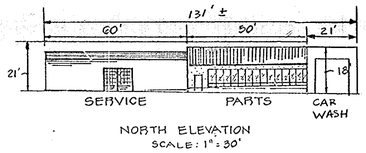
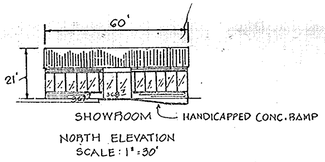
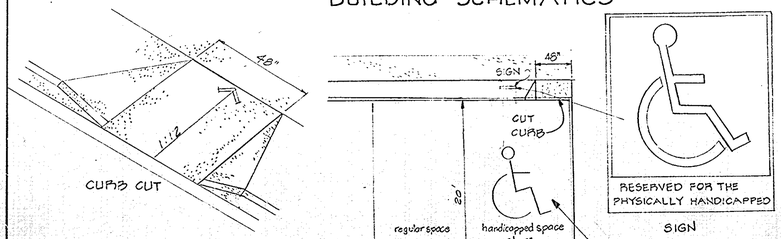


NORTH ELEVATION
SCALE: 1" = 30'



NORTH ELEVATION
SCALE: 1" = 30'

BUILDING SCHEMATICS

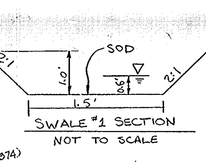


DETAILS - HANDICAPPED PARKING SPACE

NOT TO SCALE

PARKING ANALYSIS *			
USE	AREA/#BAYS	DENSITY	REQUIREMENT
SERVICE BAY	2.5 BAYS	3.0/BAY	7.5 PARKING SPACES
BUILDING	14,635	2.0/1000	29 PARKING SPACES
EXT. DISPLAY	10,841	1.0/1000	20 PARKING SPACES
TOTAL REQ			124
PROVIDED			124

* FOR O'DONNELL SITE ONLY SEE SHEET 7 FOR SAUSE CENTER

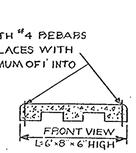


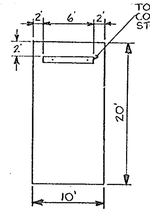
NOT TO SCALE

PRIVATE DRAIN NOTES

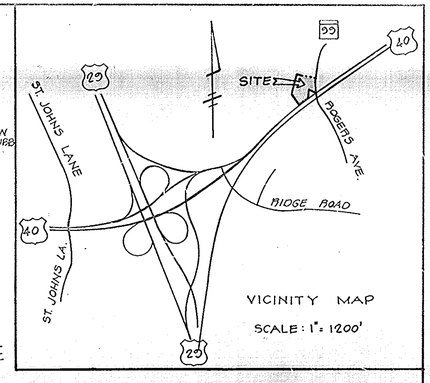
ALL PRIVATE DRAINS SHALL BE COVERNED BY THE HOWARD COUNTY PLUMBING CODE. THE CONTRACTOR SHALL BE ALLOWED TO USE ANY APPROVED MATERIAL UNLESS OTHERWISE SPECIFIED. PRIVATE DRAINS ARE DENOTED P.D.

Q_{10} = 4.90 CFS
V_{10} = 4.34 fps
n = 0.03
S = 0.03
d = 0.55'
LINE SWALE WITH SOD.





TYPICAL PARKING SPACE WITH INSTALLATION OF CURB STOP



NOTE: LIGHTING TO BE MERCURY VAPOR, M.H. OR EQUIVALENT WALL MOUNTED UP-DOWN DIRECTIONAL LIGHTING. LIGHTING SHALL BE DIRECTED/REFLECTED AWAY FROM RESIDENTIAL PROPERTY AND PUBLIC R/W. NEW OUTDOOR LIGHTING SHALL COMPLY WITH THE REQUIREMENTS OF ZONING SECTION 134.

ZONING COMPLIANCE:

BUILDING COVERAGE -

SHOWROOM (A) 6,352 SQ. FT.
SERVICE PARTS & ADMINISTRATION: 16,971 SQ. FT.
LUBE CENTER: 880 SQ. FT.
CAR WASH: (A) 840 SQ. FT.
TOTAL (A) 25,043 SQ. FT. (16.1 % OF SITE)

OPEN SPACE: INCLUDING LANDSCAPED AREAS = 20 % 29,040 SQ. FT.

PARKING LOT LANDSCAPED AREAS = 2,390 SQ. FT. 5% OF PARKING AREAS

REPAIRS, SERVICE, DISPLAYS AND ITEMS FOR SALE SHALL NOT BE LOCATED WITHIN THE 30 FOOT BLDG. & USE LINES SHOWN ON THIS PLAN.

TOTAL AREA OF PARKING LOT: 46,000± SQ. FT.

GENERAL NOTES

1. TAX MAP: 24, BLOCK 6, PARCELS 81 + 673
2. DEED REFERENCE: PARCEL 'A' 226-406
   PARCEL 'B' 219-027
   PARCEL 'C' 246-447
   PARCEL 673 3581-170
3. EXISTING ZONING: B-2
4. HORIZONTAL CONTROL: IS BASED ON MARYLAND STATE GRID SYSTEM.
5. VERTICAL CONTROL IS BASED ON HOWARD COUNTY B.M. ELEVATION CONTROL.
6. PROPOSED SITE USE: AUTO SALES, REPAIR AND SERVICE OF MOTOR VEHICLES.
7. TOTAL AREA SITE = 3.57 ACRES.
8. PARKING REQUIREMENT: SEE PARKING ANALYSIS CHART
   ~~1 SPACE PER 500 SQUARE FEET OF FLOOR AREA,~~
   ~~(A) 23,022 SQ FT (A) 46 SPACES REQUIRED = (A)~~
   ~~NUMBER OF PARKING SPACES PROVIDED 50 SPACES~~
   ~~(INCLUDING 4 HANDICAPPED SPACES)~~
9. TOPOGRAPHY: FIELD RUN BY BOENDER ASSOC. INC. APRIL, 1979 AND SUPPLEMENTED WITH FIELD RUN TOPOGRAPHY RUN BY BENCHMARK ENGINEERING INC. DATED APRIL 2002.
10. U.S. ROUTE 40 AND ROGERS AVENUE ARE PUBLIC ROADS.
11. PUBLIC WATER TO BE USED (CONTR. 9-W)
12. A COMPLETE OIL INTERCEPTOR SHALL BE PROVIDED WITHIN THE MECHANICAL PLANS OF THE BUILDING.
13. THIS SITE FULFILLS THE REQUIREMENTS OF SECTION 133.D.4.b BY PROVIDING 124 PARKING SPACES ON-SITE.
14. CONTRACTOR TO CONTACT MS. UTILITY AND HAVE UNDERGROUND UTILITIES LOCATED PRIOR TO BEGINNING CONSTRUCTION. RELOCATE GAS LINE AS NECESSARY. (410-7-0710) ADD NEW LINE FROM SHUTTLEWORTH

PLANTING SCHEDULE

BOTANIC NAME	COMMON NAME	QUAN	SIZE
JUNIPERUS HOR. BAR HARBOR	BAR HARBOR JUNIPER	250	12-15# SPREAD

OWNER & DEVELOPER

40-99 LLC.
8620 BALTIMORE NAT'L PIKE
ELLICOTT CITY, MD. 21043

APPROVED
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 6-1-83

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS HOWARD COUNTY HEALTH DEPARTMENT.

COUNTY HEALTH OFFICER — DATE 9-14-83

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING.

PLANNING DIRECTOR — DATE 9-15-83

CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION — DATE 9-15-83

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

DIRECTOR — DATE 9-8-83

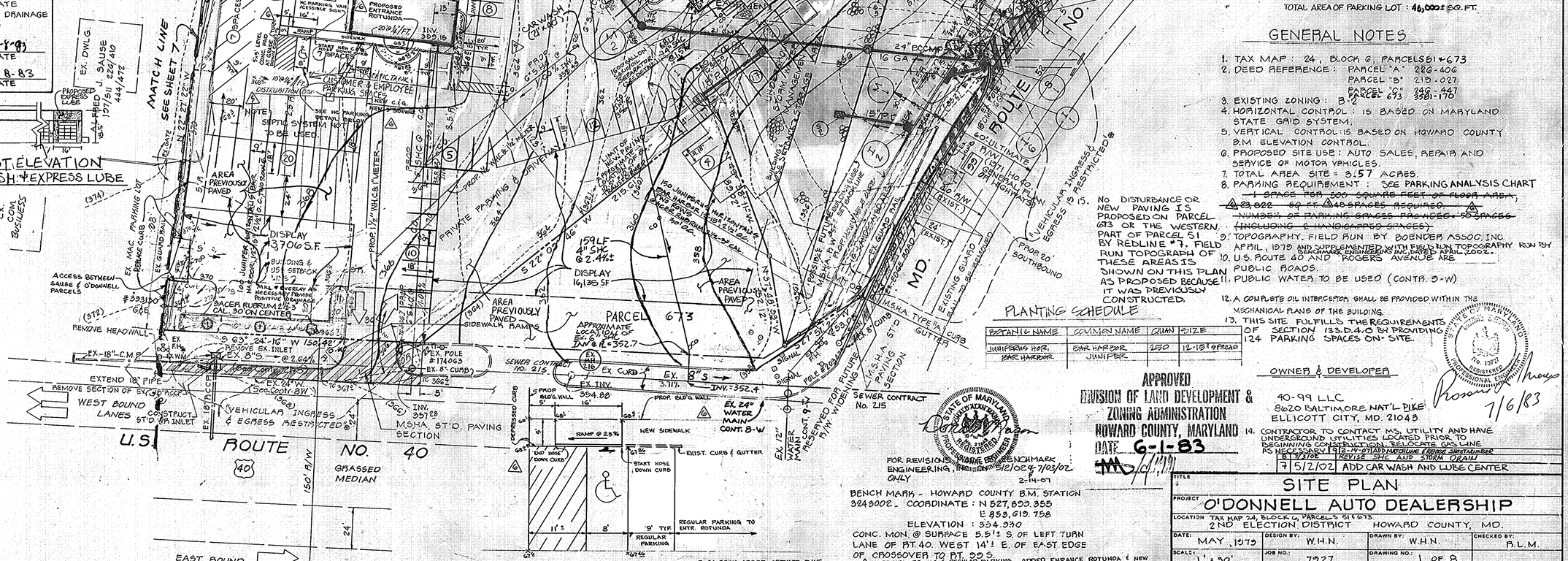
CHIEF, BUREAU OF ENGINEERING — DATE 9-8-83

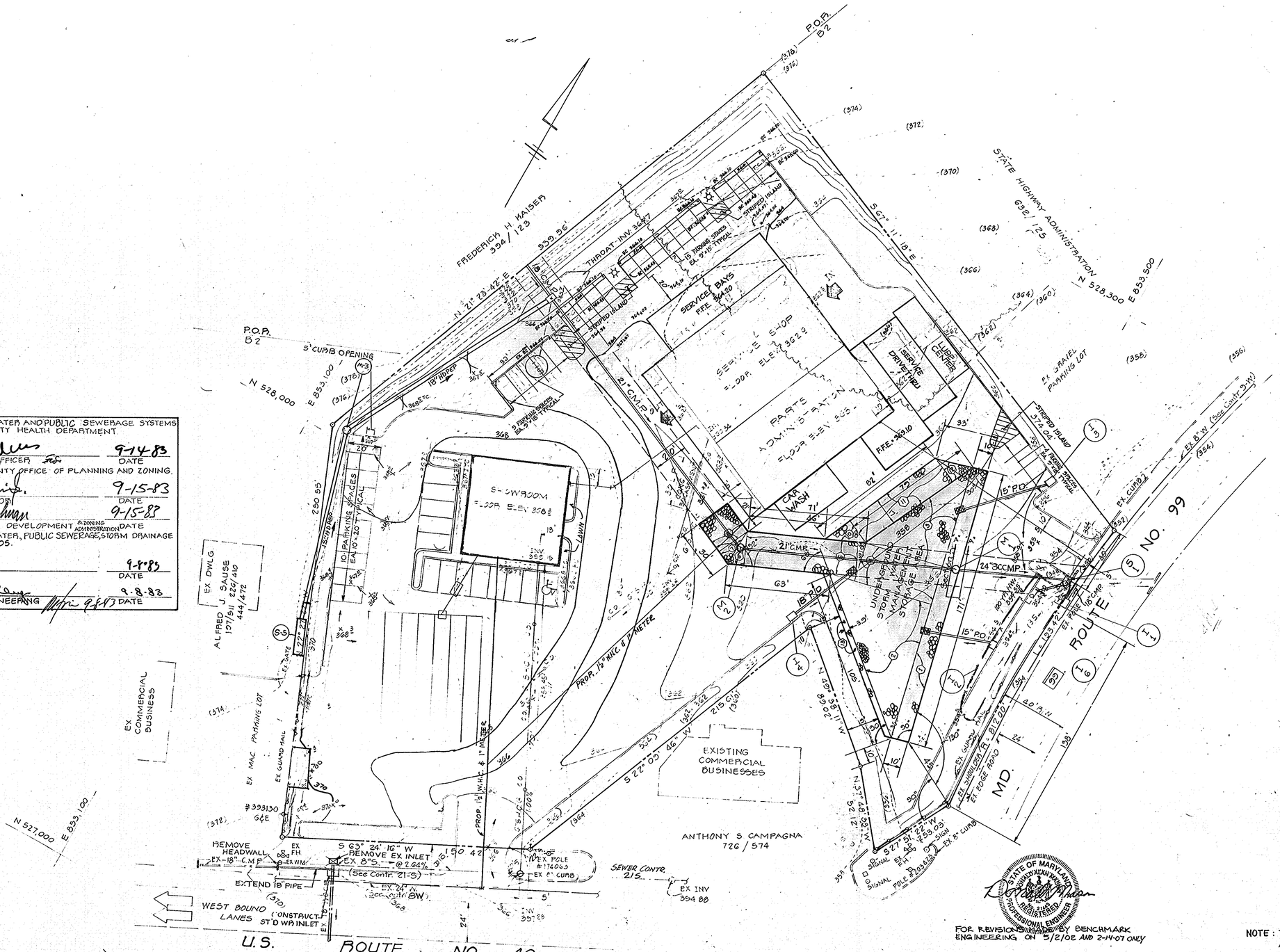
PARTIAL EAST ELEVATION @ CAR WASH & EXPRESS LUBE

SCALE: 1" = 30'

SEPTIC SYSTEM NOTES

FF BLDG. - 368.8
INV OUT - 366.5
SEPTIC TANK
EX. GROUND - 368.0
PROP. GROUND - 368.2
INV IN - 366.08
INV. OUT - 365.78
DISTRIBUTION BOX
EX. GROUND - 368.2
PROP. GRADE - 368.2
INV. OUT TO TRENCHES - 365.57
MAINTAIN 2½' COVER OVER TRENCHES


FREDERICK H. KAISER 324/129
CAP AT END OF PIPE AND PIPE 2' BELOW A MINIMUM OF 6' ABOVE GRADE.
N 21° 28' 42" E 339.56'
15' PARKING SPACES EX. 9' x 16' TYP. FOR CUSTOMER & EMPLOYEE PARKING
HANDICAP INV. 369.67
STRIPED ISLAND
ONE WAY
7 SERVICE BAYS (2,150 SQ. FT.)
15' SERVICE BAYS (6,540 SQ. FT.)
TOTAL 50 FT. SERVICE BAYS (10,690 SQ. FT.)
SERVICE & SHOP FLOOR ELEV. 369.0
TOTAL BUILDING AREA = 16,636 SQ. FT.
PARTS ADMINISTRATION FLOOR ELEV. 368.8 EX. (AREA-SAND) TO BE REMOVED
EXISTING BUILDING TO BE REMOVED
EXISTING UTILITY EASEMENT
PARKING SPACES EX. 9' x 16' TYP. FOR CUSTOMER & EMPLOYEES
EX. CURB TO REMAIN
EX. CURB TO BE REMOVED
EXISTING GAS VALVE TO BE RELOCATED
CAR WASH 24' x 40' SLOPE 2.0% MAX. FLOOR ELEV. 368.0
LIMIT OF PAVING AND GRADING
LIMIT OF NEW PAVING AND GRADING
EX. 8" S
EX. 12" W
EX. 24" WATER MAIN CONT. 8-W
EX. 18" C.M.P.
EX. 8" S
EX. 24" W
EX. 18" C.M.P.
EX. 8" S
EX. 12" W



TABULATIONS :

STORM WATER MANAGEMENT

UNDERGROUND STORAGE AREAS IN STORM DRAINS

PIPE SYSTEM	LENGTH	DIA.	AREA	CUBIC FEET
I4 to S4	42 L.F.	15"	1.227 ft	51.5
I3 to S3	55 L.F.	15"	1.227 ft	67.5
I2 to S2	50 L.F.	15"	1.227 ft	61.4

TOTAL PIPE STORAGE 180.4 C.F.

I2, I3, I4, INLET STORAGE 32.9 C.F.

STORAGE TOTAL, PIPE & INLET = 213.3 C.F.

STORM WATER MANAGEMENT

UNDERGROUND STORAGE AREAS IN SQUARE FEET (& STONE STORAGE)

GEOMETRIC AREA NO.	DIMENSIONS	SQ. FT.
①	10' x 171'	1,710
②	(64'x84')/2	2,688
③	(68'x49)/2	1,544
④	24' x 49'	1,176
⑤	67' x 20'	1,340
⑥	(9' x 20')/2	90
⑦	(5' x 20')/2	50
⑧	21' x 20'	420
⑨	(5'x20')/2	50
⑩	(19' x 17')/2	162
⑪	63' x 17'	1,071
⑫	(15'x 17')/2	128
⑬	(104' x 39')	406

TOTAL ALL NO'S. 10,875 S.F.

APPROVED : FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS HOWARD COUNTY HEALTH DEPARTMENT.

COUNTY HEALTH OFFICER — DATE 9-14-83

APPROVED : HOWARD COUNTY OFFICE OF PLANNING AND ZONING.

PLANNING DIRECTOR — DATE 9-15-83

CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION — DATE 9-15-83

APPROVED : FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

DIRECTOR — DATE 9-8-83

CHIEF, BUREAU OF ENGINEERING — DATE 9.8.83

APPROVED
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 6-1-83

STATE OF MARYLAND — DONALD W. BOONE — No. 19737 — REGISTERED PROFESSIONAL ENGINEER

7/6/83

FOR REVISIONS BY BENCHMARK ENGINEERING ON 5/2/02 AND 2-14-07 ONLY

OWNER & DEVELOPER

40-99 LLP
8620 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MD. 21043

NOTE : THIS PLAN IS FOR STORM WATER MANAGEMENT ONLY. FOR ADDITIONAL INFORMATION SEE SITE PLAN DWG NO. 1 OF 6

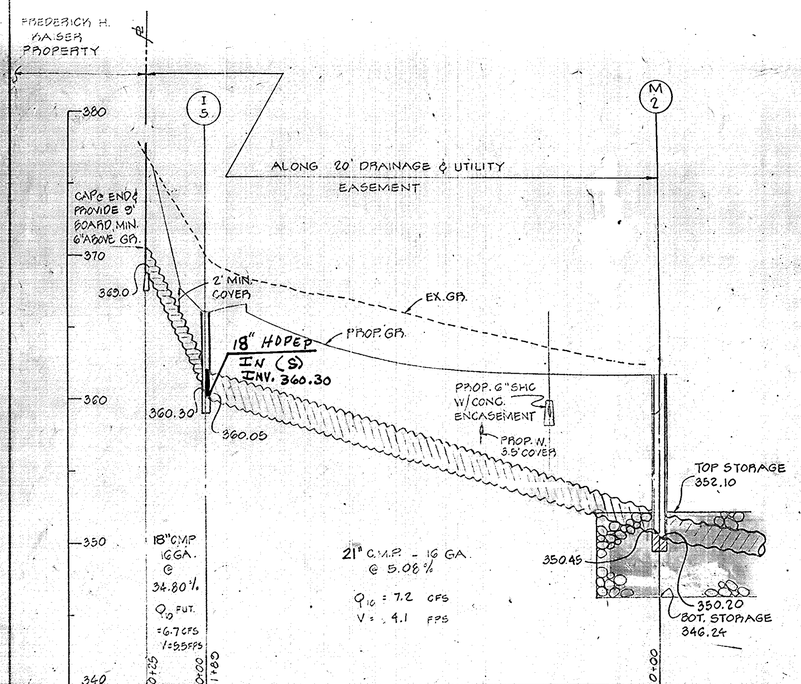
BENCH MARK - HOWARD COUNTY B.M STATION 3243002. COORDINATE : N 527,839.355 E 853,619.758
ELEVATION : 354.930
CONC. MON @ SURFACE 5.5'± S. OF LEFT TURN LANE OF RT. 40. WEST 14'± E OF EAST EDGE OF CROSSOVER TO RT. 99 S.

2-14-07	REVISE STORM DRAIN / SHEET NO.	
5-2-02	REVISE OWNER	
7-24-95	ADDED SERVICE BAYS	
11-14-83	ADD 10' ADDITION TO LENGTH OF BUILDING	
11-26-80	ADD PRIVATE SEWERAGE DISPOSAL AREA FOR SHOWROOM, REVISE PROPERTY GRADES	
1-7-80.	REVISED 30' SETBACK LINE FROM MD RTE. 99 & ADDED TREES AS REQUESTED BY Ho. Co. O.P.Z. BY-G.M. CH.K.-B.L.M.	

TITLE	STORM WATER MANAGEMENT PLAN
PROJECT	O'DONNELL AUTO DEALERSHIP
LOCATION	TAX MAP 24 GRID 9 PARCEL 5 ALL LOTS 2ND ELECTION DISTRICT HOWARD COUNTY, MD.
DATE	MAY, 1979
DESIGN BY	W.H.N.
DRAWN BY	W.H.N.
CHECKED BY	B.L.M.
SCALE	1" = 30'
JOB NO.	7927
DRAWING NO.	2 OF 8

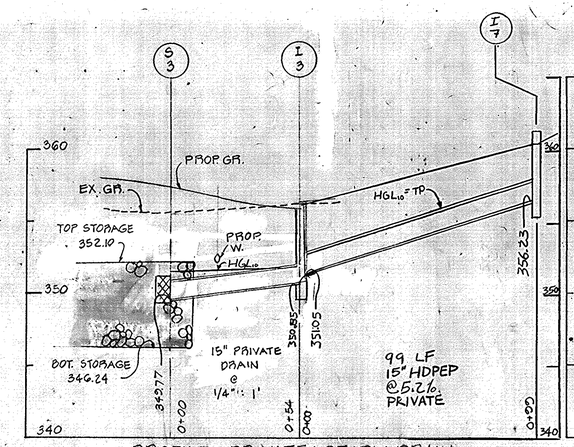
boender associates — engineers surveyors planners
SUITE 102-107 TOWN & COUNTRY PROFESSIONAL BUILDING
ELLICOTT CITY, MARYLAND 21043
BALTIMORE 301-465-7777 SALISBURY 301-749-1288

SDP-83-189



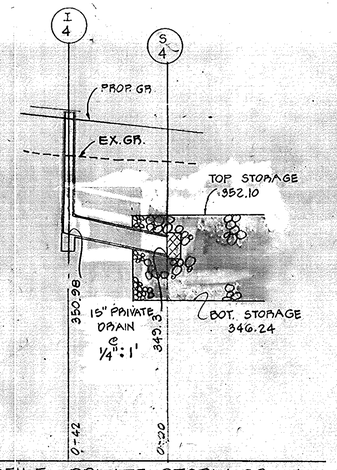
PROFILE
PUBLIC - HOWARD COUNTY STORM DRAINS

SCALE: HOR: 1" = 30'
VER: 1" = 5'



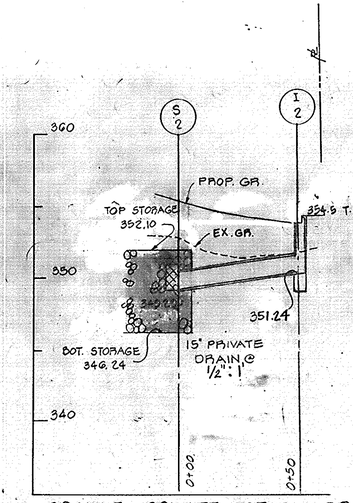
PROFILE - PRIVATE STORM DRAIN

SCALE: HOR: 1" = 30'
VER: 1" = 5'



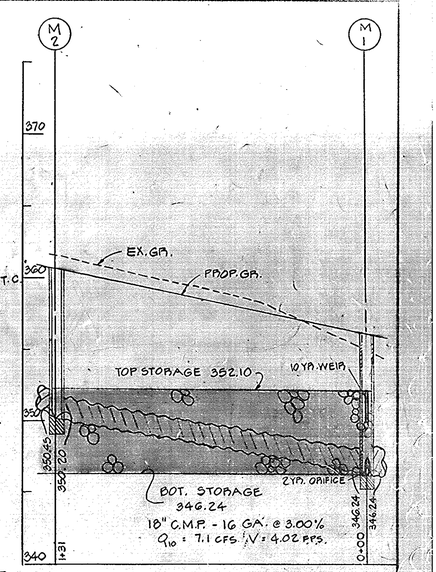
PROFILE - PRIVATE STORM DRAIN

SCALE: HOR: 1" = 30'
VER: 1" = 5'



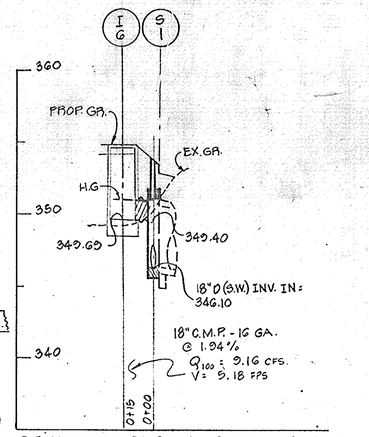
PROFILE - PRIVATE STORM DRAIN

SCALE: HOR: 1" = 30'
VER: 1" = 5'



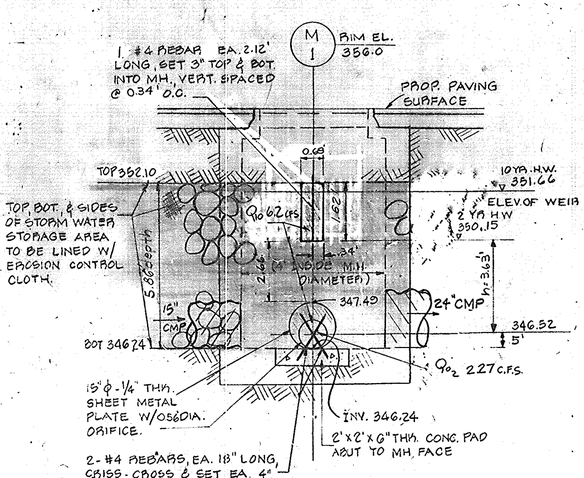
PROFILE - PRIVATE STORM DRAIN

SCALE: HOR: 1" = 30'
VER: 1" = 5'

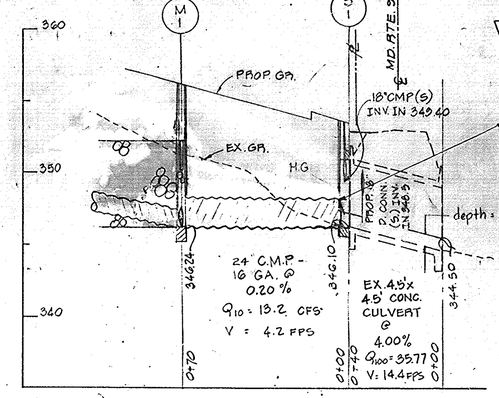


PROFILE - PUBLIC STORM DRAIN

SCALE: HOR: 1" = 30'
VER: 1" = 5'

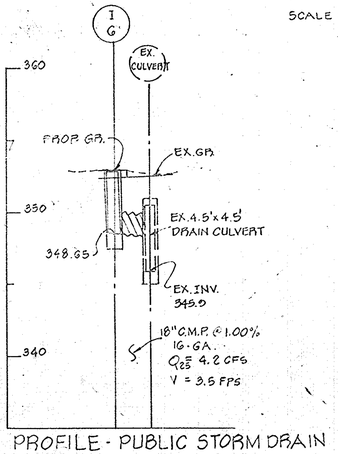


SECTION "A-A" - MANHOLE 1



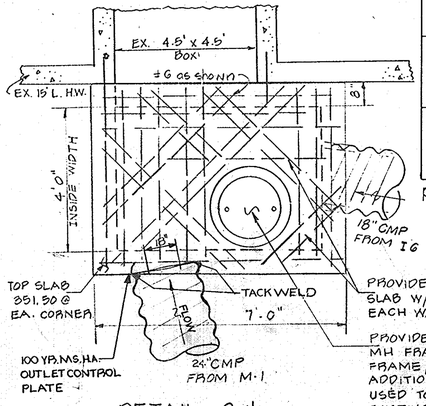
PROFILE - PUBLIC STORM DRAIN

SCALE: HOR: 1" = 30'
VER: 1" = 5'



PROFILE - PUBLIC STORM DRAIN

SCALE: HOR: 1" = 30'
VER: 1" = 5'

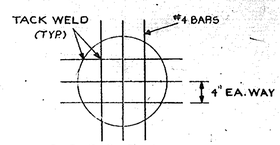


DETAIL S-1

NOT TO SCALE

OUTLET CONTROL STRUCTURE AND S.W.M. STORAGE AREA DETAIL

NOT TO SCALE



PROPOSED STRUCTURE SCHEDULE

NO.	TYPE	INV. IN	INV. OUT	TOP ELEV	REMARKS
I-1	MARYLAND WA COMB. DBL.			352.40	SEE MD. STATE INLET ST'D. 374.04
I-2	HO. CO. DBL. "S" COMB.	-	351.24	354.5 T.C.	SEE HO. CO. ST'D DRWG. D-99, PG. 154
I-3	HO. CO. DBL. "S" COMB.	-	350.85	355.80	" " " " " " " " "
I-4	HO. CO. DBL. "S" COMB.	-	350.98	358.90	" " " " " " " " "
I-5	HO. CO. "M" INLET	360.30	360.05	365.70	" " " " D-55, PG. 150
I-6	HO. CO. "A-10" INLET	-	349.69	354.10	" " " " D-64A, PG. 119A
M-1	HO. CO. ST'D. MH	346.24	346.24	356.00	" " " " D-103, PG. 158 MODIFIED - SEE DET. ABOVE.
S-1	SPECIAL MH	349.40 346.10	346.10	353.60	SEE DETAIL THIS SHEET.
S-2	GABION STONE CAGE	349.29	349.29	350.79	ALTERNATE - #4 BARS WELDED TO END OF PIPE
S-3	" " "	349.77	349.77	351.27	4" CC. EA. WAY.
S-4	" " "	349.80	349.80	350.80	" " " " " "
M-2	HO. CO. ST'D. MH	350.45	350.20	360.50	" " " D-103, PG. 158
I-7	HO. CO. "D" INLET	—	356.23	361.18	SD-4.11 THROAT @ 360.35

NO.	TYPE	INV. IN	INV. OUT	TOP	REMARKS
M-3	HO. CO. STD. MH	363.51	363.26	371.0	G-5.12
S-5	S. COMBO SEE SWM	—	365.83	372.5	SEE SHEET 8

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS HOWARD COUNTY HEALTH DEPARTMENT.

COUNTY HEALTH OFFICER — DATE 9-14-83

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

PLANNING DIRECTOR — DATE 9-15-83

CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION — DATE 9-15-83

APPROVED: FOR PUBLIC WATER, PUBLIC SEWER, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

DIRECTOR — DATE 9-8-83

CHIEF, BUREAU OF ENGINEERING — DATE 9-8-83

APPROVED
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 6-1-83

STATE OF MARYLAND — ROSARIO F. MANNO, JR. — No. 10,777 — REGISTERED PROFESSIONAL ENGINEER
7/6/83

OWNER & DEVELOPER

40-99 LLP
8620 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MD. 21043

STATE OF MARYLAND — DONALD R. MANN — No. 21,241 — REGISTERED PROFESSIONAL ENGINEER

FOR REVISIONS AS SHOWN BY BENCHMARK ENGINEERING ON 5/2/02 AND 7/03/02 & 2-14-07 ONLY

REV. #4 2-14-07 REVISE I-5 & SHEET NUMBER
REV. #3 7/03/02 REVISE S-3 TO I-7 RUN.
REV. 8-23-79 ADD SYSTEMS: I5+M2+M1, MODIFY STONE STORAGE LEVELS & 2 YR., 10 YR. OUTLETS @ M1. BY: W.H.N. CH'RM.
REV. #2 5/2/02 ADD I-3 TO I-7 S.D. RUN

STORM WATER MANAGEMENT SECTIONS & DETAILS - STORM DRAIN PROFILES

PROJECT: O'DONNELL AUTO DEALERSHIP

LOCATION: TAX MAP 24, GRID 6, PARCELS 51 & 673, 2ND ELECTION DISTRICT, HOWARD COUNTY, MD.

DATE:	DESIGN BY:	DRAWN BY:	CHECKED BY:
AUGUST, 1979	W.H.N.	G.M./W.N.	R.L.M.
SCALE: AS SHOWN	JOB NO.: 7927	DRAWING NO.: 3 OF 8	

boender associates
SUITE 102-107 TOWN & COUNTRY PROFESSIONAL BUILDING
ELLICOTT CITY, MARYLAND 21043
BALTIMORE 301-461-1727 SALISBURY 301-742-1285
engineers surveyors planners

SDP-83-189

DEVELOPER'S CERTIFICATE

I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS AS ARE DEEMED NECESSARY. DEVIATION WILL NOT BE MADE UNLESS AUTHORIZED BY THE HOWARD SOIL CONSERVATION DISTRICT.

Thos J. O'Donnell

DEVELOPER - MR. THOMAS O'DONNELL — DATE

ENGINEER'S CERTIFICATE

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

Rosario — ENGINEER — 7/6/83 DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS HOWARD COUNTY HEALTH DEPARTMENT.

COUNTY HEALTH OFFICER — 9-14-83 DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING.

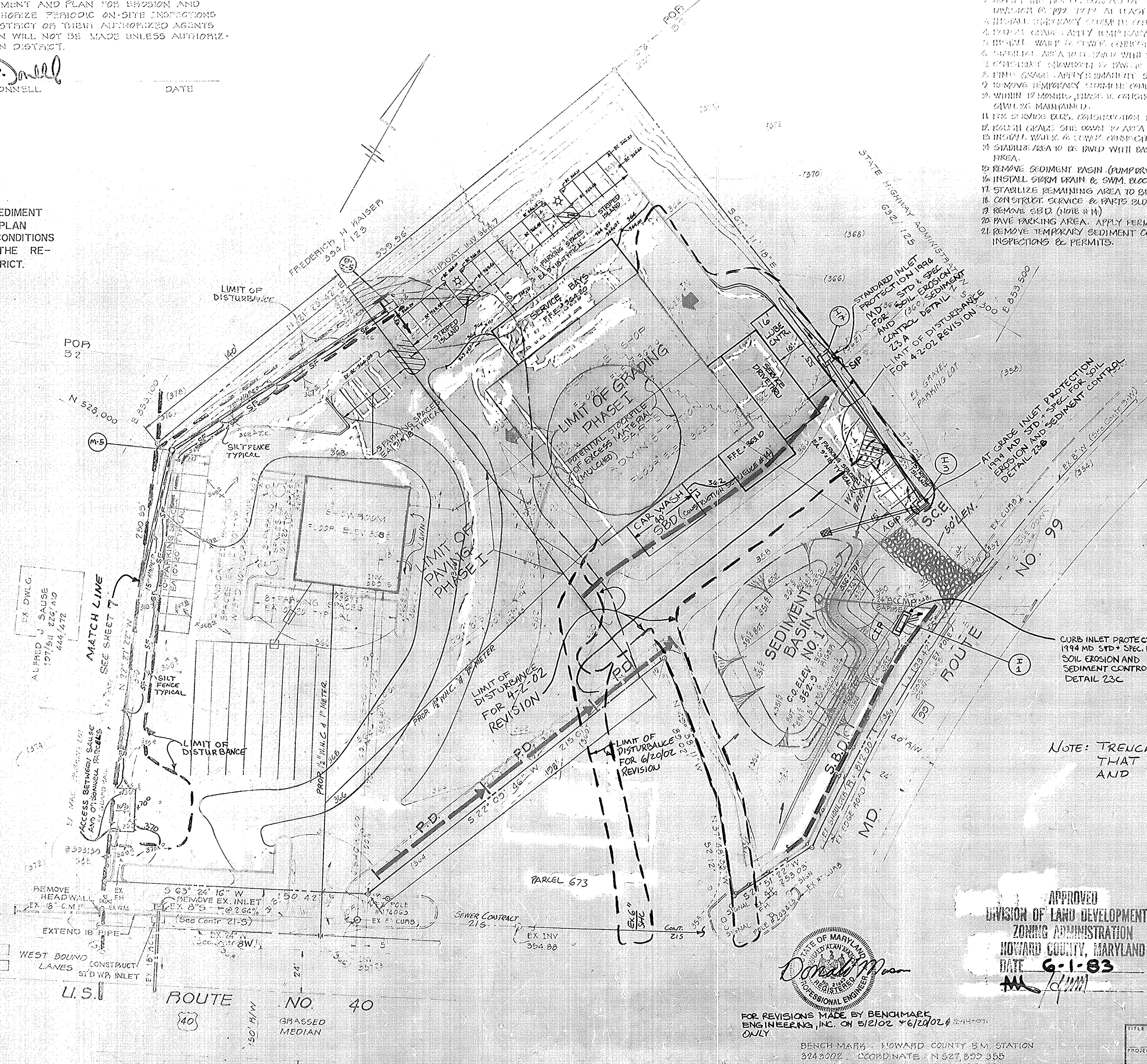
Thomas G. Harris Jr. PLANNING DIRECTOR — 9-15-83 DATE

John W. Musselman CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION — 9-15-83 DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

George F. Nemeyer DIRECTOR — 9-8-83 DATE

CHIEF, BUREAU OF ENGINEERING — 9-8-83 DATE



CONSTRUCTION SEQUENCE

1. OBTAIN BUILDING PERMIT.
2. NOTIFY THE HO. CO. BUREAU OF LICENSE, INSPECTIONS AND PERMITS AND THE CONSTRUCTION INSPECTION DIVISION @ 992-2437 AT LEAST 24 HOURS PRIOR TO GRADING OPERATIONS.
3. INSTALL TEMPORARY SEDIMENT CONTROL MEASURES, P.D., S.C.E., SBD AND SEDIMENT BASIN NO. 1
4. ROUGH GRADE. APPLY TEMPORARY STABILIZATION
5. INSTALL WATER & SEWER CONNECTIONS TO SHOWROOM AND PHASE I LIMITS.
6. STABILIZE AREA TO BE PAVED WITH BASE COURSE.
7. CONSTRUCT SHOWROOM & PAVE TO PHASE I PAVING LIMITS. MAINTAIN SEDIMENT BASIN.
8. FINE GRADE. APPLY PERMANENT STABILIZATION ON ALL DISTURBED AREAS.
9. REMOVE TEMPORARY SEDIMENT CONTROL MEASURES EXCEPT FOR SEDIMENT BASIN
10. WITHIN 12 MONTHS, PHASE II CONSTRUCTION SHALL BEGIN. DURING SPAN BETWEEN CONSTRUCTION, THE SEDIMENT BASIN SHALL BE MAINTAINED.
11. FOR SERVICE BLDG. CONSTRUCTION INSTALL TEMPORARY SEDIMENT CONTROL MEASURES, (SBD ALONG MD RTE. 99, S.C.E.)
12. ROUGH GRADE SITE DOWN TO AREA RESERVED FOR SWM. APPLY TEMPORARY STABILIZATION. MAINTAIN SEDIMENT BASIN.
13. INSTALL WATER & SEWER CONNECTIONS TO SERVICE & PARTS BLDG.
14. STABILIZE AREA TO BE PAVED WITH BASE COURSE DOWN TO BEGINNING OF SWM. PLACE SBD ALONG CONTOUR ABOVE SWM AREA.
15. REMOVE SEDIMENT BASIN (PUMP DRY & REMOVE SEDIMENT TO SITE WITH APPROVED SEDIMENT CONTROL) MAINTAIN SBD @ RTE. 99.
16. INSTALL STORM DRAIN & SWM. BLOCK ALL INLETS
17. STABILIZE REMAINING AREA TO BE PAVED WITH BASE COURSE.
18. CONSTRUCT SERVICE & PARTS BLDG.
19. REMOVE SBD. (NOTE # 14)
20. PAVE PARKING AREA. APPLY PERMANENT STABILIZATION.
21. REMOVE TEMPORARY SEDIMENT CONTROL MEASURES WITH APPROVAL OF THE HO. CO. BUREAU OF LICENSE, INSPECTIONS & PERMITS.

SITE ANALYSIS

TOTAL AREA = 3.23 AC.
AREA DISTURBED = 3.23 AC.
AREA PAVED = 2.56 AC. (INCLUDING BLDG. AREAS)
AREA REVEGETATED = 0.68 AC. (29,620 SQ. FT.)
AREA UNDISTURBED = NONE

CONSTRUCTION SEQUENCE

1. OBTAIN GRADING PERMIT.
2. NOTIFY HOWARD COUNTY BUREAU OF LICENSE, INSPECTIONS AND PERMITS 24 HRS. PRIOR TO GRADING OPERATIONS - PH. 992-2455
3. INSTALL TEMPORARY SEDIMENT CONTROL MEASURES. P.D., SBD, S.C.E. & SEDIMENT BASIN # 1 TO BE 3.5' DEEP FOR TEMPORARY SEDIMENT STORAGE. CLEANOUT AT ELEV. 352.90
4. BEGIN EARTHWORK MAINTAINING SEDIMENT CONTROL MEASURES
5. INSTALL WATER AND SEWER CONNECTIONS.
6. INSTALL DRAINS AND INLETS. BLOCK UPSTREAM END OF PIPE AT END OF WORK EACH DAY. BLOCK ALL INLETS.

6A. REMOVE SEDIMENT BASIN. MAINTAIN SBD ABOVE RTE. 99.

7. INSTALL UNDERGROUND STORM WATER MANAGEMENT.
8. STABILIZE PAVING AREA WITH BASE COURSE AND LANDSCAPE AREAS WITH TEMPORARY OR PERMANENT STABILIZATION MEASURES.
9. CONSTRUCT BLDG. & PAVING. COMPLETE THE PERMANENT STABILIZATION MEASURES.
10. REMOVE TEMP. SEDIMENT CONTROL MEASURES WITH APPROVAL OF THE HOWARD COUNTY BUREAU OF LICENSE, INSPECTIONS AND PERMITS.

NOTE: TRENCHING TO BE LIMITED TO THAT WHICH CAN BE BACKFILLED AND STABILIZED IN ANY ONE DAY.

APPROVED
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 6-1-83

Donald Mason (STATE OF MARYLAND REGISTERED PROFESSIONAL ENGINEER)

FOR REVISIONS MADE BY BENCHMARK ENGINEERING, INC. ON 5/2/02 & 6/20/02 & 2-14-07 ONLY

Rosario — 7/6/83

OWNER & DEVELOPER

40-99 LLP
8620 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MD 21043

BENCH MARK - HOWARD COUNTY B.M. STATION 3243002. COORDINATE: N 527,899.355 E 853,619.758
ELEVATION: 354.030
CONC. MON. @ SURFACE 5.5' ± S OF LEFT TURN LANE OF RT 40 WEST 14' ± E OF EAST EDGE OF CROSSOVER TO RT. 99 S.

2-14-07 ADD MATCH LINE & STORM DRAIN FOR SAUSE PARCEL & REVISE SHEET NUMBER.
6-20-02 REVISE LOD AND STORM DRAIN
5-2-02 REVISE OWNER
7-24-95 ADDED SERVICE BAYS
11-14-83 ADD 10' ADDITION TO LENGTH OF BUILDING
11-26-80 ADD PRIVATE SEWERAGE DISPOSAL AREA FOR SHOWROOM, REVISE PROPERTY GRADES.
1-7-80 REVISED 30 SETBACK LINE FROM MD RTE. 99 & ADDED TREES AS REQUESTED BY HO. CO. OPZ. BY: GM CHK. R.L.M.

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

James M. Helm — U.S. SOIL CONSERVATION SERVICE — 9-1-83 DATE

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

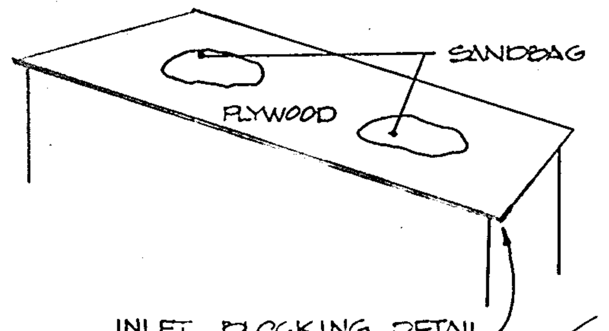
HOWARD SOIL CONSERVATION DISTRICT — 9-1-83 DATE

TITLE: SEDIMENT CONTROL PLAN			
PROJECT: O'DONNELL AUTO DEALERSHIP			
LOCATION: TAX MAP 24, GRID 6, PARCELS 51 & 673 — 2ND ELECTION DISTRICT — HOWARD COUNTY, MD.			
DATE: APRIL, 1979	DESIGN BY: W.H.N.	DRAWN BY: W.H.N.	CHECKED BY: R.L.M.
SCALE: 1" = 30'	JOB NO.: 7927	DRAWING NO.: 4 OF 8	

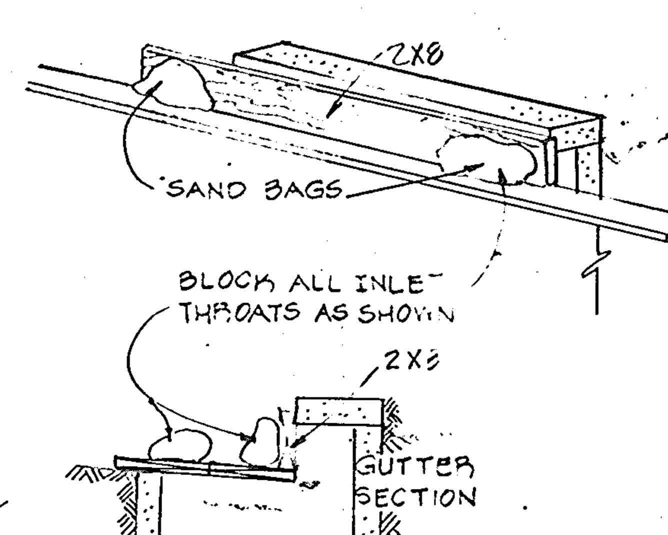
boender associates — engineers, surveyors, planners
SUITE 102-107 TOWN & COUNTRY PROFESSIONAL BUILDING
ELLICOTT CITY, MARYLAND 21043
BALTIMORE 301-465-7777 SALISBURY 301-749-1286

SDP-83-189

ISSUE	BY & DATE	DESCRIPTION	CHECK	APPROVED & DATE
REVISIONS				

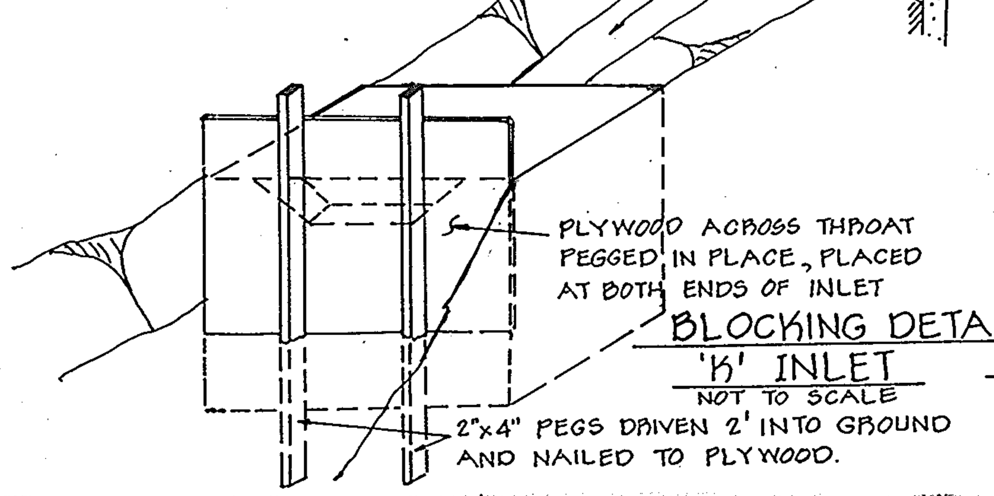


INLET BLOCKING DETAIL
"E" INLET (STD. GRATE IN PLACE

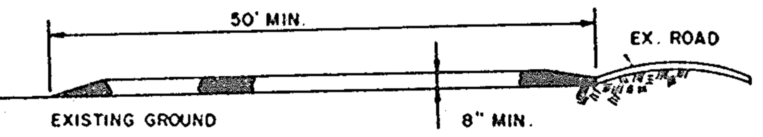


INLET BLOCKING DETAIL

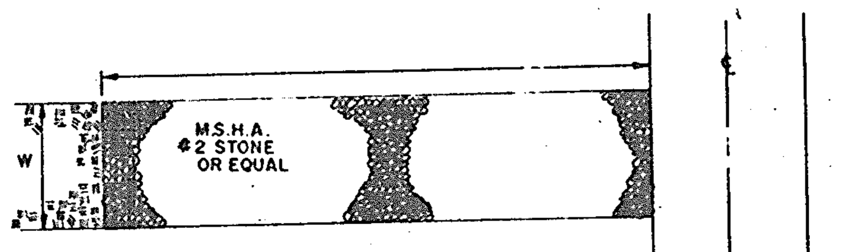
NOT TO SCALE



BLOCKING DETAIL
'K' INLET
NOT TO SCALE



SECTION



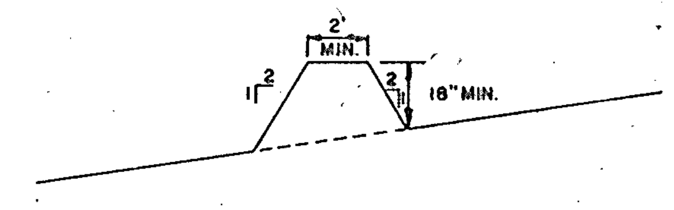
PLAN

STABILIZED CONSTRUCTION ENTRANCE
NO SCALE

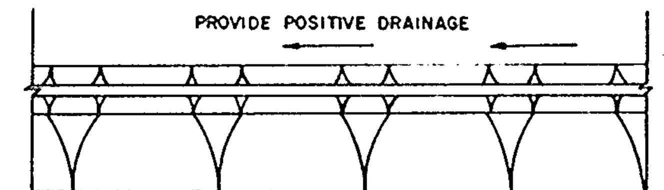
ENGINEER'S CERTIFICATE

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

[signature] 7/6/83
ENGINEER DATE

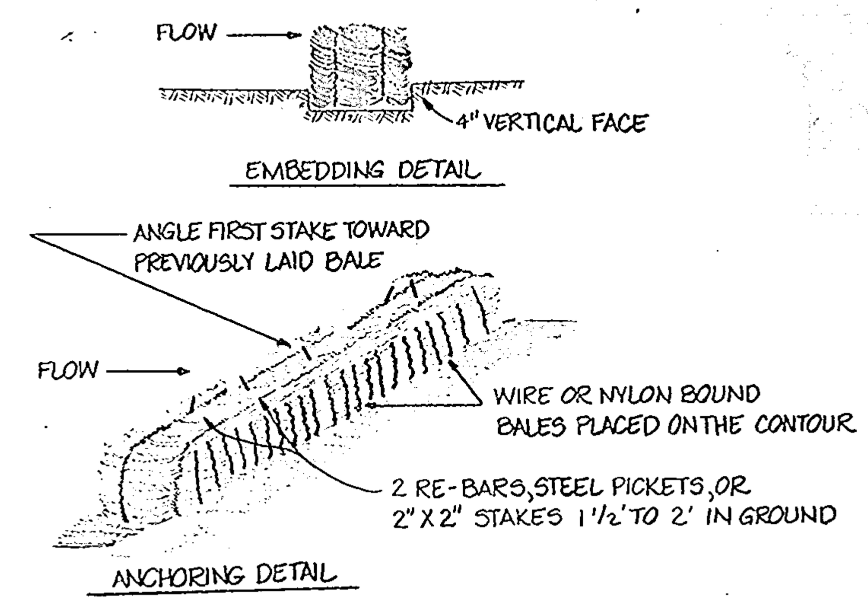


SECTION

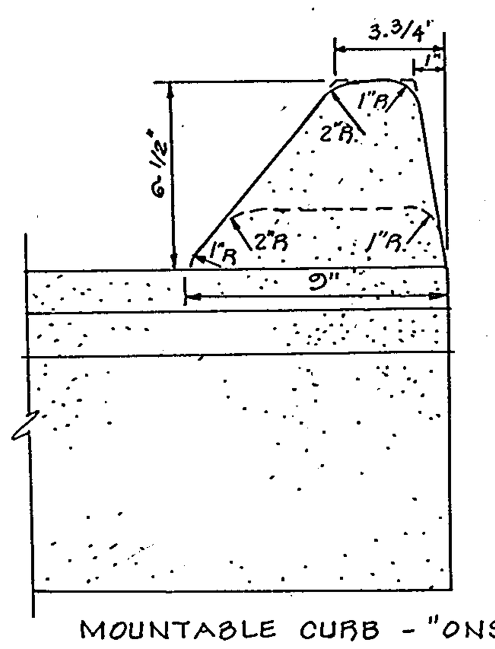


PLAN

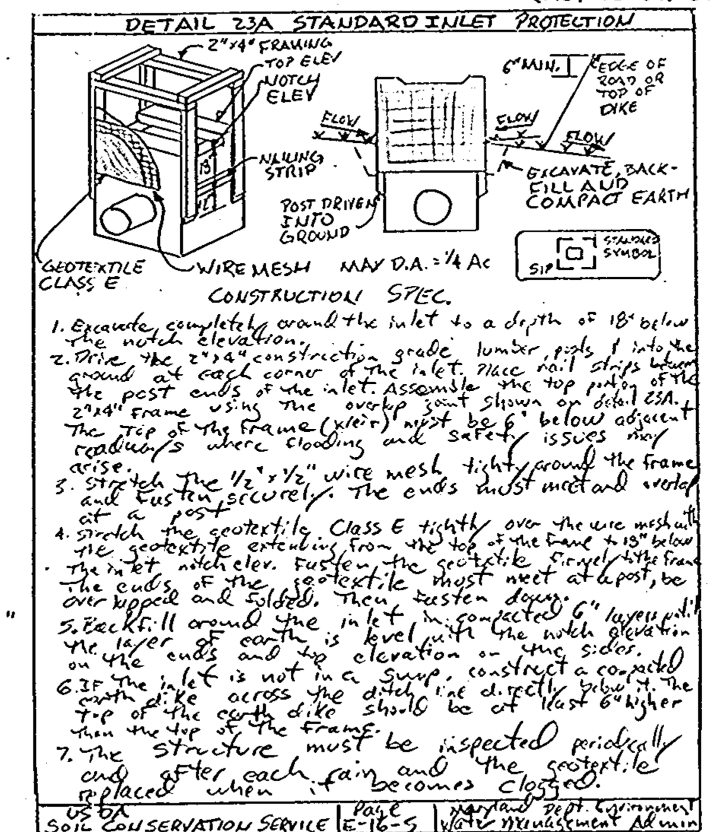
PERIMETER DIKE
NO SCALE



STRAW BALE DIKE - S.B.D.
(NOT TO SCALE)



MOUNTABLE CURB - "ONSITE"
HO. CO. DRWG. D-39 PG. 94
NOT TO SCALE


DETAIL 23A STANDARD INLET PROTECTION

CONSTRUCTION SPEC.

1. Excavate completely around the inlet to a depth of 18" below the notch elevation.
2. Drive the 2"x4" construction grade lumber posts 1' into the ground at each corner of the inlet. Place nail strips between the post ends of the inlet. Assemble the top portion of the 2"x4" frame using the overlap joint shown on detail 23A. The top of the frame (weir) must be 6" below adjacent roadways where flooding and safety issues may arise.
3. Stretch the 1/2" x 1/2" wire mesh tightly around the frame and fasten securely. The ends must meet and overlap at a post.
4. Stretch the geotextile Class E tightly over the wire mesh with the geotextile extending from the top of the frame to 18" below the inlet notch elev. Fasten the geotextile firmly to the frame. The ends of the geotextile must meet at a post, be overlapped and folded. Then fasten down.
5. Backfill around the inlet in compacted 6" layers until the layer of earth is level with the notch elevation on the ends and top elevation on the sides.
6. If the inlet is not in a sump, construct a compacted earth dike across the ditch line directly below it. The top of the earth dike should be at least 6" higher than the top of the frame.
7. The structure must be inspected periodically and after each rain and the geotextile replaced when it becomes clogged.

US DA SOIL CONSERVATION SERVICE | Page E-16-5 | Maryland Dept. Environment Water Management Admin

APPROVED
DIVISION OF LAND DEVELOPMENT &
ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 6-1-83
[signature]

SEDIMENT CONTROL NOTES

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH "STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS." PREPARED BY THE U.S.D.A. SOIL CONSERVATION SERVICE.
2. APPLY FOR GRADING PERMIT.
3. NOTIFY THE BUREAU OF LICENSE INSPECTIONS AND PERMITS 24 HRS. PRIOR TO GRADING OPERATIONS.
4. CONSTRUCTION SHALL ADHERE TO THE CONSTRUCTION SEQUENCE.
5. CUT AND FILL SLOPES SHALL BE 2:1 MAXIMUM.
6. ELEVATIONS MARKED THUS (X) SHALL BE FINISHED GRADE.
7. ANY EXCESS MATERIAL SHALL BE STOCKPILED IN A CLEARED LOCATION ON SITE WHICH IS PROTECTED BY SEDIMENT CONTROL STRUCTURE(S). MAXIMUM FILL SLOPE SHALL BE 3:1. STOCKPILED MATERIAL SHALL BE STABILIZED ACCORDING TO SEEDING SPECIFICATIONS BELOW.
8. SEDIMENT CONTROL STRUCTURES SHALL BE REMOVED ONLY WITH PERMISSION OF THE BUREAU OF LICENSE, INSPECTIONS AND PERMITS.
9. STABILIZATION MEASURES

TEMPORARY STABILIZATION:

APPLY: 2000 LBS./AC. OR 46 LBS. OF PULVERIZED DOLOMIC LIMESTONE. 500 LBS./AC. OR 11.5 LBS./1000 SQ.FT. OF 10-10-10 FERTILIZER. PLANT WITH RYEGRASS AT 40 LBS./AC. MULCH ALL DISTURBED AREAS IMMEDIATELY AFTER GRADING.

PERMANENT STABILIZATION:

APPLY: 2000 LBS./AC. OF PULVERIZED DOLOMIC LIMESTONE.
500 LBS./AC. OF 10-10-10 FERTILIZER.

SEED: 85 LBS./AC. OF KENTUCKY 31 TALL FESCUE.
40 LBS./AC. OF KENTUCKY BLUE GRASS.
25 LBS./AC. OF ANNUAL RYEGRASS.

NOTE: SEEDING MAY BE DONE BETWEEN MARCH 1 - MAY 1, OR AUG. 1 - OCT. - 1 ONLY. MULCH ALL DISTURBED AREAS IMMEDIATELY AFTER GRADING.

MULCH: 2 TONS/AC. OF UNWEATHERED WHEATSTRAW. TIE MULCH DOWN WITH 480 GAL./AC. OF LIQUID ASPHALT.

ON FILL SLOPES GREATER THAN 3:1 & NOTATED - XXXXX
APPLY CUTTINGS OF COMMON PERIWINKLE @ 12" - 18" SPACING BETWEEN PLANTS. USE CENTER HOLE PLANTING. MIX 1 OZ. OF 10-10-10 FERTILIZER WITH SOIL AT BOTTOM OF EACH PLANTING HOLE. ADD TO THE PLANTING HOLE ORGANIC MATERIAL. THE ENTIRE SLOPE SHALL BE SEEDED WITH 40#/AC. ANNUAL RYEGRASS AND COVERED WITH A PROTECTIVE MULCH. IF FRESH WOOD CHIPS, WOOD SHAVINGS OR SAWDUST IS USED AS MULCH, SUBSTITUTE SLOW RELEASE FERTILIZER 7-40-6 OR 38-0-0 FOR 10-10-10 SPECIFIED ABOVE.

ON ALL OTHER FILL SLOPES GREATER THAN 3:1, SUBSTITUTE THE FOLLOWING S. MIX FOR THE ABOVE.
APPLY 15 lbs/ACRE INNOCULATED CROWN VETCH
40 lbs/ACRE KENTUCKY 31 TALL FESCUE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS. HOWARD COUNTY HEALTH DEPARTMENT.

[signature] 9-14-83
COUNTY HEALTH OFFICER DATE

APPROVED HOWARD COUNTY OFFICE OF PLANNING AND ZONING.

[signature] 9-15-83
PLANNING DIRECTOR DATE

[signature] 9-15-83
CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION DATE

APPROVED: FOR PUBLIC WATER, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS. DEPARTMENT OF PUBLIC WORKS.

[signature] 9-8-83
DIRECTOR DATE

[signature] 9-8-83
CHIEF BUREAU OF ENGINEERING DATE

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

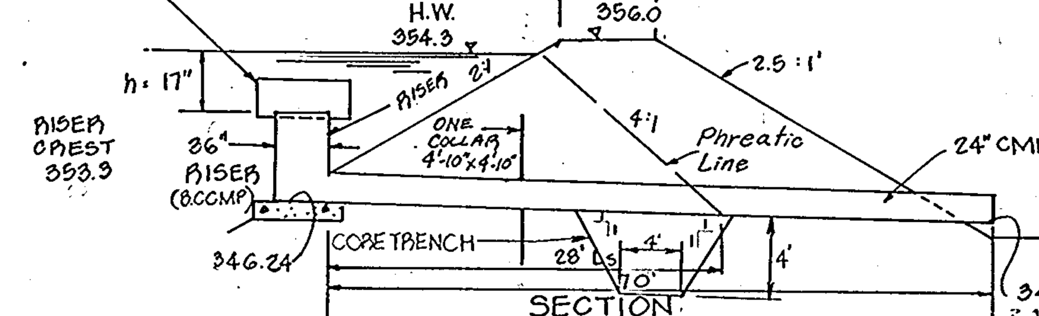
[signature] 9-1-83
U.S. SOIL CONSERVATION SERVICE DATE

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

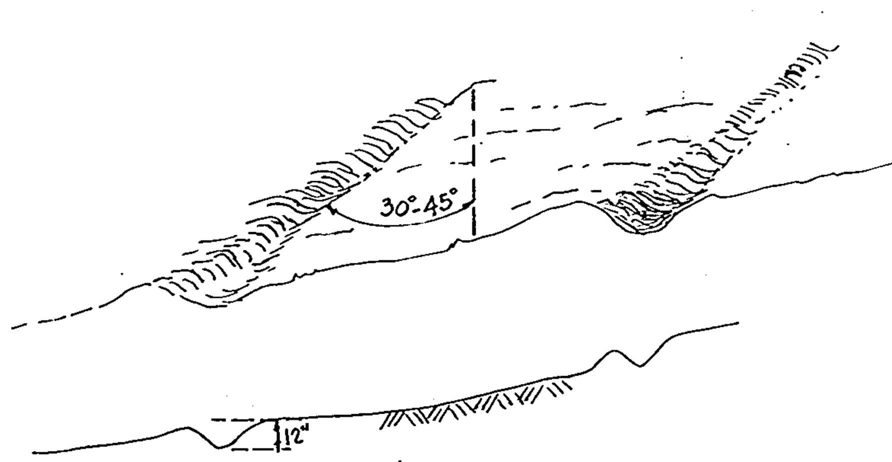
[signature] 9-1-83
HOWARD SOIL CONSEVATION DISTRICT DATE

PAVING DETAIL P-2
(FOR TRAVEL WAYS)
(STD R-2.01)

BITUMINOUS CONC. SURFACE	1 1/2" BAND C-3
BITUMINOUS CONC. BASE	2 1/2" BAND C-2
PRIME — 8" CRUSHER RUN BASE COURSE OR TWO COURSES STABILIZED ACREGATE BASE COURSE	8"

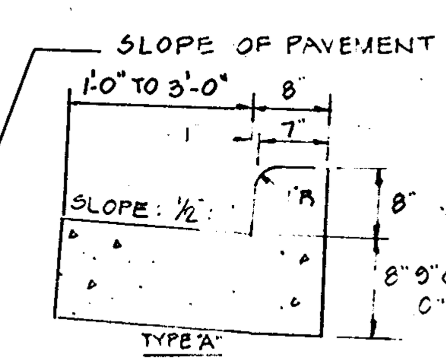


SECTION
SEDIMENT BASIN & OUTLET
NOT TO SCALE



WATER BREAK

1. THE WATER BREAK IS INSTALLED 30°- 40° DOWNSLOPE.
2. THE OUTLET END IS OPEN & EXTENDS BEYOND THE SURFACE OF THE ROAD.
3. THE DEPTH IS AT LEAST 12 INCHES BELOW THE ROAD SURFACE.
4. THE INLET END EXTENDS INTO THE SIDE DITCH OR CUT SLOPE.



STATE OF MARYLAND
STANDARD COMBINATION
CURB & GUTTER
STANDARD NO. MD - 620 02
NO SCALE

PAVING DETAIL P-1
(FOR PARKING AREA) (STD. R-2.01)

BIT. CONC. SURFACE	1"
BIT. CONC. BASE	2"
PRIME — 5" CRUSHER RUN BASE COURSE OR 4" DENSE GRADED STABILIZED AGGREGATE BASE COURSE	5"

STANDARD SYMBOLS

DIVERSION DIKE	DD 2/
INTERCEPTOR DIKE	ID 2/
PERIMETER DIKE	PD 2/
SILT FENCE	S.F. 2/
INTERCEPTOR SWALE	IS
PERIMETER SWALE	PS
STABILIZED CONSTRUCTION ENTRANCE	SCE
STONE OUTLET STRUCTURE	SOS L=
GRADE STABILIZATION STRUCTURE	
CHUTE OR FLUME	GSS-1 A-
RIGID PIPE SLOPE DRAIN	GSS-2 PSD-
FLEXIBLE PIPE SLOPE DRAIN	GSS-3 PSD-
DIVERSION	
GRASSED WATERWAY	GW
LEVEL SPREADER	L=
SUBSURFACE DRAIN	

NOTES:
1. ARROWS POINT DOWNSLOPE OR TO THE OUTLET.
2. DIKE AND DIVERSION SYMBOLS, SHALL HAVE A CROSS MARK TO CLEARLY SHOW WHERE THE STRUCTURE BEGINS AND ENDS.

BITUMINOUS CONC. SURFACE	3" MD SHA SPEC. B
BITUMINOUS CONC BASE	6" MD SHA SPEC. B

M.S.H.A.
TYPICAL PAVING SECTION
NO SCALE

BITUMINOUS CONCRETE BASE TO BE PLACED IN TWO 3" LIFTS

BITUMINOUS CONC. SURFACE	1 1/2"	3 1/2" MD. SHA SPEC. B
BITUMINOUS CONC BASE	2"	
COMPACTED PLANT MIX STABILIZED STONE AGGREGATE	12"	

M.S.H.A.
TYPICAL PAVING SECTION

NO SCALE

FOR REVISION MADE BY BENCHMARK ENGINEERING, INC ON 5/2/02 AND 2-14-07 ONLY

2-14-07 REVISE SHEET NUMBER
5-2-02 REVISE OWNER
12-17-80 - PHASE I - ADDED CORE TRENCH TO SEDIMENT BASIN

DEVELOPER'S CERTIFICATE

I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS AS ARE DEEMED NECESSARY. DEVIATION WILL NOT BE MADE UNLESS AUTHORIZED BY THE HOWARD SOIL CONSERVATION DISTRICT.

[signature]
DEVELOPER - MR. THOMAS O'DONNELL DATE

OWNER & DEVELOPER

40-99 LLP
8620 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MD. 21043

BOENDER ASSOCIATES, INC.
SUITE 101-107
TOWN & COUNTRY PROFESSIONAL BLDG.
ELLICOTT CITY, MD. 21043

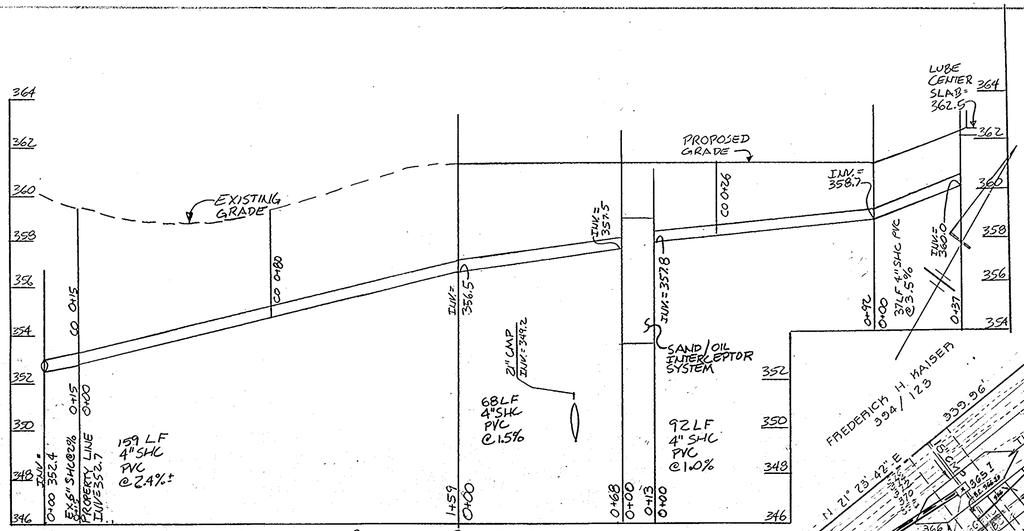
PUBLIC ROAD CONSTRUCTION DETAILS

TITLE: **SEDIMENT CONTROL DETAILS**			
PROJECT: O'DONNELL AUTO DEALERSHIP			
LOCATION: TAX MAP 24, GRID 6, PARCELS 51 & 673, 2ND ELECTION DISTRICT HOWARD COUNTY, MD			
DATE: MAY, 1979	DES. BY: W.N.	DRAWN BY: G.M.	CHKD. BY: R.L.M.
SCALE: AS SHOWN	JOB NO. 7927	DRWG. NO.: 5 OF 8	

[signature] 7/6/83

ENGINEERING PLANNING SURVEYING BY
BOENDER ASSOCIATES INC.

SDP-83-189



SEWER HOUSE CONNECTION PROFILE
SCALE: VERT. 1"=3'; HOR. 1"=30'

POB B2

FREDERICK H. KAISER 324/123

N 21° 23' 42" E 339.96'

S 67° 11' 18" E

THROAT INV 364.7

18 PARKING SPACES EA. 8½ × 20' TYPICAL

SERVICE BAYS F.F.E.= 364.20

SHOP F.F.E.= 362.0

SEE FLOOR PLAN FOR ADDITION

PARTS ADDITION FLOOR ELEV 363.5

SERVICE DRIVEWAY

LUBE CENTER

CAR WASH 20' DRAINAGE & UTILITY EASEMENT

STRIPED ISLAND

0.60 AC. C=0.72 B' SOILS

0.26 AC. C=0.72 B' SOILS

1.06 AC. C=.11

1.10 AC. C=.09

1.48 AC. C=0.42

EMERGENCY SPILLWAY

40' R/W

100 YR. EL. 374.0

15" P.E.

21" C.M.P.

24" C.M.P.

UNDERGROUND STORM WATER MANAGEMENT AREA 356

EX. 8" WTR.

EX. 12" WTR.

EX. 8" SAN.

EX. 24" SAN.

EX. 15" SAN.

EX. 6" CURB

EX. 8" CURB

EX. 24" CURB

EX. GUARD RAIL

EX. MAC PARKING LOT

EX. COMMERCIAL BUSINESS

ALFRED J. SAUSE 137/511 226/410 444/472

MATCH LINE SEE SHEET 2

N 528,000 E 853,100

N 527,000 E 853,100

#393130 G&E

EX. F.H.

EX. 8" W.M.

EX. POLE #174063

EX. 18" C.M.P.

PE HEADWALL

REMOVE EX. INLET

EXTEND 18" PIPE

CONSTRUCT STD WB INLET

SEWER CONTRACT 521

EX. INV. 354.88

PARCEL 673

U.S. ROUTE NO. 40

GRASSED MEDIAN

WEST BOUND LANES

EAST BOUND LANES

PROP. 1½" W.M.C. & 1" METER

PROP. 1½" W.M.C. & 1" METER

S 63° 24' 16" W

S 22° 05' 46" W

N 49° 38' 11" W 802.22'

S 27° 21' 22" W 250.55'

S 50° 12' 32" W

3.15 AC. C=.36

18" R.C.P.

18" H.D.P.

10' H.D.P.

150' R/W

24'

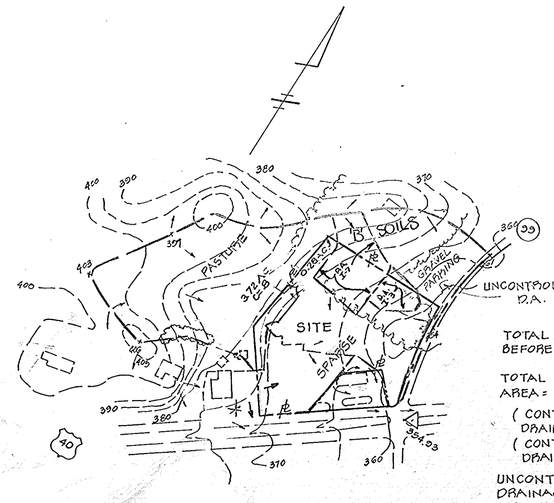
5'

10'

15'

ONSITE DRAINAGE AREA MAP

SCALE: 1" = 30'



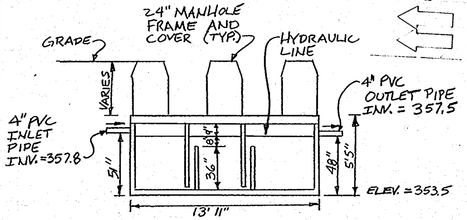
OFFSITE DRAINAGE AREA MAP

SCALE: 1" = 200'

TOTAL DRAINAGE AREA BEFORE = 9.72 AC.

TOTAL CONTROLLED DRAINAGE AREA = 8.26 AC.
(CONTROLLED OFFSITE DRAINAGE AREA = 5.11 AC.)
(CONTROLLED ONSITE DRAINAGE AREA = 3.15 AC.)

UNCONTROLLED ONSITE DRAINAGE AREA = 0.08 AC. : INSIGNIFICANT.



1600 GALLON TRAFFIC BEARING PRECAST CONCRETE SAND/OIL INTERCEPTOR SYSTEM (3 EQUAL INTERCEPTING CHAMBERS) 5'3" WIDE. MANUFACTURED BY MAYER BROTHERS, INC. OR EQUAL. SEE ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION.

SAND/OIL INTERCEPTOR SYSTEM
NOT TO SCALE

APPROVED : FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS HOWARD COUNTY HEALTH DEPARTMENT.

COUNTY HEALTH OFFICER, M.S. — 9-14-83 DATE

APPROVED : HOWARD COUNTY OFFICE OF PLANNING AND ZONING.

PLANNING DIRECTOR — 9-15-83 DATE

CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION — 9-15-83 DATE

APPROVED : FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

DIRECTOR — 9-8-83 DATE

CHIEF, BUREAU OF ENGINEERING — 9-8-83 DATE

APPROVED
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 6-1-83

STATE OF MARYLAND — DONALD GIBSON — NO. 10772 — REGISTERED PROFESSIONAL ENGINEER

7/6/83

OWNER & DEVELOPER

40-99 LLP
8620 BALTIMORE NATIONAL PK.
ELLICOTT CITY, MD. 21043

STATE OF MARYLAND — DONALD GIBSON — NO. 10772 — REGISTERED PROFESSIONAL ENGINEER

FOR REVISIONS MADE BY BENCHMARK ENGINEERING, INC. ON 5/8/02 & 7/03/02 & 2-14-07 ONLY

2-14-07	ADD STORM DRAIN, MATCH LINE & GR ADING FOR SAUSE PARCEL & REVISE SHEET NUMBER
7/03/02	REVISE SHC PROFILE 3243002 - COORDINATE : N 527,899.355 E 853,612.758 ADD SAND/OIL INTERCEPTOR SYSTEM DETAIL — ELEVATION : 354.930
5/8/02	ADDITIONS TO BUILDINGS AND ADD SHC PROFILE — CONC. MON @ SURFACE 5.5'± S. OF LEFT TURN LANE OF RT. 40. WEST 14'± E. OF EAST EDGE OF CROSSOVER TO RT. 99 S.
7-24-85	ADDED SERVICE BAYS
11-14-83	ADD 10' ADDITION TO LENGTH OF BUILDING
11-26-80	ADD PRIVATE SEWERAGE DISPOSAL AREA. FOR SHOWROOM, REVISE PROPERTY GRADES
1-7-80	REVISED 30' SETBACK LINE FROM MD. RTE. 99 & ADDED TREES AS REQUIRED BY HO. CO. O.P.Z. BY-G.M. CHK.-BLM.

TITLE: SHC PROFILE & DRAINAGE AREA MAPS
PROJECT: O'DONNELL AUTO DEALERSHIP
LOCATION: TAX MAP 24, GRID 6, PARCELS 512 & 673 — 2ND ELECTION DISTRICT — HOWARD COUNTY, MD.

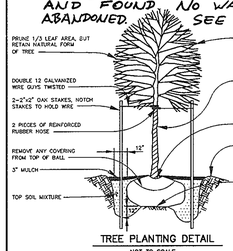
DATE:	DESIGN BY:	DRAWN BY:	CHECKED BY:
MAY, 1979	W.H.N.	W.H.N.	B.L.M.
SCALE: AS SHOWN	JOB NO.: 7927	DRAWING NO.: 6 OF 8	

boender associates — engineers surveyors planners
SUITE 102-107 TOWN & COUNTRY PROFESSIONAL BUILDING
ELLICOTT CITY, MARYLAND 21043
BALTIMORE 301-465-7777 SALISBURY 301-749-1286

SDP-83-189

SAUSE CENTER GENERAL NOTES

1. THE SUBJECT PROPERTY IS ZONED B-2 PER THE 2/02/2004 COMPREHENSIVE ZONING PLAN.
2. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY, PLUS MSHA STANDARDS AND SPECIFICATIONS, IF APPLICABLE.
3. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS CONSTRUCTION INSPECTION DIVISION AT 410-313-1880 AT LEAST (FIVE) 5 WORKING DAYS PRIOR TO THE START OF WORK.
4. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK AND RECEIVE CONFORMATION THAT ALL UTILITIES HAVE BEEN MARKED BEFORE PROCEEDING WITH SITE WORK.
5. TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE MOST CURRENT 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.
6. ALL DIMENSIONS ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
7. THE CONTOURS SHOWN HEREON HAVE BEEN TAKEN FROM FIELD RUN TOPOGRAPHIC SURVEYS AT 2' INTERVAL. THE TOPOGRAPHY WAS PREPARED BY MORRIS & RITCHIE ASSOCIATES, DATED APRIL, 1999, AND SUPPLEMENTED WITH TOPOGRAPHY PURCHASED FROM HOWARD COUNTY, GEOGRAPHICAL INFORMATION SYSTEMS.
8. THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENTS NOS. 1861 AND 2462 WERE USED FOR THIS PROJECT.
9. BOUNDARY SURVEY WAS PERFORMED BY MORRIS & RITCHIE ON OR ABOUT APRIL, 1999.
10. WATER AND SEWER FOR THIS SUBDIVISION IS PUBLIC. SEWER & WATER CONTRACT Nos. ARE #21-S AND #133-W. THE DRAINAGE AREA IS THE PATAPSCO WATERSHED.
11. ALL HANDICAP RAMPS SHALL BE IN ACCORDANCE WITH HOWARD COUNTY STD. DETAIL R4.01 AND ALL CURRENT ADA REQUIREMENTS.
12. THERE ARE NO WETLANDS OR FLOODPLAIN WITHIN THE AREA OF THIS SUBMISSION.
13. IMPROVEMENTS ON ADJOINING PARCELS ARE SHOWN FOR GRAPHICAL PURPOSES ONLY. THESE PARCELS CURRENTLY ARE IMPROVED WITH COMMERCIAL BUILDINGS AND PARKING LOTS, REFER TO THE SITE DEVELOPMENT PLANS FOR THESE PARCELS FOR ANY INFORMATION REGARDING THE IMPROVEMENTS.
14. THE ALLOWED USES ON THIS PARCEL ARE LIMITED TO THOSE LISTED IN SECTION 119.B OF THE ZONING REGULATIONS.
15. GEOTECHNICAL REPORT IS NOT REQUIRED.
16. EXISTING UTILITIES WERE LOCATED BY RECORD DRAWINGS AND FIELD LOCATIONS BY BENCHMARK ENGINEERING INC., DATED APRIL, 2003.
17. UNLESS NOTED AS "PRIVATE" ALL EASEMENTS ARE PUBLIC.
18. NO PREVIOUS DEPARTMENT OF PLANNING AND ZONING REFERENCE NUMBERS.
19. CONTRACTOR SHALL ADJUST ALL UTILITIES, RIM ELEVATIONS AND INVERT ELEVATIONS AS NEEDED TO MATCH THIS PLAN.
20. ALL EXTERIOR LIGHTING SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL VOLUME III (1993), ZONING SECTION 134 AND AS SHOWN ON THESE PLANS.
21. FOGLE'S SEPTIC CLEAN AND FOGLE'S WELL DRILLING INSPECTED THIS PROPERTY AND FOUND NO WATER WELLS OR SEPTIC SYSTEMS THAT NEED TO BE ABANDONED. SEE THEIR LETTER DATED JULY 27, 2007.



TREE PLANTING DETAIL
NOT TO SCALE

NOTE:

1. TREES SHOULD BE PLANTED A MINIMUM OF 6 FEET FROM THE EDGE OF PAVING AND MUST BE A MINIMUM OF 5 FEET FROM ANY STORM DRAIN.
2. TREES MUST BE PLANTED A MINIMUM OF 5 FEET FROM AN OPEN SPACE ACCESS STRIP AND 10 FEET FROM A DRIVEWAY.
3. SEE TREE PLANTING DETAIL -- THIS SHEET.
4. THE DEVELOPER SHALL BE RESPONSIBLE FOR STREET TREES, STORMWATER MANAGEMENT FACILITY PERIMETER PLANTING AND PRESERVATION OF THE PERIMETER VEGETATION AS SHOWN ON THESE PLANS.
5. ALL LANDSCAPING REQUIREMENTS FOR THIS PROJECT SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPE MANUAL AND SECTION 16.124(b)(3)(ii) OF THE SUBDIVISION REGULATIONS. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING WILL BE POSTED AS PART OF THE GRADING PERMIT IN THE AMOUNT OF $1,800.00 (FOR 6 SHADE TREES).

SAUSE CENTER STREET TREE CALCULATIONS

STREET TREES REQUIRED FOR 174 L.F. OF RIGHT-OF-WAY FRONTAGE FOR THE SUASE CENTER
175/30 = 6 STREET TREES REQUIRED.

SAUSE CENTER			PLANTING LIST
SYMBOL	QUANTITY	NAME	REMARKS
○	6	ACER GRISEUM PAPERBARK MAPLE	1 1/2" MIN. CAL. B&B FULL HEAD

SAUSE CENTER DEVELOPER'S/BUILDER'S CERTIFICATION

I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION, A LETTER OF NOTICE, ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

NAME: TOM O'DONNELL, O'DONNELL HONDA DATE 5/15/07

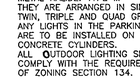
22. WAIVER PETITION, WP-07-006, A REQUEST TO WAIVE SECTION 16.155(a) TO PERMIT NON-RESIDENTIAL DEVELOPMENT WITHOUT AN APPROVED SITE DEVELOPMENT PLAN WAS DENIED BY THE DIRECTOR OF THE DEPARTMENT OF PLANNING AND ZONING ON AUGUST 24, 2006.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

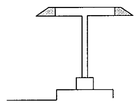
CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 10/15/07
CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 10/9/07
DIRECTOR — DATE 10/10/07

PARKING LOT LIGHTS:
THE LIGHTS IN THE PARKING AREA ARE TO BE LUMINAIRE, 1000 WATT METAL HALIDE, TYPE III THEY ARE ARRANGED IN SINGLE, TWIN, TRIPLE AND QUAD GROUPS ANY LIGHTS IN THE PARKING AREAS ARE TO BE INSTALLED ON CONCRETE CYLINDERS. ALL OUTDOOR LIGHTING SHALL COMPLY WITH THE REQUIREMENTS OF ZONING SECTION 134.

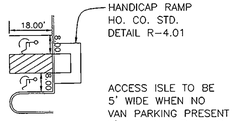
PARKING LOT LIGHT



STANDARD PARKING DETAIL
NOT TO SCALE

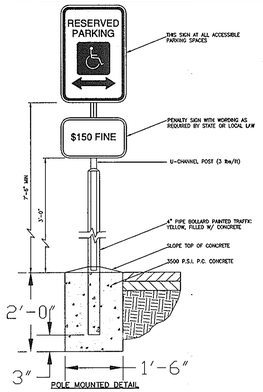


LIGHTING DETAIL
NOT TO SCALE

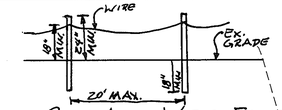


MAXIMUM 2.00% SLOPE IN ANY DIRECTION

HANDICAP PARKING DETAIL
NOT TO SCALE

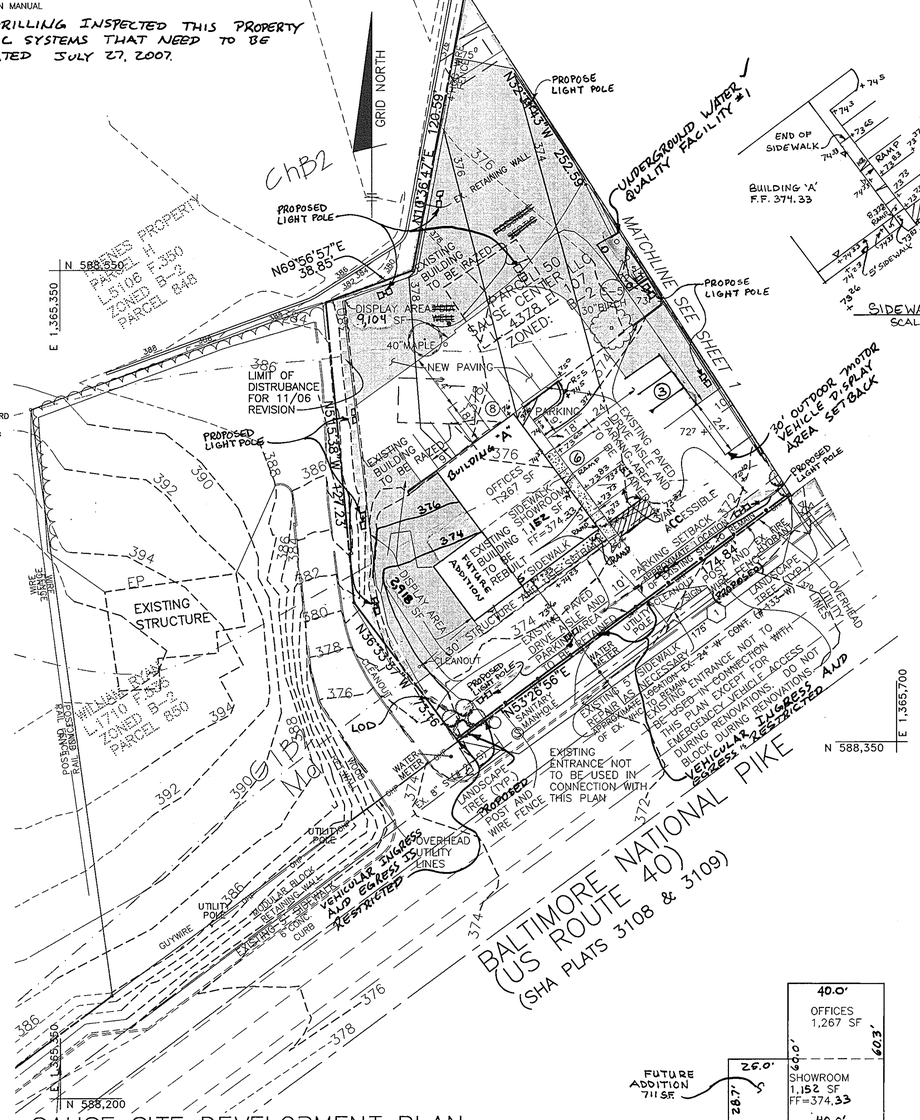


HANDICAP PARKING DETAILS
NOT TO SCALE

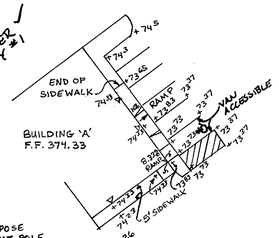


POST AND WIRE FENCE
NOT TO SCALE

POSTS TO BE 1½" GALVANIZED METAL SUNK 18" INTO UNDISTURBED GROUND AND TO STICK OUT OF THE GROUND A MINIMUM OF 24". POSTS ARE TO BE SEPARATED A MAXIMUM OF 20'. ChB2



SAUSE SITE DEVELOPMENT PLAN
PLAN VIEW
SCALE: 1" = 30'



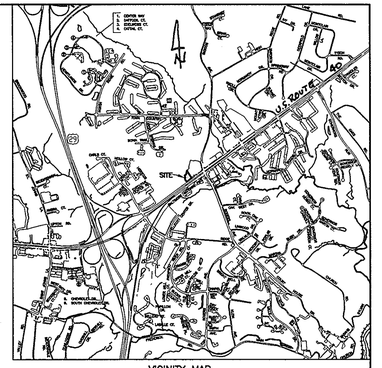
SIDEWALK DETAIL
SCALE: 1" = 30'

FOOTPRINT OF BUILDING
SCALE: 1" = 30'

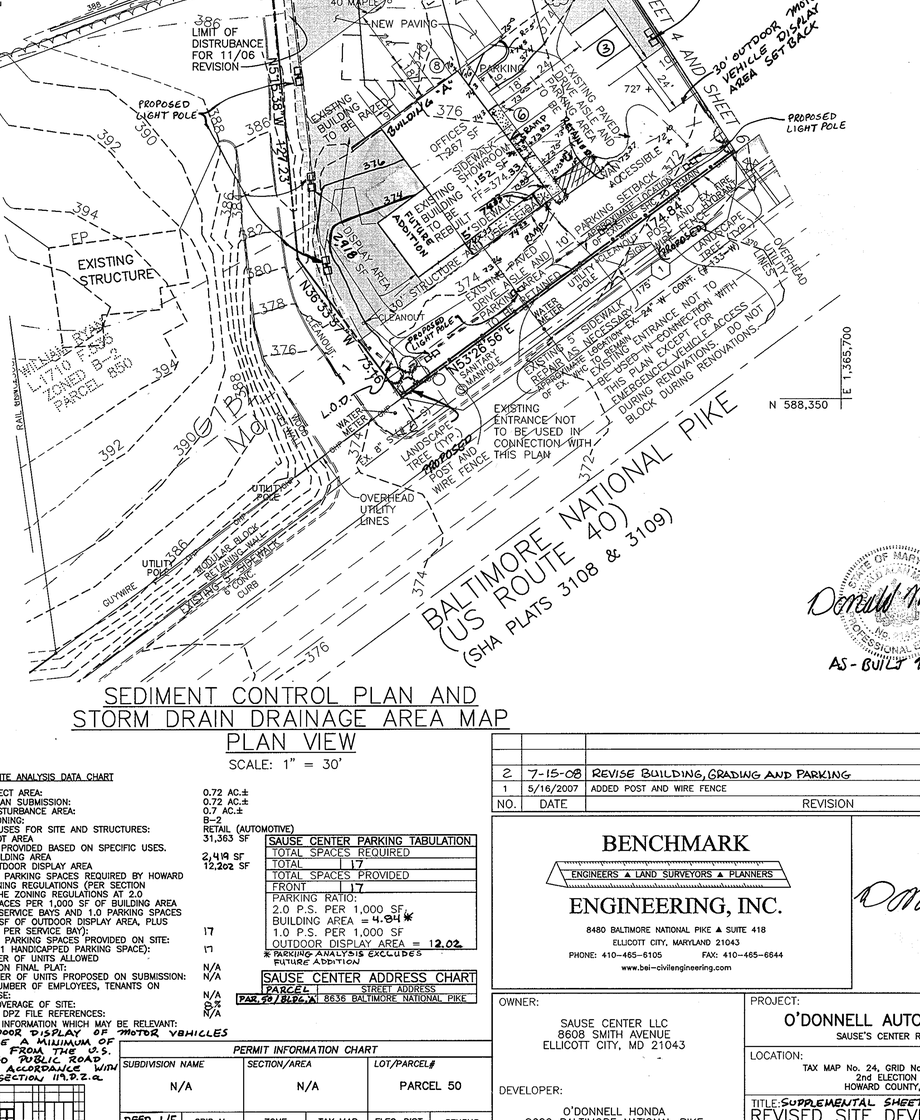
ELEVATION VIEW OF BUILDING
SCALE: 1" = 30'

POST AND WIRE FENCE
NOT TO SCALE

POSTS TO BE 1½" GALVANIZED METAL SUNK 18" INTO UNDISTURBED GROUND AND TO STICK OUT OF THE GROUND A MINIMUM OF 24". POSTS ARE TO BE SEPARATED A MAXIMUM OF 20'. ChB2



VICINITY MAP
SCALE: 1" = 2000'



SEDIMENT CONTROL PLAN AND
STORM DRAIN DRAINAGE AREA MAP
PLAN VIEW
SCALE: 1" = 30'

SAUSE CENTER SITE ANALYSIS DATA CHART

A.)	TOTAL PROJECT AREA:	0.72 AC.±
B.)	AREA OF PLAN SUBMISSION:	0.72 AC.±
C.)	LIMIT OF DISTURBANCE AREA:	0.7 AC.±
D.)	PRESENT ZONING:	B-2
E.)	PROPOSED USES FOR SITE AND STRUCTURES:	RETAIL (AUTOMOTIVE)
F.)	SQUARE FOOT AREA	31,363 SF
	PARKING IS PROVIDED BASED ON SPECIFIC USES. BUILDING AREA	2,419 SF
	OUTDOOR DISPLAY AREA	12,202 SF
G.)	NUMBER OF PARKING SPACES REQUIRED BY HOWARD COUNTY ZONING REGULATIONS (PER SECTION 133.D OF THE ZONING REGULATIONS AT 2.0 PARKING SPACES PER 1,000 SF OF BUILDING AREA EXCLUDING SERVICE BAYS AND 1.0 PARKING SPACES PER 1,000 SF OF OUTDOOR DISPLAY AREA, PLUS 3.0 SPACES PER SERVICE BAY):	17
H.)	NUMBER OF PARKING SPACES PROVIDED ON SITE: (INCLUDING 1 HANDICAPPED PARKING SPACE):	17
I.)	TOTAL NUMBER OF UNITS ALLOWED AS SHOWN ON FINAL PLAT:	N/A
J.)	TOTAL NUMBER OF UNITS PROPOSED ON SUBMISSION:	N/A
K.)	MAXIMUM NUMBER OF EMPLOYEES, TENANTS ON SITE PER USE:	N/A
L.)	BUILDING COVERAGE OF SITE:	8%
M.)	APPLICABLE DPZ FILE REFERENCES:	N/A
N.)	ANY OTHER INFORMATION WHICH MAY BE RELEVANT:	THE OUTDOOR DISPLAY OF MOTOR VEHICLES SHALL BE A MINIMUM OF 30' FEET FROM THE U.S. ROUTE 40 PUBLIC ROAD R/W IN ACCORDANCE WITH ZONING SECTION 119.D.2.a

SAUSE CENTER PARKING TABULATION	
TOTAL SPACES REQUIRED	
TOTAL	17
TOTAL SPACES PROVIDED	
FRONT	17
PARKING RATIO: 2.0 P.S. PER 1,000 SF BUILDING AREA = 4.84* 1.0 P.S. PER 1,000 SF OUTDOOR DISPLAY AREA = 12.02	

* PARKING ANALYSIS EXCLUDES FUTURE ADDITION

SAUSE CENTER ADDRESS CHART	
PARCEL	STREET ADDRESS
PAR. 50/ BLDG. A	8636 BALTIMORE NATIONAL PIKE

PERMIT INFORMATION CHART

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL#
N/A	N/A	PARCEL 50

DEED L/F	GRID No.	ZONE	TAX MAP	ELEC. DIST.	CENSUS
4376/107	6	B-2	24	2nd	6026.00

WATER CODE F-03 SEWER CODE 1432800

NO.	DATE	REVISION
2	7-15-08	REVISE BUILDING, GRADING AND PARKING
1	5/16/2007	ADDED POST AND WIRE FENCE

AS-BUILT 9-17-10

BENCHMARK
ENGINEERS ▲ LAND SURVEYORS ▲ PLANNERS
ENGINEERING, INC.
8480 BALTIMORE NATIONAL PIKE ▲ SUITE 418
ELLICOTT CITY, MARYLAND 21043
PHONE: 410-465-6105 FAX: 410-465-6644
www.bei-civilengineering.com

5/16/07

OWNER:
SAUSE CENTER LLC
8608 SMITH AVENUE
ELLICOTT CITY, MD 21043

DEVELOPER:
O'DONNELL HONDA
8620 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MD 21043
410-461-5000

PROJECT:
O'DONNELL AUTO DEALERSHIP
SAUSE'S CENTER REVITALIZATION

LOCATION:
TAX MAP No. 24, GRID No. 6, PARCEL No. 50
2nd ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE: SUPPLEMENTAL SHEET TO ADD PARCEL 50
REVISED SITE DEVELOPMENT PLAN
SAUSE CENTER

DATE: NOVEMBER, 2006 / JANUARY, 2007 PROJECT NO. 1952
DESIGN: JMC DRAFT: JMC
SCALE: 1" = 30' DRAWING 7 OF 8

SDP-83-189

P:\1952 O'Donnell Extension\dwg\8057s1 additional sheet.dwg, 5/16/2007 10:53:31 AM, Oce TDS600 HDI36mfar.pc3

SEDIMENT CONTROL NOTES

1. A MINIMUM OF 24 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, (313-1850).
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 SPECIFICATION FOR SOIL EROSION AND SEDIMENT CONTROL", 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 VOL. 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 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDINGS (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 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	0.72	ACRES
AREA DISTURBED	0.7	ACRES
AREA TO BE ROOFED OR PAVED	0.6	ACRES
AREA TO BE VEGETATIVELY STABILIZED	0.1	ACRES
TOTAL CUT	370	CY
TOTAL FILL	20	CY
OFFSITE WASTE/BORROW AREA LOCATION	SEE NOTE #12	

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 IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH CAN BE BACK FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.
12. WASTE WILL BE HAULED TO AN APPROVED WASTE DISPOSAL SITE, WITH A ACTIVE GRADING PERMIT.

TOPSOIL SPECIFICATIONS

I. Topsoil salvaged from the existing site may be used provided that it meets that 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 Agric tural 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 texture 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, quack grass, Johnson grass, 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 incorporated uniformly over designated areas and worked into the soil in conjunction with tillage operations as described in the following procedures.

III. 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 Materials.

IV. 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 or topsoil shall be not less than 1.5 percent by weight.

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

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 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 surface resulting from topsoiling or other operations shall be corrected in order to prevent the formation of depressions or water pockets.

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

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

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

a. Composted sludge shall be supplied by, or originate from, a person or persons that are permitted (at the time of acquisition of the compost) by the Maryland Department of the Environment under COMAR 26.04.06.

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

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

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

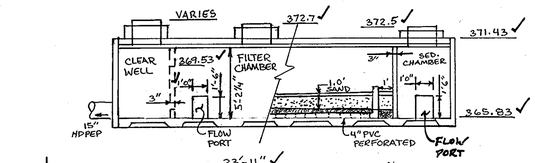
References: Guidelines Specifications, Soil Preparation and Sodding, MD-VA, Pub. #1, Cooperative Extension Service, University of Maryland and Virginia Polytechnic Institutes, Revised 1973.

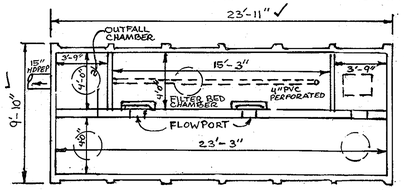
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DIVISION OF LAND DEVELOPMENT	10/15/10 DATE
CHIEF, DEVELOPMENT ENGINEERING DIVISION	10/15/10 DATE
DIRECTOR,	10/15/10 DATE

TABLE B.3.1 MATERIALS AND SPECIFICATIONS FOR SAND FILTERS

MATERIAL	SPECIFICATION	SIZE	NOTES:
NON-REBAR STEEL	ASTM A-36	N/A	STRUCTURAL STEEL TO BE HOT-DIPPED GALVANIZED ASTM A-123
	PEA GRAVEL: ASTM D-448 ORNAMENTAL STONE: WASHED COBBLES	PEA GRAVEL: NO.6 STONE: 2" TO 5"	
GEOTEXTILE (CLASS "C")	APPARENT OPENING SIZE: (ASTM D-4751) GRAB TENSILE STRENGTH: (ASTM D-4632) PUNCTURE RESISTANCE: (ASTM D-4833)	0.8" THE EQUIVALENT OPENING SIZE OF #30 SIEVE	MUST MAINTAIN 125 GPM / SQ. FT. FLOW RATE. NOTE: A PEA GRAVEL LAYER MAY BE SUBSTITUTED FOR GEOTEXTILES MEANT TO "SEPERATE" SAND FILTER LAYERS
UNDERDRAIN GRAVEL	AASHTO M-43	0.375" TO 0.750"	
UNDERDRAIN PIPING	F758, TYPE PS28 OR AASHTO M-278	4" TO 6" RIGID SCH.40 PVC OR SDR35	3/8" PERF. @ 6" O/C, 4 HOLES PER ROW; MINIMUM OF 3" OF GRAVEL OVER PIPES, NOT NECESSARY UNDERNEATH PIPES
POURED-IN-PLACE CONC. (IF REQUIRED)	MSHA MIX NO.3; f'c=3500psi @ 28 DAYS, NORMAL WEIGHT, AIR ENTRAINED; REINFORCING TO MEET ASTM 615-60	N/A	ON-SITE TESTING OF POURED-IN-PLACE CONC. REQUIRED; 28 DAY STRENGTH TEST AND SLUMP TEST; ALL CONC. DESIGN (CAST -IN-PLACE or PRE-CAST) NOT USING PREVIOUSLY APPROVED STATE OR LOCAL STANDARDS REQUIRES DESIGN DRAWINGS SEALED AND APPROVED BY A PROFESSIONAL STRUCTURAL ENGINEER LICENSED IN THE STATE OF MARYLAND.
SAND (1.0' DEEP)	AASHTO M-6 OR ASTM C-33	0.02" TO 0.04"	SAND SUBSTITUTIONS SUCH AS DIABASE AND GRAYSTONE#10 ARE NOT ACCEPTABLE. NO CALCIUM CARBONATED OR DOLOMITIC SAND SUBSTITUTIONS ARE ACCEPTABLE. NO "ROCK DUST" CAN BE USED FOR SAND





SIDE VIEW

NOTE: STRUCTURE SHALL BE MADE ENTIRELY OF MSHA MIX NO. 3 CONC. ACCORDING TO TABLE B.3.1 THIS SHEET AND REINFORCED IN ACCORDANCE WITH THE SAME TABLE

UNDERGROUND WATER QUALITY FACILITY #1

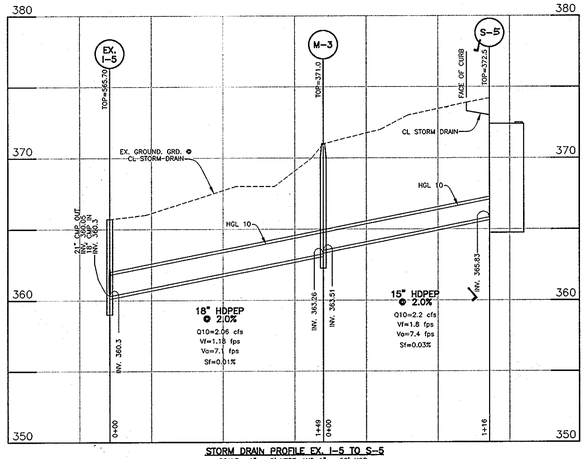
SCALE: 1"=5'

NOTE: PRIOR TO CONSTRUCTION OF SAND FILTER, STEEL REINFORCEMENT DESIGN SHALL BE PROVIDED AND SEALED BY A STRUCTURAL ENGINEER LICENSED IN THE STATE OF MARYLAND.

OPERATION & MAINTENANCE SCHEDULE FOR

PRIVATELY OWNED AND MAINTAINED UNDERGROUND STORMWATER FILTRATION SYSTEMS SAND FILTER (WQv#1)

1. THE SEDIMENT CHAMBER OUTLET DEVICES SHALL BE CLEANED AND/OR REPAIRED WHEN DRAWDOWN TIMES WITHIN THE CHAMBER EXCEEDS 36 HOURS.
2. DEBRIS & LITTER SHALL BE REMOVED AS NECESSARY TO INSURE PROPER OPERATION OF THE SYSTEM.
3. SEDIMENT SHALL BE CLEANED-OUT OF THE SEDIMENTATION CHAMBER WHEN IT ACCUMULATES TO A DEPTH OF 6 INCHES.
4. WHEN WATER PONDS ON THE SURFACE OF THE FILTER BED FOR MORE THAN 72 HOURS, THE TOP FEW INCHES OF DISCOLORED MATERIAL SHALL BE REPLACED WITH FRESH MATERIAL. PROPER CLEANING AND DISPOSAL OF THE REMOVED MATERIALS & LIQUIDS MUST BE FOLLOWED BY THE OWNER.
5. A LOGBOOK SHALL BE MAINTAINED TO DETERMINE THE RATE AT WHICH THE FACILITY DRAINS.
6. THE MAINTENANCE LOGBOOK SHALL BE AVAILABLE TO HOWARD COUNTY FOR INSPECTION TO INSURE COMPLIANCE WITH OPERATION AND MAINTENANCE CRITERIA.
7. ONCE THE PERFORMANCE CHARACTERISTICS OF THE INFILTRATION SYSTEM HAVE BEEN VERIFIED, THE MONITORING SCHEDULE CAN BE REDUCED TO AN ANNUAL BASIS UNLESS THE PERFORMANCE DATA INDICATES THAT A MORE FREQUENT SCHEDULE IS REQUIRED.



STORM DRAIN PROFILE EX. I-5 TO S-5
SCALE: 1" = 5' VERT. AND 1" = 50' HOR.

PERMANENT SEEDBED PREPARATIONS

SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

SOIL AMENDMENTS: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ON 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 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 THROUGH APRIL 30 AND AUGUST 1 THROUGH OCTOBER 15, SEED WITH 60 LBS PER ACRE (1.4 LBS/1000 SQ FT) OF KENTUCKY 31 TALL FESCUE AND 2 LBS PER ACRE (.05 LBS/1000 SQ FT) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THROUGH 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 OF KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS PER ACRE OF 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 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.

TEMPORARY SEEDBED PREPARATIONS

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

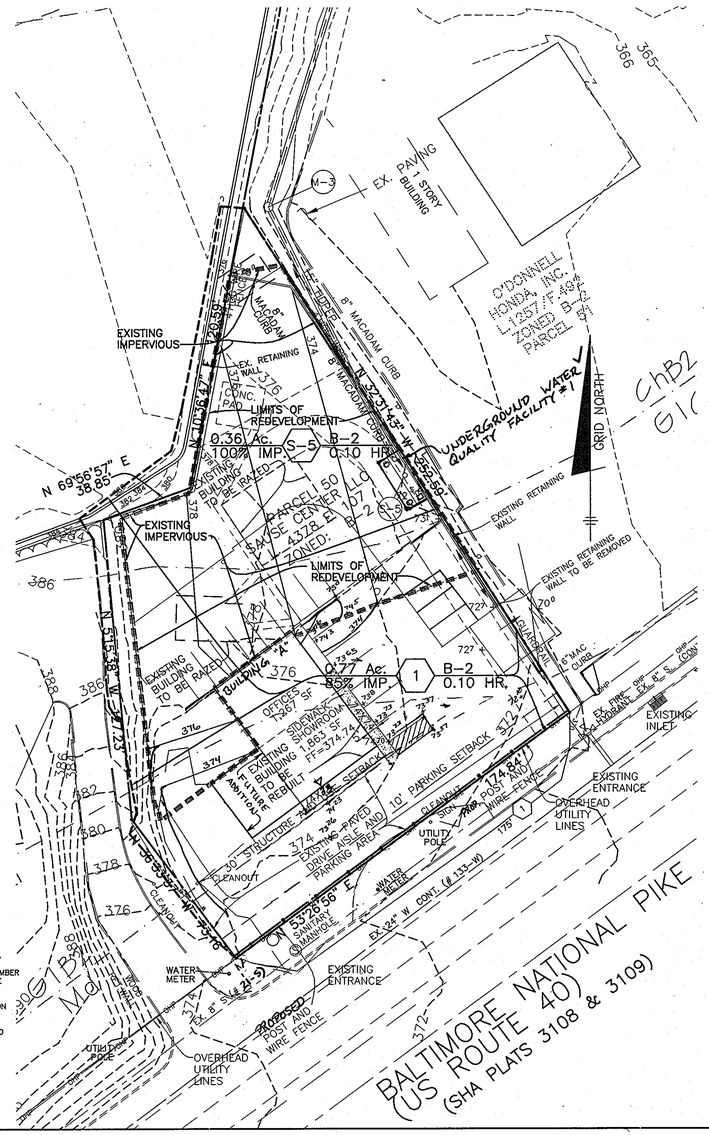
SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

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

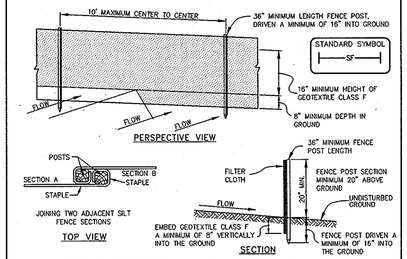
SEEDING: FOR PERIOD MARCH 1 THROUGH APRIL 30 AND FROM AUGUST 15 THROUGH NOVEMBER 15, SEED WITH 2-1/2 BUSHELS PER ACRE OF ANNUAL RYE (3.2 LBS/1000 SQ FT). FOR THE PERIOD MAY 1 THROUGH AUGUST 14, SEED WITH 3 LBS PER ACRE OF WEEPING LOVEGRASS (.07 LBS/1000 SQ FT). FOR THE PERIOD NOVEMBER 16 THROUGH FEBRUARY 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 GALLONS PER ACRE (5 GAL/1000 SQ FT) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES, 8 FT. OR HIGHER, USE 348 GALLONS PER ACRE (8 GAL/1000 SQ FT) FOR ANCHORING.

REFER TO THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.



DETAIL 22 – SILT FENCE



CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

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 13/4" diameter (minimum) round and shall be of sound quality hardwood. Steel posts will be standard T or U section weighing 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 ft / 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

SILT FENCE

SILT FENCE DESIGN CRITERIA

Slope Steepness	(Maximum) Slope Length	(Maximum) Silt Fence Length
Flatter than 50:1	unlimited	unlimited
50:1 to 10:1	125 feet	1,000 feet
10:1 to 5:1	100 feet	750 feet
5:1 to 3:1	60 feet	500 feet
3:1 to 2:1	40 feet	250 feet
2:1 and steeper	20 feet	125 feet

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

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

AS-BUILT CERTIFICATION

I HEREBY CERTIFY THAT THE FACILITY SHOWN ON THIS PLAN WAS CONSTRUCTED AS SHOWN ON THE "AS-BUILT" PLANS AND MEETS THE APPROVED PLANS AND SPECIFICATIONS.

Donald Mason PE NO. 21443 DATE 9-17-10

CERTIFY MEANS TO STATE OR DECLARE A PROFESSIONAL OPINION BASED UPON ONSITE INSPECTIONS AND MATERIAL TESTS WHICH ARE CONDUCTED DURING CONSTRUCTION. THE ONSITE INSPECTIONS AND MATERIAL TESTS ARE THOSE INSPECTIONS AND TESTS DEEMED SUFFICIENT AND APPROPRIATE BY COMMONLY ACCEPTED ENGINEERING STANDARDS. CERTIFY DOES NOT MEAN OR IMPLY A GUARANTEE BY THE ENGINEER NOR DOES AN ENGINEER'S CERTIFICATION RELIEVE ANY OTHER PARTY FROM MEETING REQUIREMENTS IMPOSED BY CONTRACT, EMPLOYMENT, OR OTHER MEANS, INCLUDING MEETING COMMONLY ACCEPTED INDUSTRY PRACTICES.

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."

DEVELOPER DATE 5/15/07

BY THE ENGINEER:

"I/WE 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."

Donald Mason 5/16/07
ENGINEER – DONALD MASON, P.E. # 21443 DATE

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 SERVICE DATE 10-4-07

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

HOWARD SOIL CONSERVATION DISTRICT DATE 10-4-07

NO.	DATE	REVISION
2	7-14-08	REVISE SAND FILTER CONFIGURATION AND LAYOUT
1	5/16/2007	ADDED POST AND WIRE FENCE

BENCHMARK
ENGINEERS ▲ LAND SURVEYORS ▲ PLANNERS
ENGINEERING, INC.
8480 BALTIMORE NATIONAL PIKE ▲ SUITE 418
ELLICOTT CITY, MARYLAND 21043
PHONE: 410-465-6105 FAX: 410-465-6644
www.bai-civilengineering.com

Donald Mason 5/16/07

OWNER:
SAUSE CENTER LLC
8608 SMITH AVENUE
ELLICOTT CITY, MD 21043

DEVELOPER:
O'DONNELL HONDA
8620 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MD 21043
410-461-5000

PROJECT: SUPPLEMENTAL SHEET TO ADD PARCEL 50
O'DONNELL AUTO DEALERSHIP
SAUSE'S CENTER REVITALIZATION

LOCATION:
TAX MAP No. 24, GRID No. 6, PARCEL No. 50
2nd ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE: SEDIMENT AND EROSION CONTROL NOTES AND DETAILS; STORMWATER MANAGEMENT PLAN, NOTES AND DETAILS

DATE: NOVEMBER, 2006 / JANUARY, 2007 PROJECT NO. 1952

DESIGN: JMC DRAFT: JMC SCALE: 1" = 30' DRAWING 8 OF 8

SDP-83-189

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