LEGEND

DESCRIPTION	EXISTING	TO BE REMOVED	NEW
BUILDING			NEW BUILDING
TYPE 1 PAVING			
TYPE 2 PAVING			
TYPE 3 PAVING			
BITUMINOUS PAVING	EX. PAVING		
STEEP SLOPES			
CURB AND GUTTER			
FENCE			X X
SANITARY SEWER	S		S
WATER	W		
GAS	G		
FIRE HYDRANT			
VALVE			
ELECTRIC	E		
TELEPHONE	T		
CONTOURS	215 216		210 211
STORM DRAIN	D		
BOLING			
PROPERTY LINE			
EASEMENT			
TREE/SHRUB			
BORINGS	B1 15.0		

GENERAL NOTES

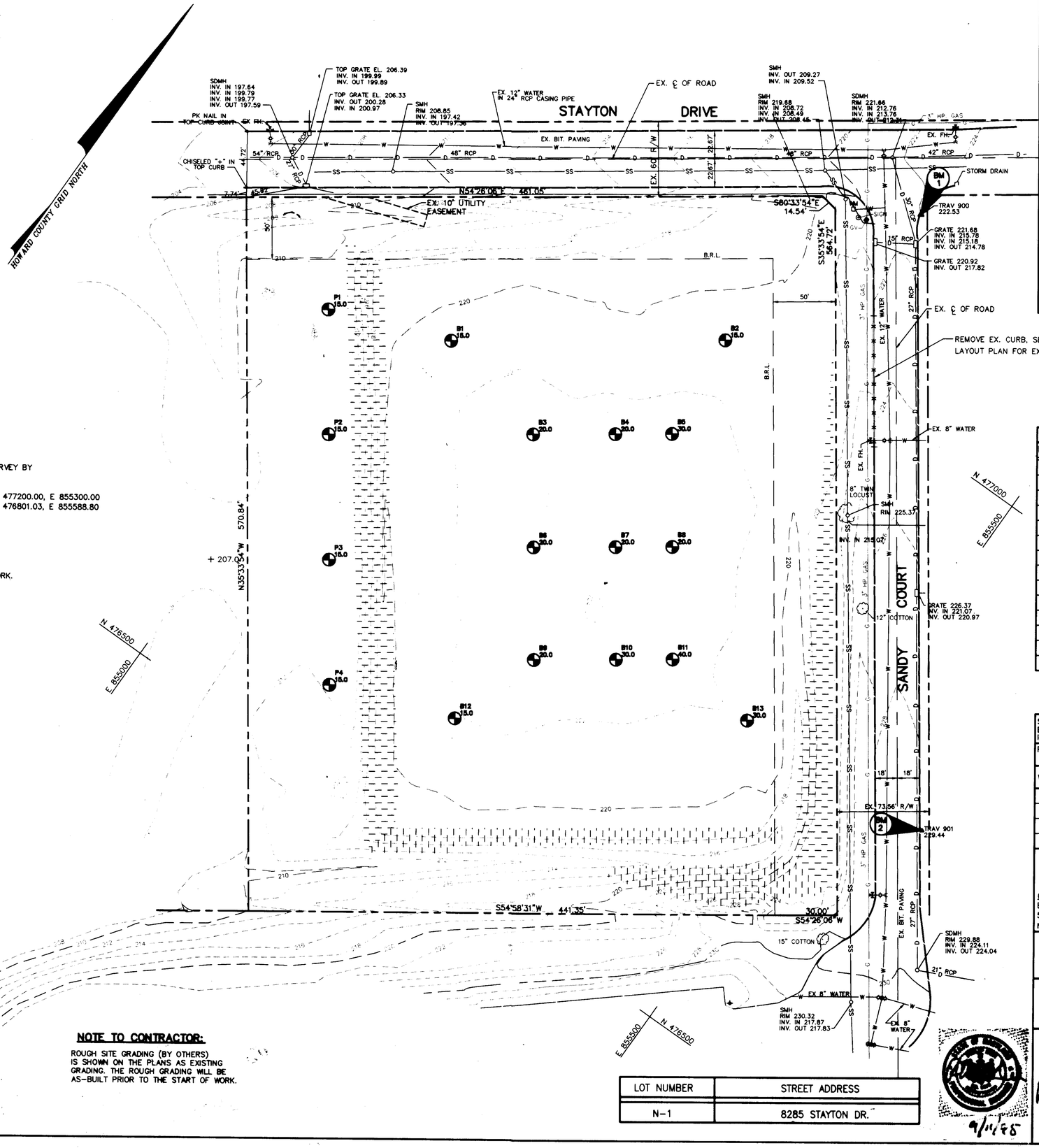
1. THE TOPOGRAPHY SHOWN IS BASED UPON A TOPOGRAPHIC SURVEY BY GREENHOURNE & O'MARA DATED JAN. 9, 1995 AND AN AS BUILT TOPOGRAPHIC SURVEY BY WHITNEY, BAILEY, COX & MAGNANI, COMPLETED AUG. 15, 1995
2. BENCH MARK 1 DATA: ELEVATION: 222.53, DESCRIPTION: TRAV. PT #900, CORD: N 477200.00, E 855300.00
   BENCH MARK 2 DATA: ELEVATION: 229.44, DESCRIPTION: TRAV. PT #901, CORD: N 476801.03, E 855588.80
3. HORIZONTAL CONTROL BASED ON HOWARD COUNTY GRID SYSTEM.
4. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY ACTUAL SITE CONDITIONS PRIOR TO THE START OF ANY WORK. THERE IS NO WARRANTY OR GUARANTEE ON THE COMPLETENESS OR CORRECTNESS OF THE EXISTING CONDITION INFORMATION GIVEN. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ARCHITECT PRIOR TO THE START OF ANY WORK.
5. THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY THE EXACT LOCATION OF ALL EXISTING UNDERGROUND UTILITIES BEFORE COMMENCING ANY WORK. CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR THE COST OF ANY AND ALL DAMAGES WHICH OCCUR AS A RESULT OF A FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL EXISTING UTILITIES TO REMAIN.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING "MISS UTILITY" AT 1-800-257-7777 THREE DAYS PRIOR TO THE START OF ANY EXCAVATION WORK.
7. THE CONTRACTOR SHALL STAKE OUT ALL BASELINES OF CONSTRUCTION, THE LOCATION OF ALL NEW CONSTRUCTION AND VERIFY ALL SETBACKS, OFFSETS, AND CLEARANCES PRIOR TO START OF ANY WORK.
8. THE CONTRACTOR SHALL VERIFY ALL EXISTING UTILITY INVERTS AND CLEARANCES FROM NEW WORK PRIOR TO START OF ANY WORK.
9. ALL DISTURBED AREAS NOT STABILIZED WITH STRUCTURES, PAVING, AND PLANTINGS SHALL BE STABILIZED WITH FOUR INCHES OF TOPSOIL, SEED, MULCH AND WATER TO ESTABLISH AN ADEQUATE GROWTH OF GRASS.
10. ALL WORK SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE REQUIREMENTS OF THE PROJECT SPECIFICATIONS.
11. THE TOPS OF ALL FRAMES AND COVERS OF ALL EXISTING UTILITIES WITHIN THE LIMITS OF CONTRACT SHALL BE ADJUSTED TO THE NEW GRADES.
12. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES.
13. NUMERICAL DIMENSIONS AND ELEVATIONS SHOWN SHALL SUPERSEDE ANY DISCREPANCY IN THE SCALING ON THE DRAWINGS.
14. SOIL BORINGS FURNISHED BY FROEHLING & ROBERTSON, INC DATED 2-28-95.

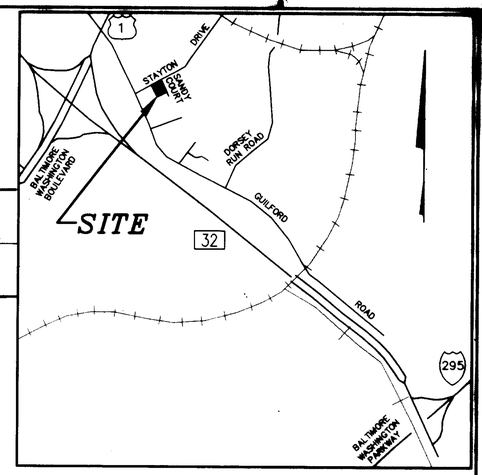
APPROVED: DEPARTMENT OF PLANNING & ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 9/21/95

CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH — DATE 9/20/95

DIRECTOR — DATE 9/22/95





VICINITY MAP
SCALE: 1" = 2000'

DRAWING INDEX

NOTE TO CONTRACTOR:

ROUGH SITE GRADING (BY OTHERS) IS SHOWN ON THE PLANS AS EXISTING GRADING. THE ROUGH GRADING WILL BE AS-BUILT PRIOR TO THE START OF WORK.

LOT NUMBER	STREET ADDRESS
N-1	8285 STAYTON DR.

Subdivision Name: BALTIMORE-WASHINGTON INDUSTRIAL PARK	Section/Area: BLOCK C	Lot/Parcel #: N-1/166
Plat # or L/F: 8791	Block #: 7	Zone: M-2
Tax/Zone Map: 48	Elect Dist.: 6	Census Tract: 6069.01
Water Code: B02	Sewer Code: 4201200	

DATE	NO.	REVISIONS

SAVAGE, MD — HOWARD COUNTY

UPS MAINTENANCE FACILITY

FILE NO. SDP-95-98

OWNER
BORDALE COMPANY
55 GLENLAKE PARKWAY
NORTHEAST ATLANTA, GA. 30328

BALTIMORE-WASHINGTON INDUSTRIAL PARK
8285 STAYTON DR.

EXISTING CONDITIONS AND BORING PLAN

ENGINEERS: Consulting Engineers
849 Fairmount Avenue (410) 512-4600
Baltimore, Maryland 21286 (410) 324-4100 (FAX)
WHITNEY, BAILEY, COX & MAGNANI

DESIGNED:	J. POTTER
DRAWN:	J. POTTER
CHECKED:	J. JOHNSON
DATE:	JUNE 26, 1995
SCALE:	1" = 40'
DRAWING NO:	CE-1

9/11/95

9/5/95

SDP-95-98

CONSTRUCTION STAKEOUT DATA

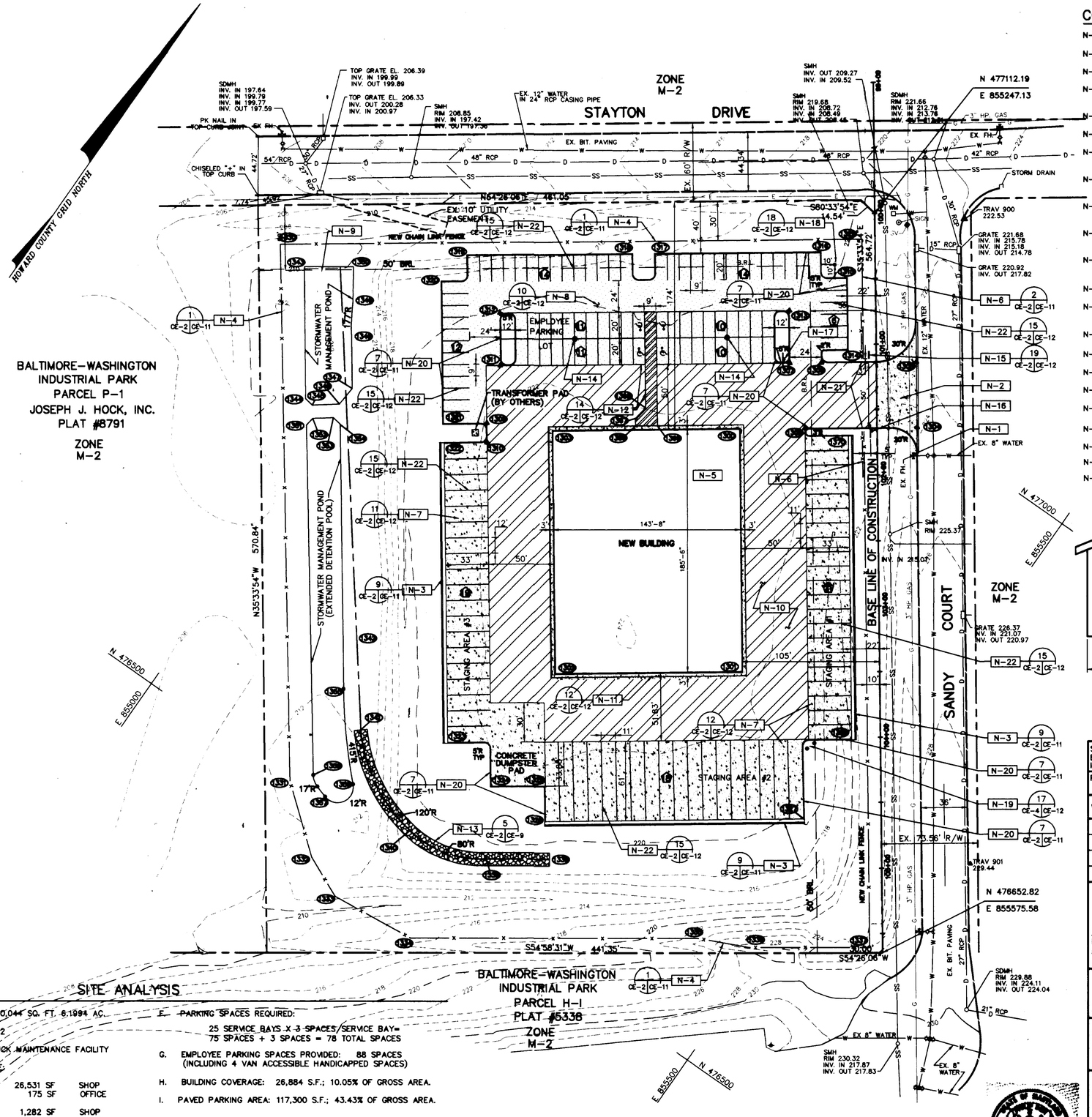
POINT	STATION	OFFSET*	DESCRIPTION
1300	101+63.72	105.00	BLDG COR
1301	103+48.22	105.00	BLDG COR
1302	103+48.22	248.67	BLDG COR
1303	101+63.72	248.67	BLDG COR
1304	101+63.72	30.75 L	CURB PI
1305	101+13.72	30.74 L	CURB PI
1306	101+13.72	42.00	CURB PI
1307	101+13.72	84.00	CURB PI
1308	101+63.72	55.00	CURB PI
1309	101+57.72	296.67	CURB PI
1310	101+72.72	296.67	CURB PI
1311	101+13.72	288.00	CURB PI
1312	100+73.72	288.00	CURB PI
1313	100+73.72	66.00	CURB PI
1314	101+63.72	22.00	CURB COR
1315	103+48.72	22.00	CURB COR
1316	100+28.72	42.00	CURB COR
1317	100+28.72	166.00	CURB COR
1318	100+28.72	166.00	CURB COR
1319	100+28.72	312.00	CURB COR
1320	100+48.72	332.00	CURB COR
1321	101+57.72	332.00	CURB COR
1322	101+73.06	331.67	CURB COR
1323	104+01.05	331.67	CURB COR
1324	104+35.05	296.67	CURB COR
1325	104+35.05	257.40	CURB COR
1326	104+82.05	257.40	CURB COR
1327	104+82.05	56.40	CURB COR
1328	104+01.05	22.00	CURB COR
1329	100+19.72	10.00	FENCE COR
1330	100+19.72	464.75	FENCE COR
1331	104+28.71	462.34	FENCE COR
1332	104+87.57	436.47	FENCE COR
1333	105+17.78	418.80	FENCE COR
1334	105+50.39	361.54	FENCE COR
1335	105+82.63	140.66	FENCE COR
1336	105+88.78	102.23	FENCE COR
1337	105+80.65	10.00	FENCE COR
1338	104+90.97	254.83	CL ACCESS ROAD
1339	104+90.48	303.48	PC ACCESS ROAD
1340	104+88.33	391.25	PCC ACCESS ROAD
1341	103+91.02	397.84	PT ACCESS ROAD
1342	103+22.04	400.06	POL ACCESS. ROAD
1343	100+37.10	436.73	SWM POND
1344	101+37.71	436.97	SWM POND
1346	101+42.71	431.83	SWM POND
1346	101+42.13	411.31	SWM POND
1347	101+30.34	401.33	SWM POND
1348	100+91.84	401.39	SWM POND
1349	100+84.08	400.05	SWM POND
1350	100+37.47	398.17	SWM POND
1351	101+57.97	436.50	SWM POND
1352	101+82.63	431.65	SWM POND
1353	101+82.47	415.88	SWM POND
1354	101+57.46	410.74	SWM POND
1355	103+88.58	410.56	SWM POND
1356	104+32.64	404.15	SWM POND
1357	104+41.93	425.57	SWM POND
1358	104+25.33	434.35	SWM POND
1366	101+60.72	184.87	CROSSWALK END
1367	101+54.87	184.84	CROSSWALK ANG BRK
1368	101+46.89	177.00	CROSSWALK ANG BRK
1369	101+60.72	168.00	CROSSWALK END
1370	101+70.05	22.00	CURB COR

*OFFSETS ARE RIGHT OF THE BASELINE OF CONSTRUCTION UNLESS OTHERWISE NOTED.

**ALL CURB LOACTIONS ARE TO THE FACE OF CURB

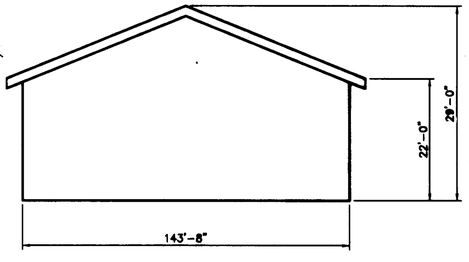
NOTES: 1. STAGING AREA #1 WILL ONLY BE USED FOR TEMPORARY PARKING (STAGING) OF REPAIRED VEHICLES WAITING FOR SHIPMENT.

2. THE NUMBER OF SERVICE BAYS INSIDE THE PROPOSED BUILDING IS 25.



CONSTRUCTION NOTES

- N-1 PROTECT EXISTING FIRE HYDRANT DURING CONSTRUCTION
- N-2 CONSTRUCT CONCRETE APRON. SEE HOWARD COUNTY STANDARD DETAIL R 6.07. MATCH EXISTING ROAD PAVING AS REQUIRED
- N-3 CONSTRUCT CONCRETE FEEDER CURB, SEE DETAILS 9, CE-11.
- N-4 ERECT NEW CHAINLINK FENCE W/ 3 STRANDS OF BARBED WIRE. SEE DETAIL 1, DWG. CE-11.
- N-5 CONSTRUCT NEW BUILDING. SEE ARCHITECTURAL/MECHANICAL DRAWINGS.
- N-6 INSTALL NEW SLIDE GATES PER DETAIL 2, DWG. CE-11.
- N-7 PAVE TRAILER STAGING AREAS WITH PORTLAND CEMENT, SEE DETAIL 11, DWG. CE-12.
- N-8 PAVE EMPLOYEE PARKING AREAS WITH TYPE 1 BITUMINOUS CONCRETE, SEE DETAIL 12, DWG. CE-12.
- N-9 CONSTRUCT OUTFALL STRUCTURE AS SHOWN ON STORMWATER MANAGEMENT PLAN, SEE DWG. CE-8.
- N-10 PAVE TRAVEL LANE AROUND BUILDING WITH TYPE 1 BITUMINOUS CONCRETE PAVING, SEE DETAIL 10, DWG. CE-12.
- N-11 CONSTRUCT 3' WIDE PORTLAND CEMENT APRON AROUND PERIMETER OF BUILDING, SEE DETAIL 11, DWG. CE-12.
- N-12 STRIPE CROSSWALK AND HANDICAP SPACES, SEE DETAIL 14, CE-12.
- N-13 CONSTRUCT 10' WIDE ACCESS RAMP FOR POND MAINTENANCE USING 6" CR6.
- N-14 INSTALL LIGHT STANDARDS, SEE ELECTRICAL DRAWINGS.
- N-15 INSTALL UPS SIGN, SEE DETAIL 19 DWG. CE-12.
- N-16 INSTALL STOP SIGN (MUTCD # R1-1 30"x30").
- N-17 INSTALL SPEED LIMIT SIGN [MUTCD #R2-1 (15)].
- N-18 INSTALL NEW FLAGPOLE, SEE DETAIL 18 DWG. CE-12.
- N-19 INSTALL PROTECTIVE BOLLARDS. SEE DETAIL 17, CE-12
- N-20 INSTALL CONCRETE CURB & GUTTER SEE DETAIL 7, CE-11
- N-21 DEPRESS CURB FOR SLIDE GATES
- N-22 STANDARD PARKING STRIPPING SEE DETAIL 15, CE-12



FRONT ELEVATION
NOT TO SCALE

APPROVED: DEPARTMENT OF PLANNING & ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 9/21/95

CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH — DATE 9/22/95

DIRECTOR — DATE 9/22/95

SITE ANALYSIS

A. AREA OF PARCEL: 270,044 SQ. FT. 6.1994 AC.

B. PRESENT ZONING: M-2

C. PROPOSED USE: TRUCK MAINTENANCE FACILITY

D. FLOOR AREA AND USE:

1ST FLOOR	=	26,531 SF	SHOP
	=	175 SF	OFFICE
MEZZANINE	=	1,282 SF	SHOP
	=	313 SF	OFFICE
TOTAL	=	28,301 SF	

E. MAXIMUM NUMBER OF EMPLOYEES: 80

F. PARKING SPACES REQUIRED:
25 SERVICE BAYS X 3 SPACES/SERVICE BAY= 75 SPACES + 3 SPACES = 78 TOTAL SPACES

G. EMPLOYEE PARKING SPACES PROVIDED: 88 SPACES (INCLUDING 4 VAN ACCESSIBLE HANDICAPPED SPACES)

H. BUILDING COVERAGE: 26,884 S.F.; 10.05% OF GROSS AREA.

I. PAVED PARKING AREA: 117,300 S.F.; 43.43% OF GROSS AREA.

Subdivision Name: BALTIMORE-WASHINGTON INDUSTRIAL PARK	Section/Area: BLOCK C
Lot/Parcel #: N-1/166	
Plat # or L/F: 8791	Block #: 7
Zone: M-2	Tax/Zone Map: 48
Elect Dist.: 6	Census Tract: 6068.01
Water Code: B02	Sewer Code: 4201200

DATE	NO.	REVISIONS

SAVAGE, MD — HOWARD COUNTY

UPS MAINTENANCE FACILITY

FILE NO. SDP-95-98

OWNER
BORDALE COMPANY
55 GLENLAKE PARKWAY
NORTHEAST ATLANTA, GA. 30328

BALTIMORE-WASHINGTON INDUSTRIAL PARK
8285 STAYTON DR.

LAYOUT & SITE ANALYSIS PLAN

ENGINEERS: Consulting Engineers
840 Fairmount Avenue (410) 512-4500
Baltimore, Maryland 21286 (410) 324-4100 (FAX)
WHITNEY, BAILEY, COX & MAGNANI

DESIGNED:	J. POTTER
DRAWN:	J. POTTER
CHECKED:	J. JOHNSON
DATE:	JUNE 26, 1995
SCALE:	1"=40'
DRAWING NO:	CE-2

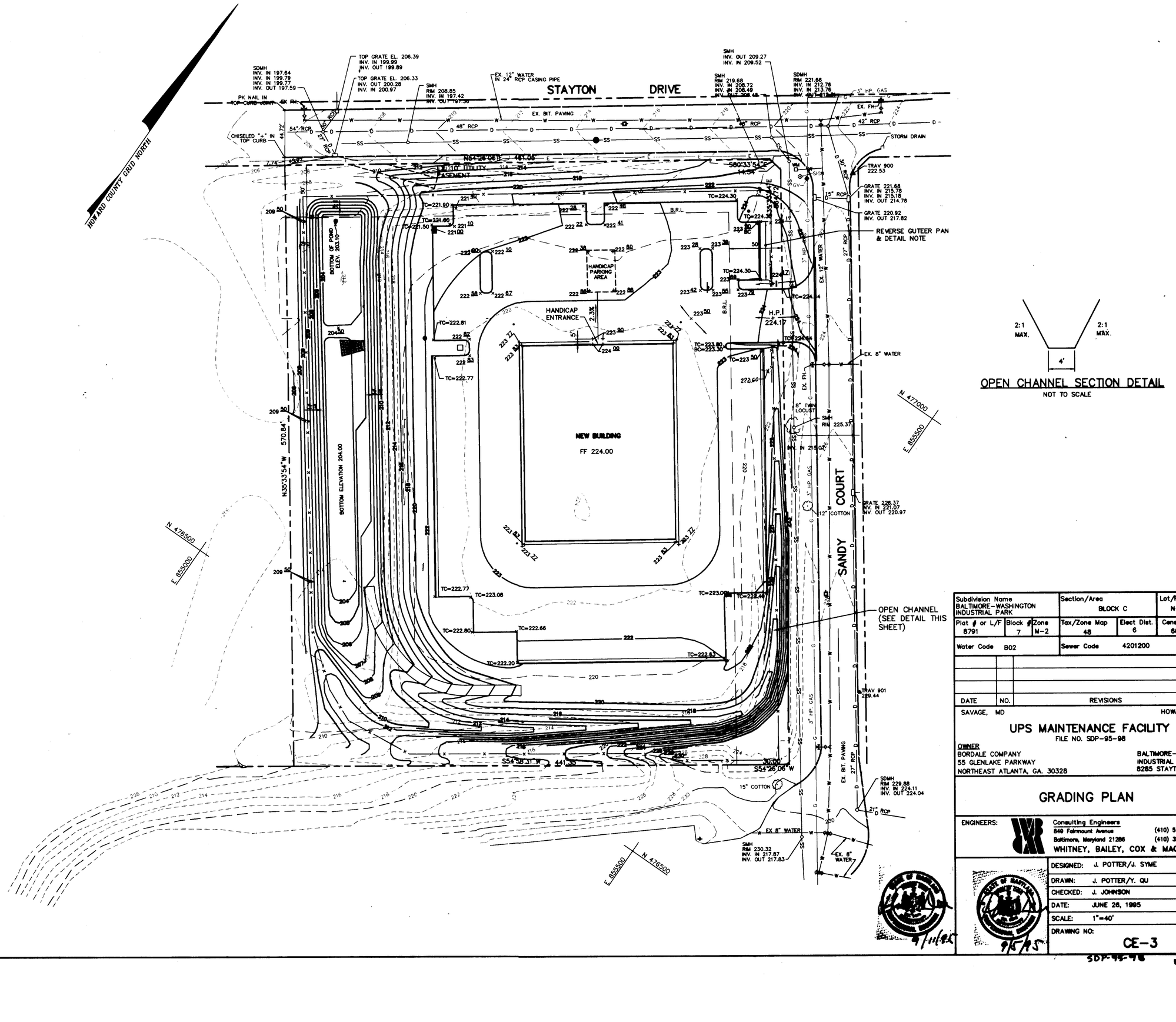
9/5/95

9/11/95

2 OF 14

SDP-95-98

WBCM 9605.0007



2:1 MAX. 2:1 MAX. 4'

OPEN CHANNEL SECTION DETAIL
NOT TO SCALE

APPROVED: DEPARTMENT OF PLANNING & ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION	9/21/95 DATE
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH	9/22/95 DATE
DIRECTOR	9/28/95 DATE

Subdivision Name: BALTIMORE-WASHINGTON INDUSTRIAL PARK		Section/Area: BLOCK C	Lot/Parcel #: N-1/166
Plat # or L/F: 8791	Block #: 7 Zone: M-2	Tax/Zone Map: 48	Elect Dist.: 6 / Census Tract: 6069.01
Water Code: B02		Sewer Code: 4201200	

DATE	NO.	REVISIONS

SAVAGE, MD — HOWARD COUNTY

UPS MAINTENANCE FACILITY

FILE NO. SDP-95-98

OWNER
BORDALE COMPANY
55 GLENLAKE PARKWAY
NORTHEAST ATLANTA, GA. 30328

BALTIMORE-WASHINGTON INDUSTRIAL PARK
8285 STAYTON DR.

GRADING PLAN

ENGINEERS:
Consulting Engineers
840 Fairmount Avenue (410) 512-4500
Baltimore, Maryland 21286 (410) 324-4100 (FAX)
WHITNEY, BAILEY, COX & MAGNANI

DESIGNED:	J. POTTER/J. SYME
DRAWN:	J. POTTER/Y. QU
CHECKED:	J. JOHNSON
DATE:	JUNE 28, 1995
SCALE:	1"=40'
DRAWING NO:	CE-3 3 OF 14

9/11/95

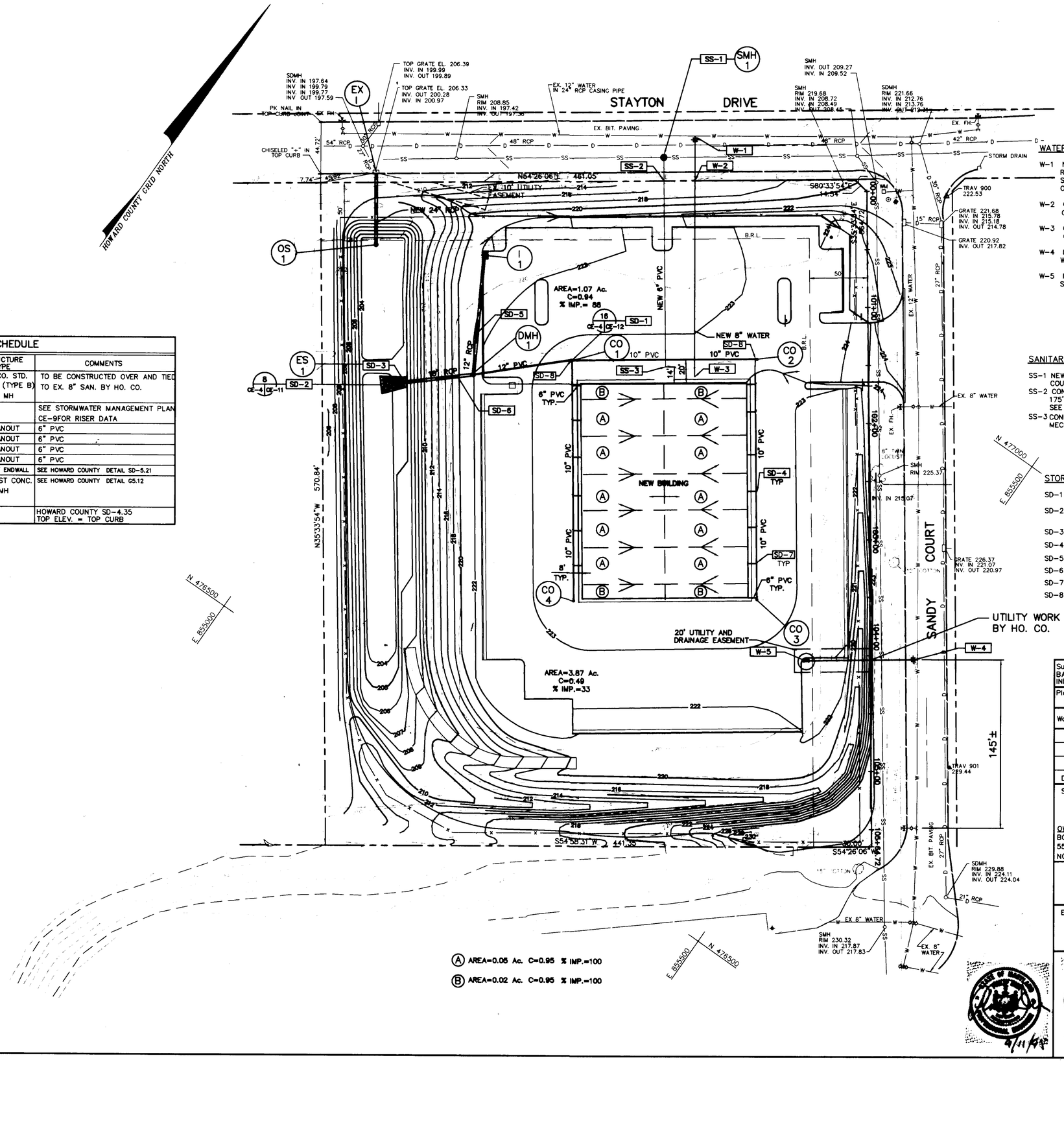
9/5/95

SDP-95-98

WBCM 95030001

STRUCTURE SCHEDULE

NO.	STATION	OFFSET	INVERT	TOP ELEV.	STRUCTURE TYPE	COMMENTS
SMH-1	99+70	175' RT.	IN(E) 203.20 IN(S) 209.73 OUT(W) 203.00	214.30	HO. CO. STD. S-1.32 (TYPE B) DROP MH	TO BE CONSTRUCTED OVER AND TIED TO EX. 8" SAN. BY HO. CO.
OS-1						SEE STORMWATER MANAGEMENT PLAN CE-9FOR RISER DATA
CO-1	101+56.22	256.17' RT.	213.68	223.62	CLEANOUT	6" PVC
CO-2	101+56.22	97.50' RT.	216.30	223.78	CLEANOUT	6" PVC
CO-3	103+51.00	97.50' RT.	218.78	223.62	CLEANOUT	6" PVC
CO-4	103+51.00	256.17' RT.	219.61	223.63	CLEANOUT	6" PVC
ES-1	101+64.20	412.72' RT.	205.00		TYPE "C" ENDWALL	SEE HOWARD COUNTY DETAIL SD-5.21
DMH-1	101+55.72	341.09' RT.	IN(N) 212.63 IN(E) 212.88 OUT(W) 207.00	222.00	PRECAST CONC. DROP MH	SEE HOWARD COUNTY DETAIL G5.12
I-1	100+52.75	332.05' RT.	OUT(S) 217.79	221.50	WR.	HOWARD COUNTY SD-4.35 TOP ELEV. = TOP CURB



WATER NOTES

W-1 NEW 8" TAPPING SLEEVE AND VALVE (STA. 99+55, OFFSET 147' RIGHT), WITH ROADWAY BOX INSTALLATION BY HOWARD COUNTY. 8" SERVICE TO BE TEMPORARILY CAPPED AT RIGHT-OF-WAY (STA. 99+90, OFFSET 147' RIGHT).

W-2 CONNECT NEW 8" SERVICE FROM CAP TO BUILDING AS SHOWN (STA. 99+89.52 OFFSET 147' RIGHT). AFTER REMOVING TEMPORARY CAP.

W-3 CONNECT NEW WATER SERVICE TO BUILDING PLUMBING. STA. 101+58.57 OFFSET 149.95' SEE MECHANICAL DRAWINGS

W-4 NEW 6" TAPPING SLEEVE AND VALVE (STA. 104+04, OFFSET 37' RIGHT) WITH ROADWAY BOX AND 6" MAIN, INSTALLATION BY HOWARD COUNTY.

W-5 NEW FIRE HYDRANT INSTALLATION BY HOWARD COUNTY, PER STANDARD NO. W-4. SEE PROFILE DRAWING CE-5.

SANITARY SEWER NOTES

SS-1 NEW SANITARY MANHOLE AND 6" SERVICE TO RIGHT-OF- WAY LINEBY HOWARD COUNTY SEE STRUCTURE SCHEDULE.

SS-2 CONNECT NEW 6" PVC SANITARY FROM RIGHT-OF-WAY LINE(STA. 99+90, OFFSET 175' RIGHT) TO BUILDING AS SHOWN (STA. 101+49.93, OFFSET 175' RIGHT). SEE PROFILE DRAWING CE-5.

SS-3 CONNECT NEW SANITARY SEWER TO BUILDING PLUMBING. SEE MECHANICAL DRAWINGS.

STORM DRAIN NOTES

SD-1 DETAIL TYPICAL FOR ALL CLEANOUTS. DETAIL 16 ON CE-12

SD-2 INSTALL RIP RAP APRON 9' WIDE TO 18' WIDE AND 20' LONG AT 0% FROM PIPE INVERT d50=9.5", THICK=19"

SD-3 HEADWALL SEE HOWARD COUNTY DETAIL SD-5.21

SD-4 SEE ARCHITECTURAL PLAN FOR LOCATION OF DOWNSPOUTS

SD-5 NEW 12" RCP. SEE PROFILE DWG. CE-5

SD-6 NEW 18" RCP SEE PROFILE DWG CE-5

SD-7 NEW 10"X10" WYE WITH 1/8 BEND (TYP.)

SD-8 NEW 10"X10" TEE WITH CLEANOUT

APPROVED: DEPARTMENT OF PLANNING & ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 9/2/95

CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH — DATE 9/22/95

DIRECTOR — DATE 9/28/95

Subdivision Name: BALTIMORE-WASHINGTON INDUSTRIAL PARK	Section/Area: BLOCK C
Lot/Parcel #: N-1/166	
Plat # or L/F: 8791	Block #: 7
Zone: M-2	Tax/Zone Map: 48
Elect Dist.: 6	Census Tract: 6069.01
Water Code: B02	Sewer Code: 4201200

DATE	NO.	REVISIONS

SAVAGE, MD — HOWARD COUNTY

UPS MAINTENANCE FACILITY

FILE NO. SDP-95-98

OWNER
BORDALE COMPANY
55 GLENLAKE PARKWAY
NORTHEAST ATLANTA, GA. 30328

BALTIMORE-WASHINGTON INDUSTRIAL PARK
8285 STAYTON DR.

UTILITY AND DRAINAGE AREA PLAN

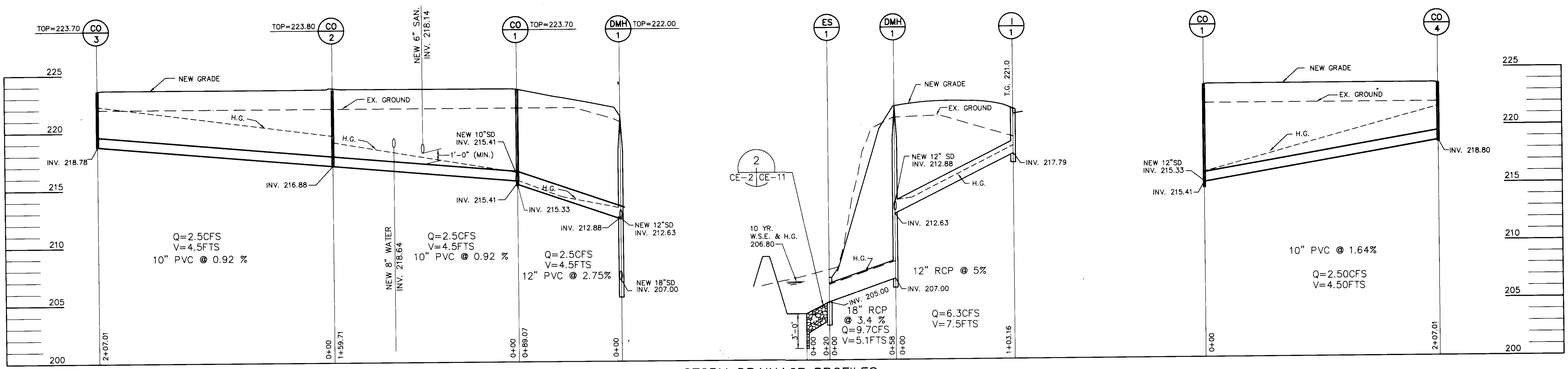
ENGINEERS:
Consulting Engineers
849 Fairmount Avenue (410) 512-4500
Baltimore, Maryland 21286 (410) 324-4100 (FAX)
WHITNEY, BAILEY, COX & MAGNANI

DESIGNED:	J. POTTER/J. SYME
DRAWN:	J. POTTER/Y. QU
CHECKED:	J. JOHNSON
DATE:	JUNE 26, 1995
SCALE:	1"=40'
DRAWING NO:	CE-4

4 OF 14

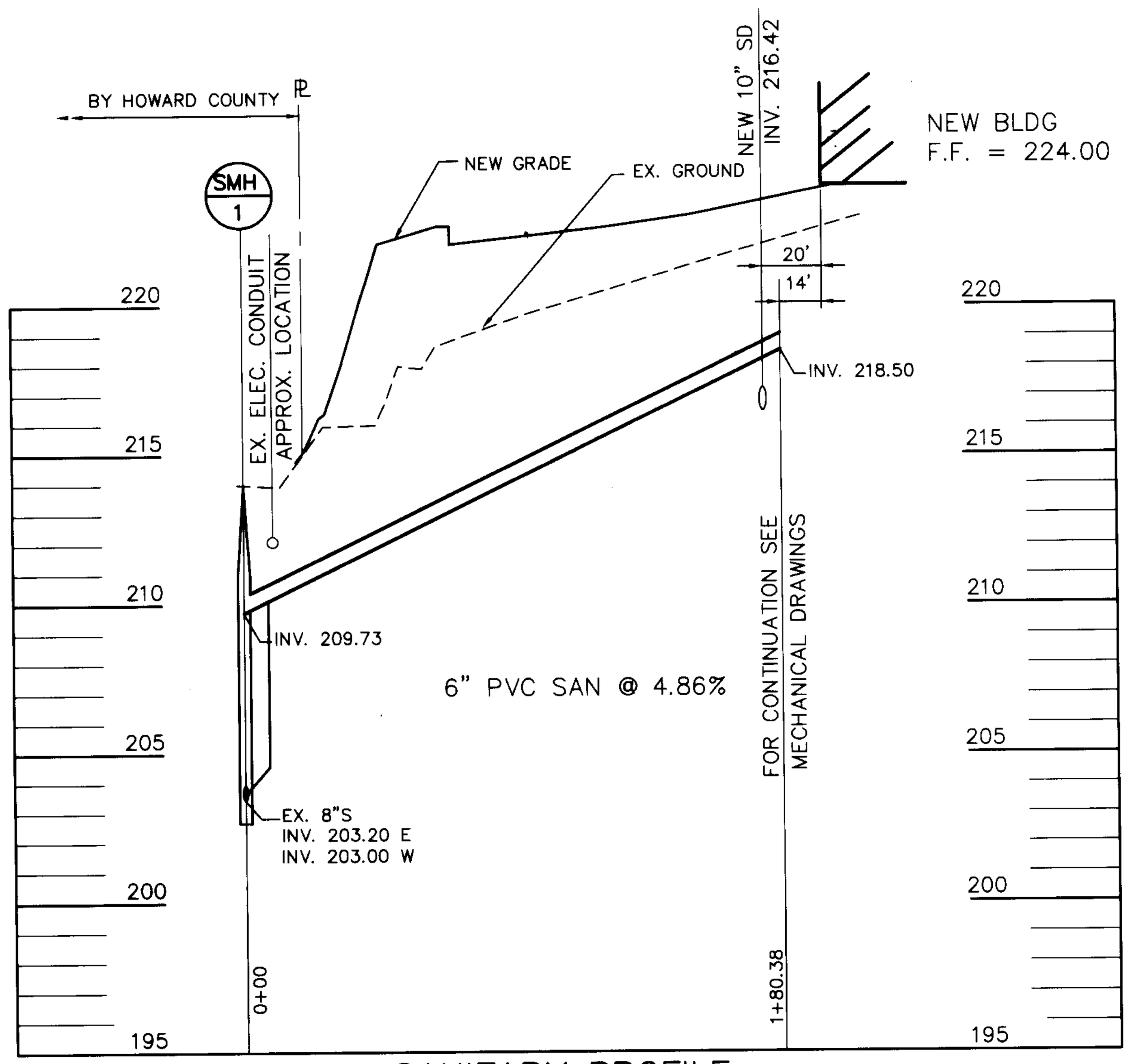
9/2/95

SDP-95-98



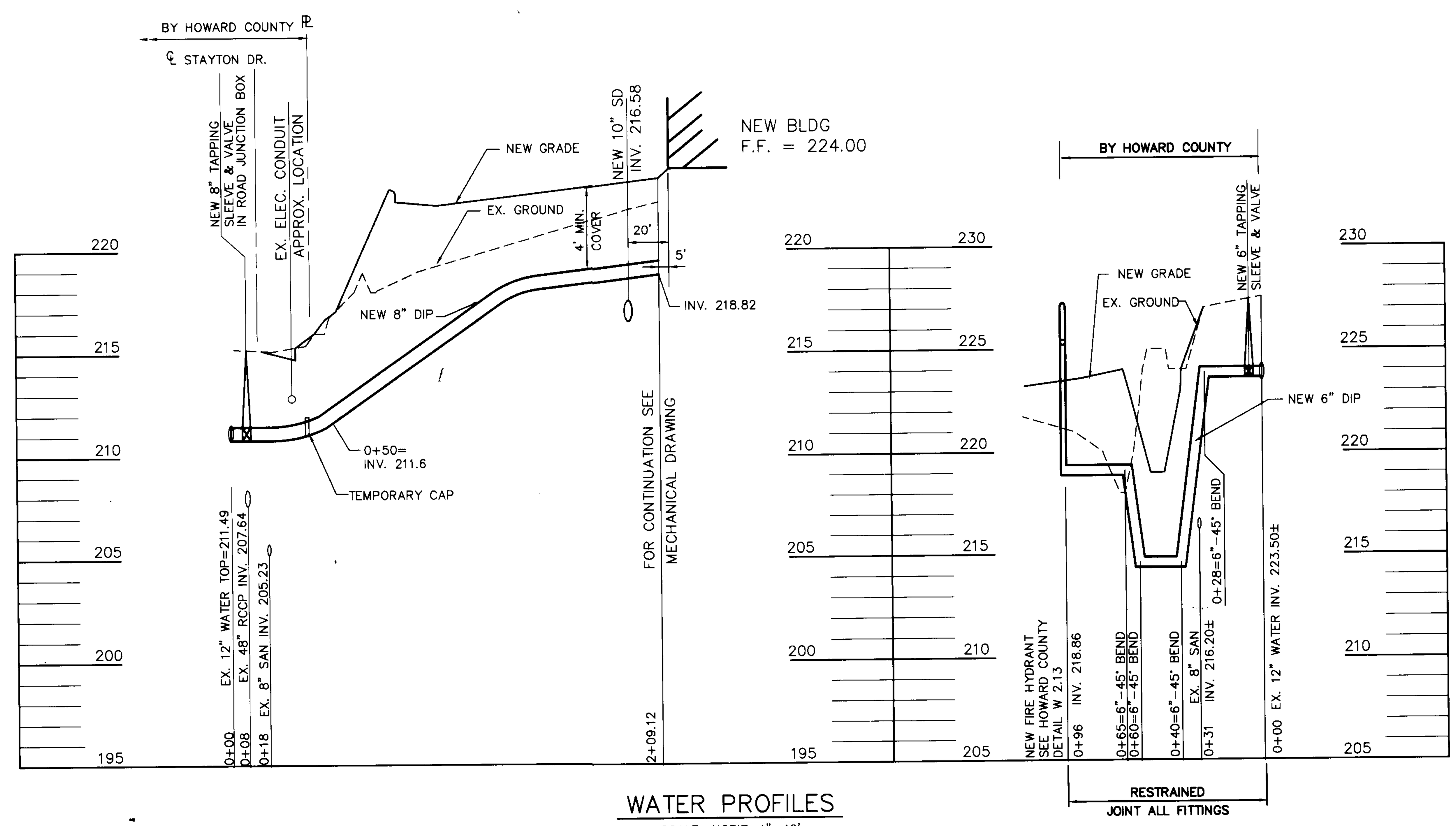
STORM DRAINAGE PROFILES

SCALE: HORIZ. 1"=40'
VERT. 1"=4'



SANITARY PROFILE

SCALE: HORIZ. 1"=40'
VERT. 1"=4'



WATER PROFILES

SCALE: HORIZ. 1"=40'
VERT. 1"=4'

Subdivision Name BALTIMORE–WASHINGTON INDUSTRIAL PARK			Section/Area BLOCK C		Lot/Parcel # N-1/166
Plat # or L/F 8791	Block # 7	Zone M-2	Tax/Zone Map 48	Elect Distr 6	Census Tract 6069.01
Water Code B02			Sewer Code 4201200		

DATE	NO.	REVISIONS

SAVAGE, MD — HOWARD COUNTY

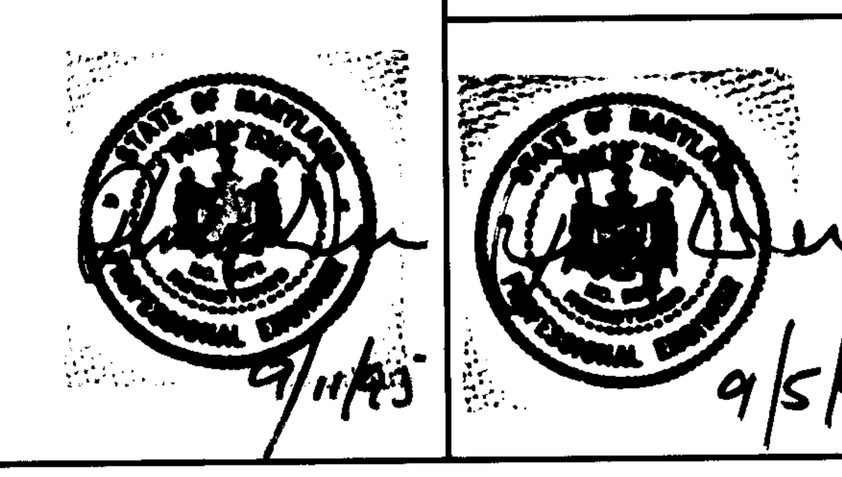
UPS MAINTENANCE FACILITY

CONTRACT PURCHASER FILE NO. SDP-95-98
UNITED PARCEL SERVICE
EAST CENTRAL REGION
SCOTT PLAZA II, SUITE 240
PHILADELPHIA, PA. 19113

BALTIMORE-WASHINGTON
INDUSTRIAL PARK
8282 STAYTON DR.

UTILITY PROFILES

ENGINEERS: Consulting Engineers
849 Fairmount Avenue
Baltimore, Maryland 21286
(410) 512-4500
(410) 324-4100 (FAX)
WHITNEY, BAILEY, COX & MAGNANI



DESIGNED:	J. POTTER/J.A.S.
DRAWN:	Y.N.Q.
CHECKED:	J. JOHNSON
DATE:	APRIL 11, 1995
SCALE:	AS SHOWN
DRAWING NO:	CE-5

APPROVED: DEPARTMENT OF PLANNING & ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION	9/21/95 DATE
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH	9/22/95 DATE
DIRECTOR	9/22/95 DATE

WBCM 95037001

SEDIMENT CONTROL LEGEND

EARTH DIKE 'A-1'

SILT FENCE S S

LIMIT OF DISTURBANCE LOD

EXISTING CONTOUR 100

PROPOSED CONTOUR 100

STONE CONSTRUCTION ENTRANCE S.C.E.

STOCKPILE AREA

TEMPORARY CONTOUR FOR SEDIMENT TRAP 100

BAFFLE

SLOPE PROTECTION CLASS I RIP-RAP ON FILTER CLOTH

INLET PROTECTION I.P.

SEDIMENT CONTROL CERTIFICATIONS

BY THE DEVELOPER:

"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 THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT."

Francis J. Tyminski 8/31/95
DATE

BY THE ENGINEER:

"I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, 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 HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."

PHILIP DER CWB&M 9/5/95
DATE
#9972
SIGNATURE OF ENGINEER

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

Patricia Englu 9/19/95
U.S. SOIL CONSERVATION SERVICE DATE

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

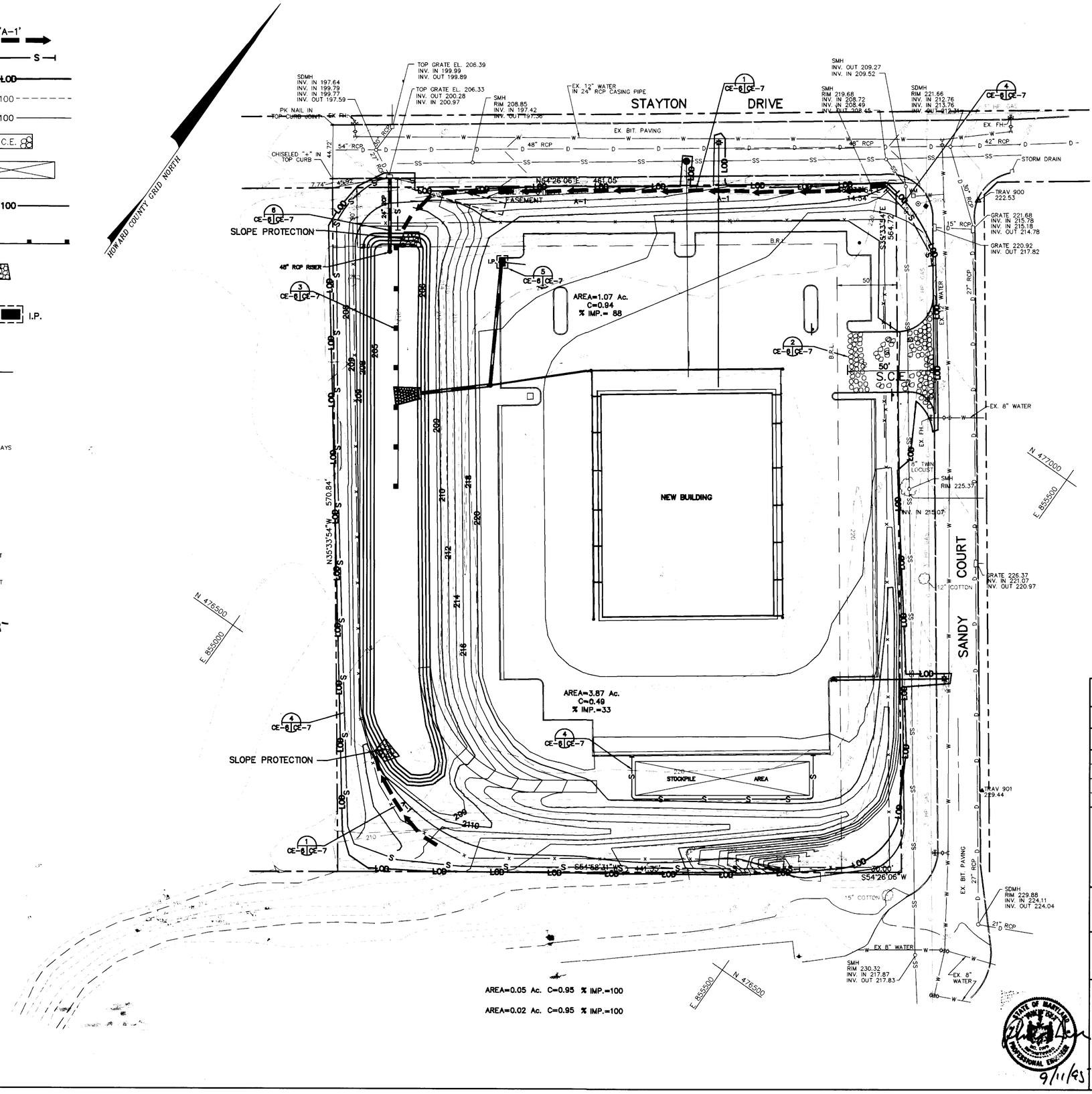
Robert W. Ziehm 9/19/95
U.S. SOIL CONSERVATION SERVICE DATE

APPROVED: DEPARTMENT OF PLANNING & ZONING

9/21/95
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

9/22/95
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEACH DATE

9/28/95
DIRECTOR DATE



SEQUENCE OF CONSTRUCTION

1. OBTAIN GRADING PERMIT.
2. CLEAR AND GRUB FOR THE INSTALLATION OF SEDIMENT CONTROL DEVICES ONLY.
3. INSTALL STABILIZED CONSTRUCTION ENTRANCE, EARTH DIKES, AND SEDIMENT BASIN STOCKPILE SOIL WHERE SHOWN.
4. CLEAR AND GRUB REMAINDER OF SITE.
5. INSTALL STORM DRAIN INLET & INLET PROTECTION.
6. ROUGH GRADE SITE. GRADE PAVED AREAS TO SUBGRADE AND STABILIZE WITH AGGREGATE BASE COURSE.
7. BEGIN BUILDING CONSTRUCTION; INSTALL PIPING AND UTILITIES.
8. FINISH BUILDING AND PAVING CONSTRUCTION.
9. FINE GRADE REMAINDER OF SITE AND STABILIZE ALL DISTURBED AREAS.
10. REMOVE SEDIMENT FROM SEDIMENT BASIN. EXCAVATE TO POND BOTTOM. CONVERT BASIN TO SWM POND, INCLUDING TOPSOIL SEED AND MULCH FOR NEW BOTTOM.
11. AFTER THE SEDIMENT BASIN HAS BEEN CONVERTED TO A STORMWATER MANAGEMENT POND AND WITH THE SEDIMENT CONTROL INSPECTOR'S APPROVAL, REMOVE ALL SEDIMENT CONTROL DEVICES.
12. STABILIZE ANY REMAINING DISTURBED AREAS.

HOWARD SOIL CONSERVATION DISTRICT PERMANENT SEEDING NOTES

APPLY TO GRADED OR CLEARED AREA NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE COVER IS NEEDED.

SEEDBED PREPARATION: LOOSEN UPPER THREE-INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING.

SOIL AMENDMENTS: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING SCHEDULE.

1) PREFERRED – APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SQUARE FT.) AND 600 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ. FT.) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE-INCHES OF SOIL. AT TIME OF SEEDING, APPLY 400 LBS PER ACRE 30-0-0 UREAFORM FERTILIZER (9 LBS/1000 SQ. FT.).

2) ACCEPTABLE – APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SQ. FT.) AND 1000 LBS PER ACRE 10-10-10 FERTILIZER (23 LBS/1000 SQ. FT.) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE-INCHES OF SOIL.

SEEDING: FOR THE PERIODS MARCH 1 THRU APRIL 30, AND AUGUST 1 THRU OCTOBER 15, SEED WITH 60 LBS PER ACRE (1.4 LBS/1000 SQ. FT.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 60 LBS KENTUCKY 31 TALL FESCUE PER ACRE AND 2 LBS PER ACRE (.05 LBS/1000 SQ. FT.) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THRU FEBRUARY 28, PROTECT SITE BY: OPTION (1) 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING. OPTION (2) USE SOD. OPTION (3) SEED WITH 60 LBS/ACRE KENTUCKY 31 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 MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GAL. PER ACRE (5 GAL./1000 SQ. FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES, 8 FT. OR HIGHER, USE 348 GAL. PER ACRE (8 GAL./1000 SQ. FT.) FOR ANCHORING.

MAINTENANCE: INSPECT ALL SEEDED AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.

SEEDBED PREPARATION: LOOSEN UPPER THREE-INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING.

SOIL AMENDMENTS: APPLY 600 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ. FT.).

SEEDING: FOR PERIOD MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU NOVEMBER 15. SEED WITH 2-1/2 BUSHEL PER ACRE OF ANNUAL RYE (3.2 LBS/1000 SQ. FT.) FOR THE PERIOD MAY 1 THRU AUGUST 14. SEED WITH 3 LBS PER ACRE OF WEEPING LOVEGRASS (.07 LBS/1000 SQ. FT.). FOR THE PERIOD NOVEMBER 16 THRU FEBRUARY 28, PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRIG, OR USE SOD.

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 MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GAL. PER ACRE (5 GAL./1000 SQ. FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES, 8 FT. OR HIGHER, USE 348 GAL. PER ACRE (8 GAL./1000 SQ. FT.) FOR ANCHORING.

REFER TO THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

Subdivision Name BALTIMORE-WASHINGTON INDUSTRIAL PARK		Section/Area BLOCK C		Lot/Parcel # N-1/166
Plat # or L/F 8791	Block # 7	Zone M-2	Tax/Zone Map 48	Elect Dist. 6	Census Tract 6069.01
Water Code B02			Sewer Code 4201200		

DATE	NO.	REVISIONS

SAVAGE, MD — HOWARD COUNTY

UPS MAINTENANCE FACILITY

FILE NO. SDP-95-98

OWNER
BORDALE COMPANY
55 GLENLAKE PARKWAY
NORTHEAST ATLANTA, GA. 30328

BALTIMORE-WASHINGTON INDUSTRIAL PARK
8285 STAYTON DR.

SEDIMENT & EROSION CONTROL PLAN

ENGINEERS: Consulting Engineers
849 Fairmount Avenue (410) 512-4500
Baltimore, Maryland 21286 (410) 324-4100 (FAX)
WHITNEY, BAILEY, COX & MAGNANI

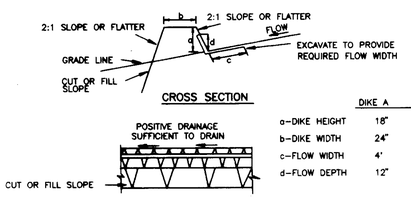
STATE OF MARYLAND PHILIP DER No. 9972 PROFESSIONAL ENGINEER 9/11/95

STATE OF MARYLAND PHILIP DER No. 9972 PROFESSIONAL ENGINEER 9/5/95

DESIGNED:	J. SYME
DRAWN:	Y. QU
CHECKED:	J. JOHNSON
DATE:	JUNE 26, 1995
SCALE:	1" = 40'
DRAWING NO:	CE-6

6 OF 14

SDP-95-98



	DIKE A	DIKE B
a-DIKE HEIGHT	18"	30"
b-DIKE WIDTH	24"	36"
c-FLOW WIDTH	4'	6'
d-FLOW DEPTH	12"	24"

STANDARD SYMBOL A-2 B-3

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

1. Seed and cover with straw mulch.
2. Seed and cover with Erosion Control Matting or line with sod.
3. 4" – 7" stone or recycled concrete equivalent pressed into the soil 7" minimum

Construction Specifications

1. All temporary earth dikes shall have uninterrupted positive grade to an outlet. Spot elevations may be necessary for grades less than 1%.

2. Runoff diverted from a disturbed area shall be conveyed to a sediment trapping device.

3. Runoff diverted from an undisturbed area shall outlet directly into an undisturbed, stabilized area at a non-erosive velocity.

4. All trees, brush, stumps, obstructions, and other objectional material shall be removed and disposed of so as not to interfere with the proper functioning of the dike.

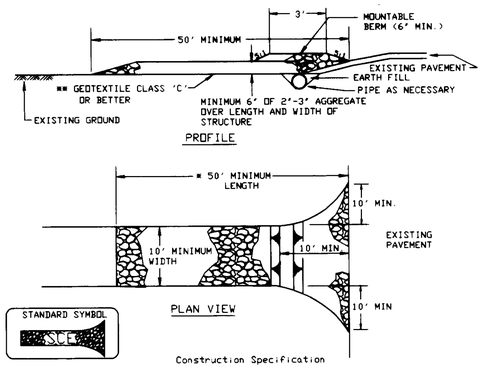
5. The dike shall be excavated or shaped to line, grade and cross section as required to meet the criteria specified herein and be free of bank projections or other irregularities which will impede normal flow.

6. Fill shall be compacted by earth moving equipment.

7. All earth removed and not needed for construction shall be placed so that it will not interfere with the functioning of the dike.

8. Inspection and maintenance must be provided periodically and after each rain event.

1 CE-6 CE-7 **EARTH DIKE DETAIL** NOT TO SCALE



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.

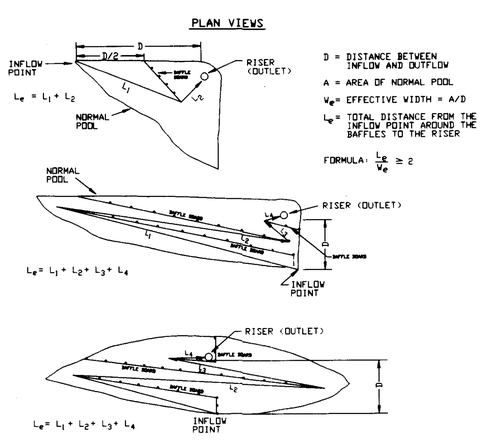
3. Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. **The plan approval authority may not require single family residences to use geotextile.

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

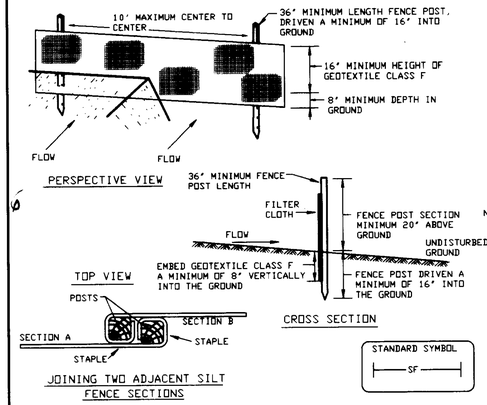
6. Location – A stabilized construction entrance shall be located at every point where construction traffic enters or leaves a construction site. Vehicles leaving the site must travel over the entire length of the stabilized construction entrance.

2 CE-6 CE-7 **STABILIZED CONSTRUCTION ENTRANCE** NOT TO SCALE



BAFFLE DETAIL

3 CE-6 CE-7 **SEDIMENT BASIN BAFFLES** NOT TO SCALE



Construction Specifications

1. Fence posts shall be a minimum of 36" long driven 16" minimum into the ground. Wood posts shall be 11/2" x 11/2" square (minimum) cut, or 13/4" diameter (minimum) round and shall be of sound quality OAK 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.

4 CE-6 CE-7 **SILT FENCE** NOT TO SCALE

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

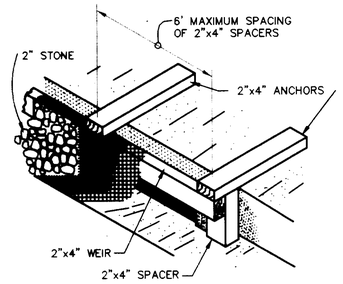
Note: In areas of less than 2% slope and sandy soils (USDA general classification system, soil Class A) maximum slope length and silt fence length will be unlimited. In these areas a silt fence may be the only perimeter control required.

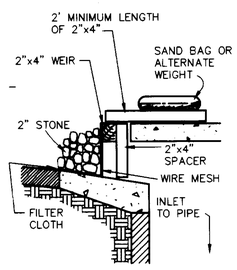
HOWARD SOIL CONSERVATION DISTRICT STANDARD SEDIMENT CONTROL NOTES

1. A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTION, 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 REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN (A) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES, AND ALL SLOPES 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 VOLUME 1, CHAPTER 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
5. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1991 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING (SEC. 51), SOD (SEC. 54), TEMPORARY SEEDING (SEC. 50), AND MULCHING (SEC. 52). TEMPORARY STABILIZATION WITH MULCH ALONE CAN BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
6. ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
7. SITE ANALYSIS:

TOTAL AREA OF SITE:	5.88 Acres
AREA DISTURBED:	5.88 Acres
AREA TO BE ROOFED OR PAVED:	3.15 Acres
AREA TO BE VEGETATIVELY STABILIZED:	2.73 Cu. Yds.
TOTAL CUT:	5700 Cu. Yds.
TOTAL FILL:	7000 Cu. Yds.
OFF-SITE 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 SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
11. TRENCHES FOR THE CONSTRUCTION OF UTILITIES ARE LIMITED TO PIPE LENGTHS OR THAT WHICH CAN BE BACKFILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.





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.

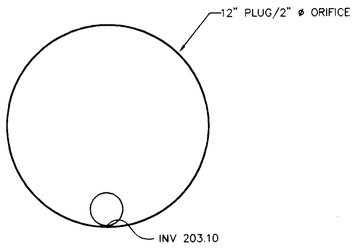
6. Form the 1/2" x 1/2" wire mesh and the geotextile fabric to the concrete gutter and against the face of the curb on both sides of the inlet. Place clean 3/4" x 1 1/2" stone over the wire mesh and geotextile in such a manner to prevent water from entering the inlet under or around the geotextile.

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.

STANDARD SYMBOL

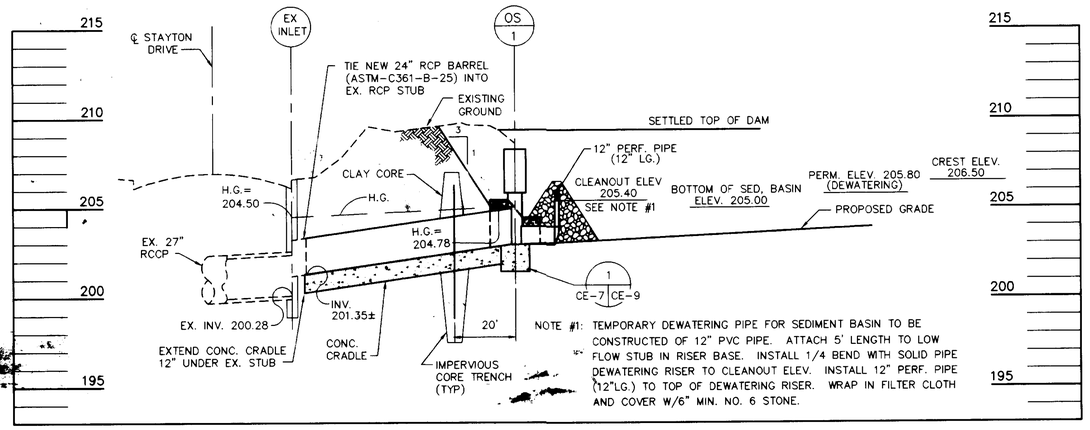
5 CE-6 CE-7 **CURB INLET PROTECTION** NOT TO SCALE



7 CE-7 CE-7 **ORIFICE DETAIL** NOT TO SCALE

6 CE-6 CE-7 **℄ PROFILE PRINCIPLE SPILLWAY FOR TEMPORARY S.W.M.**

SCALE: HORIZ. 1"=20'
VERT. 1"=4'



APPROVED: DEPARTMENT OF PLANNING & ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION	9/6/95 DATE
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH	9/22/95 DATE
DIRECTOR	9/21/95 DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
Approved: H.S.C.D. 9/18/95

Subdivision Name	BALTIMORE-WASHINGTON INDUSTRIAL PARK
Section/Area	BLOCK C
Lot/Parcel #	N-1/166
Plat # or L/F	8791
Block #	7
Zone	M-2
Tax/Zone Map	48
Elect Distr	6
Census Tract	6069.01
Water Code	B02
Sewer Code	4201200

DATE	NO.	REVISIONS
5/19/95	1	REVISED PER SRC MEETING 5/4/95

SAVAGE, MD — HOWARD COUNTY

UPS MAINTENANCE FACILITY

CONTRACT PURCHASER — FILE NO. SDP-95-98

UNITED PARCEL SERVICE
EAST CENTRAL REGION
SCOTT PLAZA II, SUITE 240
PHILADELPHIA, PA. 19113

BALTIMORE-WASHINGTON INDUSTRIAL PARK
8282 STAYTON DR.

SEDIMENT CONTROL NOTES & DETAILS

ENGINEERS: Consulting Engineers
849 Fairmount Avenue (410) 512-4500
Baltimore, Maryland 21286 (410) 324-4100 (FAX)
WHITNEY, BAILEY, COX & MAGNANI

DESIGNED:	J. SYME
DRAWN:	S. CHO
CHECKED:	J. JOHNSON
DATE:	JONE 1995
SCALE:	AS NOTED
DRAWING NO:	CE-7

9/11/95 9/15/95

SDP-95-98

WBCM 95030001

CONSTRUCTION NOTES

SWM-1 SEE PROFILE ALONG PRINCIPLE SPILLWAY.

SWM-2 CONNECT 24" RCP BARREL TO EX. INLET AND RISER ASSEMBLY.

SWM-3 CONSTRUCT BENCH USING 3'x 18'x 6' GABIONS. L=30' TOP EL.= 204.0 TO RETAIN 6" - 12" OF RUNOFF IN FOREBAY.

SWM-4 CONSTRUCT 10' POND MAINTENANCE ACCESS RAMP. SEE LAYOUT PLAN FOR ALIGNMENT. PAVING SECTION: 6" GRADED AGGREGATE ON FILTER FABRIC. (SEE DETAIL 5, CE-9)

SWM-5 LAYOUT POND USING STATION OFFSET DATA ON LAYOUT PLAN. SEE GRADING PLAN FOR SPOT ELEVATIONS. SEE LANDSCAPING PLAN FOR WETLANDS PLANTINGS IN FOREBAY.

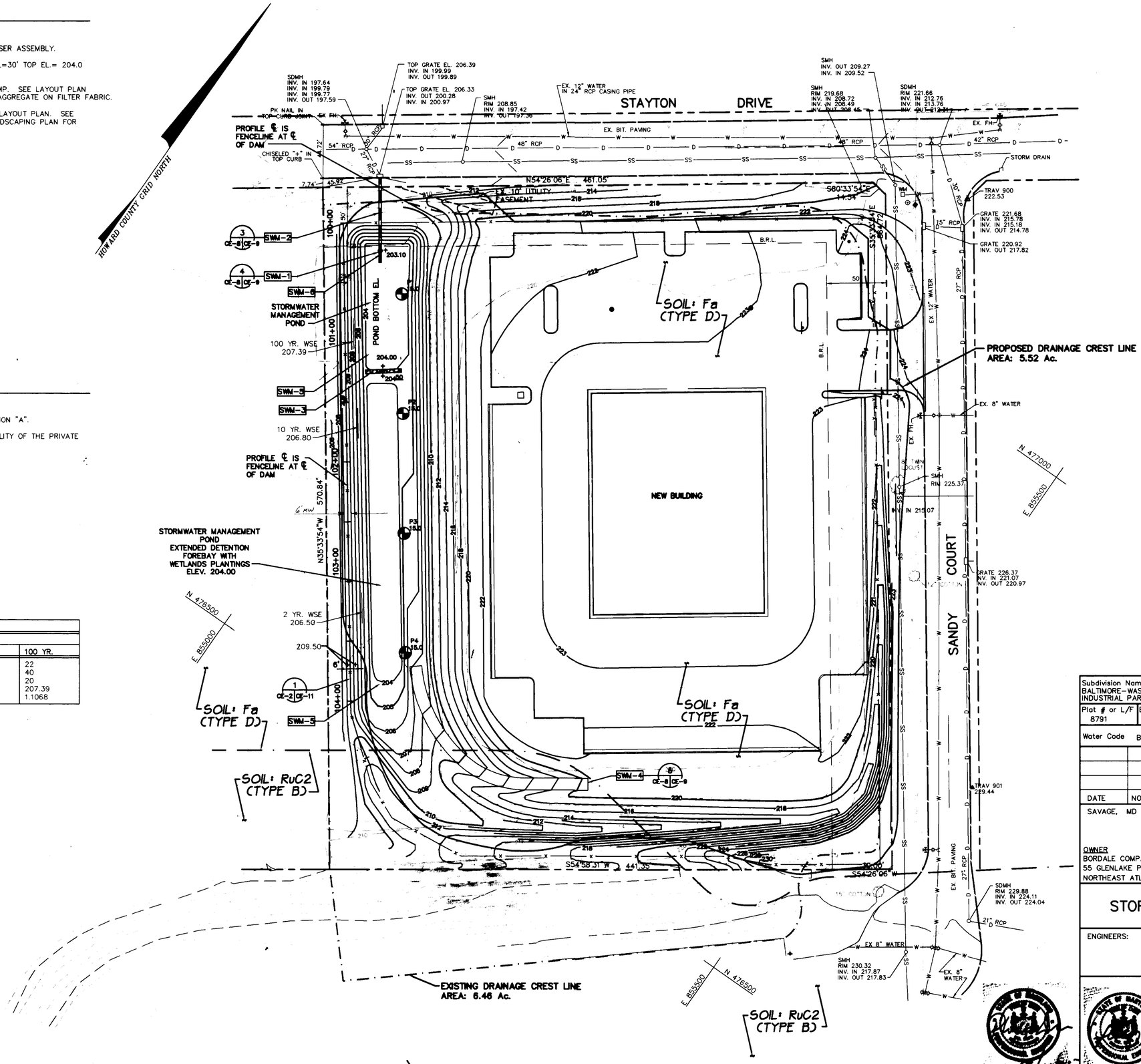
SWM-6 INSTALL LOW FLOW PIPE. SEE DETAIL 1, DE-9

NOTES

1. SEE DRAWING CE-2 FOR GEOMETRY LOCATION.
2. POND TYPE IS EXCAVATED WITH HAZARD CLASSIFICATION "A".
3. MAINTENANCE OF FACILITY SHALL BE THE RESPONSIBILITY OF THE PRIVATE OWNER, UNITED PARCEL SERVICE.

HYDRAULIC SUMMARY TABLE			
DATA DESCRIPTION	STORM EVENT		
	2 YR.	10 YR.	100 YR.
ALLOWBLE RELEASE RATE (CFS)	4	12	22
COMPUTED INFLOW (CFS)	14	26	40
DISCHARGE (CFS)	0	9	20
ELEVATION AT DISCHARGE	206.50	206.80	207.39
STORAGE VOLUME AT ELEVATION (AF)	0.6892	0.8265	1.1068

DRAINAGE AREA TO POND: 5.52 Ac.



APPROVED: DEPARTMENT OF PLANNING & ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 9/21/95

CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH — DATE 9/22/95

DIRECTOR — DATE 9/22/95

Subdivision Name: BALTIMORE-WASHINGTON INDUSTRIAL PARK	Section/Area: BLOCK C	Lot/Parcel #: N-1/166
Plat # or L/F: 8791	Block #: 7	Zone: M-2
Tax/Zone Map: 48	Elect Dist.: 6	Census Tract: 6069.01
Water Code: B02	Sewer Code: 4201200	

DATE	NO.	REVISIONS

SAVAGE, MD — HOWARD COUNTY

UPS MAINTENANCE FACILITY

FILE NO. SDP-95-98

OWNER
BORDALE COMPANY
55 GLENLAKE PARKWAY
NORTHEAST ATLANTA, GA. 30328

BALTIMORE-WASHINGTON INDUSTRIAL PARK
8285 STAYTON DR.

STORMWATER MANAGEMENT PLAN

ENGINEERS: Consulting Engineers
849 Fairmount Avenue (410) 512-4500
Baltimore, Maryland 21286 (410) 324-4100 (FAX)
WHITNEY, BAILEY, COX & MAGNANI

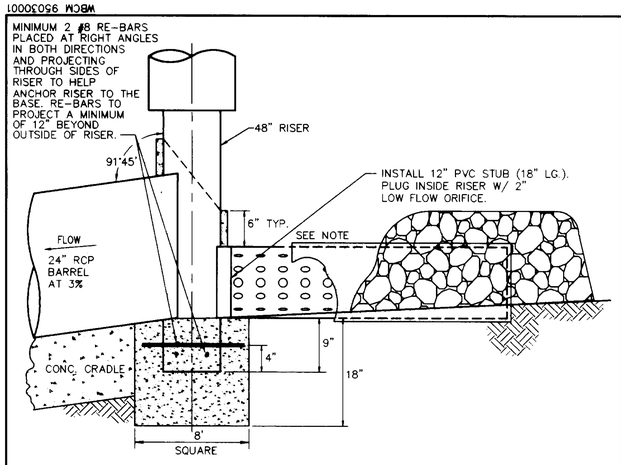
DESIGNED:	J. POTTER
DRAWN:	J. POTTER
CHECKED:	J. JOHNSON
DATE:	JUNE 26, 1995
SCALE:	1" = 40'
DRAWING NO:	CE-8

9/5/95

8 OF14

SDP-95-98

WBCM 96030001



NOTE : INSTALL 20 LF–12" PERFORATED PVC PIPE W/ CAP TO REPLACE TEMPORARY SEDIMENT TRAP RISER AS SHOWN ON SEDIMENT CONTROL DWG. WRAP PIPE W/FILTER CLOTH. COVER W/6" MIN. OF NO. 6 STONE. SEAL CONNECTIONS TO RISER W/CONCRETE GROUT 4" THICK.

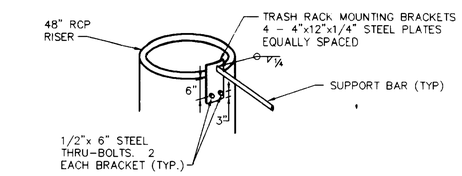
Construction Specifications

The riser shall have a base attached with a watertight connection and shall have sufficient weight to prevent flotation of the riser.

1. A concrete base 18" thick with the riser embedded 9" in the base.

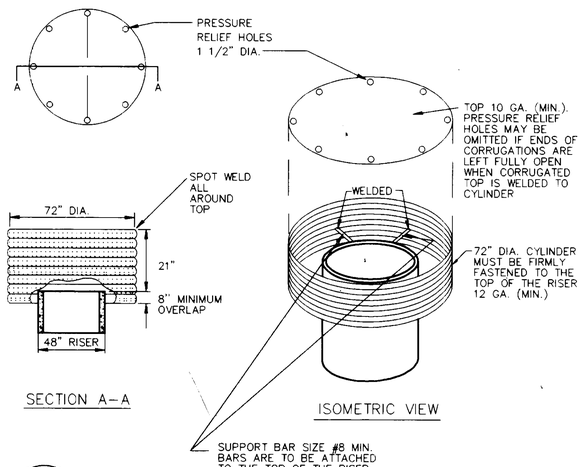
1 CE-8 CE-9 **RISER BASE**

SCALE: HORIZ. 1"=5'
VERT. 1"=1'



TRASH RACK SUPPORT

NOTE: TRASH RACK ASSEMBLY TO BE PAINTED BATTLESHIP GREY

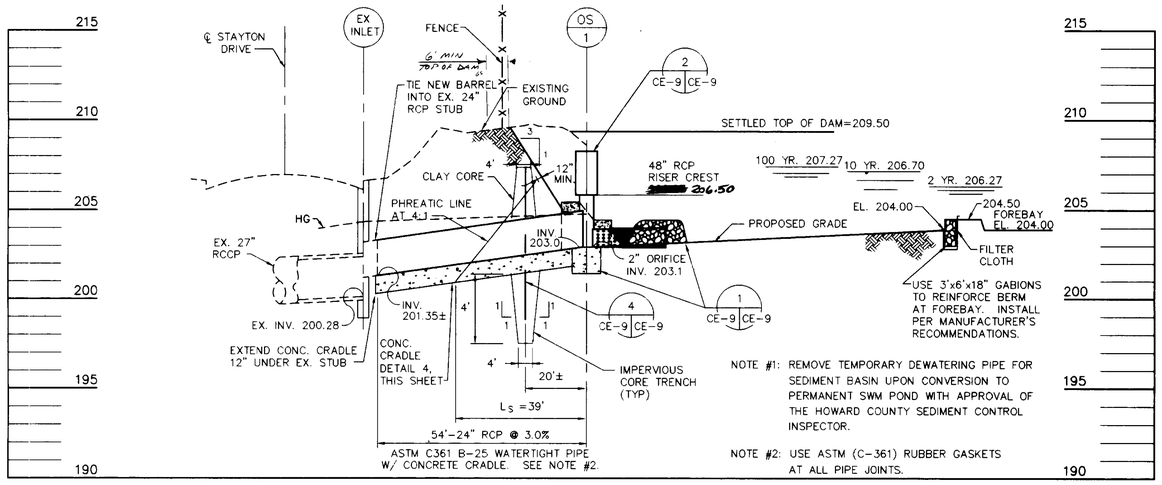


SECTION A–A

ISOMETRIC VIEW

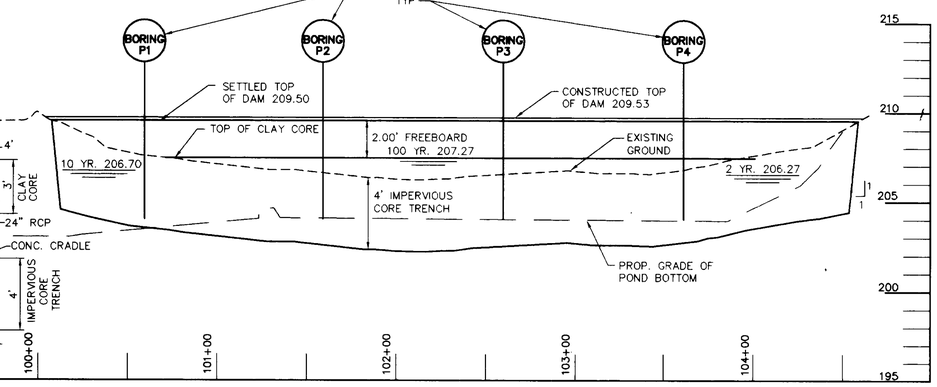
2 CE-8 CE-9 **TRASH RACK**

NOT TO SCALE.



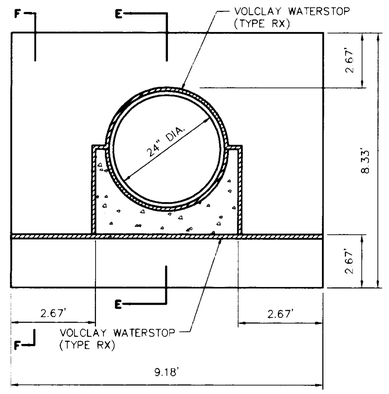
3 CE-8 CE-9 **PROFILE ALONG ℄ OF PRINCIPLE & EMERGENCY SPILLWAY**

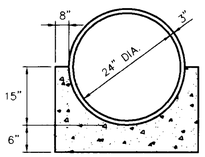
SCALE: HORIZ 1"=20'
VERT. 1"=4'



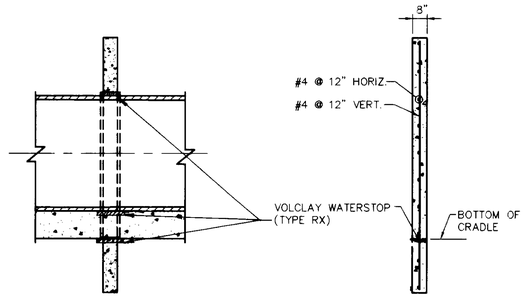
PROFILE ALONG ℄ OF DAM

SCALE: HORIZ. 1"=40'
VERT. 1"=4'





CRADLE

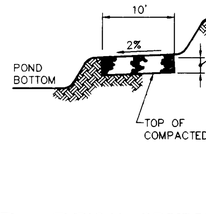


SECTION E–E

SECTION F–F
(SHOWING STEEL)

4 CE-8 CE-9 **ANTI–SEEP COLLAR DETAIL**

NOT TO SCALE



5 CE-8 CE-9 **TYPICAL SECTION POND ACCESS ROAD**

SCALE: HORIZ. 1"=10'
VERT. 1"=2'

APPROVED: DEPARTMENT OF PLANNING & ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 9/21/95

CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH — DATE 9/22/95

DIRECTOR — DATE 9/28/95

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

Approved: [signature] Howard S.C.D. Date 9/18/95

USDA, NATURAL RESOURCES CONS. SERVICE — Date 9/15/95

CONSULTANT'S HAZARD CLASS CERTIFICATION

"I CERTIFY THAT THIS POND MEETS ALL THE REQUIREMENTS FOR HAZARD CLASS A. (REQUIREMENTS AS STATED IN THE SOIL CONSERVATION SERVICE – MARYLAND STANDARDS AND SPECIFICATIONS FOR POND, CODE 378, NOVEMBER 1992.) ALL NECESSARY INVESTIGATIONS AND COMPUTATIONS HAVE BEEN PERFORMED TO VERIFY THIS FINDING. A COPY OF SAID INFORMATION HAS BEEN SUPPLIED TO S.C.S.

SIGNATURE: [signature] MD LICENSE NO. #9972 DATE 9/5/95

PRINT NAME: PHILIP DER #9972

Subdivision Name: BALTIMORE–WASHINGTON INDUSTRIAL PARK	Section/Area: BLOCK C	Lot/Parcel #: N–1/166
Plat # or L/F: 8791	Block #: 7	Zone: M–2
Tax/Zone Map: 48	Elect Dist.: 6	Census Tract: 6069.01
Water Code: B02	Sewer Code: 4201200	

DATE	NO.	REVISIONS
5/19/95	1	REVISED PER SRC MEETING 5/4/95

SAVAGE, MD — HOWARD COUNTY

UPS MAINTENANCE FACILITY

FILE NO. SDP–95–98

OWNER
BORDALE COMPANY
55 GLENLAKE PARKWAY
NORTHEAST ATLANTA, GA. 30328

BALTIMORE–WASHINGTON INDUSTRIAL PARK
8285 STAYTON DR.

STORMWATER MANAGEMENT DETAILS

ENGINEERS: Consulting Engineers
849 Fairmount Avenue (410) 512–4500
Baltimore, Maryland 21286 (410) 324–4100 (FAX)
WHITNEY, BAILEY, COX & MAGNANI

DESIGNED: J. POTTER
DRAWN: J. POTTER
CHECKED: J. JOHNSON
DATE: JUNE 26, 1995
SCALE: AS NOTED
DRAWING NO: CE–9

9 OF 14

STATE OF MARYLAND — PHILIP DER — PROFESSIONAL ENGINEER — 9/5/95

SDP-95-98

WBCM 95030001

POND CONSTRUCTION

By the Developer:

"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 the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I shall engage a registered professional engineer to supervise pond construction and provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 day of completion, I also authorize periodic on-site inspections by the Howard Soil Conservation District."

Signature of Developer — Date

Print name below signature.

By the Engineer:

"I certify that this plan for pond construction, 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 have notified the developer that he/she must engage a registered professional engineer to supervise pond construction and provide the Howard Soil Conservation District with an :as-built" plan of the pond within 30 days of completion."

PHILIP BER — 9/5/95

Signature of Engineer — Date

Print name below signature

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements for small pond construction, soil erosion and sediment control.

USDA-Natural Resources Conservation District — 9/19/95 — Date

These plans for small pond construction, soil erosion and sediment control meet the requirements of the Howard Soil Conservation District.

Robert W. Zielke — 9/19/95

Howard Soil Conservation District — Date

APPROVED: DEPARTMENT OF PLANNING & ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION — 9/21/95 DATE

CHIEF, DIVISION OF LAND DEVELOPMEN AND RESEACH — 9/22/95 DATE

DIRECTOR — 9/22/95 DATE

CONSTRUCTION SPECIFICATIONS

All references to ASTM and AASHTO specifications apply to the most recent version.

I. SITE PREPARATION

Areas designed for borrow areas, embankment, and structural works shall be cleared, grubbed and stripped of topsoil. All trees, vegetation, roots and other objectionable material shall be removed. Channel banks and sharp breaks shall be sloped no steeper than 1:1.

Areas to be covered by the pond or reservoir will be cleared of all trees, brush, logs, fences, rubbish and other objectionable material unless otherwise designated on the plans. Trees, brush and stumps shall be cut approximately level with the ground surface. For dry stormwater management ponds, a minimum of a 50-foot radius around the inlet structure shall be cleared.

All cleared and grubbed material shall be disposed of outside and below the limits of the dam and reservoir as directed by the owner or his representative. When specified, a sufficient quantity of topsoil will be stockpiled in a suitable location for use on the embankment and other designated areas.

II. EARTH FILL

Material

The fill material shall be taken from approved designated borrow area or areas. It shall be free of roots, stumps, wood, rubbish, stones greater than 6", frozen or other objectionable materials. Fill material for the center of the embankment and cutoff trench shall conform to Unified Soil Classification GC, SC, CH, or CL. Consideration may be given to the use of other materials in the embankment if design and construction are supervised by a geotechnical engineer.

Placement

Areas on which fill is to be placed shall be scarified prior to placement of fill. Fill materials shall be placed in 8-inch maximum thickness (before compaction) layers which are to be continuous over the entire length of the fill. The most permeable borrow material shall be placed in the downstream portions of the embankment. The principal spillway must be installed concurrently with fill placement and not excavated into the embankment.

Compaction

The movement of the hauling and spreading equipment over the fill shall be controlled so that the entire surface of each lift shall be traversed by not less than one tread track of the equipment or compaction shall be achieved by a minimum of four complete passes of a sheepsfoot, rubber tired or vibratory roller. Fill material shall contain sufficient moisture such that the required degree of compaction can be obtained with the equipment used. The fill material shall contain sufficient moisture so that if formed into a ball it will not crumble, yet not be so set that water can be squeezed out.

Where a minimum required density is specified, it shall not be less than 95% of maximum dry density with a moisture content within ±2% of the optimum. Each layer of fill shall be compacted as necessary to obtain that density, and is to be certified by the Engineer at the time of construction. All compaction is to be determined by AASHTO Method T-99.

Cutoff Trench

The cutoff trench shall be excavated into impervious material along or parallel to the centerline of the embankment as shown on the plans. The bottom width of the trench shall be governed by the equipment used for excavation, with the minimum width being four feet. The depth shall be at least four feet below existing grade or as shown on the plans. The side slopes of the trench shall be 1 to 1 or flatter. The backfill shall be compacted with construction equipment, rollers, or hand tampers to assure maximum density and minimum permeability.

III. STRUCTURAL BACKFILL

Backfill adjacent to pipes or structures shall be of the type and quality conforming to that specified for the adjoining fill material. The fill shall be placed in horizontal layers not to exceed four inches in thickness and compacted by hand tampers or other manually directed compaction equipment. The material needs to fill completely all spaces under and adjacent to the pipe. At no time during the backfilling operation shall driven equipment be allowed to operate closer than four feet, measured horizontally, to any part of a structure. Under no circumstances shall equipment be driven over any part of a concrete structure or pipe unless there is a compacted fill of twenty-four inches or greater over the structure or pipe.

IV. PIPE CONDUITS

All pipes shall be circular in cross section.

A. Corrugated Metal Pipe

All of the following criteria shall apply for corrugated metal pipe:

1. Materials – (Steel Pipe) – This pipe and its bituminous coated and shall conform to the requirements of AASHTO Specification M-190 Type A with watertight coupling bands. Any bituminous coating damaged or otherwise removed shall be replaced with cold applied bituminous coating compound. Steel pipes with polymeric coatings shall have a minimum coating thickness of 0.01 inch (10 mil) on both sides of the pipe. The following coatings or an approved equal may be used: Nexon, Plasti-Cote, Blac-Klad, and Beth-Cu-Loy. Coated corrugated steel pipe shall meet the requirements of AASHTO M-245 and M-246.

Materials – (Aluminum Coated Steel Pipe) – This pipe and its appurtenances shall conform to the requirements of AASHTO Specification M-274 with watertight coupling bands or flanges. Any aluminum coating damaged or otherwise removed shall be replaced with cold applied bituminous coating compound.

Materials – (Aluminum Pipe) – This pipe and its appurtenances shall conform to the requirements of AASHTO Specification M-196 or M-211 with watertight coupling bands or flanges. Aluminum surfaces that are to be in contact with concrete shall be painted with one coat of zinc chromate primer. Hot dip galvanized bolts may be used for connections. The pH of the surrounding soils shall be between 4 and 9.

Coupling bands, anti-seep collars, end sections, etc. must be composed of the same material as the pipe. Metals must be insulated from dissimilar materials with use of rubber or plastic insulating materials at least 24 mils in thickness.

2. Connections – All connections with pipes must be completely watertight. The drain pipe or connection to the riser shall be welded all around when the pipe and riser are metal. Anti-seep collars shall be connected to the pipe in such a manner as to be completely watertight. Dimple bands are not considered to be watertight.

All connections shall use a rubber or neoprene gasket when joining pipe sections. the end of each pipe shall be re-rolled an adequate number of corrugations to accommodate the band width. The following type connections are acceptable for pipes less than 48" in diameter: flanges on both ends of the pipe, a 12" wide standard lap type band with 12" wide by 3/8" thick closed cell circular neoprene gasket; and a 12" wide hugger type band with O-ring gaskets having a minimum diameter of 1/2" greater than the corrugation depth. Pipes 48" in diameter and larger shall be connected by a 24" long annular corrugated band using rods and lugs. A 12" wide by 3/8" thick closed cell circular neoprene gasket will be installed on the end of each pipe for a total of 24". Helically corrugated pipe shall have either continuously welded seams or have lock seams.

3. Bedding – The pipe shall be firmly and uniformly bedded throughout it entire length. Where rock or soft, spongy or other unstable soil is encountered, all such material shall be removed and replaced with suitable earth compacted to provide adequate support.

4. Backfilling shall conform to "Structural Backfill."

5. Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.

B. Reinforced Concrete Pipe

All of the following criteria shall apply for reinforced concrete pipe:

1. Materials – Reinforced concrete pipe shall have bell and spigot joints with rubber gaskets and shall equal or exceed ASTM Specification C-361. An approved equivalent is AWWA Specification C-302.

2. Bedding – All reinforced concrete pipe conduits shall be laid in a concrete bedding for their entire length. This bedding shall consist of high slump concrete placed under the pipe and up the sides of the pipe at least 10% of its outside diameter with a minimum thickness of 3", or as shown on the drawings.

3. Laying pipe – Bell and spigot pipe shall be placed with the bell end upstream. Joints shall be made in accordance with recommendations of the manufacturer of the material. After the joints are sealed for the entire line, the bedding shall be placed so that all spaces under the pipe are filled. Care shall be exercised to prevent any deviation from the original line and grade of the pipe. The first joint must be located within 2 feet from the riser.

4. Backfilling shall conform to "Structural Backfill."

5. Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.

C. Polyvinyl Chloride (PVC) Pipe

All of the following criteria shall apply for polyvinyl chloride (PVC) pipe:

1. Materials – PVC pipe shall be PVC-1120 or PVC-1220 conforming to ASTM D-1785 or ASTM D-2241.

2. Joints and connections to anti-seep collars shall be completely watertight.

3. Bedding – The pipe shall be firmly and uniformly bedded throughout its entire length. Where rock or soft, spongy or other unstable soil is encountered, all such material shall be removed and replaced with suitable earth compacted to provide adequate support.

4. Backfilling shall conform to "Structure Backfill."

5. Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.

Concrete

Concrete shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 608, Mix No. 3.

Rock Riprap

All rock shall be dense, sound, and free from cracks, seams, and other defects conducive to accelerated weathering. The rock fragments shall be angular to subrounded in shape. The least dimension of an individual rock fragment shall be not less than one-third the greatest dimension of the fragment.

The rock shall have the following properties:

1. Bulk specific gravity (saturated surface-dry basis) not less than 2.5.

2. Absorption not more than three percent.

3. Soundness: Weight loss in five cycles not more than 20 percent when sodium sulfate is used.

Bulk specific gravity and absorption shall be determined according to ASTM C 127. The test for soundness shall be performed according to ASTM C 88.

The riprap shall be placed to the required thickness in one operation. The rock shall be delivered and placed in a manner that will ensure the riprap in place shall be reasonably homogeneous with the larger rocks uniformly distributed and firmly on contact one to another with the smaller rocks filling the voids between the larger rocks. Filter cloth shall be placed under all riprap and shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 919.12.

Care of Water During Construction

All work on permanent structures shall be carried out in areas free from water. The Contractor shall construct and maintain all temporary dikes, levees, cofferdams, drainage channels, and stream diversions necessary to protect the areas to be occupied by the permanent works. The contractor shall also furnish, install, operate, and maintain all necessary pumping and other equipment required for removal of water from the various parts of the work and for maintaining the excavations, foundation, and other parts of the work free from water as required or directed by the engineer for constructing each part of the work. After having served their purpose, all temporary protective works shall be removed or leveled and graded to the extent required to prevent obstruction in any degree whatsoever of the flow of water to the spillway or outlet works and so as not to interfere in any way with the operation or maintenance of the structure. Stream diversions shall be maintained until the full flow can be passed through the permanent works. The removal of water from the required excavation and the foundation shall be accomplished in a manner and to the extent that will maintain stability of the excavated slopes and bottom of required excavations and will allow satisfactory performance of all construction operations. During the placing and compacting of material in required excavations, the water level at the locations being refilled shall be maintained below the bottom of the excavation at such locations which may require draining the water to sumps from which the water shall be pumped.

V. STABILIZATION

All borrowed areas shall be graded to provide proper drainage and left in a sightly condition. All exposed surfaces of the embankment, spillway, spoil and borrow areas, and berms shall be stabilized by seeding, liming, fertilizing and mulching in accordance with the Maryland Soil Conservation Service Standards and Specifications for Critical Area Planting (MD-342), or as shown on the accompanying drawings.

VI. EROSION AND SEDIMENT CONTROL

Construction operations will be carried out in such a manner that erosion will be controlled and water and air pollution minimized. State and local laws concerning pollution abatement will be followed. Construction plans shall detail erosion and sediment control measures to be employed during the construction process.

OPERATION AND MAINTENANCE SCHEDULE OF PRIVATELY OWNED AND MAINTAINED STORMWATER MANAGEMENT FACILITY WET FOREBAY AND EXTENDED DETENTION POND

ROUTINE MAINTENANCE

1. FACILITY SHALL BE INSPECTED ANNUALLY AND AFTER MAJOR STORMS. INSPECTIONS SHOULD BE PERFORMED DURING WET WEATHER TO DETERMINE IF THE POND IS FUNCTIONING PROPERLY.

2. TOP AND SIDE SLOPES OF THE EMBANKMENT SHALL BE MOWED A MINIMUM OF TWO (2) TIMES A YEAR, ONCE IN JUNE AND ONCE IN SEPTEMBER. OTHER SIDE SLOPES AND MAINTENANCE ACCESS SHOULD BE MOWED AS NEEDED. WETLAND VEGETATION ON THE BOTTOM OF THE POND SHALL NOT BE DISTURBED.

3. DEBRIS AND LITTER SHALL BE REMOVED DURING REGULAR MOWING OPERATIONS AND AS NEEDED.

4. VISIBLE SIGNS OF EROSION IN THE POND SHALL BE REPAIRED AS IT IS NOTICED.

NON-ROUTINE MAINTENANCE

1. STRUCTURAL COMPONENTS OF THE POND, SUCH AS THE DAM, THE RISER, AND THE PIPES, SHALL BE REPAIRED UPON THE DETECTION OF ANY DAMAGE. THE COMPONENTS SHOULD BE INSPECTED DURING ROUTINE MAINTENANCE OPERATIONS.

2. SEDIMENT SHOULD BE REMOVED FROM THE POND (INCLUDING THE FOREBAY) NO LATER THAN WHEN THE CAPACITY OF THE POND IS HALF FULL OF SEDIMENT, WHEN DEEMED NECESSARY FOR AESTHETIC REASONS, OR WHEN DEEMED NECESSARY BY THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.

Subdivision Name: BALTIMORE-WASHINGTON INDUSTRIAL PARK			Section/Area: BLOCK C		Lot/Parcel #: N-1/166
Plat # or L/F: 8791	Block #: 7	Zone: M-2	Tax/Zone Map: 48	Elect Dist.: 6	Census Tract: 6069.01
Water Code: B02			Sewer Code: 4201200		

DATE	NO.	REVISIONS
5/19/95	1	REVISED PER SRC MEETING 5/4/95

SAVAGE, MD — HOWARD COUNTY

UPS MAINTENANCE FACILITY

FILE NO. SDP-95-98

OWNER
BORDALE COMPANY
55 GLENLAKE PARKWAY
NORTHEAST ATLANTA, GA. 30328

BALTIMORE-WASHINGTON INDUSTRIAL PARK
8285 STAYTON DR.

STORMWATER MANAGEMENT NOTES

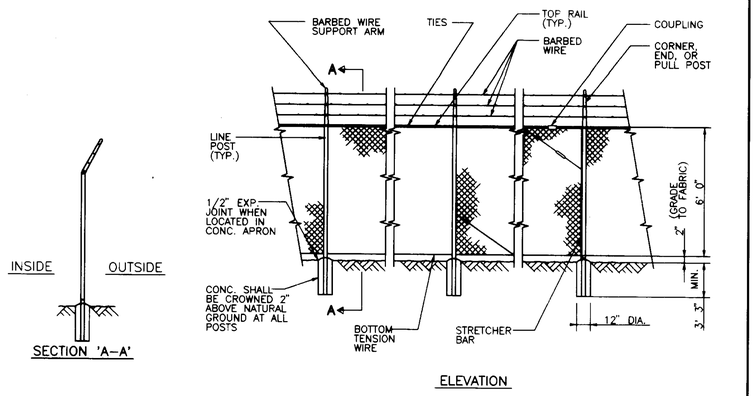
ENGINEERS:
Consulting Engineers
849 Fairmount Avenue (410) 512-4500
Baltimore, Maryland 21286 (410) 324-4100 (FAX)
WHITNEY, BAILEY, COX & MAGNANI

STATE OF MARYLAND — PROFESSIONAL ENGINEER — 9/11/95

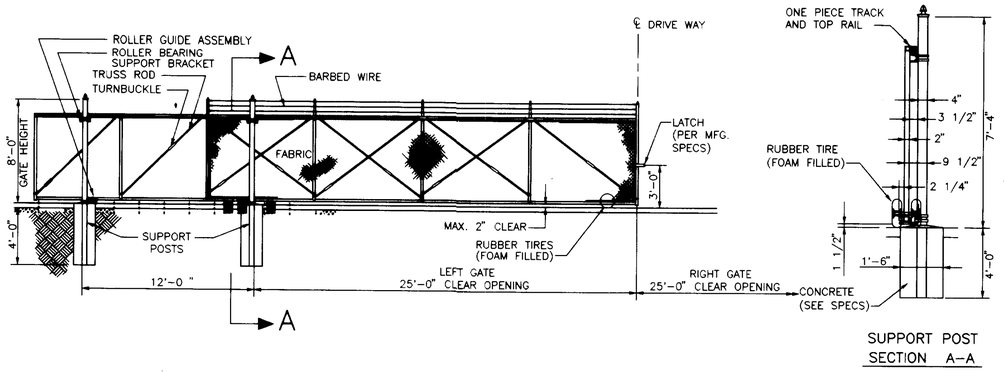
STATE OF MARYLAND — PROFESSIONAL ENGINEER — 6/5/95

DESIGNED:	J. SYME
DRAWN:	Y. QU
CHECKED:	J. JOHNSON
DATE:	JUNE 26, 1995
SCALE:	1" = 40'
DRAWING NO:	CE-10

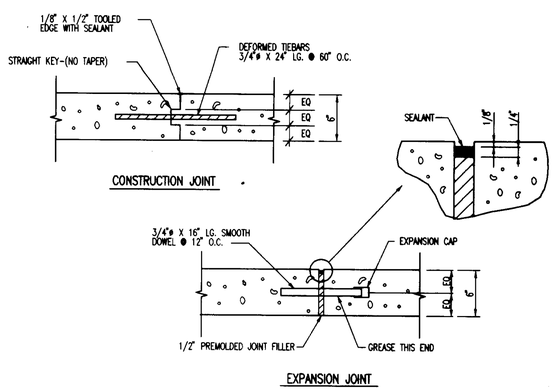
SDP-95-98



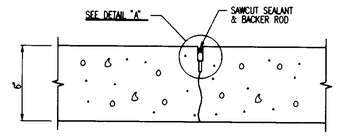
1 CE-2 | CE-11 CHAIN LINK FENCE
NOT TO SCALE

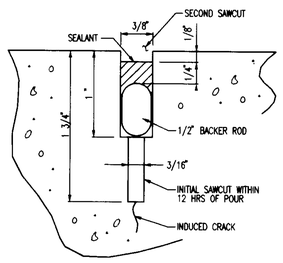


2 CE-2 | CE-11 CHAIN LINK SLIDING GATE
NOT TO SCALE



3 CE-13 | CE-11 CONC. PAVE. CONST. & EXPANSION JOINT
NOT TO SCALE

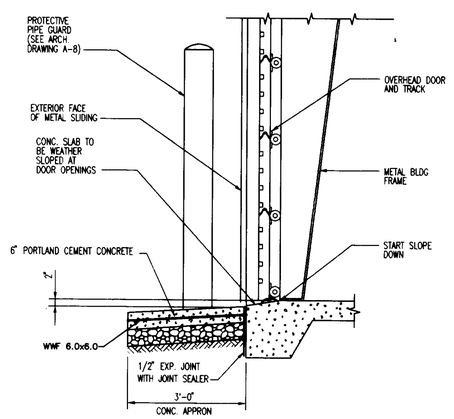




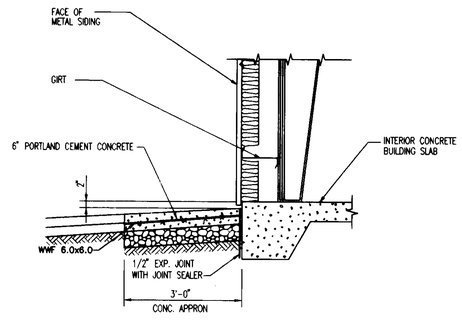
NOTES:

1. THIS DETAIL SHOWS (2) SAWCUTS. THE INITIAL SAWCUT PROVIDES RELIEF OF INTERNAL STRESSES DUE TO SHRINKAGE. THE SECOND SAWCUT PROVIDES THE NECESSARY WIDTH TO ACHIEVE THE PROPER SHAPE FACTOR OF THE SEALANT PER THE SEALANT MANUFACTURER. THE SECOND SAWCUT ALSO CLEANS THE INITIAL SAWCUT OF ANY SPRAY-ON CURING COMPOUND WHICH MOST CONTRACTORS PREFER TO USE AND MUST BE CLEANED OUT BEFORE APPLYING THE SEALANT.
2. EXAMPLE ASSUMES 7" THICK PAVEMENT, WITH 14' JOINT SPACING, AND 100 FT.
3. DIMENSIONS SHOWN WILL VARY. ACTUAL JOINT WIDTH MUST BE DETERMINED BY THE ANTICIPATED JOINT MOVEMENT. THE ACTUAL JOINT DEPTH IS DETERMINED BY THE RECOMMENDATIONS OF THE SEALANT MANUFACTURER.

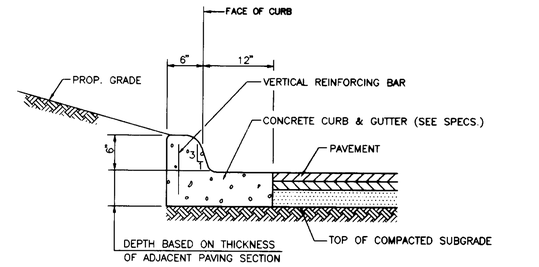
4 CE-13 | CE-11 CONC. PAVEMENT CONTROL JOINT
NOT TO SCALE



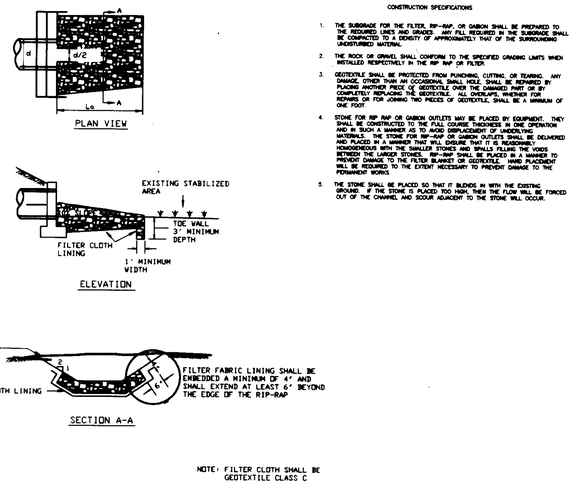
5 CE-2 | CE-11 PAVING AT OVERHEAD DOOR OPENING
NOT TO SCALE



6 CE-2 | CE-11 PAVING AT BUILDING
NOT TO SCALE



7 CE-2 | CE-11 CONCRETE CURB & GUTTER
NOT TO SCALE

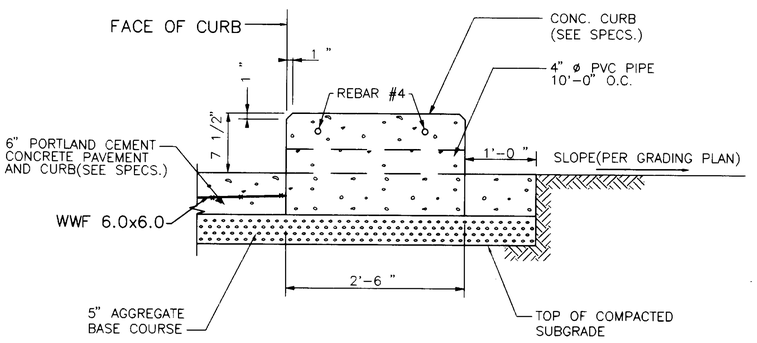


CONSTRUCTION SPECIFICATIONS

1. THE SUBGRADE FOR THE FILTER, RIP-RAP, OR GABION SHALL BE PREPARED TO THE REQUIRED LINES AND GRADES. ANY FILL REQUIRED IN THE SUBGRADE SHALL BE COMPACTED TO A DENSITY OF APPROXIMATELY THAT OF THE SURROUNDING UNDISTURBED MATERIAL.
2. THE ROCK OR GRAVEL SHALL CONFORM TO THE SPECIFIED GRADING LIMITS WHEN INSTALLED RESPECTIVELY IN THE RIP RAP OR FILTER.
3. GEOTEXTILE SHALL BE PROTECTED FROM PUNCHING, CUTTING, OR TEARING. ANY DAMAGE, OTHER THAN AN OCCASIONAL SMALL HOLE, SHALL BE REPAIRED BY PLACING ANOTHER PIECE OF GEOTEXTILE OVER THE DAMAGED PART OR BY COMPLETELY REPLACING THE GEOTEXTILE. ALL OVERLAPS, WHETHER FOR REPAIRS OR FOR JOINING TWO PIECES OF GEOTEXTILE, SHALL BE A MINIMUM OF ONE FOOT.
4. STONE FOR RIP RAP OR GABION OUTLETS MAY BE PLACED BY EQUIPMENT. THEY SHALL BE CONSTRUCTED TO THE FULL COURSE THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO AVOID DISPLACEMENT OF UNDERLYING MATERIALS. THE STONE FOR RIP-RAP OR GABION OUTLETS SHALL BE DELIVERED AND PLACED IN A MANNER THAT WILL ENSURE THAT IT IS REASONABLY HOMOGENEOUS WITH THE SMALLER STONES AND SPALLS FILLING THE VOIDS BETWEEN THE LARGER STONES. RIP-RAP SHALL BE PLACED IN A MANNER TO PREVENT DAMAGE TO THE FILTER BLANKET OR GEOTEXTILE. HAND PLACEMENT WILL BE REQUIRED TO THE EXTENT NECESSARY TO PREVENT DAMAGE TO THE PERMANENT WORKS.
5. THE STONE SHALL BE PLACED SO THAT IT BLENDS IN WITH THE EXISTING GROUND. IF THE STONE IS PLACED TOO HIGH, THEN THE FLOW WILL BE FORCED OUT OF THE CHANNEL AND SCOUR ADJACENT TO THE STONE WILL OCCUR.

NOTE: FILTER CLOTH SHALL BE GEOTEXTILE CLASS C

8 CE-4 | CE-11 STORM DRAIN OUTFALL AND PROTECTION
NOT TO SCALE



9 CE-2 | CE-11 FEEDER CURB AT STAGING PAD
NOT TO SCALE

APPROVED: DEPARTMENT OF PLANNING & ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 9/6/95

CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH — DATE 9/22/95

DIRECTOR — DATE 9/26/95

Subdivision Name: BALTIMORE-WASHINGTON INDUSTRIAL PARK			Section/Area: BLOCK C		Lot/Parcel #: N-1/166
Plat # or L/F: 8791	Block #: 7	Zone: M-2	Tax/Zone Map: 48	Elect Dist.: 6	Census Tract: 6069.01
Water Code: B02			Sewer Code: 4201200		

DATE	NO.	REVISIONS
5/19/95	1	REVISED PER SRC MEETING 5/4/95

SAVAGE, MD — HOWARD COUNTY

UPS MAINTENANCE FACILITY

FILE NO. SDP-95-98

OWNER
BORDALE COMPANY
55 GLENLAKE PARKWAY
NORTHEAST ATLANTA, GA. 30328

BALTIMORE-WASHINGTON INDUSTRIAL PARK
8285 STAYTON DR.

SITE DETAILS I

ENGINEERS: Consulting Engineers
849 Fairmount Avenue (410) 512-4500
Baltimore, Maryland 21286 (410) 324-4100 (FAX)
WHITNEY, BAILEY, COX & MAGNANI

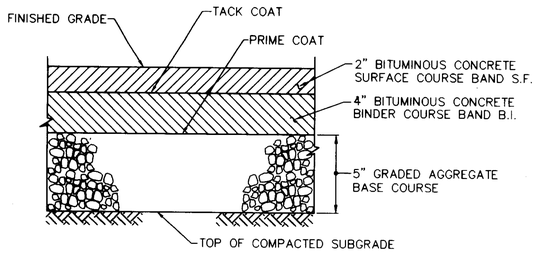
DESIGNED:	J.A.S.
DRAWN:	S.A.C.
CHECKED:	J. JOHNSON
DATE:	JUNE 26, 1995
SCALE:	AS NOTED
DRAWING NO:	CE-11

9/5/95

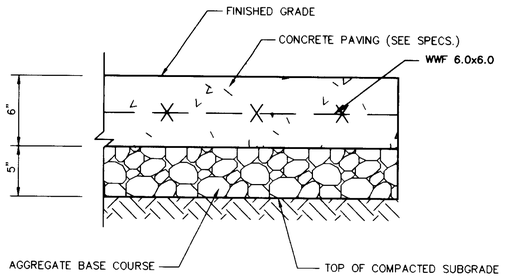
11 OF 14

SDP-95-98

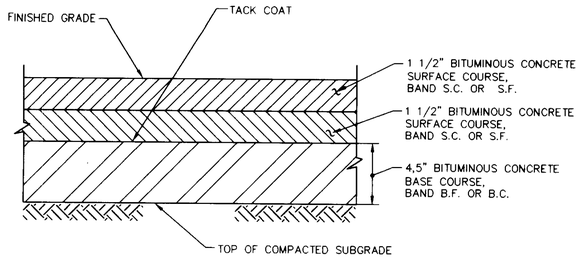
WBCM 95030001



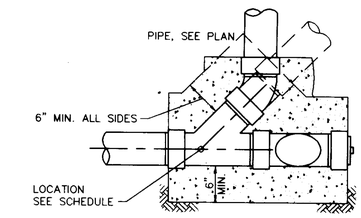
10 CE-4 CE-12 **BITUMINOUS PAVING – TYPE 1**
NOT TO SCALE



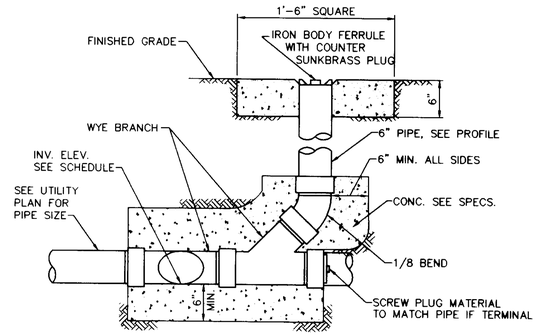
11 CE-4 CE-12 **CONCRETE PAVING – TYPE 2**
NOT TO SCALE



12 CE-4 CE-12 **FULL DEPTH BITUMINOUS PAVING – TYPE 3**
NOT TO SCALE

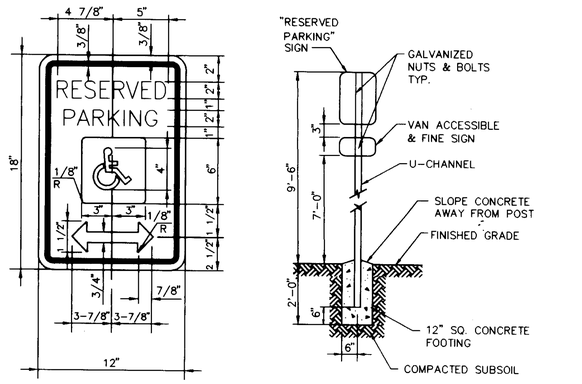


PLAN



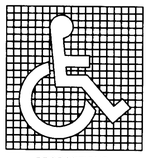
SECTION

16 CE-4 CE-12 **CLEANOUT**
NOT TO SCALE

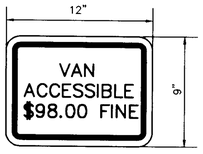


SEE PROPORTIONS FOR SYMBOL DESIGN
(ALL DIMESIONS FOR SIGN IN INCHES)

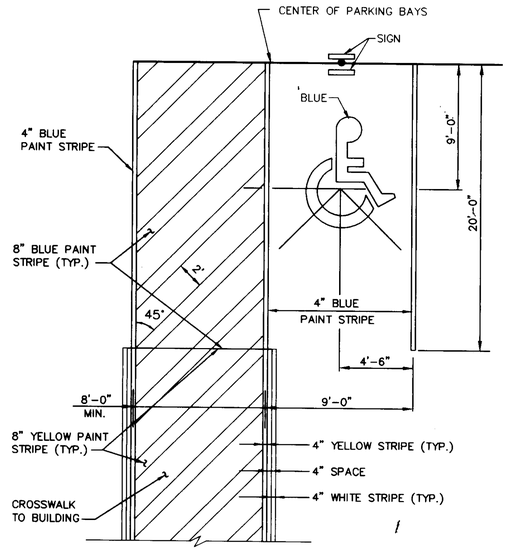
COLORS:
LEGEND & BORDER–GREEN
WHITE SYMBOL ON BLUE BACKGROUND
BACKGROUND–WHITE.



PROPORTIONS

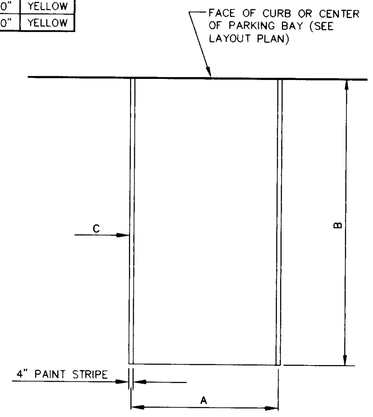


13 CE-2 CE-12 **HANDICAP PARKING SIGN**
NOT TO SCALE

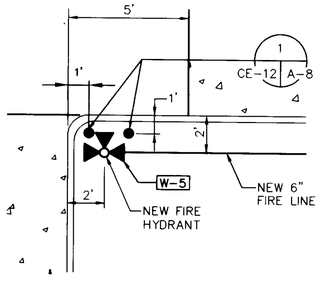


14 CE-2 CE-12 **HANDICAP PARKING STRIPING**
NOT TO SCALE

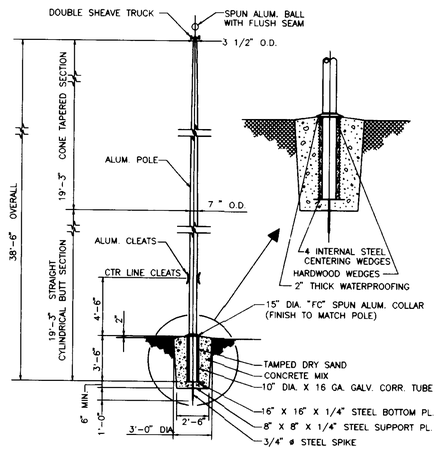
PARKING AREA	A	B	C
EMPLOYEE	9'–0"	20'–0"	WHITE
STAGING #1	11'–0"	33'–0"	YELLOW
STAGING #2	11'–0"	60'–0"	YELLOW
STAGING #3	12'–0"	33'–0"	YELLOW



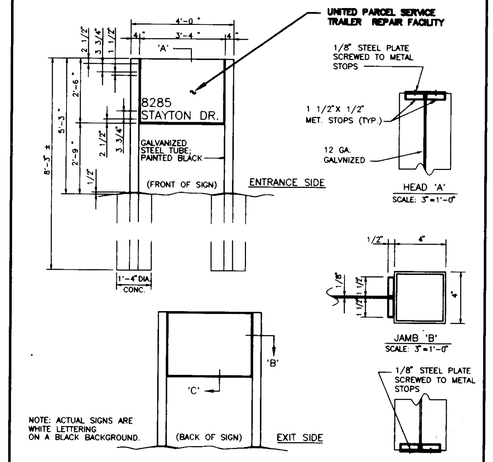
15 CE-2 CE-12 **STANDARD PARKING STRIPING**
NOT TO SCALE



17 CE-4 CE-12 **FIRE HYDRANT**
NOT TO SCALE



18 CE-2 CE-12 **FLAG POLE**
NOT TO SCALE



19 CE-2 CE-12 **ENTRANCE SIGN**
NOT TO SCALE

APPROVED: DEPARTMENT OF PLANNING & ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 9/21/95

CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH — DATE 9/22/95

DIRECTOR — DATE 9/26/95

STATE OF MARYLAND — 9/11/95

Subdivision Name: BALTIMORE–WASHINGTON INDUSTRIAL PARK	Section/Area: BLOCK C	Lot/Parcel #: N–1/166
Plat # or L/F: 8791	Block #: 7	Zone: M–2
Tax/Zone Map: 48	Elect Dist.: 6	Census Tract: 6069.01
Water Code: B02	Sewer Code: 4201200	

DATE	NO.	REVISIONS
5/19/95	1	REVISED PER SRC MEETING 5/4/95

SAVAGE, MD — HOWARD COUNTY

UPS MAINTENANCE FACILITY

FILE NO. SDP–95–98

OWNER
BORDALE COMPANY
55 GLENLAKE PARKWAY
NORTHEAST ATLANTA, GA. 30328

BALTIMORE–WASHINGTON INDUSTRIAL PARK
8285 STAYTON DR.

SITE DETAILS 2

ENGINEERS:
Consulting Engineers
849 Fairmount Avenue (410) 512–4500
Baltimore, Maryland 21286 (410) 324–4100 (FAX)
WHITNEY, BAILEY, COX & MAGNANI

STATE OF MARYLAND — 9/5/95

DESIGNED:	J.A.S.
DRAWN:	S.A.C.
CHECKED:	J. JOHNSON
DATE:	JUNE 26, 1995
SCALE:	AS NOTED
DRAWING NO:	CE–12

12 OF 14

SDP-95-98

WBCM 95030001

WBCM 95030001

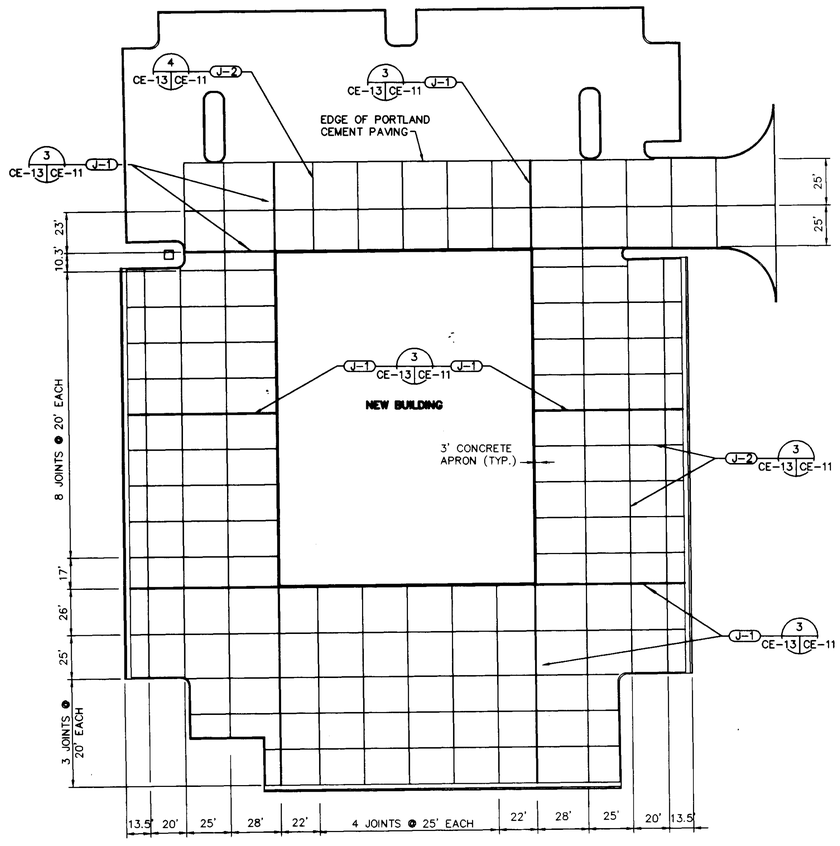
JOINT CONSTRUCTION NOTES

J-1 INSTALL EXPANSION JOINT. SEE DETAIL 3, SHEET CE-11.

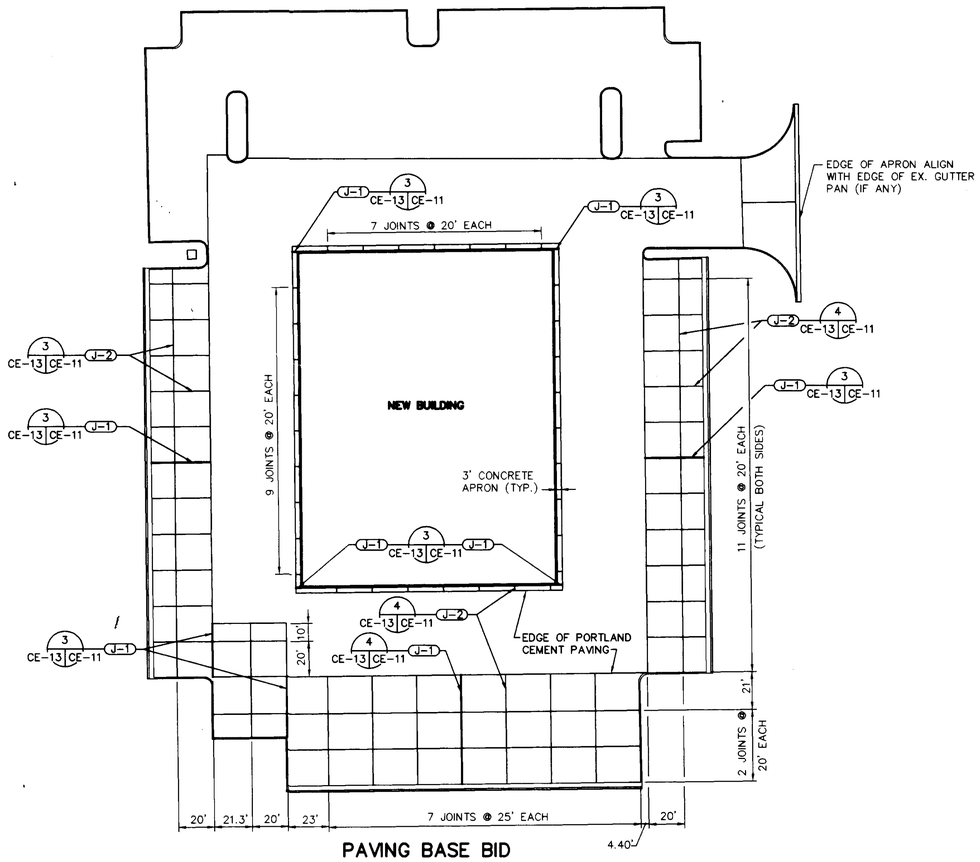
J-2 INSTALL CONTROL JOINTS AT SPACING SHOWN. SEE DETAIL 4, DRAWING CE-11.

NOTE

CONTRACTOR TO USE KEYED CONSTRUCTION JOINTS BETWEEN POURS AS NOTED IN SPECIFICATIONS.



PAVING ALTERNATE NUMBER 5



PAVING BASE BID
OR
PAVING ALTERNATE NUMBER 4

APPROVED: DEPARTMENT OF PLANNING & ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 9/21/95

CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH — DATE 9/22/95

DIRECTOR — DATE 9/28/95

Subdivision Name: BALTIMORE-WASHINGTON INDUSTRIAL PARK			Section/Area: BLOCK C		Lot/Parcel #: N-1/166
Plat # or L/F: 8791	Block #: 7	Zone: M-2	Tax/Zone Map: 48	Elect Dist.: 6	Census Tract: 6069.01
Water Code: B02			Sewer Code: 4201200		

DATE	NO.	REVISIONS

SAVAGE, MD — HOWARD COUNTY

UPS MAINTENANCE FACILITY

FILE NO. SDP-95-98

OWNER
BORDALE COMPANY
55 GLENLAKE PARKWAY
NORTHEAST ATLANTA, GA. 30328

BALTIMORE-WASHINGTON INDUSTRIAL PARK
8285 STAYTON DR.

ENGINEERS: Consulting Engineers
849 Fairmount Avenue (410) 512-4500
Baltimore, Maryland 21286 (410) 324-4100 (FAX)
WHITNEY, BAILEY, COX & MAGNANI

9/14/95

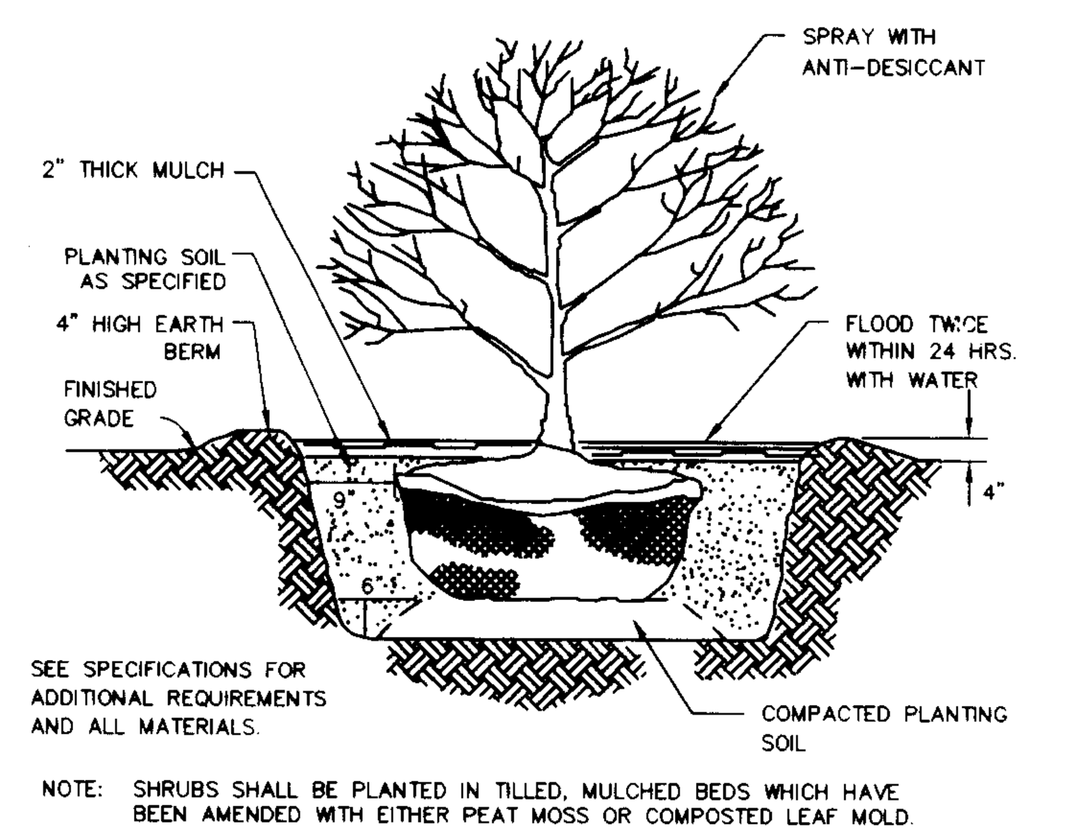
9/5/95

DESIGNED:	J. POTTER
DRAWN:	J. POTTER
CHECKED:	J. JOHNSON
DATE:	JUNE 26, 1995
SCALE:	1" = 40'
DRAWING NO:	CE-13

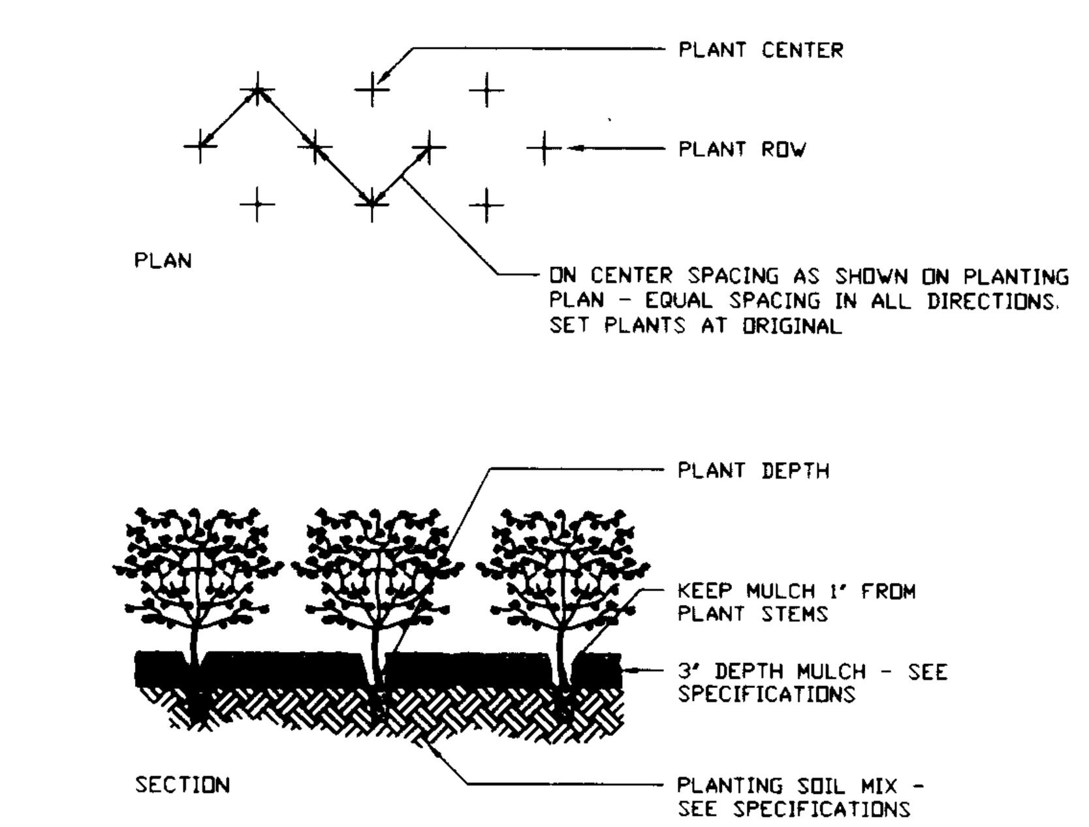
13 OF 14

SDP-95-98

WBCM 95030001



SHRUB PLANTING DETAIL — NOT TO SCALE



GROUNDCOVER PLANTING DETAIL — NOT TO SCALE

NOTES:

1. "THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL".
2. "FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING HAS BEEN POSTED AS PART OF DPW DEVELOPER'S AGREEMENT IN THE AMOUNT OF $6,100.00"

SCHEDULE A
PERIMETER LANDSCAPE EDGE

CATEGORY	ADJACENT TO ROADWAYS	ADJACENT TO PERIMETER PROPERTIES
LANDSCAPE TYPE	B & E	N/A
LINEAR FEET OF ROADWAY FRONTAGE/PERIMETER	1060*	N/A
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NONE	N/A
CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NONE	N/A
NUMBER OF PLANTS REQUIRED SHADE TREES EVERGREEN TREES SHRUBS	26 SHADE 6 EVERGREEN 210 SHRUBS	N/A
NUMBER OF PLANTS REQUIRED SHADE TREES EVERGREEN TREES OTHER TREES (2:1 SUBSTITUTION) SHRUBS (10:1 SUBSTITUTION) (DESCRIBE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED)	26 SHADE 6 EVERGREEN N/A 210 SHRUBS 40 SHRUBS IN ISLAND PLANTING	N/A

* 840 LINEAR FEET - PARKING TO ROAD
220 LINEAR FEET - NON-RESIDENTIAL TO ROAD

SCHEDULE B
PARKING LOT INTERNAL LANDSCAPING

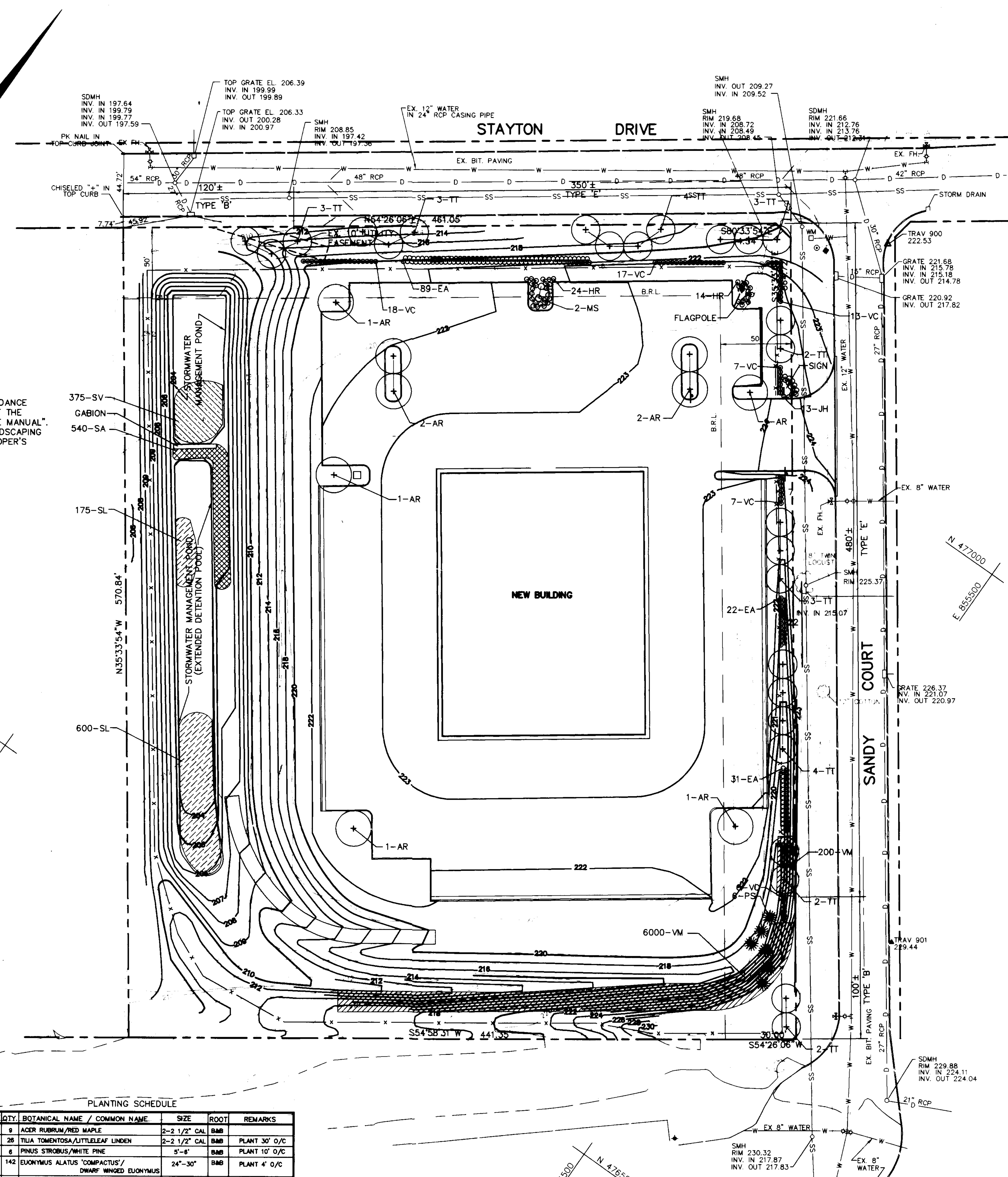
NUMBER OF PARKING SPACES	148
NUMBER OF ISLANDS REQUIRED (1/20)	8
NUMBER OF ISLANDS PROVIDED	8
NUMBER OF TREES REQUIRED	8
NUMBER OF TREES PROVIDED SHADE TREES OTHER TREES (2:1 SUBSTITUTION)	9 N/A

APPROVED: DEPARTMENT OF PLANNING & ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION — 9/2/95 DATE

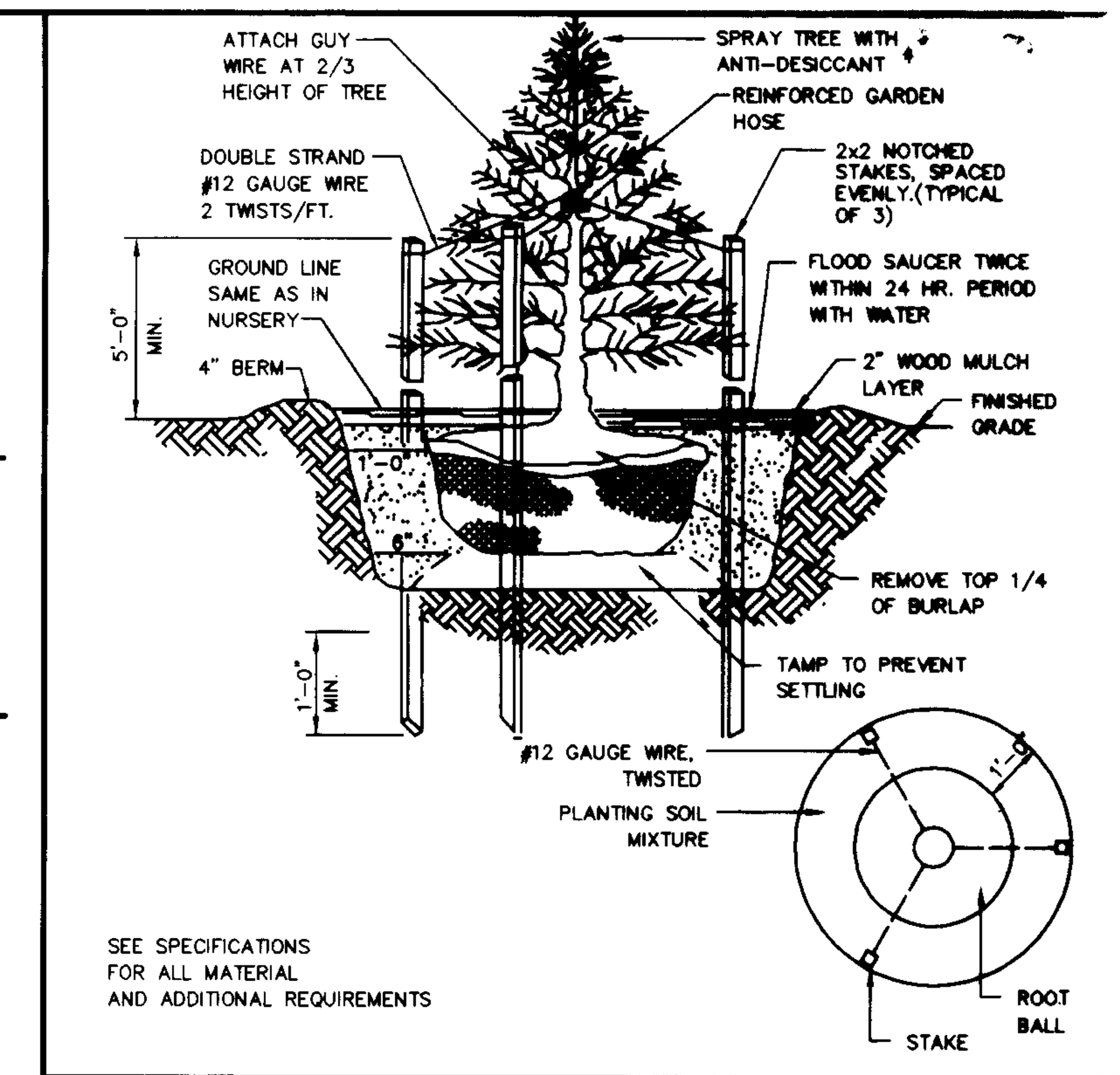
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH — 9/22/95 DATE

DIRECTOR — 9/22/95 DATE

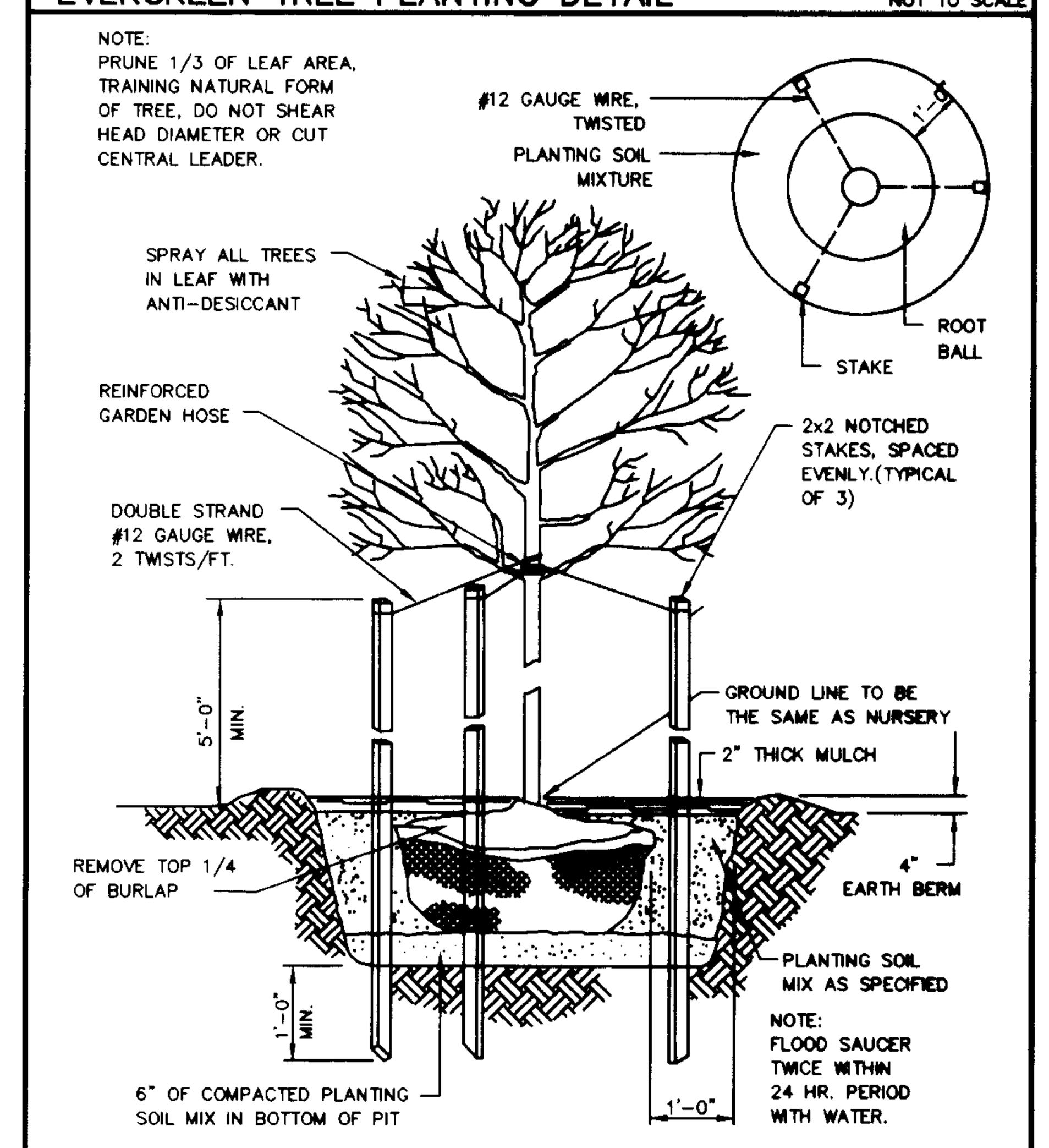


PLANTING SCHEDULE

KEY	QTY.	BOTANICAL NAME / COMMON NAME	SIZE	ROOT	REMARKS
AR	9	ACER RUBRUM/RED MAPLE	2-2 1/2" CAL	B&B	
TT	26	TILIA TOMENTOSA/LITTLELEAF LINDEN	2-2 1/2" CAL	B&B	PLANT 30' O/C
PS	6	PINUS STROBUS/WHITE PINE	5'-6'	B&B	PLANT 10' O/C
EA	142	EUONYMUS ALATUS 'COMPACTUS'/ DWARF WINGED EUONYMUS	24"-30"	B&B	PLANT 4' O/C
VC	68	VIBURNUM CARLESII/KOREAN SPICE VIBURNUM	24"-30"	B&B	PLANT 4' O/C
MS	2	MAGNOLIA STELLATA/STAR MAGNOLIA	4'-5'	B&B	PLANT 10' O/C
HR	38	RHODODENDRON 'HERSHEY RED'/ HERSHEY RED AZALEA	18"-24"	B&B	PLANT 4' O/C
JH	13	JUNIPERUS HORIZONTALIS 'WILTONII'/ BLUE RUG JUNIPER	15"-18"	B&B	PLANT 4' O/C
VM	6200	VINCA MINOR/COMMON PERIWINKLE	——	FLAT	PLANT 1' O/C
SV	375	SCIRPUS VALIDUS/SOFTSTEM BULRUSH	——	BARE	PLANT 2' O/C
SA	540	SCIRPUS AMERICANUS/ COMMON THREE-SQUARE	——	BARE	PLANT 2' O/C
SL	775	SAGITTARIA LATIFOLIA/ DUCK POTATO	——	BARE	PLANT 2' O/C



EVERGREEN TREE PLANTING DETAIL — NOT TO SCALE



DECIDUOUS TREE PLANTING DETAIL — NOT TO SCALE

Subdivision Name	Section/Area	Lot/Parcel #
BALTIMORE-WASHINGTON INDUSTRIAL PARK	BLOCK C	N-1/166

Plat # or L/F	Block #	Zone	Tax/Zone Map	Elect Dist.	Census Tract
8791	7	M-2	48	6	6069.01

Water Code B02 — Sewer Code 4201200

DATE	NO.	REVISIONS

SAVAGE, MD — HOWARD COUNTY

UPS MAINTENANCE FACILITY

FILE NO. SDP-95-98

OWNER
BORDALE COMPANY
55 GLENLAKE PARKWAY
NORTHEAST ATLANTA, GA. 30328

BALTIMORE-WASHINGTON INDUSTRIAL PARK
8285 STAYTON DR.

LANDSCAPE PLAN

ENGINEERS: Consulting Engineers
849 Fairmount Avenue
Baltimore, Maryland 21286
(410) 512-4500
(410) 324-4100 (FAX)
WHITNEY, BAILEY, COX & MAGNANI

STATE OF MARYLAND — DAVID C. POWLEN — REGISTERED LANDSCAPE ARCHITECT — NO. 2068 — 9/5/95

DESIGNED:	D.C.P.
DRAWN:	D.C.P.
CHECKED:	J. JOHNSON
DATE:	JUNE 26, 1995
SCALE:	1" = 40'
DRAWING NO:	CE-14

SDP-95-98