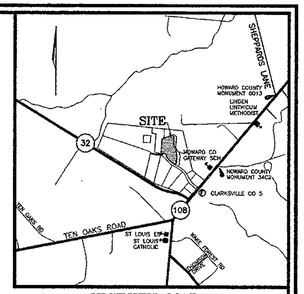
COLEMAN HONDA
CAR DEALERSHIP
SITE DEVELOPMENT PLANS
HOWARD COUNTY, MARYLAND



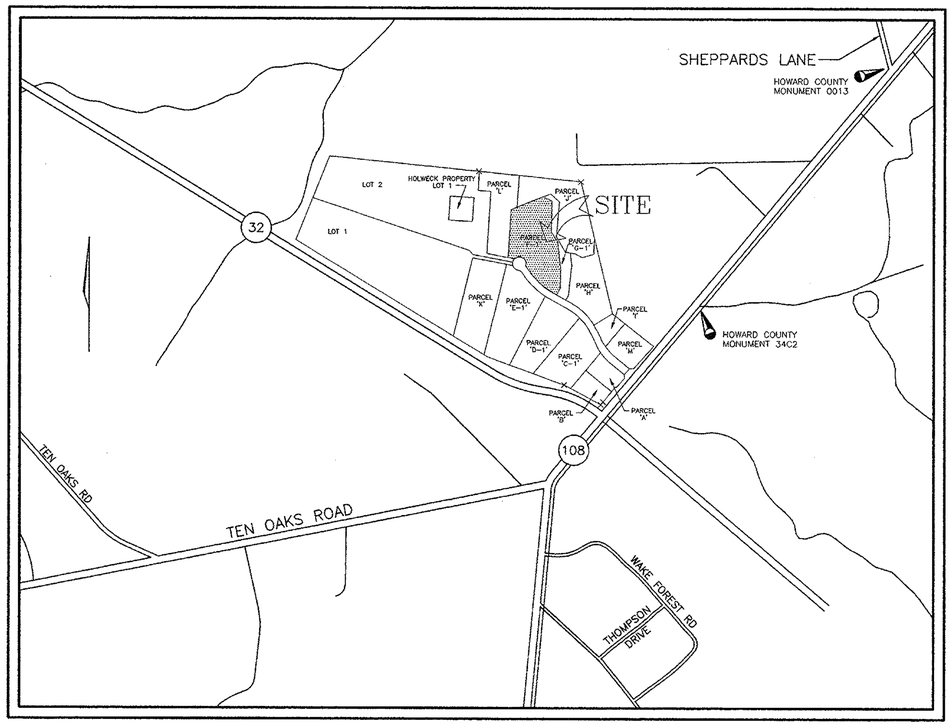
VICINITY MAP
SCALE: 1"=2000'

GENERAL NOTES

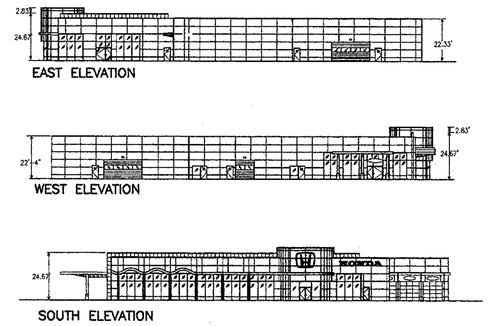
1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS, IF APPLICABLE.
2. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
3. THE CONTRACTOR IS TO NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE DAYS BEFORE STARTING WORK ON THESE DRAWINGS:

MISS UTILITY	1-800-257-7777
C & P TELEPHONE COMPANY:	725-9976
HOWARD COUNTY BUREAU OF UTILITIES:	313-2366
AT&T CABLE LOCATION DIVISION:	393-3553
B.G.&E. CO. CONTRACTOR SERVICES:	850-4620
B.G.&E. CO. UNDERGROUND DAMAGE CONTROL:	787-4620
STATE HIGHWAY ADMINISTRATION:	531-5533

4. SITE ANALYSIS:
   AREA OF PARCEL= 5.89 AC.
   PRESENT ZONING: B-2
   USE OF STRUCTURE:
   AUTOMOBILE SALES : 20,743 SQ.FT (INCLUDING MEZZANINE)
   AUTOMOBILE SERVICE : 10,861 SQ.FT. (23 SERVICE BAYS)
   BUILDING COVERAGE ON SITE: 0.7 AC OR 11% OF GROSS AREA
   PAVED PARKING LOT/AREA ON SITE: 3.64 AC OR 62% OF GROSS AREA
   AREA OF LANDSCAPE ISLAND: 0.25 AC= 10,765 SQ.FT.
5. PROJECT BACKGROUND:
   LOCATION: CLARKSVILLE, MARYLAND TAX MAP: 34 PARCEL 'F-1' HOLWECK SUBD.
   ZONING: B-2
   SECTION/AREA: N/A
   SITE AREA: 5.89 AC.
   DPZ REFERENCES: F-98-144 APPROVED 12/15/98
   F-94-36(#11179) APPROVED 1/13/94, F-95-75(#11584) APPROVED (1/23/95)
   WP-93-90 APPROVED 7/16/93
6. 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 START OF WORK.
7. ANY DAMAGE TO PUBLIC RIGHT-OF-WAYS, PAVING, OR EXISTING UTILITIES WILL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
8. EXISTING UTILITIES LOCATED FROM ROAD CONSTRUCTION PLANS, FIELD SURVEYS AND AVAILABLE RECORD DRAWINGS. APPROXINATE LOCATION OF EXISTING UTILITIES ARE SHOWN FOR THE CONTRACTORS INFORMATION. CONTRACTOR SHALL LOCATE EXISTING UTILITIES WELL IN ADVANCE OF CONSTRUCTION ACTIVITIES AND TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND TO MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
9. ALL REINFORCED CONCRETE FOR STORM DRAIN STRUCTURES SHALL HAVE A MINIMUM OF 28 DAYS STRENGTH OF 3,500 P.S.I.
10. 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.
11. ESTIMATES OF EARTHWORK QUANTITIES ARE PROVIDED SOLELY FOR THE PURPOSE OF CALCULATING FEES.
12. SOIL COMPACTION SPECIFICATIONS, REQUIREMENTS, METHODS AND MATERIALS ARE TO BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE PROJECT GEOTECHNICAL ENGINEER. GEOTECHNICAL ENGINEER TO CONFIRM ACCEPTABILITY OF PROPOSED PAVING SECTION, BASED ON SOILS TEST.
13. ALL STORM DRAIN PIPE BEDDING SHALL BE CLASS 'C' AS SHOWN IN VOLUME I OF HOWARD COUNTY DESIGN MANUAL.
14. STORMWATER MANAGEMENT PROVIDED UNDER F-94-38.
15. COORDINATES AND ELEVATIONS ARE BASED ON HOWARD COUNTY MONUMENTS 0013 AND 34C2 (NAD 83)
16. A NOISE STUDY IS NOT REQUIRED FOR THIS PROJECT.
17. EXISTING TOPOGRAPHY IS FROM A TOPOGRAPHIC SURVEY PERFORMED BY MARKS AND VOGEL ASSOCIATES, INC. IN DEC 1997.
18. WATER FOR THIS PROJECT IS PUBLIC AND WILL BE CONNECTED TO EX. 8" WATER CONT. # 44-3323-D AND PROPOSED 8" WATER MAIN CONT. # 44-3759-D.
19. SEWER FOR THIS PROJECT IS PUBLIC AND WILL BE CONNECTED TO EX. SAN. FORCE MAIN CONT. # 30-3687-D.
20. ALL PAVING TO BE AS SPECIFIED BY THE GEOTECHNICAL ENGINEER (SEE DETAILS ON SHEET 3).
21. ALL CURB AND GUTTER TO BE HOWARD COUNTY STANDARD CONCRETE OR BITUMINOUS (SEE DETAIL SHEET 3), LIMITS AS SHOWN ON PLAN.
22. PROPOSED PAVING SECTIONS TO BE CONFIRMED BY PROJECT GEOTECHNICAL ENGINEER PRIOR TO CONSTRUCTION.
23. PROJECT GEOTECHNICAL ENGINEER TO MONITOR WALL CONSTRUCTION, BACKFILL AND COMPACTION.
24. PROJECT GEOTECNICAL ENGINEER TO APPROVE PAVING SUBBASE PRIOR TO INSTALLATION OF PAVING SECTION.
25. SITE LIGHTING TO CONFORM TO SECTION 134 OF THE HOWARD COUNTY ZONING REGULATIONS.
26. CONTRACTOR TO PROVIDE TRACER WIRE OVER PROPOSED 1 1/4" PRESSURE SEWER WITH TERMINAL AT THE RIGHT-OF-WAY LINE AND AT THE GRINDER PUMP.
27. CONTRACTOR RESPONSIBLE TO CONSTRUCT ALL HANDICAP PARKING AND HANDICAP ACCESS ROUTES IN ACCORDANCE WITH CURRENT ADA REQUIREMENTS.
28. WHERE DRAINAGE FLOWS AWAY FROM CURB, CONTRACTOR TO REVERSE THE GUTTER PAN.
29. ANY EXISTING STREET TREES DAMAGED OR DESTROYED DURING CONSTRUCTION WILL BE REPLACED BY THE CONTRACTOR.
30. ALL 2:1 SLOPES TO BE STABILIZED WITH SOD. SLOPES 3:1 OR FLATTER TO BE STABILIZED WITH SEED AND MULCH.



LOCATION MAP
SCALE: 1"=600'



BUILDING ELEVATIONS
NOT TO SCALE

SHEET INDEX

SHT. NO.	CONTENTS
1	COVER SHEET
2	SITE LAYOUT PLAN
3	SITE DETAILS AND SECTIONS
4	SITE GRADING PLAN
5	STORM DRAIN & SEWER PROFILES
6	SOILS AND DRAINAGE AREA MAP
7	SEDIMENT & EROSION CONTROL PLAN
8	SEDIMENT & EROSION CONTROL NOTES AND DETAILS
9	LANDSCAPE PLAN
10	LANDSCAPE NOTES AND DETAILS
11	RETAINING WALL DETAILS

PARKING TABULATION

	REQUIRED	PROPOSED
SALES/OFFICE; 20,743 SQ.FT.(INCLUDING MEZZANINE)	41 SPACES	41 SPACES
2 SPACES/1,000 SQ.FT.=		
23 BAY AUTOMOBILE SERVICE AREA; 3 SPACES/SERVICE BAY=	69 SPACES	69 SPACES
23,140 SQ.FT. OUTDOOR DISPLAY; 1 SPACE/1000 SQ.FT.=	23 SPACES	24 SPACES
TOTAL SPACES =	133 SPACES	133 SPACES
HANDICAP SPACES =	5 SPACES	5 SPACES

OWNER/DEVELOPER
Jim Coleman
c/o 8817, LLC
10400 Auto Park Drive
Bethesda, Maryland 20817
Tel. No. (301)469-6600

VOGEL & ASSOCIATES
ENGINEERS · SURVEYORS · PLANNERS
3691 Park Avenue, Suite 101 • Ellicott City,Maryland 21043
Tel 410.461.5828 Fax 410.465.3966

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

DIRECTOR — DATE 5/14/99

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 5/4/99

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 5/13/99

NO.	REVISION	DATE

ADDRESS CHART	
PARCEL NO.	STREET ADRESS
F-1	12441 AUTO DRIVE

SUBDIVISION NAME		SECTION/AREA		PARCEL NUMBER
HOLWECK		N/A		PARCEL F-1
PLAT NO.	BLOCK NO.	ZONE	TAX/ZONE	ELECT. DIST.	CENSUS TR.
13459-13460	18	B-2	34	5TH	6051
WATER CODE	110		SEWER CODE	6653000	

COVER SHEET
FOR
COLEMAN HONDA CAR DEALERSHIP
PARCEL 'F-1' HOLWECK SUBDIVISION
SITE DEVELOPMENT PLAN

TAX MAP #34
PARCEL 'F-1'
5TH ELECTION DISTRICT
REFERENCE F 98-144
HOWARD COUNTY, MARYLAND

STATE OF MARYLAND — ROBERT HARRIS VOGEL — NO. 16193 — REGISTERED PROFESSIONAL ENGINEER — 5/12/99
ROBERT H. VOGEL, P.E. #16193

DESIGN BY: R.H.V.
DRAWN BY: J.E.R.
CHECKED BY: R.H.V.
DATE: MARCH, 1999
SCALE: AS SHOWN
W.O. NO.: 98-74

SHEET 1 OF 11

SDP-99-93

LEGEND

EXISTING GROUND	---444---
PROPOSED GRADE	466
EXISTING WATER	
EXISTING SEWER	
EXISTING STORM DRAIN	
EXISTING CURB & GUTTER	
PROPERTY LINE	
PROPOSED C&G	
PROP. STORM DRAIN	
PROP. SEWER	
PROP. WATER MAIN	
EASEMENT	
PROP. HEAVY DUTY PAVEMENT	
PROP. 4" CONC. SIDEWALK	
PROP. LIGHT DUTY PAVEMENT	
PROP. PARKING AREA LIGHTING	
PROP. WALL MOUNTED LIGHTING	
AUTO DISPLAY AREA	

NOTE: SITE LIGHTING TO CONFORM TO SECTION 134 OF THE HOWARD COUNTY ZONING REGULATIONS.

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Tel 410.461.5828 Fax 410.465.3966

OWNER/DEVELOPER

Jim Coleman
c/o 8817, LLC
10400 Auto Park Drive
Bethesda, Maryland 20817
Tel. No. (301)469-6600

LAYOUT PLAN

SCALE: 1"= 30'

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

DIRECTOR 5/14/99 DATE

CHIEF, DIVISION OF LAND DEVELOPMENT 5/14/99 DATE

CHIEF, DEVELOPMENT ENGINEERING DIVISION 5/13/99 DATE

NO.	REVISION	DATE

ADDRESS CHART	
PARCEL NO.	STREET ADRESS
F-1	12441 AUTO DRIVE

SUBDIVISION NAME			SECTION/AREA		PARCEL NUMBER
HOLWECK			N/A		PARCEL F-1
PLAT NO.	BLOCK NO.	ZONE	TAX/ZONE	ELECT. DIST.	CENSUS TR.
13459-13460	18	B-2	34	5TH	6051
WATER CODE I10			SEWER CODE: 6653000		

SITE LAYOUT PLAN
FOR
COLEMAN HONDA CAR DEALERSHIP
PARCEL 'F-1' HOLWECK SUBDIVISION
SITE DEVELOPMENT PLAN

TAX MAP #34 — REFERENCE F 98-144
PARCEL 'F-1' — 5TH ELECTION DISTRICT — HOWARD COUNTY, MARYLAND

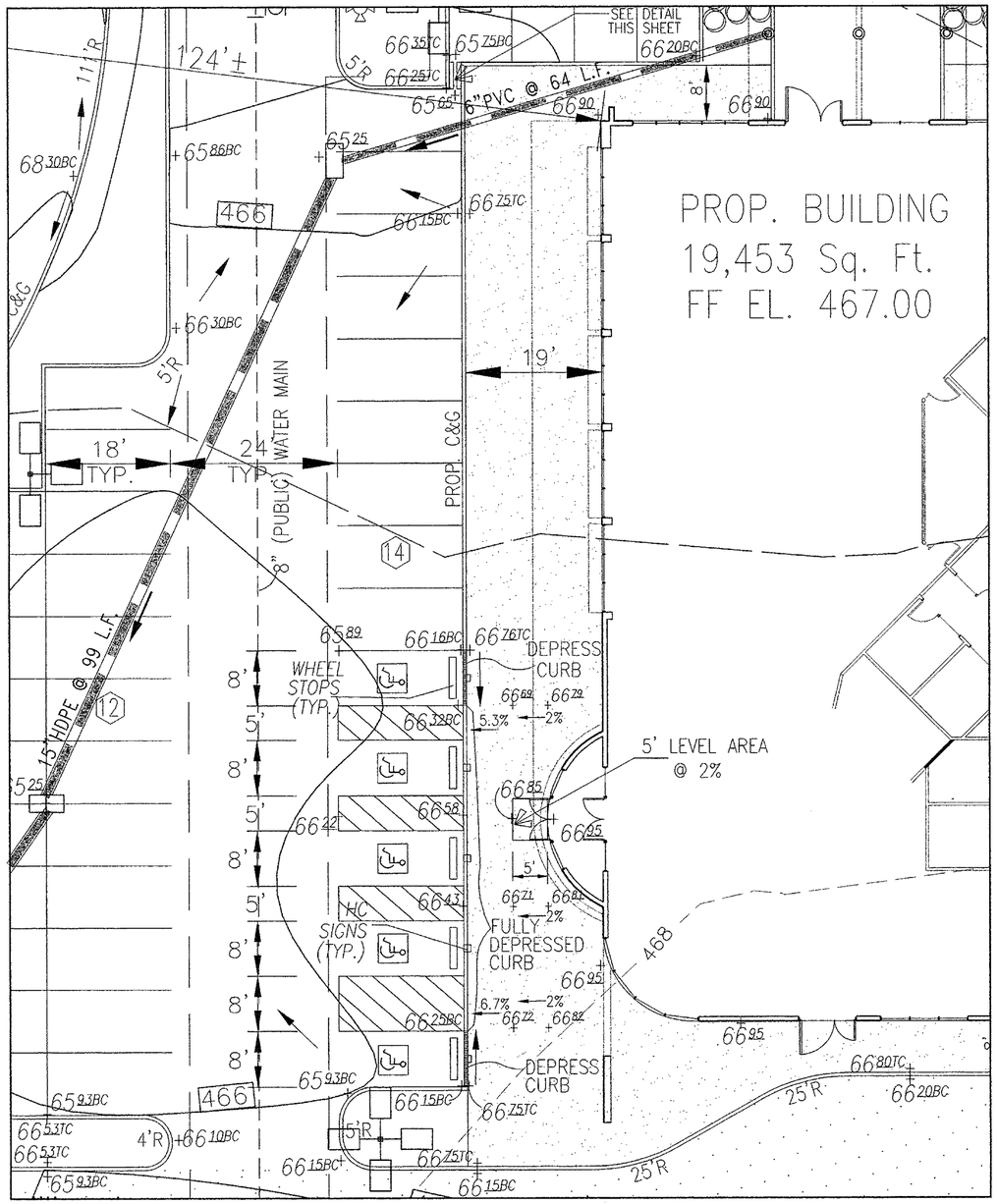
STATE OF MARYLAND — ROBERT HARRIS VOGEL — No 16193 — REGISTERED PROFESSIONAL ENGINEER — 3/22/99
ROBERT H. VOGEL, PE #16193

DESIGN BY: R.H.V.
DRAWN BY: J.E.R.
CHECKED BY: R.H.V.
DATE: MARCH, 1999
SCALE: 1" = 30'
W.O. NO.: 98-74

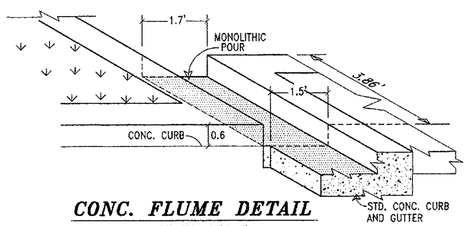
HONDA

SHEET 2 OF 11

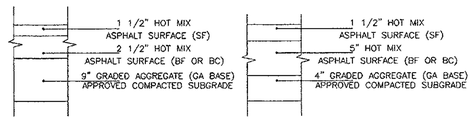
C:\ACADJOBS\98-74\C-2.DWG-J.E.R.12/31/98



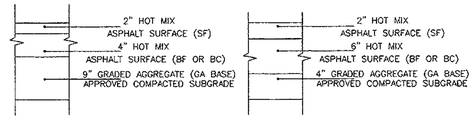
HANDICAP DETAIL
SCALE: 1"=10'



CONC. FLUME DETAIL
NOT TO SCALE

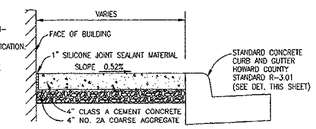


LIGHT DUTY PAVING SECTION
(AS RECOMMENDED BY THE PROJECT GEOTECHNICAL ENGIEER)



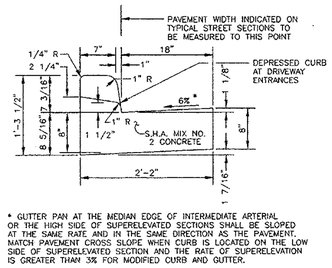
HEAVY DUTY PAVING SECTION
(AS RECOMMENDED BY THE PROJECT GEOTECHNICAL ENGIEER)

NOTE:
1. SIDEWALK TO HAVE MEDIUM BROOM FINISH PERPENDICULAR TO DIRECTION OF PEDESTRIAN TRAFFIC.
2. CONSTRUCT IN ACCORDANCE WITH PROJECT SPECIFICATION.
3. SEE SITE PLAN FOR SIDEWALK LOCATION.
4. PROVIDE ACCESSIBLE/CART RAMPS IN ACCORDANCE WITH STANDARD RAMP DETAIL.
5. PLACE 6X6-W2.0 WWF IN CENTER OF SLAB.
6. PLACE EXPANSION JOINT @ 20' MAX.
7. PLACE CONTROL JOINTS AT 4' TO 10' MAX.



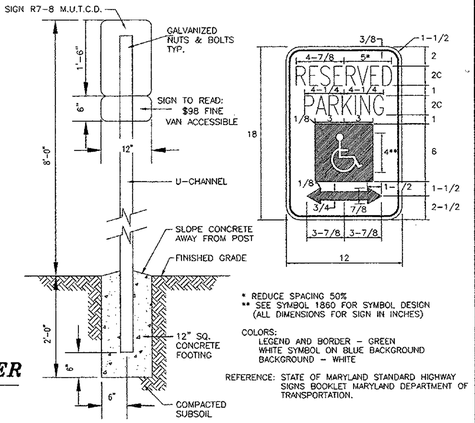
TYPICAL SIDEWALK DETAIL
NOT TO SCALE

NOT TO SCALE



* GUTTER PAN AT THE MEDIAN EDGE OF INTERMEDIATE ARTERIAL OR THE HIGH SIDE OF SUPERELEVATED SECTIONS SHALL BE SLOPED AT THE SAME RATE AND IN THE SAME DIRECTION AS THE PAVEMENT. MATCH PAVEMENT CROSS SLOPE WHEN CURB IS LOCATED ON THE LOW SIDE OF SUPERELEVATED SECTION AND THE RATE OF SUPERELEVATION IS GREATER THAN 3% FOR MODIFIED CURB AND GUTTER.

STANDARD COMBINATION CURB & GUTTER
HOWARD COUNTY STANDARD R-3.01
NOT TO SCALE

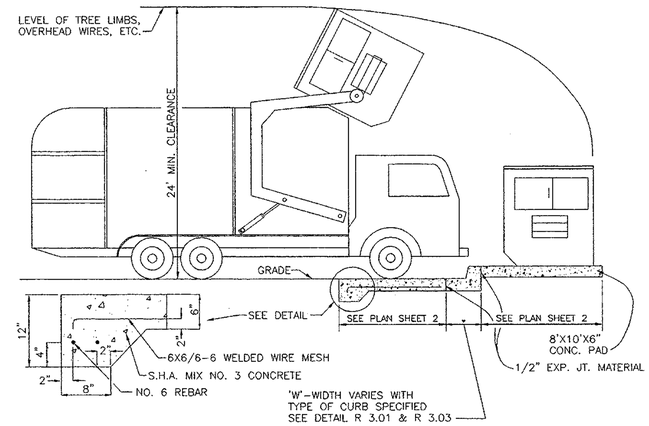


* REDUCE SPACING 50%
** SEE SYMBOL 1860 FOR SYMBOL DESIGN (ALL DIMENSIONS FOR SIGN IN INCHES)

COLORS:
LEGEND AND BORDER – GREEN
WHITE SYMBOL ON BLUE BACKGROUND
BACKGROUND – WHITE

REFERENCE: STATE OF MARYLAND STANDARD HIGHWAY SIGNS BOOKLET MARYLAND DEPARTMENT OF TRANSPORTATION.

HANDICAP SIGN
NOT TO SCALE



SOLID WASTE SERVICE PAD
HOWARD COUNTY STD. R 11.01
NOT TO SCALE

OWNER/DEVELOPER
Jim Coleman
c/o 8817, LLC
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Bethesda, Maryland 20817
Tel. No. (301)469-6600

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Tel 410.461.5828 Fax 410.465.3966

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

DIRECTOR — DATE 5/14/99

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 5/14/99

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 5/13/99

NO.	REVISION	DATE

ADDRESS CHART	
PARCEL NO.	STREET ADRESS
F-1	12441 AUTO DRIVE

SUBDIVISION NAME		SECTION/AREA		PARCEL NUMBER
HOLWECK		N/A		PARCEL F-1
PLAT NO.	BLOCK NO.	ZONE	TAX/ZONE	ELECT. DIST.	CENSUS TR.
13459-13460	18	B-2	34	5TH	6051
WATER CODE	110		SEWER CODE	6653000	

SITE DETAILS AND SECTIONS FOR COLEMAN HONDA CAR DEALERSHIP
PARCEL 'F-1' HOLWECK SUBDIVISION
SITE DEVELOPMENT PLAN

TAX MAP #34 PARCEL 'F-1' — 5TH ELECTION DISTRICT — REFERENCE F 98-144 HOWARD COUNTY, MARYLAND

STATE OF MARYLAND ROBERT HARRIS VOGEL No. 16193 REGISTERED PROFESSIONAL ENGINEER
ROBERT H. VOGEL, PE #16193

DESIGN BY: R.H.V.
DRAWN BY: J.E.R.
CHECKED BY: R.H.V.
DATE: MARCH, 1999
SCALE: AS SHOWN
W.O. NO.: 98-74

SHEET 3 OF 11

SDP-99-93

C:\ACAD\JOBS\98-74\C-3.DWG-J.E.R.12/31/98

GRADING PLAN

SCALE: 1"= 30'

OWNER/DEVELOPER

Jim Coleman
c/o 8817, LLC
10400 Auto Park Drive
Bethesda, Maryland 20817
Tel. No. (301)469-6600

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DIRECTOR — DATE 5/14/99

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 5/14/99

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NO.	REVISION	DATE

ADDRESS CHART

PARCEL NO.	STREET ADRESS
F-1	12441 AUTO DRIVE

SUBDIVISION NAME	SECTION/AREA	PARCEL NUMBER
HOLWECK	N/A	PARCEL F-1

PLAT NO.	BLOCK NO.	ZONE	TAX/ZONE	ELECT. DIST.	CENSUS TR.
13459-13460	18	B-2	34	5TH	6051

WATER CODE I10 SEWER CODE 6653000

SITE GRADING PLAN FOR

COLEMAN HONDA CAR DEALERSHIP

PARCEL 'F-1' HOLWECK SUBDIVISION

SITE DEVELOPMENT PLAN

TAX MAP #34 REFERENCE F 98-144
PARCEL 'F-1' 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

STATE OF MARYLAND ROBERT HARRIS VOGEL No. 16193 REGISTERED PROFESSIONAL ENGINEER
ROBERT H. VOGEL, PE #16193

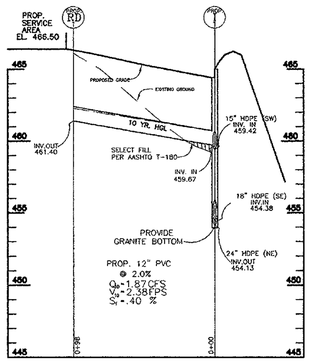
DESIGN BY: R.H.V.
DRAWN BY: J.E.R.
CHECKED BY: R.H.V.
DATE: MARCH, 1999
SCALE: 1" = 30'
W.O. NO.: 98-74

HONDA

SHEET 4 OF 11

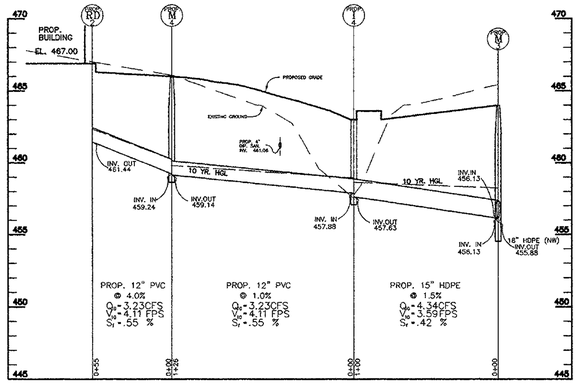
C:\ACADJOBS\98-74\C-4.DWG-J.E.R.12/31/98

SDP-99-93



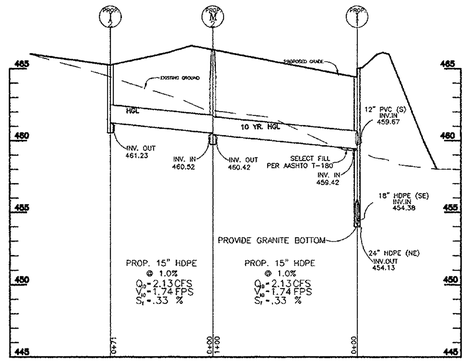
STORM DRAIN PROFILE

SCALE: 1" = 50' (HOR.) 1"= 5'(VER)



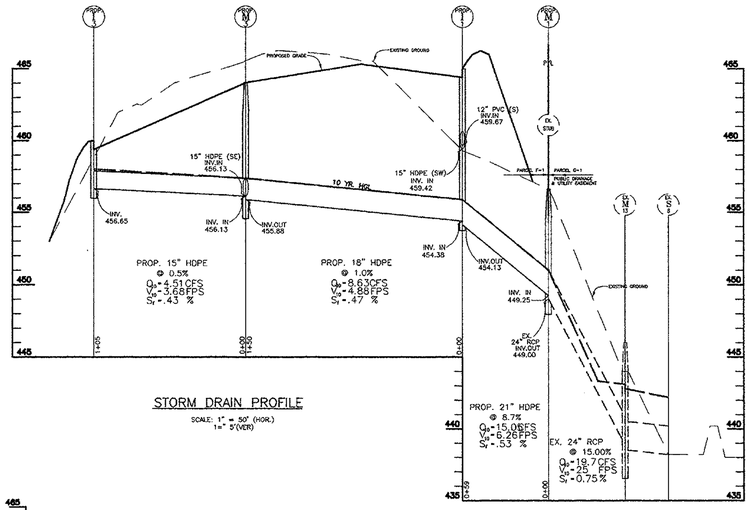
STORM DRAIN PROFILE

SCALE: 1" = 50' (HOR.) 1"= 5'(VER)



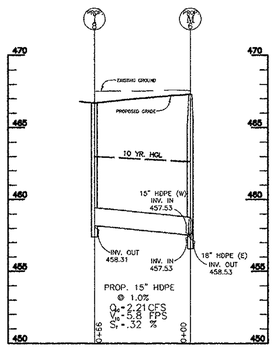
STORM DRAIN PROFILE

SCALE: 1" = 50' (HOR.) 1"= 5'(VER)



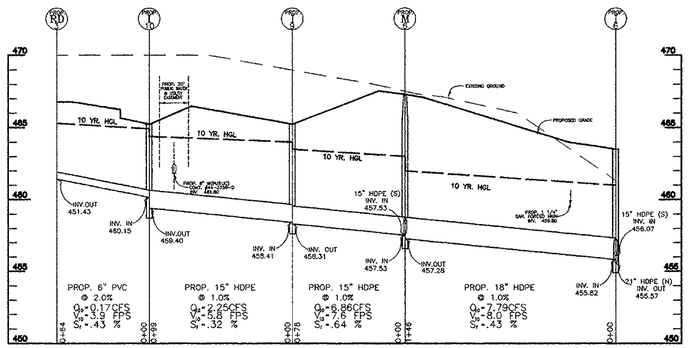
STORM DRAIN PROFILE

SCALE: 1" = 50' (HOR.) 1"= 5'(VER)



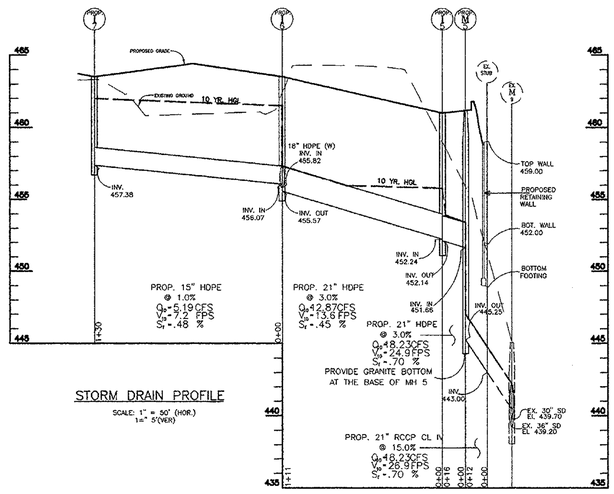
STORM DRAIN PROFILE

SCALE: 1" = 50' (HOR.) 1"= 5'(VER)



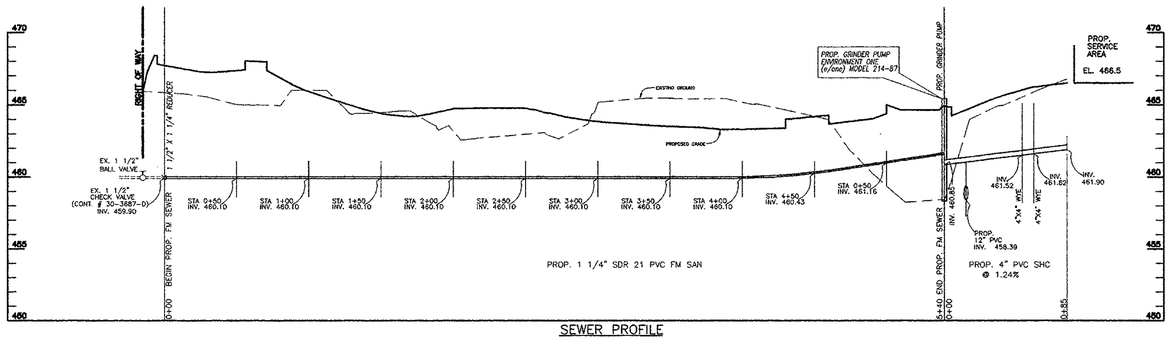
STORM DRAIN PROFILE

SCALE: 1" = 50' (HOR.) 1"= 5'(VER)



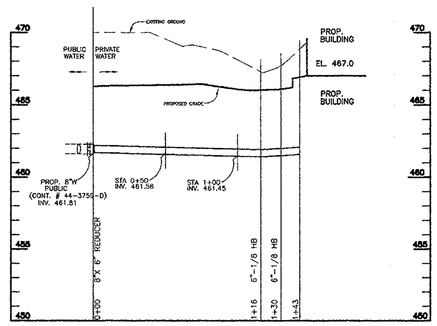
STORM DRAIN PROFILE

SCALE: 1" = 50' (HOR.) 1"= 5'(VER)



SEWER PROFILE

SCALE: 1" = 50' (HOR.) 1"= 5'(VER)



8" WHC PROFILE

SCALE: 1" = 50' (HOR.) 1"= 5'(VER)

STRUCTURE SCHEDULE

NO.	TYPE	TOP EL.	INV. IN.	INV. OUT	LOCATION	REMARKS
I-1	DOUBLE 'S' COMBINATION INLET	465.00*	459.42(15" HDPE)SW 454.38(18" HDPE)SE 459.67 (12" PVC)S	454.13	N563200.9699 E1328317.3721	SD 4.34
I-2	DOUBLE 'S' INLET	465.25**	–	456.23	N563037.6683 E1328263.2034	SD 4.23
I-3	DOUBLE 'S' COMBINATION INLET	460.00*	–	456.65	N563258.5398 E1328527.2756	SD 4.34
I-4	DOUBLE 'S' COMBINATION INLET	463.60*	457.88	457.63	N563090.7561 E1328524.8315	SD 4.34
I-5	DOUBLE 'S' COMBINATION INLET	461.80*	452.24	452.14	N562910.0296 E1328588.0075	SD 4.34
I-6	DOUBLE 'S' COMBINATION INLET	464.10*	456.07 (15" HDPE)S 455.82 (18" HDPE)W	455.57	N562794.8179 E1328599.5647	SD 4.34
I-7	DOUBLE 'S' COMBINATION INLET	464.10*	–	457.38	N562661.4726 E1328610.9814	SD 4.34
I-8	DOUBLE 'S' COMBINATION INLET	467.10*	–	458.31	N562711.4829 E1328437.9017	SD 4.34
I-9	DOUBLE 'S' INLET	465.25	458.41	458.31	N562828.1230 E1328390.8459	SD 4.23
I-10	DOUBLE 'S' INLET	465.25	460.15	459.40	N562875.0297 E1328300.9073	SD 4.23
M-1	STANDARD MANHOLE	457.00**	449.25	449.00	N563260.8262 E1328288.3634	G-5.12
M-2	STANDARD MANHOLE	466.31**	460.52	460.42	N563109.6672 E1328272.2218	G-5.12
M-3	STANDARD MANHOLE	464.03	456.13 (15" HDPE)SE 456.13 (15" HDPE)NE	455.88	N563172.4327 E1328466.3441	G-5.12
M-4	SHALLOW MANHOLE	466.00**	459.24	459.14	N562966.6490 E1328490.6563	G-5.12
M-5	STANDARD MANHOLE	461.66	451.66	445.25	N562928.0943 E1328581.1308	G-5.12
M-6	STANDARD MANHOLE	467.60	457.53 (15" HDPE)W 457.53 (15" HDPE)S	457.28	N562779.1614 E1328452.8264	G-5.12

* – TOP OF CURB ** – TOP OF RIM/GRATE

STORM DRAIN PIPE SCHEDULE

PIPE DESCRIPTION		LENGHT (L.F.)
DIAMETER	TYPE	
6"	PVC	64
12"	PVC	279
15"	HDPE	619
18"	HDPE	426
21"	HDPE	139
24"	HDPE	59

HDPE – HIGH DENSITY POLYETHYLENE PIPE
PVC – POLYVINYL CHLORIDE PIPE

OWNER/DEVELOPER

Jim Coleman
c/o 8817, LLC
10400 Auto Park Drive
Bethesda, Maryland 20817
Tel. No. (301)469-6600

VOGEL & ASSOCIATES
ENGINEERS·SURVEYORS·PLANNERS
3691 Park Avenue, Suite 101 • Ellicott City,Maryland 21043
Tel 410.461.5828 Fax 410.465.3966

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

DIRECTOR — DATE 5/14/99

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 5/14/99

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 5/13/99

NO.	REVISION	DATE

ADDRESS CHART	
PARCEL NO.	STREET ADRESS
F-1	12441 AUTO DRIVE

SUBDIVISION NAME		SECTION/AREA		PARCEL NUMBER
HOLWECK		N/A		PARCEL F-1
PLAT NO.	BLOCK NO.	ZONE	TAX/ZONE	ELECT. DIST.	CENSUS TR.
13459-13460	18	B-2	34	5TH	6051
WATER CODE	I10		SEWER CODE	6653000	

STORM DRAIN & SEWER PROFILES
FOR
COLEMAN HONDA CAR DEALERSHIP
PARCEL 'F-1' HOLWECK SUBDIVISION
SITE DEVELOPMENT PLAN

TAX MAP #34 REFERENCE F 98-144
PARCEL 'F-1' 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

STATE OF MARYLAND — ROBERT HARRIS VOGEL — NO. 16193 — REGISTERED PROFESSIONAL ENGINEER — 3/20/99

ROBERT H. VOGEL, PE #16193

DESIGN BY: R.H.V.
DRAWN BY: J.E.R.
CHECKED BY: R.H.V.
DATE: MARCH, 1999
SCALE: AS SHOWN
W.O. NO.: 98-74

RECORDED AS PLAT NO. 13459 AND 13460 ON 5/20/99

5 SHEET OF 11

C:\ACADJOBS\98-74\C-5.0WC-J.E.R.12/31/98

SDP-99-93

SOILS CHART		
SYMBOL	NAME/DESCRIPTION	TYPE
MgB2	MANOR GRAVELLY LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	B
MgC2	MANOR GRAVELLY LOAM, 8 TO 15 PERCENT SLOPES, MODERATELY ERODED	B
EkA	ELIOAK SILT LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	C
EkB2	ELIOAK SILT LOAM, 8 TO 15 PERCENT SLOPES, MODERATELY ERODED	C

NOTE:
THIS SITE DOES NOT INCLUDE SOILS DESIGNATED AS HYDRIC OR SOILS WITH HYDRIC INCLUSIONS. SOLS ARE NOT CLASSIFIED AS HIGHLY ERODIBLE.
HOWARD SOIL SURVEY MAP NUMBER 23

SOILS AND DRAINAGE AREA MAP

SCALE: 1"= 30'

LEGEND

EXISTING GROUND	---------444---------
PROPOSED GRADE	468
EX. DRAINAGE AREA	
PROP. DRAINAGE AREA	
SOILS DIVIDE	

VOGEL & ASSOCIATES
ENGINEERS·SURVEYORS·PLANNERS
3691 Park Avenue, Suite 101 • Ellicott City,Maryland 21043
Tel 410.461.5828 Fax 410.465.3966

OWNER/DEVELOPER

Jim Coleman
c/o 8817, LLC
10400 Auto Park Drive
Bethesda, Maryland 20817
Tel. No. (301)469-6600

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

DIRECTOR — DATE 5/14/99

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 5/14/99

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 5/13/99

NO.	REVISION	DATE

ADDRESS CHART	
PARCEL NO.	STREET ADRESS
F-1	12441 AUTO DRIVE

SUBDIVISION NAME	SECTION/AREA	PARCEL NUMBER
HOLWECK	N/A	PARCEL F-1

PLAT NO.	BLOCK NO.	ZONE	TAX/ZONE	ELECT. DIST.	CENSUS TR.
13459-13460	18	B-2	34	5TH	6051
WATER CODE I10			SEWER CODE 6653000		

SOILS & DRAINAGE AREA MAP
FOR
COLEMAN HONDA CAR DEALERSHIP
PARCEL 'F-1' HOLWECK SUBDIVISION
SITE DEVELOPMENT PLAN

TAX MAP #34 — PARCEL 'F-1' — 5TH ELECTION DISTRICT — REFERENCE F 98-144 — HOWARD COUNTY, MARYLAND

STATE OF MARYLAND — ROBERT HARRIS VOGEL — NO 16193 — REGISTERED PROFESSIONAL ENGINEER — 3/22/99
ROBERT H. VOGEL, PE #16193

DESIGN BY: R.H.V.
DRAWN BY: J.E.R.
CHECKED BY: R.H.V.
DATE: MARCH, 1999
SCALE: 1" = 30'
W.O. NO.: 98-74

HONDA

SHEET 6 OF 11

SEQUENCE OF CONSTRUCTION

1.	OBTAIN GRADING PERMIT.	
2.	NOTIFY HOWARD COUNTY BUREAU OF INSPECTIONS AND PERMITS (410-313-1880) AT LEAST 24 HOURS BEFORE STARTING ANY WORK.	
3.	CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE.	1 DAY
4.	INSTALL SILT FENCE BELOW PROPOSED RETAINING WALL (EAST) AND ALONG AUTO DRIVE. INSTALL SUPER SILT FENCE ALONG EAST PROPERTY LINE.	1 DAY
5.	CONSTRUCT STORM DRAIN FROM EXISTING 21" RCP STUB TO MANHOLE #5.	1 DAY
6.	CONSTRUCT RETAINING WALL ALONG EAST PROPERTY LINE	5 DAYS
7.	BACKFILL RETAINING WALL ONLY AND INSTALL SUPER SILT FENCE ALONG TOP OF WALL	3 DAYS
8.	INSTALL SEDIMENT TRAP #1 AND EARTH DIKE	3 DAYS
9.	GRADE SITE TO FINAL SUBGRADE AND PREPARE BUILDING PAD	3 DAYS
10.	INSTALL SITE UTILITIES AND STORM DRAIN SYSTEM. BEGIN BUILDING CONSTRUCTION.	8 DAYS
11.	INSTALL INLET PROTECTION.	12 DAYS
12.	CONSTRUCT CURB AND GUTTER (LEAVE SECTION AT SEDIMENT TRAP #1 FOR LAST).	2 DAYS
13.	REMOVE SEDIMENT TRAP #1 AND EARTH DIKE. INSTALL SILT FENCE AT TOE OF NEW SLOPE. COMPLETE CURB AND GUTTER	4 DAYS
14.	INSTALL LIGHTING FIXTURES, CONDUITS AND BASE PAVING	4 DAYS
15.	INSTALL LANDSCAPING AND SEED AND MULCH ALL REMAINING DISTURBED AREAS. INSTALL FINAL PAVING	4 DAYS

16. DURING GRADING AND AFTER EACH RAINFALL, THE CONTRACTOR SHALL INSPECT AND PROVIDE NECESSARY MAINTENANCE ON THE SEDIMENT AND EROSION CONTROL MEASURES SHOWN HEREON.

17. 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, SWALES, DITCH PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1.

B. 14 CALENDER DAYS FOR ALL OTHER DISTURBED AREAS.

18. UPON STABILIZATION OF ALL DISTURBED AREAS AND WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, REMOVE ALL SEDIMENT CONTROL STRUCTURES.

LEGEND

EXISTING GROUND
PROPOSED GRADE
EXISTING WATER
EXISTING SEWER
EXISTING STORM DRAIN
EXISTING CURB & GUTTER
PROPERTY LINE
EASEMENT
PROPOSED C&G
PROP. STORM DRAIN
PROP. SEWER
PROP. WATER MAIN
STABILIZED CONSTRUCTION ENTRANCE
SEDIMENT TRAP GRADE
PROP. SILT FENCE
PROP. SUPER SILT FENCE
PROP. EARTH DIKE
LIMIT OF DISTURBANCE

PARCEL L
HOLWECK SUBDIVISION
PLAT NO. 11182
ZONED B-2

PARCEL 'K'
(NON-BUILDABLE)

PARCEL 'J'
(NON-BUILDABLE)
5.616 ACRES
ZONED B-2

PARCEL F-1
5.8944 ACRES

PROP. BUILDING
19,453 Sq. Ft.
FF EL. 467.00

PROP. SERVICE AREA
10,861 Sq. Ft.

EXISTING
NO. BUILDING AREA

PROPOSED
CAR STORAGE
AREA

A-1 EARTH DIKE

AUTO DRIVE
COUNTY ROAD
66' R/W

EXISTING
PUBLIC DRAINAGE
STORMWATER MANAGEMENT
&
UTILITY EASEMENT
L 3694 F 442

EXISTING
PRIVATE FOREST
CONSERVATION
EASEMENT II
PART OF
L 3883 F 77

EXISTING
25' WETLAND
BUFFER AREA

EXISTING 25' NO BUILDING AREA

EXISTING CLIMITS OF WETLAND

MD. STATE GRID MERIDIAN

SEDIMENT TRAP NO. 1
STONE OUTLET SEDIMENT TRAP ST-II

DRAINAGE AREA:	1.8 AC.
VOLUME REQUIRED:	5760 CU.FT.
VOLUME PROVIDED:	5800. CU.FT.
TOP OF EMBANKMENT:	458.00
SIDE SLOPES:	2:1
BOTTOM ELEV.:	453.10
WEIR LENGTH:	6.4 FT.
WEIR CREST ELEV.:	457.00
WET STORAGE:	453.10 TO 455.10
DRY STORAGE:	455.10 TO 457.00
CLEANOUT ELEV.:	454.25

INSTALL SILT FENCE AFTER REMOVAL OF SEDIMENT TRAP #1 AND EARTH DIKE

INSTALL SILT FENCE PRIOR TO CONSTRUCTION OF THE RETAINING WALL

INSTALL SUPER SILT FENCE AFTER THE RETAINING WALL HAS BEEN CONTRUCTED AND BACKFILLED

CONSTRUCT MANHOLE OVER AND CONNECT TO EX. 24" RCP STUB INV. 443.00

SEE SHEET 3 OF 11 FOR HO. CO. DETAIL R 11.01)

NOTE: SEE ARCHITECTURAL DRAWINGS FOR INTERNAL OIL/SAND INTERCEPTOR

NOTE: VISUAL & AUDIBLE ALARM PANEL MODEL (e-one) 160-2 MUST BE INSTALLED FOR THE PROPOSED GRINDER PUMP.

SEDIMENT & EROSION CONTROL PLAN

SCALE: 1"= 30'

OWNER/DEVELOPER
Jim Coleman
c/o 8817, LLC
10400 Auto Park Drive
Bethesda, Maryland 20817
Tel. No. (301)469-6600

VOGEL & ASSOCIATES
ENGINEERS·SURVEYORS·PLANNERS
3691 Park Avenue, Suite 101 • Ellicott City,Maryland 21043
Tel 410.461.5828 Fax 410.465.3966

ENGINEERS CERTIFICATE

"I HEREBY 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 3/22/99
ROBERT H. VOGEL

DEVELOPER'S CERTIFICATE

"I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE IN ACCORDING TO THIS 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 ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."

SIGNATURE OF DEVELOPER — DATE 3/24/99

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS.

USDA-NATURAL RESOURCES CONSERVATION SERVICE — DATE 3/25/99

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

HOWARD SCD — DATE 3/25/99

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

DIRECTOR — DATE 6/14/99

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 5/14/99

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 5/12/99

NO.	REVISION	DATE

ADDRESS CHART	
PARCEL NO.	STREET ADRESS
F-1	12441 AUTO DRIVE

SUBDIVISION NAME			SECTION/AREA		PARCEL NUMBER
HOLWECK			N/A		PARCEL F-1
PLAT NO.	BLOCK NO.	ZONE	TAX/ZONE	ELECT. DIST.	CENSUS TR.
13459-13460	18	B-2	34	5TH	6051
WATER CODE	110		SEWER CODE	6653000	

SEDIMENT & EROSION CONTROL PLAN
FOR
COLEMAN HONDA CAR DEALERSHIP
PARCEL 'F-1' HOLWECK SUBDIVISION
SITE DEVELOPMENT PLAN

TAX MAP #34 PARCEL 'F-1' — 5TH ELECTION DISTRICT — REFERENCE F 98-144 — HOWARD COUNTY, MARYLAND

STATE OF MARYLAND
ROBERT HARRIS VOGEL
#16193
REGISTERED
PROFESSIONAL ENGINEER
6/14/99

ROBERT H. VOGEL, PE #16193

DESIGN BY: R.H.V.
DRAWN BY: J.E.R.
CHECKED BY: R.H.V.
DATE: MARCH, 1999
SCALE: 1" = 30'
W.O. NO.: 98-74

SHEET 7 OF 11

SDP-99-93

c:\ACADJOBS\98-74\C-7.DWG-J.E.R.12/31/98

21.0 STANDARD AND SPECIFICATIONS FOR TOPSOIL

DEFINITION

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

PURPOSE

To provide a suitable soil medium for vegetative growth. Soils of concern have low moisture content, low nutrient levels, low pH, material toxic to plants, and/or unacceptable soil gradation.

CONDITION WHERE PRACTICE APPLIES

I. This practice is limited to areas having 2:1 or flatter slopes where:

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

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

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

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

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

CONSTRUCTION AND MATERIAL SPECIFICATIONS

I. Topsoil salvaged from the existing site may be used, provided that it meets the standards as set forth in these specifications. Typically, the depth of topsoil to be salvaged for a given soil type can be found in the representative soil profile section in the soil survey published by USDA-SCS in cooperation with Maryland Agriculture Experimental Station.

II. Topsoil Specifications – Soil to be used as topsoil must meet the following:

i. Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority. Regardless, topsoil shall not be a mixture of contrasting textured subsoils and shall contain less than 5% by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger than 1 1/2" in diameter.

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

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

II. For sites having disturbed areas under 5 acres:

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

III. For sites having disturbed areas over 5 acres:

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

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

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

c. Topsoil having soluble salt content greater than 500 parts per million shall not be used.

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

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

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

V. Topsoil Application

i. When topsoiling, maintain needed erosion and sediment control practices such as diversions, Grade stabilization, Structures, Earth Dikes, Slope silt Fence and Sediment Traps and Basins.

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

iii. Topsoil shall be uniformly distributed in a 4"-8" layer and lightly compacted to a minimum thickness of 4". Spreading shall be performed in such a manner that sodding or seeding can proceed with a minimum of additional soil preparation and tillage. Any irregularities in the formation of depressions or water pockets.

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

TEMPORARY SEEDING

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

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

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

Seeding: For periods 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 spring, 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 feet 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.

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 3 inches of soil by raking, discing, or other acceptable means before seeding, if not previously loosened.

Soil Amendments: Use one of the following schedules:

1) Preferred– Apply 2 tons per acre dolomitic limestone (92 lbs./1000 sq. ft) and 600 lbs. per acre 10-10-10 fertilizer (14 lbs./1000 sq. ft.) before seeding. Harrow or disc into upper 3 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./1000sq. 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 60lbs. 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. of 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. per acre Kentucky 31 Tall Fescue, and mulch with 2 tons per acre well anchored straw.

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

Maintenance: Inspect all seeded areas, and make needed repairs, replacements, and reseedings.

SEDIMENT CONTROL NOTES

1. All Grading Permits shall be obtained prior to the starting of any Grading work.
2. A minimum of 24 hours notice must be given to the Howard County Office of Inspection and Permits prior to the start of any construction (992-2437).
3. All vegetation and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS AS FOR SOIL EROSION AND SEDIMENT CONTROL.
4. 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.
5. All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chapter 12, Storm Drainage, of the Howard County Design Manual.
6. All disturbed areas must be stabilized within the time period specified above in accordance with the 1983 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 only be done when recommended seeding dates do not allow proper germination and establishment of grasses.
7. 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.
8. Site Analysis

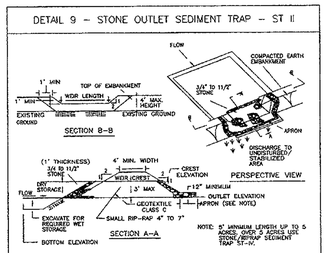
Total area of site R/W and easements: Parcel F-1= 5.8944 AC.+/- acres

Area disturbed	5.62 AC.+/-	acres
Area to be roofed or paved:	5.27 AC.+/-	acres
Area to be vegetatively stabilized	0.35 AC.+/-	acres
Total cut	6,458	cu. yds.
Total fill	5,140	cu. yds.

Excess cut/spoil to be placed in berm along western property line within limit of disturbance.

9. Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
10. Additional sediment controls must be provided, if deemed necessary by the Howard County Sediment Control Inspector.
11. 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.
12. It is the contractor's responsibility to clean/restore the adjacent SWM facilities due to sediment emanating from construction activities on this site.

DETAIL 9 – STONE OUTLET SEDIMENT TRAP – ST II

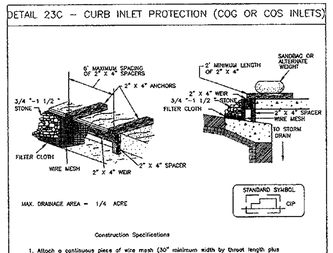


Construction Specifications

1. Area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The pool area shall be cleared.
2. The fill material for the embankment shall be free of roots and other woody vegetation as well as oversized stones, rocks, organic material or other objectionable material. The embankment shall be compacted by traversing with equipment while it is being constructed.
3. All cut and fill slopes shall be 2:1 or flatter.
4. The stone used in the outlet shall be small rip-rap 4" to 7" in size with a 1" inch layer of 3/4" to 1 1/2" washed aggregate placed on the upstream face of the outlet. Stone facing shall be as necessary to prevent clogging. Geotextile Class C may be substituted for the stone facing by placing it on the inside face of the stone outlet.
5. Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to one half of the wet storage depth of the trap. Removed sediment shall be deposited in a suitable area and in such a manner that it will not erode.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE C - 9 - 15	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

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

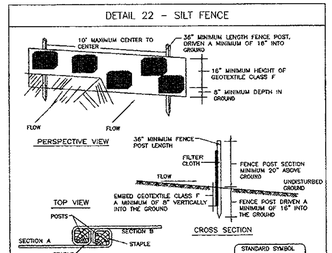


Construction Specifications

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 5' 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 lip 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 seven 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 - 58	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 22 – SILT FENCE



Construction Specifications

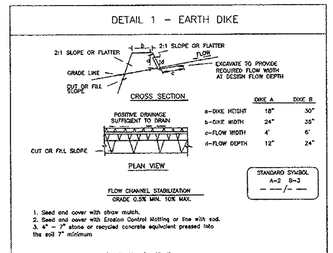
1. Fence posts shall be a minimum of 36" long driven 16" minimum into the ground. Wood posts shall be 1 1/2" x 1 1/2" square (minimum) cut, or 1 3/4" diameter (minimum) round and shall be of sound quality hardwood. Steel posts will be standard T or U section weighting not less than 1.00 pond per linear foot.
2. Geotextile shall be fastened securely to each fence post with wire ties or staples at top and midsection 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.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE E - 15 - 3	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 1 – EARTH DIKE



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

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

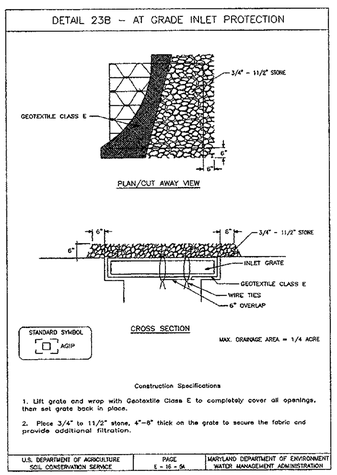
1. Seed and cover with straw mulch.
2. Seed and cover with Erosion Control blotting or line with sod.
3. 4" – 7" straw or recycled cocreate equivalent pressed into the soil 7" minimum

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 objectionable 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.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE A - 1 - 6	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 23B – AT GRADE INLET PROTECTION

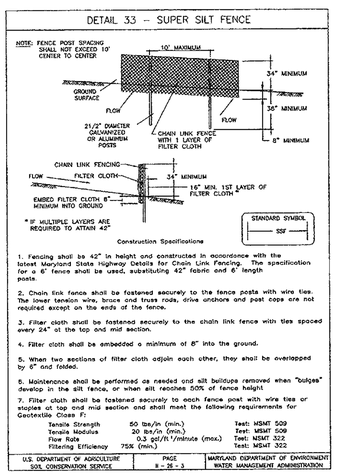


Construction Specifications

1. Lift grate and wrap with Geotextile Class E to completely cover all openings, then set grate back in place.
2. Place 3/4" to 1 1/2" stone, 4"-8" thick on the grate to secure the fabric and provide additional filtration.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE E - 16 - 54	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 33 – SUPER SILT FENCE



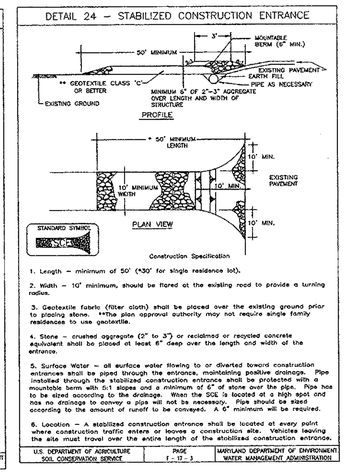
Construction Specifications

1. Fencing shall be 42" in height and constructed in accordance with the latest Maryland State Highway Details for Chain Link Fencing. The specification for a 6' fence shall be used, substituting 42" fabric and 8' length posts.
2. Chain link fence shall be fastened securely to the fence posts with wire ties. The lower tension wire, brace and truss rods, drive anchors and post caps are not required except on the ends of the fence.
3. Filter cloth shall be fastened securely to the chain link fence with ties spaced every 24" at the top and mid section.
4. Filter cloth shall be embedded a minimum of 8" into the ground.
5. When two sections of filter cloth adjoin each other, they shall be overlapped by 6" and folded.
6. Maintenance shall be performed as needed and silt buildups removed when "bulges" develop in the silt fence, or when silt reaches 50% of fence height.
7. Filter cloth shall be fastened securely to each fence post with wire ties or staples at top and mid section and shall meet the following requirements for Geotextile Class F:

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

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE B - 25 - 3	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 grading 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.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE F - 17 - 3	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

SUPER SILT FENCE

Design Criteria

Slope	Slope Steepness	Slope Length (maximum)	Silt Fence Length (maximum)
0 - 10%	0 - 10:1	Unlimited	Unlimited
10 - 20%	10:1 - 5:1	200 feet	1,500 feet
20 - 33%	5:1 - 3:1	100 feet	1,000 feet
33 - 50%	3:1 - 2:1	100 feet	500 feet
50% +	2:1 +	50 feet	250 feet

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE B - 25 - 34	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

OWNER/DEVELOPER

Jim Coleman
c/o 8817, LLC
10400 Auto Park Drive
Bethesda, Maryland 20817
Tel. No. (301)469-6600

VOGEL & ASSOCIATES
ENGINEERS-SURVEYORS-PLANNERS
3691 Park Avenue, Suite 101 • Ellicott City, Maryland 21043
Tel 410.461.5826 Fax 410.465.3966

ENGINEERS CERTIFICATE

"I HEREBY 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 ROBERT H. VOGEL — DATE 3/22/99

DEVELOPER'S CERTIFICATE

"I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE IN ACCORDING TO THIS 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 ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."

SIGNATURE OF DEVELOPER — DATE 3/22/99

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS.

USDA-NATURAL RESOURCES CONSERVATION SERVICE — DATE 3/25/99

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

HOWARD SCD — DATE 3/25/99

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

DIRECTOR — DATE 5/14/99

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 5/14/99

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 5/12/99

NO.	REVISION	DATE

ADDRESS CHART

PARCEL NO.	STREET ADRESS
F-1	12441 AUTO DRIVE

SUBDIVISION NAME	SECTION/AREA	PARCEL NUMBER
HOLWECK	N/A	PARCEL F-1

PLAT NO.	BLOCK NO.	ZONE	TAX/ZONE	ELECT. DIST.	CENSUS TR.
13459-13460	18	B-2	34	5TH	6051

WATER CODE 110 — SEWER CODE 6853000

SEDIMENT & EROSION CONTROL NOTES & DETAILS FOR COLEMAN HONDA CAR DEALERSHIP PARCEL 'F-1' HOLWECK SUBDIVISION

SITE DEVELOPMENT PLAN

TAX MAP #34 PARCEL 'F-1' — 5TH ELECTION DISTRICT — REFERENCE F 98-144 HOWARD COUNTY, MARYLAND

STATE OF MARYLAND ROBERT HARRIS VOGEL No. 16193 REGISTERED PROFESSIONAL ENGINEER

ROBERT H. VOGEL, PE #16193

DESIGN BY: R.H.V.
DRAWN BY: J.E.R.
CHECKED BY: R.H.V.
DATE: MARCH, 1999
SCALE: 1" = 30'
W.O. NO.: 98-74

SHEET 8 OF 11

SDP-99-93

C:\ACAD\98S\98-74\C-8.DWG-J.E.R. 12/31/98

LANDSCAPING PLAN

SCALE: 1"= 30'

LEGEND

EXISTING GROUND	444
PROPOSED GRADE	466
EXISTING WATER	
EXISTING SEWER	
EXISTING STORM DRAIN	
EXISTING CURB & GUTTER	
PROPERTY LINE	
PROPOSED C&G	
PROP. STORM DRAIN	
PROP. SEWER	
PROP. WATER MAIN	
EASEMENT	
PROP. HEAVY DUTY PAVEMENT	
PROP. 4" CONC. SIDEWALK	
PROP. LIGHT DUTY PAVEMENT	
PROP. PARKING AREA LIGHTING	
PROP. WALL MOUNTED LIGHTING	

VOGEL & ASSOCIATES
ENGINEERS·SURVEYORS·PLANNERS
3691 Park Avenue, Suite 101 • Ellicott City,Maryland 21043
Tel 410.461.5828 Fax 410.465.3966

OWNER/DEVELOPER
Jim Coleman
c/o 8817, LLC
10400 Auto Park Drive
Bethesda, Maryland 20817
Tel. No. (301)469-6600

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

DIRECTOR — DATE 5/14/99
CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 5/14/99
CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 5/13/99

NO.	REVISION	DATE

ADDRESS CHART

PARCEL NO.	STREET ADRESS
F-1	12441 AUTO DRIVE

SUBDIVISION NAME	SECTION/AREA	PARCEL NUMBER
HOLWECK	N/A	PARCEL F-1

PLAT NO.	BLOCK NO.	ZONE	TAX/ZONE	ELECT. DIST.	CENSUS TR.
13459-13460	18	B-2	34	5TH	6051

WATER CODE I10 — SEWER CODE 6653000

LANDSCAPE PLAN
FOR
COLEMAN HONDA CAR DEALERSHIP
PARCEL 'F-1' HOLWECK SUBDIVISION
SITE DEVELOPMENT PLAN

TAX MAP #34
PARCEL 'F-1'
5TH ELECTION DISTRICT
REFERENCE F 98-144
HOWARD COUNTY, MARYLAND

STATE OF MARYLAND — ROBERT HARRIS VOGEL — No. 16193 — REGISTERED PROFESSIONAL ENGINEER — 3/22/99
ROBERT H. VOGEL, PE #16193

DESIGN BY: R.H.V.
DRAWN BY: J.E.R.
CHECKED BY: R.H.V.
DATE: MARCH, 1999
SCALE: 1" = 30'
W.O. NO.: 98-74

HONDA

9 SHEET OF 11

C:\ACADJOBS\98-74\C-9.DWG-J.E.R.12/31/98

SDP-99-93

PLANTING NOTES

1. PLANTS, RELATED MATERIALS, AND OPERATIONS SHALL MEET THE DETAILED DESCRIPTION AS GIVEN ON THE PLANS AND AS DESCRIBED HEREIN.

2. ALL PLANT MATERIAL, UNLESS OTHERWISE SPECIFIED, SHALL BE NURSERY GROWN, UNIFORMLY BRANCHED AND HAVE A VIGOROUS ROOT SYSTEM. PLANT MATERIAL SHALL BE HEALTHY, VIGOROUS PLANTS FREE FROM DEFECTS, DECAY, DISFIGURING ROOTS, SUNSCALD INJURIES, ABRASIONS OF THE BARK, PLANT DISEASE, INSECT PEST EGGS, BOXERS AND ALL FORMS OF INFESTATION OR OBJECTIONABLE DISFIGUREMENTS. PLANT MATERIAL THAT IS WEAK OR WHICH HAS BEEN CUT BACK FROM LARGER GRADES TO MEET SPECIFIED REQUIREMENTS WILL BE REJECTED. TREES WITH FORKED LEADERS WILL NOT BE ACCEPTED. ALL PLANTS SHALL BE FRESHLY DUG; NO HEELED-IN PLANTS OR PLANTS FROM COLD STORAGE WILL BE ACCEPTED.

3. UNLESS OTHERWISE SPECIFIED, ALL PLANT MATERIAL SHALL CONFORM TO "AMERICAN STANDARD FOR NURSERY STOCK" ANSI Z60.1-1986, PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMAN, INCLUDING ALL ADDENDA.

4. UNLESS OTHERWISE SPECIFIED, ALL GENERAL CONDITIONS, PLANTING OPERATIONS, DETAILS AND PLANTING SPECIFICATIONS SHALL CONFORM TO "LANDSCAPE SPECIFICATION GUIDELINES FOR BALTIMORE-WASHINGTON METROPOLITAN AREAS", (HEREIN-AFTER "LANDSCAPE GUIDELINES") APPROVED BY THE LANDSCAPE CONTRACTORS ASSOCIATION OF METROPOLITAN WASHINGTON AND THE POTOMAC CHAPTER OF THE AMERICAN SOCIETY OF LANDSCAPE ARCHITECTS, SEPTEMBER, 1981, INCLUDING ALL ADDENDA.

5. CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING UTILITY COMPANIES, UTILITY CONTRACTORS AND "MISS UTILITY" A MINIMUM OF 48 HOURS PRIOR TO BEGINNING ANY WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO UTILITIES AND MAY MAKE MINOR ADJUSTMENTS IN SPACING AND LOCATION OF PLANTING MATERIALS TO AVOID CONFLICTS WITH UTILITIES.

6. PLANTING BED SHALL BE MULCHED WITH 3" OF SHREDDED HARDWOOD BARK MULCH. GROUNDCOVER BEDS SHALL BE MULCHED TO A DEPTH OF 2".

7. ALL AREAS WITHIN THE CONTRACT LIMIT NOT COVERED BY BUILDING, PAVING, PLANTING BEDS OR OTHERWISE DESIGNATED ON THE PLANS SHALL BE SEEDED AND MULCHED OR SODDED IN ACCORDANCE WITH "1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL", PERMANENT SEEDING SPECIFICATIONS (SEE SHEET 6), INCLUDING ALL ADDENDA, AS DIRECTED BY THE OWNER.

8. CONTRACTOR IS RESPONSIBLE FOR INSTALLING ALL MATERIALS IN THE PROPER PLANTING SEASON FOR EACH PLANT TYPE.

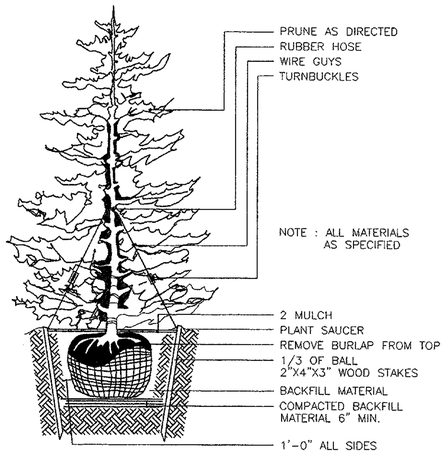
   PLANTING MIX SHALL BE DONE AS FOLLOWS:

   DECIDUOUS PLANTS - TWO PARTS TOP SOIL, ONE PART WELL-ROTTED COW OR HORSE MANURE. ADD 3 LBS. OF STANDARD 10-10-10 FERTILIZER PER CUBIC YARD OF PLANTING MIX. EVERGREEN PLANTS - TWO PARTS TOPSOIL, ONE PART HUMIS OR OTHER APPROVED ORGANIC MATERIAL. ADD 3 LBS. OF EVERGREEN (ACIDIC) FERTILIZER PER CUBIC YARD OF PLANTING MIX.

9. TOPSOIL SHALL CONFORM TO LANDSCAPE GUIDELINES.

10. THIS PLAN IS INTENDED FOR LANDSCAPE PLAN ONLY. SEE OTHER PLAN SHEETS FOR INFORMATION ON GRADING, SEDIMENT CONTROL, LAYOUT, ETC.

11. CONTRACTOR TO ADJUST PLANTINGS AS REQUIRED WITH PRIOR APPROVAL OF THE ENGINEER OR LANDSCAPE ARCHITECT.

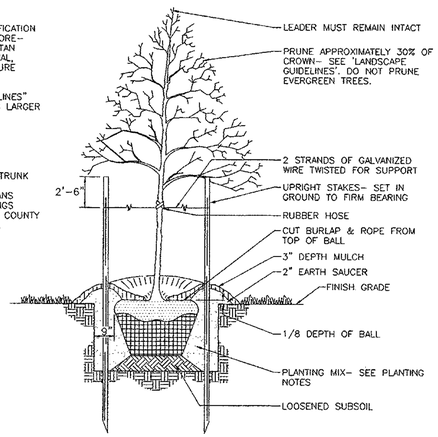


TYPICAL EVERGREEN TREE PLANTING DETAIL

NOT TO SCALE

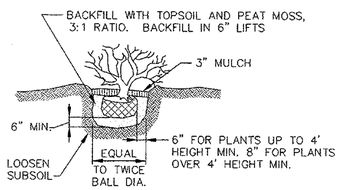
NOTES

1. SEE "LANDSCAPE SPECIFICATION GUIDELINES FOR BALTIMORE-WASHINGTON METROPOLITAN AREAS" FOR ALL MATERIAL, PRODUCT, AND PROCEDURE SPECIFICATIONS.
2. SEE "LANDSCAPE GUIDELINES" FOR SUPPORTING TREES LARGER THAN 2-1/2" CALIPER.
3. PLACE UPRIGHT STAKES PARALLEL TO WALKS & BUILDINGS.
4. KEEP MULCH 1" FROM TRUNK
5. SEE ARCHITECTURAL PLANS FOR ADDITIONAL PLANTINGS WHICH EXCEED HOWARD COUNTY MINIMUM REQUIREMENTS.
6. TREES ARE NOT TO BE PLANTED OVER PRIVATE SEWAGE EASEMENT.



TREE PLANTING AND STAKING

DECIDUOUS TREES UP TO 2-1/2" CALIPER — NOT TO SCALE



SHRUB PLANTING DETAIL

NOT TO SCALE

SCHEDULE A
PERIMETER LANDSCAPE EDGE

CATEGORY	ADJACENT TO AUTO DRIVE	ADJACENT TO PERIMETER PROPERTIES (DUMPSTER SCREEN)
LANDSCAPE TYPE	E	D
LINEAR FEET OF ROADWAY FRONTAGE/PERIMETER	460	30
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NO	NO
CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NO	NO
NUMBER OF PLANTS REQUIRED(BASED ON TOTAL PERIMETER) TYPE D TYPE E		
SHADE TREES (1:60) (1:40)	12	1
EVERGREEN TREES (1:10) N/A	0	3
SHRUBS N/A (1:4)	115	0
NUMBER OF PLANTS PROVIDED		
SHADE TREES	5	0
EVERGREEN TREES	0	12
OTHER TREES (2:1 SUBSTITUTION)	0	0
SHRUBS (10:1 SUBSTITUTION)	70	0
TOTAL SHRUBS	185	0

SCHEDULE B
PARKING LOT INTERNAL LANDSCAPING

NUMBER OF PARKING SPACES (INCLUDING DISPLAY)	274
NUMBER OF TREES + ISLANDS REQUIRED: 1/20 SP.	14 ISLANDS (2800 SF)
NUMBER OF TREES PROVIDED NUMBER OF SHRUBS PROVIDED	14 104
NUMBER OF ISLANDS PROVIDED AREA OF ISLANDS PROVIDED	14 10675 SF

* ISLANDS WITHOUT SHRUBS TO BE SODDED

LANDSCAPE SCHEDULE

KEY	QTY	PLANT NAME/BOTANICAL NAME	SIZE	REMARKS
SHADE TREES				
Ar	3	ACER RUBRUM/ RED SUNSET	2 1/2"-3" CAL	B & B
G	5	GLEDITSIA TRIACANTHOS INTERMIS 'SKYLINE' THORNLESS HONEY LOCUST SKYLINE	2 1/2"-3" CAL	B & B
Z	11	ZELKOVA SERRATA 'VILLAGE GREEN' VILLAGE GREEN JAPANESE ZELKOVA	2 1/2"-3" CAL	B & B
EVERGREEN TREES				
Cl	12	CUPPRESSOCYPARIS LEYLANDI LEYLAND CYPRESS	1 1/2"-2" CAL	B & B
SHRUBS				
Jb	80	JUNIPERUS HORIZONTALIS BLUE CHIP JUNIPER	18" - 24" SP.	3 GAL.
Jh	24	JUNIPERUS HORIZONTALIS 'PLUMOSA' COMPACTA/ COMPACT ANDORRA JUNIPER	18" - 24" SP.	3 GAL.
T	185	TAXUS CUSPIDATA "NANA" DWARF JAPANESE YEW	1 1/2"-2" CAL	B & B

NOTE:

FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING MUST BE POSTED AS PART OF THE DEVELOPER'S AGREEMENT (PUBLIC WATER) IN THE AMOUNT OF $12,000.00 FOR 115 SHRUBS, 3 EVERGREENS AND 27 SHADE TREES.

OWNER/DEVELOPER

Jim Coleman
c/o 8817, LLC
10400 Auto Park Drive
Bethesda, Maryland 20817
Tel. No. (301)469-6600

VOGEL & ASSOCIATES
ENGINEERS·SURVEYORS·PLANNERS
3691 Park Avenue, Suite 101 • Ellicott City,Maryland 21043
Tel 410.461.5828 Fax 410.465.3966

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(1) YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

SIGNATURE OF DEVELOPER — DATE 3/4/99

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

DIRECTOR — DATE 5/14/99

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 5/14/99

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 5/14/99

NO.	REVISION	DATE

ADDRESS CHART						
PARCEL NO.	STREET ADRESS					
F-1	12441 AUTO DRIVE					
SUBDIVISION NAME HOLWECK			SECTION/AREA N/A		PARCEL NUMBER PARCEL F-1	
PLAT NO.	BLOCK NO.	ZONE	TAX/ZONE	ELECT. DIST.	CENSUS TR.	
13459-13460	18	B-2	34	5TH	6051	
WATER CODE I10			SEWER CODE 6653000			

LANDSCAPE NOTES AND DETAILS
FOR
COLEMAN HONDA CAR DEALERSHIP
PARCEL 'F-1' HOLWECK SUBDIVISION
SITE DEVELOPMENT PLAN

TAX MAP #34 PARCEL 'F-1' — 5TH ELECTION DISTRICT — REFERENCE F 98-144 HOWARD COUNTY, MARYLAND

STATE OF MARYLAND — ROBERT HARRIS VOGEL — NO. 16193 — REGISTERED PROFESSIONAL ENGINEER — 3/30/99

ROBERT H. VOGEL, PE #16193

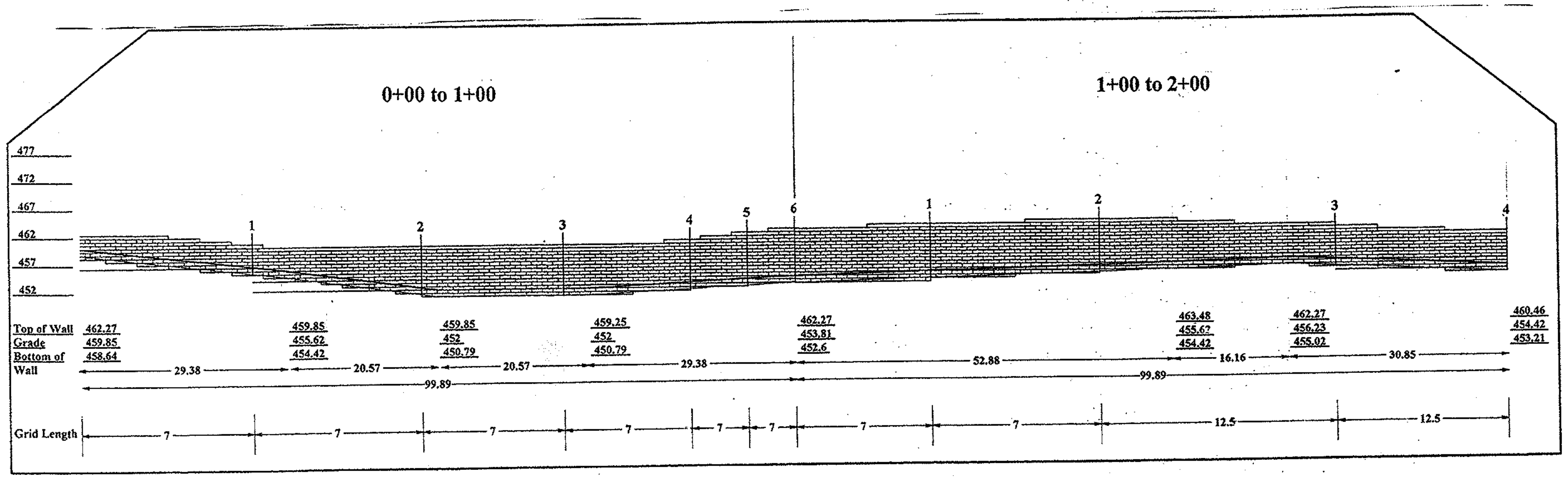
DESIGN BY: R.H.V.
DRAWN BY: J.E.R.
CHECKED BY: R.H.V.
DATE: MARCH, 1999
SCALE: AS SHOWN
W.O. NO.: 98-74

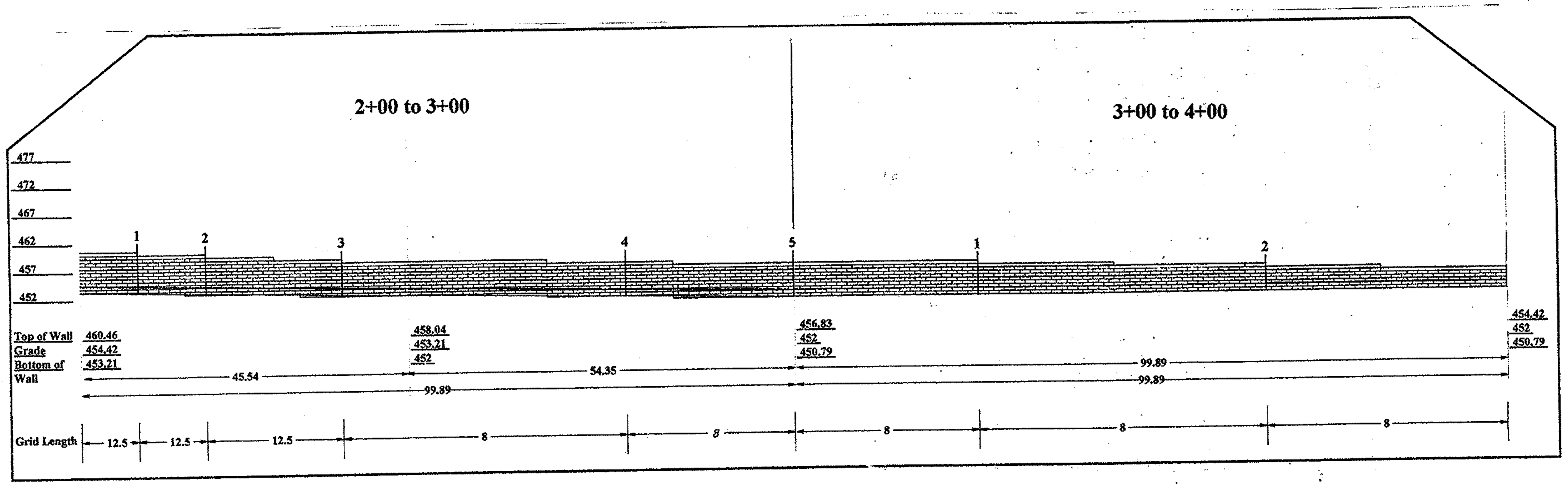
SHEET 10 OF 11

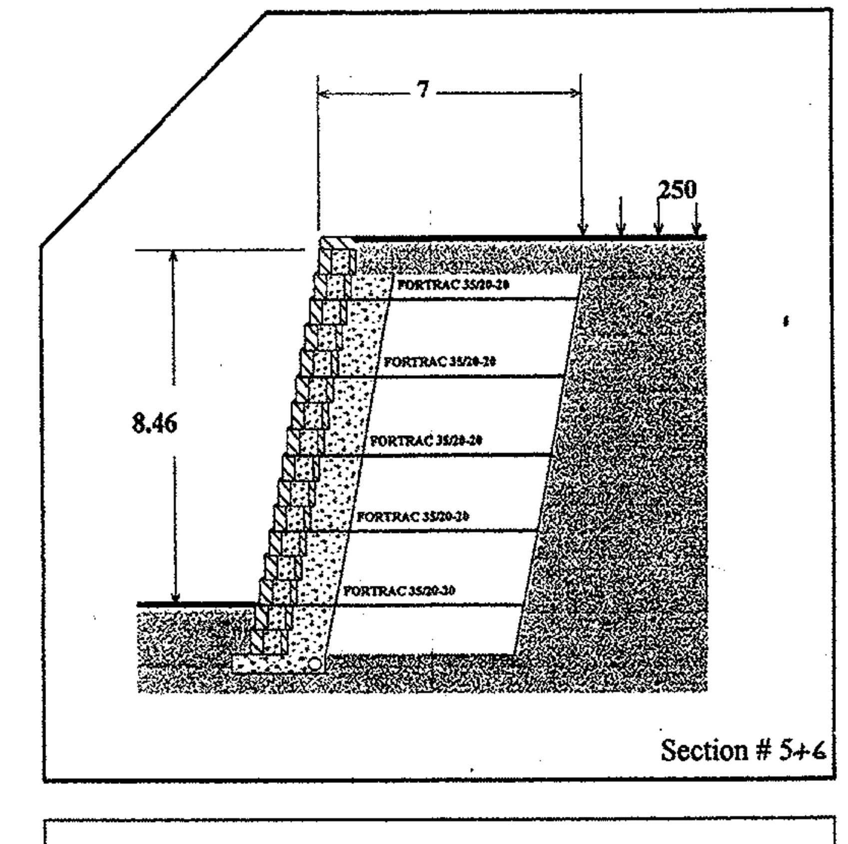
SDP-99-93

C:\MCADJOBS\98-74\C-9A.DWG-J.E.R.12/31/98

ALLAN BLOCK RETAINING WALL as manufactured by Nitterhouse Masonry Products, LLC (717)-267-4500







Project Name: COLEMAN HONDA
Location: Clarksville, MD
Designer: DKS (2/10/99)
Number: 0+00 to 1+00

ALLAN BLOCK
7400 Metro Blvd.
Suite 185
Edina, MN 55439
Phone 612/835-5309
Fax 612/835-0013
http://www.allanblock.com

Project Section # 5+6

AB Custom
Wall Height = 9.664 (ft.)
Facia Height = 0.604 (ft.)
Facia Depth = 0.97 (ft.)
Facia Angle = 6 (deg.)
Soil Bearing Capacity = 2500 (PSF)

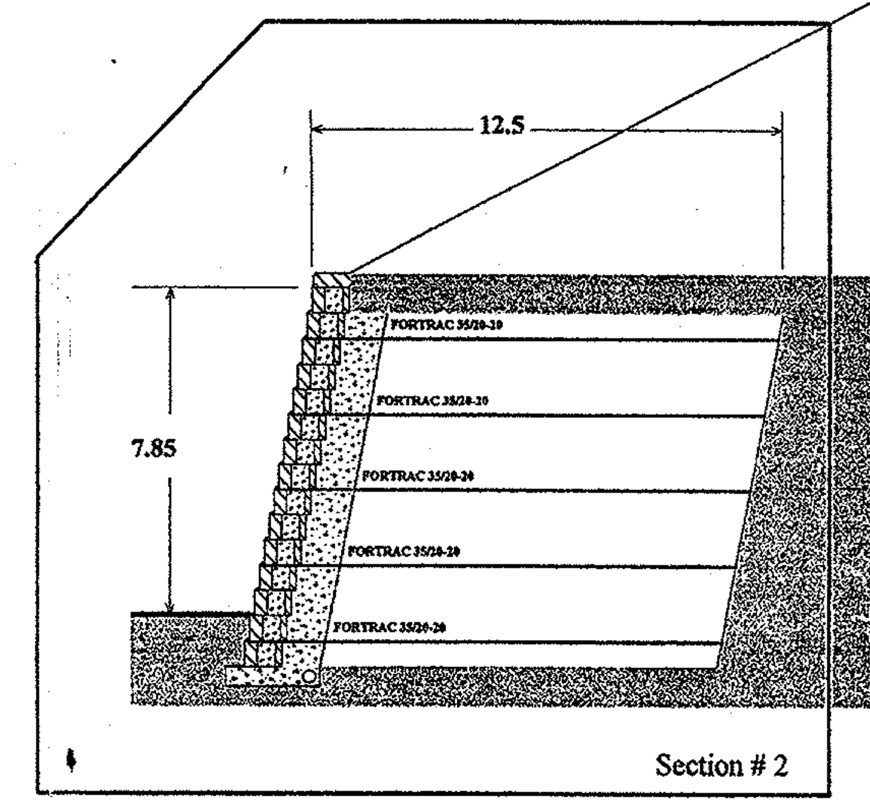
Retained Soil
Friction Angle = 28 (deg.)
Unit Weight = 120 (PCF)

Infill Soil
Friction Angle = 28 (deg.)
Unit Weight = 120 (PCF)

Surcharge Details
Surcharge = 250 (PSF)
Design Angle Above Wall = 0 (deg.)

Factors of Safety
Sliding = 2.23
Overturning = 4.79
Design Bearing Capacity = 1600 (PSF)

Geogrid Info.
GeoGrid Type =FORTRAC 35/20-20
Number of Grid Layers = 5
Length of Grid Layers = 7 (ft.)



Project Name: COLEMAN HONDA
Location: Clarksville, MD
Designer: DKS (2/10/99)
Number: 1+00 to 2+00

ALLAN BLOCK
7400 Metro Blvd.
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Fax 612/835-0013
http://www.allanblock.com

Project Section # 2

AB Custom
Wall Height = 9.06 (ft.)
Facia Height = 0.604 (ft.)
Facia Depth = 0.97 (ft.)
Facia Angle = 6 (deg.)
Soil Bearing Capacity = 2500 (PSF)

Retained Soil
Friction Angle = 28 (deg.)
Unit Weight = 120 (PCF)

Infill Soil
Friction Angle = 28 (deg.)
Unit Weight = 120 (PCF)

Surcharge Details
Surcharge = 0 (PSF)
Design Angle Above Wall = 23.82 (deg.)

Factors of Safety
Sliding = 1.91
Overturning = 5.82
Design Bearing Capacity = 1818 (PSF)

Geogrid Info.
GeoGrid Type =FORTRAC 35/20-20
Number of Grid Layers = 5
Length of Grid Layers = 12.5 (ft.)

Specifications

ab

Specification Guidelines: *Allan Block Modular Retaining Wall Systems*

SECTION 1

PART 1: GENERAL

1.1 Scope
Work includes furnishing and installing modular concrete block retaining wall units to the lines and grades designated on the construction drawings and as specified herein.

1.2 Applicable Sections of Related Work
Geogrid Wall Reinforcement (see section 2)

1.3 Reference Standards
ASTM C1372-97 Standard Specifications for Segmental Retaining Wall Units.

1.4 Delivery, Storage, and Handling
A. Contractor shall check the materials upon delivery to assure proper material has been received.
B. Contractor shall prevent excessive mud, wet cement, and like materials from coming in contact with the materials.
C. Contractor shall protect the materials from damage. Damaged material shall not be incorporated in the project.

PART 2: MATERIALS

2.1 Modular Wall Units
A. Wall units shall be ALLAN BLOCK Retaining Wall units as produced by a licensed Manufacturer.
B. Wall units shall have minimum 28 day compressive strength of 3000 psi *(20.7MP)* in accordance with ASTM C1372-97. The concrete units shall have adequate freeze-thaw protection with an average absorption rate of 7.5 lb/ft³ *(120 kg/m³)* for northern climates and 10 lb/ft³ *(160 kg/m³)* for southern climates.
C. Exterior dimensions shall be uniform and consistent. Maximum dimensional deviations shall be .125 inch, *(3mm)* not including textured face.
D. Wall units shall provide a minimum of 110 pounds total weight per square foot of wall face area *(1,761kg/m²)*. Fill contained within the units may be considered 80% effective weight.
E. Exterior face shall be textured. Color as specified by owner.

2.2 Wall Rock
A. Base material shall be well graded compactible aggregate, 0.25 inch to 1.5 inch, *(6.4mm - 38mm)* with no more than 10% passing the #200 sieve.
B. Drainage material shall be the same as base material.
C. Backfill material shall be site excavated soils when approved by the engineer unless otherwise specified in the drawings. Unsuitable soils for backfill (heavy clays or organic soils) shall not be used in the reinforced soil mass.
D. Where additional fill is required, contractor shall submit sample and specifications to the Engineer for approval.

PART 3: WALL CONSTRUCTION

3.1 Excavation
A. Contractor shall excavate to the lines and grades shown on the construction drawings. Contractor shall use caution not to over-excavate beyond the lines shown, or to disturb the base elevations beyond those shown.

3.2 Foundation Soil Preparation
A. Foundation soil shall be excavated as dimensioned on the plans and compacted to a min. 90% compaction prior to placement of the base material.
B. Foundation soil shall be examined by the Engineer to insure that the actual foundation soil strength meets or exceeds assumed design strength. Soil not meeting the required strength shall be removed and replaced with acceptable material.

3.3 Base
A. Base material shall be placed as shown on construction drawing. Top of base shall be located to allow bottom wall units to be buried to proper depths as per wall heights and specifications.
B. Base material shall be installed on undisturbed native soils or suitable replacement fills compacted at 90% standard proctor.
C. Base shall be compacted at 90% standard proctor to provide a level hard surface on which to place the first course of blocks. The base shall be constructed to insure proper wall embedment and the final elevation shown on the plans. Well-graded sand can be used to smooth the top 1/2 inch *(12.5mm)* on the leveling pad.
D. Base material shall be a 3 inch *(76mm)* minimum depth for walls under 4 feet and a 6 inch *(150mm)* minimum depth for walls over 4 feet *(1.2m)*.

3.4 Unit Installation
A. The first course of wall units shall be placed on the prepared base with the raised lip facing out and the front edges tight together. The units shall be checked for level and alignment as they are placed.
B. Insure that units are in full contact with base. Proper care shall be taken to develop straight lines and smooth curves on base course as per wall layout.
C. All cavities in and around the base row shall be filled with base materials and compacted. Backfill front and back of entire base row to firmly lock in place. Check again for level and alignment. All excess material shall be swept from top of units.
D. Install next course of wall units on top of base row. Position blocks to be offset from seams of blocks below. Perfect "running bond" is not essential, but a 3 inch *(75mm)* minimum offset is recommended.
Check each block for proper alignment and level. Fill all cavities in and around wall units and to a 12 inch *(305mm)* depth behind block with drainage material. Spread backfill in uniform lifts not exceeding 8 inches *(200mm)*. Employ methods using lightweight compaction equipment that will not disrupt the stability or batter of the wall. Hand-operated plate compaction equipment shall be used on the block and within 3 feet *(.9m)* of wall to achieve consolidation. Compact to 90% S.P. in backfill beyond consolidation zone.
E. Install each subsequent course in like manner. Repeat procedure to the extent of wall height.
F. Allowable construction tolerance at the wall face is 2 degrees vertically and 1 inch *(25mm)* in 10 feet *(3m)* horizontally.

Specification Guidelines: *Geogrid Reinforcement Systems*

SECTION 2

PART 1: GENERAL

1.1 Scope
Work includes furnishings and installing geogrid reinforcement, wall fill, and backfill to the lines and grades designated on the construction drawings and as specified herein.

1.2 Applicable Section of Related Work
Section 1: ALLAN BLOCK Modular Retaining Wall Systems.

1.3 Reference Standards
See specific geogrid manufacturers reference standards.

1.4 Delivery, Storage, and Handling
A. Contractor shall check the geogrid upon delivery to assure that the proper material has been received.
B. Geogrid shall be stored above -20° F *(-29° C)*.
C. Contractor shall prevent excessive mud, wet cement, or other foreign materials from coming in contact with the geogrid material.

PART 2: GRID MATERIALS

2.1 Definitions
A. Geogrid products shall be of high density polyethylene or polyester yarns encapsulated in a protective coating specifically fabricated for use as a soil reinforcement material.
B. Concrete retaining wall units are as detailed on the drawings and shall be ALLAN BLOCK Retaining Wall Units.
C. Drainage material is free draining granular material as defined in section: Modular Concrete Retaining Wall systems as "Drainage Material."
D. Backfill is the soil used as fill for the reinforced soil mass.
E. Foundation soil is the in-situ soil.

2.2 Products
A. Geogrid shall be the type as shown on the drawings having the property requirements as described within the manufacturers specifications.

2.3 Acceptable Manufacturers
A. A manufacturer's product shall be approved by the engineer.

PART 3: WALL CONSTRUCTION

3.1 Foundation Soil Preparation
A. Foundation soil shall be excavated to the lines and grades as shown on the construction drawings, or as directed by the Engineer.
B. Foundation soil shall be examined by the Engineer to assure that the actual foundation soil strength meets or exceeds assumed design strength.
C. Over-excavated areas shall be filled with approved compacted backfill material.
D. Foundation soil shall be proof rolled prior to fill and geogrid placement.

3.2 Wall Construction
A. Wall construction shall be as specified under Section 1, Part 3, Wall Construction.

3.3 Geogrid Installation
A. Install ALLAN BLOCK wall to designated height of first geogrid layer, backfill and compact behind wall to depth equal to designed grid length.
B. Cut geogrid to designed embedment length and place on top of ALLAN BLOCK to back edge of lip. Extend horizontally on compacted backfill.
C. Place next course of ALLAN BLOCK on top of grid and fill block cores with drainage fill to lock in place. Remove slack in grid and stake to maintain tension.
D. Lay geogrid at the proper elevation and orientations shown on the construction drawings or as directed by the Engineer.
E. Correct orientation (strength direction) of the geogrid shall be verified by the contractor.
F. Follow manufacturers guidelines for overlap requirements.

3.4 Fill Placement and Backfill Placement
A. Backfill material shall be placed in lifts and compacted as specified under Section 1, Part 3.4, Unit Installation.
B. Backfill shall be placed, spread and compacted in such a manner that minimizes the development of wrinkles in and/or movement of the geogrid.
C. Only hand-operated compaction equipment shall be allowed within 3 feet, *(.9m)* of the wall face.
D. Tracked construction equipment shall not be operated directly on the geogrid. A minimum backfill thickness of 6 inches *(150mm)* is required prior to operation of tracked vehicles over the geogrid. Turning of tracked vehicles should be kept to a minimum to prevent tracks from displacing the fill and damaging the geogrid.
E. Rubber-tired equipment may pass over the geogrid reinforcement at slow speeds, less than 10 MPH *(16 Km/H)*. Sudden braking and sharp turning shall be avoided.
F. The backfill shall be compacted to achieve 90% standard proctor. Soil tests of the backfill material shall be submitted to the Engineer for review and approval prior to the placement of any backfill. The contractor is fully responsible for achieving the specified compaction requirements. The Engineer may direct the contractor to remove, correct or amend any soil found not in compliance with these specifications.

TECHNICAL SUPPORT
For engineering and technical assistance on projects that fall beyond the scope of these guidelines, contact the ALLAN BLOCK CORPORATION at 1-800/899-5309.

VOGEL & ASSOCIATES
ENGINEERS·SURVEYORS·PLANNERS
3691 Park Avenue, Suite 101 • Ellicott City, Maryland 21043
Tel 410.461.5828 Fax 410.465.3966

HIGHEST CROSS SECTIONS FOR PROJECT SHOWN.

COMPLETE DESIGN PACKAGE WILL BE AVAILABLE

BEFORE START OF CONSTRUCTION.

STATE OF MARYLAND · WILLIAM K. RYAN · NO. 21586 · REGISTERED · PROFESSIONAL ENGINEER

2/11/99

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Signature	Date
DIRECTOR	5/14/99
CHIEF, DIVISION OF LAND DEVELOPMENT	5/14/99
CHIEF, DEVELOPMENT ENGINEERING DIVISION	5/13/99

NO.	REVISION	DATE

ADDRESS CHART

PARCEL NO.	STREET ADRESS
F-1	12441 AUTO DRIVE

SUBDIVISION NAME	SECTION/AREA	PARCEL NUMBER
HOLWECK	N/A	PARCEL F-1

PLAT NO.	BLOCK NO.	ZONE	TAX/ZONE	ELECT. DIST.	CENSUS TR.
13459-13460	18	B-2	34	5TH	6051

WATER CODE I10 SEWER CODE 6653000

RETAINING WALL DETAILS
FOR
COLEMAN HONDA CAR DEALERSHIP
PARCEL 'F-1' HOLWECK SUBDIVISION
SITE DEVELOPMENT PLAN

TAX MAP #34
PARCEL 'F-1'
5TH ELECTION DISTRICT
REFERENCE F 98-144
HOWARD COUNTY, MARYLAND

DESIGN BY:
DRAWN BY:
CHECKED BY:
DATE:
SCALE:
W.O. NO.: 98-119

HONDA

SDP-99-93