fifteen (15) feet from any building.



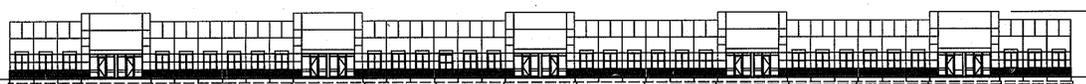
Overall Property Outline

Scale: 1"=200'



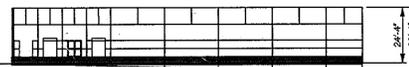
Site Analysis Data Chart

- General Site Data
 - Present Zoning: M-1
 - Applicable DPZ File References: S-90-05, P-90-23, F-91-24, F-96-136, WP-96-31, F-98-165, SDP-98-149, F-00-103, SDP-01-30, F-02-09
 - Proposed Use of Site or Structure: Government Office
 - Proposed Water: Public Proposed Sewer: Public Water and contract number: 44-3914-D
- Area Tabulation
 - Total Project Area: Parcel A-12: 5.2562± AC.
 - Net Area of Site: 5.2562± Acres (Indicate by Section and Area As Shown on Final Plat)
 - Area of This Plan Submission: 5.2562± Acres
 - Limit of Disturbed Area: Parcel A-12: 4.9± AC.
 - Building Coverage of Site: A-12 = 1.23± Acres and 23 % of Gross Area (Proposed)
- Open Space Data: N / A
- Parking Space Data
 - Floor Space per floor of proposed use on site: Parcel A-12: 89,621 SF (One Story) 1.5 spaces per 1,000 sq ft.
 - Number of Parking Spaces Required by Zoning Regulations: Parcel A-12: 187 SPACES
 - Total Number of Parking Spaces Provided On-Site: Parcel A-12: 187
 - Number of Handicapped Parking Spaces Provided: Parcel A-12: 5



Front Elevation - Parcel: A-12

Not To Scale



Right Side Elevation - Parcel: A-12

Not To Scale

7-14-07
Date



Professional Engr. No. 24498

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING		
<i>[Signature]</i>	DATE	9/5/01
CHIEF, DEVELOPMENT ENGINEERING DIVISION		
<i>[Signature]</i>	DATE	7/10/01
CHIEF, DIVISION OF LAND DEVELOPMENT		
<i>[Signature]</i>	DATE	9/11/04
DIRECTOR		

Date	No.	Revision Description
12/14/11	2	MEDIANINE & BLDG ADDITION TO RATIO
8/14/07	1	BLDG ADDITION, FENCING, PARKING, LANDSCAPING

Troy Hill Corporate Center
Parcel A-12

OWNER / DEVELOPER:
TROY HILL INVESTORS LLC.
C/O C&S TROY HILL LLC.
925 FELL STREET
BALTIMORE, MARYLAND 21231
(410) 534-6350

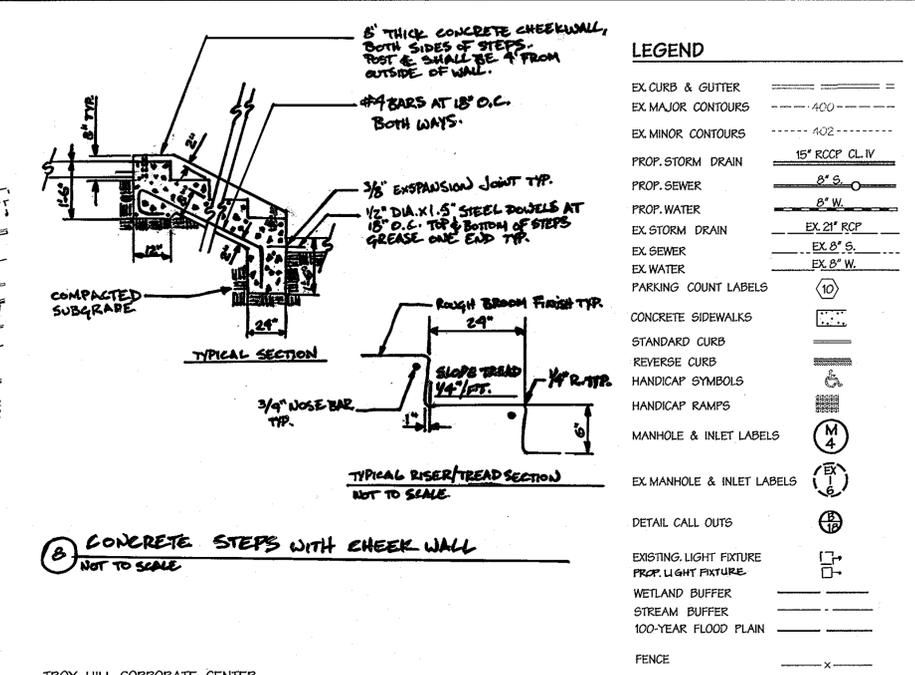
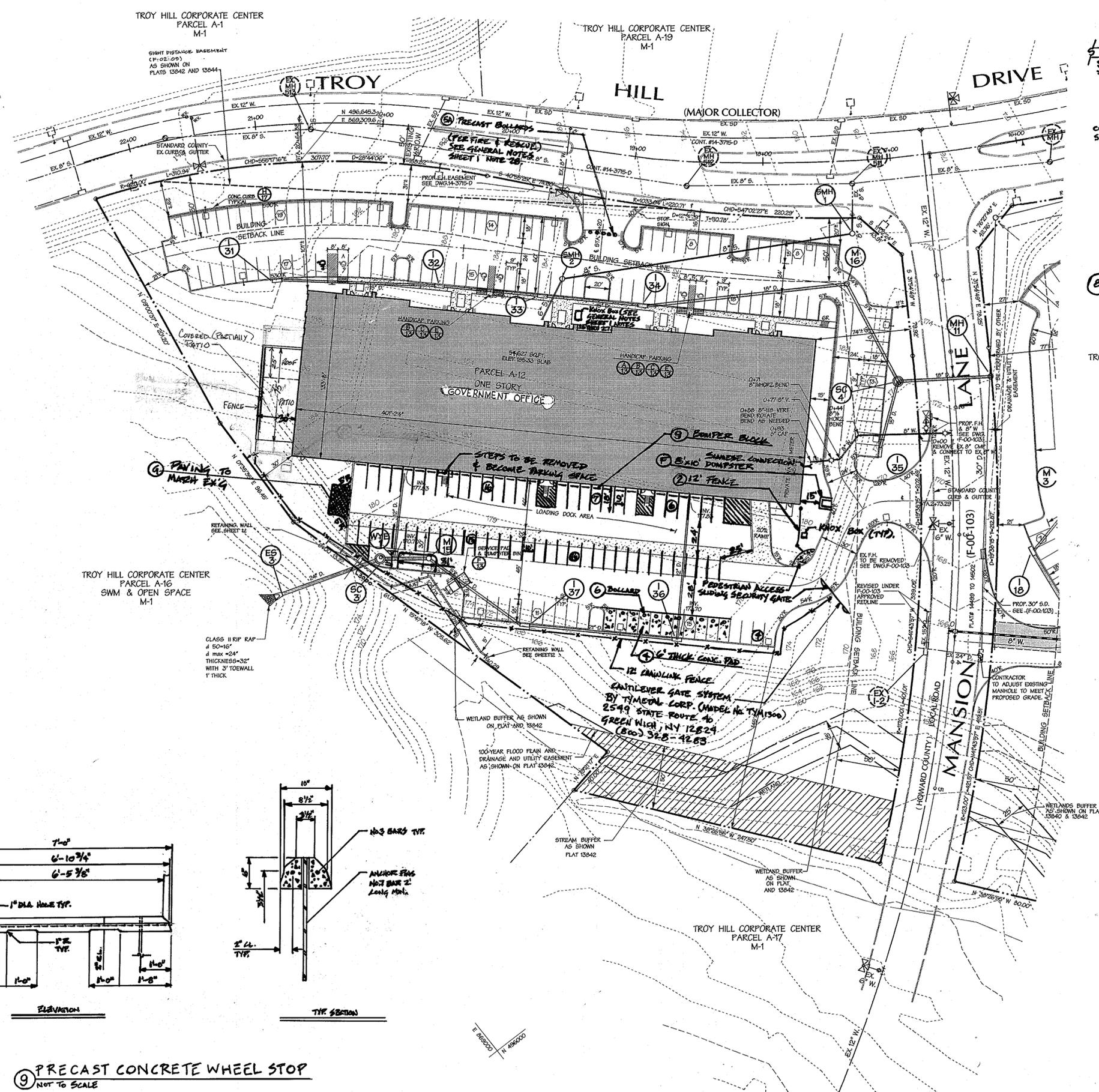
DMW
Daft-McCune-Walker, Inc.
200 East Pennsylvania Avenue
Towson, Maryland 21286
(410) 296-3353
Fax 296-4705

A Team of Land Planners,
Landscape Architects,
Golf Course Architects,
Engineers, Surveyors &
Environmental Professionals

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL #
TROY HILL CORPORATE CENTER	1	A-12
PLAN # OR LTR BLOCK #	TAX ZONE MAP	ELECT. DISTRICT
14502	M-1	37
CENSUS TRACT		6012
WATER CODE	SEWER CODE	
A03	2152200	

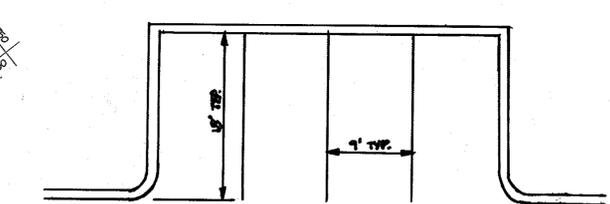
COVER SHEET

Drn. By: ADL	Scale: 1"=200'	Proj. No. 99058.A
Des. By: ADL	Date: 6/21/01	
Chk. By:	Approved:	1 of 12

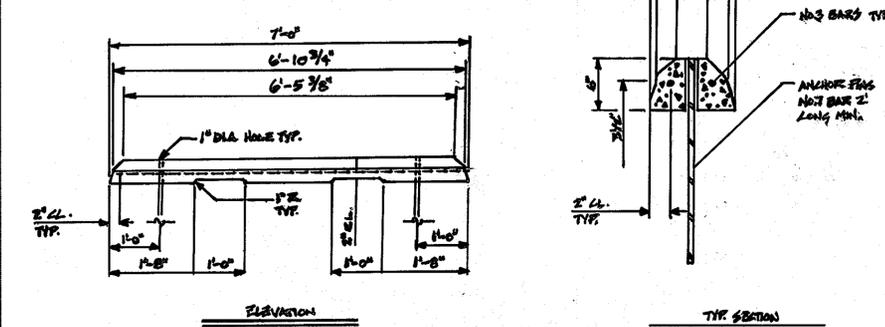


LEGEND

- EX CURB & GUTTER
- EX MAJOR CONTOURS
- EX MINOR CONTOURS
- PROP. STORM DRAIN
- PROP. SEWER
- PROP. WATER
- EX STORM DRAIN
- EX SEWER
- EX WATER
- PARKING COUNT LABELS
- CONCRETE SIDEWALKS
- STANDARD CURB
- REVERSE CURB
- HANDICAP SYMBOLS
- HANDICAP RAMPS
- MANHOLE & INLET LABELS
- EX MANHOLE & INLET LABELS
- DETAIL CALL OUTS
- EXISTING LIGHT FIXTURE
- PROP. LIGHT FIXTURE
- WETLAND BUFFER
- STREAM BUFFER
- 100-YEAR FLOOD PLAIN
- FENCE



15 PARKING DETAIL NOT TO SCALE



9 PRECAST CONCRETE WHEEL STOP NOT TO SCALE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

Howard County 9/5/01 DATE
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

John P. Smith 9/10/01 DATE
 CHIEF, DIVISION OF LAND DEVELOPMENT

John P. Smith 9/10/01 DATE
 DIRECTOR

12/2/01	2	MEZZANINE & BUILDING ADDITION TO PATIO
8/1/01	1	BUILDING ADDITION, FENCING, PARKING, LANDSCAPING
Date	No.	Revision Description

Troy Hill Corporate Center
 Parcel A-12

OWNER/DEVELOPER
 TROY HILL INVESTORS LLC
 410 GEE TROY HILL LLC
 925 FELL STREET
 BALTIMORE, MARYLAND 21231
 (410) 534-6360

DMW
 DaR-McCune-Walker, Inc.
 200 East Pennsylvania Avenue
 Towson, Maryland 21286
 (410) 296-8335
 Fax 296-4705

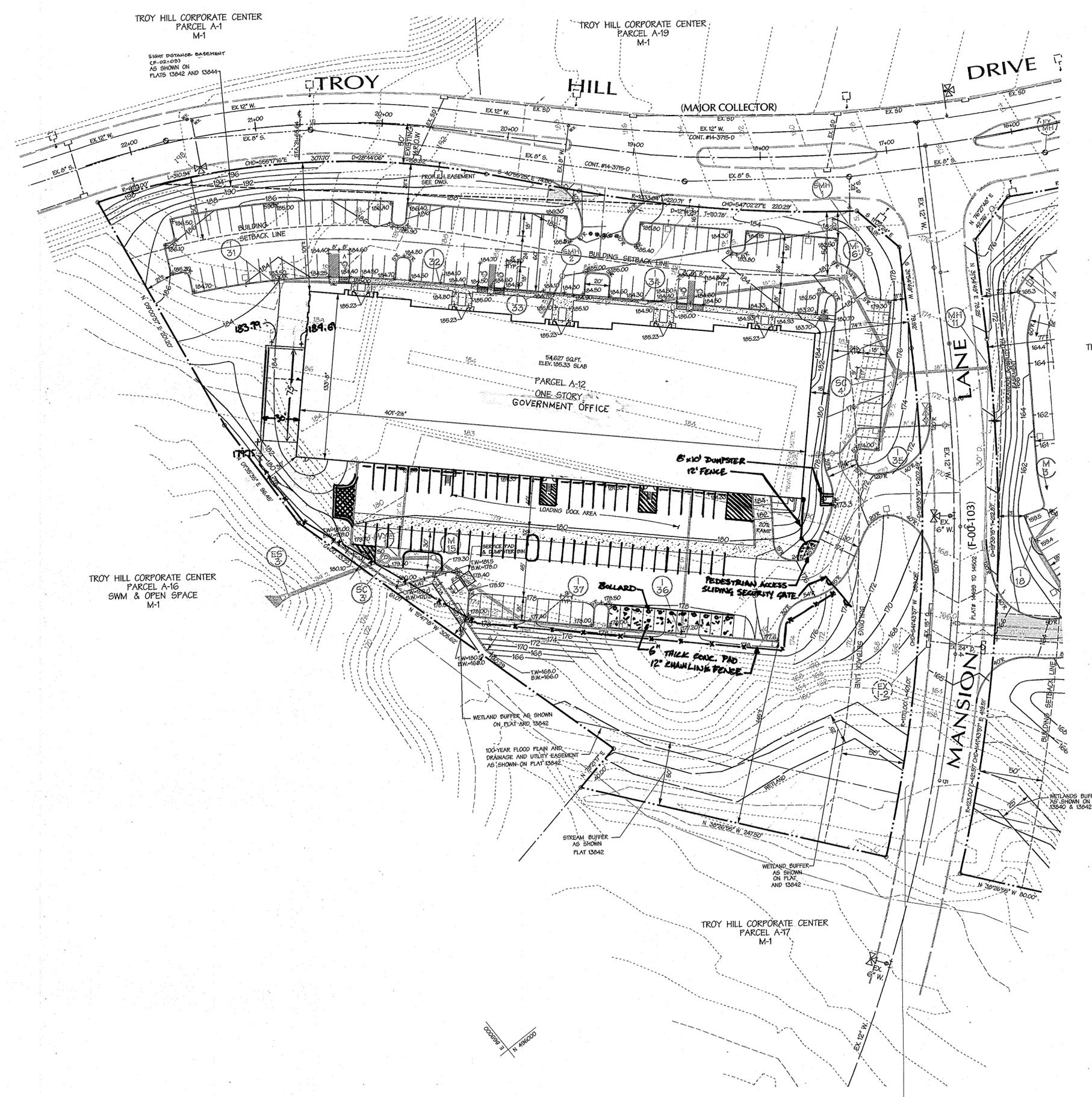
A Team of Land Planners, Landscape Architects, Golf Course Architects, Engineers, Surveyors & Environmental Professionals

7-19-01
 Date

Professional Engr. *NA 498*

Professional Engineer

SUBDIVISION NAME TROY HILL CORPORATE CENTER		SECTION/AREA 1	LOT/PARCEL A-12
PLAT OR LOT BLOCK/ZONE 14502 1B M-1		ELECT. DISTRICT 37	CENSUS TRACT 6012
WATER CODE A03	SEWER CODE 21B2200	TITLE SITE PLAN PARCEL A-12	
Drn. By: ADL	Scale: 1"=40'	Proj. No. 99058-A	
Des. By: LL	Date: 6/21/01	2 of 12	
Chk. By:	Approved:		



LEGEND

- EX. CURB & GUTTER
- EX. MAJOR CONTOURS
- EX. MINOR CONTOURS
- PROP. STORM DRAIN
- PROP. SEWER
- PROP. WATER
- EX. STORM DRAIN
- EX. SEWER
- EX. WATER
- PARKING COUNT LABELS
- CONCRETE SIDEWALKS
- STANDARD CURB
- REVERSE CURB
- HANDICAP SYMBOLS
- HANDICAP RAMPS
- MANHOLE & INLET LABELS
- EX. MANHOLE & INLET LABELS
- DETAIL CALL OUTS
- EXISTING LIGHT FIXTURE
- PROP. LIGHT FIXTURE
- WETLAND BUFFER
- STREAM BUFFER
- 100-YEAR FLOOD PLAIN
- FENCE

TROY HILL CORPORATE CENTER
PARCEL A-11
M-1

NOTE: NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE REQUIRED WETLANDS, STREAM(S) OR THEIR BUFFERS.

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

<i>[Signature]</i>	9/5/01
CHIEF DEVELOPMENT ENGINEERING DIVISION	DATE
<i>[Signature]</i>	9/1/01
CHIEF DIVISION OF LAND DEVELOPMENT	DATE
<i>[Signature]</i>	9/1/01
DIRECTOR	DATE

12/12/11	2	MEZZANINE + BLDG ADDITION TO PART 10
8/1/07	1	BUILDING ADDITION, FENCING, PARKING, LANDSCAPING
Date	No.	Revision Description

Troy Hill Corporate Center
Parcel A-12

OWNER / DEVELOPER:
TROY HILL INVESTORS LLC
500 425 TROY HILL LLC
925 FELL STREET
BALTIMORE, MARYLAND 21201
(410) 534-6350

DMW
Daft McCune-Walker, Inc.

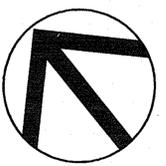
200 East Pennsylvania Avenue
Towson, Maryland 21286
(410) 586-3333
Fax 296-4705

A Team of Land Planners,
Landscape Architects,
Golf Course Architects,
Engineers, Surveyors &
Environmental Professionals

SUBDIVISION NAME TROY HILL CORPORATE CENTER PLAT ON LOT FLOODING ZONE 14502 1B M-1	SECTION/AREA 37	LOT/PARCEL A-12
WATER CODE A03	SEWER CODE 2152200	CENSUS TRACT 6012

GRADING PLAN
PARCEL A-12

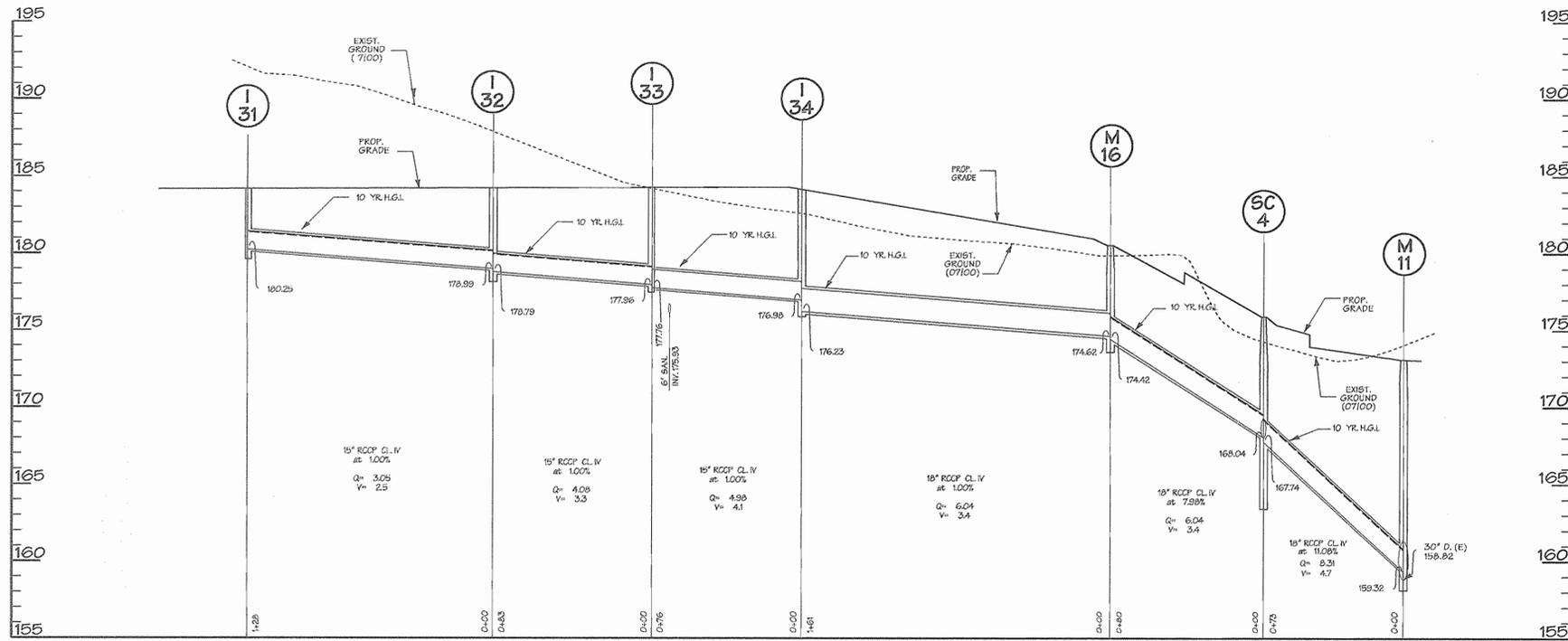
Drn. By: ADL	Scale: 1" = 40'	Proj. No. 99058.A
Des. By: DJA	Date: 6/21/01	3 of 12
Chk. By:	Approved:	



7-14-01
Date

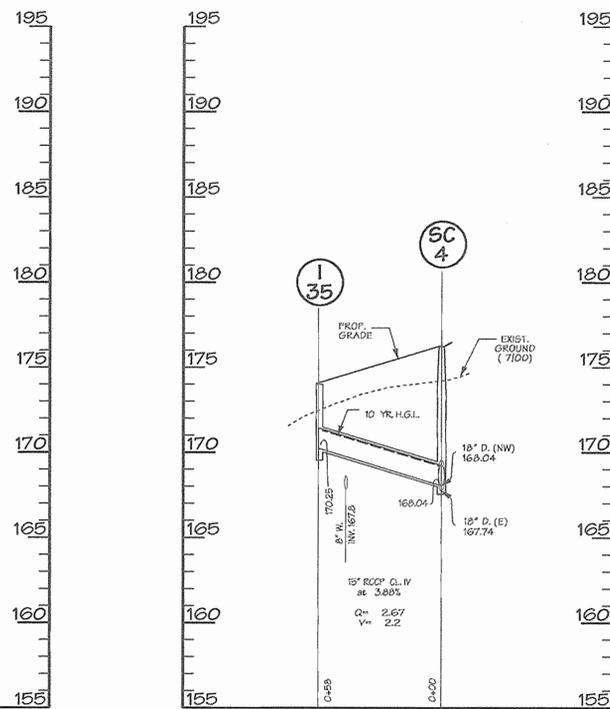


Professional Engr. No. 21996



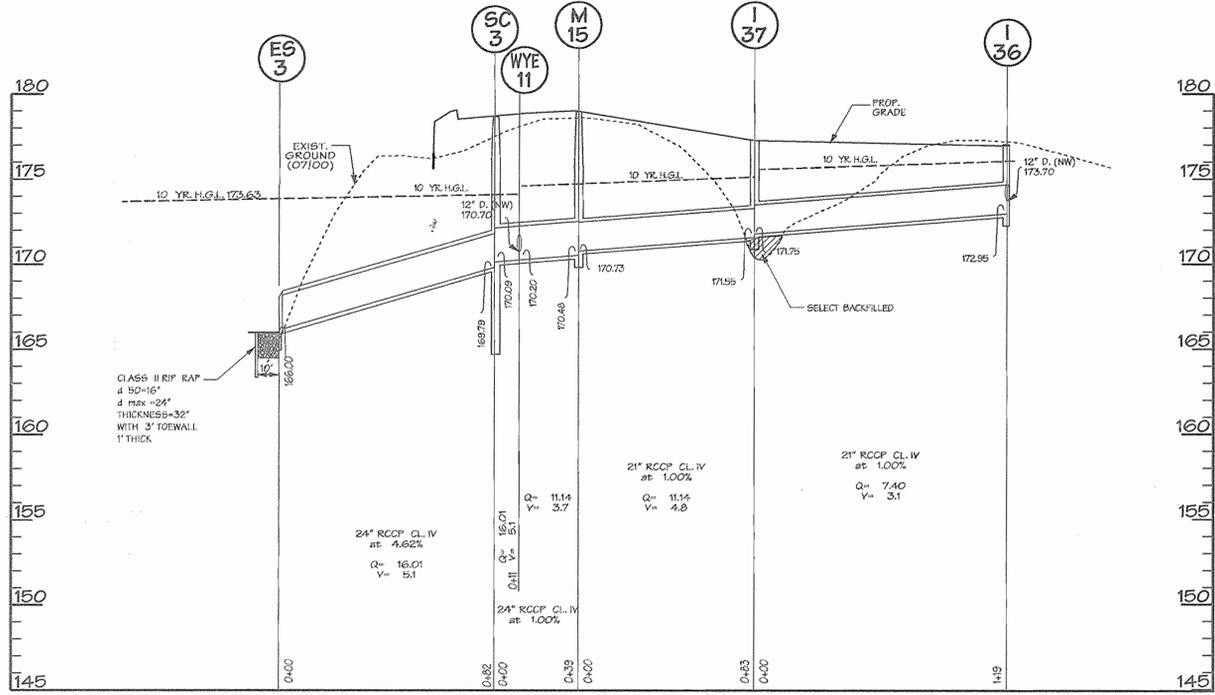
Storm Drain Profile- Parcel: A-12

Scale: Horiz: 1"=40'
Vert: 1"=5'



Storm Drain Profile- Parcel: A-12

Scale: Horiz: 1"=40'
Vert: 1"=5'



Storm Drain Profile- Parcel: A-12

Scale: Horiz: 1"=40'
Vert: 1"=5'

STRUCTURE SCHEDULE FOR PARCEL A-12

NO.	TYPE	INV. IN.	INV. OUT.	TOP ELEV.	REMARKS
I-30	A-5	182.75	186.5		HO CO STD. SD. 4.01
I-31	A-5	180.25	183.5		HO CO STD. SD. 4.01
I-32	A-5	178.99	184.1		HO CO STD. SD. 4.01
I-33	A-5	177.96	184.1		HO CO STD. SD. 4.01
I-34	A-5	176.99	184.3		HO CO STD. SD. 4.01
I-35	A-5	170.25	174.0		HO CO STD. SD. 4.01
I-36	A-5	172.95	177.2		HO CO STD. SD. 4.01
I-37	A-5	171.75	177.4		HO CO STD. SD. 4.01
M-15	STD. MANHOLE 4'	174.82	174.42	180.9	HO CO STD. G. 5.12
SC-4		168.04	167.74	176.0	
M-11	STD. MANHOLE 4'	169.32	167.74	173.0	HO CO STD. G. 5.12
M-15	STD. MANHOLE 4'	170.75	170.48	179.2	HO CO STD. G. 5.12
SC-3		169.50	169.20	179	
EB-3	END SECTION	168.00		166.0	

PIPE SCHEDULE

SIZE	CLASS	LF
18"	RCCP CL. IV.	484 LF
18"	RCCP CL. IV.	389 LF
24"	RCCP CL. IV.	140 LF

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

Howard County Seal

CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE: 9/5/01

CHIEF, DIVISION OF LAND DEVELOPMENT
DATE: 9/14/01

DIRECTOR
DATE: 9/11/01

Date No. Revision Description

Troy Hill Corporate Center
Parcel A-12

OWNER/DEVELOPER
TROY HILL INVESTORS LPA
C/O C&S TROY HILL LLC
925 FELL STREET
BALTIMORE, MARYLAND 21231
(410) 534-6250

DMW
Dan McCune-Walker, Inc.
200 East Pennsylvania Avenue
Towson, Maryland 21286
(410) 286-3353
Fax 286-4705

A Team of Land Planners,
Landscape Architects,
Civil Engineers, Surveyors &
Environmental Professionals

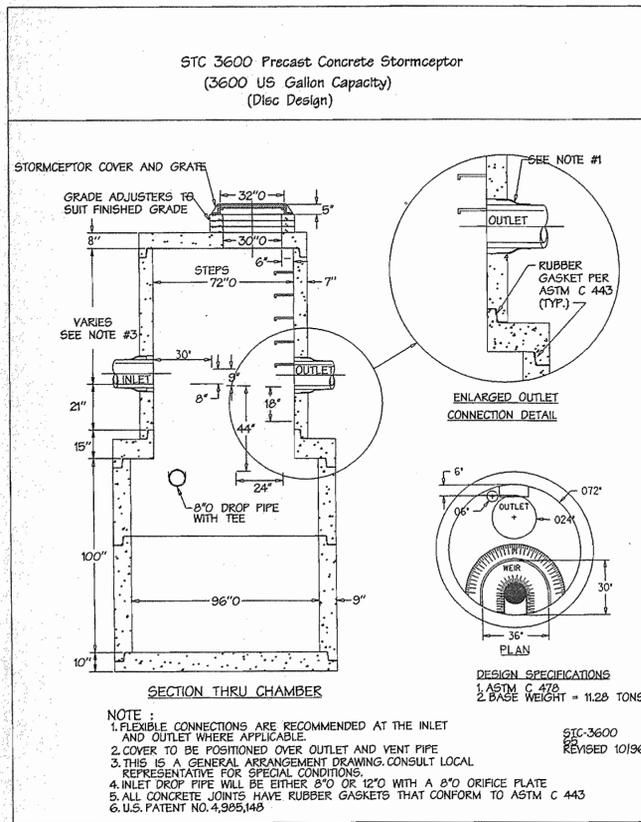
SUBMISSION NAME: TROY HILL CORPORATE CENTER SECTION/AREA: 1 LOT/PARCEL: A-12
FLAT/ OR LIP: BLOCK/ ZONE: TAX/ZONE MAP: 37 ELECT. DISTRICT: 1 CENSUS TRACT: 6012
MAP/ZONE: 18 M-1 SEWER CODE: 2182200
WATER CODE: A03

7-18-01
Date

Professional Engr. No. 21499

TITLE: **STORM DRAIN PROFILES**

Dwn. By: ADL Scale: 1" = 40' Proj. No. 99058.A
Des. By: LL Date: 6/21/01
Chk. By: Approved: 4 of 12



Stormceptor Detail: Parcel A-12

Scale: Not to Scale

Precast Concrete Order Request Form
* TO BE FILLED OUT ON ONE SIDE BY OWNER

Contractor Information
Name: KIMBALL CONST.
Address: 9615 PHILADELPHIA RD.
City: BALTIMORE
State: MARYLAND
Zip Code: 21237
Contact: LEWIS KIMBALL
Phone: 410-574-0800
Fax: 410-574-7850

Owner Information
Name: C & S TROY HILL LLC.
Phone:
Fax:

PLEASE draw orientation of inlet and outlet pipes on diagram along with the pipe inside diameter (in) and invert elevation (ft). Clearly mark inlet pipes with an "I" and outlet pipes with an "O". Please provide the inlet/outlet pipe angle in degrees.

IMPERVIOUS DRAINAGE AREA FOR THIS UNIT

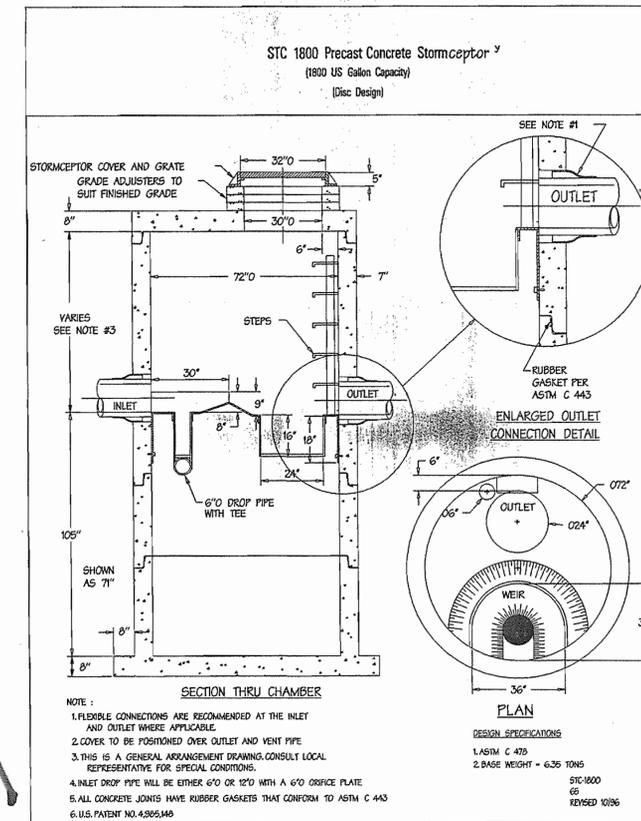
Stormceptor [®] Size	Insert Size	Manhole Number
STC 900 <input type="checkbox"/>	DISC <input type="checkbox"/>	SC3
STC 1200 <input type="checkbox"/>	22" <input type="checkbox"/>	Top Elevation (ft) 138.14 179.09
STC 1800 <input type="checkbox"/>	32" <input type="checkbox"/>	Inlet Pipe Invert (ft) 178.00
STC 2400 <input type="checkbox"/>	44" <input checked="" type="checkbox"/>	Outlet Pipe Invert (ft) 169.79
	CUSTOM	Pipe Type RCCP CL IV.
		Inlet Pipe Inside Diameter (ID) 24"
		Inlet Pipe Outside Diameter (OD) 30"
		Outlet Pipe Inside Diameter (ID) 24"
		Outlet Pipe Outside Diameter (OD) 30"

Project Name: TROY HILL CORPORATE CENTER
Approximate time frame of delivery (weeks): 8
Delivery Address: Street: TROY HILL DRIVE
City: ELKCRIDGE State: MARYLAND Zip Code:
Designer Company: DAFT-McCUNE AND WALKER
Designer Contact: RICK WILLIAMS Phone: 410-296-3333 Fax: 410-296-4705

PLEASE FILL OUT COMPLETELY AND FAX TO: **CSR** Hydro Conduit
ATTN: ED O'MALLEY FAX: (703)922-3659, PHONE: (703)971-1900
FOR TECHNICAL ASSISTANCE PLEASE CALL MIKE BARG, PHONE (703)971-1900

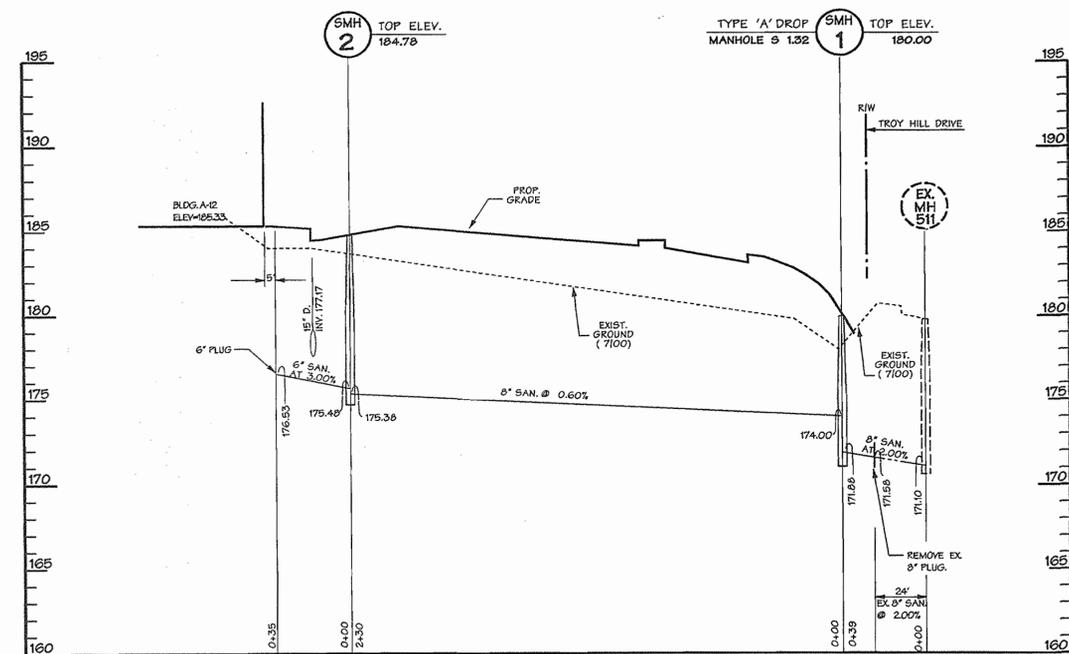
Stormceptor Form: Parcel A-12

Scale: Not to Scale

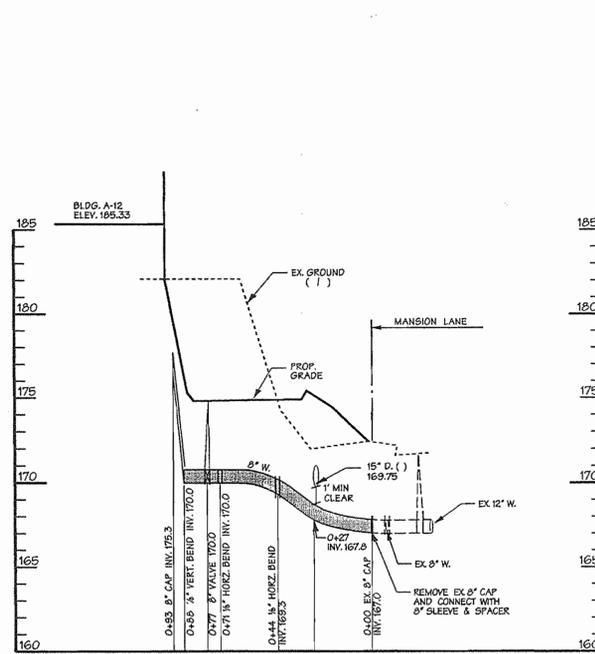


Stormceptor Detail: Parcel A-12

Scale: Not to Scale



Private San Sewer Profile- Parcel: A-12



Private 8" Water- Parcel: A-12

OPERATION AND MAINTENANCE SCHEDULE FOR STORMCEPTOR WATER QUALITY DEVICE

- 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 a minimum, utilizing the Stormceptor Inspection/Monitoring Form. Inspection shall be done by 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 Technical Manual, the unit must be cleaned.
- The Stormceptor water quality structure shall be checked and cleaned immediately after petroleum spills. The owner shall contact the appropriate regulatory agencies.
- The maintenance of the Stormceptor 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 owner.
- 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 of the Stormceptor units shall be repaired as needed.
- The owner shall retain and make the Stormceptor Inspection/Monitoring Forms available to the Howard County officials upon their request.

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

John Pennington 9/5/01
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Andy Shuman 7/16/01
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

James S. Burt 9/1/01
DIRECTOR DATE

Date	No.	Revision Description

Troy Hill Corporate Center
Parcel A-12

OWNER/DEVELOPER
TROY HILL INVESTORS LLC
c/o C & S TROY HILL LLC
925 FELL STREET
BALTIMORE, MARYLAND 21231
(410) 534-6350

DMW
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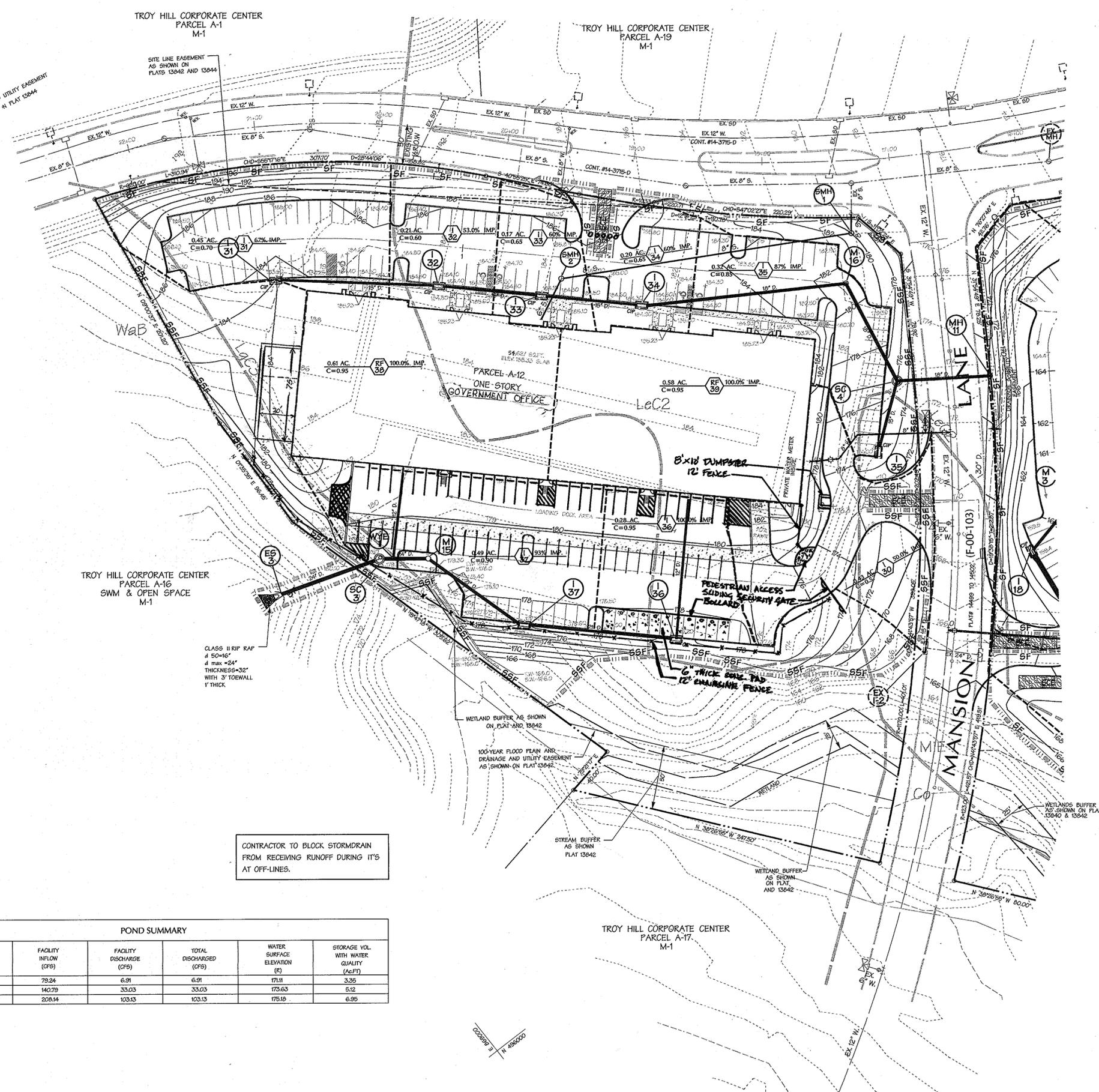
A Team of Land Planners,
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Engineers, Surveyors &
Environmental Professionals

7-18-01
Date

Professional Engr. No. 21918

SUBDIVISION NAME		SECTION/AREA	LOT/PARCEL
TROY HILL CORPORATE CENTER		1	A-12
PLAT OR L.P. BLOCK/LOT		37	
14802 1B M-1		1	GENUS TRACT
WATER CODE		A03	SEWER CODE
			2192200
TITLE			
UTILITY PROFILES			
Drn. By: ADL	Scale: 1"=40'	Proj. No. 99058.A	
Des. By: DMF	Date: 6/21/01		
Chk. By:	Approved:	5 of 12	

AS-BUILT



LEGEND

DRAINAGE AREA LINES --- L.O.D. ---

LIMIT OF DISTURBANCE --- L.O.D. ---

SUPER SILT FENCE --- SSF --- SSF ---

SILT FENCE --- SF --- SF ---

CURB INLET PROTECTION CIP [Symbol]

DRAINAGE AREA LABELS 0.28 AC. C=0.86 [Symbol] 100% IMP. [Symbol]

STABILIZED CONSTRUCTION ENTRANCE [Symbol]

SOILS KeB2 [Symbol]

WETLAND BUFFER [Symbol]

STREAM BUFFER [Symbol]

100-YEAR FLOOD PLAIN [Symbol]

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

Tom Meyer 8/29/01
 U.S.D.A. NATURAL RESOURCES CONSERVATION SERVICE DATE

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

John M. DeMarco 8/29/01
 APPROVED: HOWARD SOIL CONSERVATION DISTRICT DATE

PLAN NUMBER

DEVELOPERS CERTIFICATE:

I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT.

John M. DeMarco 6/21/01
 SIGNATURE OF DEVELOPER DATE

ENGINEERS CERTIFICATE:

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

W. Richard DeMarco 7-18-01
 SIGNATURE OF ENGINEER DATE

W. Richard DeMarco
 PRINT NAME BELOW SIGNATURE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

John DeMarco 9/5/01
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Cindy Harwell 7/1/01
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Joseph A. Rantz 7/1/01
 DIRECTOR DATE

Date	No.	Revision Description
12/1/01	2	MEZZANINE & BLOG ADDITION TO PART 10
8/16/01	1	Building Addition, Fencing, Parking, Landscaping

Troy Hill Corporate Center
 Parcel A-12

OWNER / DEVELOPER
 TROY HILL MANORRES LLC
 640 C&D TROY HILL, LLC
 925 FELL STREET
 BALTIMORE, MARYLAND 21231
 (410) 534-6350

DMW
 Darr-McCune-Walker, Inc.
 200 East Pennsylvania Avenue
 Towson, Maryland 21286
 (410) 296-3333
 Fax 296-4705

A Team of Land Planners, Landscape Architects, Golf Course Architects, Engineers, Surveyors & Environmental Professionals

7-18-01
 Date

Professional Engr. No. 21146

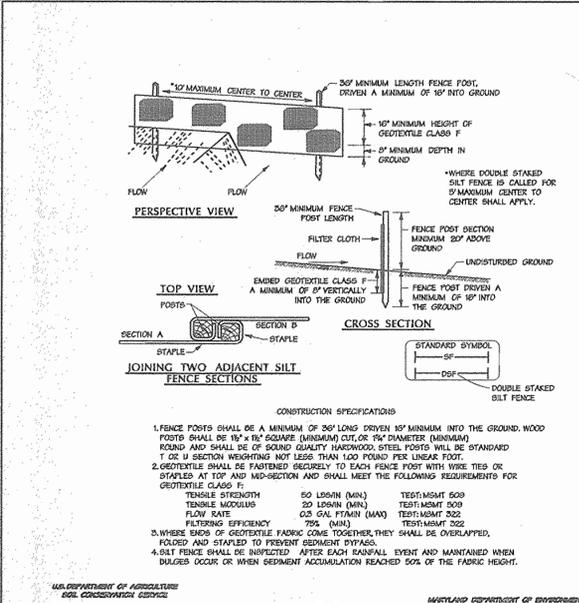
SUBDIVISION NAME TROY HILL CORPORATE CENTER	SECTION/AREA 1	LOT/PARCEL # A-12
PLAN OR LOT/BLOCK/ZONE 14502 10 M-1	TAX/ZONE MAP 37	ELECT. DISTRICT 1
WATER CODE A03	SEWER CODE 2192200	CENSUS TRACT 6012
TITLE DRAINAGE AREA MAP & SEDIMENT CONTROL PLAN PARCEL A-12		
Dwn. By: ADL	Scale: 1" = 40'	Proj. No. 99058.A
Des. By: RBW	Date: 6/21/01	
Chk. By:	Approved:	6 of 12

POND SUMMARY

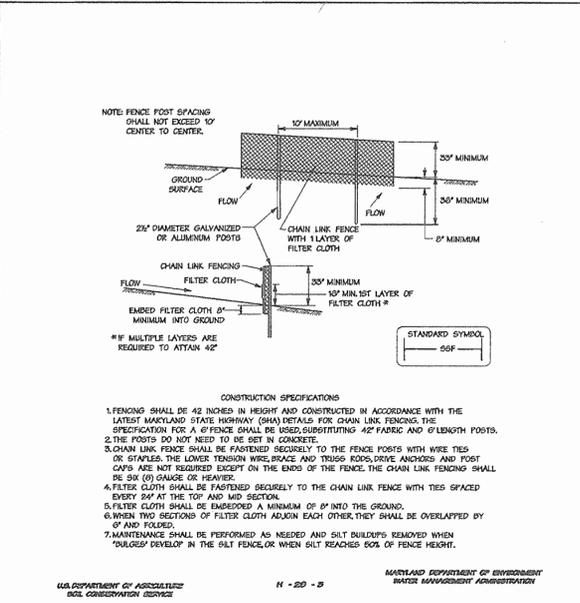
DESIGN STORM	FACILITY INFLOW (CFS)	FACILITY DISCHARGE (CFS)	TOTAL DISCHARGED (CFS)	WATER SURFACE ELEVATION (E)	STORAGE VOL. WITH WATER QUALITY (MG)
2 YR	79.24	6.91	6.91	171.11	3.25
10 YR	140.79	33.03	33.03	173.63	5.12
100 YR	208.14	103.13	103.13	175.10	6.99

CONTRACTOR TO BLOCK STORMDRAIN FROM RECEIVING RUNOFF DURING IT'S AT OFF-LINES.

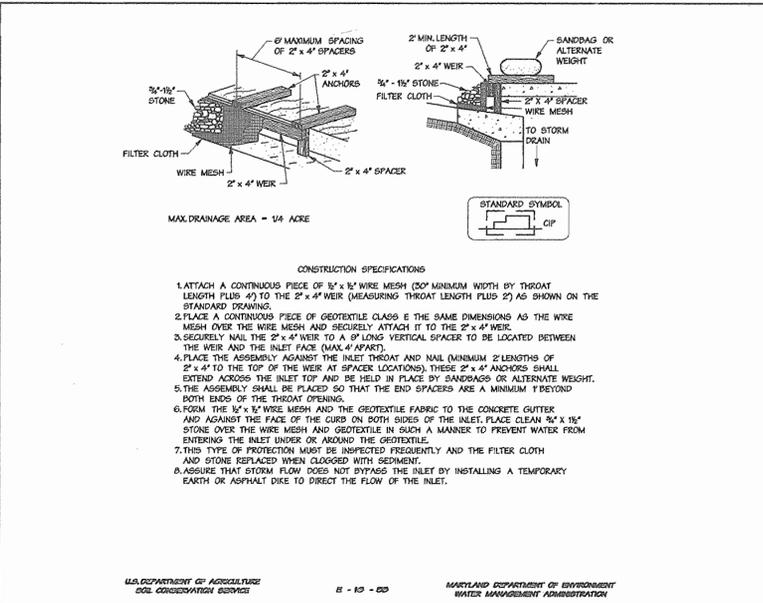




Silt Fence Not To Scale



Super Silt Fence Not To Scale



Curb Inlet Protection (COG or COS Inlets) Not To Scale

DUST CONTROL SPECIFICATIONS

TEMPORARY METHODS:

- MULCHES - SEE STANDARDS FOR VEGETATIVE STABILIZATION WITH MULCHES. ONLY MULCH SHOULD BE CRIMPED OR TACKED TO PREVENT BLOWING.
- VEGETATIVE COVER - SEE STANDARDS FOR TEMPORARY VEGETATIVE COVER.
- TILLAGE - TO ROUGHEN SURFACE AND BRING CLODS TO THE SURFACE. THIS IS AN EMERGENCY MEASURE WHICH SHOULD BE USED BEFORE SOIL BLOWING STARTS. BEGIN FLOWING ON WINDWARD SIDE OF SITE. CHISEL-TYPE PLOWS SPACED ABOUT 12 INCHES APART, SPRING-TOOTHED HARROWS, AND SIMILAR FLOWS ARE EXAMPLES OF EQUIPMENT WHICH MAY PROVIDE THE DESIRED EFFECT.
- IRRIGATION - THIS IS GENERALLY DONE AS 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.
- BARRIERS - SOLID BOARD FENCES, SNOW FENCES, BURLAP FENCES, STRAW BALS, 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 EFFECTIVE IN CONTROLLING SOIL BLOWING.
- CALCIUM CHLORIDE - APPLY AT A RATE THAT WILL KEEP SURFACE MOIST. MAY NEED RETREATMENT.

PERMANENT METHODS:

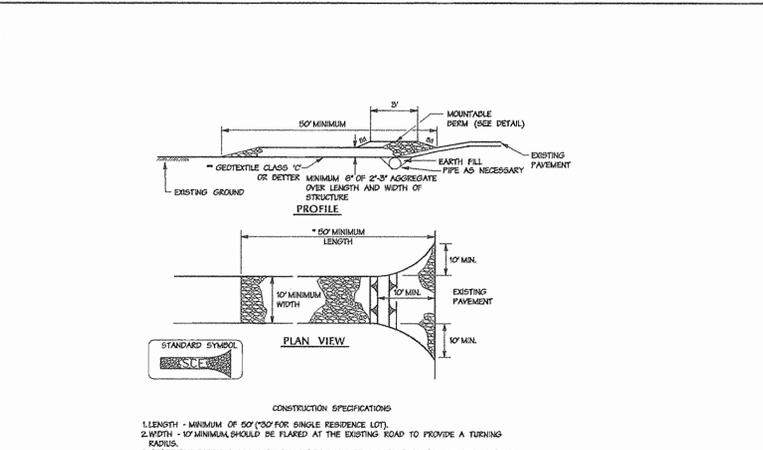
- PERMANENT VEGETATION - SEE STANDARDS FOR PERMANENT VEGETATIVE COVER, AND PERMANENT STABILIZATION WITH SOIL EXISTING TREES OR LARGE SHRUBS MAY AFFORD VALUABLE PROTECTION IF LEFT IN PLACE.
- TOPSOILING - COVERING WITH LESS ERODIBLE SOIL MATERIALS. SEE STANDARDS FOR TOPSOILING.
- STONE - COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL AFTER RECEIVING PERMISSION FROM THE SEDIMENT CONTROL INSPECTOR.

Dust Control Specifications Not To Scale

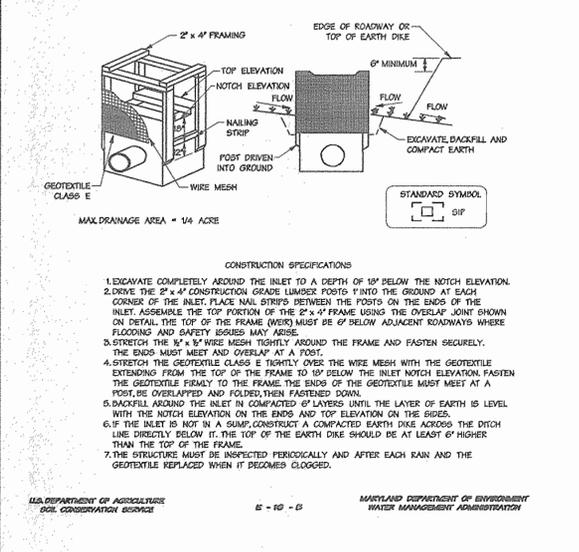
SEQUENCE OF CONSTRUCTION

SEQUENCE	NUMBER OF DAYS
1. OBTAIN A GRADING PERMIT.	7
2. INSTALL SEDIMENT AND EROSION CONTROL DEVICES.	7
3. ROUGH GRADE SITE.	14
4. CONSTRUCT WATER, SEWER AND STORM DRAIN AND INSTANT INLET PROTECTION.	30
5. BEGIN BUILDING CONSTRUCTION.	180
6. FINE GRADE SITE.	7
7. INSTALL CURB & GUTTER, PAVING AND SIDE WALKS.	5
8. STABILIZE ALL AREAS IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS.	30
9. UPON APPROVAL OF THE SEDIMENT AND EROSION CONTROL INSPECTION REMOVE ALL EROSION CONTROL MEASURES AND STABILIZE.	10

Sediment Control General Notes Not To Scale



Stabilized Construction Entrance Not To Scale



Standard Inlet Protection Not To Scale

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

Jim Meyer
U.S.D. NATURAL RESOURCE CONSERVATION SERVICE
DATE: 6/21/01

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

APPROVED: *John W. Johnson*
HOWARD SOIL CONSERVATION DISTRICT
DATE: 6/21/01

PLAN NUMBER: _____

DEVELOPERS CERTIFICATE:

I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENTATION BEGINNING THE PROJECT. I/WE, THE DEVELOPER, A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN AS-BUILT PLAN.

John W. Johnson
SIGNATURE OF DEVELOPER
PRINT NAME BELOW SIGNATURE
DATE: 6/21/01

ENGINEERS CERTIFICATE:

I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I AM A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN AS-BUILT PLAN OF THE PROJECT WITHIN 90 DAYS OF COMPLETION.

William DeMone
SIGNATURE OF ENGINEER
PRINT NAME BELOW SIGNATURE
DATE: 7-18-01

W. Richard DeMone

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

Chris Damann 9/5/01
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Chris Damann 9/6/01
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Joseph R. Rutz 9/16/01
DIRECTOR DATE

Date No. Revision Description

Troy Hill Corporate Center
Parcel A-12

OWNER / DEVELOPER
Troy Hill Investors LLC
606 E. TROY HILL L.L.C.
525 FELL STREET
BALTIMORE, MARYLAND 21201
(410) 534-6350

DMW
D&M-CONE-WALKER, INC.
200 East Pennsylvania Avenue
Towson, Maryland 21286
(410) 290-3353
Fax: 290-4705

A Team of Land Planners,
Landscape Architects,
Golf Course Architects,
Engineers, Surveyors &
Environmental Professionals

SUBDIVISION NAME: TROY HILL CORPORATE CENTER SECTION/AREA: 1 LOT/PARCELS: A-12
PLAT OR LOT RECORD NO.: 15022 ZONE: 37 EJECT. DISTRICT: 1 CENSUS TRACT: 6002
WATER CODE: A03 SEWER CODE: 2152200

TITLE: **SEDIMENT & EROSION CONTROL DETAILS**

Drn. By: ADL Scale: 1"=40' Proj. No. 99058.A
Des. By: RBW Date: 6/21/01
Chk. By: Approved: Professional Engr. No. 21998



STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION

Section I - Vegetative Stabilization Methods and Materials

- A. Site Preparation**
- Install erosion and sediment control structures (either temporary or permanent) such as diversion, grade stabilization structures, berms, waterways, or sediment control basins.
 - Perform all grading operations at right angles to the slope. Final grading and sloping is not usually necessary for temporary seeding.
 - Schedule required soil tests to determine soil amendment composition and application rates for sites having disturbed areas over 5 acres.
- B. Soil Amendments (Fertilizer and Lime Specifications)**
- Soil tests must be performed to determine the exact ratios and application rates for both lime and fertilizer on sites having disturbed areas over 5 acres. Soil analysis may be performed by the University of Maryland or a recognized commercial laboratory. Soil samples taken for engineering purposes may also be used for chemical analyses.
 - Fertilizers shall be uniform in composition, free flowing and suitable for accurate application by approved equipment. Material may be substituted for fertilizer with prior approval from the appropriate approval authority. Fertilizers shall all be delivered to the site fully labeled according to the applicable state fertilizer laws and shall bear the name, trade name or trademark and warranty of the producer.
 - Lime materials shall be ground limestone (hydrated or burnt lime may be substituted) which contains at least 85% total bases (calcium oxide plus magnesium oxide). Limestone shall be ground to such fineness that at least 50% will pass through a #100 mesh sieve and 90 - 100% will pass through a #20 mesh sieve.
 - Incorporate lime and fertilizer into the top 3 - 5" of soil by disking or other suitable means.

- C. Seeded Preparation**
- Temporary Seeding**
 - Seeded preparation shall consist of loosening soil to a depth of 3" to 5" by means of suitable agricultural or construction equipment, such as disc harrows or chisel plows or ripers mounted on construction equipment. After the soil is loosened it should not be rolled or dragged smooth but left in the rough condition.
 - Sloped areas (greater than 3%) should be tracked leaving the surface in an irregular condition with ridges running parallel to the contour of the slope.
 - Apply fertilizer and lime as prescribed on the plans.
 - Incorporate lime and fertilizer into the top 3 - 5" of soil by disking or other suitable means.
 - Permanent Seeding**
 - Minimum soil conditions required for permanent vegetative establishment:
 - Soil pH shall be between 6.0 and 7.0
 - Soluble salts shall be less than 500 parts per million (ppm).
 - The soil shall contain less than 40% clay but enough fine grained material (> 30% silt plus clay) to provide the capacity to hold a moderate amount of moisture. An exception is if loess or silt loess is to be planted in a sandy soil (< 30% silt plus clay) would be acceptable.
 - Soil shall contain 15% minimum organic matter by weight.
 - Soil must contain sufficient pore space to permit adequate root penetration.
 - If these conditions cannot be met by the soils on site, adding topsoil is required in accordance with Section 21 Standards and Specifications for Topsoil.
 - Areas previously graded in conformance with the drawings shall be maintained in a true and even grade then compacted or otherwise loosened to a depth of 3 - 5" to permit bonding of the topsoil to the surface area and to create horizontal erosion check slots to prevent topsoil from sliding down a slope.
 - Apply soil amendments as per soil test or as included on the plans.
 - Mix soil amendments into the top 3 - 5" of topsoil by disking or other suitable means. Lawn areas should be raked to smooth the surface, remove large stones and branches and ready the area for seed application. Where site conditions will not permit normal seeded preparation, loose surface soil by dragging with a heavy chain or other equipment to roughen the surface. Steep slopes (steeper than 3%) should be tracked by a dozer leaving the soil in an irregular condition with ridges running parallel to the contour of the slope. The top 1 - 3" of soil should be loose and friable. Seeded loosening may not be necessary on newly disturbed areas.

- D. Seed Specifications**
- All seed must meet the requirements of the Maryland State Seed Law. All seed shall be subject to retesting by a recognized seed laboratory. All seed used shall have been tested within the 6 months immediately preceding the date of sowing such material on this job.
 - Incubation - The incubation for testing legume seed in the seed mixtures shall be a pure culture of nitrogen-fixing bacteria prepared specifically for the species. Incubation shall not be used later than the date indicated on the container and fresh inoculant as directed on package. Use four times the recommended rate when hydroseeding. Water is very important to keep inoculant as cool as possible until used. Temperatures above 75-80 F. can weaken bacteria and make the inoculant less effective.

- E. Methods of Seeding**
- Hydroseeding** - Apply seed uniformly with hydroseeder (slurry includes seed and fertilizer), broadcast or drop seeder, or a culti-packer seeder.
 - If fertilizer is being applied at the time of seeding, the application rates amount will not exceed the following: Nitrogen: maximum of 100 lbs. per acre total of soluble nitrogen; P2O5 (phosphorus): 200 lbs/acre; K2O (potassium): 200 lbs/acre.
 - Lime - use only ground agricultural limestone. Up to 3 tons per acre may be applied by hydroseeding. Normally not more than 2 tons are applied by hydroseeding at any one time.
 - Seed and fertilizer shall be mixed on site and seeding shall be done immediately and without interruption.
 - Dry Seeding** - This includes use of conventional drop or broadcast spreaders.
 - Seed spread dry shall be incorporated into the subsoil at the rates prescribed on the Temporary or Permanent Seeding Standards or Tables 20, 21, 22. The seeded area shall then be rolled with a weighted roller to provide good seed soil contact.
 - Where practical, seed should be applied in two directions perpendicular to each other. Apply half the seeding rate in each direction.
 - Disk or Cultipacker Seeding** - Mechanized seeders that apply and cover seed with soil.
 - Cultipacker seeders are required to bury the seed in such a fashion as to provide at least 1/4 inch of soil covering. Seeded must be firm after planting.
 - Where practical, seed should be applied in two directions perpendicular to each other. Apply half the seeding rate in each direction.

- F. Mulch Specifications (in order of preference)**
- Straw shall consist of thoroughly threshed wheat, oat or corn straw, reasonably bright in color and shall not be rusty, moldy, caked, decayed or excessively dusty and shall be free of noxious weed seeds as specified in this Maryland Seed Law.
 - Wood Cellulose Fiber Mulch (WCFM)**
 - WCFM shall consist of specially prepared wood cellulose processed into a uniform fibrous physical state.
 - WCFM shall be dyed green or contain a green dye in the package that will provide an appropriate color to facilitate visual inspection of the uniformly spread slurry.
 - WCFM, including dye, shall contain no germination or growth inhibiting factors.
 - WCFM materials shall be manufactured and processed in such a manner that the wood cellulose fiber mulch will remain in uniform suspension in water under agitation and will blend with seed, fertilizer and other additives to form a homogeneous slurry. The mulch material shall form a higher the green cover on application, having moisture absorption and retention properties and shall cover and hold grass seed in contact with the soil without inhibiting the growth of the grass seedlings.
 - WCFM material shall contain no elements or compounds at concentration levels that will be phytotoxic.
 - WCFM must conform to the following physical requirements: fiber length to approximately 10 mm, diameter approximately 1 mm, pH range of 4.0 to 8.5, ash content of 15% maximum and water holding capacity of 30% minimum.
- Note: Only sterile straw mulch should be used in areas where one species of grass is desired.

G. Mulching Seeded Areas - Mulch shall be applied to all seeded areas where one species of grass is desired.

- If grading is completed outside of the seeding season, mulch alone shall be applied as prescribed in this section and maintained until the seeding season returns and seeding can be performed in accordance with these specifications.
 - When straw mulch is used, it shall be spread over all seeded areas at the rate of 2 tons/acre. Mulch shall be applied in a uniform loose depth of between 1" and 2". Mulch should achieve a uniform distribution and depth so that the soil surface is not exposed. If a mulch anchoring tool is to be used, the rate should be increased to 2.5 tons/acre.
 - Wood cellulose fiber used as a mulch shall be applied at a net dry weight of 1500 lbs. per acre. The wood cellulose fiber shall be mixed with water and the mixture shall contain a maximum of 50 lbs. of wood cellulose fiber per 100 gallons of water.
- H. Securing Straw Mulch (Mulch Anchoring)** shall be performed immediately following mulch application to minimize loss by wind or water. This may be done by one of the following methods (listed by preference), depending upon size of area and erosion hazard:
- A mulch anchoring tool is a tractor drawn implement designed to punch and anchor mulch into the soil surface a minimum of two (2) inches. This practice is most effective on large areas, but is limited to flatter slopes where operators can operate safely. If used on sloping land, this practice should be used on the contour if possible.
 - Wood cellulose fiber may be used for anchoring straw. The fiber mulch shall be applied at a net dry weight of 700 pounds/acre. The wood cellulose fiber shall be mixed with water and the mixture shall contain a maximum of 50 pounds of wood cellulose fiber per 100 gallons of water.
 - Application of liquid binders should be faster at the edges where wind catches mulch, such as in valleys or on crest of banks. The remainder of area should appear uniform after binder application. Synthetic binders - such as Acrylic DLR (Agro-Tack), DCA-70, Petrosol, Terra Tax II, Terra Tack AR, or other approved quality may be used at rates recommended by the manufacturer to anchor mulch.
 - Lightweight plastic netting may be stapled over the mulch according to manufacturer's recommendations. Netting is usually available in rolls 4' to 15' feet wide and 300 to 3,000 feet long.

Section II - Temporary Seeding

Vegetation - annual grass or grain used to provide cover on disturbed areas for up to 12 months. For longer duration of vegetative cover, Permanent Seeding is required.

SEED MIXTURE (HARDINESS ZONE)					FERTILIZER RATE (10-10-10)	LIME RATE
NO.	SPECIES	APPLICATION RATE (LB/AC)	SEEDING DATES	SEEDING DEPTHS		
1	ANNUAL RYEGRASS	50		1/4" - 1/2"	600 LB/AC (15 LB/1000 SF)	2 TONS/AC (100 LB/1000 SF)
2	WEEPING LOVEGRASS	4		1/4" - 1/2"		

Section III - Permanent Seeding

Seeding grass and legumes to establish ground cover for a minimum period of one year on disturbed areas generally receiving low maintenance.

SEED MIXTURE (HARDINESS ZONE)					FERTILIZER RATE (10-10-10)	LIME RATE
NO.	SPECIES	APPLICATION RATE (LB/AC)	SEEDING DATES	SEEDING DEPTHS		
1	ANNUAL RYEGRASS	50		1/4" - 1/2"	600 LB/AC (15 LB/1000 SF)	2 TONS/AC (100 LB/1000 SF)
2	WEEPING LOVEGRASS	4		1/4" - 1/2"		

Section IV - Sod - To provide quick cover on disturbed areas (2:1 grade or flatter).

- A. General Specifications**
- Class of turfgrass sod shall be Maryland or Virginia State Certified or Approved. Sod blocks shall be made available to the job foreman and inspector.
 - Sod shall be machine cut as a uniform soil thickness of 3/4" plus or minus 1/8", at the time of cutting. Measurement of thickness shall exclude top growth and should, individual pieces of sod shall be cut to the suppliers width and length. Maximum allowable deviation from standard widths and lengths shall be 5 percent. Broken pads and torn or uneven ends will not be acceptable.
 - Standard size sections of sod shall be strong enough to support their own weight and retain their size and shape when suspended vertically with a firm grasp on the upper 10 percent of the section.
 - Sod shall not be harvested or transplanted when moisture content (necessity dry or wet) may adversely affect its survival.
 - Sod shall be harvested, delivered, and installed within a period of 36 hours. Sod not transplanted within this period shall be approved by an agronomist or soil scientist prior to its installation.
- B. Sod Installation**
- During periods of excessively high temperature or in areas having dry subsoil, the subsoil shall be lightly irrigated immediately prior to laying the sod.
 - The first row of sod shall be laid in a straight line with subsequent rows placed parallel to and tightly wedged against each other. Lateral joints shall be staggered to promote more uniform growth and strength. Ensure that sod is not stretched or overlapped and that all joints are butted tight in order to prevent voids which would cause air drying of the roots.
 - Whenever possible, sod shall be laid with the long edge parallel to the contour and with staggering joints. Sod shall be rolled and tamped, pegged or otherwise secured to prevent slippage on slopes and to ensure solid contact between sod roots and the underlying soil surface.
 - Sod shall be watered immediately following rolling or tamping until the underside of the new sod pad and soil surface below the sod are thoroughly wet. The operations laying, tamping and irrigating for any piece of sod shall be completed within eight hours.
- C. Sod Maintenance**
- In the absence of adequate rainfall, watering shall be performed daily or as often as necessary during the first week and in sufficient quantities to maintain adequate moisture content. Watering should be done during the heat of the day to prevent wilting.
 - After the first week, sod watering is required as necessary to maintain adequate moisture content.
 - The first mowing of sod should not be attempted until the sod is firmly rooted. No more than 1/3 of the grass leaf shall be removed by the initial cutting or subsequent mowings. Grass height shall be maintained between 2" and 3" unless otherwise specified.

Section V - Turfgrass Establishment

Areas where turfgrass may be desired include lawns, parks, playgrounds, and commercial sites which will receive a medium high level of maintenance. Areas to receive seed shall be tilled by disking or other approved methods to a depth of 2 to 4 inches, leveled and raked to prepare a proper seeded. Stones and debris over 1/2 inches in diameter shall be removed. The resulting seeded

A. Turfgrass Mixtures

- Kentucky Bluegrass** - Full sun mixture - For use in areas that receive intensive management. Irrigation required in the areas of central Maryland and eastern shore. Recommended Certified Kentucky Bluegrass Cultivars Seeding Rate: 15 to 2.0 pounds/1000 square feet. A minimum of three bluegrass cultivars should be chosen ranging from a minimum of 10% to a maximum of 30% of the mixture by weight.
- Kentucky Bluegrass/Perennial Rye** - Full sun mixture - For use in full sun areas where rapid establishment is necessary and when turf will receive medium to intensive management. Certified Perennial Ryegrass Cultivars/Certified Kentucky Bluegrass Seeding rate: 2 pounds mixture/1000 square feet. A minimum of 3 Kentucky Bluegrass Cultivars must be chosen with each cultivar ranging from 10% to 30% of the mixture by weight.
- Tall Fescue/Kentucky Bluegrass** - Full sun mixture - For use in drought prone areas and/or for areas receiving low to medium management in full sun to medium shade. Recommended mixture includes certified Tall Fescue cultivars 50 - 100% certified Kentucky Bluegrass Cultivars 0 - 5%. Seeding rate: 5 to 8 lb/1000 sq. ft. One or more cultivars may be blended.
- Kentucky Bluegrass/Fine Fescue - Shade Mixture** - For use in areas with shade in bluegrass lawns. For establishment in high quality, intensively managed turf areas. Mixture includes certified Kentucky Bluegrass Cultivars 30-40% and certified Fine Fescue and 60-70%. Seeding rate: 1 1/2 - 3 lb/1000 square feet. A minimum of 3 Kentucky Bluegrass Cultivars must be chosen, with each cultivar ranging from a minimum of 10% to a maximum of 30% of the mixture by weight.

Note: Turfgrass varieties should be selected from those listed in the most current University of Maryland Publication, Agronomy Volume 477, "Turfgrass Cultivar Recommendations for Maryland".

- B. Ideal times of seeding**
- Western MD: March 15 - June 1, August 1 - October 1 (Hardiness Zones - 5b, 6a)
 - Central MD: March 1 - May 15, August 15 - October 15 (Hardiness Zone - 6b)
 - Southern MD, Eastern Shore: March 1 - May 15, August 15 - October 15 (Hardiness Zones - 7a, 7b)

C. Irrigation

If soil moisture is deficient, supply new seedlings with adequate water for plant growth (1/2" - 1" every 3 to 4 days depending on soil texture) until they are firmly established. This is especially true when seedlings are made late in the planting season, in abnormally dry or hot seasons, or on adverse sites.

D. Repairs and Maintenance

Inspect all seeded areas for failures and make necessary repairs, replacement, and reseeding within the planting season.

- Once the vegetation is established, the site shall have 90% groundcover to be considered adequately stabilized.
- If the stand provides less than 40% ground cover, reestablish following original lime, fertilizer, seedbed preparation and seeding recommendations.
- If the stand provides between 40% and 90% ground cover, overseeding and fertilizing using half of the rates originally applied may be necessary.
- Maintenance fertilizer rates for permanent seedings are shown in table 24 for lawns and other medium high maintenance turfgrass areas, refer to the University of Maryland publication "Lawn Care in Maryland" Bulletin No. 171.

G - 20 - 1A

TOPSOIL SPECIFICATIONS:

2.0 STANDARD AND SPECIFICATIONS FOR TOPSOIL

Definition

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

Purpose

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

- This practice is limited to areas having 2:1 or flatter slopes where:
 - The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth.
 - 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.
 - The original soil to be vegetated contains material toxic to plant growth.
 - The soil is so acidic that treatment with limestone is not feasible.
- 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 Experimental 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 textures and shall contain less than 5% by volume of cinders, stones, slags, coarse fragments, gravel sticks, roots, trash, and other materials larger 1 1/2 inch in diameter.

ii. Topsoil must be free of plants or plant parts such as Bermuda grass, quack grass, Johnsongrass, nutedge, poison ivy, thistle, or others as specified.

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. Place topsoil (if required) and apply soil amendments as specified in 2.0 Vegetative Stabilization - Section I - Vegetative Stabilization Methods and Materials.

III. For sites having disturbed areas over 5 acres:

i. On soil meeting Topsoil specifications, obtain test results dictating fertilizer and lime amendments required to bring the soil into compliance with the following:

a. pH for topsoil shall be between 6.0 and 7.5. If the tested soil demonstrates a pH of less than 6.0, sufficient lime shall be prescribed to raise the pH to 6.5 or higher.

b. Organic contents 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.

or chemicals used for weed control until sufficient time has elapsed (14 days min.) to permit dissipation of phytotoxic materials.

Note: Topsoil substitutes or 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 2.0 Vegetative Stabilization - Section I - 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 Erosion 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 seeded preparation.

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

Jim Murray 8/29/01
U.S.D.A. NATURAL RESOURCES CONSERVATION SERVICE

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

John Blanton 8/29/01
APPROVED: HOWARD SOIL CONSERVATION DISTRICT

DEVELOPERS CERTIFICATE:

I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT.

W.R. DeMarco 6/21/01
SIGNATURE OF DEVELOPER DATE

ENGINEERS CERTIFICATE:

I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I AM A REGISTERED PROFESSIONAL ENGINEER IN MARYLAND AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN AFFIDAVIT OF THE FUND WITHIN 30 DAYS OF COMPLETION.

W.R. DeMarco 7-18-01
SIGNATURE OF ENGINEER DATE

W. Richard DeMarco
PRINT NAME BELOW SIGNATURE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

John Blanton 8/5/01
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

John Blanton 8/10/01
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

John Blanton 8/10/01
DIRECTOR DATE

Date No. Revision Description

Troy Hill Corporate Center
Parcel A-12

OWNER/DEVELOPER
TROY HILL INVESTORS LLC
c/o 66 TROY HILL LLC
995 FELL STREET
BALTIMORE, MARYLAND 21291
(410) 534-6350

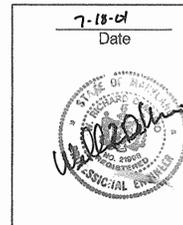
DMW
DeB. McCune-Walker, Inc.
200 East Pennsylvania Avenue
Towson, Maryland 21286
(410) 290-3383
Fax: 290-2706

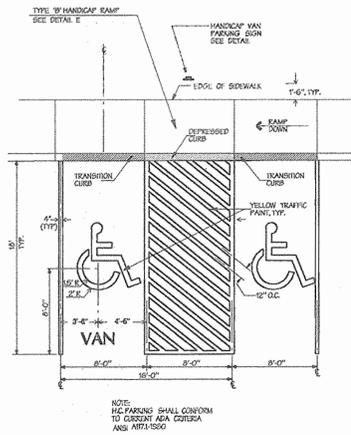
A Team of Land Planners, Landscape Architects, Golf Course Architects, Engineers, Surveyors & Environmental Professionals

SUBDIVISION NAME TROY HILL CORPORATE CENTER	SECTION/AREA 1	LOT/PARCEL# A-12
PLAT OR L.P. RECORD# 19	TAX/ZONE MAP# M-1	ELECT. DISTRICT 1
WATER CODE A03	SEWER CODE 2192200	CENSUS TRACT 5012

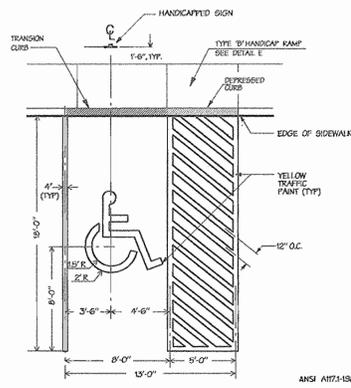
SEDIMENT & EROSION CONTROL DETAILS

Dm. By: ADL	Scale: 1"=40'	Proj. No. 99058-A
Des. By: RBW	Date: 6/21/01	
Chk. By:	Approved:	8 of 12

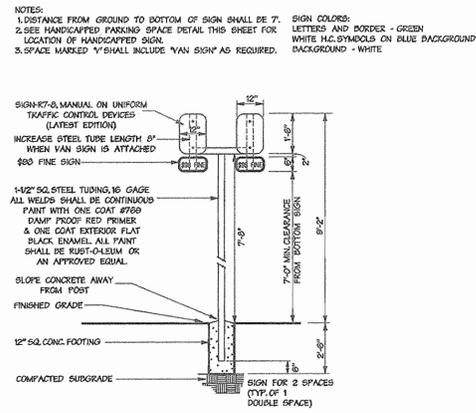




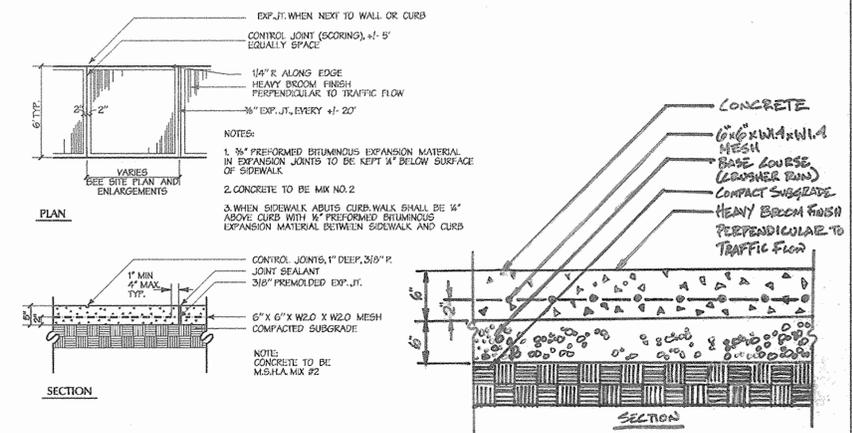
A Handicap Parking: Van & Standard
Not To Scale



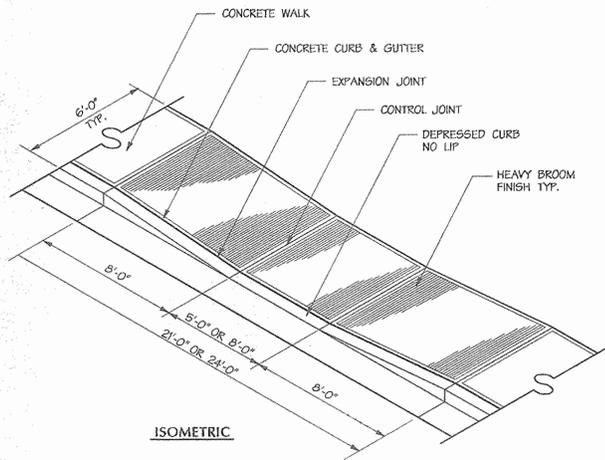
B Handicap Parking Space
Not To Scale



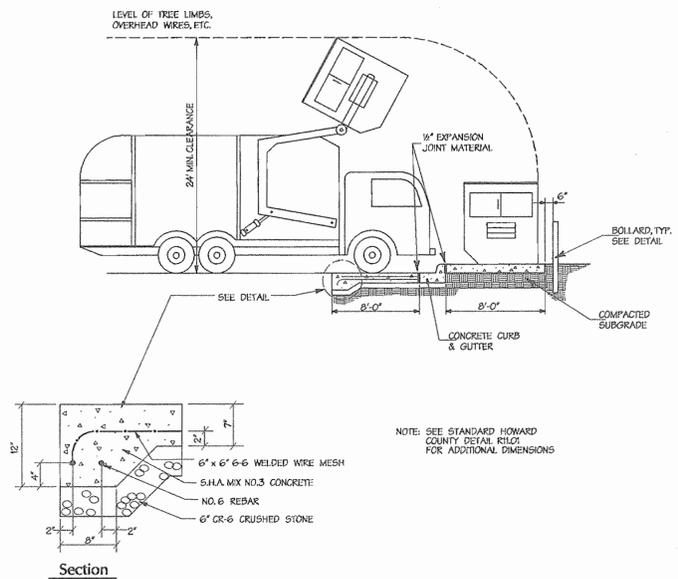
C Handicap Parking Signs
Not To Scale



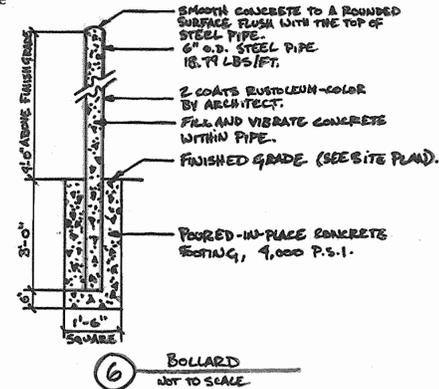
D Concrete Walk
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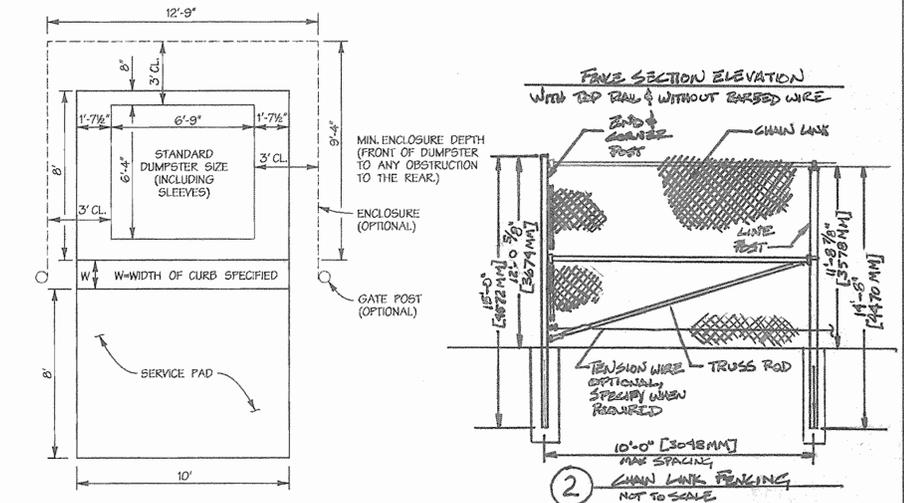
E Type "B" Handicapped Ramp
Not To Scale



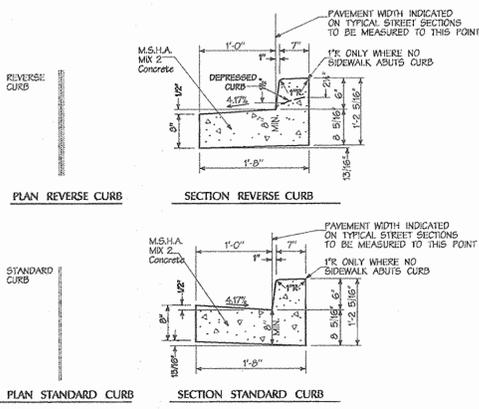
F Service Pad & Dumpster Bin
Not To Scale



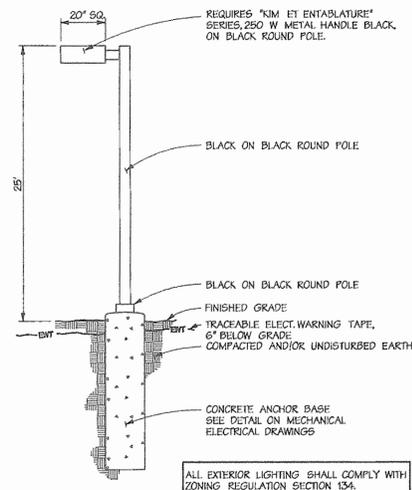
G Concrete Pad
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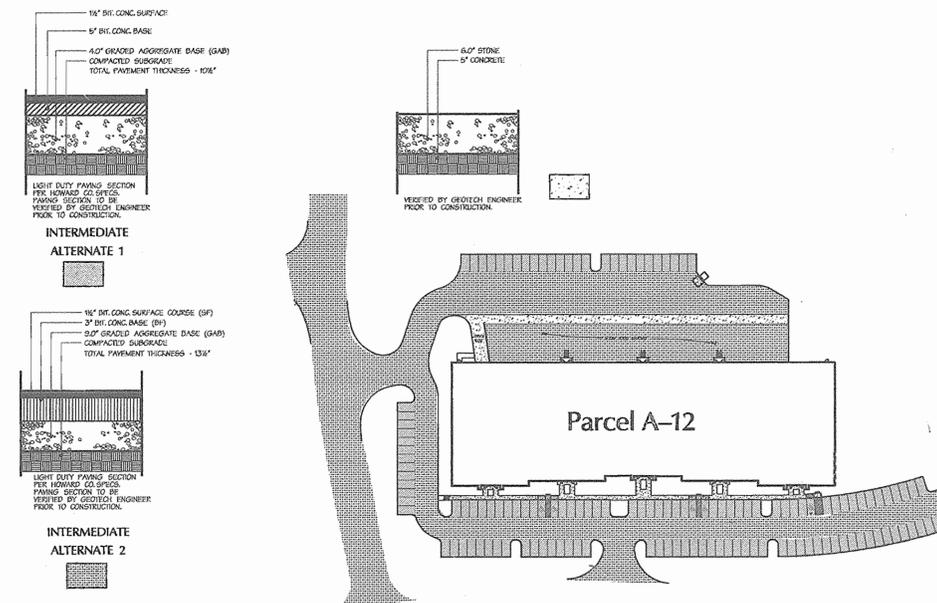
Dumpster Enclosure
Not To Scale



H Concrete Curb, Typical
Not To Scale



I Sharp Cutoff Area Light
Not To Scale



G Paving Detail
Not To Scale

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

[Signature] 9/5/01
CHIEF, DEVELOPMENT DIVISION & DATE

[Signature] 9/10/01
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 9/10/01
DIRECTOR DATE

8/14/01 BUILDING ADJ. FENCING, PARKING, LANDSCAPING
Date No. Revision Description

Troy Hill Corporate Center
Parcel A-12

OWNER/DEVELOPER:
TROY HILL INVESTORS LLC
c/o 1801 TROY HILL LLC
925 FELL STREET
BALTIMORE, MARYLAND 21201
(410) 534-6350

DMW
Duff-McCune-Walker, Inc.
200 East Pennsylvania Avenue
Towson, Maryland 21286
(410) 296-8353
Fax 296-4705

A Team of Land Planners,
Landscape Architects,
Golf Course Architects,
Engineers, Surveyors &
Environmental Professionals

SUBDIVISION NAME TROY HILL CORPORATE CENTER	SECTION/TARIA 1	LOT/PARCEL # A-12
PLAT # OR L.P. BLOCK # 14802 1B M-1	TAX/ZONING MAP 37	ELECT DISTRICT 1
WATER CODE A03	SEWER CODE 2152200	CENSUS TRACT 6012

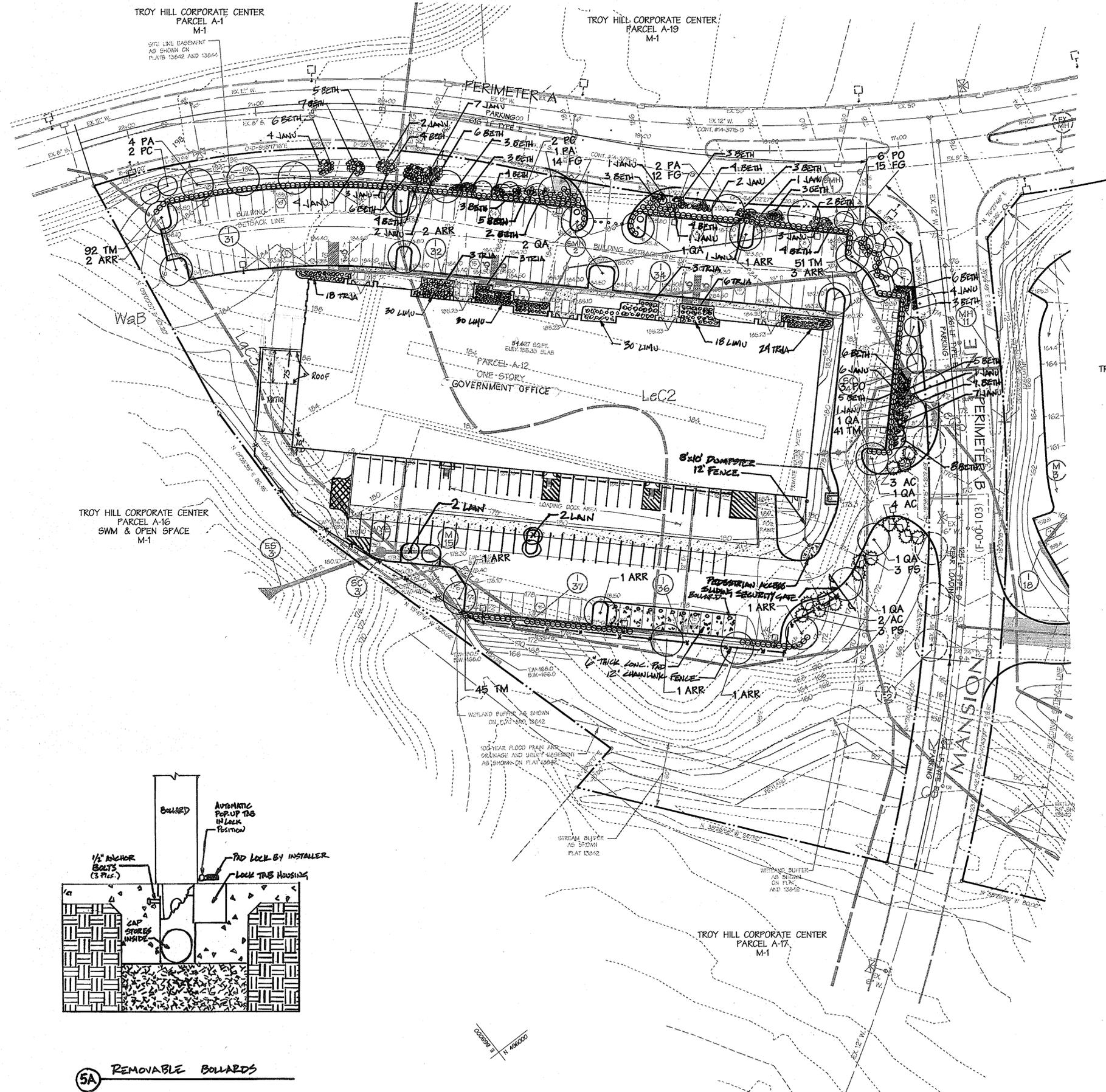
TITLE
SITE DETAILS

Drn. By: ADL	Scale: AS SHOWN	Proj. No. 99058.A
Des. By: ADL	Date: 6/21/01	9 of 12
Chk. By:	Approved:	

7-18-01
Date

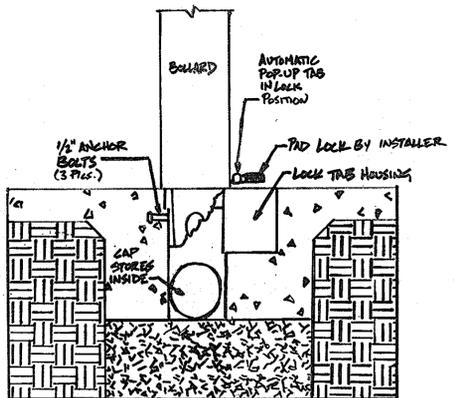
[Signature]
PROFESSIONAL ENGINEER

Professional Engr. No. 21998



LEGEND

- EX MAJOR CONTOURS --- 400 ---
- EX MINOR CONTOURS --- 402 ---
- PROP. STORM DRAIN --- 15" RCCP CL.V
- PROP. SEWER --- 8" S.
- PROP. WATER --- 8" W.
- EX STORM DRAIN --- EX 21" RCP
- EX SEWER --- EX 8" S.
- EX WATER --- EX 8" W.
- PARKING COUNT LABELS --- (M) 4
- CONCRETE SIDEWALKS --- [Symbol]
- STANDARD CURB --- [Symbol]
- REVERSE CURB --- [Symbol]
- HANDICAP SYMBOLS --- [Symbol]
- HANDICAP RAMPS --- [Symbol]
- MANHOLE & INLET LABELS --- (M) 4
- EX MANHOLE & INLET LABELS --- (M) 4
- DETAIL CALL OUTS --- [Symbol]
- PROP. LIGHT FIXTURE --- [Symbol]
- EX LIGHT FIXTURE --- [Symbol]
- PROP. SHADE TREES --- [Symbol]
- EX SHADE TREES --- [Symbol]
- PROP. FLOWERING TREES --- [Symbol]
- PROP. EVERGREEN --- [Symbol]
- PROP. 4' SHRUBS --- [Symbol]



5A REMOVABLE BOLLARDS

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

<i>[Signature]</i>	9/5/01
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE
<i>[Signature]</i>	7/10/01
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE
<i>[Signature]</i>	9/16/01
DIRECTOR	DATE

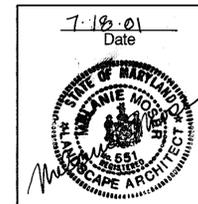
12/12/01	2	MEZZANINE & BLDG ADDITION TO PH10
6/16/01	1	BUILDING ADDITION, FENCING, PARKING, LANDSCAPING

Troy Hill Corporate Center
Parcel A-12

OWNER/DEVELOPER
TROY HILL INVESTORS LLC
600 C&E TROY HILL LLC
925 FELL STREET
BALTIMORE, MARYLAND 21231
(410) 534-6350

DMW
Darr McCune-Walkers, Inc.
200 East Pennsylvania Avenue
Towson, Maryland 21286
(410) 298-3333
Fax: 298-4705

A Team of Land Planners,
Landscape Architects,
Golf Course Architects,
Engineers, Surveyors &
Environmental Professionals

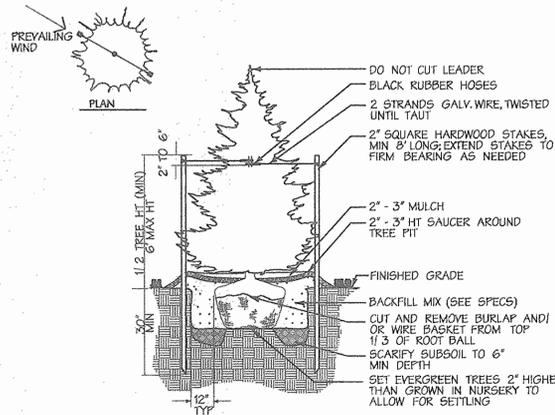


SUBDIVISION NAME	SECTION/AREA	LOT/PARCELS
TROY HILL CORPORATE CENTER	1	A-12
PLAT# OR LTP# BLOCK# ZONE	TAX/ZONE MAP	ELECT. DISTRICT
14502 13 M-1	37	6012
WATER CODE	SEWER CODE	
A03	2152200	

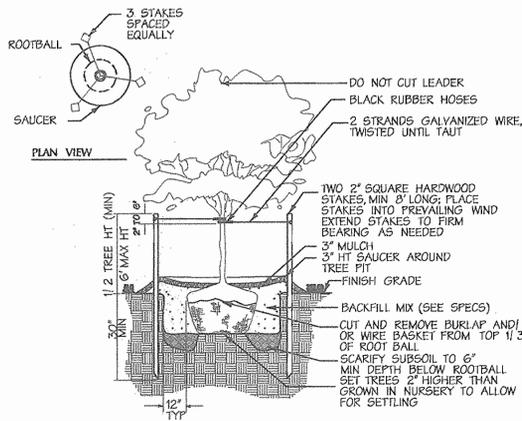
LANDSCAPE PLAN
Parcel A-12

Drn. By: FDK	Scale: 1"=40'	Proj. No. 99058.A
Des. By: MM	Date: 6/21/01	10 of 12
Chk. By:	Approved:	

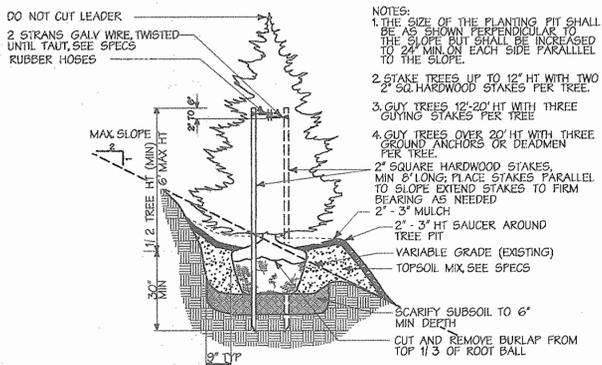
Landscape Architect No. 651



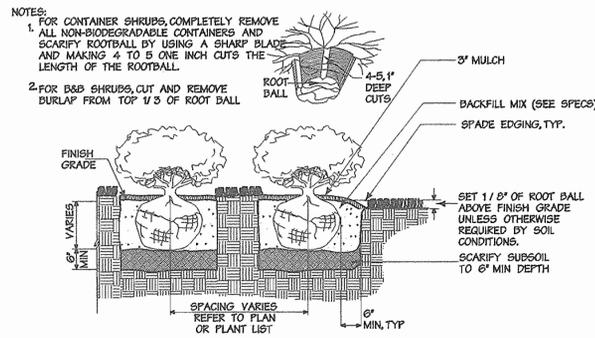
Evergreen Tree Planting
Not To Scale



Less Than 3" Cal. Tree Planting
Not To Scale



Evergreen Tree Planting on Slope
Not To Scale



Shrub Bed Planting
Not To Scale

**SCHEDULE A
PERIMETER LANDSCAPE EDGE**

Category	Adjacent to Roadways	Adjacent to Perimeter Properties
Frontage / Perimeter		
Parcel A-12	F.A. 616 LF Type E F.D. 423 LF Type E 125 LF Type D	
Credits for Existing Vegetation (Yes, No, Linear Feet) (Describe below if needed)	NO	NO
Credits for Wall, Fence or Berm (Yes, No, Linear Feet) (Describe below if needed)	NO	NO
Number of Plants Required	PARCEL A-12	
Shade Trees	20 Shade Trees	
Evergreen Trees	15 Evergreen	
Shrubs	250 Shrubs	
Number of Plants Provided	PARCEL A-12	
Shade Trees	20 Shade Trees	
Evergreen Trees	15 Evergreen	
Other Trees (2:1 substitution)	15 Flowering Trees	
Shrubs (10:1 substitution)	270 Shrubs	
(Describe plant substitution credits below if needed)		

Substitutions:
 15 Flowering Trees have been substituted for 5 Shade Trees on PARCEL A-12.
 2 Evergreen Trees have been substituted for 1 Shade Tree on PARCEL A-12.
 10 Shrubs have been substituted for 1 Shade Tree on PARCEL A-12.

**SCHEDULE B
PARKING LOT INTERNAL LANDSCAPING**

Number of Parking Spaces	PARCEL A-12 130
Number of Trees Required	PARCEL A-12 7
Number of Trees Provided	PARCEL A-12 7 Shade Trees
Other Trees (2:1 substitution)	
Number of Islands Required @ 120 sp.	PARCEL A-12 7
Number of Islands Provided	PARCEL A-12 7

Bonding Amount: 20 Shade Trees @ \$300
 15 Flowering Trees @ 300
 15 Evergreen Trees @ \$300
 270 Shrubs @ \$30
 Total: \$ 20,250

Landscape Notes

- The contractor shall review architectural/engineering plans to become thoroughly familiar with grading and surface utilities.
- All equipment and tools shall be placed so as not to interfere or hinder the pedestrian and vehicular traffic flow. See Seasonal Plant List for planting times of bulbs and seasonal plants.
- The contractor shall coordinate with lighting and irrigation contractors regarding timing of installation of plant material.
- The contractor shall insure that his work does not interrupt established or projected drainage patterns.
- During planting operations, excess waste materials shall be promptly and frequently removed from the site.
- The contractor is advised of the existence of underground utilities on the site. Their exact location shall be verified in the field with the owner or general contractor prior to the commencement of any digging operations. In the event they are uncovered, the contractor shall be held responsible for all damage to utilities and such damage shall not result in any additional expenses to the owner.
- If utility lines are encountered in excavation of tree pits, other locations for trees shall be made by the contractor without additional compensation. No changes of location shall be made without approval of the landscape architect.
- Maintain positive drainage out of planting beds at a minimum 2% slope. All grades, dimensions, and existing conditions shall be verified by the contractor on site before construction begins. Any discrepancies shall be brought to the attention of the landscape architect or owner.
- Every possible safeguard shall be taken to protect building surfaces, equipment, and furnishing. The contractor shall be responsible for any damage or injury to person or property which may occur as a result of his negligence in the execution of the work.
- In the event of variation between quantities shown on the plant list and the plans, the plans shall control. The contractor is responsible for verifying all plant quantities prior to the commencement of work. All discrepancies shall be reported to the landscape architect for clarification prior to bidding. The contractor shall furnish plant material in sizes as specified in plant list.
- The contractor shall stake all material located on the site for review and/or adjustment by the landscape architect prior to planting. All locations are to be approved by the landscape architect before excavation.
- Plants shall conform to current "American Standards for Nursery Stock" by American Association of Nurserymen (AAN), particularly with regard to size, growth, size of ball, and density of branch structure. Plant material shall be tagged as the source by the landscape architect unless this requirement is specifically waived.
- All plants (B&B or container) shall be properly identified by weather-proof labels securely attached thereto before delivery to project site. Labels shall identify plants by name, species, and size. Labels shall not be removed until the final inspection by the landscape architect or agent in charge.
- Any material and/or work may be rejected by the landscape architect if it does not meet the requirements of the specifications. All rejected materials shall be removed from the site by the contractor.
- No substitutions shall be made without written consent of the owner or landscape architect.
- The landscape architect or owner shall have the right, at any stage of the operations, to reject any and all work and material which, in his opinion, does not meet the requirements of these plans and specifications.
- The contractor shall be wholly responsible for stability and conditions of all trees and shrubs and shall be legally liable for any damage caused by instability of any plant materials.

- All proposed trees to be installed either entirely in or entirely out of planting beds. Planting bed lines are not to be obstructed. Mulch shall have been shredded within the last six months.
- All planting beds adjacent to lawn, sod, or seeded areas shall be spade edged.
- Maintenance shall begin after each plant has been installed and shall continue until 90 days after final acceptance by the architect or owner representative. Maintenance includes mowing of turf, watering, pruning, weeding, fertilizing, mulching, replacement of sick or dead plants, and any other care necessary for the proper growth of the plant material. The contractor must be able to provide continued maintenance if requested by the owner.
- Upon completion of all landscaping, an acceptance of the work shall be held. The contractor shall notify the landscape architect or owner for scheduling the inspection at least seven (7) days prior to the anticipated inspection date.
- All trees shall be guaranteed for 12 months from the date of acceptance.
- The contractor is responsible for testing project soils. The contractor is to provide a certified soils report to the owner. The contractor shall verify that the soils on site are acceptable for the proper growth of the proposed plant material. Should the contractor find poor soil conditions, the contractor shall be required to provide soil amendments as necessary. These amendments shall include, but not be limited to, fertilizers, lime, and topsoil. Proper planting soils must be verified prior to planting of materials.
- PLANTING MIX:
 - Planting mix shall be prepared at approved on-site staging area using approved on-site existing soil. Mix minimum quantities of 20 cubic yards or sufficient mix for entire job if less than 20 cubic yards is required.
 - Thoroughly mixed in the following proportions for tree and shrub planting mix:
 - .5 cy existing soil
 - .2 cy sharp sand
 - .3 cy wood residuals
 - 4.5 lbs treble superphosphate
 - 5 lbs dolomite limestone (eliminate for acid loving plants)
 - For bed planting shrubs and groundcover spaces 24 inches or closer, incorporate the following ingredients per 20 sf and incorporate into top 8 inches of existing soils by rototilling or similar method of incorporation:
 - .2 cy sharp sand
 - .3 cy organic material
 - 4.5 lbs treble superphosphate
 - 5 lbs dolomite limestone (eliminate for acid loving plants)
- The contractor shall dispose of stumps and major roots of all plants to be removed. Any depressions caused by removal operations shall be rolled with fertile, friable soil placed and compacted so as to reestablish proper grade for new planting and/or lawn areas.
- The contractor shall insure adequate vertical drainage in all plant beds and planters.

PLANT LIST LOT A-12

Key	Qty.	Botanical Name	Common Name	Size	Condition	Remarks
Major Deciduous Trees						
AR	13	Acer rubrum 'Red Sunset'	Red Sunset Red Maple	2 1/2'-3' Cal.	B&B	Full
PA	7	Platanus acerifolia	London Plane Tree	2 1/2'-3' Cal.	B&B	Full
QA	7	Quercus acutifolia	Sawtooth Oak	2 1/2'-3' Cal.	B&B	Full
Flowering Trees						
FC	4	Prunus cerasifera 'Thundercloud'	Thundercloud Plum	8'-10' Ht.	B&B	Full
PO	9	Prunus Oxymeris	Oxeye Cherry	8'-10' Ht.	B&B	Full
Evergreen						
AC	9	Abies concolor	Concolor Fir	6'-8' Ht.	B&B	Full
PS	6	Pinus strobus	White Pine	6'-8' Ht.	B&B	Full
Shrubs						
FG	41	Fothergilla gardenii 'Blue Mist'	Blue Mist Fothergilla	2 1/2'-3 1/2' Ht.	Con. Or B&B	
TM	229	Toxos media 'Wand'	Wand Yew	18"-24" Sp.	Container	4 O.C.

NOTE: FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING HAS BEEN POSTED AS PART OF THE DPW DEVELOPER AGREEMENT IN THE AMOUNT OF \$49,500.00 FOR THE SUBJECT PARCEL AS WELL AS PARCEL A-10 AND A-11 WAS BONDED UNDER THE DEVELOPER'S AGREEMENT FOR SDP-01-30. THE LANDSCAPING FOR A-12 MUST BE PLANTED AND INSTALLED IN ACCORDANCE WITH SDP-01-32.

NOTE:
 This project will be constructed in accordance with the provisions in section 16.124 of the Howard County Landscape Manual.

DEVELOPER'S/BUILDER'S CERTIFICATE

I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL.

I/WE FURTHER CERTIFY THAT UPON COMPLETION, A CERTIFICATION OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

NAME: *[Signature]* DATE: 6/21/01

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

PROVIDE THE FOLLOWING NOTE ON THE LANDSCAPE PLAN:

THE OWNER, TENANT, AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING, INCLUDING BOTH PLANT MATERIALS AND BERMS, FENCES AND WALLS. ALL PLANT MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION, AND WHEN NECESSARY, REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED.

KEY	Qty	Botanical Name	Common Name	SIZE	CONDITION	REMARKS
Flowering Trees						
LAN	4	Lagotis indica 'Nighting'	Common Crane Myrtle	6-8'	B&B	Upright Full
Shrub/Container						
BEM	129	Berberis thunbergii 'Grimon'	'Grimon' Pyracantha	18-24"	Container	Full
LNU	80	Liriodendron muscari	Lil'Heart	12-18"	Container	Full
JANU	80	Jasminum nudiflorum	Winter Jasmine	18-24"	Container	Full
TRJA	83	Trachelospermum asiaticum	ASIANC JASMINE	18-24"	Container	Full

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
[Signature] 9/5/01
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
[Signature] 9/10/01
 CHIEF, DIVISION OF LAND DEVELOPMENT
[Signature] 9/11/01
 DIRECTOR

Sheet 1 of 1 BUILDING ADDITION, FENCING, PARKING, LANDSCAPING
 Date No. Revision Description

Troy Hill Corporate Center
 Parcel A-12

OWNER/DEVELOPER:
 TROY HILL CORPORATE CENTER
 600 EAST PENNSYLVANIA AVENUE
 BALTIMORE, MARYLAND 21201
 (410) 534-6350

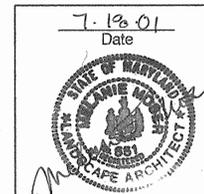
DMW
 Duff-McCune-Walber, Inc.
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 (410) 296-3333
 Fax 296-4705

A Team of Land Planners,
 Landscape Architects,
 Golf Course Architects,
 Engineers, Surveyors &
 Environmental Professionals

SUBMISSION NAME	SECTION/AREA	LOT/PARCEL #
TROY HILL CORPORATE CENTER	1	A-12
PLAN # ON LPT/BLOCK#	TAX/ZONING MAP	ELECT. DISTRICT
14502	1B M-1	37
WATER CODE	SEWER CODE	GENIUS TRACT
A03	2152200	6012

LANDSCAPE NOTES & DETAILS

Drn. By: Scale: Proj. No. 99058.A
 Des. By: Date: 6/21/01
 Chk. By: Approved: 11 of 12

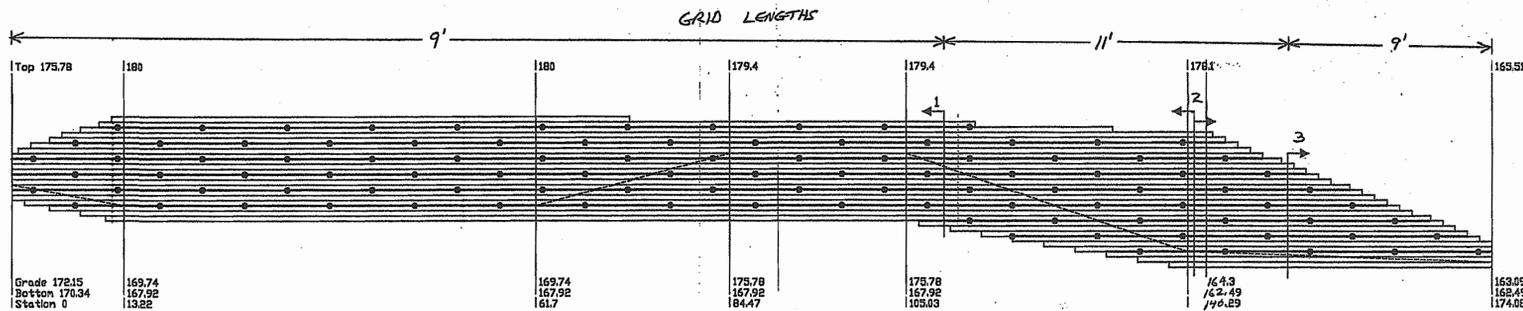


Landscape Architect No. 591

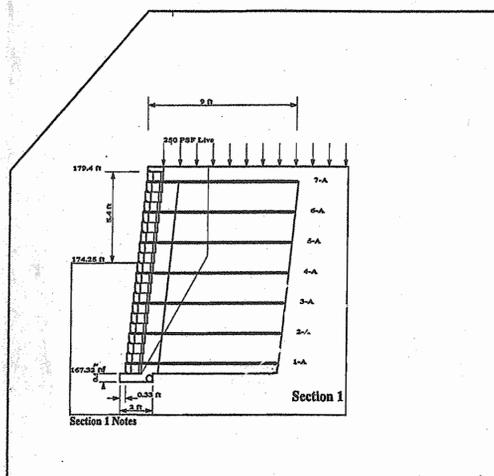
Project Information	
Project Name:	TROY HILL CORPORATE CENTER
Location:	Lot A-12, Howard County, MD
Project Number:	DS201207
Wall Number:	1 of 4 (W. of building)
Designer:	DKS
Date:	1-26-01/ redesign per DMW 1-16-01 civils

ALLAN BLOCK RETAINING WALL ELEVATION

Horizontal Scale: 1"= 10' Vertical Scale: 1"= 10'



Section	1	2	3
Top	179.4	178.19	174.57
Grade	174.85	164.3	163.96
Bottom	167.38	168.49	168.49
Station	109.44	139.88	149.84



Allan Block Corp.
7400 Metro Blvd.
Suite 185
Edina, MN 55439
Phone 612/835-5509
Fax 612/835-0013
http://www.allanblock.com

Nitterhouse Masonry Prod.
839 Cleveland Ave. PO Box 692
Chambersburg, PA 17201
717-267-4500
717-264-7535 - fax

AB Classic	
Total Wall Height	= 12.08 Feet
Block Height	= 0.604 Feet
Angle of Setback	= 6 Deg.
Depth of Block	= 0.97 Feet
Length of Block	= 1.629 Feet
Infill Soil	
Friction Angle	= 32 Deg.
Unit Weight	= 120 PCF
Foundation Soil	
Friction Angle	= 32 Deg.
Unit Weight	= 120 PCF
Bearing Capacity	
Factor of Safety	= 7.34
Safety Factors Static	
Actual Sliding	= 2.015
Actual Overturning	= 3.698
Safety Factors Seismic	
Actual Sliding	= N.A.
Actual Overturning	= N.A.
Geogrid Legend	
A-Minor 10XT	= 10' x 10' x 1.0
B-Minor 8XT	= 8' x 8' x 1.0
C-Minor 10XT	= 10' x 10' x 1.0
D-Minor 8XT	= 8' x 8' x 1.0
E-Minor 10XT	= 10' x 10' x 1.0
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T-Minor 8XT	= 8' x 8' x 1.0
U-Minor 10XT	= 10' x 10' x 1.0
V-Minor 8XT	= 8' x 8' x 1.0
W-Minor 10XT	= 10' x 10' x 1.0
X-Minor 8XT	= 8' x 8' x 1.0
Y-Minor 10XT	= 10' x 10' x 1.0
Z-Minor 8XT	= 8' x 8' x 1.0

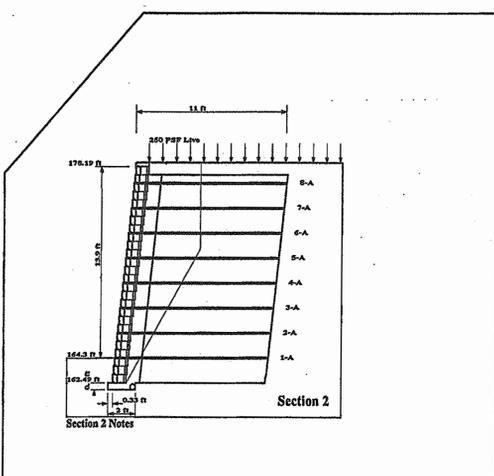
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Location:	Lot A-12, Howard County, MD
Project Number:	DS201207
Wall Number:	1 of 4 (W. of building)
Designer:	DKS
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The final design must provide for proper wall drainage to prevent the buildup of hydrostatic pressures over the service life of the structure. In the event additional water is introduced into the general wall area, either above or below grade, any designs from this software would be invalid. All installations must conform to Allan Block installation specifications. (Refer to ABENG.M4.0595)

1 of 3

ABwalls 2000 V3.1 Allan Block Corporation



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AB Classic	
Total Wall Height	= 15.7 Feet
Block Height	= 0.604 Feet
Angle of Setback	= 6 Deg.
Depth of Block	= 0.97 Feet
Length of Block	= 1.629 Feet
Infill Soil	
Friction Angle	= 32 Deg.
Unit Weight	= 120 PCF
Foundation Soil	
Friction Angle	= 32 Deg.
Unit Weight	= 120 PCF
Bearing Capacity	
Factor of Safety	= 2.29
Safety Factors Static	
Actual Sliding	= 2.015
Actual Overturning	= 3.641
Safety Factors Seismic	
Actual Sliding	= N.A.
Actual Overturning	= N.A.
Geogrid Legend	
A-Minor 10XT	= 10' x 10' x 1.0
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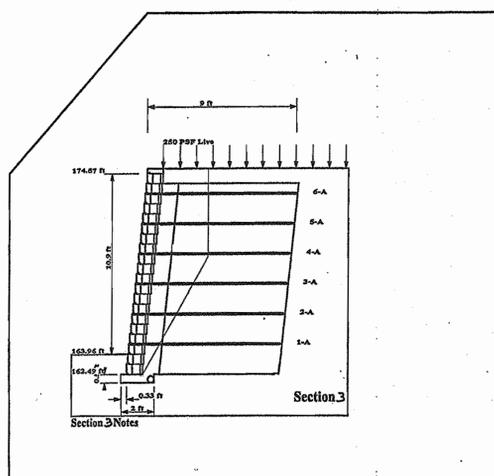
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Wall Number:	1 of 4 (W. of building)
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Friction Angle	= 32 Deg.
Unit Weight	= 120 PCF
Foundation Soil	
Friction Angle	= 32 Deg.
Unit Weight	= 120 PCF
Bearing Capacity	
Factor of Safety	= 2.41
Safety Factors Static	
Actual Sliding	= 2.015
Actual Overturning	= 3.698
Safety Factors Seismic	
Actual Sliding	= N.A.
Actual Overturning	= N.A.
Geogrid Legend	
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3 of 3

ABwalls 2000 V3.1 Allan Block Corporation

Main Office
7902 Runnymede Dr.
Frederick, MD 21702-2944
(301) 695-2542
Fax (301) 695-9502

PA Office
6242 Molly Pitcher Hwy
Shippensburg, PA 17257
(717) 709-1133
Fax (717) 709-1154

Ryan & Associates

Consulting & Design Engineers



SPECIALIZING IN THE DESIGN AND INSTALLATION OF SEGMENTAL RETAINING WALLS.

505 WINGATE ROAD • TIMONUM, MARYLAND 21093 • 410-561-8133 FAX 410-561-8134
ONLINE: WWW.WALLSCAPESINC.COM

7/24/01
Date



Professional Eng. No.

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING	
<i>Mark D. ...</i>	9/5/01
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE
<i>Chris ...</i>	9/10/01
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE
<i>Scott ...</i>	9/11/01
DIRECTOR	DATE

Date No.	Revision Description
----------	----------------------

Troy Hill Corporate Center

OWNER / DEVELOPER:
TROY HILL INVESTORS LLC
C/O CES TROY HILL LLC
925 FELL STREET
BALTIMORE, MARYLAND 21251
(410) 534-6380

DMW
Duff+McCuneWalker, Inc. A Team of Land Planners
200 East Pennsylvania Avenue
Covington, Maryland 21286
(410) 296-3333
Fax 296-4705

SUBDIVISION NAME	TROY HILL CORPORATE CENTER	SECTION AREA	A-12
PLAT OR L.F. BLOCK#	12428	TAX ZONE	37
MAP	18	ELECT. DISTRICT	H-1
CENSUS TRACT	6011.02		
WATER CODE	A03	SEWER CODE	2152200

TITLE ALLAN BLOCK RETAINING WALL DETAILS

PARCEL A-12

Drn. By:	DKS	Scale:	As Shown	Proj. No.	99058A
Des. By:	DKS	Date:	08-22-00		
Chk. By:	WKR	Approved:			12 of 12