SITE DEVELOPMENT PLAN
BALTIMORE AIR COIL
AT DORSEY RUN INDUSTRIAL CENTER
HOWARD COUNTY, MARYLAND

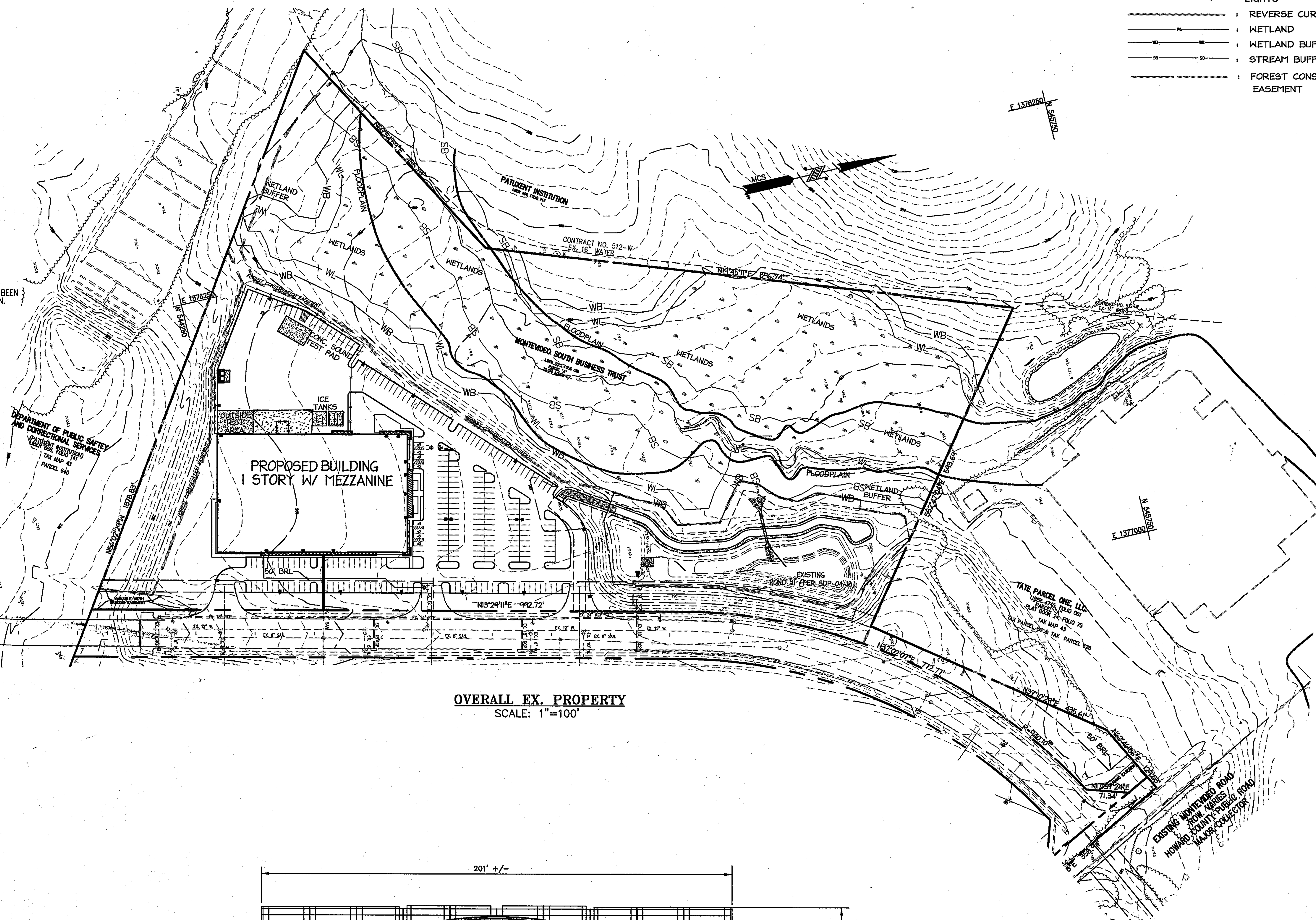
SHEET INDEX

GENERAL NOTES

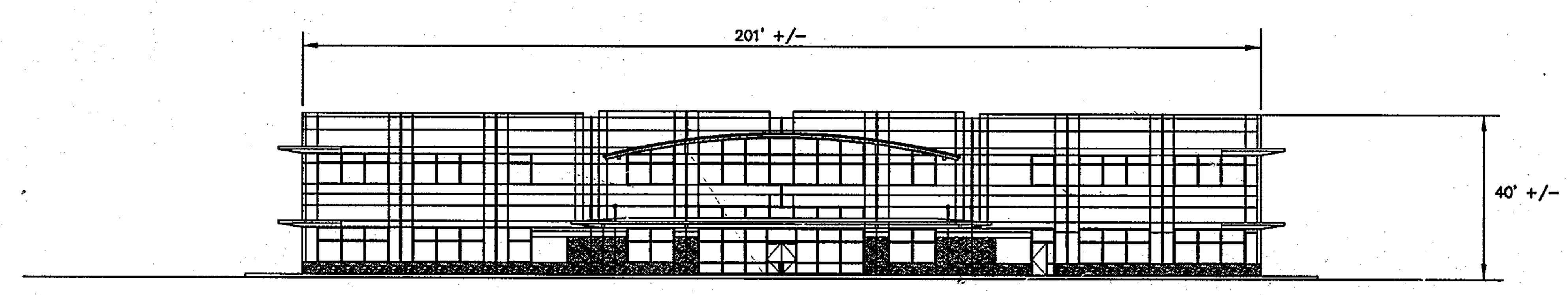
1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOL. IV "STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION" PLUS MSHA STANDARDS AND SPECIFICATIONS.
2. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/ CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
3. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
4. 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.
5. APPROXIMATE LOCATION OF EXISTING UTILITIES ARE PER HOWARD COUNTY RECORDS AND PROPOSED UTILITIES PER F-04-070
6. PUBLIC WATER AND SEWER PROVIDED BY CONTRACT # 14-4193-D
7. THIS SITE IS LOCATED IN THE DEEP RUN, POTAPSCO WATERSHED
8. 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-180--STANDARD.
9. CONTRACTOR SHALL MAINTAIN ALL SEDIMENT CONTROL DEVICES WITHIN THE LIMITS OF THE SITE DURING CONSTRUCTION OF THE SITE IMPROVEMENTS. CONTRACTOR SHALL PROVIDE ADDITIONAL EROSION AND SEDIMENTATION CONTROL MEASURES AS MAY BE NECESSARY DURING CONSTRUCTION AND/OR BY GOVERNING AGENCIES.
10. A 100 YR FLOODPLAIN STUDY IS NOT REQUIRED FOR THIS PROJECT. THE 100 YR FLOODPLAIN HAS BEEN PREVIOUSLY DELINEATED PER PLAT#(16916 - 16920) AND SHOWN AS A PART OF THIS PLAN.
11. EXISTING ON-SITE WETLANDS HAVE BEEN SHOWN AS APPROVED AND DELINEATED ON PLAT # (16916 - 16920)
12. ALL APPLICABLE STEEP SLOPES HAVE BEEN LOCATED ON THIS SITE DEVELOPMENT PLAN.
13. THERE ARE NO KNOWN CEMETERIES OR BURIAL GROUNDS ON THIS SITE. HOWEVER, UPON DISCOVERY OF ANY EVIDENCE OF BURIAL OR GRAVES, THE DEVELOPER WILL BE SUBJECT TO SECTION 16.1305 OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS.
14. ALL ADJACENT PROPERTIES ARE NON-RESIDENTAIL USES.
15. NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE WETLANDS, STREAM(S) OR THEIR REQUIRED BUFFERS AND FOREST CONSERVATION EASEMENT AREAS.
16. THE SUBJECT PROPERTY IS ZONED M-2 PER THE COMPREHENSIVE REZONING PLAN (02/02/2004).
17. THE TOPOGRAPHY AND SITE BOUNDARY WERE COMPLETED BY THR RBA GROUP ON AND BETWEEN JANUARY 8 AND JUNE 25, 2003.
18. THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLAN COORDINATE SYSTEM MONUMENT NOS 43HA AND 43B6 WERE USED FOR THIS PROJECT (NAD 1983/91).
19. CONTRACTOR SHALL VERIFY SIZE AND LOCATIONS OF ALL UNDERGROUND UTILITIES AND TEST PIT ALL UTILITIES, INCLUDING PROPOSED TIE IN LOCATIONS, AT LEAST 5 DAYS PRIOR TO STARTING ANY WORK ON THESE DRAWINGS. DISCREPANCES SHALL BE REPORTED TO THE ENGINEER IN ADVANCE OF CONSTRUCTION START.
20. THE CONTRACTOR SHALL INSURE THAT CURRENT AS BUILT RECORDS ARE MAINTAINED DURING CONSTRUCTION. UPON COMPLETION OF CONSTRUCTION, CERTIFIED (i.e. P.E. STAMPED) AS-BUILT DRAWINGS SHALL BE SUBMITTED TO THE OWNER.
21. WATER QUALITY & QUANTITY MANAGEMENT FOR THIS SITE IS PROVIDE IN STORMWATER MANAGEMENT POND #1 ON MASS GRADING PLAN (SDP-04-18).
22. OPERATING EXISTING VALVES, SWITCHES, SERVICES OR START UP OF NEW SERVICES SHALL BE COORDINATED WITH THE OWNERS REPRESENTATIVE.
23. UNLESS OTHERWISE NOTED, DIMENSIONS FROM CURB ARE MEASURED AT FACE OF CURB.
24. FOREST CONSERVATION OBLIGATION, IN ACCORDANCE WITH SECTION 16.1202 OF THE HOWARD COUNTY CODE AND FOREST CONSERVATION MANUAL, HAVE BEEN MET BY THE PREPARATION ON MASS GRADING PLAN (SDP-04-18).
25. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL
26. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING HAS BEEN POSTED AS PART OF THE DPW DEVELOPER'S AGREEMENT IN THE AMOUNT OF $22,680 FOR 47 SHADE TREES, 30 EVERGREEN TREES AND 136 SHRUBS.
27. THERE ARE NO STREET LIGHTS PROVIDED IN ACCORDANCE WITH SECTION 134 OF THE ZONING REGULATIONS.
28. THE TRAFFIC STUDY WAS PREPARED BY THE RBA GROUP ON JUNE 10, 2003. THE STUDY WAS AMENDED ON MARCH 19,2004 BY STREET TRAFFIC STUDIES, LTD.
29. ON 11/25/03 THE HOWARD COUNTY PLANNING DIRECTOR APPROVED WP-04-58 WHICH WAVIED SECTION 16.145 AND SECTION 16.146, WHICH REQUIRE APPROVAL OF SKETCH PLAN AND PRELIMINARY PLAN FOR MAJOR SUBDIVISIONS.

SITE ANALYSIS DATA CHART

1. GENERAL SITE DATA
   a. PRESENT ZONING: M-2 PER THE 2004 COMP. REZONING PLAN
   b. APPLICABLE DPZ FILE REFERENCES: SDP-04-18, F-04-070, WP-04-58,GP-04-55
   c. PROPOSED USE OF SITE OR STRUCTURE(S): MANUFACTURING
   d. PROPOSED WATER AND SEWER SYSTEMS: PUBLIC
2. AREA TABULATION
   a. TOTAL PROJECT AREA: 20.5 AC.±
   b. AREA OF THIS PLAN SUBMISSION: 20.5 AC±
   c. LIMIT OF DISTURBED AREA: 6.55 AC.±
   d. PROPOSED BLDG. SQUARE FOOTAGE: 93,238 TOTAL, INCLUDING MEZZANINE (65,052 SF - FIRST FLOOR, 27,894 SF - SECOND FLOOR, 292 SF - SECONDARY ROOF)
   e. BUILDING COVERAGE OF SITE: 1.5 AC.± AND 7.3% OF GROSS AREA (PROPOSED)
   f. THE PROPOSED BLDG. IS INTENDED FOR SINGLE TENANT USE.
3. PARKING SPACE DATA
   a. NUMBER OF PARKING SPACES REQUIRED BY ZONING REGULATIONS AND CRITERIA: 233 SP. (2.5 SP/1000 SF.)
   b. TOTAL NUMBER OF PARKING SPACES PROVIDED ON-SITE: 250 (2.6 +/- SP/1000 S.F.)
   NUMBER OF HANDICAPPED PARKING SPACES PROVIDED: 8 SPACES (INCLUDED IN PKG. SP. PROVIDED)



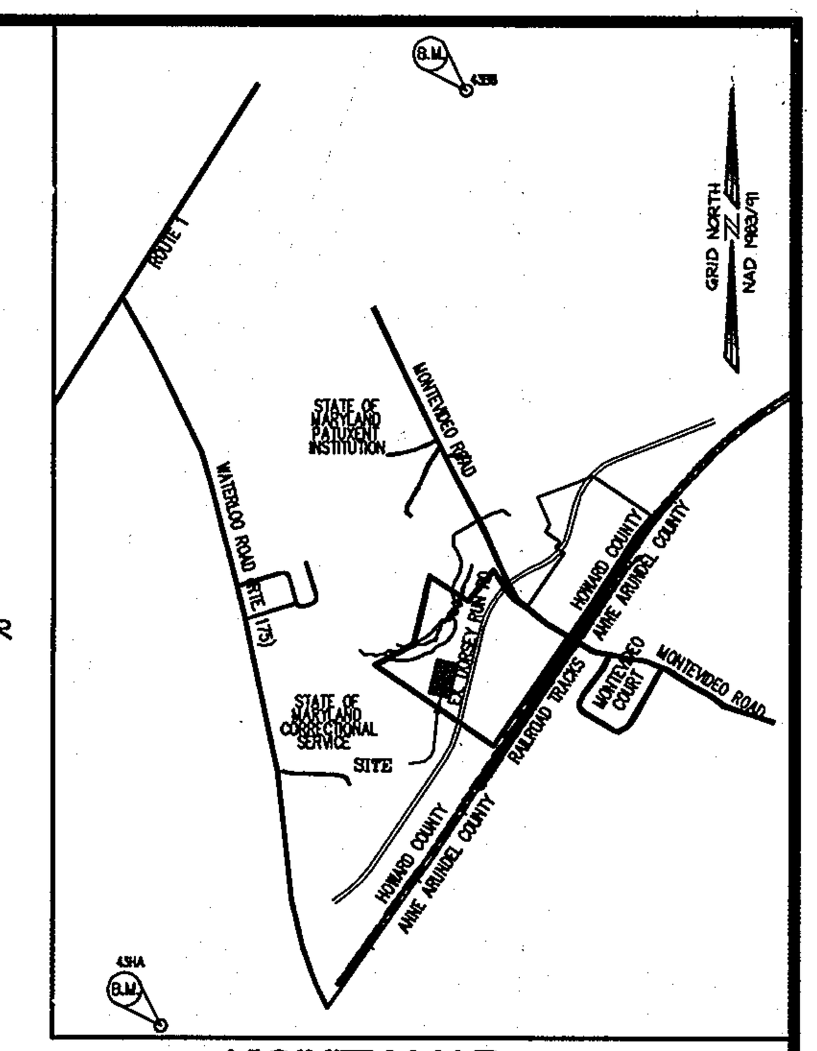
OVERALL EX. PROPERTY
SCALE: 1"=100'



PARKING LOT – NORTH ELEVATION
N.T.S

LEGEND

- EXISTING CONTOUR
- PROPOSED CONTOUR
- + 483 : PROPOSED SPOT ELEVATION
- EXISTING WOODS LINE
- EXISTING STORM SEWER
- PROPOSED STORM SEWER
- EXISTING SANITARY SEWER
- PROPOSED SANITARY SEWER
- EXISTING WATER LINE
- PROPOSED WATER LINE
- EXISTING CURB AND GUTTER
- PROPOSED CURB AND GUTTER
- E.P. : EDGE OF PAVEMENT
- F.D.O. : FOUNDATION DRAIN OUTLET
- SCHEMATIC PARKING LOT LIGHTS
- REVERSE CURB
- WETLAND
- WETLAND BUFFER
- STREAM BUFFER
- FOREST CONSERVATION EASEMENT



VICINITY MAP
SCALE: 1"=2000'

BENCHMARK

Horizontal Datum: Howard County Grid System (NAVD 1927)
Vertical Datum: NAVD 1929
Howard County Monument 43HA
N540761.72, E1373837.37, Elev. 224.90
Howard County Monument 43B6
N550601.61, E1376866.05, Elev. 210.56

7/6/2011
(Professional engineer seal, State of Maryland) for revision 1

~~APPROVED: DEPARTMENT OF PUBLIC WORKS~~
~~Chief, Bureau of Highways — Date~~

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Chief, Division of Land Development HB — Date 9/10/04
Chief, Development Engineering Division MAJ — Date 9/9/04
DIRECTOR — DATE 9/22/04

Date	No.	Revision Description
6/1/11	1	REVISED TO ADD OUTDOOR CONDENSOR TESTING AREA

BUILDING "A"
AT DORSEY RUN INDUSTRIAL CENTER, PARCEL A
TM 43, TM GRID 16, P/O TM PARCEL 572, FIRST ELECTION DISTRICT
HOWARD COUNTY, MD

OWNER / DEVELOPER

MONTEVIDEO SOUTH BUSINESS TRUST
C/O TRAMMELL CROW COMPANY
7315 WISCONSIN AVENUE/ SUITE 300 W
BETHESDA, MARYLAND 20814
TEL. (301) 530-6200 FAX (301) 530-6131

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7172 columbia gateway drive (suite 100) · columbia, md. 21046-2990
410.872.8690 · metro 301.881.0148 · fax 410.872.8693

ADDRESS CHART

LOT/PARCEL	STREET ADDRESS
572	7520 MONTEVIDEO ROAD

PERMIT INFORMATION CHART

SUBDIVISION NAME		LOT/PARCEL NO.		CENSUS TRACT
DORSEY RUN INDUSTRIAL CENTER		PARCEL A, P/O TM PARCEL 572		6067.03
PLAT NO. 16916-16920	GRID NO. 16	ZONE M-2	TAX MAP 43	ELECTION DISTRICT 1ST
WATER CODE PUBLIC			SEWER CODE PUBLIC	

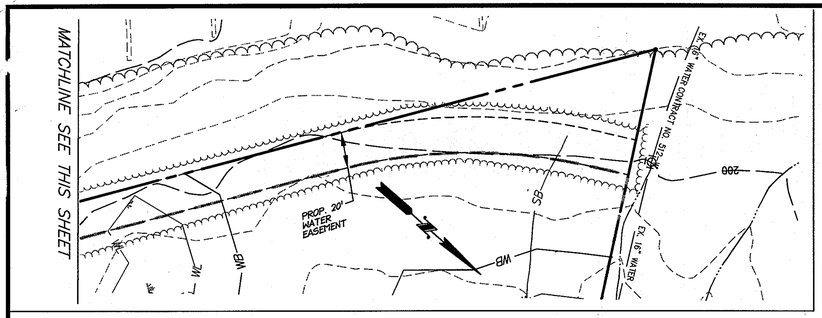
6/2/04
STATE OF MARYLAND
JOHN M. HOUSEHOLDER
No. 29907
PROFESSIONAL ENGINEER

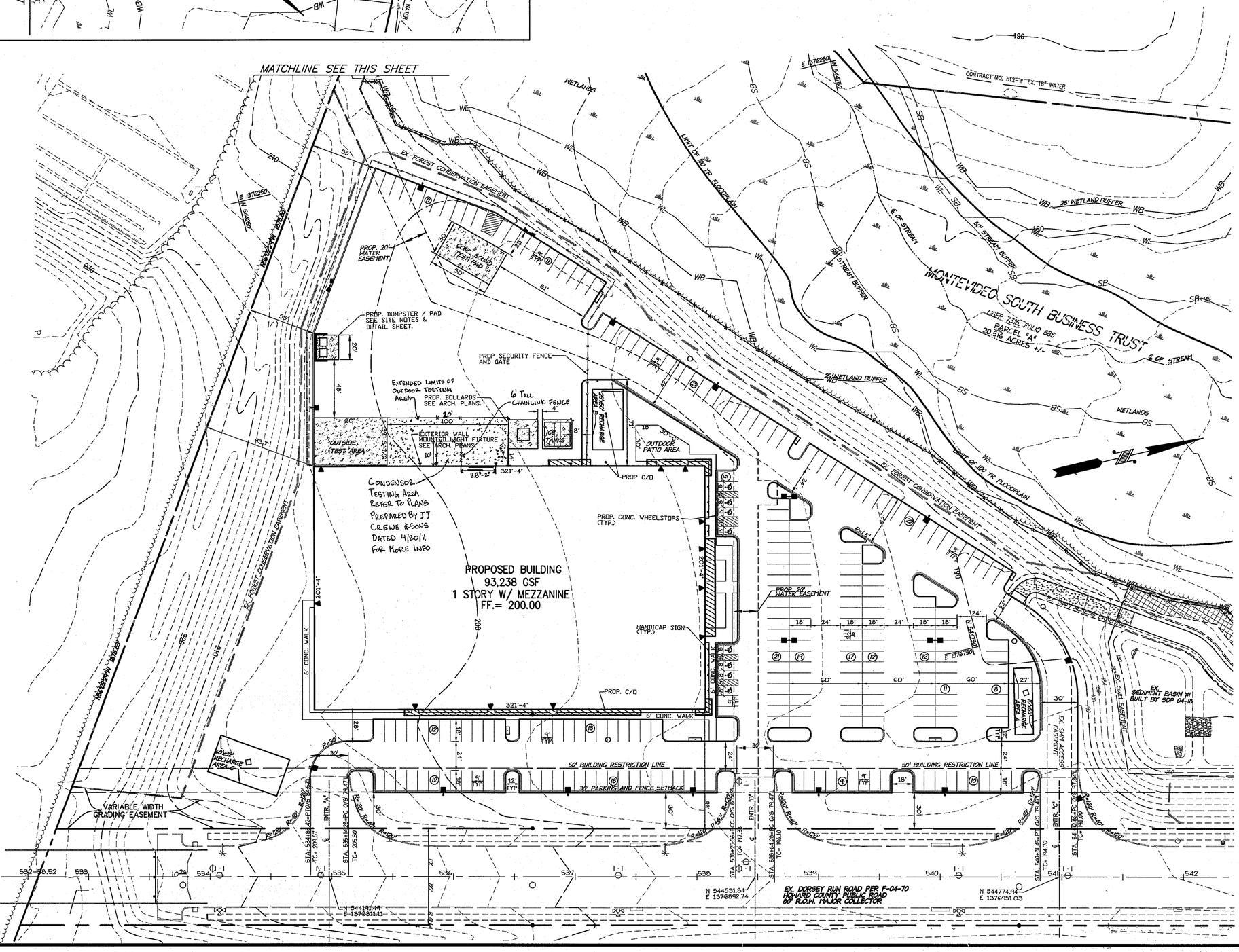
NOTE:
christopher consultants SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION, MEANS, METHODS, TECHNIQUES, OR PROCEDURES, UTILIZED BY THE CONTRACTOR , NOR FOR THE SAFETY OF PUBLIC OR CONTRACTOR'S EMPLOYEES, OR FOR THE FAILURE OF THE CONTRACTOR TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND STANDARD CONSTRUCTION PRACTICES.

TITLE:
COVER SHEET

DESIGN: BAM	SCALE: 1"=100'	PROJECT: 036701.01
DRAWN: ADL	DATE: 6/02/04	
CHECKED: JMH	APPROVED:	

MDC-121(SDP)
SDP-04-100





LEGEND

- EXISTING CONTOUR
- PROPOSED CONTOUR
- + 483 : PROPOSED SPOT ELEVATION
- EXISTING WOODS LINE
- EXISTING STORM SEWER
- PROPOSED STORM SEWER
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- PROPOSED SANITARY SEWER
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- PROPOSED WATER LINE
- EXISTING CURB AND GUTTER
- PROPOSED CURB AND GUTTER
- E.P. : EDGE OF PAVEMENT
- F.D.O. : FOUNDATION DRAIN OUTLET
- SCHEMATIC PARKING LOT LIGHTS
- REVERSE CURB
- WL : WETLAND
- WB : WETLAND BUFFER
- SB : STREAM BUFFER
- DOOR ENTRANCE
- ROOF OVERHANG
- WATER VALVE
- FH
- STORM DRAIN INLET
- EX. FOREST CONSERVATION EASEMENT

7/6/2011

STATE OF MARYLAND · JOHN M. HOUSEHOLDER · No. 29907 · PROFESSIONAL ENGINEER

for revision 1

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chief, Division of Land Development - MB	Date 7/6/04
Chief, Development Engineering Division MRJ	Date 7/9/04
Director	Date 7/12/04

Date	No.	Revision Description
6/1/11	1	REVISED TO ADD OUTDOOR CONDENSOR TESTING AREA

BUILDING 'A'
AT DORSEY RUN INDUSTRIAL CENTER, PARCEL A
TM 43, TM GRID 16, P/O TM PARCEL 572, FIRST ELECTION DISTRICT
HOWARD COUNTY, MD

OWNER / DEVELOPER

MONTEVIDEO SOUTH BUSINESS TRUST
C/O TRAMMELL CROW COMPANY
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410.872.8690 · metro 301.881.0148 · fax 410.872.8693

6/2/04
DATE
STATE OF MARYLAND · JOHN M. HOUSEHOLDER · No. 29907 · PROFESSIONAL ENGINEER

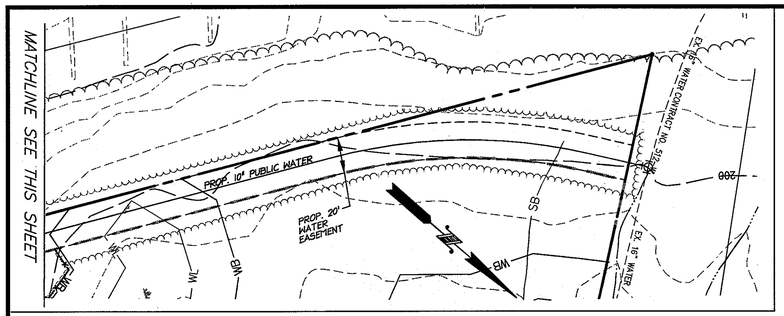
TITLE:

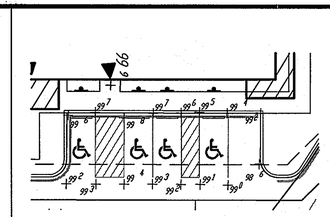
SITE LAYOUT PLAN

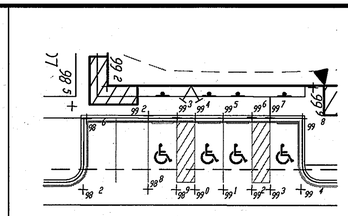
DESIGN: BAM	SCALE: 1"=40'	PROJECT: 036701.01	
DRAWN: ADL	DATE: 6/01/04	2 OF 12	
CHECKED: JMH	APPROVED:		

SDP-04-100

MDC-121(SDP)







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- : EXISTING CONTOUR
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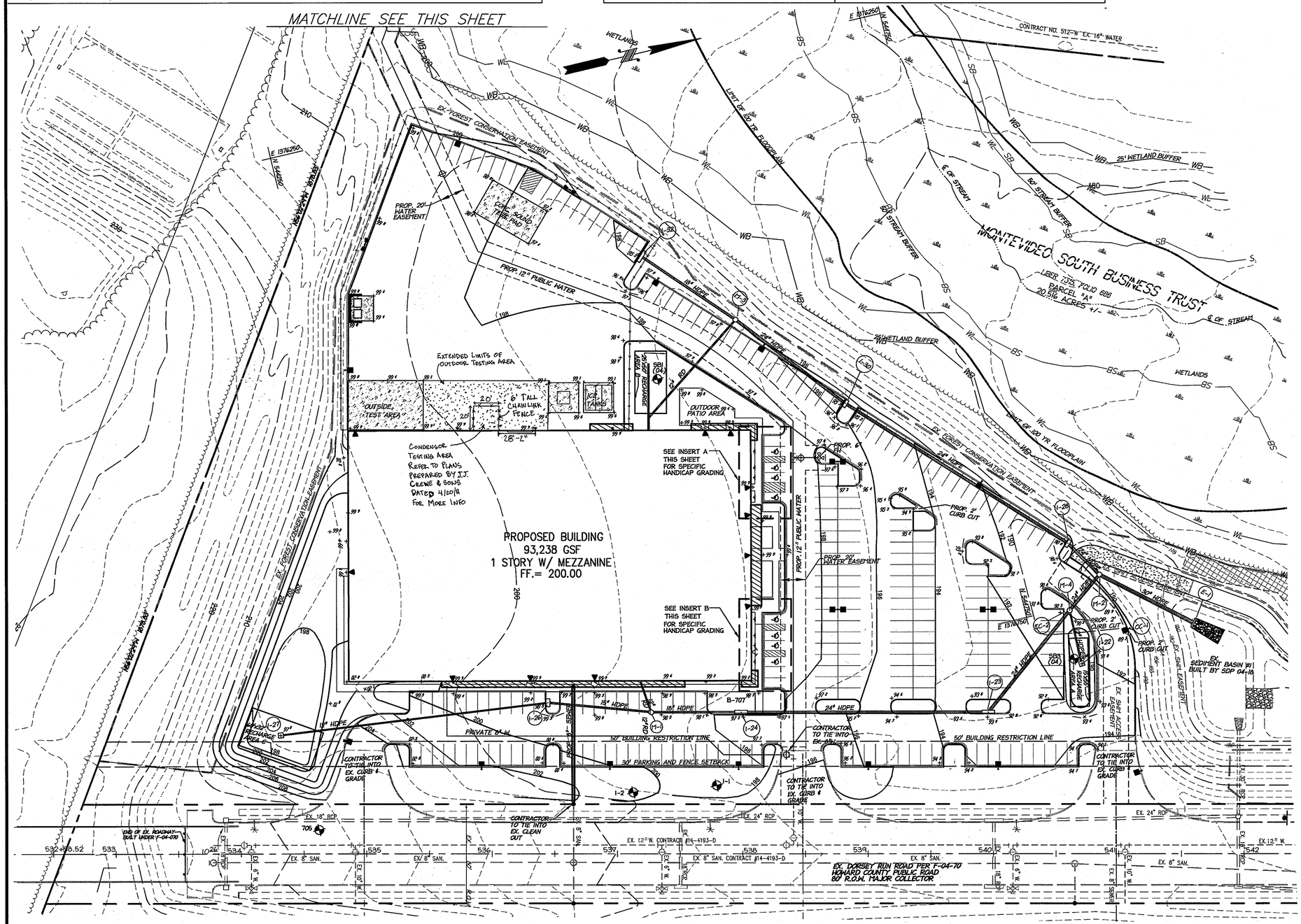
- : DOOR ENTRANCE
- : ROOF OVERHANG
- : WATER VALVE
- : FH
- : STORM DRAIN INLET
- : EX. FOREST CONSERVATION EASEMENT
- : SOIL BORINGS



7/6/2011

for revision 1

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chief, Division of Land Development	Date 7/19/04
Chief, Development Engineering Division	Date 9/8/04
Director	Date 9/22/04

Date	No.	Revision Description
6/1/11	1	REVISED TO ADD OUTDOOR CONDENSER TESTING AREA

BUILDING "A"
AT DORSEY RUN INDUSTRIAL CENTER, PARCEL A
TM 43, TM GRID 16, P/O TM PARCEL 572, FIRST ELECTION DISTRICT
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OWNER / DEVELOPER

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6/2/04
DATE

STATE OF MARYLAND
JOHN M. HOUSEHOLDER
No. 29907
PROFESSIONAL ENGINEER

TITLE:

GRADING & UTILITY PLAN

DESIGN: BAM	SCALE: 1"=40'	PROJECT: 036701.01
DRAWN: ADL	DATE: 6/01/04	3 OF 12
CHECKED: JMH	APPROVED:	

SDP-04-100

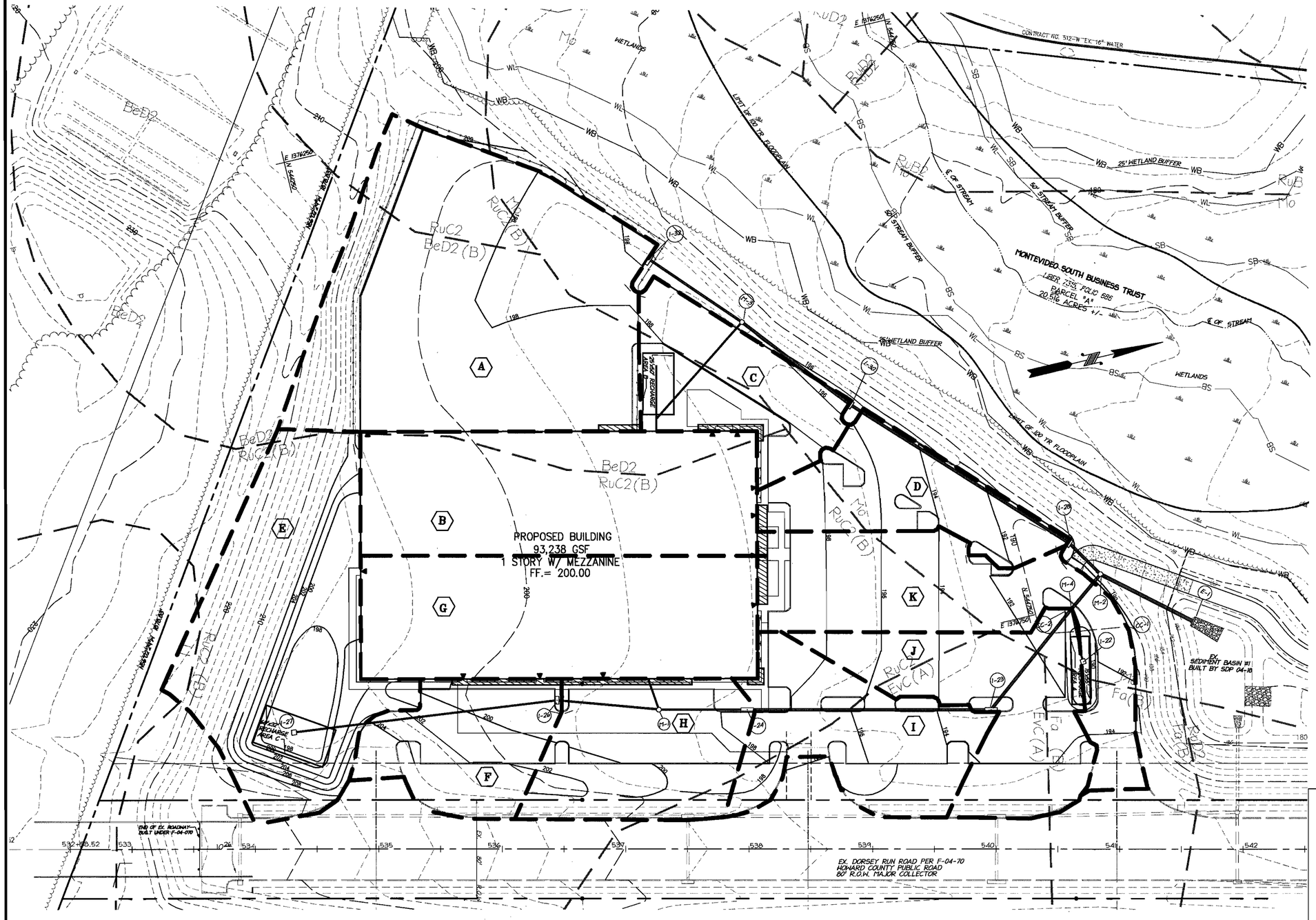
MDC-121(SDP)

SOILS CLASSIFICATION

Type	Name	Group	Description
EvB	Evesboro	A	Loamy Sand, 1 to 5 percent slopes
EvC	Evesboro	A	Loamy Sand, 5 to 15 percent slopes
Fa	Fallsington	B/D	Loam
Ll	Leonardtown	D	Silt Loam
RuC2	Rumford	B	Loamy Sand, 1 to 5 percent slopes, moderately eroded
RuD2	Rumford	B	Loamy Sand, 10 to 15 percent slopes, moderately eroded
BeD2	Beltsville		Silt Loam, 10 to 15 percent slopes, moderately eroded
Mo	Mixed alluvial		

DRAINAGE CHART

INLET NO.	INLET DESIGNATION	DRAINAGE AREA (AC.)	'C' FACTOR	PERCENT IMPERVIOUS (%)
CC-1	K	0.61	0.82	93
I-22	J	0.45	0.62	67
I-23	I	0.43	0.63	65
I-24	H	0.32	0.31	72
M-1	G	0.73	0.86	100
I-26	F	0.36	0.72	78
I-27	E	0.68	0.24	0
I-28	D	0.35	0.83	91
I-30	C	0.35	0.69	74
M-3	B	0.73	0.86	100
I-32	A	1.26	0.75	83



LEGEND

- EXISTING CONTOUR
- PROPOSED CONTOUR
- + 483 : PROPOSED SPOT ELEVATION
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- EXISTING STORM SEWER
- PROPOSED STORM SEWER
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- SCHEMATIC PARKING LOT LIGHTS
- REVERSE CURB
- WL : WETLAND
- WB : WETLAND BUFFER
- SB : STREAM BUFFER
- DOOR ENTRANCE
- ROOF OVERHANG
- DRAINAGE AREA DIVIDE
- D : DRAINAGE AREA LABEL

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chief, Division of Land Development	Date 9/9/04
Chief, Development Engineering Division	Date 9/9/04
Director	Date 9/22/04

Date	No.	Revision Description

BUILDING "A"
AT DORSEY RUN INDUSTRIAL CENTER

OWNER / DEVELOPER

MONTEVIDEO SOUTH BUSINESS TRUST
C/O TRAMMELL CROW COMPANY
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6/2/04
DATE

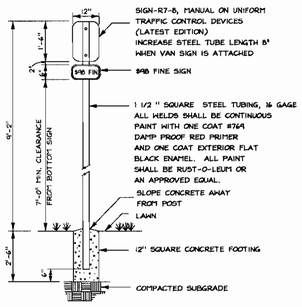
STATE OF MARYLAND
JOHN M. HOUSEHOLDER
No. 29907
PROFESSIONAL ENGINEER

TITLE:
STORM DRAINAGE AREA MAP

DESIGN: BAM	SCALE: 1"=40'	PROJECT: 036701.01
DRAWN: ADL	DATE: 6/01/04	
CHECKED: JMH	APPROVED:	4 OF 12

SDP-04-100

MDC-121(SDP)

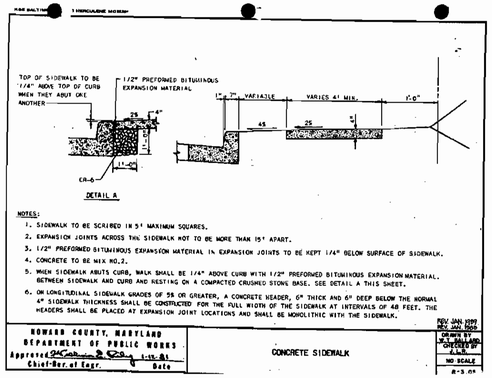


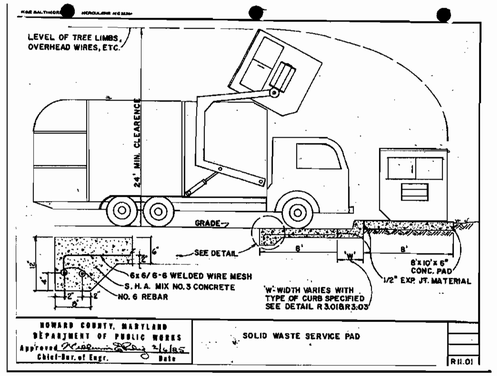
NOTES:
1. DISTANCE FROM GROUND TO BOTTOM OF SIGN SHOULD BE A MIN. 7'-6".
2. SEE HANDICAPPED PARKING SPACE DETAIL THIS SHEET FOR LOCATION OF HANDICAPPED SIGN.
3. SIGNS SHALL CONFORM TO CURRENT ADA CRITERIA.

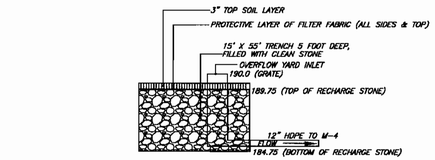
SIGN COLORS:
LETTERS AND BORDER - GREEN
WHITE H.C. SYMBOLS ON BLUE BACKGROUND
BACKGROUND - WHITE

Not To Scale

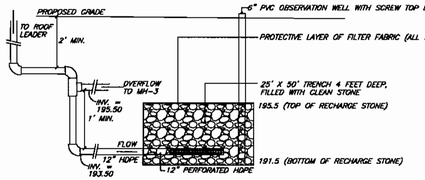
HANDICAP PARKING SIGN



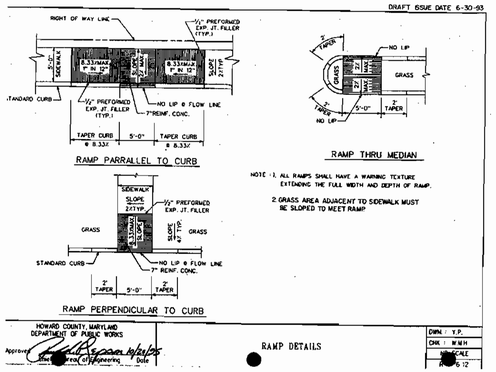


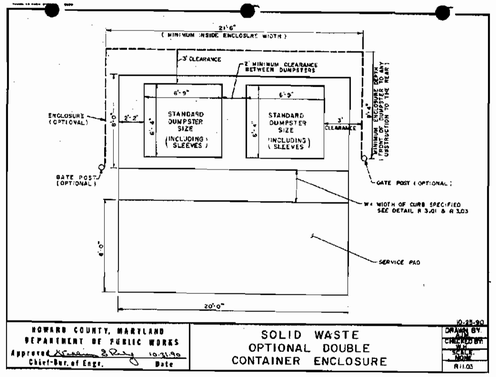


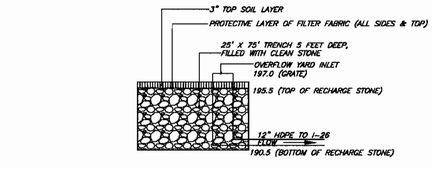
RECHARGE AREA A
NOT TO SCALE



RECHARGE AREA B
NOT TO SCALE







RECHARGE AREA C
NOT TO SCALE

Note: Stormwater Recharge Trenches are to be privately owned & maintained.

Operation and Maintenance schedule for privately owned and maintained stormwater Recharge Trenches

Routine Maintenance:

1. The observation well shall be monitored periodically. For the first year after completion of construction, the well should be monitored on a quarterly basis and after every large storm. 2. It is recommended that a log book be maintained indicating the rate at which the facility dewaters after large storms and the depth of the well for each observation. Once the performance characteristics of the structure have been verified, the monitoring schedule can be reduced to and annual basis, unless the performance data indicates that a more frequent schedule is required.
3. Sediment build-up in the top 12" of stone aggregates or the surface inlet should be monitored at the same time as the observation well. A monitoring well in the top 12" of stone aggregate will be required when the trench has a paved surface. Sediment deposited shall not be allowed to build up to the point where it will reduce the rate of infiltration in to the trench.

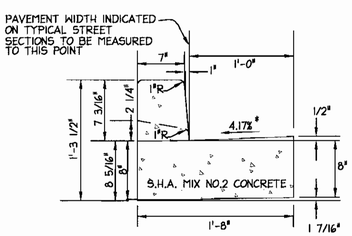
Non-routine Maintenance

Structural components of the Infiltration Trench such as the overflow inlet shall be repaired upon the detection of any damage. The components shall be inspected during routine maintenance operations.

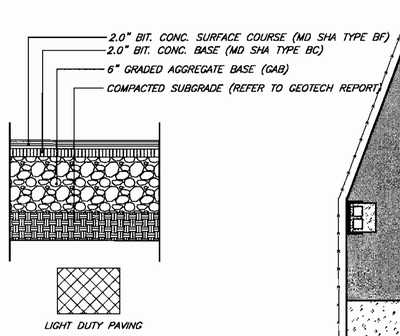
NOTE:

ALL RECHARGE AREAS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION 2001 STANDARD AND SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, SECTION 315, INFILTRATION TRENCHES.

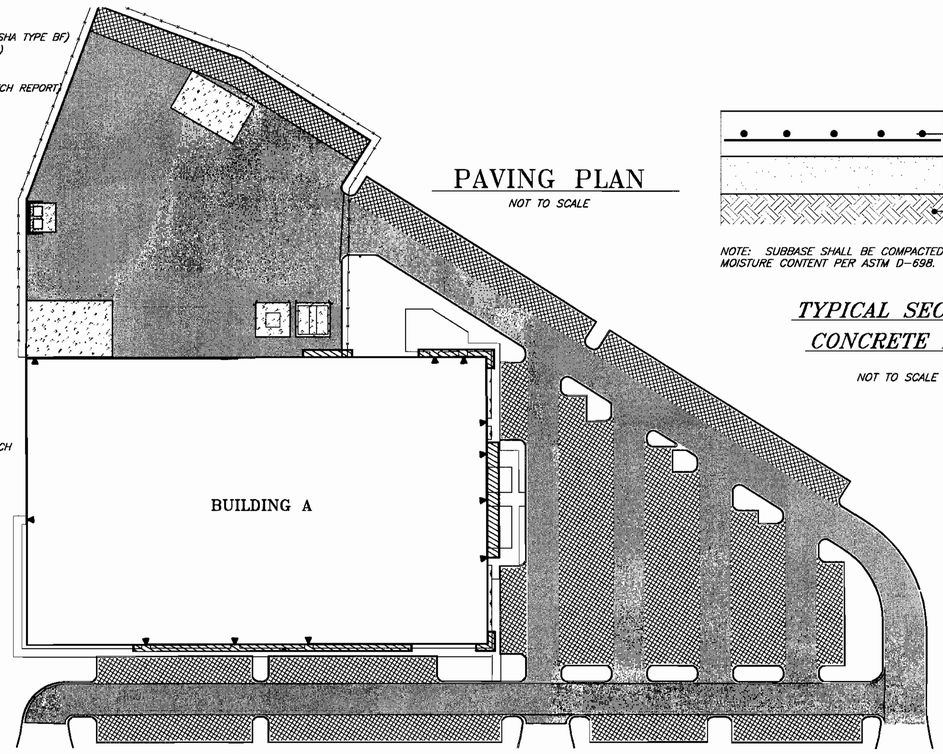
STANDARD 7" COMBINATION CURB AND GUTTER
N.T.S.



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



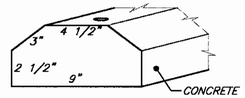
NOTE: THE ABOVE PAVING SECTIONS REFERENCE THE OCTOBER 9, 2003 GEOTECHNICAL REPORT PROVIDED BY ATC ASSOCIATES, INC.



PAVING PLAN
NOT TO SCALE

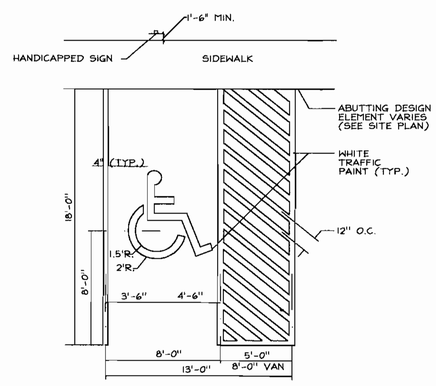
NOTE: SUBBASE SHALL BE COMPACTED TO 95% DENSITY AT OPTIMUM MOISTURE CONTENT PER ASTM D-698.

TYPICAL SECTION CONCRETE PAD
NOT TO SCALE



6 FT. - CONCRETE
9" WIDE
5" HIGH
2 STEEL BARS - REINFORCED
2 PRE-FORMED HOLES
APPROXIMATE WEIGHT - 210 LBS.

WHEELSTOP DETAIL
NOT TO SCALE



HANDICAP PARKING SPACE DETAIL
NOT TO SCALE

6/2/04
DATE
STATE OF MARYLAND
JOHN M. HOUSEHOLDER
No. 29907
PROFESSIONAL ENGINEER

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chief, Division of Land Development — Date 9/15/04
Chief, Development Engineering Division — Date 9/9/04
Director — Date 9/22/04

Date	No.	Revision Description

BUILDING "A"
AT DORSEY RUN INDUSTRIAL CENTER

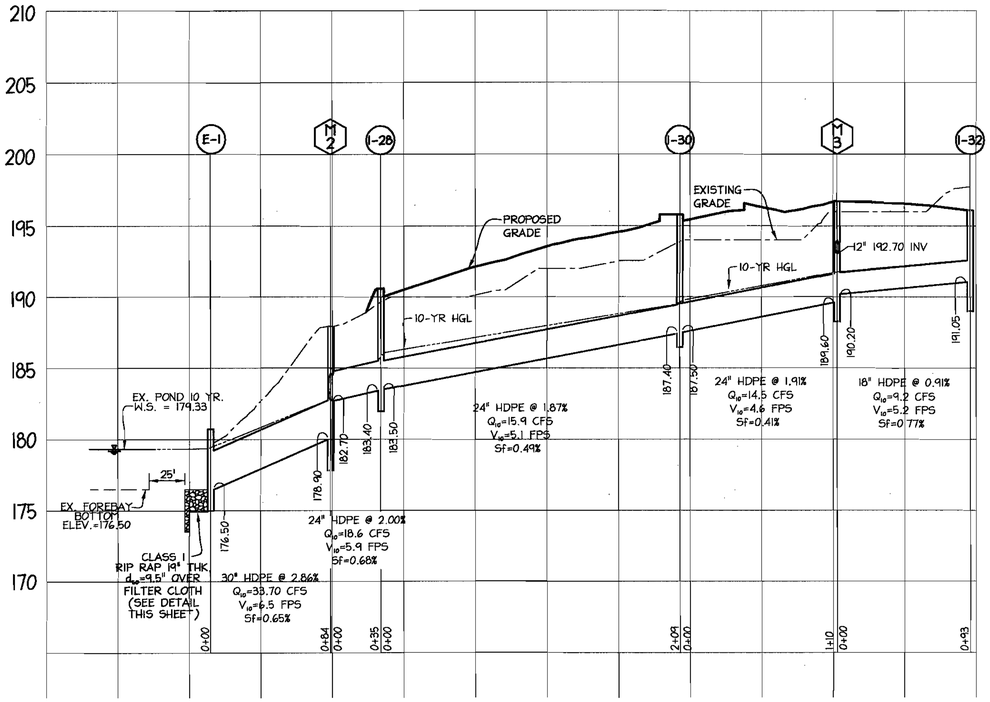
OWNER / DEVELOPER
MONTEMIDEO SOUTH BUSINESS TRUST
C/O TRAMMELL CROW COMPANY
7315 WISCONSIN AVENUE SUITE 300 W
BETHESDA, MARYLAND 20814
TEL. (301) 530-6200 FAX (301) 530-6131

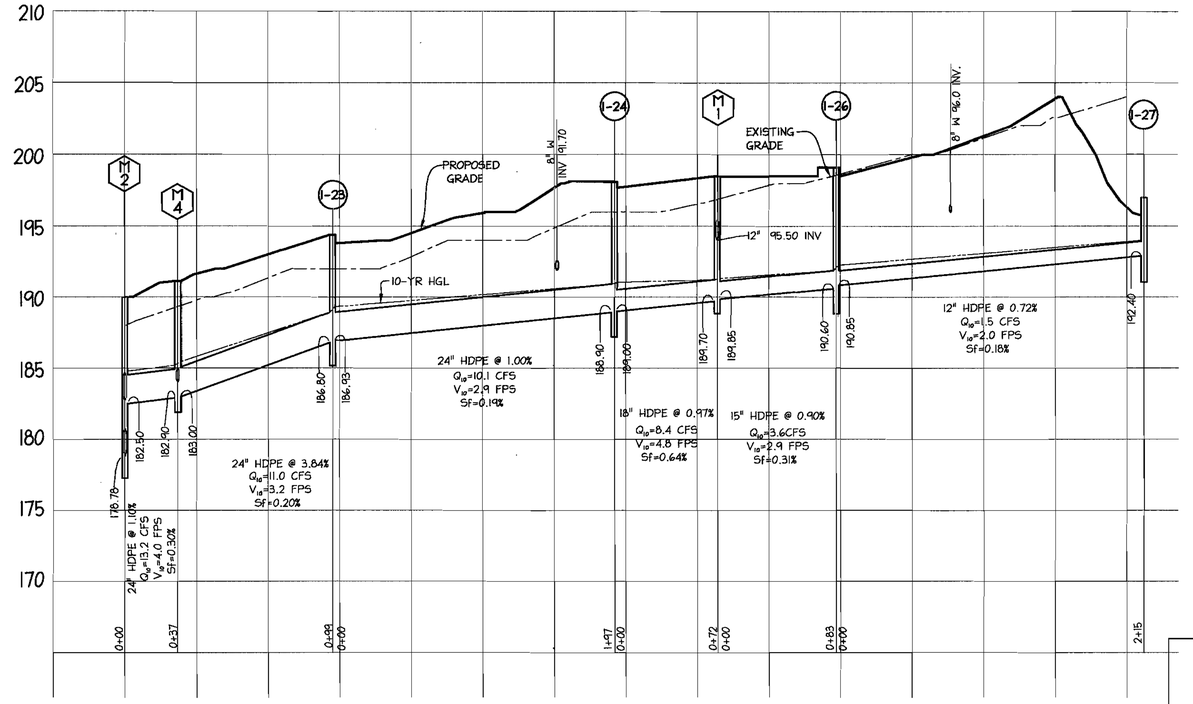
christopher consultants
engineering · surveying · land planning
christopher consultants, ltd
7172 columbia gateway drive (suite 100) · columbia, md 21046-2990
410.872.8690 · metro 301.881.0148 · fax 410.872.8693

TITLE:
SITE NOTES & DETAILS

DESIGN: BAM	SCALE: AS SHOWN	PROJECT: 036701.01	
DRAWN: ADL	DATE: 6/01/04		
CHECKED: JMH	APPROVED:	5 OF 12	

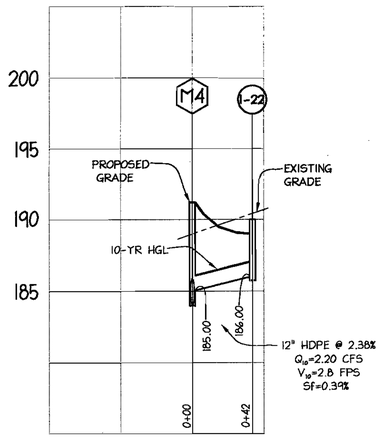
SDP-04-100
MDC-121(SDP)

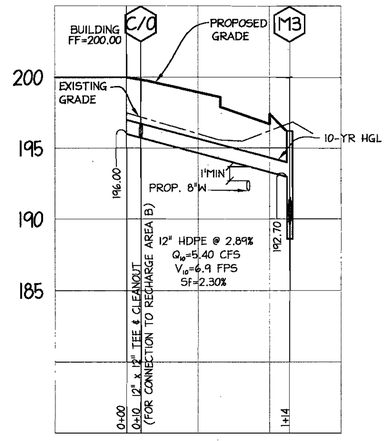




STORM DRAIN PROFILES

HORZ: 1"=50'
VERT: 1"=5'





STORM DRAIN PROFILES

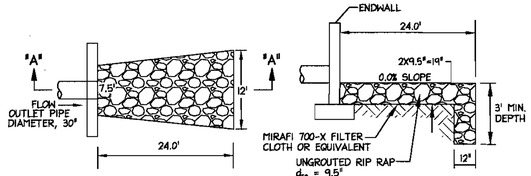
HORZ: 1"=50'
VERT: 1"=5'

STORM DRAIN STRUCTURE SCHEDULE

STR. NO.	TOP ELEV.	INV. IN	INV. OUT	TYPE	NORTHING	EASTING
E - 1	181.00	176.50 (30")		STANDARD HOWARD CO. DETAIL SD-5.51	544,878.95	1,376,785.59
M - 2	187.95	182.70 (24")	178.90 (30")	STD. PRECAST MANHOLE HOWARD CO. STD. DETAIL G-5.12	544,814.46	1,376,730.23
M - 4	190.70	183.00 (24")	182.90 (24")	STD. PRECAST MANHOLE HOWARD CO. STD. DETAIL G-5.12	544,784.78	1,376,752.52
I - 23	194.40	186.93 (24")	186.80 (24")	TYPE "A-5" INLET HOWARD CO. DETAIL SD-4.01	544,702.37	1,376,816.90
I - 24	198.10	189.00 (18")	188.90 (24")	TYPE "A-10" INLET HOWARD CO. DETAIL SD-4.02	544,510.46	1,376,770.87
M - 1	198.50	189.85 (15")	189.70 (18")	STD. PRECAST MANHOLE HOWARD CO. STD. DETAIL G-5.12	544,440.79	1,376,754.17
I - 26	199.10	190.85 (12")	190.60 (15")	STD. PRECAST TYPE "A-5" INLET HOWARD CO. DETAIL SD-4.40	544,149.11	1,376,703.18
I - 27	197.00		192.40 (12")	STD. PRECAST TYPE "D" HOWARD CO. DETAIL SD-4.39 (THREE THROATS OPEN)	544,362.38	1,376,727.54
I - 22	190.00		186.00 (12")	STD. PRECAST TYPE "D" HOWARD CO. DETAIL SD-4.39	544,790.35	1,376,805.05
I - 28	190.60	183.50 (24")	183.40 (24")	STD. PRECAST TYPE "A-5" INLET HOWARD CO. DETAIL SD-4.40	544,795.84	1,376,669.87
I - 30	195.90	187.50 (24")	187.40 (24")	TYPE "A-5" INLET HOWARD CO. DETAIL SD-4.01	544,649.62	1,376,549.14
M - 3	196.75	190.20 (18")	189.60 (24")	STD. PRECAST MANHOLE HOWARD CO. STD. DETAIL G-5.12	544,580.14	1,376,463.15
I - 32	196.10		191.05 (18")	STD. PRECAST TYPE "A-5" INLET HOWARD CO. DETAIL SD-4.40	544,519.06	1,376,395.80

PIPE SCHEDULE

SIZE (IN)	TYPE	LENGTH (FT)
12	HDPE	257
15	HDPE	83
18	HDPE	165
24	HDPE	687
30	HDPE	84



UNGROUTED RIP RAP OUTLET DETAIL (E-1)

NOT TO SCALE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chief, Division of Land Development — Date: 9/10/04

Chief, Development Engineering Division MRJ — Date: 9/9/04

Director — Date: 9/10/04

Date	No.	Revision Description

BUILDING "A"
AT DORSEY RUN INDUSTRIAL CENTER

OWNER / DEVELOPER

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C/O TRAMMELL CROW COMPANY
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TEL. (301) 530-6200 FAX (301) 530-6131

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7172 columbia gateway drive (suite 100) · columbia, md. 21046-2990
410 872 8890 · metro 301 881 0148 · fax 410 872 8893

6/2/04
DATE

STATE OF MARYLAND — JOHN M. HOUSEHOLDER — No. 29907 — PROFESSIONAL ENGINEER

TITLE:

STORM DRAIN PROFILES

DESIGN: BAM	SCALE: AS SHOWN	PROJECT: 036701.01
DRAWN: ADL	DATE: 6/01/04	6 OF 12
CHECKED: JMH	APPROVED:	

SDP-04-100

MDC-121(SDP)

VATC
8989 Herrmann Drive, Suite 300
Columbia, MD 21045-4710
(410) 381-0232
Fax (410) 381-0247

TEST BORING LOG

CLIENT: Trammell Crow Company
PROJECT NAME: BAC Final Report
PROJECT LOCATION: Montevideo Road, Jessup, MD
BORING #: SB01
JOB #: 09.75277.0004
DRAWN BY: Jeff Wiebodt
APPROVED BY: Fernando Pons, P.E.

DRILLING and SAMPLING INFORMATION

Date Started: 2-27-04	Hammer Wt.: 140 lbs.	Driller: J. Scribellito	Spoon Sampler OD: 2.25 in.
Date Completed: 2-27-04	Hammer Drop: 30 in.	Field Professional: Jeff Wiebodt	Rock Core Dia.: ____ in.
Boring Method: HSA	Shelby Tube OD: ____ in.		

TEST DATA

SOIL CLASSIFICATION / SURFACE ELEVATION feet	Datum Depth/Elev.	Depth Scale	Sample No.	Sample Type	Remarks
LOOSE brown silty fine to coarse SAND (SM), moist			1	SS	2-4-4
			2	SS	2-4-3
MEDIUM STIFF tan to gray very fine sandy SILT (ML), moist	3.5		3	SS	3-3-4
			4	SS	7-9-13
MEDIUM STIFF TO VERY STIFF gray to red SILT (ML), trace fine sand, moist	8.5		5	SS	3-7-11
Seam of Charcoal at 19.0 feet)			6	SS	2-3-3
End of boring	20.0				

Sample Type: SS - Driven Split Spoon; ST - Pressed Shelby Tube; CA - Continuous Flight Auger; RC - Rock Core; CU - Cuttings; CT - Continuous Tube

Depth to Groundwater: Noted on Drilling Tools Dry ft.; At Completion (in augers) ____ ft.; At Completion (open hole) Dry ft.; After 72 hours 1.5 ft.; After ____ hours ____ ft.; Cave Depth 4.8 ft.

Boring Method: HSA - Hollow Stem Augers; CFA - Continuous Flight Augers; DC - Driving Casing; MD - Mud Drilling

Page 1 of 1

VATC
8989 Herrmann Drive, Suite 300
Columbia, MD 21045-4710
(410) 381-0232
Fax (410) 381-0247

TEST BORING LOG

CLIENT: Trammell Crow Company
PROJECT NAME: Baltimore Air Coil Facility
PROJECT LOCATION: Montevideo Road, Jessup, MD
BORING #: I-1
JOB #: 09.75277.0004
DRAWN BY: Wayne Tucker
APPROVED BY: Fernando Pons

DRILLING and SAMPLING INFORMATION

Date Started: 5-6-04	Hammer Wt.: 140 lbs.	Driller: J. Scribellito	Spoon Sampler OD: 2.25 in.
Date Completed: 5-6-04	Hammer Drop: 30 in.	Field Professional: Jeff Wiebodt	Rock Core Dia.: N/A in.
Boring Method: HSA	Shelby Tube OD: N/A in.		

TEST DATA

SOIL CLASSIFICATION / SURFACE ELEVATION 204.0 feet	Datum Depth/Elev.	Depth Scale	Sample No.	Sample Type	Standard Penetration Test (SPT) Sample Blows 6 Inch Increments	Remarks
TOPSOIL = 11"			1	SS	2-2-4	Northing: 544472.48
LOOSE TO MEDIUM DENSE brown silty fine SAND (SM), trace to little fine gravel and trace clay 1 to 3 feet below ground surface, moist	0.8 / 203.1		2	SS	4-7-8	Easting: 1378821.85
			3	SS	4-5-8	Elevations were obtained from the Mass Grading Plans prepared by Christopher Consultants, dated March 19, 2004
			4	SS	6-7-8	
			5	SS	4-5-7	
BORING TERMINATED AT 20 FEET BELOW GROUND SURFACE	20.0 / 184.0		6	SS	4-4-6	

Sample Type: SS - Driven Split Spoon; ST - Pressed Shelby Tube; CA - Continuous Flight Auger; RC - Rock Core; CU - Cuttings; CT - Continuous Tube

Depth to Groundwater: Noted on Drilling Tools dry ft.; At Completion (in augers) dry ft.; At Completion (open hole) dry ft.; After 24 hours dry ft.; After ____ hours ____ ft.; Cave Depth 16.5 ft.

Boring Method: HSA - Hollow Stem Augers; CFA - Continuous Flight Augers; DC - Driving Casing; MD - Mud Drilling

Page 1 of 1

VATC
8989 Herrmann Drive, Suite 300
Columbia, MD 21045-4710
(410) 381-0232
Fax (410) 381-0247

TEST BORING LOG

CLIENT: Trammell Crow Company
PROJECT NAME: BAC Final Report
PROJECT LOCATION: Montevideo Road, Jessup, MD
BORING #: SB03
JOB #: 09.75277.0004
DRAWN BY: Jeff Wiebodt
APPROVED BY: Fernando Pons, P.E.

DRILLING and SAMPLING INFORMATION

Date Started: 2-27-04	Hammer Wt.: 140 lbs.	Driller: J. Scribellito	Spoon Sampler OD: 2.25 in.
Date Completed: 2-27-04	Hammer Drop: 30 in.	Field Professional: Jeff Wiebodt	Rock Core Dia.: ____ in.
Boring Method: HSA	Shelby Tube OD: ____ in.		

TEST DATA

SOIL CLASSIFICATION / SURFACE ELEVATION feet	Datum Depth/Elev.	Depth Scale	Sample No.	Sample Type	Standard Penetration Test (SPT) Sample Blows 6 Inch Increments	Remarks
VERY LOOSE TO MEDIUM DENSE tan silty fine to medium SAND (SM), moist			1	SS	1-2-2	
			2	SS	2-2-3	
			3	SS	3-3-5	
			4	SS	4-6-6	
			5	SS	5-6-8	
SOFT white very fine sandy SILT (ML), trace clay, very moist to wet	18.5		6	SS	3-2-2	
End of boring	20.0					

Sample Type: SS - Driven Split Spoon; ST - Pressed Shelby Tube; CA - Continuous Flight Auger; RC - Rock Core; CU - Cuttings; CT - Continuous Tube

Depth to Groundwater: Noted on Drilling Tools 18.5 ft.; At Completion (in augers) ____ ft.; At Completion (open hole) Dry ft.; After 72 hours Dry ft.; After ____ hours ____ ft.; Cave Depth 19.2 ft.

Boring Method: HSA - Hollow Stem Augers; CFA - Continuous Flight Augers; DC - Driving Casing; MD - Mud Drilling

Page 1 of 1

VATC
8989 Herrmann Drive, Suite 300
Columbia, MD 21045-4710
(410) 381-0232
Fax (410) 381-0247

TEST BORING LOG

CLIENT: Trammell Crow Company
PROJECT NAME: Baltimore Air Coil Facility
PROJECT LOCATION: Montevideo Road, Jessup, MD
BORING #: I-2
JOB #: 09.75277.0004
DRAWN BY: Wayne Tucker
APPROVED BY: Fernando Pons

DRILLING and SAMPLING INFORMATION

Date Started: 5-6-04	Hammer Wt.: 140 lbs.	Driller: J. Scribellito	Spoon Sampler OD: 2.25 in.
Date Completed: 5-6-04	Hammer Drop: 30 in.	Field Professional: Jeff Wiebodt	Rock Core Dia.: N/A in.
Boring Method: HSA	Shelby Tube OD: N/A in.		

TEST DATA

SOIL CLASSIFICATION / SURFACE ELEVATION 204.0 feet	Datum Depth/Elev.	Depth Scale	Sample No.	Sample Type	Standard Penetration Test (SPT) Sample Blows 6 Inch Increments	Remarks
TOPSOIL = 9"			1	SS	3-4-7	Northing: 544414.14
MEDIUM DENSE TO LOOSE brown silty fine SAND (SM), moist	0.8 / 203.2		2	SS	3-9-9	Easting: 1378807.86
			3	SS	5-9-10	Elevations were obtained from the Mass Grading Plans prepared by Christopher Consultants, dated March 19, 2004
			4	SS	5-6-7	
trace clay at 15 feet below ground surface			5	SS	4-3-3	
BORING TERMINATED AT 20 FEET BELOW GROUND SURFACE	20.0 / 184.0		6	SS	3-3-3	

Sample Type: SS - Driven Split Spoon; ST - Pressed Shelby Tube; CA - Continuous Flight Auger; RC - Rock Core; CU - Cuttings; CT - Continuous Tube

Depth to Groundwater: Noted on Drilling Tools dry ft.; At Completion (in augers) dry ft.; At Completion (open hole) 17.3 ft.; After 24 hours dry ft.; After ____ hours ____ ft.; Cave Depth 17.3 ft.

Boring Method: HSA - Hollow Stem Augers; CFA - Continuous Flight Augers; DC - Driving Casing; MD - Mud Drilling

Page 1 of 1

VATC
8989 Herrmann Drive, Suite 300
Columbia, MD 21045-4710
(410) 381-0232
Fax (410) 381-0247

TEST BORING LOG

CLIENT: Trammell Crow Company
PROJECT NAME: Baltimore Air Coil Facility
PROJECT LOCATION: Montevideo Road, Jessup, MD
BORING #: B-705
JOB #: 09.75277.0004
DRAWN BY: Philip Quansah
APPROVED BY: Fernando Pons

DRILLING and SAMPLING INFORMATION

Date Started: 4-3-03	Hammer Wt.: 140 lbs.	Driller: J. Scribellito, Jr.	Spoon Sampler OD: 2.25 in.
Date Completed: 4-3-03	Hammer Drop: 30 in.	Field Professional: N/A	Rock Core Dia.: N/A in.
Boring Method: HSA	Shelby Tube OD: N/A in.		

TEST DATA

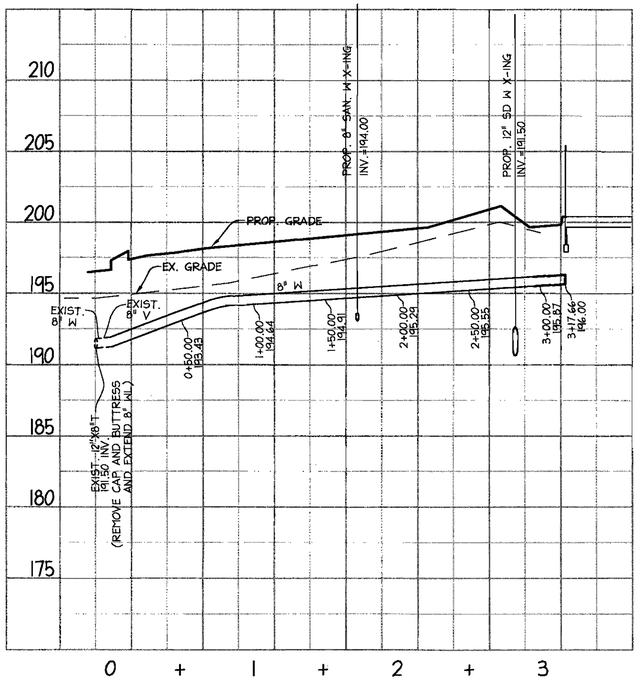
SOIL CLASSIFICATION / SURFACE ELEVATION 212.0 feet msl	Datum Depth/Elev.	Depth Scale	Sample No.	Sample Type	Standard Penetration Test, N = blows/foot	Remarks
Tan, moist, medium dense, CLAYEY FINE TO MEDIUM SAND	2.5 / 209.5		1	SS	3-5-6	
6.0 inches of topsoil at the surface	6.0		2	SS	4-6-6	
Brown, moist, stiff, FINE TO MEDIUM SANDY SILT	206.0		3	SS	5-11-11	
Grey to tan, moist, medium dense, SILTY FINE TO MEDIUM SAND			4	SS	4-5-7	
	15.0		5	SS	4-5-6	
Light reddish brown, moist, stiff, VERY FINE SANDY SILT	197.0					
	20.0		6	SS	3-4-7	
Grey to tan, moist, loose to medium dense, SILTY VERY FINE TO FINE SAND	192.0		7	SS	8-14-15	
			8	SS	4-7-6	
	35.0		9	SS	2-3-5	
COAL	177.0					
	40.0		10	SS	2-2-2	
Black to grey, moist, medium dense, SILTY VERY FINE TO MEDIUM SAND	172.0					
	45.0		11	SS	7-8-15	
End of boring	167.0					

Sample Type: SS - Driven Split Spoon; ST - Pressed Shelby Tube; CA - Continuous Flight Auger; RC - Rock Core; CU - Cuttings; CT - Continuous Tube

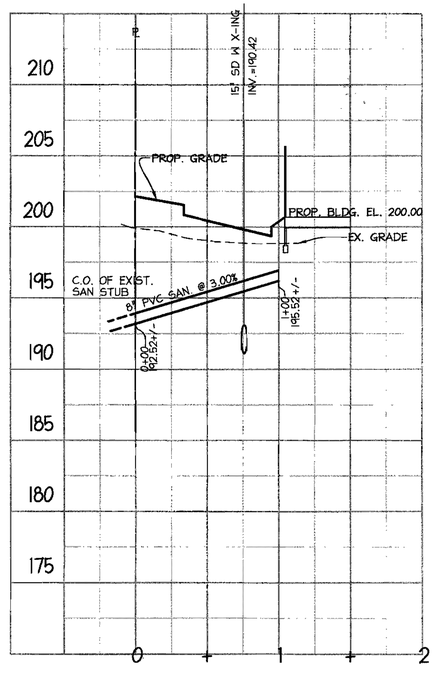
Depth to Groundwater: Noted on Drilling Tools 43.5 ft.; At Completion (in augers) ____ ft.; At Completion (open hole) DRY ft.; After 24 hours DRY ft.; After ____ hours ____ ft.; Cave Depth 29.9 ft.

Boring Method: HSA - Hollow Stem Augers; CFA - Continuous Flight Augers; DC - Driving Casing; MD - Mud Drilling

Page 1 of 1



8" PRIVATE WATER
HORZ: 1"=50'
VERT: 1"=5'



8" PRIVATE SANITARY SEWER
HORZ: 1"=50'
VERT: 1"=5'

6/2/04
DATE

STATE OF MARYLAND
JOHN M. HOUSEHOLDER
No. 29907
PROFESSIONAL ENGINEER

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chief, Division of Land Development — Date 9/9/04

Chief, Development Engineering Division (MB) — Date 9/9/04

Director — Date 9/22/04

Date	No.	Revision Description

BUILDING "A"
AT DORSEY RUN INDUSTRIAL CENTER

OWNER / DEVELOPER

MONTEVIDEO SOUTH BUSINESS TRUST
C/O TRAMMELL CROW COMPANY
7315 WISCONSIN AVENUE SUITE 300 W
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TEL. (301) 530-6200 FAX (301) 530-6131

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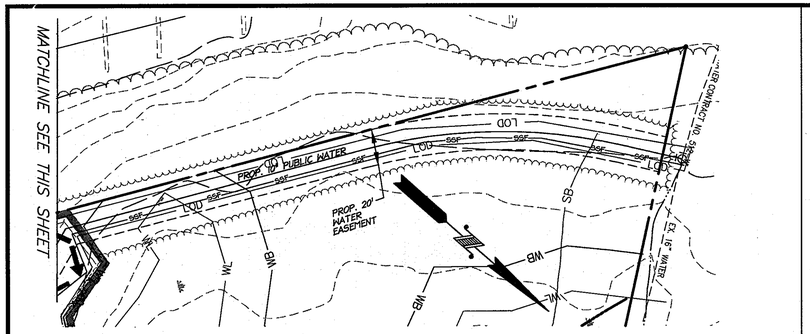
7172 columbia gateway drive (suite 100) · columbia, md. 21046-2990
410.872.8690 · metro 301 881 0148 · fax 410.872.8693

TITLE:
BORING LOGS & WATER PROFILES

DESIGN: BAM	SCALE: AS SHOWN	PROJECT: 036701.01	
DRAWN: JMH	DATE: 6/01/04	7 OF 12	
CHECKED: JMH	APPROVED:		

SDP-04-100
MDC-121(SDP)



DEVELOPER'S CERTIFICATE

"I/We certify that all development and construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District."

Signature of Developer — Date: 6/2/04

JAMES D'AGOSTINO
Print name below signature

ENGINEER'S 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 and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."

Signature of Engineer — Date: 6/2/04

JOHN HOUSEHOLDER
Print name below signature

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS.

USDA, Natural Resources, Conservation Service — Date: 9-7-04

This development plan is approved for erosion and sediment control by The HOWARD SOIL CONSERVATION DISTRICT.

Howard SCD — Date: 9-7-04

LEGEND

- EX. LIMITS OF DISTURBANCE DISTURBANCE (SDP-04-18)
- LOD : LIMITS OF DISTURBANCE
- SSF SSF : SUPER SILT FENCE
- CIP/SIP : CURB INLET PROTECTION / STANDARD INLET PROTECTION
- DSCE : STABILIZED CONSTRUCTION ENTRANCE
- : EXISTING CONTOUR
- : PROPOSED CONTOUR
- + 483 : EXISTING SPOT ELEVATION
- : EXISTING WOODS LINE
- : EXISTING STORM SEWER
- : PROPOSED STORM SEWER
- : EXISTING SANITARY SEWER
- : PROPOSED SANITARY SEWER
- : EXISTING WATER LINE
- : PROPOSED WATER LINE
- : EXISTING CURB AND GUTTER
- : REVERSE CURB
- WL : WETLAND
- WB : WETLAND BUFFER
- SB : STREAM BUFFER
- : WATER VALVE
- : FH
- : STORM DRAIN INLET
- : EX. A-2
- SSF SSF : EX. SILT FENCE

NOTE: ALL SEDIMENT CONTROL DEVICES CONSTRUCTED DURING MASS GRADING PLAN GP-04-55 SHALL REMAIN IN PLACE FOR ALL CONSTRUCTION SHOWN ON THESE PLANS, UNLESS OTHERWISE DIRECTED BY THE ENGINEER OR HOWARD SOIL CONSERVATION DISTRICT INSPECTORS.

SEQUENCE OF CONSTRUCTION

1. OBTAIN THE GRADING PERMIT FROM HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS DIVISION. (1 DAY)
2. ARRANGE AN ON-SITE PRE-CONSTRUCTION MEETING WITH COUNTY INSPECTORS, THE CONTRACTOR, AND ENGINEER PRIOR TO THE START OF CONSTRUCTION OF THIS PLAN. (1 DAY)
3. CONTRACT A PRIVATE UTILITY LOCATING COMPANY TO ADEQUATELY MARK ALL EXISTING UTILITIES. (2 DAYS)
4. INSTALL THE STABILIZED CONSTRUCTION ENTRANCES PER THE PLAN. (1 DAY)
5. VERIFY ALL EXISTING CONTROL DEVICES FROM MASS GRADING PLAN SDP-04-18 ARE STILL IN PLACE. PERIMETER CONTROLS MAY NEED TO BE RELOCATED AND/OR RE-ESTABLISHED AS SHOWN ON THIS PLAN. OBTAIN INSPECTOR'S APPROVAL PRIOR TO GRADING. (2 DAYS)
6. ONCE INSPECTOR'S APPROVAL IS OBTAINED, BEGIN ON-SITE GRADING. MAINTAIN POSITIVE DRAINAGE TO EXISTING SEDIMENT BASIN AT ALL TIMES. (28 DAYS)
7. START BUILDING CONSTRUCTION AND UTILITY INSTALLATION. INCLUDING STORMWATER RECHARGE FACILITIES (25 WEEKS).
8. IMMEDIATELY UPON COMPLETION OF GRADING, PROVIDE STABILIZATION PER THE SEEDING TABLES PROVIDED ON THE PLANS. (7 DAYS)
9. ONCE ALL GRADING, PAVEMENT, CURB AND GUTTER ARE COMPLETED AND THE SITE IS STABILIZED, OBTAIN INSPECTOR'S APPROVAL PRIOR TO REMOVAL OF ANY SEDIMENT CONTROL DEVICES AND THE CONVERSION OF THE ON-SITE SEDIMENT BASIN TO A PERMANENT STORMWATER MANAGEMENT FACILITY AS SHOWN AND APPROVED UNDER SDP-04-18. (2WEEKS)
10. REMOVE ALL REMAINING SEDIMENT CONTROL DEVICES. (5 DAYS)
11. STABILIZE ANY REMAINING DISTURBED AREAS ON-SITE. (4 DAYS)
12. ONCE ALL SEDIMENT CONTROL DEVICES ARE REMOVED AND THE SITE IS STABILIZED, OBTAIN FINAL APPROVAL FROM INSPECTOR. (2 DAYS)

NOTE:

CONSTRUCTION OF THIS PLAN MAY NOT BEGIN UNTIL ALL CONTROLS REVIEWED AND APPROVED UNDER SDP 04-18 ARE INSTALLED AND FUNCTIONING.

7/6/2011
for revision 1

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chief, Division of Land Development — Date: 9/9/04

Chief, Development Engineering Division — Date: 9/9/04

Director — Date: 9/22/04

Date	No.	Revision Description
6/1/11	1	REVISED TO ADD OUTDOOR CONDENSOR TESTING AREA

BUILDING "A"
AT DORSEY RUN INDUSTRIAL CENTER, PARCEL A
TM 43, TM GRID 16, P/O TM PARCEL 572, FIRST ELECTION DISTRICT
HOWARD COUNTY, MD

OWNER / DEVELOPER

MONTEVIDEO SOUTH BUSINESS TRUST
C/O TRAMMELL CROW COMPANY
7315 WISCONSIN AVENUE SUITE 300 W
BETHESDA, MARYLAND 20814
TEL. (301) 530-6200 FAX (301) 530-6131

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7172 columbia gateway drive (suite 100) · columbia, md. 21046-2990
410.872.8690 · metro 301.881.0148 · fax 410.872.8693

6/2/04
DATE
STATE OF MARYLAND — JOHN M. HOUSEHOLDER — No. 29907 — PROFESSIONAL ENGINEER

TITLE:

EROSION & SEDIMENT CONTROL PLAN

DESIGN: BAM	SCALE: 1"=40'	PROJECT: 036701.01	
DRAWN: ADL	DATE: 6/01/04		8 OF 12
CHECKED: JMH	APPROVED:		

SDP-04-100

MDC-121(SDP)

19.0 Standards and Specifications
For Land Grading

Definitions

Reshaping of the existing land surface in accordance with a plan as determined by engineering survey and layout.

Purpose

The purpose of a land grading specification is to provide for erosion control and vegetative establishment on those areas where the existing land surface is to be reshaped by grading according to plan.

Design Criteria

The grading plan should be based upon the incorporation of building designs and street layouts that fit and utilize existing topography and desirable natural surrounding to avoid extreme grade modifications. Information submitted must provide sufficient topographic surveys and soil investigations to determine limitations that must be imposed on the grading operation related to slope stability, effect on adjacent properties and drainage patterns, measured for drainage and water removal and vegetative treatment, etc.

Many countries have regulations and design procedures already established for land grading and cut and fill slopes. Where these requirements exist, they should be followed. The plan must show existing and proposed contours of the area(s) to be graded. The plan shall also include practices for erosion control, slope stabilization, safe disposal of runoff water and drainage, such as waterways, lined ditches, reverse slope benches (including grade and cross-section), grade stabilization structures, retaining walls, and surface and subsurface drains. The plan shall also include phasing of these practices. The following shall be incorporated into the plan:

1. Provisions shall be made to safety conduct surface runoff to storm drains, protected outlets or to stable water courses to insure that surface runoff will not damage slopes or other graded areas.

2. Cut and fill slopes that are to be stabilized with grasses shall not be steeper then 2:1. (Where the slope id to be mowed the slope should be no steeper then 3:1: 4:1 is preferred because of safety factors related to mowing steep slopes.

3. Reverse benches shall be provided whenever the vertical interval (height) of any 2:1slopes exceeds 20 feet; for 3:1 slopes it shall be increased to 30 feet and for 4:1 to 40 feet. Benches shall be located to divide the slopes face as equally as possible and shall convey the water to a stable outlet. Soils, seeps, rock outcrops, etc., shall also be taken into consideration when designing benches.

   a. Benches shall be a minimum of six-feet wide to provide ease of maintenance.

   b. Benches shall be designed with a reverse slope of 6:1 of flatter to the toe of the upper slope and with a minimum of one foot in depth. Bench gradient to the outlet shall be between 2 percent and 3 percent, unless accompanied by appropriate design and computations.

   c. The flow length within a bench shall not exceed 800' unless accompanied by appropriate design and computations. For flow channel stabilization see temporary swales.

4. Surface water shall be diverted from the face of all cut and/or fill slopes by the use of earth dikes, ditches and swales or conveyed downslope by the use of a designated structure, except where:

   a. The face of the slope is or shall be stabilized and the face of all graded slopes shall be protected for surface runoff until they are stabilized.

   b. The face of the slope shall not be subjected to any concentrated slows of surface water such as from natural drainways, graded swales, downspouts, etc.

   c. The face of the slope will be protected by special erosion control materials, to include, but not limited to: approved vegetative stabilization practices (see section G), rip-rap or other approved stabilization methods.

5. Cut slopes occurring in ripable rock shall be serrated as shown on the following diagram. These serrations shall be made with conventional equipment as the excavation is made. Each step or serration shall be constructed on the contour and will have steps cut as nominal two-foot intervals with nominal three-foot horizontal shelves. These steps will vary depending on the slope ratio or the cut slope. The nominal slope line is 1:1. These steps will weather and act to hold moisture, lime, fertilizer and seed thus producing a much quicker and longer lived vegetative cover and better slope stabilization. Over land flow shall be diverted from the top of all serrated cut slopes and carried to a suitable outlet.

6. Surface drainage shall be provided where necessary to intercept seepage that would otherwise adversely affect slope stability or create excessively wet site conditions.

7. Slopes shall not be created to close to property lines as the endanger adjoining properties without adequately protecting such properties against sediment, erosion, slippage, settlement, subsidence or other related damages.

8. Fill material shall be free of brush, rubbish, rocks, logs, stumps, building debris, and other objectionable material. It should be free of stones over two (2) inches in diameter where compacted by hand or mechanical tampers over eight (8) inches in diameter where compacted by rollers or other equipment. Frozen material shall not be placed in the fill nor shall the fill material be placed on a frozen foundation.

9. Stockpiles, borrow areas and spoil shall be shown on the plans and shall be subjected to the provisions of the Standard and Specifications.

All disturbed areas shall be stabilized structurally or vegetatively in compliance with 20.0 Standards and Specifications for Vegetative Stabilization.

21.0 Standard and Specifications
For Topsoil

Definitions

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

Purpose

To provide a suitable soil medium for vegetative growth. Soild 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:

   a. The texture of the exposed subsoil/parent material in not adequate to produce vegetative growth.

   b. The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish continuing supplies of moisture and plant nutrients.

   c. The original soil to be vegetated contains materials toxic to plant growth

   d. The soil is so acidic that treatment with limestone is not feasible.

For the purpose of these Standards and Specification, areas having slopes steeper that 2:1 require special consideration and design for adequate stabilization. Areas having slopes steeper that 2:1 shall have the appropriate stabilization shown on the plans.

Construction and Material Specifications

Topsoil salvaged from the existing site may be used provided that it meets the standards as set forth in these specifications. 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.

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 bot be a mixture of contrastinf textured subsoils and shall contain less than 5% by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials large than 1 ½ " in diameter.

   ii. Topsoil must be free of plants or plant parts such as bermuda grass, quackgrass, Johnsongrass, nutsedge, poison ivy, thistle, or other as specified.

   iii. Where the subsoil is either highly acidic or composed of heavy clays, ground limestone shall be spread to the rate of 4–8 tons/acre (200–400 pounds per 1,000square feet) prior to the placement of topsoil. Lime shall be distributed uniformly over designated areas and worked in to the soil in conjunction with tillage operations as described in the following procedures.

For sites having disturbed areas under 5 acres:

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

For sites having disturbed areas over 5 acres:

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 tested soil demonstrates a pH of less the 6.0, sufficient lime shall be prescribed to raise pH to 6.5 or higher.

   b. Organic content of topsoil shall be not less then 1.5 percent by weight.

   c. Topsoil having soluble salt content grater then 500 parts per million shall not be used.

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

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

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

Topsoil Application

When topsoiling, maintain needed erosion and sediment control practiced such as diversions, Grade Stabilization Structures, Earth Dikes, Slope Silt Fences and Sediment Traps and Basins.

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

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.

Topsoil shall not be place while the topsoil or subsoil is in a frozen or muddy condition, when the subsoil id excessively wet in a condition that may otherwise be detrimental to proper grading and seedbed preparation.

Alternative for Permanent Seeding – Instead of applying the full amounts of like and commercial fertilizer, composted sludge and amendments mat be applied as specified below:

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

   a. Composted sludge shall be supplied by, or originated 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 as least 1 percent nitrogen, 1.5 percent phosphorus, and 0.2 percent potassium and have a pH of 7.0 to 8.0. If compost does not meet these requirements, the appropriate constituents must be added to meet the requirements prior to use.

   c. Composted sludge shall be applied at a rate of 1 ton/1,000 square feet.

Composted sludge shall be amended with a potassium fertilizer applied at the rate of 4 lb/1,000 square feet, and 1/3 the normal lime application rate.

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

30.0 Dust Control

Definition

Controlling dust blowing and movement on construction sites and roads.

Purpose

To prevent blowing and movement of dust from exposed soil surfaces, reduce on and off-site damage, health hazards, and improve traffic safety.

Conditions Where Practice Applies

This practice is applicable to areas subject to dust blowing and movement wher in and off-site damage is likely without treatment.

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" apart, spring-toothed harrows, and similar plows are examples of equipment whicj may produce the desired effect.

4. 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 that runoff begins to flow.

5. Barriers – Solid board fences, silt fences, snow fences, burlap fences, stew bales, and similar materials can be used to control air currents and soil blowing. Barriers placed at right angles to [revailing currents at intervals of about 10 times their height are effective in controlling soil blowing.
6. Calcium Chloride – Apply at rates that will keep surface moist. May need retreatment.

Permanent Methods

1. Permanent Vegetation – See standards for permanent vegetative cover, and permanent stabilization with sod. Existing trees or large shrubs may afford valuable protection if left in place.]

2. Topsoil – Covering with less erosive materials. See Standards for topsoilding.

3. Stone – Cover surface with crushed stone or coarse gravel.

References

1. Agriculture Handbook 346. Wind Erosion Forces in the United State and Their Use in Predicting Soil Loss.

2. Agriculture Information Bulletin 354. How to Control Wind Erosion, USDA – ARS.

PERMANENT SEEDING NOTES

Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.

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

Soil Amendments: In lieu of soil test recommendations, use one of the following schedules:
1. Preferred—Apply 2 tons/acre dolomitic limestone (92 lbs/1000 sq. ft.) and 600 lbs/acre 10–10–10
   fertilizer (14 lbs/1000 sq. ft.) before seeding. Harrow or disk into upper three inches of soil.
   At time of seeding apply 400 lbs/acre 30–0–0 urea form fertilizer (9 lbs/1000 sq. ft.)
2. Acceptable—Apply 2 tons/acre dolomitic limestone (92 lbs/1000 sq. ft.) and 1000 lbs/acre 10–10–10
   fertilizer (23 lbs/1000 sq. ft.) before seeding. Harrow or disk into upper three inches of soil.

Seeding -- For the periods March 1 -- April 30, and August 1 -- October 15, seed with 60 lbs/acre (1.4 lbs/1000 sq. ft.) of Kentucky 31 Tall Fescue. For the period May 1 -- July 31, seed with 60 lbs Kentucky 31 Tall Fescue per acre and 2 lbs/acre (.05 lbs/1000 sq. ft.) of weeping lovegrass. During the period of October 16 -- February 28, protect site by:
   Option 1 – Two tons per acre of well anchored straw mulch and seed as soon as possible in the spring.
   Option 2 – Use sod. Option 3 -- Seer: with 60 lbs/acre Kentucky 30 Tall Fescue and mulch with
   2 tons/acre well anchored straw.

Mulching -- Apply 1–1/2 to 2 tons per acre (70 to 90 lbs/1000 sq. ft.) of unrotted small grain straw immediately after seeding. Anchor much immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sq. ft.) of emulsified asphalt on flat areas. On slope 8 feet or higher, use 348 gallons per acre (8 gal/1000 sq. ft.) for anchoring.

Maintenance -- Inspect all seeding areas and make needed repairs, replacements and reseedings.

TEMPORARY SEEDING NOTES.

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

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

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

Seeding: -- For periods March 1 -- April 30 and from August 15 -- October 15, seed with 2–1/2 bushel per acre of annual rye (3.2 lbs/1000 sq. ft.). For the period May 1 -- August 14, seed with 3 lbs/acre of weeping lovegrass (.07 lbs/1000 sq. ft.). For the period November 16 -- February 28 protect the site by applying 2 tons/acre of well anchored straw mulch and seed as soon as possible in the spring, or use sod.

Mulching: -- Apply 1–1/2 to 2 tons/acre (70 to 90 lbs/1000 sq. ft.) of unrotted weed–free, small grain straw immediately after seeding. Anchor much immediately after application using mulch anchoring tool or 218 gal. per acre (5 gal/1000 sq. ft.) of emulsified asphalt on flat areas. On slope 8 ft. or higher, use 348 gal. per acre (8 gal/1000 sq. ft.)for anchoring.

Refer to the 1994 MARYLAND STANDARDS AND SPECIFICATION FOR SOIL EROSION AND SEDIMENT CONTROL for additional rates and methods not covered.

DEVELOPER'S CERTIFICATE

"I/We certify that all development and construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District."

Signature of Developer — Date: 6/2/04

JAMES D'AGOSTINO
Print name below signature

ENGNEER'S 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 and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."

Signature of Engineer — Date: 6/2/04

JOHN HOUSEHOLDER
Print name below signature

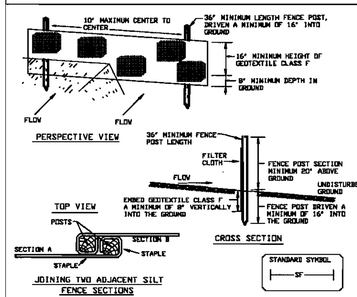
REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS.

USDA, Natural Resources, Conservation Service — Date: 9-7-04

This development plan is approved for compliance with the requirements of the Howard County code governing soil erosion and sediment control for the HOWARD SOIL CONSERVATION DISTRICT.

Howard SCD — Date: 9-7-04

DETAIL 22 – SILT FENCE



Construction Specifications

1. Fence posts shall be a minimum of 36" long driven 16" minimum into the ground. Wood posts shall be 11/2" x 11/8" square (minimum) cut, or 13/4" diameter (minimum) round and shall be of sound quality hardwood. Steel posts will be standard T or U section weighting not less than 1.00 pond per linear Foot.

2. Geotextile shall be fastened securely to each fence post with wire ties or staples at top and mid-section and shall meet the following requirements for Geotextile Class F:

Tensile Strength	50 lbs/in (min.)	Test: MSMT 509
Tensile Modulus	20 lbs/in (min.)	Test: MSMT 509
Flow Rate	0.3 gal ft²/ minute (max.)	Test: MSMT 322
Filtering Efficiency	75% (min.)	Test: MSMT 322

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

4. Silt Fence shall be inspected after each rainfall event and maintained when bulges occur or when sediment accumulation reached 50% of the fabric height.

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SILT FENCE

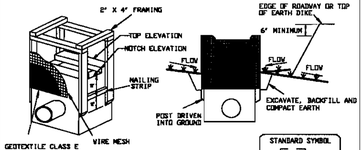
Silt Fence Design Criteria

Slope Steepness	(Maximum) Slope Length	(Maximum) Silt Fence Length
Flatter than 50:1	unlimited	unlimited
50:1 to 10:1	125 Feet	1,000 Feet
10:1 to 5:1	100 Feet	750 Feet
5:1 to 3:1	60 Feet	500 Feet
3:1 to 2:1	40 Feet	250 Feet
2:1 and steeper	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	PAGE E - 16 - 3A	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 23A – STANDARD INLET PROTECTION



MAX. DRAINAGE AREA = 1/4 ACRE

Construction Specifications

1. Excavate completely around the inlet to a depth of 18" below the notch elevation.

2. Drive the 2" x 4" construction grade lumber posts 1' into the ground at each corner of the inlet. Place nail strips between the posts on the ends of the inlet. Assemble the top portion of the 2" x 4" frame using the overlap joint shown on Detail 23A. The top of the frame (weir) must be 6" below adjacent roadways where flooding and safety issues may arise.

3. Stretch the 1/2" x 1/2" wire mesh tightly around the frame and fasten securely. The ends must meet and overlap at a post.

4. Stretch the Geotextile Class E tightly over the wire mesh with the geotextile extending from the top of the frame to 18" below the inlet notch elevation. Fasten the geotextile firmly to the frame. The ends of the geotextile must meet at a post, be overlapped and folded, then fastened down.

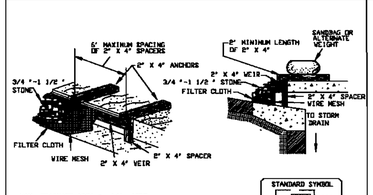
5. Backfill around the inlet in compacted 6" layers until the layer of earth is level with the notch elevation on the ends and top elevation on the sides.

6. If the inlet is not in a sump, construct a compacted earth dike across the ditch line directly below it. The top of the earth dike should be at least 6" higher than the top of the frame.

7. The structure must be inspected periodically and after each rain and the geotextile replaced when it becomes clogged.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE E - 16 - 5	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 23C – CURB INLET PROTECTION (COG OR COS INLETS)



MAX. DRAINAGE AREA = 1/4 ACRE

Construction Specifications

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

2. Place a continuous piece of Geotextile Class E the same dimensions as the wire mesh over the wire mesh and securely attach it to the 2" x 4" weir.

3. Securely nail the 2" X 4" weir to a 9" long vertical spacer to be located between the weir and the inlet face (max. 4' apart).

4. Place the assembly against the inlet throat and nail (minimum 2' lengths of 2" x 4" to the top of the weir at spacer locations). These 2" x 4" anchors shall extend across the inlet top and be held in place by sandbags or alternate weight.

5. The assembly shall be placed so that the end spacers are a minimum 1' beyond both ends of the throat opening.

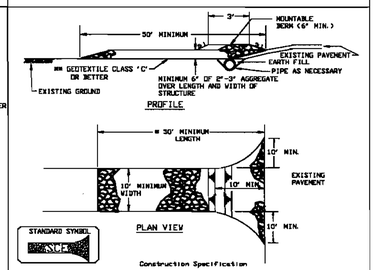
6. Form the 1/2" x 1/2" wire mesh and the geotextile fabric to the concrete gutter and against the face of the curb on both sides of the inlet. Place clean 3/4" x 1 1/2" stone over the wire mesh and geotextile in such a manner to prevent water from entering the inlet under or around the geotextile.

7. This type of protection must be inspected frequently and the filter cloth and stone replaced when clogged with sediment.

8. Assure that storm flow does not bypass the inlet by installing a temporary earth or asphalt dike to direct the flow to the inlet.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE E - 16 - 5B	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 24 – STABILIZED CONSTRUCTION ENTRANCE



Construction Specification

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 radius.

3. Geotextile fabric (Filter cloth) shall be placed over the existing ground prior to placing stone. Witha 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 entrance.

5. Surface Water – all surface water flowing to or diverted toward construction entrances shall be piped through the entrance, maintaining positive drainage. Pipe installed through the stabilized construction entrance shall be protected with a mountable berm with 5:1 slopes and a minimum of 6" of stone over the pipe. Pipe 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.

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HOWARD COUNTY SOIL CONSERVATION DISTRICT

STANDARD SEDIMENT CONTROL NOTES

1. A minimum of 48 hours notice must be given to the Howard County Department of Inspections, Licenses and Permits, Sediment Control Division prior to the start of any construction (313–1855).

2. All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the most current MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL and revisions thereto.

3. Following initial soil disturbance or re–disturbance, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1, b) 14 days as to all other disturbed or graded areas on the project site.

4. All sediment traps/basins 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.

5. All disturbed areas must be stabilized within the time period specific above in accordance with the 1995 MARYLAND STANDARD AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seeding (Sec. 51), sod (Sec. 54), temporary seeding (Sec. 50) and mulching (Section 52). Temporary stabilization with mulch along can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.

6. All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained by the Howard County Sediment Control Inspector.

7. Site Analysis:
Total Area of Site 20.516 Acres
Area Disturbed 6.55 Acres
Area to be roofed or paved 4.35 Acres
Area to be vegetatively stabilized 2.20 Acres
Total Cut 5300 Cu. Yds.
Total Fill 5500 Cu. Yds.
Offsite waste/borrow area location: N/A

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 control must be provided, if deemed necessary by the Howard County Sediment Control Inspector.

10. On all site with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of instllation 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 by the end of each work day, whichever is shorter.

6/2/04
DATE

STATE OF MARYLAND
JOHN M. HOUSEHOLDER
No. 29907
PROFESSIONAL ENGINEER

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chief, Division of Land Development — Date 7/13/04

Chief, Development Engineering Division — Date 6/9/04

Director — Date 7/22/04

Date	No.	Revision Description

BUILDING "A"
AT DORSEY RUN INDUSTRIAL CENTER

OWNER / DEVELOPER

MONTEVIDEO SOUTH BUSINESS TRUST
C/O TRAMMELL CROW COMPANY
7315 WISCONSIN AVENUE SUITE 300 W
BETHESDA, MARYLAND 20814
TEL. (301) 530–6200 FAX (301) 530–6131

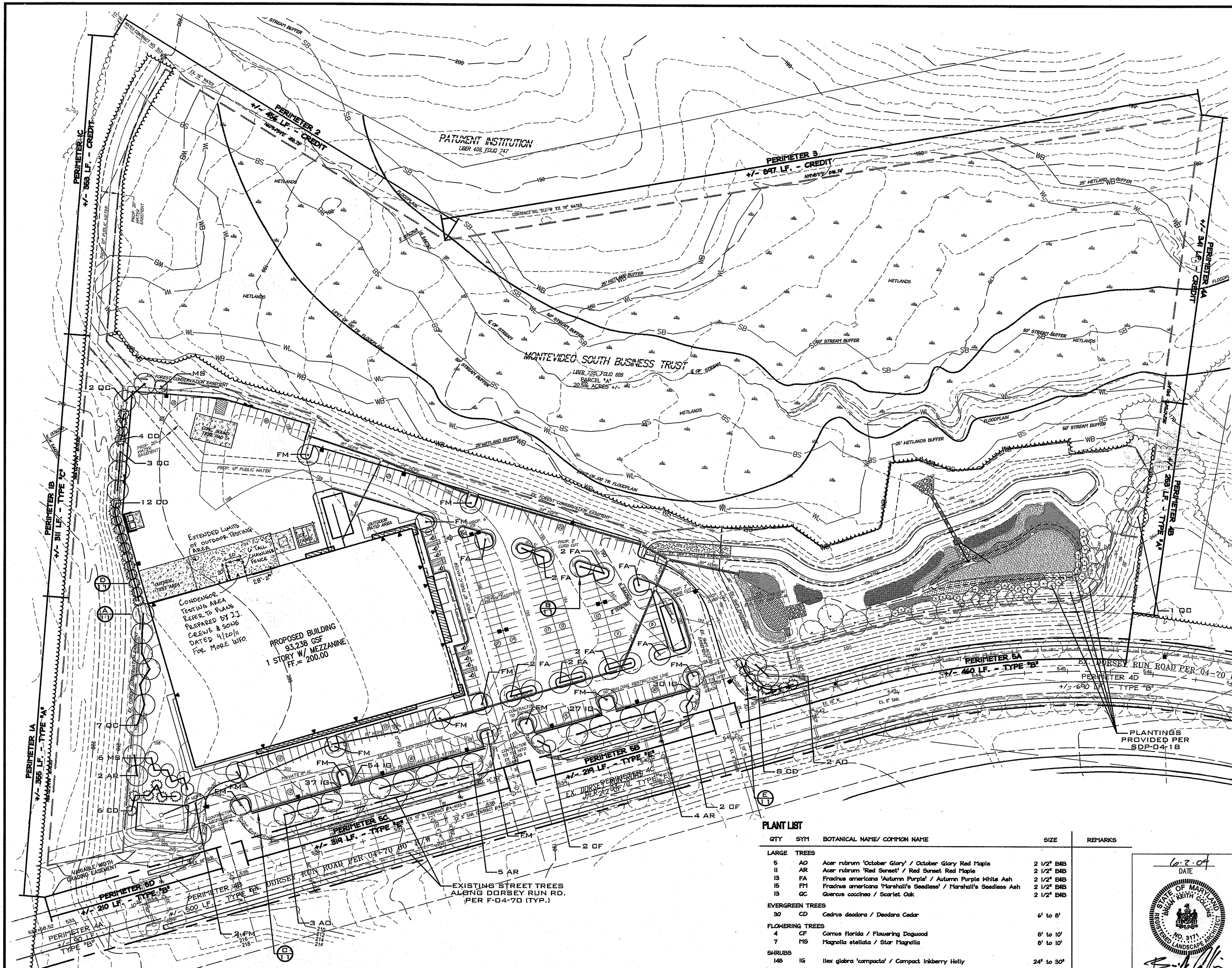
christopher consultants
engineering · surveying · land planning
christopher consultants, ltd.
7172 columbia gateway drive (suite 100) · columbia, md. 21046-2990
410.872.8890 · metro 301.881.0148 · fax 410.872.8893

TITLE:
EROSION & SEDIMENT CONTROL NOTES & DETAILS

DESIGN: BAM	SCALE:		PROJECT: 036701.01
DRAWN: JMH	DATE: 6/01/04		9 OF 12
CHECKED: JMH	APPROVED:		

MDC-121(SDP)

SDP-04-100



LEGEND

- : LIMITS OF DISTURBANCE
- : EXISTING CONTOUR
- : PROPOSED CONTOUR
- + 483 : PROPOSED SPOT ELEVATION
- : EXISTING WOODS LINE
- : EXISTING STORM SEWER
- : PROPOSED STORM SEWER
- : EXISTING SANITARY SEWER
- : PROPOSED SANITARY SEWER
- W : EXISTING WATER LINE
- W : PROPOSED WATER LINE
- : EXISTING CURB AND GUTTER
- : PROPOSED CURB AND GUTTER
- E.P. : EDGE OF PAVEMENT
- F.D.O. : FOUNDATION DRAIN OUTLET
- : SCHEMATIC LIGHTING (TO BE DONE BY OTHERS)
- : EXISTING TREE
- : PROPOSED OVERSTORY
- : PROPOSED EVERGREEN
- : PROPOSED ORNAMENTAL
- : PROPOSED SHRUBS
- : PLANTINGS PER SDP-04-18
- : PLANTINGS PER F-04-70

7/6/2011

for revision 1

PLANT LIST

QTY	SYM	BOTANICAL NAME/ COMMON NAME	SIZE	REMARKS
LARGE TREES				
5	AO	Acer rubrum 'October Glory' / October Glory Red Maple	2 1/2" B&B	
11	AR	Acer rubrum 'Red Sunset' / Red Sunset Red Maple	2 1/2" B&B	
13	FA	Fraxinus americana 'Autumn Purple' / Autumn Purple White Ash	2 1/2" B&B	
15	FM	Fraxinus americana 'Marshall's Seedless' / Marshall's Seedless Ash	2 1/2" B&B	
13	QC	Quercus coccinea / Scarlet Oak	2 1/2" B&B	
EVERGREEN TREES				
30	CD	Cedrus deodora / Deodara Cedar	6' to 8'	
FLOWERING TREES				
4	CF	Cornus florida / Flowering Dogwood	8' to 10'	
7	MS	Magnolia stellata / Star Magnolia	8' to 10'	
SHRUBS				
148	IG	Ilex glabra 'compacta' / Compact Inkberry Holly	24" to 30"	

6.2.04
DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chief, Division of Land Development HB	Date 9/10/04
Chief, Development Engineering Division MPB	Date 9/9/04
Director	Date 9/22/04

Date	No.	Revision Description
6/1/11	1	REVISED TO ADD OUTDOOR CONDENSOR TESTING AREA

BUILDING "A"
AT DORSEY RUN INDUSTRIAL CENTER, PARCEL A
TM 43, TM GRID 16, P/O TM PARCEL 572, FIRST ELECTION DISTRICT
HOWARD COUNTY, MD

OWNER / DEVELOPER

MONTEVIDEO SOUTH BUSINESS TRUST
C/O TRAMMELL CROW COMPANY
7315 WISCONSIN AVENUE SUITE 300 W
BETHESDA, MARYLAND 20814
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410.872.8690 · metro 301.881.0148 · fax 410.872.8693

TITLE:

LANDSCAPE PLAN

DESIGN: BKC	SCALE: 1"=50'	PROJECT: 036701.01
DRAWN: PZ	DATE: 6/01/04	10 OF 12
CHECKED: BKC	APPROVED:	

SDP-04-100 MDC-121(SDP)

SCHEDULE A
PERIMETER LANDSCAPE EDGE

CATEGORY	ADJACENT TO ROADWAYS				ADJACENT TO PERIMETER PROPERTIES						
LANDSCAPE TYPE *A*					P 1A		P 1C	P 2	P 3	P 4A	P 4B
LINEAR FEET OF PERIMETER					355 LF.		353 LF.	456 LF.	847 LF.	341 LF.	253 LF.
LANDSCAPE TYPE *B*	P 5A			P 5D							
LINEAR FEET OF PERIMETER	460 LF.			210 LF.							
LANDSCAPE TYPE *C*						P 1B					
LINEAR FEET OF PERIMETER						311 LF					
LANDSCAPE TYPE *E*		P 5B	P 5C								
LINEAR FEET OF PERIMETER		219 LF.	319 LF.								
CREDIT FOR EXISTING VEGETATION (DESCRIBE BELOW IF NEEDED)	YES# 8 SHADE 4 EVER-GREEN	N/A	N/A	N/A	N/A	N/A	353 LF.	456 LF.	847 LF.	341 LF.	YES# 4 SHADE
REMAINING LINEAR FEET OF PERIMETER (PERIMETER - CREDIT)	460 LF.	219 LF.	319 LF.	210 LF.	355 LF.	311 LF.	0 LF.	0 LF.	0 LF.	0 LF.	253 LF
NUMBER OF PLANTS REQUIRED SHADE TREES EVERGREEN TREES SHRUBS	1 8 0	6 0 56	8 0 80	5 6 0	6 0 0	8 16 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
NUMBER OF PLANTS PROVIDED SHADE TREES EVERGREEN TREES OTHER TREES (2:1 SUBSTITUTION) SHRUBS (10:1 SUBSTITUTION) (DESCRIBE PLANT SUBTITUTION CREDITS BELOW IF NEEDED)	2 8 0 0	4 0 4# 57	8 0 0 89	2 6 6# 0	9 0 0 0	5# 16 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0

* NOTES:
P5A/P4B - PLANTINGS PROVIDED PER SDP-04-18
P5B - 4 ORNAMENTAL TREES SUBSTITUTED FOR 2 SHADE TREES
P5D - 6 ORNAMENTAL TREES SUBSTITUTED FOR 3 SHADE TREES
P1B - 3 SHADE TREES PLANTED IN PERIMETER 1A

GENERAL PLANTING NOTES

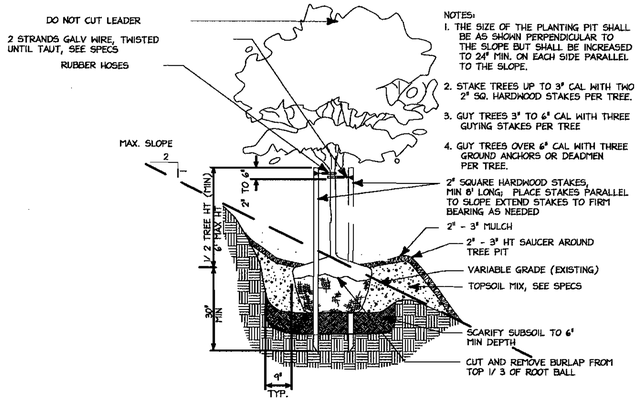
1. ALL PLANT MATERIAL TO MEET A.A.N. STANDRDS
2. LANDSCAPING CONTRACTOR TO FOLLOW LANDSCAPE SPECIFICATION GUIDLINES FOR BALTIMORE WASHINGTON METRO AREA APPROVED BY LCAMN.
3. NO SUBSTITUTIONS TO BE MADE WITHOUT CONSENT OF LANDSCAPE ARCHITECT OR OWNER.
4. ALL BEDS TO BE TOPPED WITH THREE INCHES OF HARDWOOD MULCH.
5. LANDSCAPE CONTRACTOR TO VERIFY LOCATION OF UTILITIES WITH OWNERS BEFORE PLANTING.
6. LANDSCAPE ARCHITECT/OWNER SHALL SELECT, VERIFY AND/OR APPROVE ALL PLANT MATERIAL. AT OWNER'S DISCRETION, SPECIMEN AND OTHER PLANT MATERIAL WILL BE SELECTED.
7. LANDSCAPE CONTRACTOR SHALL COORDINATE PLANT BED FILLING OPERATIONS AND PLANT MATERIAL INSTALLATION WITH WITH GENERAL CONTRACTOR AND UTILITIES CONTRACTOR. AT THE TIME OF FINAL INSPECTION WITH ACCEPTANCE, ALL ELECTRIC,WATER,DRAINAGE, AND FOUNTAIN UTILITIES,AS WELL AS ALL PLANT MATERIALS, SHALL REMAIN UNDAMAGED. LIKEWISE, LANDSCAPE CONTRACTOR AND UTILITIES CONTRACTOR SHALL COORDINATE EFFORTS TO ENSURE THAT SURFACE UTILITIES ARE AT THE PROPER ELEVATION RELATIVE TO FINAL GRADES.
8. CONTRACTOR SHALL NOTIFY MISS UTILITY 72 HOURS PRIOR TO CONSTRUCTION.
9. THE OWNER,TENANT, AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENTANCE 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.
10. TOPSOIL MIX
    a. 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.
    b. 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 dolmanite limestone (eliminate for acid loving plants)
    c. 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 dolmanite limestone (eliminate for acid loving plants)
11. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HO.CO. CODE. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING IN THE AMOUNT OF 22,680 MUST BE POSTED AS PART OF THE DEVELOPER'S AGREEMENT. (47 SHADE, 30 EVERGREEN, 136 SHRUBS).
12. 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 _____ DATE _____

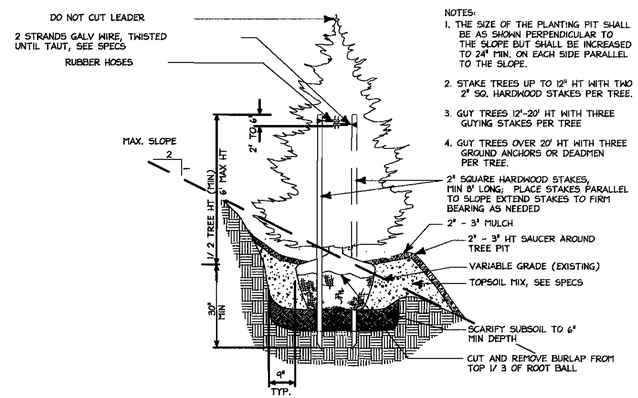
SCHEDULE B
PARKING LOT INTERNAL LANDSCAPING

NUMBER OF PARKING SPACES	250
NUMBER OF TREES REQUIRED @ 1/20 PKG. SPACES	13
NUMBER OF TREES PROVIDED SHADE TREES OTHER TREES (2:1 SUBTITUTION)	13 0
NUMBER OF ISLANDS REQUIRED @ 1 PER 20 PKG. SP.	13
NUMBER OF ISLANDS PROVIDED @ 1 PER 20 PKG. SP.	13



NOTES:
1. THE SIZE OF THE PLANTING PIT SHALL BE AS SHOWN PERPENDICULAR TO THE SLOPE BUT SHALL BE INCREASED TO 24" MIN. ON EACH SIDE PARALLEL TO THE SLOPE.
2. STAKE TREES UP TO 3" CAL WITH TWO 2" SQ. HARDWOOD STAKES PER TREE.
3. GUY TREES 3" TO 6" CAL WITH THREE GUYING STAKES PER TREE
4. GUY TREES OVER 6" CAL WITH THREE GROUND ANCHORS OR DEADMEN PER TREE.

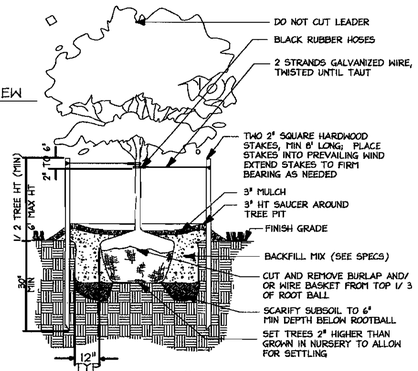
Ⓐ Tree Planting on Slope
Not To Scale



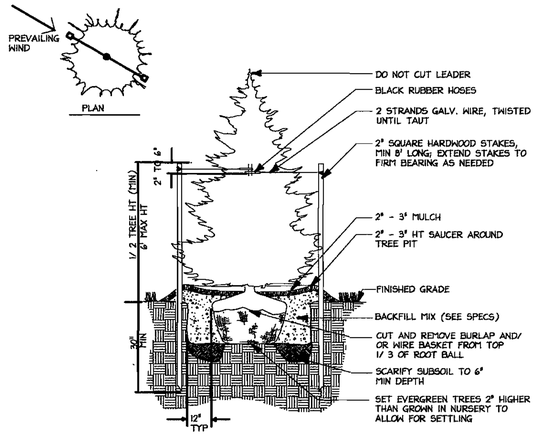
NOTES:
1. THE SIZE OF THE PLANTING PIT SHALL BE AS SHOWN PERPENDICULAR TO THE SLOPE BUT SHALL BE INCREASED TO 24" MIN. ON EACH SIDE PARALLEL TO THE SLOPE.
2. STAKE TREES UP TO 12' HT WITH TWO 2" SQ. HARDWOOD STAKES PER TREE.
3. GUY TREES 12'-20' HT WITH THREE GUYING STAKES PER TREE
4. GUY TREES OVER 20' HT WITH THREE GROUND ANCHORS OR DEADMEN PER TREE.

Ⓓ Evergreen Tree Planting on Slope
Not To Scale

PLAN VIEW

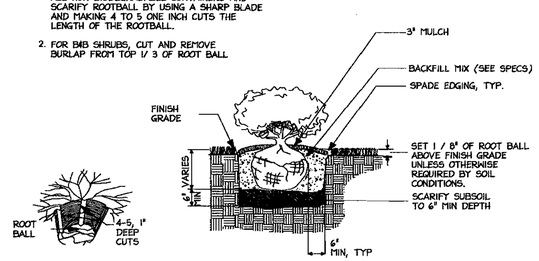


Ⓑ Less Than 3" Cal. Tree Planting
Not To Scale



Ⓔ Evergreen Tree Planting
Not To Scale

NOTES:
1. FOR CONTAINER SHRUBS, COMPLETELY REMOVE ALL NON-BIODEGRADABLE CONTAINERS AND SCARIFY ROOTBALL BY USING A SHARP BLADE AND MAKING 4 TO 5 ONE INCH CUTS THE LENGTH OF THE ROOTBALL.
2. FOR B&B SHRUBS, CUT AND REMOVE BURLAP FROM TOP 1/3 OF ROOT BALL



Ⓒ Shrub Bed Planting
Not To Scale

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chief, Division of Land Development — Date 7/10/04

Chief, Development Engineering Division — Date 9/9/04

Director — Date 7/12/04

Date	No.	Revision Description

BUILDING "A"
AT DORSEY RUN INDUSTRIAL CENTER

OWNER / DEVELOPER

MONTEMIDEO SOUTH BUSINESS TRUST
C/O TRAMMELL CROW COMPANY
7315 WISCONSIN AVENUE SUITE 300 W
BETHESDA, MARYLAND 20814
TEL. (301) 530-6200 FAX (301) 530-6131

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6.2.04
DATE

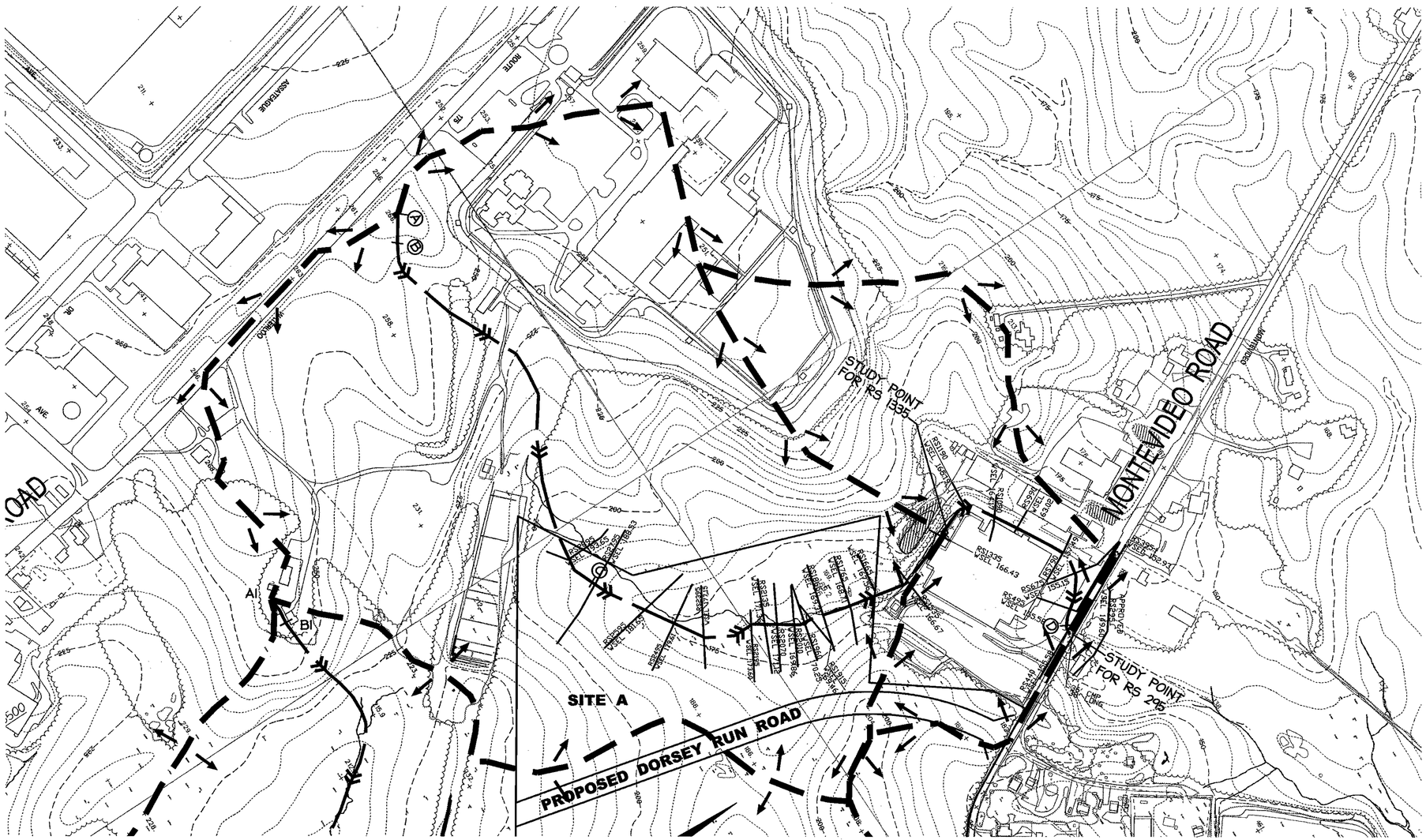
STATE OF MARYLAND — BRIAN KEITH COLLINS — NO. 3171 — REGISTERED LANDSCAPE ARCHITECT

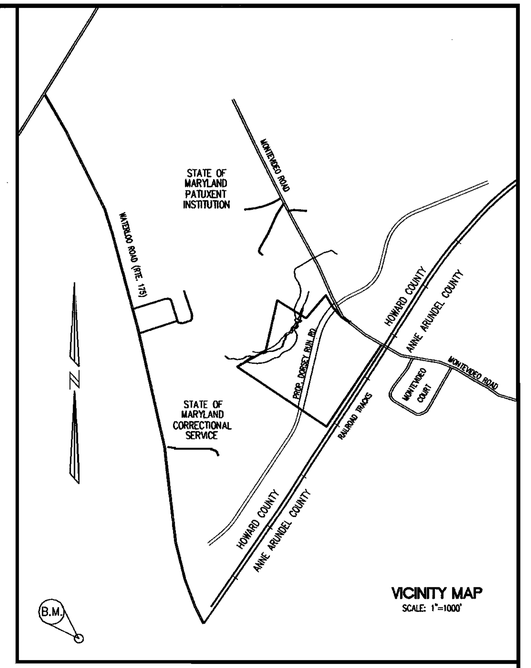
TITLE:
LANDSCAPE DETAILS & NOTES

DESIGN: BKC	SCALE: AS SHOWN	PROJECT: 036701.01
DRAWN: PZ	DATE: 6/01/04	
CHECKED: BKC	APPROVED:	11 OF 12

MDC-121(SDP)

SDP-04-100





VICINITY MAP
SCALE: 1"=1000'

LEGEND

DRAINAGE AREA DIVIDE

FLOW PATH

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chief, Division of Land Development — Date 9/10/04

Chief, Development Engineering Division — Date 9/9/04

Director — Date 9/27/04

Date	No.	Revision Description

SITE "A"
AT DORSEY RUN INDUSTRIAL CENTER

OWNER / DEVELOPER
MONTEVIDEO SOUTH BUSINESS TRUST
C/O TRAMMELL CROW COMPANY
7315 WISCONSIN AVENUE SUITE 300 W
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PERMIT INFORMATION CHART

PROJECT NAME	LOT/PARCEL NO.	CENSUS TRACT
BALTIMORE AIR COIL	100,325,372,572,574	6067.03

PLAT NO.	GRID NO.	ZONE	TAX MAP	ELECTION DISTRICT
N/A	16	M-2	43	1ST

WATER CODE	SEWER CODE
PUBLIC	PUBLIC

TITLE:

100 YEAR FLOODPLAIN DRAINAGE AREA MAP

DESIGN: RAD/XDF	SCALE: 1"=200'	PROJECT: 036701.01
DRAWN: ADL	DATE: 6/1/04	12 OF 12
CHECKED:	APPROVED:	

6/2/04
DATE

STATE OF MARYLAND
JOHN W. HOUSEHOLDER
No. 29907
PROFESSIONAL ENGINEER

SDP-04-100

MDC-