

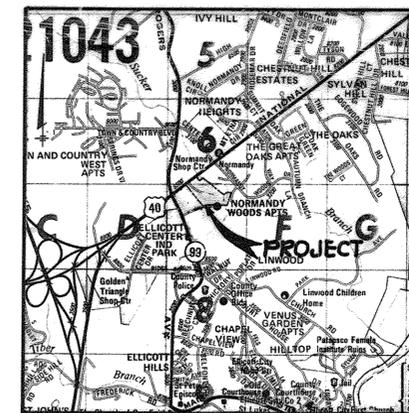
SHEET INDEX	
NO.	DESCRIPTION
1	TITLE SHEET
2	SITE DEVELOPMENT PLAN
3	DETAILS AND PROFILES
4	DRAINAGE AREA MAP & SEDIMENT CONTROL PLAN
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SITE DEVELOPMENT PLAN

ACURA

2ND ELECTION DISTRICT

HOWARD COUNTY, MARYLAND



VICINITY MAP
SCALE: 1"=2000'

GENERAL NOTES

- ALL WATER LINES SHALL BE CONSTRUCTED A MINIMUM OF 42" COVER BELOW FINISHED GRADE.
- CORRUGATED STEEL PIPE SECTIONS WILL BE JOINED WITH A SINGLE OR TWO PIECE CORRUGATED BAND WITH A WATERTIGHT NEOPRENE GASKET. DIMPLE BAND CONNECTORS WILL NOT BE PERMITTED.
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, I.E., STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION.
- APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL TEST PIT EXISTING UTILITIES AT ALL CROSSINGS AND CONNECTIONS A MINIMUM OF TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS.
- CONTRACTOR TO NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS:

MISS UTILITY	559-0100
C & P TELEPHONE COMPANY	725-9976
HOWARD COUNTY BUREAU OF UTILITIES	992-2366
AT&T CABLE LOCATION DIVISION	393-3553
BALTIMORE GAS & ELECTRIC COMPANY	685-0123
STATE HIGHWAY ADMINISTRATION	531-5533
HOWARD COUNTY CONSTRUCTION/INSPECTION SURVEY DIVISION (24 HOURS NOTICE PRIOR TO COMMENCEMENT OF WORK)	792-7272
- ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT \ominus ELEVATIONS.

- PROFILE STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
- NO PIPE SHALL BE LAID UNTIL LINES OF EXCAVATION HAVE BEEN BROUGHT TO SUBGRADE.
- TOPO TAKEN FROM FIELD RUN SURVEY DATED NOVEMBER, 1985 BY THE RIEMER GROUP INC.
- ALL PLAN DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
- ALL STORM DRAIN PIPE BEDDING SHALL BE AS SHOWN IN DETAIL G2.01 (TRENCH IN ROCK OR TRENCH IN EARTH AS DETERMINED BY FIELD CONDITIONS) IN VOL. IV OF HOWARD COUNTY DESIGN MANUAL UNLESS OTHERWISE DIRECTED BY THE ENGINEER OR AS SHOWN ON THE DRAWINGS.
- THE DEVELOPER IS RESPONSIBLE FOR THE ACQUISITION OF ALL EASEMENTS, RIGHTS AND/OR RIGHTS-OF-WAY THAT MAY BE REQUIRED FOR THE SEDIMENT AND EROSION CONTROL PRACTICES, STORM WATER MANAGEMENT PRACTICES AND THE DISCHARGE OF STORM WATER ONTO OR ACROSS ADJACENT OR DOWNSTREAM PROPERTIES INCLUDED IN THIS PLAN. HE IS ALSO RESPONSIBLE FOR THE ACQUISITION OF ALL EASEMENTS, RIGHTS AND/OR RIGHTS-OF-WAY THAT MAY BE REQUIRED FOR GRADING AND/OR WORK ON ADJACENT PROPERTIES INCLUDED IN THIS PLAN.

△ SITE TABULATION

TOTAL AREA OF SITE:	6.289 ACRES (273,744.40 SQ. FT.)
PRESENT ZONING:	B-2
USE OF STRUCTURES:	BUILDING A - AUTOMOBILE DEALERSHIP (SALES, REPAIR, SERVICE BUILDINGS & C. STORAGE OF NON-FLAMMABLE MATERIALS ONLY
TOTAL BUILDING COVERAGE:	8.695% - 0.541 ACRES
PAVED PARKING LOT/AREA ON SITE:	2.680 AC. (116,726.65 SQ. FT.)
TOTAL BUILDING FLOOR AREA:	22,561 SQ. FT. (FIRST FLOOR)
AREA OF LANDSCAPE ISLAND:	5,211 SQ. FT. (SECOND FLOOR)
LIMIT OF DISTURBED AREA:	0.10 AC. (43,560.00 SQ. FT.)

* BASED ON DESIGN BY THE ENGINEER OF RECORD AS APPROVED AND SHOWN PRIOR TO REVISION B.

△ PURPOSE STATEMENT: REDLINE REVISION #3

THE PURPOSE OF THIS REDLINE REVISION IS TO BRING THE EXISTING BUILDING TO CURRENT ACURA SHOWROOM STANDARDS. THE NEW STANDARDS MANDATE NEW CUSTOMER SERVICE REQUIREMENTS. THE FOLLOWING IMPROVEMENTS PERTAIN TO SERVICE CUSTOMER INTAKE PROCEDURES AND PROTOCOLS. THE BUILDING UPGRADE WILL INCLUDE THE ADDITION OF A NEW ENCLOSED SERVICE PARKING AREA AND ASSOCIATED SPACES AND CAR WASH AREA. EXISTING DEALERSHIP CANOPIES WILL BE ENCLOSED FOR THESE PROPOSED IMPROVEMENTS.

△ PARKING TABULATION

BUILDING A: 22,561 SF	
SALES / SHOWROOM / PARTS / OFFICE: 1420 SF	
@ 2 SPACES PER 1000 SF	0 SPACES
SERVICE BAY (S): 16 AUTOMOBILE SERVICE BAYS	
@ 2 SPACES PER SERVICE BAY	48 SPACES
OUTDOOR AUTOMOBILE DISPLAY AREA	
@ 1 SPACE PER 1000 SF	3 SPACES
SPACES REQUIRED FOR SDP 86-182	60 SPACES
SPACES REQUIRED FOR SDP 04-055*	16 SPACES
TOTAL SPACES REQUIRED FOR SDP 86-182 & SDP 04-055	76 SPACES
TOTAL SPACES PROVIDED	70 SPACES

GERALD + BETTY MAIZLISH
c/o ACURA WEST
L. 3071, F. 83
PARCEL 202
NISSAN DEALERSHIP
SDP-94-55

EX. PRIVATE USE-IN-Common ACCESS EASEMENT for PARCEL 199 & PARCEL 202 L. 3162, F. 507

PARCEL 'B-1'

PROP SHARED PARKING EASEMENT TO BE ADDED TO EX. USE-IN-Common ACCESS EASEMENT

△ PARKING TABULATIONS

Existing Sales Area on Site = 3,874 s.f.
Proposed Sales Trailer Area = 700 s.f.

USE	FIELD	EXISTING	PROPOSED	TOTAL
SALES	Required	8	0	8
SALES	Provided	0	0	0
SERVICE BAYS	Required	46	0	46
SERVICE BAYS	Provided	46	0	46
DISPLAY	Required	0	0	0
DISPLAY	Provided	0	0	0
SPACES FOR ADJACENT NISSAN (SDP-94-55)	Required	9	0	9
SPACES FOR ADJACENT NISSAN (SDP-94-55)	Provided	0	0	0
Total Required		74	0	74
Total Provided		76	0	76

* SDP 04-055 REPRESENTS AN ADJACENT CAR DEALERSHIP THAT IS PROVIDING 16 ADDITIONAL PARKING SPACES.

* Existing Sales Building = 4054 SF.

NOTE: BASED UPON APPROVED SDP 86-182 DATED 8-21-86 THE MAX BUILDING COVERAGE AREA OF 50% IS ALLOWED.

NOTE: 16 EXISTING STORAGE SPACES ASSIGNED TO NISSAN WEST (SDP-94-55) PROPOSED SERVICE BAY EXPANSION.

△ SITE TABULATION

TOTAL AREA OF SITE	6.289 Ac. (273,744.40 SF)
EXISTING ZONING	B-2
PROPOSED USE	BUILDING 'A' Automobile Dealership - sales, repair and servicing.
	BUILDING 'B/C' Storage of nonflammable material only.
BUILDING COVERAGE PERMITTED (50%)	3.1445 Ac. (136,972 SF)
BUILDING COVERAGE PROPOSED (7.3%)	0.47 Ac. (20,492 SF)
TOTAL BUILDING AREA	18,008 SF First floor
	7,016 SF Mezzanine
	3,040 SF Existing Storage
	23,064 SF

△ PARKING REQUIRED

@ 1 space per 500 SF of Sales, Repair and Storage (17,828 SF)	36 spaces
@ 7 spaces per 10 employees of Office Area (15 employees)	11 spaces
Total Required	47 spaces total

△ PARKING PROPOSED

Includes two handicapped spaces	48 spaces
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△ OPEN SPACE REQUIRED (20%) 1.26 Ac.

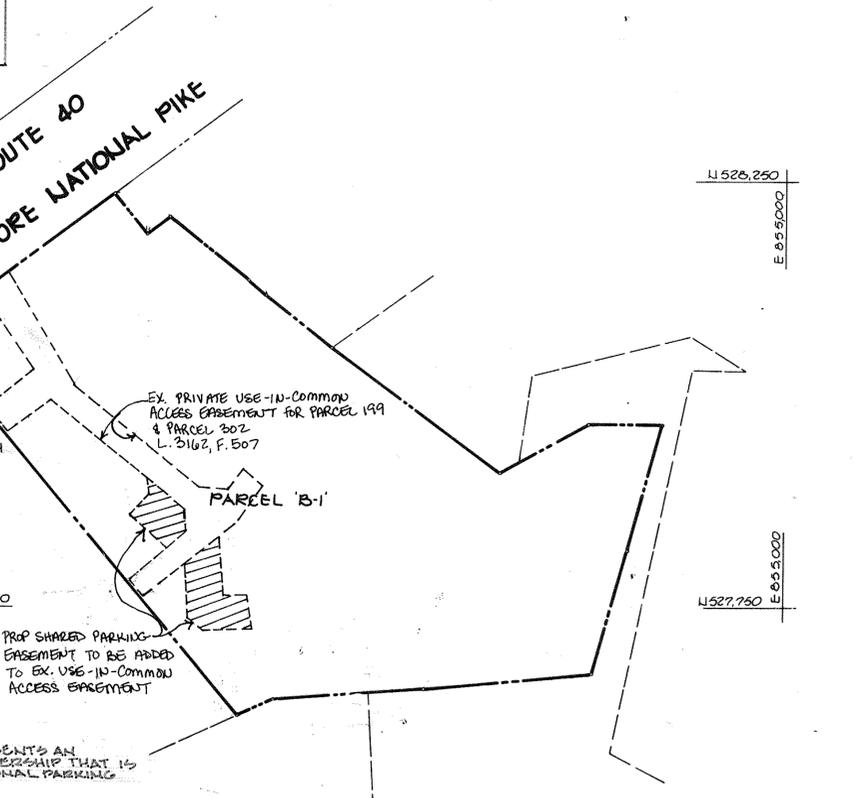
△ OPEN SPACE PROPOSED (59%) 3.69 Ac.

△ LANDSCAPED ISLANDS REQUIRED (5%) 828 SF

△ LANDSCAPED ISLANDS PROPOSED (5.9%) 970 SF

△ TOTAL AREA OF PUBLIC PARKING LOTS 0.26 Ac. (16,440 SF)

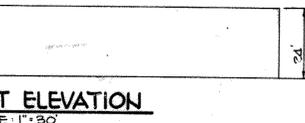
* Note: Additional parking provided (155 spaces) is for storage of automobiles. Handicapped parking is computed only as part of public parking provided.



△ PLAN
SCALE: 1"=100'

△ NOTE: THE AUTOMOBILE STORAGE PARKING REQUIREMENT HAS BEEN SATISFIED DUE TO AN OFF-SITE AUTOMOBILE STORAGE PARKING LOT LOCATED IN BALTIMORE COUNTY AT 6231 BALTIMORE NATIONAL PIKE, CATONVILLE, MD 21228 TAX MAP #99 PARCEL 124.

△ NOTE: SEVEN (7) EXTERIOR PARKING SPACES HAVE BEEN REMOVED AND TEN (10) PARKING SPACES HAVE BEEN ADDED WITHIN THE NEW SERVICE STAGING EXPANSION AREA. LANDSCAPING FOR THE REQUIRED NUMBER OF TREES/SHRUBS HAS BEEN PROVIDED IN ACCORDANCE WITH SECTION 12.4 OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE LANDSCAPE MANUAL. SURETY IN THE AMOUNT OF \$25,000.00 SHALL BE PAID WITH PRW DEVELOPER'S AGREEMENT.



DATE	NO.	REVISION
7-25-85	1	ACURA WEST SERVICES AREA EXPANSION
4-4-08	7	REVISE PARKING TABULATION
8-16-04	8	ASSIGN 16 EXISTING STORAGE SPACES TO NISSAN WEST PROP. SERVICE BAY EXPANSION

△ ADDRESS CHART

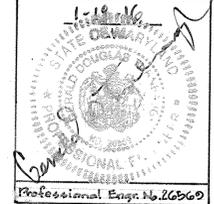
PARCEL	STREET ADDRESS
'B-1'	8659 US. ROUTE 40

△ SUBDIVISION NAME: LANCELOTTA PROPERTY ACURA AUTOMOBILE DEALERSHIP

PLAT # OR L/F	BLOCK #	ZONE	TAX/ZONE MAP	ELEC. DIST.	CENSUS TR
GG56	1	B-2	17,18,24125	2ND	6025

△ WATER CODE: FO1 **△ SEWER CODE:** 1452600

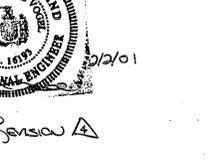
FOR REVISION ONLY



FOR REVISION



FOR REVISION



FOR REVISION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 26560 EXP. DATE 7-18-17

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.
John J. ... 8-20-86
COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING.
Anthony ... 8-21-86
PLANNING DIRECTOR DATE
John ... 8-21-86
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
George ... 8-18-86
DIRECTOR DATE
Robert ... 8-18-86
CHIEF, BUREAU OF ENGINEERING DATE

2-2-01 4 REVISE BUILDING COVERAGE FOR VESTIBULE
3-17-03 4 ADD SALES TRAILER
DATE NO REVISION
OWNER/DEVELOPER
NORRIS AUTO GROUP
205 HERMIT TROULEVARD
BALTIMORE, MARYLAND 21222
CONTACT: DAVID NORRIS COOK

PROJECT: ACURA NORRIS AUTO GROUP
AUTOMOBILE DEALERSHIP
AREA LANCELOTTA PROPERTY FLAT #P GG56
PARCEL 'B-1', TAX MAPS 17,18,24125
2ND ELECTION DISTRICT, HOWARD COUNTY, MD

TITLE SHEET

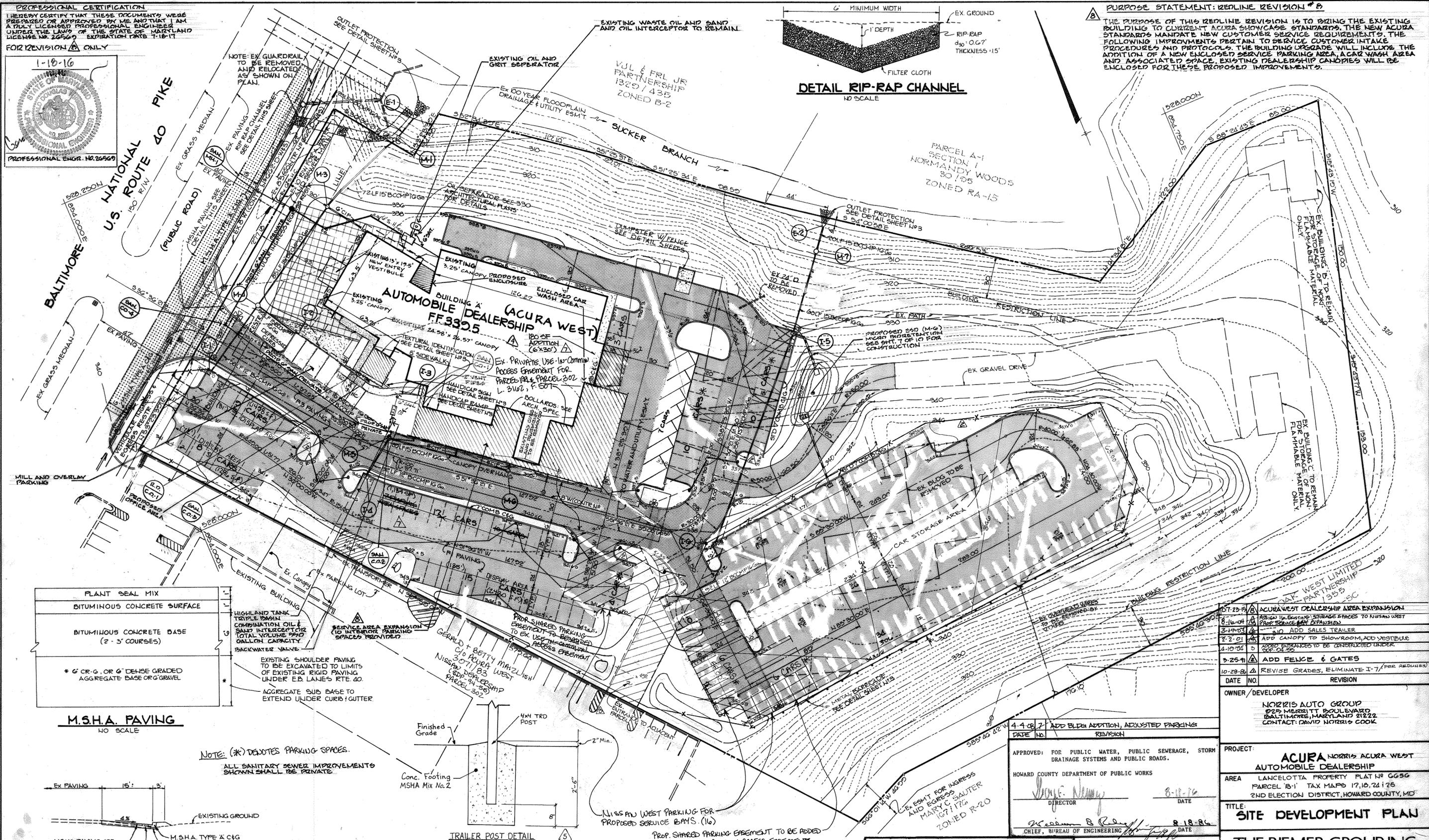
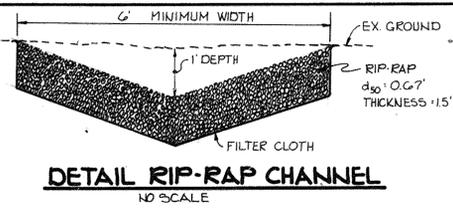
THE RIEMER GROUP, INC.
The Riemer Group, Inc. A Land Planning, Design & Civil Engineering Firm
3105 Health Park Drive, Ellicott City, Maryland 21043 (301) 461-2890

7-24-86 DATE
DESIGNED BY: D.A.M.
DRAWN BY: F.D.M.
PROJECT NO: 23700
DATE: 2-20-86
SCALE: AS SHOWN
DRAWING NO. 1 OF 11

PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE NO. 26552 EXPIRATION DATE 1-18-17
 FOR REVISION ONLY

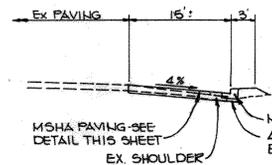


PURPOSE STATEMENT: REDEFINE REVISION #3
 THE PURPOSE OF THIS REDEFINE REVISION IS TO BRING THE EXISTING BUILDING TO CURRENT ACURA SHOWCASE STANDARDS. THE NEW ACURA STANDARDS MANDATE NEW CUSTOMER SERVICE REQUIREMENTS. THE FOLLOWING IMPROVEMENTS PERTAIN TO SERVICE CUSTOMER INTAKE PROCEDURES AND PROTOCOLS. THE BUILDING UPGRADE WILL INCLUDE THE ADDITION OF A NEW ENCLOSED SERVICE PARKING AREA, A CAR WASH AREA AND ASSOCIATED SPACE. EXISTING DEALERSHIP CANOPIES WILL BE ENCLOSED FOR THESE PROPOSED IMPROVEMENTS.



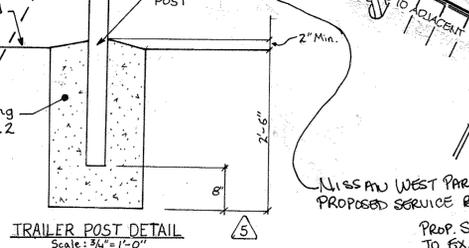
PLANT SEAL MIX	1
BITUMINOUS CONCRETE SURFACE	1
BITUMINOUS CONCRETE BASE (2" COURSE)	3
* 6" CR-G, OR 6" DENSE GRADED AGGREGATE BASE OR G-GRVEL	

M.S.H.A. PAVING
 NO SCALE



U.S. ROUTE 40 ROAD WIDENING
 NO SCALE

NOTE: (*) DENOTES PARKING SPACES.
 ALL SANITARY SEWER IMPROVEMENTS SHOWN SHALL BE PRIVATE.



- NOTES PER REVISION #3
1. THERE WILL BE NO INCREASE IN DISPLAY AREA ON THE ACURA SITE.
 2. OVERFLOW STORAGE FROM THE ADJACENT NISSAN WEST PROPERTY WILL BE STORED AT THE REAR OF THE ACURA SITE.

NOTE: ALL CURB RADI ARE 5' UNLESS OTHERWISE NOTED.

LEGEND

- P1 PAVING
- P3 PAVING
- M.S.H.A. PAVING
- PAVERS
- CONCRETE
- POST & CABLE 2 1/2" HT.
- SWING GATES

07-25-83	ACURA WEST DEALERSHIP AREA EXPANSION
08-16-84	DESIGN THE SERVICE STORAGE SPACES TO NISSAN WEST (FROM SERVICE BAY EXPANSION)
03-17-85	ADD SALES TRAILER
07-21-85	ADD CANOPY TO SHOWROOM, ADD VESTIBULE
04-10-86	ADDED ENTRANCES TO BE CONSTRUCTED UNDER SHOP 241-25
03-25-91	ADD FENCE & GATES
10-29-86	REVISE GRADES, ELIMINATE I-7/ (PER REDUNDANT)
DATE NO.	REVISION

OWNER / DEVELOPER
 NORRIS AUTO GROUP
 225 MERRITT BOULEVARD
 BALTIMORE, MARYLAND 21222
 CONTACT: DAVID NORRIS COOK

PROJECT:
**ACURA NORRIS ACURA WEST
 AUTOMOBILE DEALERSHIP**

AREA
 LANCELLOTTA PROPERTY PLAT NO GG56
 PARCEL B-1 TAX MAPS 17,18,24,25
 2ND ELECTION DISTRICT, HOWARD COUNTY, MD

TITLE:
SITE DEVELOPMENT PLAN

THE RIEMER GROUP, INC.
 The Riemer Group, Inc. A Land Planning, Design & Civil Engineering Firm
 3105 Health Park Drive, Ellicott City, Maryland 21043 (301) 461-2890

7-25-86	DATE
DESIGNED BY: D.A.M.	
DRAWN BY: F.D.M.	
PROJECT NO: 23200	
DATE: 2-28-86	
SCALE: 1" = 30'	
DRAWING NO. 2 OF 11	

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DATE: 8-12-86
 DIRECTOR

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.
 DATE: 8-18-86
 CHIEF, BUREAU OF ENGINEERING

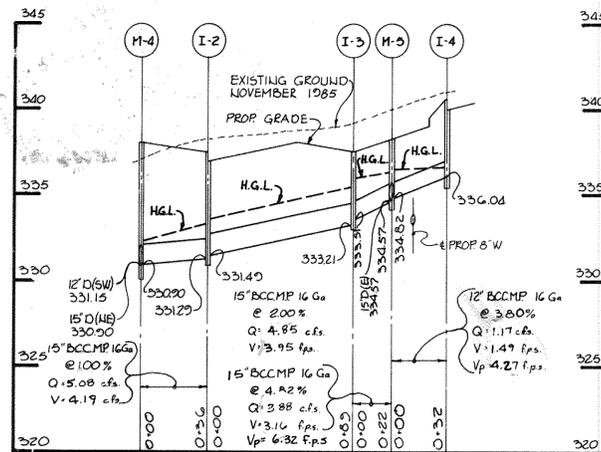
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.
 DATE: 8-20-86
 DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
 HOWARD COUNTY, MARYLAND

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING.
 DATE: 8-21-86
 PLANNING DIRECTOR
 CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION

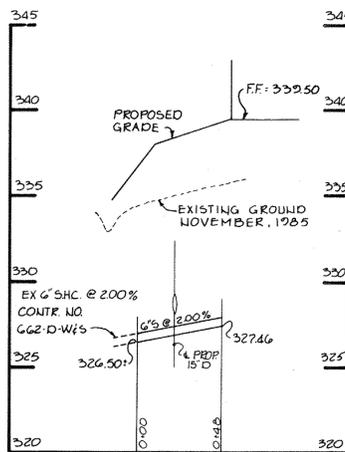


PURPOSE STATEMENT: REDEFINE REVISION #3

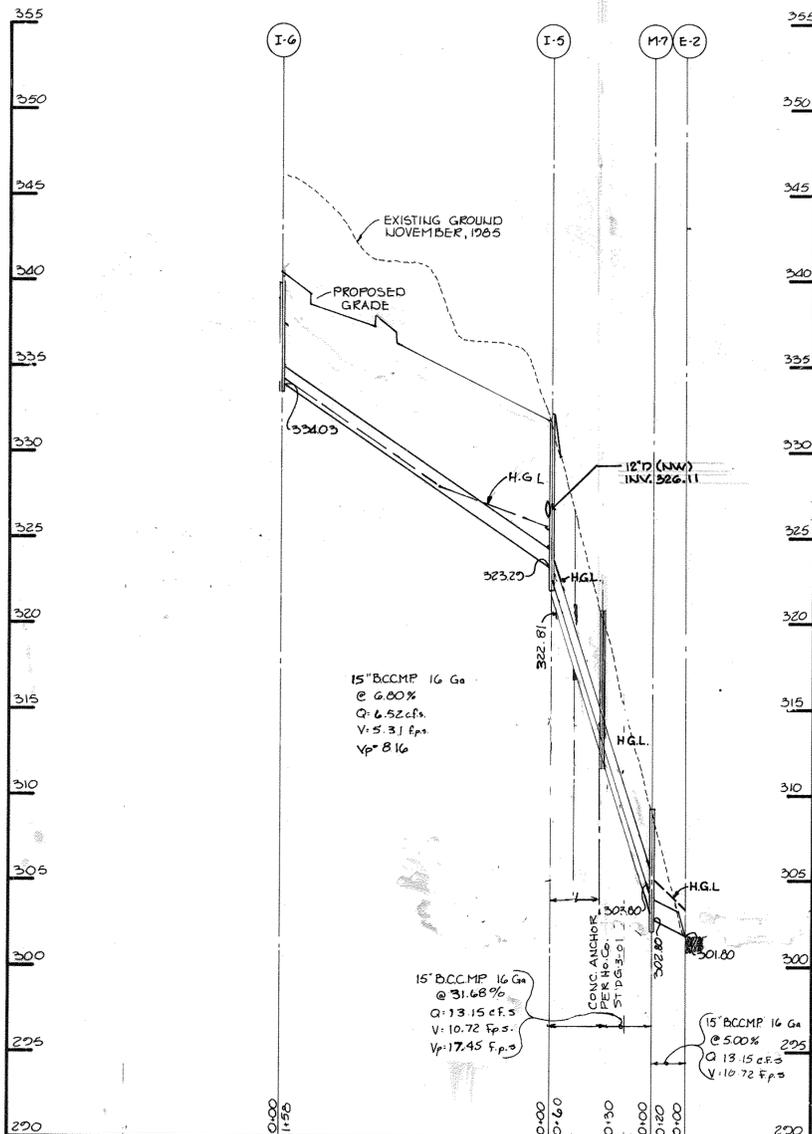
THE PURPOSE OF THIS REDLINE REVISION IS TO BRING THE EXISTING BUILDING TO CURRENT ACURA SHOWCASE STANDARDS. THE NEW ACURA STANDARDS MANDATE NEW CUSTOMER SERVICE REQUIREMENTS. THE FOLLOWING IMPROVEMENTS PERTAIN TO SERVICE CUSTOMER INTAKE PROCEDURES AND PROTOCOLS. THE BUILDING LAYOUT WILL INCLUDE THE ADDITION OF A NEW ENCLOSED SERVICE PARKING AREA, A CAR WASH AREA AND ASSOCIATED SPACE. EXISTING DEALERSHIP CANOPIES WILL BE ENCLOSED FOR THESE PROPOSED IMPROVEMENTS.



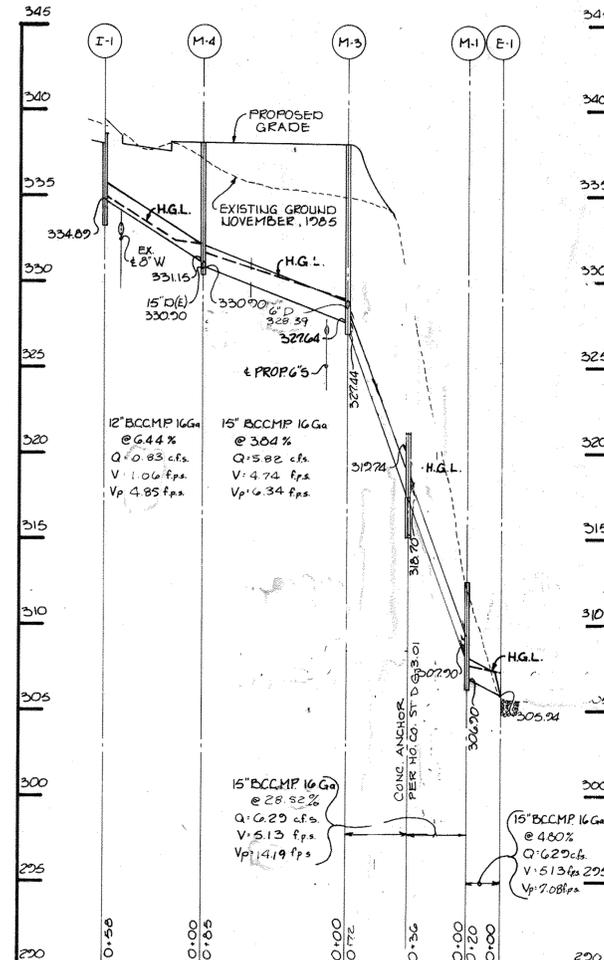
PROFILE
SCALE: HORIZ: 1"=50'
VERT: 1"=5'



SEWER PROFILE
SCALE: HORIZ: 1"=50'
VERT: 1"=5'



PROFILE
SCALE: HORIZ: 1"=50'
VERT: 1"=5'

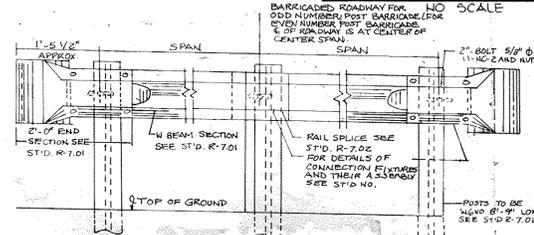


PROFILE
SCALE: HORIZ: 1"=50'
VERT: 1"=5'



STRUCTURE	MEDIUM STONE DIA.	LENGTH (L)	WIDTH (W)	THICKNESS (T)
E-1	.67	10'	10'	1.5'
E-1	.67	10	10'	1.5'

OUTLET PROTECTION



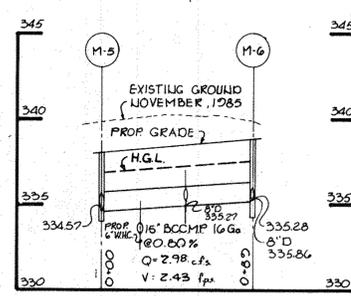
METAL BARRICADE

NO SCALE
SEE HO. CO. STD. DETAIL # 7.12

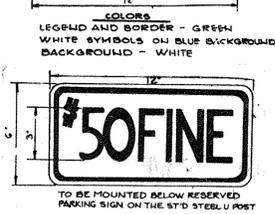
GUTTER PAN SAME CROSS SLOPE AS ADJACENT PAVEMENT

M.S.H.A. TYPE 'A' CURB AND GUTTER
NO SCALE

SECTION 'A-A' HANDICAP RAMP DETAIL
NO SCALE



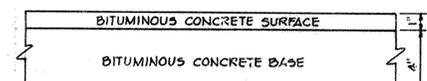
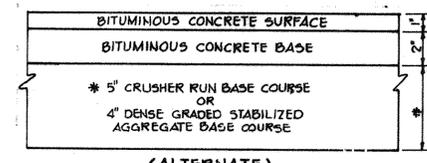
PROFILE
SCALE: HORIZ: 1"=50'
VERT: 1"=5'



HANDICAP SIGN DETAIL
NO SCALE

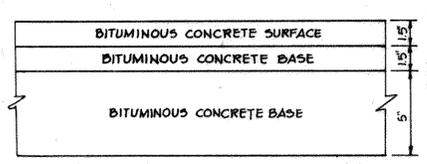
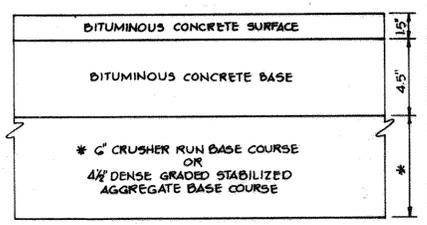
DETAIL BUILDING ENTRANCE TEXTURAL IDENTIFICATION FOR THE BLIND
NO SCALE

NOTE: TO BE USED FOR ALL BUILDING ENTRANCES EXCEPT THOSE THAT ARE EXCLUSIVELY FIRE EXITS



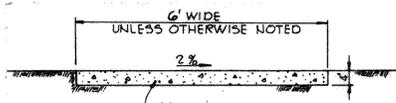
HOWARD COUNTY DESIGN MANUAL VOLUME IV - STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (DRAWING R-201)

(5" PAVING, P-1)

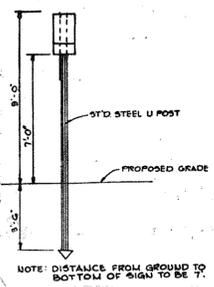


HOWARD COUNTY DESIGN MANUAL VOLUME IV - STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (DRAWING R-201)

(8" PAVING, P-3)

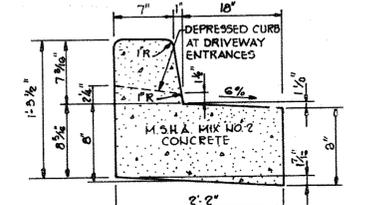


SIDEWALK DETAIL
No Scale

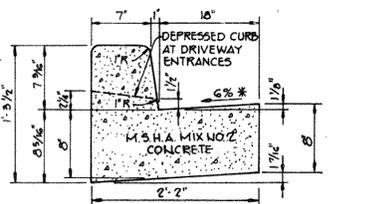


NOTE: DISTANCE FROM GROUND TO BOTTOM OF SIGN TO BE 7'

HAUDICAP SIGN DETAIL
NO SCALE



REVERSE 7" COMBINATION CURB AND GUTTER
No Scale



HOWARD COUNTY DESIGN MANUAL VOLUME IV - STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (DRAWING R-201)

* GUTTER PAN AT THE HIGH SIDE OF SUPERELEVATED SECTIONS SHALL BE SLOPED AT THE SAME RATE AS THE PAVEMENT.

STANDARD 7" COMBINATION CURB AND GUTTER
No Scale

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

James G. ... 8-20-89
COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING.
Robert ... 8-21-86
PLANNING DIRECTOR DATE
William ... 8-21-86
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION DATE

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

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Charles ... 8-17-86
DIRECTOR DATE
William ... 8-18-86
CHIEF, BUREAU OF ENGINEERING DATE

10-28-84 1 ELIMINATE I-7, M-2 & M-8, REVISE BARRICADE
1-29-85 2 ACURA WEST DEALERSHIP SER. AREA EXPANSION
DATE NO REVISION

OWNER/DEVELOPER
NOZZIS AUTO GROUP
225 MERRITT BOULEVARD
BALTIMORE, MARYLAND 2122
CONTACT: DAVID NOZZIS, COO.

PROJECT: ACURA-NOZZIS ACURA WEST AUTOMOBILE DEALERSHIP
AREA LANCILOTTA PROPERTY PLAT NO GG5C PARCEL B-1 TAX MAPS 17, 18, 24, 25 2ND ELECTION DISTRICT, HOWARD COUNTY, MD

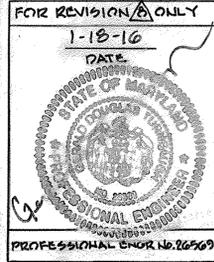
TITLE: DETAILS AND PROFILES

THE RIEMER GROUP, INC.
The Riemer Group, Inc. A Land Planning, Design & Civil Engineering Firm
3105 Health Park Drive, Ellicott City, Maryland 21043 (301) 481-2880

7-25-86 DATE
DESIGNED BY: D.A.M.
DRAWN BY: F.D.M.
PROJECT NO: 23700
DATE: 2-28-86
SCALE: AS SHOWN
DRAWING NO. 3 OF 11

APPROVED
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE: 6-20-86
William ...

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO. 26569 EXPIRATION DATE: 7-15-17

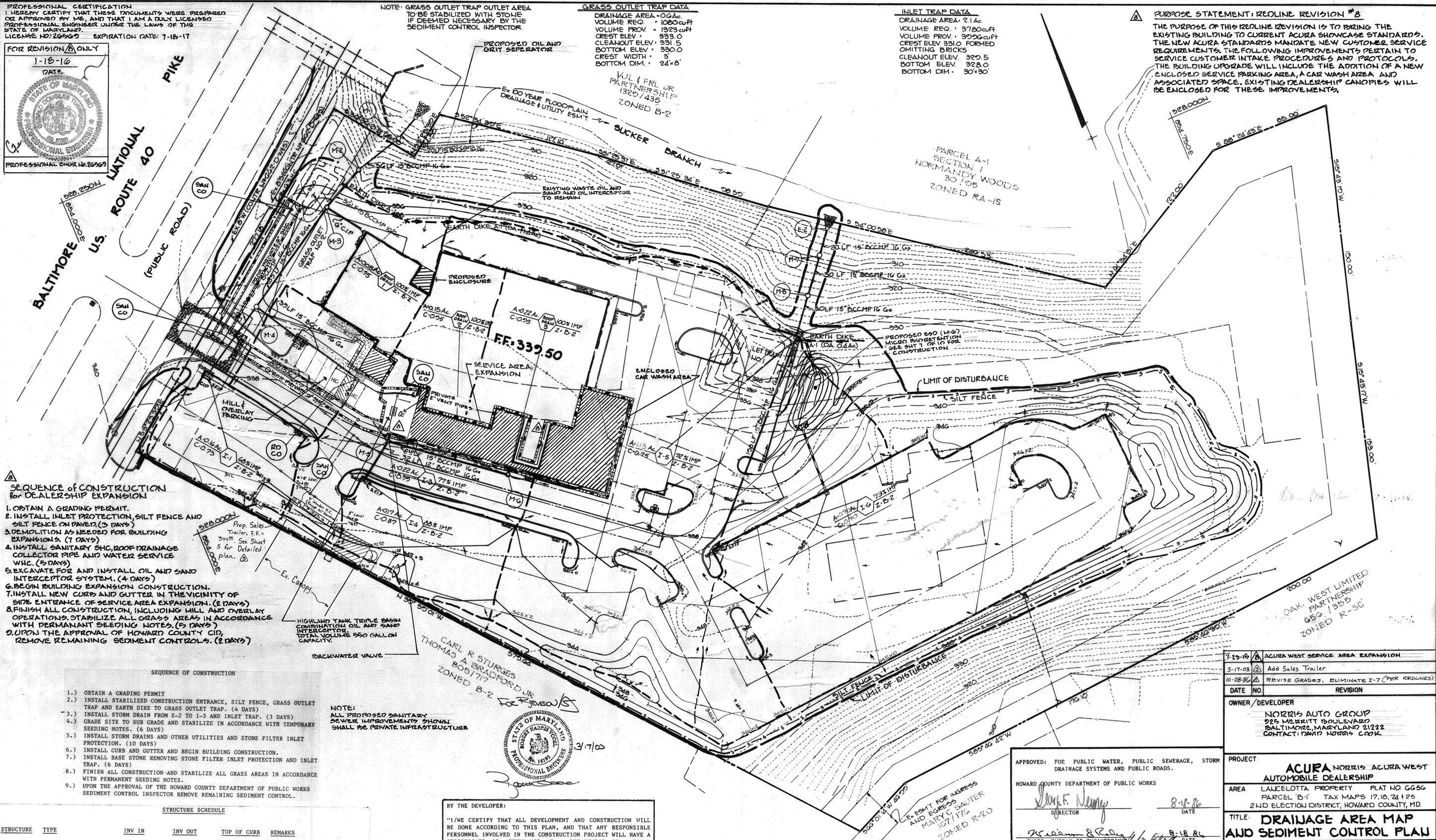


NOTE: GRASS OUTLET TRAP OUTLET AREA TO BE STABILIZED WITH STONE IF DEEMED NECESSARY BY THE SEDIMENT CONTROL INSPECTOR

GRASS OUTLET TRAP DATA
DRAINAGE AREA: 0.6 AC
VOLUME REQ.: 1080 cu ft
VOLUME PROV.: 1823 cu ft
CREST ELEV.: 333.0
CLEANOUT ELEV.: 331.5
BOTTOM ELEV.: 330.0
CREST WIDTH: 3'
BOTTOM DIM.: 24" x 8"

INLET TRAP DATA
DRAINAGE AREA: 2.1 AC
VOLUME REQ.: 3780 cu ft
VOLUME PROV.: 3906 cu ft
CREST ELEV.: 331.0 FORMED
OMITTING BRICKS
CLEANOUT ELEV.: 328.5
BOTTOM ELEV.: 328.0
BOTTOM DIM.: 30" x 30"

PURPOSE STATEMENT: REDLINE REVISION #8
THE PURPOSE OF THIS REDLINE REVISION IS TO BRING THE EXISTING BUILDING TO CURRENT ACURA SHOWCASE STANDARDS. THE NEW ACURA STANDARDS MANDATE NEW CUSTOMER SERVICE REQUIREMENTS. THE FOLLOWING IMPROVEMENTS PERTAIN TO SERVICE CUSTOMER INTAKE PROCEDURES AND PROTOCOLS. THE BUILDING UPGRADE WILL INCLUDE THE ADDITION OF A NEW ENCLOSED SERVICE PARKING AREA, A CAR WASH AREA AND ASSOCIATED SPACE. EXISTING DEALERSHIP CANOPIES WILL BE ENCLOSED FOR THESE IMPROVEMENTS.



- SEQUENCE OF CONSTRUCTION FOR DEALERSHIP EXPANSION**
- OBTAIN A GRADING PERMIT.
 - INSTALL INLET PROTECTION, SILT FENCE AND SILT FENCE ON PAVED (3 DAYS)
 - DEMOLITION AS NEEDED FOR BUILDING EXPANSIONS (7 DAYS)
 - INSTALL SANITARY SHC, ROOF DRAINAGE COLLECTOR PIPE AND WATER SERVICE W.H.C. (5 DAYS)
 - EXCAVATE FOR AND INSTALL OIL AND SAND INTERCEPTOR SYSTEM. (4 DAYS)
 - BEGIN BUILDING EXPANSION CONSTRUCTION.
 - INSTALL NEW CURB AND GUTTER IN THE VICINITY OF SIDE ENTRANCE OF SERVICE AREA EXPANSION. (2 DAYS)
 - FINISH ALL CONSTRUCTION, INCLUDING MILL AND OVERLAY OPERATIONS, STABILIZE ALL GRASS AREAS IN ACCORDANCE WITH PERMANENT SEEDING NOTES. (15 DAYS)
 - UPON THE APPROVAL OF HOWARD COUNTY CID, REMOVE REMAINING SEDIMENT CONTROLS. (2 DAYS)

- SEQUENCE OF CONSTRUCTION**
- OBTAIN A GRADING PERMIT
 - INSTALL STABILIZED CONSTRUCTION ENTRANCE, SILT FENCE, GRASS OUTLET TRAP AND EARTH DIKE TO GRASS OUTLET TRAP. (4 DAYS)
 - INSTALL STORM DRAIN FROM E-2 TO 1-5 AND INLET TRAP. (3 DAYS)
 - GRADE SITE TO SUB GRADE AND STABILIZE IN ACCORDANCE WITH TEMPORARY SEEDING NOTES. (6 DAYS)
 - INSTALL STORM DRAINS AND OTHER UTILITIES AND STONE FILTER INLET PROTECTION. (10 DAYS)
 - INSTALL CURB AND GUTTER AND BEGIN BUILDING CONSTRUCTION.
 - INSTALL BASE STONE REMOVING STONE FILTER INLET PROTECTION AND INLET TRAP. (6 DAYS)
 - FINISH ALL CONSTRUCTION AND STABILIZE ALL GRASS AREAS IN ACCORDANCE WITH PERMANENT SEEDING NOTES.
 - UPON THE APPROVAL OF THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS SEDIMENT CONTROL INSPECTOR REMOVE REMAINING SEDIMENT CONTROL.

STRUCTURE SCHEDULE

STRUCTURE	TYPE	INV IN	INV OUT	TOP OF CURB	REMARKS
I-1	18" comb	333.93	333.93	338.7	Ho. Co. ST'D SD 4.32
I-2	18" comb	331.49	331.29	337.6	Ho. Co. ST'D SD 4.32
I-3	18" comb	333.51	333.21	388.2	Ho. Co. ST'D SD 4.32
I-4	18" comb	336.04	336.04	340.8	Ho. Co. ST'D SD 4.32
I-5	18" comb	323.29	322.80	332.4	Ho. Co. ST'D SD 4.32
I-6	18" comb	334.23	334.03	340.3	Ho. Co. ST'D SD 4.32
I-7	18" comb	338.50	338.50	343.0	Ho. Co. ST'D SD 4.32
M-1	4'-0" dia manhole	307.90	306.90	*311.7	Ho. Co. ST'D G 5.12
M-2	4'-0" dia manhole	319.74	318.74	*330.2	Ho. Co. ST'D G 5.12
M-3	4'-0" dia manhole	327.64	327.44	*338.4	Ho. Co. ST'D G 5.12
M-4	4'-0" dia manhole	12" D 331.15 15" D 330.90	330.90	*337.9	Ho. Co. ST'D G 5.12
M-5	4'-0" dia manhole	12" D 334.82 15" D 334.57	334.57	*338.0	Ho. Co. ST'D G 5.12
M-6	4'-0" dia manhole	335.48	335.28	*338.9	Ho. Co. ST'D G 5.12
M-7	4'-0" dia manhole	303.80	302.80	*309.0	Ho. Co. ST'D G 5.12
M-8	4'-0" dia manhole	313.80	312.80	*330.2	Ho. Co. ST'D G 5.12
E-1	15" metal end section	305.94	305.94	---	Ho. Co. ST'D SD 5.61
E-2	15" metal end section	301.80	301.80	---	Ho. Co. ST'D SD 5.61

* ELEVATION AT RIM

NOTE: ALL PROPOSED SANITARY SEWER IMPROVEMENTS SHOWN SHALL BE PRIVATE INFRASTRUCTURE



BY THE DEVELOPER:
"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT."
David M. ... DEVELOPER DATE 7/23/86

BY THE ENGINEER:
"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."
Arthur E. Muegge ENGINEER DATE 7-25-86

REVIEWED FOR: Howard NAME S.C.D.
AND MEETS TECHNICAL REQUIREMENTS
James M. Welms U.S. SOIL CONSERVATION SERVICE DATE 8/14/86

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
L. ... HOWARD S.C.D. DATE 8-14-86

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.
John ... COUNTY HEALTH OFFICER DATE 8-20-86

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING.
... PLANNING DIRECTOR DATE 8-21-86

... CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION DATE 8-21-86

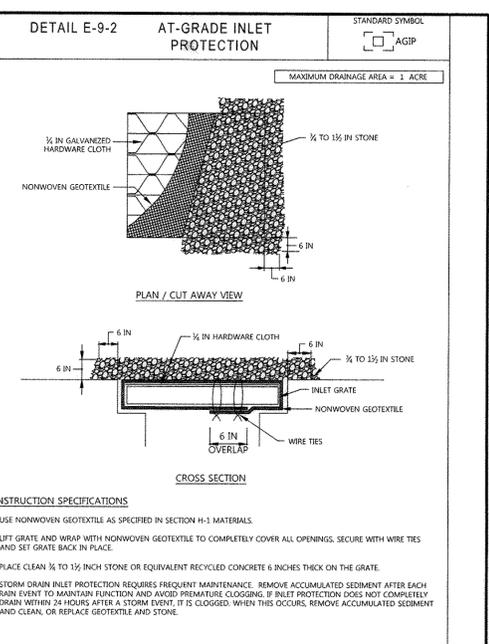
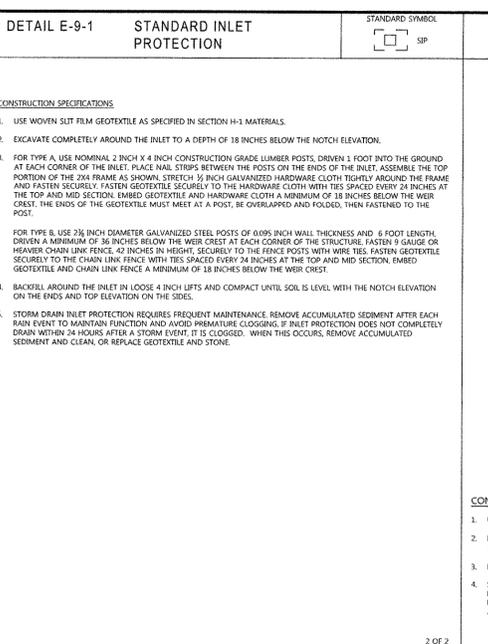
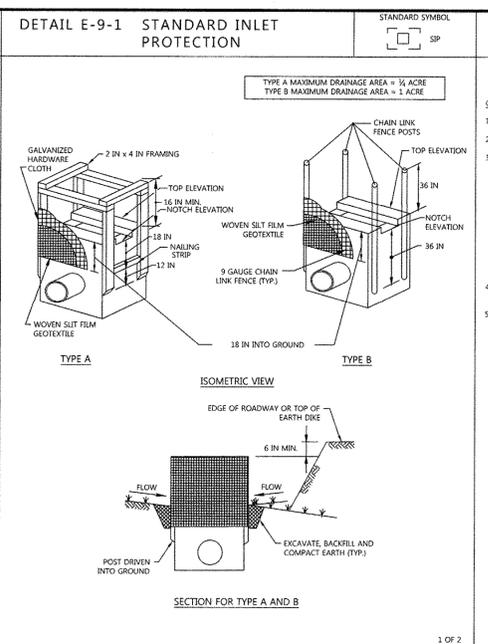
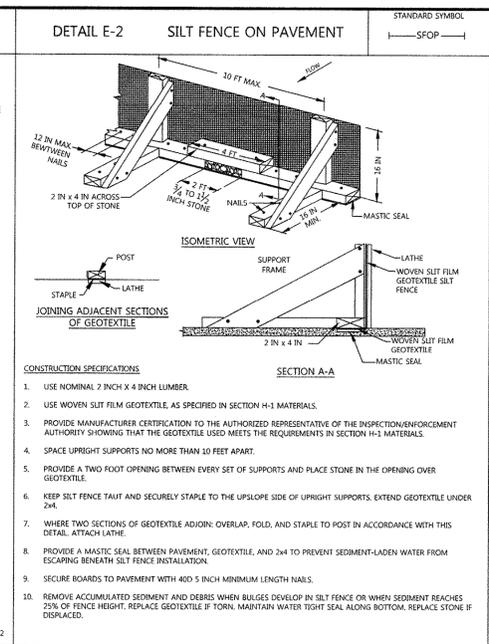
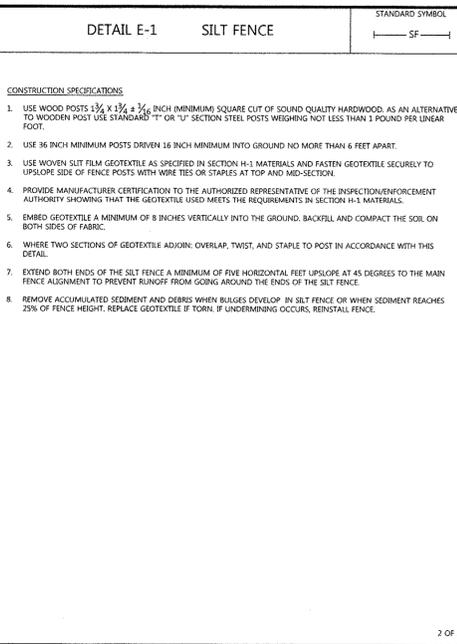
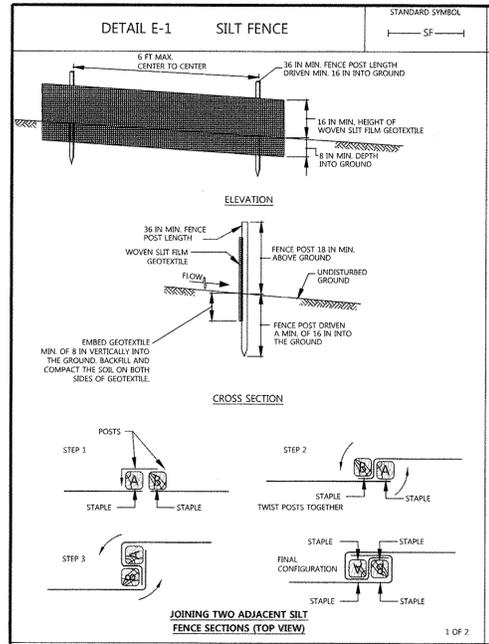
APPROVED: DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION, HOWARD COUNTY, MARYLAND
DATE: 6-20-86

7-29-15	ACURA WEST SERVICE AREA EXPANSION
3-17-03	Add Sales Trailer
10-28-86	REVISE GRADES, ELIMINATE I-7 (PER REDLINES)
DATE	NO REVISION
OWNER/DEVELOPER	
NORRIS AUTO GROUP 925 MERRITT BOULEVARD BALTIMORE, MARYLAND 21222 CONTACT: DAVID NORRIS COOK	
PROJECT	
ACURA NORRIS ACURA WEST AUTOMOBILE DEALERSHIP	
AREA	
LAUCELOTTA PROPERTY PLAT NO GG56 PARCEL 'D-1' TAX MAPS 17,18,24,25 2ND ELECTION DISTRICT, HOWARD COUNTY, MD.	
TITLE: DRAINAGE AREA MAP AND SEDIMENT CONTROL PLAN	

THE RIEMER GROUP, INC.
The Riemer Group, Inc. A Land Planning, Design & Civil Engineering Firm
3105 Health Park Drive, Ellicott City, Maryland 21043 (301) 461-2600

7-25-86 DATE

DESIGNED BY: D.A.M.
DRAWN BY: F.D.M.
PROJECT NO: 23900
DATE: 2-20-86
SCALE: 1" = 30'
DRAWING NO. 4 OF 11



MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE 2011

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL
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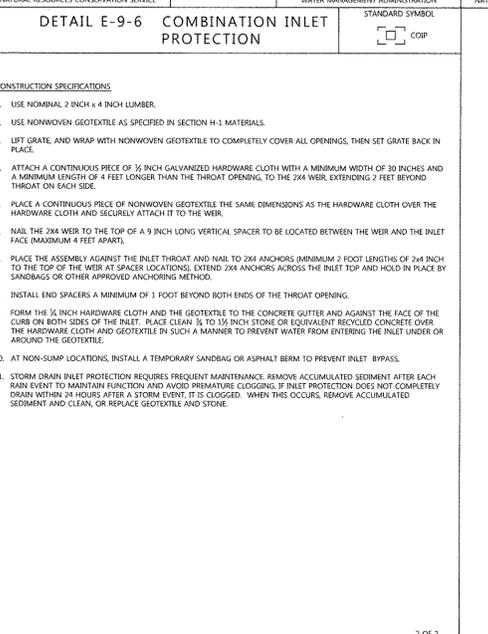
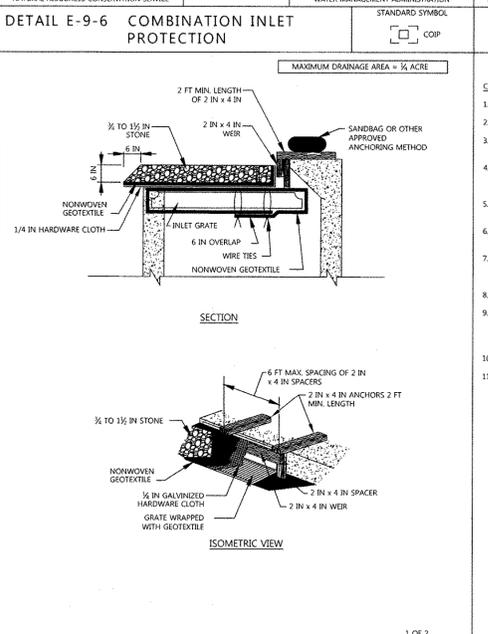
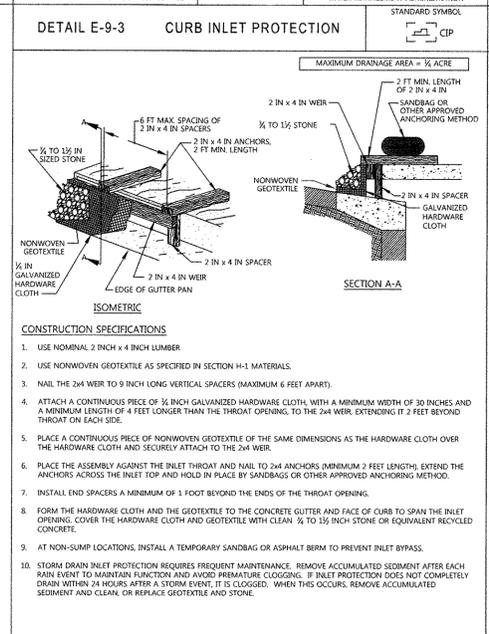
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE 2011

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE 2011

HOWARD COUNTY SOIL CONSERVATION DISTRICT STANDARD SEDIMENT CONTROL NOTES

- A PRE-CONSTRUCTION MEETING MUST OCCUR WITH THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS, CONSTRUCTION INSPECTION DIVISION (CID), 410-313-1855 AFTER THE FUTURE LOT AND PROTECTED AREAS ARE MARKED CLEARLY IN THE FIELD. A MINIMUM OF 48 HOUR NOTICE TO CID MUST BE GIVEN AT THE FOLLOWING STAGES:
 - PRIOR TO THE START OF EARTH DISTURBANCE.
 - UPON COMPLETION OF THE INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING.
 - PRIOR TO THE START OF ANOTHER PHASE OF CONSTRUCTION OR OPENING OF ANOTHER GRADING UNIT.
 - PRIOR TO THE REMOVAL OR MODIFICATION OF SEDIMENT CONTROL PRACTICES.
- OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE. OTHER RELATED STATE AND FEDERAL PERMITS SHALL BE REFERENCED, TO ENSURE COORDINATION AND TO AVOID CONFLICTS WITH THIS PLAN.
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, AND REVISIONS THERE TO.
- FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION IS REQUIRED WITHIN THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER CONTROLS, DICES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES GREATER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1); AND SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISTURBED AREAS ON THE PROJECT SITE EXCEPT FOR THOSE AREAS UNDER ACTIVE GRADING.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR TOPSOIL (SEC. B-4-2), PERMANENT SEEDING (SEC. B-4-5), TEMPORARY SEEDING (SEC. B-4-4) AND MULCHING (SEC. B-4-3). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE APPLIED BETWEEN FALL AND SPRING SEEDING DATES IF THE GROUND IS FROZEN. INCREMENTAL STABILIZATION (SEC. B-4-1) SPECIFICATIONS SHALL BE ENFORCED IN AREAS WITH >15 FT. OF CUT AND/OR FILL STOCKPILES (SEC. B-4-8) IN EXCESS OF 20 FT. MUST BE BENCHED WITH STABLE OUTLET. ALL CONCENTRATED FLOW, STEEP SLOPE, AND HIGHLY ERODIBLE AREAS SHALL RECEIVE SOIL STABILIZATION MATTING (SEC. B-4-6).
- 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 CID.

TOTAL AREA OF SITE	6.29 ACRES
AREA TO BE ROOFED OR PAVED	0.32 ACRES
AREA TO BE VEGETATIVELY STABILIZED	0.12 ACRES
UTILITY AREA PAVEMENT REPLACEMENT	0.11 ACRES
TOTAL CUT	173.64 CU. YDS.
TOTAL FILL	13.95 CU. YDS.
OFFSITE WASTE/BORROW ARE LOCATION	SITE WITH AN OPEN GRADING PERMIT
- ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED, IF DEEMED NECESSARY BY THE CID. THE SITE AND ALL CONTROLS SHALL BE INSPECTED BY THE CONTRACTOR WEEKLY AND THE NEXT DAY AFTER EACH RAIN EVENT. A WRITTEN REPORT BY THE CONTRACTOR, MADE AVAILABLE UPON REQUEST, IS PART OF EVERY INSPECTION AND SHOULD INCLUDE:
 - INSPECTION DATE
 - INSPECTION TYPE (ROUTINE, PRE-STORM EVENT, DURING RAIN EVENT)
 - NAME AND TITLE OF INSPECTOR
 - WEATHER INFORMATION (CURRENT CONDITIONS AS WELL AS TIME AND AMOUNT OF LAST RECORDED PRECIPITATION)
 - BRIEF DESCRIPTION OF PROJECT'S STATUS (E.G., PERCENT COMPLETE) AND/OR CURRENT ACTIVITIES
 - EVIDENCE OF SEDIMENT DISCHARGES
 - IDENTIFICATION OF SEDIMENT CONTROLS THAT REQUIRE MAINTENANCE
 - IDENTIFICATION OF MISSING OR IMPROPERLY INSTALLED SEDIMENT CONTROLS
 - COMPLIANCE STATUS REGARDING THE SEQUENCE OF CONSTRUCTION AND STABILIZATION REQUIREMENTS
 - PHOTOGRAPHS
 - MONITORING/SAMPLING
 - MAINTENANCE AND/OR CORRECTIVE ACTION PERFORMED
 - OTHER INSPECTION ITEMS AS REQUIRED BY THE GENERAL PERMIT FOR STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITIES (NPDES, MDE).
- TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH CAN AND SHALL BE BACK-FILLED AND STABILIZED BY THE END OF EACH WORKDAY, WHICHEVER IS SHORTER.
- ANY MAJOR CHANGES OR REVISIONS TO THE PLAN OR SEQUENCE OF CONSTRUCTION MUST BE REVIEWED AND APPROVED BY THE HCSD PRIOR TO PROCEEDING WITH CONSTRUCTION. MINOR REVISIONS MAY BE ALLOWED BY THE CID PER THE LIST OF HCSD APPROVED FIELD CHANGES.
- DISTURBANCE SHALL NOT OCCUR OUTSIDE THE LOD. A PROJECT IS TO BE SEQUENCED SO THAT GRADING ACTIVITIES BEGIN ON ONE GRADING UNIT (MAXIMUM ACREAGE UNIT) PER GRADING UNIT AT A TIME. WORK MAY PROCEED TO A SUBSEQUENT GRADING UNIT WHEN AT LEAST 50 PERCENT OF THE DISTURBED AREA IN THE PRECEDING GRADING UNIT HAS BEEN STABILIZED AND APPROVED BY THE CID, UNLESS OTHERWISE SPECIFIED AND APPROVED BY THE CID, NO MORE THAN 30 ACRES CUMULATIVELY MAY BE DISTURBED AT A GIVEN TIME.
- WASH WATER FROM ANY EQUIPMENT, VEHICLES, WHEELS, PAVEMENT, AND OTHER SOURCES MUST BE TREATED IN A SEDIMENT BASIN OR OTHER APPROVED WASHOUT STRUCTURE.
- TOPSOIL SHALL BE STOCKPILED AND PRESERVED ON-SITE FOR REDISTRIBUTION ONTO FINAL GRADE.
 - USE I AND II MARCH 1 - JUNE 15
 - USE III AND IIII OCTOBER 1 - APRIL 30
 - USE IV MARCH 1 - MAY 31
- ALL SILT FENCE AND SUPER SILT FENCE SHALL BE PLACED ON-THE-CONTOUR, AND BE IMBRICATED AT 25 FT. MINIMUM INTERVALS, WITH LOWER ENDS CURLED UPHILL BY 2 FT. IN ELEVATION.
- STREAM CHANNELS MUST NOT BE DISTURBED DURING THE FOLLOWING RESTRICTED TIME PERIODS (INCLUSIVE):
 - USE I AND II MARCH 1 - JUNE 15
 - USE III AND IIII OCTOBER 1 - APRIL 30
 - USE IV MARCH 1 - MAY 31
- A COPY OF THIS PLAN, THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, AND ASSOCIATED PERMITS SHALL BE ON-SITE AND AVAILABLE WHEN THE SITE IS ACTIVE.



MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE 2011

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL
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MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE 2011

APPROVED: DEPARTMENT OF PLANNING AND ZONING
DATE: 2-26-16
CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE: 3-01-16
CHIEF, DIVISION OF LAND DEVELOPMENT
DATE: 3-2-16
DIRECTOR

FOR REVISION ONLY
DATE: 1-19-16

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

APPROVED: DEPARTMENT OF PLANNING AND ZONING
DATE: 2-26-16
CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE: 3-01-16
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DIRECTOR

FOR REVISION ONLY
DATE: 1-19-16

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

NORRIS ACURA WEST
8559 BALTIMORE NATIONAL PIKE
ELICOTT CITY, MD 21043
HOWARD COUNTY, MARYLAND

OWNER / DEVELOPER
NORRIS AUTO GROUP
925 MERRITT BOULEVARD
BALTIMORE, MD 21222
CONTACT: DAVID NORRIS COOK

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 26569, EXPIRATION DATE: 7-18-17.

SEDIMENT AND EROSION CONTROL DETAILS AND NOTES

SUBDIVISION NAME: **LABELLANTA PROPERTY** | SECT./AREA: 199 | LOT/PARCEL #: 199
 PLAT# OR L/V: 6656 | BLOCK#: 1 | ZONE: B-2 | TAX/ZONE MAP: 25 | ELEC. DIST.: 2 | CENSUS TR.: 602900
 WATER CODE: | SEWER CODE: | ADDRESS CHART: | LOT NUMBER: 31 | STREET ADDRESS: 8559 BALTIMORE NATIONAL PIKE
 DES. BY ERS | SCALE: AS SHOWN | PROJ. NO. 15028
 DRN. BY GMO | DATE: 1/15/16
 CHK'D. BY: APPROVED | 4A OF 11

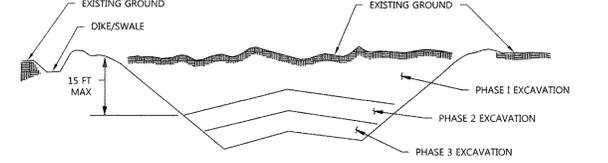
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STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION

(B-4-1) SECTION 1 - INCREMENTAL STABILIZATION

- INCREMENTAL STABILIZATION - CUT SLOPES
 - EXCAVATE AND STABILIZE CUT SLOPES IN INCREMENTS NOT TO EXCEED 15 FEET IN HEIGHT. PREPARE SEEDBED AND APPLY SEED AND MULCH ON ALL CUT SLOPES AS THE WORK PROGRESSES.
 - CONSTRUCTION SEQUENCE EXAMPLE (REFER TO FIGURE B.1):
 - CONSTRUCT AND STABILIZE ALL TEMPORARY SWALES OR DIKES THAT WILL BE USED TO CONVEY RUNOFF AROUND THE EXCAVATION.
 - PERFORM PHASE 1 EXCAVATION, PREPARE SEEDBED, AND STABILIZE.
 - PERFORM PHASE 2 EXCAVATION, PREPARE SEEDBED, AND STABILIZE OVERSEED PHASE 1 AREAS AS NECESSARY.
 - PERFORM FINAL PHASE EXCAVATION, PREPARE SEEDBED, AND STABILIZE OVERSEED PREVIOUSLY SEEDED AREAS AS NECESSARY.

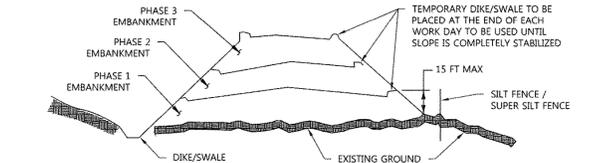
NOTE: ONCE EXCAVATION HAS BEGUN THE OPERATION SHOULD BE CONTINUOUS FROM GRUBBING THROUGH THE COMPLETION OF GRADING AND PLACEMENT OF TOPSOIL (IF REQUIRED) AND PERMANENT SEED AND MULCH. ANY INTERRUPTIONS IN THE OPERATION OR COMPLETING THE OPERATION OUT OF THE SEEDING SEASON WILL NECESSITATE THE APPLICATION OF TEMPORARY STABILIZATION.



B. INCREMENTAL STABILIZATION - FILL SLOPES

- CONSTRUCT AND STABILIZE FILL SLOPES IN INCREMENTS NOT TO EXCEED 15 FEET IN HEIGHT. PREPARE SEEDBED AND APPLY SEED AND MULCH ON ALL SLOPES AS THE WORK PROGRESSES.
- STABILIZE SLOPES IMMEDIATELY WHEN THE VERTICAL HEIGHT OF A LIFT REACHES 15 FEET, OR WHEN THE GRADING OPERATION CEASES AS DESCRIBED IN THE PLANS.
- AT THE END OF EACH DAY, INSTALL TEMPORARY WATER CONVEYANCE PRACTICE(S), AS NECESSARY, TO INTERCEPT SURFACE RUNOFF AND CONVEY IT DOWN THE SLOPE IN A NON-EROSIVE MANNER.
- CONSTRUCTION SEQUENCE EXAMPLE (REFER TO FIGURE B.2):
 - CONSTRUCT AND STABILIZE ALL TEMPORARY SWALES OR DIKES THAT WILL BE USED TO DIVERT RUNOFF AROUND THE FILL. CONSTRUCT SILT FENCE ON LOW SIDE OF FILL UNLESS OTHER METHODS SHOWN ON THE PLANS ADDRESS THIS AREA.
 - AT THE END OF EACH DAY, INSTALL TEMPORARY WATER CONVEYANCE PRACTICE(S), AS NECESSARY, TO INTERCEPT SURFACE RUNOFF AND CONVEY IT DOWN THE SLOPE IN A NON-EROSIVE MANNER.
 - PLACE PHASE 1 FILL, PREPARE SEEDBED, AND STABILIZE.
 - PLACE PHASE 2 FILL, PREPARE SEEDBED, AND STABILIZE.
 - PLACE FINAL PHASE FILL, PREPARE SEEDBED, AND STABILIZE OVERSEED PREVIOUSLY SEEDED AREAS AS NECESSARY.

NOTE: ONCE THE PLACEMENT OF FILL HAS BEGUN THE OPERATION SHOULD BE CONTINUOUS FROM GRUBBING THROUGH THE COMPLETION OF GRADING AND PLACEMENT OF TOPSOIL (IF REQUIRED) AND PERMANENT SEED AND MULCH. ANY INTERRUPTIONS IN THE OPERATION OR COMPLETING THE OPERATION OUT OF THE SEEDING SEASON WILL NECESSITATE THE APPLICATION OF TEMPORARY STABILIZATION.



(B-4-2) SECTION 2 - SOIL PREPARATION, TOPSOILING, AND SOIL AMENDMENTS

- SOIL PREPARATION
 - SEEDBED PREPARATION CONSISTS OF LOOSENING SOIL TO A DEPTH OF 3 TO 5 INCHES BY MEANS OF SUITABLE AGRICULTURAL OR CONSTRUCTION EQUIPMENT, SUCH AS DISC HARROWS OR CHISEL PLOWS OR RIPPER MOUNTED ON CONSTRUCTION EQUIPMENT. AFTER THE SOIL IS LOOSENED, IT MUST NOT BE ROLLED OR DRAGGED SMOOTH BUT LEFT IN THE ROUGHENED CONDITION. SLOPES 3:1 OR FLATTER ARE TO BE TRACKED WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE.
 - APPLY FERTILIZER AND LIME AS PRESCRIBED ON THE PLANS.
 - INCORPORATE LIME AND FERTILIZER INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS.
- PERMANENT STABILIZATION
 - A SOIL TEST IS REQUIRED FOR ANY EARTH DISTURBANCE OF 5 ACRES OR MORE. THE MINIMUM SOIL CONDITIONS REQUIRED FOR PERMANENT VEGETATIVE ESTABLISHMENT ARE:
 - SOIL PH BETWEEN 6.0 AND 7.0.
 - SOLUBLE SALTS LESS THAN 500 PARTS PER MILLION (PPM).
 - SOIL CONTAINS LESS THAN 40 PERCENT CLAY BUT ENOUGH FINE GRAINED MATERIAL (GREATER THAN 30 PERCENT SILT PLUS CLAY) TO PROVIDE THE CAPACITY TO HOLD A MODERATE AMOUNT OF MOISTURE. AN EXCEPTION: IF LOVEGRASS WILL BE PLANTED, THEN A SANDY SOIL (LESS THAN 30 PERCENT SILT PLUS CLAY) WOULD BE ACCEPTABLE.
 - SOIL CONTAINS 1.5 PERCENT MINIMUM ORGANIC MATTER BY WEIGHT.
 - SOIL CONTAINS SUFFICIENT PORE SPACE TO PERMIT ADEQUATE ROOT PENETRATION.
 - APPLICATION OF AMENDMENTS OR TOPSOIL IS REQUIRED IF ON-SITE SOILS DO NOT MEET THE ABOVE CONDITIONS.
 - GRADED AREAS MUST BE MAINTAINED IN A TRUE AND EVEN GRADE AS SPECIFIED ON THE APPROVED PLAN, THEN SCARIFIED OR OTHERWISE LOOSENED TO A DEPTH OF 3 TO 5 INCHES.
 - APPLY SOIL AMENDMENTS AS SPECIFIED ON THE APPROVED PLAN OR AS INDICATED BY THE RESULTS OF A SOIL TEST.
 - MIX SOIL AMENDMENTS INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS. RAKE LAWN AREAS TO SMOOTH THE SURFACE. REMOVE LARGE OBJECTS LIKE STONES AND BRANCHES, AND READY THE AREA FOR SEED APPLICATION. LOOSEN SURFACE SOIL BY DRAGGING WITH A HEAVY CHAIN OR OTHER EQUIPMENT TO ROUGHEN THE SURFACE WHERE SITE CONDITIONS WILL NOT PERMIT NORMAL SEEDBED PREPARATION. TRACK SLOPES 3:1 OR FLATTER WITH TRACKED EQUIPMENT LEAVING THE SOIL IN AN IRREGULAR CONDITION WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE. LEAVE THE TOP 1 TO 3 INCHES OF SOIL LOOSE AND FRIABLE. SEEDBED LOOSENING MAY BE UNNECESSARY ON NEWLY DISTURBED AREAS.
- TOPSOILING
 - TOPSOIL IS PLACED OVER PREPARED SUBSOIL PRIOR TO ESTABLISHMENT OF PERMANENT VEGETATION. THE PURPOSE IS TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH. SOILS OF CONCERN HAVE LOW MOISTURE CONTENT, LOW NUTRIENT LEVELS, LOW PH, MATERIALS TOXIC TO PLANTS, AND/OR UNACCEPTABLE SOIL GRADATION.
 - TOPSOIL SALVAGED FROM AN EXISTING SITE MAY BE USED PROVIDED 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-NRCS.
 - TOPSOILING IS LIMITED TO AREAS HAVING 2:1 OR FLATTER SLOPES WHERE:
 - THE TEXTURE OF THE EXPOSED SUBSOIL/PARENT MATERIAL IS NOT ADEQUATE TO PRODUCE VEGETATIVE GROWTH.
 - THE SOIL MATERIAL IS SO SHALLOW THAT THE ROOTING ZONE IS NOT DEEP ENOUGH TO SUPPORT PLANTS OR FURNISH CONTINUING SUPPLIES OF MOISTURE AND PLANT NUTRIENTS.
 - THE ORIGINAL SOIL TO BE VEGETATED CONTAINS MATERIAL TOXIC TO PLANT GROWTH.
 - THE SOIL IS SO ACIDIC THAT TREATMENT WITH LIME/STONE IS NOT FEASIBLE.
 - AREAS HAVING SLOPES STEEPER THAN 2:1 REQUIRE SPECIAL CONSIDERATION AND DESIGN.
 - TOPSOIL SPECIFICATIONS: SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING CRITERIA:
 - TOPSOIL MUST BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, OR LOAMY SAND. OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY. TOPSOIL MUST NOT BE A MIXTURE OF CONTRASTING TEXTURED SUBSOILS AND MUST CONTAIN LESS THAN 5 PERCENT BY VOLUME OF CHISELS, STONES, SLAG, COARSE FRAGMENTS, GRAVEL, STICKS, ROOTS, TRASH, OR OTHER MATERIALS LARGER THAN 1 1/2 INCHES IN DIAMETER.
 - TOPSOIL MUST BE FREE OF NOXIOUS PLANTS OR PLANT PARTS SUCH AS BERMUDA GRASS, QUACK GRASS, JOHNSON GRASS, NUT SEDGE, POISON IVY, THISTLE, OR OTHERS AS SPECIFIED.
 - 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.

- APPLICATION
 - EROSION AND SEDIMENT CONTROL PRACTICES MUST BE MAINTAINED WHEN APPLYING TOPSOIL.
 - UNIFORMLY DISTRIBUTE TOPSOIL IN A 5 TO 8 INCH LAYER AND LIGHTLY COMPACT TO A MINIMUM THICKNESS OF 4 INCHES. SPREADING IS TO BE PERFORMED IN SUCH A MANNER THAT SCODDING OR SCODDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL SOIL PREPARATION AND TILLAGE. ANY IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOILING OR OTHER OPERATIONS MUST BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS.
 - TOPSOIL MUST NOT BE PLACED IF THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MOIDY CONDITION. WHEN THE SUBSOIL IS EXCESSIVELY WET OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDBED PREPARATION.
 - SOIL AMENDMENTS (FERTILIZER AND LIME SPECIFICATIONS)
 - SOIL TESTS MUST BE PERFORMED TO DETERMINE THE EXACT RATIOS AND APPLICATION RATES FOR BOTH LIME AND FERTILIZER ON SITES HAVING DISTURBED AREAS OF 5 ACRES OR MORE. SOIL ANALYSIS MAY BE PERFORMED BY A RECOGNIZED PRIVATE OR COMMERCIAL LABORATORY. SOIL SAMPLES TAKEN FOR ENGINEERING PURPOSES MAY ALSO BE USED FOR CHEMICAL ANALYSES.
 - FERTILIZERS MUST BE UNIFORM IN COMPOSITION, FREE FLOWING AND SUITABLE FOR ACCURATE APPLICATION BY APPROPRIATE EQUIPMENT. MANURE MAY BE SUBSTITUTED FOR FERTILIZER WITH PRIOR APPROVAL FROM THE APPROPRIATE APPROVAL AUTHORITY. FERTILIZERS MUST ALL BE DELIVERED TO THE SITE FULLY LABELED ACCORDING TO THE APPLICABLE LAWS AND MUST BEAR THE NAME, TRADE NAME OR TRADEMARK AND WARRANTY OF THE PRODUCER.
 - LIME MATERIALS MUST BE GROUND LIMESTONE (HYDRATED OR BURNT LIME MAY BE SUBSTITUTED EXCEPT WHEN HYDROSEEDING) WHICH CONTAINS AT LEAST 50 PERCENT TOTAL OXIDES (CALCIUM OXIDE PLUS MAGNESIUM OXIDE). LIMESTONE MUST BE GROUND TO SUCH FINENESS THAT AT LEAST 50 PERCENT WILL PASS THROUGH A #100 MESH SIEVE AND 98 TO 100 PERCENT WILL PASS THROUGH A #20 MESH SIEVE.
 - LIME AND FERTILIZER ARE TO BE EVENLY DISTRIBUTED AND INCORPORATED INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS.
 - WHERE THE SUBSOIL IS EITHER HIGHLY ACIDIC OR COMPOSED OF HEAVY CLAYS, SPREAD GROUND LIMESTONE AT THE RATE OF 4 TO 8 TONS/ACRE 200-400 POUNDS PER 1,000 SQUARE FEET) PRIOR TO THE PLACEMENT OF TOPSOIL.

(B-4-3) SECTION 3 - SEEDING AND MULCHING

- SEEDING
 - SPECIFICATIONS
 - ALL SEED MUST MEET THE REQUIREMENTS OF THE MARYLAND STATE SEED LAW. ALL SEED MUST BE SUBJECT TO RE-TESTING BY A RECOGNIZED SEED LABORATORY. ALL SEED USED MUST HAVE BEEN TESTED WITHIN THE 6 MONTHS IMMEDIATELY PRECEDING THE DATE OF SOWING SUCH MATERIAL ON ANY PROJECT. REFER TO TABLE B.4 REGARDING THE QUALITY OF SEED. SEED TAGS MUST BE AVAILABLE UPON REQUEST TO THE INSPECTOR TO VERIFY TYPE OF SEED AND SEEDING RATE.
 - MULCH ALONE MAY BE APPLIED BETWEEN THE FALL AND SPRING SEEDING DATES ONLY IF THE GROUND IS FROZEN. THE APPROPRIATE SEEDING MIXTURE MUST BE APPLIED WHEN THE GROUND THAWES.
 - INOCULANTS: THE INOCULANT FOR TREATING LEGUME SEED IN THE SEED MIXTURES MUST BE A PURE CULTURE OF NITROGEN FIXING BACTERIA PREPARED SPECIFICALLY FOR THE SPECIES. INOCULANTS MUST NOT BE USED LATER THAN THE DATE INDICATED ON THE CONTAINER. ADD FRESH INOCULANTS AS DIRECTED ON THE PACKAGE. USE FOUR TIMES THE RECOMMENDED RATE WHEN HYDROSEEDING.
 - IT IS VERY IMPORTANT TO KEEP INOCULANTS AS COOL AS POSSIBLE UNTIL USED. TEMPERATURES ABOVE 75 TO 80 DEGREES FAHRENHEIT CAN WEAKEN BACTERIA AND MAKE THE INOCULANT LESS EFFECTIVE.
 - SOD OR SEED MUST NOT BE PLACED ON SOIL WHICH HAS BEEN TREATED WITH SOIL STERILANTS OR CHEMICALS USED FOR WEED CONTROL UNTIL SUFFICIENT TIME HAS ELAPSED (24 DAYS MIN.) TO PERMIT DISSIPATION OF PHYTO-TOXIC MATERIALS.
- APPLICATION
 - DRY SEEDING: THIS INCLUDES USE OF CONVENTIONAL DROP OR BROADCAST SPREADERS.
 - INCORPORATE SEED INTO THE SUBSOIL AT THE RATES PRESCRIBED ON TEMPORARY SEEDING TABLE B.1, PERMANENT SEEDING TABLE B.3, OR SITE-SPECIFIC SEEDING SUMMARIES.
 - APPLY SEED IN TWO DIRECTIONS, PERPENDICULAR TO EACH OTHER. APPLY HALF THE SEEDING RATE IN EACH DIRECTION ROLL THE SEEDED AREA WITH A WEIGHTED ROLLER TO PROVIDE GOOD SEED TO SOIL CONTACT.
 - DRILL OR CULTIPACKER SEEDING: MECHANIZED SEEDERS THAT APPLY AND COVER SEED WITH SOIL.
 - CULTIPACKER SEEDERS ARE REQUIRED TO BURY THE SEED IN SUCH A FASHION AS TO PROVIDE AT LEAST 1/4 INCH OF SOIL COVER. SEEDBED MUST BE FIRM AFTER PLANTING.
 - APPLY SEED IN TWO DIRECTIONS, PERPENDICULAR TO EACH OTHER. APPLY HALF THE SEEDING RATE IN EACH DIRECTION.
 - HYDROSEEDING: APPLY SEED UNIFORMLY WITH HYDROSEEDER (SLURRY INCLUDES SEED AND FERTILIZER).
 - IF FERTILIZER IS BEING APPLIED AT THE TIME OF SEEDING, THE APPLICATION RATES SHOULD NOT EXCEED THE FOLLOWING: NITROGEN, 100 POUNDS PER ACRE TOTAL OF SOLUBLE NITROGEN; P205 (PHOSPHORUS), 200 POUNDS PER ACRE; K2O (POTASSIUM), 200 POUNDS PER ACRE.
 - LIME USE ONLY GROUND AGRICULTURAL LIMESTONE (UP TO 3 TONS PER ACRE MAY BE APPLIED BY HYDROSEEDING). NORMALLY, NOT MORE THAN 2 TONS ARE APPLIED BY HYDROSEEDING AT ANY ONE TIME. DO NOT USE BURNT OR HYDRATED LIME WHEN HYDROSEEDING.
 - MIX SEED AND FERTILIZER ON SITE AND SEED IMMEDIATELY AND WITHOUT INTERRUPTION.
 - WHEN HYDROSEEDING DO NOT INCORPORATE SEED INTO THE SOIL.

NOTE: IT IS VERY IMPORTANT TO KEEP INOCULANTS AS COOL AS POSSIBLE UNTIL USED. TEMPERATURES ABOVE 75 TO 80 DEGREES FAHRENHEIT CAN WEAKEN BACTERIA AND MAKE THE INOCULANT LESS EFFECTIVE.

NOTE: SOD OR SEED MUST NOT BE PLACED ON SOIL WHICH HAS BEEN TREATED WITH SOIL STERILANTS OR CHEMICALS USED FOR WEED CONTROL UNTIL SUFFICIENT TIME HAS ELAPSED (24 DAYS MIN.) TO PERMIT DISSIPATION OF PHYTO-TOXIC MATERIALS.

- MULCHING
 - MULCH MATERIALS (IN ORDER OF PREFERENCE)
 - STRAW CONSISTING OF THOROUGHLY THRESHED WHEAT, RYE, OAT, OR BARLEY AND REASONABLY BRIGHT IN COLOR. STRAW IS TO BE FREE OF NOXIOUS WEED SEEDS AS SPECIFIED IN THE MARYLAND SEED LAW AND NOT MUSTY, MOLLY, CAKED, DECAYED, OR EXCESSIVELY DUSTY. NOTE: USE ONLY STERILE STRAW MULCH IN AREAS WHERE ONE SPECIES OF GRASS IS DESIRED.
 - WOOD CELLULOSE FIBER MULCH (WCFM) CONSISTING OF SPECIALLY PREPARED WOOD CELLULOSE PROCESSED INTO A UNIFORM FIBROUS PHYSICAL STATE.
 - WCFM IS TO BE DYED GREEN OR CONTAIN A GREEN DYE IN THE PACKAGE THAT WILL PROVIDE AN APPROPRIATE COLOR TO FACILITATE VISUAL INSPECTION OF THE UNIFORMITY SPREAD SLURRY.
 - WCFM, INCLUDING DYE, MUST CONTAIN NO GERMINATION OR GROWTH INHIBITING FACTORS.
 - WCFM MATERIALS ARE TO BE MANUFACTURED AND PROCESSED IN SUCH A MANNER THAT THE WOOD CELLULOSE FIBER MULCH WILL REMAIN IN UNIFORM SUSPENSION IN WATER UNDER AGITATION AND WILL BLEND WITH SEED, FERTILIZER AND OTHER ADDITIVES TO FORM A HOMOGENEOUS SLURRY. THE MULCH MATERIAL MUST FORM A BULK-LIKE GROUND COVER ON APPLICATION, HAVING MOISTURE ABSORPTION AND PERCOLATION PROPERTIES AND MUST COVER AND HOLD GRASS SEED IN CONTACT WITH THE SOIL WITHOUT INHIBITING THE GROWTH OF THE GRASS SEEDLINGS.
 - WCFM MATERIAL MUST NOT CONTAIN ELEMENTS OR COMPOUNDS AT CONCENTRATION LEVELS THAT WILL BE PHYTO-TOXIC.
 - WCFM MUST CONFORM TO THE FOLLOWING PHYSICAL REQUIREMENTS: FIBER LENGTH OF APPROXIMATELY 10 MILLIMETERS, DIAMETER APPROXIMATELY 1 MILLIMETER, PH RANGE OF 4.0 TO 8.5, ASH CONTENT OF 1.6 PERCENT MAXIMUM AND WATER HOLDING CAPACITY OF 90 PERCENT MINIMUM.

- ANCHORING
 - PERFORM MULCH ANCHORING IMMEDIATELY FOLLOWING APPLICATION OF MULCH TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS (LISTED BY PREFERENCE), DEPENDING UPON THE SIZE OF THE AREA AND EROSION HAZARD:
 - A MULCH ANCHORING TOOL IS A TRACTOR DRAWN IMPLEMENT DESIGNED TO PUNCH AND ANCHOR MULCH INTO THE SOIL SURFACE A MINIMUM OF 2 INCHES. THIS PRACTICE IS MOST EFFECTIVE ON LARGE AREAS, BUT IS LIMITED TO FLATTER SLOPES WHERE EQUIPMENT CAN OPERATE SAFELY. IF USED ON SLOPING LAND, THIS PRACTICE SHOULD FOLLOW THE CONTOUR.
 - WOOD CELLULOSE FIBER MAY BE USED FOR ANCHORING STRAW. APPLY THE FIBER BINDER AT A NET DRY WEIGHT OF 750 POUNDS PER ACRE. MIX THE WOOD CELLULOSE FIBER WITH WATER AT A MAXIMUM OF 50 POUNDS OF WOOD CELLULOSE FIBER PER 100 GALLONS OF WATER.
 - SYNTHETIC BINDERS SUCH AS ACRYLIC DLR (AGRO-TACK), DCA-70, PETROSET, TERRA TAC II TERRA TACK OR OTHER

APPROVED EQUAL MAY BE USED. FOLLOW APPLICATION RATES AS SPECIFIED BY THE MANUFACTURER. APPLICATION OF LIQUID BINDERS NEEDS TO BE HEAVIER AT THE EDGES WHERE WIND CATCHES MULCH, SUCH AS IN VALLEYS AND ON CRESTS OF BANKS. USE OF ASPHALT BINDERS IS STRICTLY PROHIBITED.

iv. LIGHTWEIGHT PLASTIC NETTING MAY BE STAPLED OVER THE MULCH ACCORDING TO MANUFACTURER SPECIFICATIONS. NETTING IS USUALLY AVAILABLE IN ROLLS 4 TO 15 FEET WIDE AND 300 TO 3000 FEET LONG.

(B-4-4) SECTION 4 - TEMPORARY STABILIZATION

EXPOSED SOILS WHERE GROUND COVER IS NEEDED FOR A PERIOD OF 6 MONTHS OR LESS. FOR LONGER DURATION OF TIME, PERMANENT STABILIZATION PRACTICES ARE REQUIRED.

- SELECT ONE OR MORE OF THE SPECIES OR SEED MIXTURES LISTED IN TABLE B.1 FOR THE APPROPRIATE PLANT HARDINESS ZONE (FROM FIGURE B.3), AND ENTER THEM IN THE TEMPORARY SEEDING SUMMARY BELOW ALONG WITH APPLICATION RATES, SEEDING DATES AND SEEDING METHODS. IF THIS SUMMARY IS NOT PUT ON THE PLAN AND COMPLETED, THEN TABLE B.1 PLUS APPLICATION RATES MUST BE PUT ON THE PLAN.
- FOR SITES HAVING SOIL TESTS PERFORMED, USE AND SHOW THE RECOMMENDED RATES BY THE TESTING AGENCY. SOIL TESTS ARE NOT REQUIRED FOR TEMPORARY SEEDING.
- WHEN STABILIZATION IS REQUIRED OUTSIDE OF A SEEDING SEASON, APPLY SEED AND MULCH OR THE STRAW MULCH ALONE AS PRESCRIBED IN SECTION B.4-3.A.1.B AND MAINTAIN UNTIL THE NEXT SEEDING SEASON.

Season	Seed Mixture (Hardiness Zone 7a)			Fertilizer Rate (10-20-20)	Lime Rate
	Species	Application Rate (Lb./Ac.)	Seeding Dates		
Cool	Annual Ryegrass	40	2/15 - 4/30	436 Lbs./Ac. (10 Lbs./1000 Sq.Ft.)	2 Tons/Ac. (90 Lbs./1000 Sq.Ft.)
	Perennial Ryegrass	40	8/15 - 11/30		
Warm	Foxtail Millet	30	5/1 - 8/14	436 Lbs./Ac. (10 Lbs./1000 Sq.Ft.)	2 Tons/Ac. (90 Lbs./1000 Sq.Ft.)
	Perennial Ryegrass	30	5/1 - 8/14		

SEEDING RATES FOR THE WARM-SEASON GRASSES ARE IN POUNDS OF PURE LIVE SEED (PLS). ACTUAL PLANTING RATES SHALL BE ADJUSTED TO REFLECT PURE SEED GERMINATION AND PURITY, AS TESTED. ADJUSTMENTS ARE USUALLY NOT NEEDED FOR THE COOL-SEASON GRASSES.

SEEDING RATES LISTED ABOVE ARE FOR TEMPORARY SEEDINGS. WHEN PLANTED ALONE - WHEN PLANTED AS A NURSE CROP WITH PERMANENT SEED MIXTURES, USE 1/3 OF THE SEEDING RATE LISTED ABOVE FOR BARLEY, OATS, AND WHEAT. FOR SMALLER-SEEDED GRASSES (ANNUAL RYEGRASS, PEARL MILLET, FOXTAIL MILLET), DO NOT EXCEED MORE THAN 5% (BY WEIGHT) OF THE OVERALL PERMANENT SEEDING MIX. CEREAL RYE - GENERALLY SHOULD NOT BE USED AS A NURSE CROP UNLESS PLANTING WILL OCCUR IN VERY LATE FALL BEYOND THE SEEDING DATES FOR OTHER TEMPORARY SEEDINGS. CEREAL RYE HAS ALLOPATHIC PROPERTIES THAT INHIBIT THE GERMINATION AND GROWTH OF OTHER PLANTS. IF IT MUST BE USED AS A NURSE CROP, SEED AT 1/3 OF THE RATE LISTED ABOVE.

OATS ARE THE RECOMMENDED NURSE CROP FOR WARM-SEASON GRASSES.

FOR SANDY SOILS, PLANT SEEDS AT TWICE THE DEPTH LISTED ABOVE.

THE PLANTING DATES LISTED ARE AVERAGES FOR EACH ZONE AND MAY REQUIRE ADJUSTMENT TO REFLECT LOCAL CONDITIONS, ESPECIALLY NEAR THE BOUNDARIES OF THE ZONE.

(B-4-5) SECTION 5 - PERMANENT STABILIZATION

EXPOSED SOILS WHERE GROUND COVER IS NEEDED FOR 6 MONTHS OR MORE.

- SEED MIXTURES
 - GENERAL USE
 - SELECT ONE OR MORE OF THE SPECIES OR MIXTURES LISTED IN TABLE B.3 FOR THE APPROPRIATE PLANT HARDINESS ZONE (FROM FIGURE B.3) AND BASED ON THE SITE CONDITION OR PURPOSE FOUND ON TABLE B.2. ENTER SELECTED MIXTURES, APPLICATION RATES, AND SEEDING DATES IN THE PERMANENT SEEDING SUMMARY. THE SUMMARY IS TO BE PLACED ON THE PLAN.
 - ADDITIONAL PLANTING SPECIFICATIONS FOR EXCEPTIONAL SITES SUCH AS SHORELINES, STREAM BANKS, OR DUNES OR FOR SPECIAL PURPOSES SUCH AS WILDLIFE OR AESTHETIC TREATMENT MAY BE FOUND IN USDA-NRCS TECHNICAL FIELD OFFICE GUIDE, SECTION 34.2 - CRITICAL AREA PLANTING.
 - FOR SITES HAVING DISTURBED AREA OVER 5 ACRES, USE AND SHOW THE RATES RECOMMENDED BY THE SOIL TESTING AGENCY.
 - FOR AREAS RECEIVING LOW MAINTENANCE, APPLY UREA FORM FERTILIZER (46-0-0) AT 1 1/2 POUNDS PER 1000 SQUARE FEET (150 POUNDS PER ACRE) AT THE TIME OF SEEDING IN ADDITION TO THE SOIL AMENDMENTS SHOWN IN THE PERMANENT SEEDING SUMMARY.
- TURFGRASS MIXTURES
 - AREAS WHERE TURFGRASS MAY BE DESIRED INCLUDE LAWNS, PARKS, PLAYGROUNDS, AND COMMERCIAL SITES WHICH WILL RECEIVE A MEDIUM TO HIGH LEVEL OF MAINTENANCE.
 - SELECT ONE OR MORE OF THE SPECIES OR MIXTURES LISTED BELOW BASED ON THE SITE CONDITIONS OR PURPOSE. ENTER SELECTED MIXTURES, APPLICATION RATES, AND SEEDING DATES IN THE PERMANENT SEEDING SUMMARY. THE SUMMARY IS TO BE PLACED ON THE PLAN.
 - KENTUCKY BLUEGRASS: FULL SUN MIXTURE. FOR USE IN AREAS THAT RECEIVE INTENSIVE MAINTENANCE. IRRIGATION REQUIRED IN THE AREAS OF CENTRAL MARYLAND AND EASTERN SHORE. RECOMMENDED CERTIFIED KENTUCKY BLUEGRASS CULTIVARS SEEDING RATE: 1.5 TO 2.0 POUNDS PER 1000 SQUARE FEET. CHOOSE A MINIMUM OF THREE KENTUCKY BLUEGRASS CULTIVARS WITH EACH RANGING FROM 10 TO 35 PERCENT OF THE TOTAL MIXTURE BY WEIGHT.
 - KENTUCKY BLUEGRASS/PERENNIAL RYE: FULL SUN MIXTURE. FOR USE IN FULL SUN AREAS WHERE RAPID ESTABLISHMENT IS NECESSARY AND WHEN TURF WILL RECEIVE MEDIUM TO INTENSIVE MAINTENANCE. CERTIFIED PERENNIAL RYEGRASS CULTIVARS/CERTIFIED KENTUCKY BLUEGRASS SEEDING RATE: 2 POUNDS MIXTURE PER 1000 SQUARE FEET. CHOOSE A MINIMUM OF THREE KENTUCKY BLUEGRASS CULTIVARS WITH EACH RANGING FROM 10 TO 35 PERCENT OF THE TOTAL MIXTURE BY WEIGHT.
 - TALL FESCUE/KENTUCKY BLUEGRASS: FULL SUN MIXTURE. FOR USE IN DROUGHT PRONE AREAS AND/OR FOR AREAS RECEIVING LOW TO MEDIUM MANAGEMENT IN FULL SUN TO MEDIUM SHADE. RECOMMENDED MIXTURE INCLUDES: CERTIFIED TALL FESCUE CULTIVARS 95 TO 100 PERCENT, CERTIFIED KENTUCKY BLUEGRASS CULTIVARS 0 TO 5 PERCENT. SEEDING RATE: 5 TO 8 POUNDS PER 1000 SQUARE FEET. ONE OR MORE CULTIVARS MAY BE BLENDED.
 - KENTUCKY BLUEGRASS/FINE FESCUE: SHADE MIXTURE. FOR USE IN AREAS WITH SHADE IN BLUEGRASS LAWNS. FOR ESTABLISHMENT IN HIGH QUALITY, INTENSIVELY MANAGED TURF AREAS. MIXTURE INCLUDES: CERTIFIED KENTUCKY BLUEGRASS CULTIVARS 30 TO 40 PERCENT AND CERTIFIED FINE FESCUE AND 60 TO 70 PERCENT. SEEDING RATE: 1 1/2 TO 3 POUNDS PER 1000 SQUARE FEET.

NOTE: SELECT TURFGRASS VARIETIES FROM THOSE LISTED IN THE MOST CURRENT UNIVERSITY OF MARYLAND PUBLICATION, AGRONOMY MEMO #77, TURFGRASS CULTIVAR RECOMMENDATIONS FOR MARYLAND. CHOOSE CERTIFIED MATERIAL. CERTIFIED MATERIAL IS THE BEST GUARANTEE OF CULTIVAR PURITY. THE CERTIFICATION PROGRAM OF THE MARYLAND DEPARTMENT OF AGRICULTURE, TURF AND SEED SECTION, PROVIDES A RELIABLE MEANS OF CONSUMER PROTECTION AND ASSURES A PURE GENETIC LINE.

- IDEAL TIMES OF SEEDING FOR TURF GRASS MIXTURES
 - WESTERN MD, MARCH 15 TO JUNE 1, AUGUST 1 TO OCTOBER 1 (HARDINESS ZONE: 5B, 6A)
 - CENTRAL MD, MARCH 1 TO MAY 15, AUGUST 15 TO OCTOBER 15 (HARDINESS ZONE: 6B)
 - SOUTHERN MD, EASTERN SHORE: MARCH 1 TO MAY 15, AUGUST 15 TO OCTOBER 15 (HARDINESS ZONE: 7A, 7B)
- TILL AREAS TO RECEIVE SEED BY DISKING OR OTHER APPROVED METHODS TO A DEPTH OF 2 TO 4 INCHES. LEVEL AND RAKE THE AREAS TO PREPARE A PROPER SEEDBED. REMOVE STONES AND DEBRIS OVER 1 1/2 INCHES IN DIAMETER. THE RESULTING SEEDBED MUST BE IN SUCH CONDITION THAT FUTURE MOWING OF GRASSES WILL BE WITHOUT DIFFICULTY.
- IF SOIL MOISTURE IS DEFICIENT, SUPPLY NEW SEEDINGS WITH ADEQUATE WATER FOR PLANT GROWTH (1/2 TO 1 INCH EVERY 3 TO 4 DAYS DEPENDING ON SOIL TEXTURE) UNTIL THEY ARE FIRMLY ESTABLISHED. THIS IS ESPECIALLY TRUE WHEN SEEDINGS ARE MADE LATE IN THE PLANTING SEASON, IN ABNORMALLY DRY OR HOT SEASONS, OR ON ADVERSE SITES.

Seed Mixture No.	Species	Application Rate (Lb./Ac.)	** Fertilizer Rate (10-20-20)			* Lime Rate
			N	P ₂ O ₅	K ₂ O	
9	*Tall Fescue	60	45	90	90	2 Tons/Ac. (90 Lb./1000 Sq.Ft.)
9	*Kentucky Bluegrass	40	2/15 - 4/30 8/15 - 10/31	1/2 - 3/4	1/2	2 Tons/Ac. (90 Lb./1000 Sq.Ft.)
	Perennial Ryegrass	20				

- BLEND 3 CULTIVARS OF ANY CULTIVAR LISTED ON PAGE B.32 OF THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
- AT TIME OF FINE GRADING, FERTILIZER AND LIME RATES WILL BE BASED ON SOIL TEST RESULTS. (SEE SECTION 2.C). COPY OF RECOMMENDED RATES TO BE SUPPLIED TO THE SEDIMENT CONTROL INSPECTOR.
- FOR SEEDING DATES 5/1-8/14 ADD 6 LB/AC OF EITHER FOXTAIL MILLET OR PEARL MILLET TO PERMANENT SEED MIXTURE #9 ABOVE.

NOTE: ALL SEED MUST COMPLY WITH THE MARYLAND STATE SEED LAW. SEED MUST BE FREE OF PROHIBITED OR RESTRICTED NOXIOUS WEEDS, AS CURRENTLY LISTED BY THE MARYLAND DEPARTMENT OF AGRICULTURE, TURF AND SEED SECTION.

SOD: TO PROVIDE QUICK COVER ON DISTURBED AREAS (2:1 GRADE OR FLATTER).

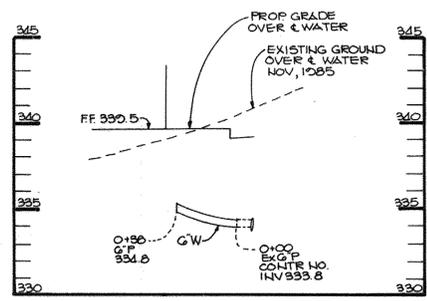
- GENERAL SPECIFICATIONS
 - CLASS OF TURFGRASS SOD MUST BE MARYLAND STATE CERTIFIED. SOD LABELS MUST BE MADE AVAILABLE TO THE JOB FOREMAN AND INSPECTOR.
 - SOD MUST BE MACHINE CUT AT A UNIFORM SOIL THICKNESS OF 3/4 INCH, PLUS OR MINUS 1/4 INCH, AT THE TIME OF CUTTING. MEASUREMENT FOR THICKNESS MUST EXCLUDE TOP GROWTH AND THATCH. BROKEN PADS AND TORN OR UNEVEN EDGES WILL NOT BE ACCEPTABLE.
 - STANDARD SIZE SECTIONS OF SOD MUST BE STRONG ENOUGH TO SUPPORT THEIR OWN WEIGHT AND RETAIN THEIR SIZE AND SHAPE WHEN SUSPENDED VERTICALLY WITH A FIRM GRASP ON THE UPPER 10 PERCENT OF THE SECTION.
 - SOD MUST NOT BE HARVESTED OR TRANSPLANTED WHEN MOISTURE CONTENT (EXCESSIVELY DRY OR WET) MAY ADVERSELY AFFECT ITS SURVIVAL.
 - SOD MUST BE HARVESTED, DELIVERED, AND INSTALLED WITHIN A PERIOD OF 36 HOURS. SOD NOT TRANSPLANTED WITHIN THIS PERIOD MUST BE APPROVED BY AN AGRONOMIST OR SOIL SCIENTIST PRIOR TO ITS INSTALLATION.
- SOD INSTALLATION
 - DURING PERIODS OF EXCESSIVELY HIGH TEMPERATURE OR IN AREAS HAVING DRY SUBSOIL, LIGHTLY IRRIGATE THE SUBSOIL IMMEDIATELY PRIOR TO LAYING THE SOD.
 - LAY THE FIRST ROW OF SOD IN A STRAIGHT LINE WITH SUBSEQUENT ROWS PLACED PARALLEL TO IT AND TIGHTLY WEDGED AGAINST EACH OTHER. STAGGER LATERAL JOINTS TO PROMOTE MORE UNIFORM GROWTH AND STRENGTH. ENSURE THAT SOD IS NOT STRETCHED OR OVERLAPPED AND THAT ALL JOINTS ARE BUTTED TIGHT IN ORDER TO PREVENT VOIDS WHICH WOULD CAUSE AIR WRINGING OF THE ROOTS.
 - WHEREVER POSSIBLE, LAY SOD WITH THE LONG EDGES PARALLEL TO THE CONTOUR AND WITH STAGGERING JOINTS. ROLL AND TAMP; PEC OR OTHERWISE SECURE THE SOD TO PREVENT SLIPPAGE ON SLOPES. ENSURE SOLID CONTACT EXISTS BETWEEN SOD ROOTS AND THE UNDERLYING SOIL SURFACE.
 - WATER THE SOD IMMEDIATELY FOLLOWING ROLLING AND TAMPING UNTIL THE UNDERSIDE OF THE NEW SOD PAD AND SOIL SURFACE BELOW THE SOD ARE THOROUGHLY WET. COMPLETE THE OPERATIONS OF LAYING, TAMPING AND IRRIGATING FOR ANY PIECE OF SOD WITHIN EIGHT HOURS.
- SOD MAINTENANCE
 - IN THE ABSENCE OF ADEQUATE RAINFALL, WATER DAILY DURING THE FIRST WEEK OR AS OFTEN AND SUFFICIENTLY AS NECESSARY TO MAINTAIN MOIST SOIL TO A DEPTH OF 4 INCHES. WATER SOD DURING THE HEAT OF THE DAY TO PREVENT WILTING.
 - AFTER THE FIRST WEEK, SOD WATERING IS REQUIRED AS NECESSARY TO MAINTAIN ADEQUATE MOISTURE CONTENT.
 - DO NOT MOW UNTIL THE SOD IS FIRMLY ROOTED. NO MORE THAN 1/3 OF THE GRASS LEAF MUST BE REMOVED BY THE INITIAL CUTTING OR SUBSEQUENT CUTTINGS. MAINTAIN A GRASS HEIGHT OF AT LEAST 3 INCHES UNLESS OTHERWISE SPECIFIED.

(H-1) STANDARDS AND SPECIFICATIONS FOR MATERIALS

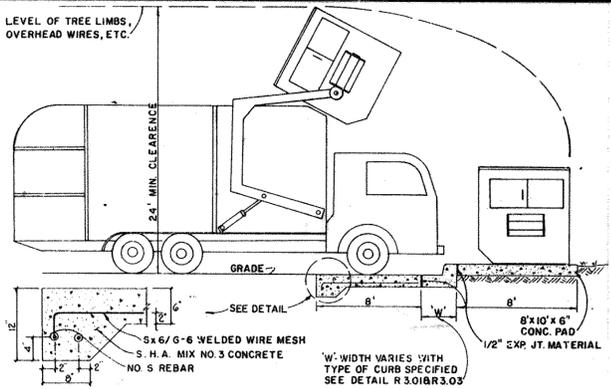
TABLE H.1: GEOTEXTILE FABRICS

PROPERTY	TEST METHOD	MINIMUM AVERAGE ROLL VALUE ¹					
		WOVEN SPLIT FILM GEOTEXTILE		WOVEN MONOFILAMENT GEOTEXTILE		NONWOVEN GEOTEXTILE	
		MD	CD	MD	CD	MD	CD
Grab Tensile Strength	ASTM D-4632	200 lb	200 lb	370 lb	250 lb	200 lb	200 lb
Grab Tensile Elongation	ASTM D-4632	15%	10%	15%	15%	50%	50%
Trapezoidal Tear Strength	ASTM D-4533	75 lb	75 lb	100 lb	60 lb	80 lb	80 lb
Puncture Strength	ASTM D-6241	450 lb		900 lb		450 lb	
Apparent Opening Size ²	ASTM D-4751	U.S. Sieve 30 (0.59 mm)		U.S. Sieve 70 (0.21 mm)		U.S. Sieve 70 (0.21 mm)	
Permittivity	ASTM D-4491	0.05 sec -1		0.28 sec -1		1.1 sec -1	
Ultraviolet Resistance Retained at 500 hours	ASTM D-4355	70% strength		70% strength		70% strength	

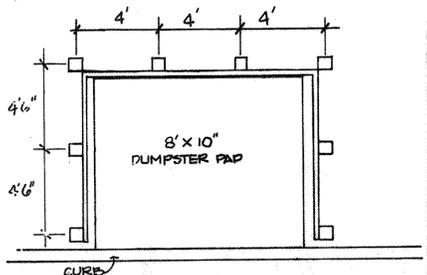
- ALL NUMERIC VALUES EXCEPT APPARENT OPENING SIZE (AOS) REPRESENT MINIMUM AVERAGE ROLL VALUES (MARV). MARV IS CALCULATED AS THE TYPICAL MINUS TWO STANDARD DEVIATIONS. MD IS MACHINE DIRECTION; CD IS CROSS DIRECTION.
- VALUES FOR AOS REPRESENT THE AVERAGE MAXIMUM OPENING.



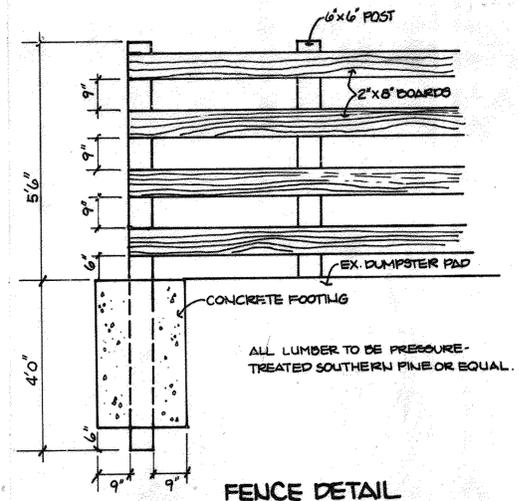
WATER HOUSE CONNECTION
NO SCALE



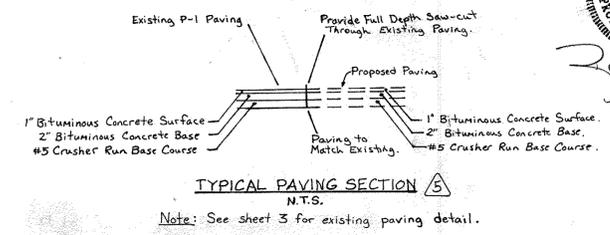
DUMPSTER PAD DETAIL
NO SCALE



POST LOCATION PLAN
SCALE: 1/2" = 1'-0"

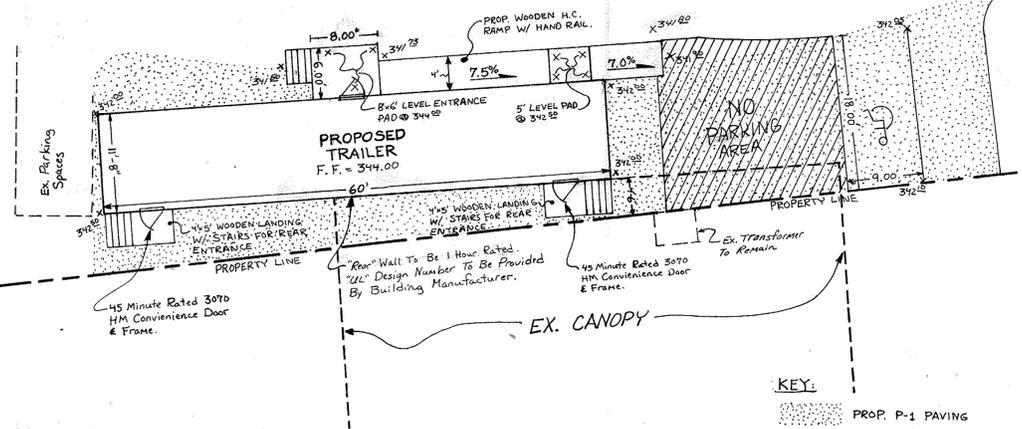


FENCE DETAIL
SCALE: 1/2" = 1'-0"

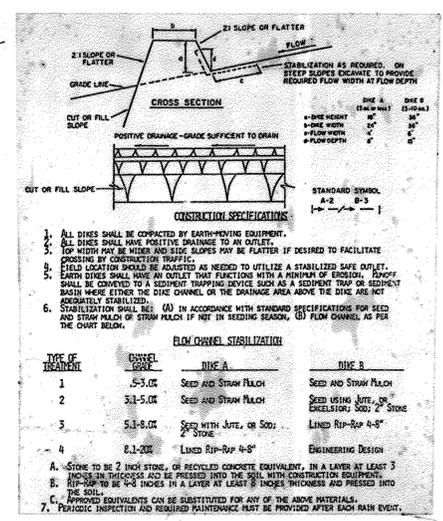


TYPICAL PAVING SECTION
N.T.S.

Note: See sheet 3 for existing paving detail.

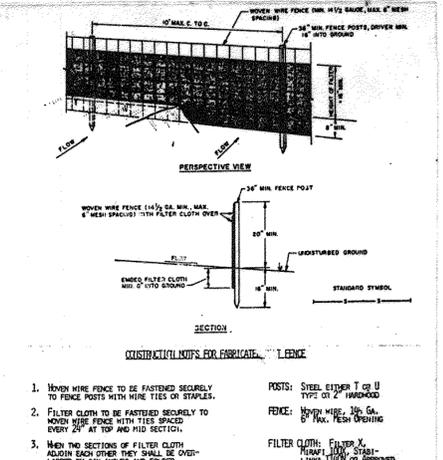


PROP. SALES TRAILER DETAIL
SCALE = 1" = 10'

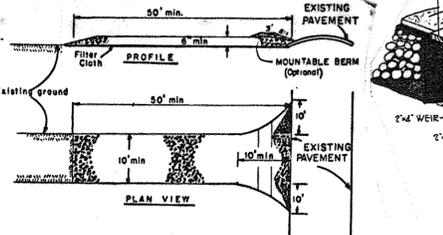


EARTH DIKE
NO SCALE

- CONSTRUCTION SPECIFICATIONS FOR STONE FILTER INLET PROTECTION**
- Materials**
 - Wooden frame is to be constructed of 2" x 4" construction grade lumber.
 - Wire mesh must be of sufficient strength to support filter fabric, and stone for curb inlets, with water fully impounded against it.
 - Filter cloth must be of a type approved for this purpose; resistant to sunlight with sieve size, 80, 40-85, to allow sufficient passage of water and removal of sediment.
 - Stone is to be 2" in size and clean, since fines would clog the cloth.
 - Procedure**
 - A weal, ditchline or yard inlet protection.
 - Excavate completely around inlet to a depth of 18" below notch elevation.
 - Drive 2 x 4 post 1' into ground at four corners of inlet. Place nail strips between posts on ends of inlet. Assemble top portion of 2 x 4 frame using overlap joint shown. Top of frame (weir) must be 6" below edge of roadway adjacent to inlet.
 - Stretch wire mesh tightly around frame and fasten securely. Ends must meet at post.
 - Stretch filter cloth tightly over wire mesh, the cloth must extend from top of frame to 18" below inlet notch elev. Fasten securely to frame. Ends must meet at post, be overlapped and folded, then fastened down.
 - Backfill around inlet in compacted 6" layers until layer of earth is even with notch elevation on ends and top elevation on sides.
 - If the inlet is not in a low point, construct a compacted earth dike in the ditchline below it. The top of this dike is to be at least 6" higher than the top of frame (weir).
 - This structure must be inspected frequently and the filter fabric replaced when clogged.
 - Curb Inlet Protection.
 - Attach a continuous piece of wire mesh (30" min. width by throat length plus 4") to the 2" x 4" weir (measuring throat length plus 2") as shown on the standard drawing.
 - Place a piece of approved filter cloth (40-85 sieve) of the same dimensions as the wire mesh over the wire mesh and securely attach to the 2" x 4" weir.
 - Securely nail the 2" x 4" weir to 9" long vertical spacers to be located between the weir and inlet face (max. 6' apart).
 - Place the assembly against the inlet throat and nail (minimum 2" lengths of 2" x 4" to the top of the weir as spacer locations. These 2" x 4" anchors shall extend across the inlet top and be held in place by sandbags or alternate weight.
 - The assembly shall be placed so that the end spacers are a minimum 1' beyond both ends of the throat opening.
 - Form the wire mesh and filter cloth to the concrete gutter and against the face of curb on both sides of the inlet. Place clean 2" stone over the wire mesh and filter fabric in such a manner as to prevent water from entering the inlet under or around the filter cloth.
 - This type of protection must be inspected frequently and the filter cloth and stone replaced when clogged with sediment.
 - Assure that storm flow does not bypass inlet by installing temporary earth or asphalt dike directing flow into inlet.



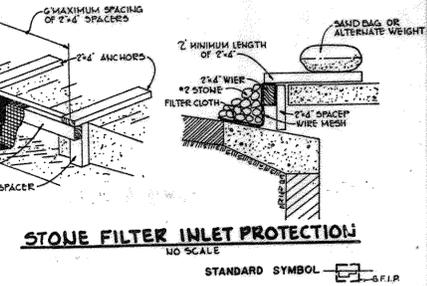
SILT FENCE
NO SCALE



STABILIZED CONSTRUCTION ENTRANCE
NO SCALE

- SEDIMENT CONTROL NOTES**
- A minimum of 24 hours notice must be given to the Howard County Office of Inspections and Permits prior to the start of any construction (992-2437)
 - All vegetative 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 FOR SOIL EROSION AND SEDIMENT CONTROL.
 - Following initial soil disturbance or redistribution, 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.
 - 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.
 - 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 stabilizations (Sec. 5) and 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.
 - 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.
 - Site Analysis:

Total Area of Site	63 acres
Area Disturbed	4.5 acres
Area to be roofed or paved	2.6 acres
Area to be vegetatively stabilized	1.9 acres
Total Cut	6000 Cu. yds.
Total Fill	6000 Cu. yds.
Soil Type	Medium
 - Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
 - Additional sediment controls must be provided, if deemed necessary by the Howard County DPW sediment control inspector.
 - Site grading will begin only after all perimeter sediment control measures have been installed and are in a functioning condition.
 - Sediment will be removed from traps when its depth reaches the clean out elevation shown on the plans.
- PERMANENT SEEDING NOTES**
- Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.
- Seeded Preparation:** Loosen upper three inches of soil by raking, disking or other acceptable means before seeding.
- Soil Amendments:** Apply 0-20-20 fertilizer at the rate of 600 lbs. per acre. Harrow or disc lime and 0-20-20 fertilizer into the soil to a minimum depth of 2". Lawns or high maintenance areas will be dragged and leveled with a York rake. At the time of seeding, apply 400 lbs. of 30-0-0 ureaform fertilizer and 500 lbs. of 10-20-20 or equivalent fertilizer per acre.
- Seeding:** For the periods March 1 thru April 30, and August 1 thru October 15, seed with 40 lbs. per acre (1 lb./1000 sq.ft.) of a mixture of certified 'Merion' Kentucky bluegrass; common Kentucky bluegrass @ 40 lbs. per acre (1 lb./1000 sq.ft.) and Red Fescue, Penna. or Jamstown @ 20 lbs. per acre (0.5 lb./1000 sq.ft.) for the period May 1 thru July 31, seed with 40-40-20 mix as specified above and 2 lbs. per acre (0.05 lb./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 40-40-20 mix specified above and mulch with 2 concrete well-anchored straw.
- Mulching:** Apply 1 1/2 to 2 tons per acre (70 to 90 lbs./1000 sq.ft.) of untreated 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 gal. per acre (8 gal./1000 sq.ft.) for anchoring.
- Maintenance:** Inspect all seeded areas and make needed repairs, replacements and reseeding.
- TEMPORARY SEEDING NOTES**
- Apply to graded or cleared areas likely to be redisturbed where a short-term vegetative cover is needed.
- Seeded Preparation:** Loosen upper three inches of soil by raking, disking or other acceptable means before seeding.
- Soil Amendments:** Apply 600 lbs. per acre 10-10-10 fertilizer (14 lbs./1000 sq.ft.) where soil is highly acidic, apply dolomitic limestone at the rate of 1 ton per acre.
- Seeding:** For periods March 1 thru April 30 and from August 15 thru November 15, seed with 140 lbs. 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 (0.7 lb./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 untreated 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.



STONE FILTER INLET PROTECTION
NO SCALE

BY THE DEVELOPER:

Arthur E. Muegge DATE: 7-23-86

BY THE ENGINEER:

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

Arthur E. Muegge DATE: 7-25-86

REVIEWED FOR: *Howard* NAME: S.C.D.

AND MEETS TECHNICAL REQUIREMENTS

James M. Helms DATE: 8/4/86

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

Sophy Carl DATE: 8-14-86

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

John J. Kelly DATE: 8-20-86

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING.

Arthur E. Muegge DATE: 8-21-86

APPROVED: DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION

Arthur E. Muegge DATE: 8-21-86

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

Arthur E. Muegge DATE: 8-18-86

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Arthur E. Muegge DATE: 8-18-86

OWNER/DEVELOPER

JERRY MAIZLISH
623 GLENCOE ROAD
SPARKS, MARYLAND

PROJECT: ACURA AUTOMOBILE DEALERSHIP

AREA: LANCELOTTA PROPERTY PLAT NO. GG-56 PARCEL B-1 TAX MAPS 17,18,2125 2ND ELECTION DISTRICT, HOWARD COUNTY, MD.

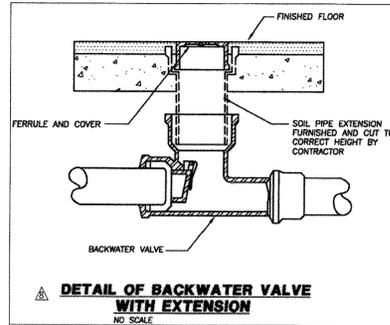
TITLE: SEDIMENT CONTROL DETAILS

THE RIEMER GROUP, INC.

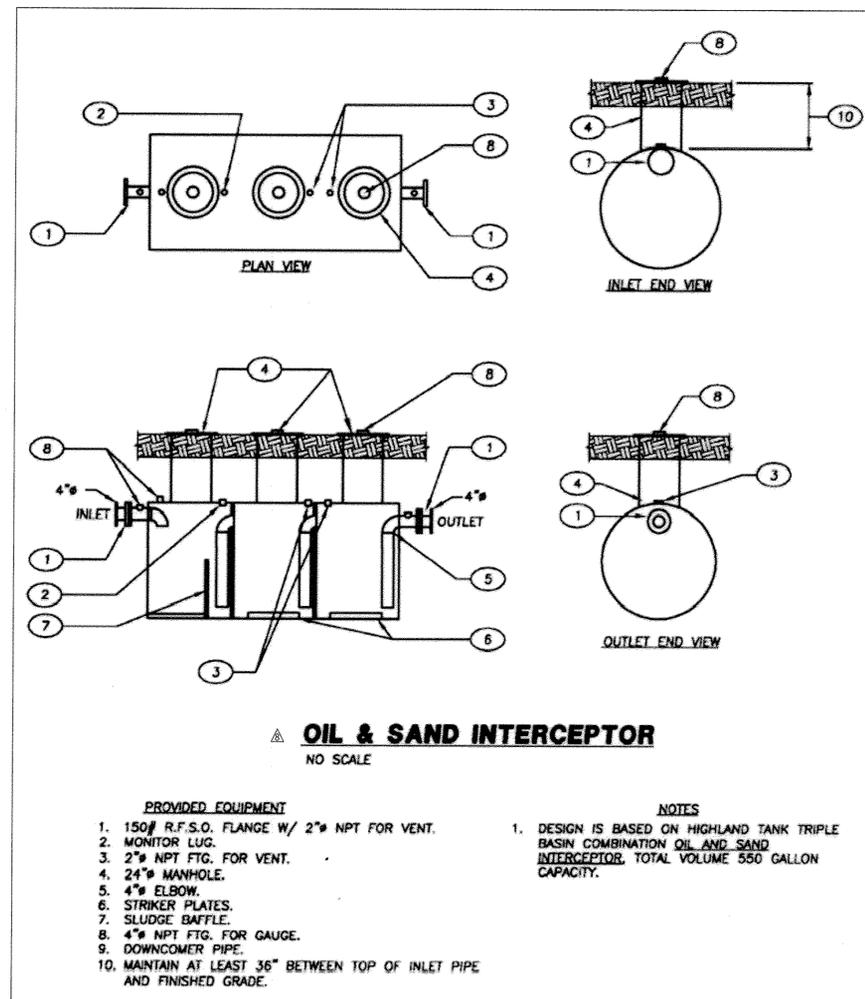
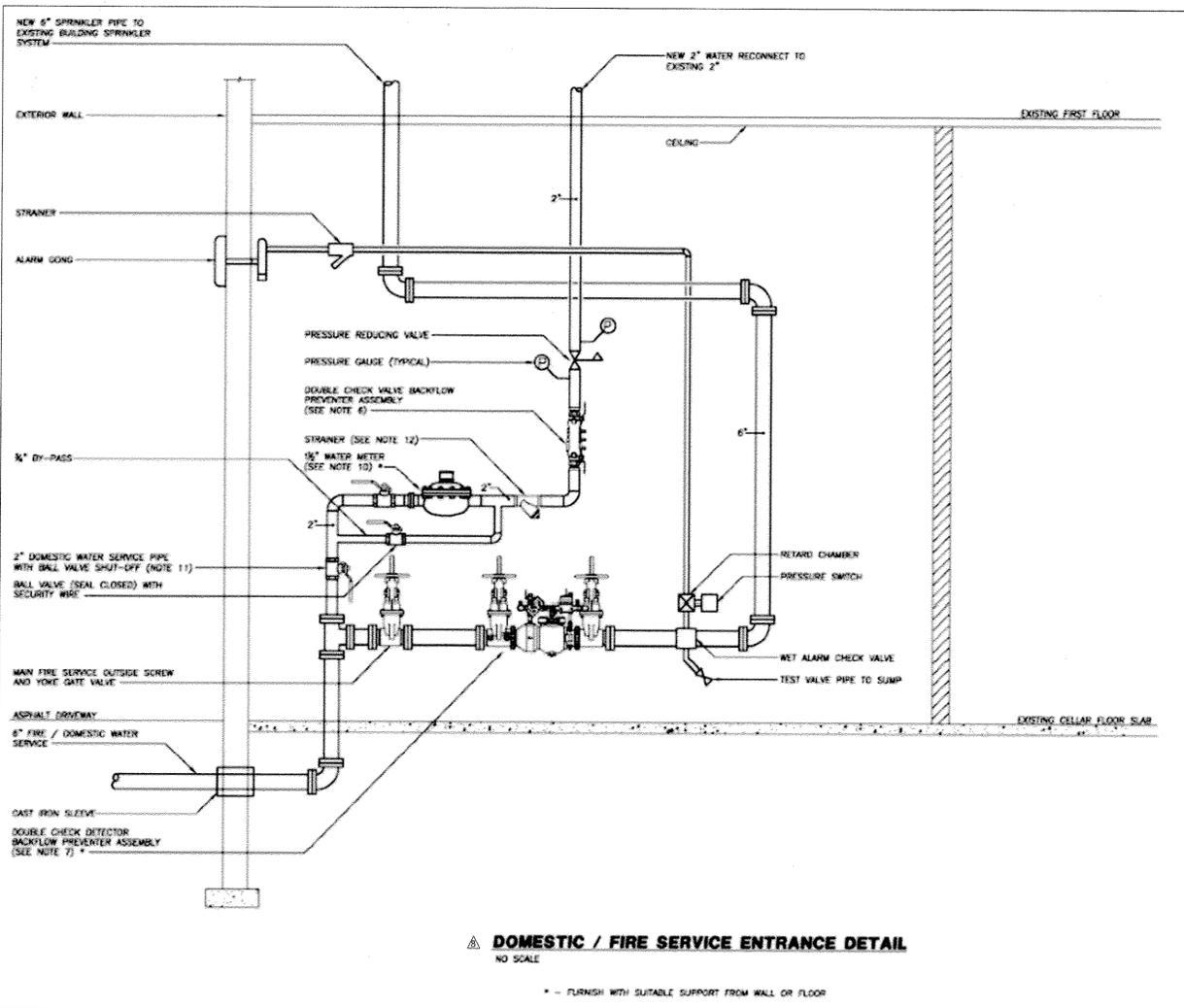
The Riemer Group, Inc. A Land Planning, Design & Civil Engineering Firm
3105 Health Park Drive, Ellicott City, Maryland 21043 (301) 461-2880

DATE: 7-25-86

DESIGNED BY: D.A.M.
DRAWN BY: F.D.M.
PROJECT NO: 23700
DATE: 2-28-86
SCALE: AS SHOWN
DRAWING NO. 5 OF 11



- INSIDE APPURTENANCES SETTING**
NOTES DOMESTIC AND FIRE
1. OWNER TO DISARM AND REARM FIRE ALARM SYSTEM DURING TESTING AND MAINTENANCE.
 2. ORDER AND INSTALL BACKFLOW PREVENTERS AS PER HOWARD COUNTY STANDARDS.
 3. ALL FITTINGS AND NIPPLES TO BE "LEAD FREE" THREADED BRASS WITH APPROPRIATE ADAPTERS.
 4. PERMANENT BRICK, CONCRETE SUPPORTS STATIONS AND/OR WELDED, CANTILEVERED WALL BRACKETS TO BE PLACED UNDER FLANGE FITTINGS.
 5. BACKFLOW PREVENTERS TO BE TESTED PRIOR TO OPERATIONAL ACCEPTANCE.
 6. 2" DOUBLE CHECK VALVE ASSEMBLY (ASME LISTED 1015) ON DOMESTIC WATER SHALL BE "LEAD FREE" "ZURN" MODEL NO. "300S" WITH FULL PORT OR BALL VALVES.
 7. 6" FIRELINE DOUBLE CHECK DETECTOR ASSEMBLY (ASME LISTED 1044) WITH METERED BY-PASS SHALL BE "LEAD FREE" "ZURN" MODEL NO. "350 ADALM" SERIES. INSTALL WITH STAINLESS STEEL BOLTS AND BRASS NUTS. METER FURNISHED BY HOWARD COUNTY 6" PIPE AND FITTINGS SHALL BE DUCTILE IRON WITH FLANGED CONNECTIONS WITH STAINLESS STEEL BOLTS AND BRASS NUTS.
 8. 6" GATE VALVES SHALL BE APPROVED OS&Y TYPE RESILIENT SEAT. PROVIDE LENGTH OF CHAIN FOR EACH VALVE TO ALLOW HOWARD COUNTY TO LOCK VALVE IN DESIRED POSITION.
 9. 2" PIPE SHALL BE "LEAD FREE" THREADED BRASS.
 10. WATER METER SHALL BE EQUIVALENT TO "HERSEY" MODEL NO. "572" MAGNETIC TYPE POSITIVE DISPLACEMENT DISC TYPE.
 11. BALL VALVES SHALL BE 2" FULL PORT BRONZE CONSTRUCTION EQUIVALENT TO "ZURN WILKINS" MODEL NO. "850 XL" (LEAD FREE).
 12. STRAINER SHALL BE "Y" TYPE "ZURN" MODEL NO. "52L" (LEAD FREE).



PURPOSE STATEMENT: REDLINE REVISION #8

THE PURPOSE OF THIS REDLINE REVISION IS TO BRING THE EXISTING BUILDING TO CURRENT ACURA SHOWCASE STANDARDS. THE NEW ACURA STANDARDS MANDATE NEW CUSTOMER SERVICE REQUIREMENTS. THE FOLLOWING IMPROVEMENTS PERTAIN TO SERVICE CUSTOMER INTAKE PROCEDURES AND PROTOCOLS. THE BUILDING UPGRADE WILL INCLUDE THE ADDITION OF A NEW ENCLOSED SERVICE PARKING AREA, A CAR WASH AREA AND ASSOCIATED SPACE. EXISTING DEALERSHIP CANOPIES WILL BE ENCLOSED FOR THESE PROPOSED IMPROVEMENTS.

07-23-15	NO.	ACURA WEST DEALERSHIP SERVICE AREA EXPANSION
DATE	NO.	REVISION DESCRIPTION
NORRIS ACURA WEST		
8559 BALTIMORE NATIONAL PIKE ELLICOTT CITY, MD 21043 HOWARD COUNTY, MARYLAND		
OWNER / DEVELOPER		
NORRIS AUTO GROUP 925 MERRITT BOULEVARD BALTIMORE, MD 21222 CONTACT: DAVID NORRIS COOK		
 DAFT MCCUNE WALKER INC		
501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286 P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM		
TITLE		
SITE DETAILS		
SUBDIVISION NAME	SECT./AREA	LOT/PARCEL #
LANELEYVA PROPERTY		199
PLAT# OR LOT	BLOCK	ZONE
6656	1	B-2
TAX/ZONE MAP	ELEC. DIST.	CENSUS TR.
25	2	602900
WATER CODE	SEWER CODE	
ADDRESS CHART		
LOT NUMBER	STREET ADDRESS	
81	8559 BALTIMORE NATIONAL PIKE	
DES. BY ERS	SCALE: AS SHOWN	PROJ. NO. 15028
DRN. BY GMO	DATE: 1/20/16	
CHK'D BY	APPROVED	5A OF 11

PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 26569, EXPIRATION DATE: 7-18-17.

APPROVED: DEPARTMENT OF PLANNING AND ZONING

[Signature] 2-26-16
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 3-06-16
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 3-2-16
 DIRECTOR DATE

FOR REVISION ONLY
 1-20-16
 DATE

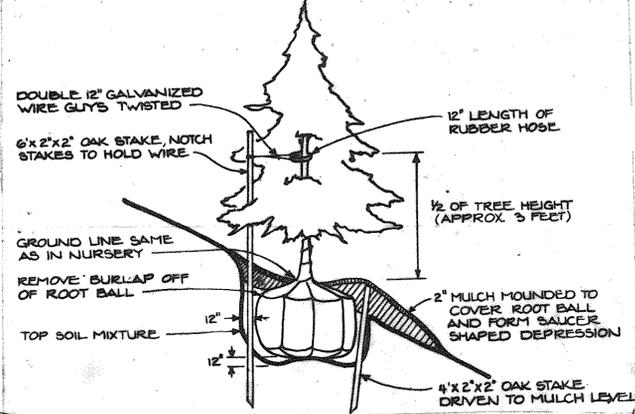
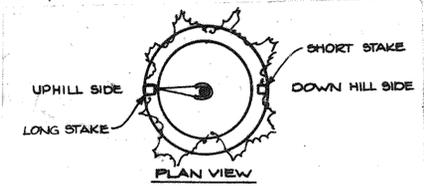
[Signature]
 PROFESSIONAL ENGR. NO. 26569

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

HOWARD SCD *[Signature]* DATE

PURPOSE STATEMENT: REDLINE REVISION #8

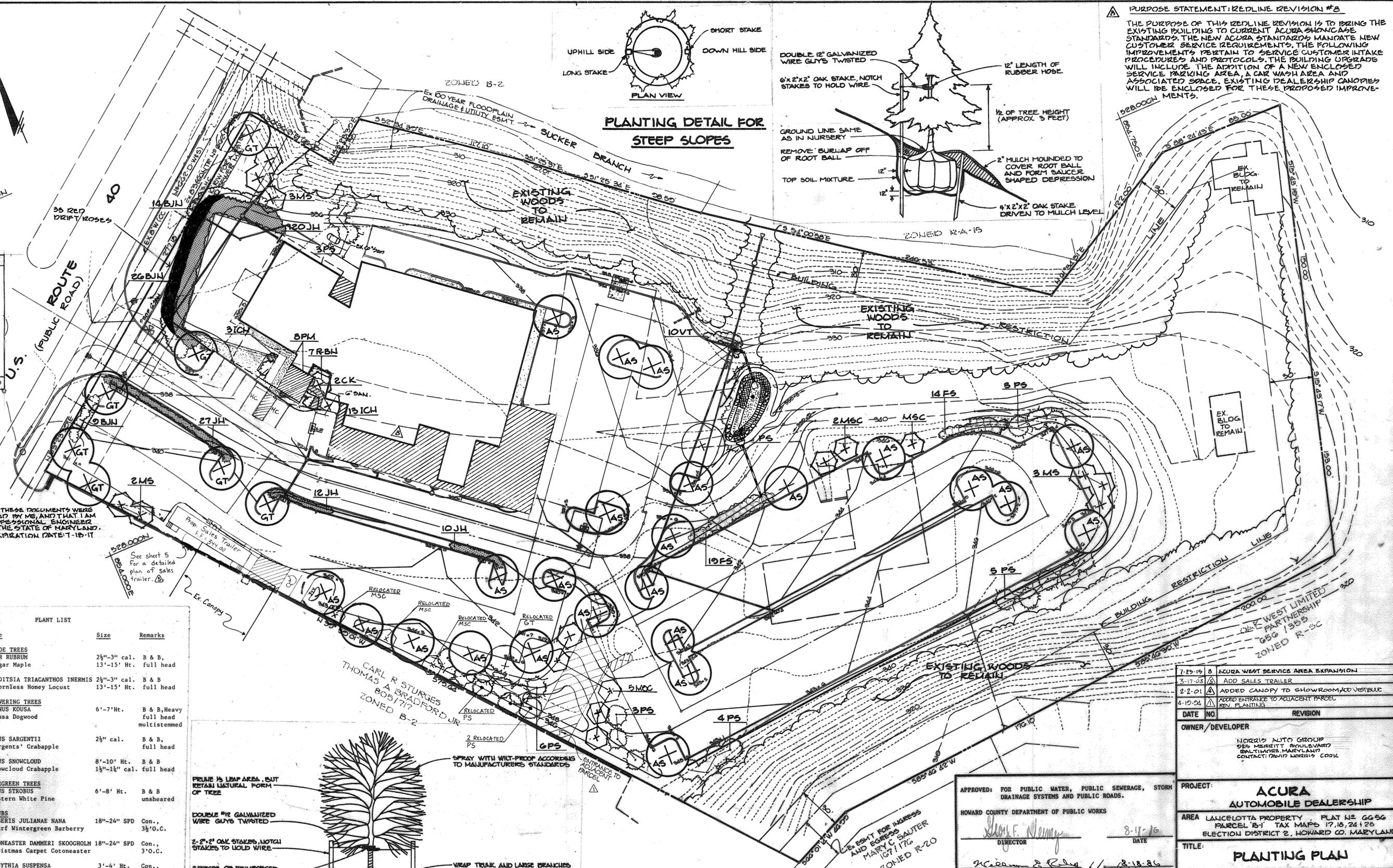
THE PURPOSE OF THIS REDLINE REVISION IS TO BRING THE EXISTING BUILDING TO CURRENT ACURA SHOWCASE STANDARDS. THE NEW ACURA STANDARDS MANDATE NEW CUSTOMER SERVICE REQUIREMENTS. THE FOLLOWING IMPROVEMENTS PERTAIN TO SERVICE CUSTOMER INTAKE PROCEDURES AND PROTOCOLS. THE BUILDING UPGRADE WILL INCLUDE THE ADDITION OF A NEW ENCLOSED SERVICE PARKING AREA, A CAR WASH AREA AND ASSOCIATED SPACE. EXISTING DEALERSHIP CANOPIES WILL BE ENCLOSED FOR THESE PROPOSED IMPROVEMENTS.



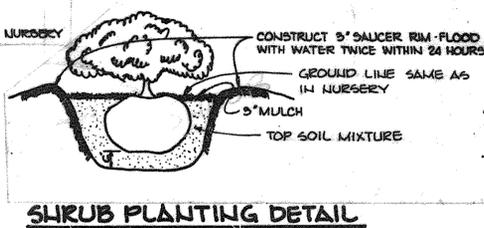
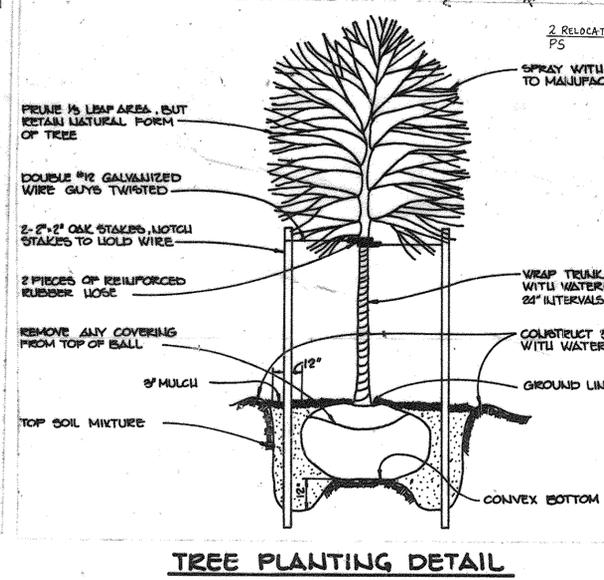
PLANTING DETAIL FOR STEEP SLOPES

FOR REVISION 8 ONLY
1-18-16
DATE
STATE OF MARYLAND
PROFESSIONAL ENGINEER
PROFESSIONAL ENGR. NO. 205569

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 205569, EXPIRATION DATE: 1-18-17



Quan	Sym.	Name	Size	Remarks
25	AS	SHADE TREES ACER RUBRUM -Sugar Maple	2 1/2"-3" cal. 13'-15' Ht.	B & B, full head
8	GT	GLEDTISIA TRIACANTHOS INERMIS -Thornless Honey Locust	2 1/2"-3" cal. 13'-15' Ht.	B & B, full head
2	CK	FLOWERING TREES CORNUS KOUSA -Kousa Dogwood	6'-7' Ht.	B & B, Heavy full head multistemmed
6	MS	MALUS SARGENTII -Sargent's Crabapple	2 1/2" cal.	B & B, full head
11	MSC	MALUS SNOWCLOUD -Snowcloud Crabapple	8'-10' Ht. 1 1/2"-1 3/4" cal.	B & B, full head
32	FS	EVERGREEN TREES PINUS STROBUS -Eastern White Pine	6'-8' Ht.	B & B unsheared
40	BJN	SHRUBS BERBERIS JULIANAE NANA -Dwarf Wintergreen Barberry	18"-24" SPD 3 1/2" O.C.	Con.,
15	CD	COTONEASTER DAMMERI SKOOGHOLM -Christmas Carpet Cotoneaster	18"-24" SPD 3" O.C.	Con.,
35	FS	FORSYTHIA SUSPENS -Weeping Forsythia	3'-4' Ht. 4 1/2" O.C.	Con.,
16	ICH	ILEX GRENATA HETZI -Hetzi Japanese Holly	24"-30" Ht. 3" O.C.	Con.,
160	JH	JUNIPERUS HORIZ. HUGHES -Hughes Spreading Juniper	18"-24" SPD 4" O.C.	Con.,
8	PM	PINUS MUGHO MUGHUS -Mugho pine	24"-30" Spd.	Con.
7	R-BN	RHODODENDRON 'BOULE DE NEIGE' -White Rhododendron	30"-36" Ht.	Con., or B & B
21	VT	VIBURNUM PPLICATUM TOMENTOSUM -Doublefile Viburnum	3'-4' Ht.	B & B
25		RED DRIFT ROSES	3 CAL.	CONT.
1	AS	SHADE TREE	18'-20' HT.	CONT.



TREE PLANTING DETAIL

SHRUB PLANTING DETAIL

DATE	NO.	REVISION
7-25-15	8	ACURA WEST SERVICE AREA EXPANSION
3-17-03	7	ADD SALES TRAILER
2-2-01	6	ADDED CANOPY TO SHOWROOM, ADD VESTIBULE
4-10-04	5	ADDED ENTRANCE TO ADJACENT PARCEL FOR PLANTING

OWNER/DEVELOPER
NOZZA'S AUTO GROUP
8520 MERRITT ROAD, SUITE 100
BALTIMORE, MARYLAND
CONTACT: 7610 MORRIS COOK

PROJECT: **ACURA AUTOMOBILE DEALERSHIP**

AREA LANCELOTTA PROPERTY, PLAT NO. GG56
PARCEL B-1 TAX MAPS 17, 18, 24 & 25
ELECTION DISTRICT 2, HOWARD CO. MARYLAND

TITLE: **PLANTING PLAN**

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Director: [Signature] 8-11-16
DATE

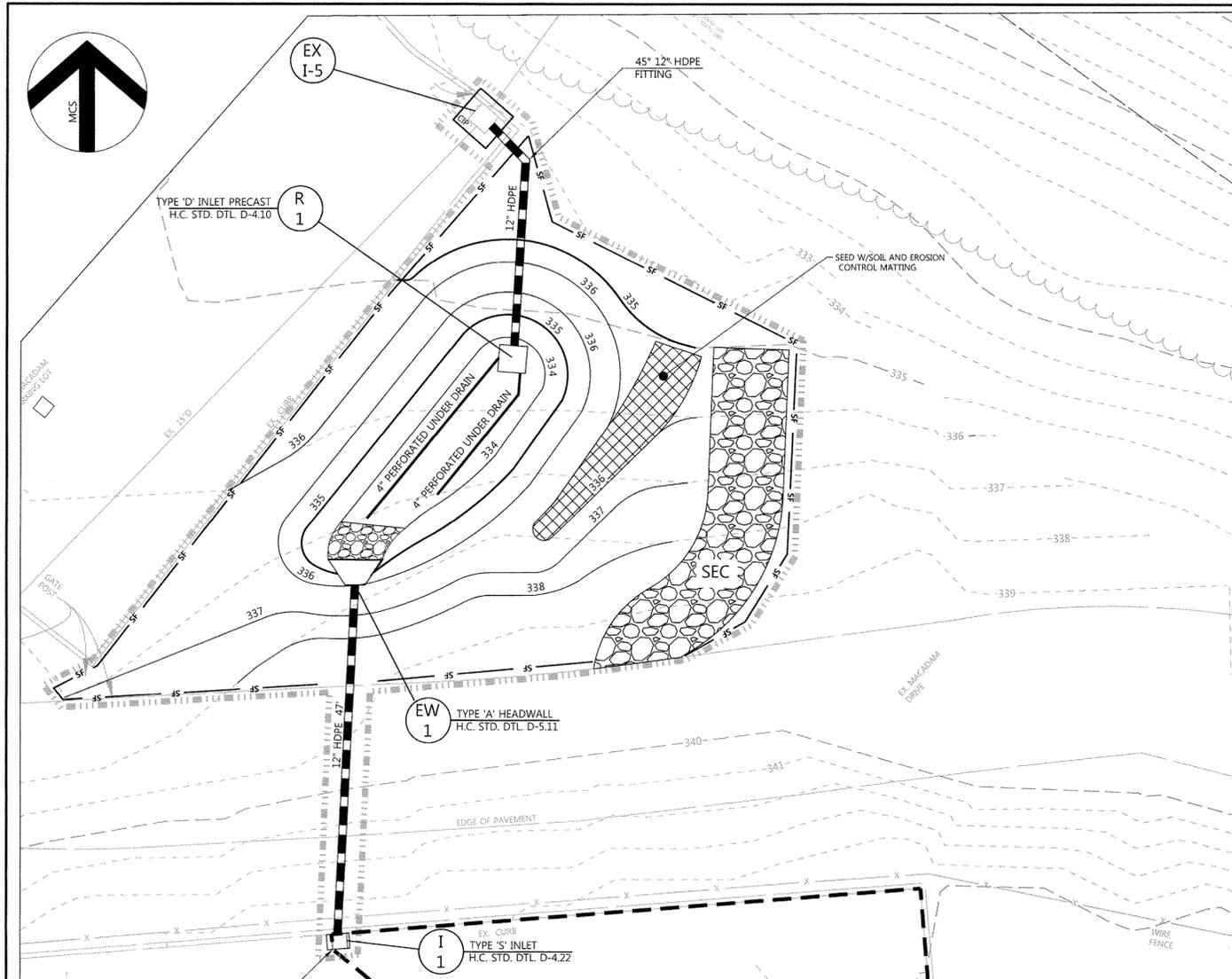
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.
County Health Officer: [Signature] 8-21-16
DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING.
Planning Director: [Signature] 8-21-16
DATE

APPROVED: DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE: 6-20-86
[Signature]

THE RIEMER GROUP, INC.
The Riemer Group, Inc. A Land Planning, Design & Civil Engineering Firm
3105 Health Park Drive, Ellicott City, Maryland 21043 (301) 481-2800

DATE: 7-28-16
DESIGNED BY: M.E.M.
DRAWN BY: P.E.R.
PROJECT NO: 25700
DATE:
SCALE: 1" = 30'
DRAWING NO. 6 OF 11



MICRO-BIORETENTION PLAN
SCALE: 1"=10'

TABLE B.4.1 MATERIALS SPECIFICATIONS FOR MICRO-BIORETENTION, RAIN GARDENS & LANDSCAPE INFILTRATION

MATERIAL	SPECIFICATION	SIZE	NOTES
PLANTINGS	SEE APPENDIX A, TABLE A-4	N/A	PLANTINGS ARE SITE-SPECIFIC
PLANTING SOIL [2' TO 4" DEEP]	LOAMY SAND (60 - 65%) & COMPOST (35 - 40%) OR SANDY LOAM (30%), COARSE SAND (30%) & COMPOST (40%)	N/A	
ORGANIC CONTENT	MIN. 10% BY DRY WEIGHT (ASTM D 2974)		
MULCH	SHREDDED HARDWOOD		AGED 6 MONTHS, MINIMUM; NO PINE OR WOOD CHIPS
PEA GRAVEL DIAPHRAGM	PEA GRAVEL: ASTM-D-448	NO. 8 OR NO. 9 (1/8" TO 3/8")	
CURTAIN DRAIN	ORNAMENTAL STONE: WASHED COBBLES	STONE: 2" TO 5"	
GEOTEXTILE		N/A	PE TYPE 1 NONWOVEN
GRAVEL (UNDERDRAINS AND INFILTRATION BERMS)	AASHTO M-43	NO. 57 OR NO. 6 AGGREGATE (3/8" TO 3/4")	
UNDERDRAIN PIPING	F 758, TYPE PS 28 OR AASHTO M-278	4" TO 6" RIGID SCHEDULE 40 PVC OR SDR35	SLOTTED OR PERFORATED PIPE; 3/8" PERF. @ 6" ON CENTER, 4 HOLES PER ROW; MINIMUM OF 3" OF GRAVEL OVER PIPES; NOT NECESSARY UNDERNEATH PIPES. PERFORATED PIPE SHALL BE WRAPPED WITH 1/4-INCH GALVANIZED HARDWARE CLOTH
POURED IN PLACE CONCRETE (IF REQUIRED)	MSHA MIX NO. 3; F _c = 3500 PSI @ 28 DAYS, NORMAL WEIGHT, AIR-ENTRAINED, REINFORCING TO MEET ASTM-615-60	N/A	ON-SITE TESTING OF POURED-IN-PLACE CONCRETE REQUIRED: 28 DAY STRENGTH AND SLUMP TEST; ALL CONCRETE 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 - DESIGN TO INCLUDE MEETING ACI CODE 350R/89; VERTICAL LOADING (H-10 OR H-20); ALLOWABLE HORIZONTAL LOADING (BASED ON SOIL PRESSURES); AND ANALYSIS OF POTENTIAL CRACKING
SAND	AASHTO-M-6 OR ASTM-C-33	0.02" TO 0.04"	SAND SUBSTITUTIONS SUCH AS DIABASE AND GRAYSTONE (AASHTO) #10 ARE NOT ACCEPTABLE. NO CALCIUM CARBONATED OR DOLOMITIC SAND SUBSTITUTIONS ARE ACCEPTABLE. NO "ROCK DUST" CAN BE USED FOR SAND.

OPERATION AND MAINTENANCE SCHEDULE FOR MICRO-BIORETENTION (M-6) AND BIORETENTION SWALE (M-8)

- THE OWNER SHALL MAINTAIN THE PLANT MATERIAL, MULCH LAYER AND SOIL LAYER ANNUALLY. MAINTENANCE OF MULCH AND SOIL IS LIMITED TO CORRECTING AREAS OF EROSION OR WASH OUT. ANY MULCH REPLACEMENT SHALL BE DONE IN THE SPRING. PLANT MATERIAL SHALL BE CHECKED FOR DISEASE AND INSECT INFESTATION AND MAINTENANCE WILL ADDRESS DEAD MATERIAL AND PRUNING. ACCEPTABLE REPLACEMENT PLANT MATERIAL IS LIMITED TO THE FOLLOWING: 2000 MARYLAND STORMWATER DESIGN MANUAL VOLUME II, TABLE A.4.1 AND 2.
- THE OWNER SHALL PERFORM A PLANT IN THE SPRING AND IN THE FALL OF EACH YEAR. DURING THE INSPECTION, THE OWNER SHALL REMOVE DEAD AND DISEASED VEGETATION CONSIDERED BEYOND TREATMENT, REPLACE DEAD PLANT MATERIAL WITH ACCEPTABLE REPLACEMENT PLANT MATERIAL, TREAT DISEASED TREES AND SHRUBS, AND REPLACE ALL DEFICIENT STAKES AND WIRES.
- THE OWNER SHALL INSPECT THE MULCH EACH SPRING. THE MULCH SHALL BE REPLACED EVERY TWO TO THREE YEARS. THE PREVIOUS MULCH LAYER SHALL BE REMOVED BEFORE THE NEW LAYER IS APPLIED.
- THE OWNER SHALL CORRECT SOIL EROSION ON AN AS NEEDED BASIS, WITH A MINIMUM OF ONCE PER MONTH AND AFTER EACH HEAVY STORM.

MAINTENANCE CRITERIA

- PERIODICALLY REMOVE TRASH & DEBRIS AS IT ACCUMULATES.
- REMOVE AND REPLACE TOP FEW INCHES OF FILTER MEDIA WHEN WATER PONDS FOR MORE THAN 48 HRS.
- PRUNE AND REPLACE DEAD VEGETATION AS NECESSARY.
- WATER VEGETATION DURING DRY PERIODS

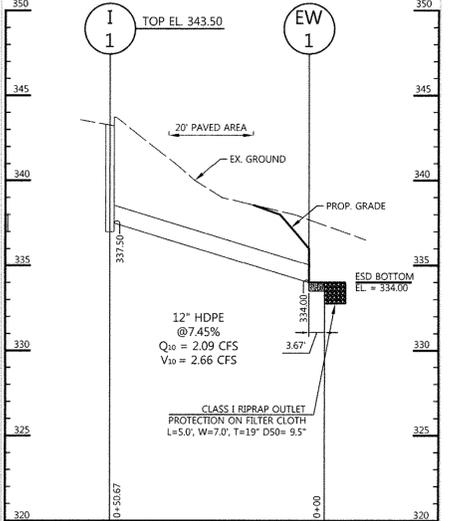
DEVELOPERS CERTIFICATION:
"I HAVE CERTIFIED THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."
SIGNATURE OF DEVELOPER _____ DATE _____

ENGINEER'S CERTIFICATION:
"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."
SIGNATURE OF ENGINEER _____ DATE _____

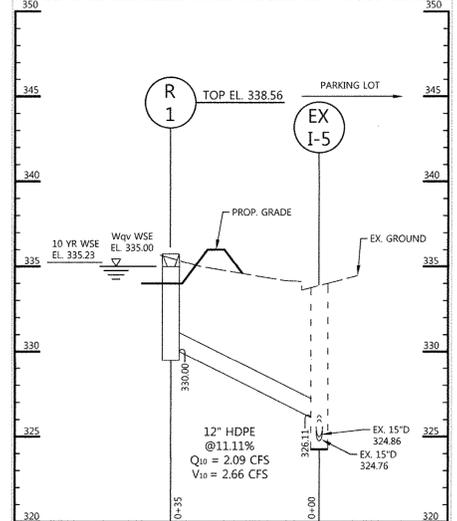
SEDIMENT CONTROL SEQUENCE OF CONSTRUCTION

- OBTAIN A GRADING PERMIT FOR THE PROSED WORK. NOTIFY THE HOWARD COUNTY DEPARTMENT OF PERMITS AND LICENSES (DILP) AT LEAST 48 HOURS PRIOR TO BEGINNING WORK. (2 DAYS)
- INSTALL THE STABILIZED CONSTRUCTION ENTRANCE (SCE) AND PERIMETER CONTROLS. (5 DAYS)
- AN ON-SITE STOCKPILE AREA, IF APPLICABLE, WILL BE LOCATED WITHIN THE LIMIT OF DISTURBANCE WITH THE COORDINATION AND DISCRETION OF THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR AND THE GENERAL CONTRACTOR. (1 DAY)
- WITH THE PERMISSION OF THE SEDIMENT CONTROL INSPECTOR, BEGIN STORM DRAIN INSTALLATION, AS WELL AS ESD OVERFLOW INLET AND OUTFALL PIPE. TEMPORARILY BLOCK INLET I-1 AND R-1 UNTIL VEGETATIVE STABILIZATION HAS OCCURRED. (10 DAYS)
- EXCAVATE ESD FACILITY TO SUBGRADE AND FINE GRADE AREA WITHIN LIMIT OF DISTURBANCE. STABILIZE SITE WITH VEGETATION. STABILIZE DIVERSION SWALE WITH SEED AND EROSION CONTROL MATTING. (5 DAYS)
- ONCE SITE HAS BEEN STABILIZED WITH VEGETATION, BEGIN INSTALLATION OF ESD COMPONENTS. REFER TO MICRO-BIORETENTION SEQUENCE OF CONSTRUCTION FOR THIS INSTALLATION LOCATED ON THIS SHEET.
- WITH THE PERMISSION OF THE SEDIMENT CONTROL INSPECTOR, REMOVE ALL REMAINING SEDIMENT CONTROL PRACTICES AND STABILIZE THOSE AREAS DISTURBED BY THIS PROCESS. (2 DAYS)
- ONCE DISTURBED AREAS HAVE COMPLETELY BEEN STABILIZED, REMOVE INLET BLOCKINGS AND MAKE THE FACILITY ACTIVE. (1 DAY)

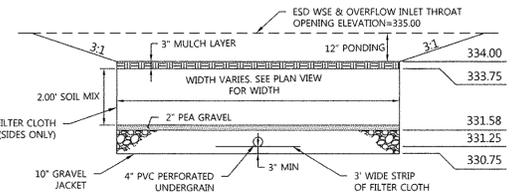
PROFILE
SCALE: HORZ. 1"=20'
VERT. 1"= 5'



ESD OUTFALL
SCALE: HORZ. 1"=20'
VERT. 1"= 5'



TYPICAL CROSS-SECTION OF MICRO-BIORETENTION
NOT TO SCALE



LEGEND

- SSF SUPER SILT FENCE
- SFD DIVERSION FENCE
- LIMIT OF DISTURBANCE
- DRAINAGE AREA DIVIDE
- EXISTING EASEMENT
- 200 EXISTING CONTOURS
- EXISTING ROADWAY
- EXISTING WETLANDS
- EXISTING INLET
- EXISTING MANHOLE
- ⊙ EXISTING STORM DRAIN MANHOLE
- PROPOSED INLET
- PROPOSED MANHOLE
- 15" D PROPOSED STORM DRAIN
- 210 PROPOSED MAJOR CONTOURS
- 214 PROPOSED MINOR CONTOURS

PURPOSE STATEMENT: REDLINE REVISION #8

THE PURPOSE OF THIS REDLINE REVISION IS TO BRING THE EXISTING BUILDING TO CURRENT ACURA SHOWCASE STANDARDS. THE NEW ACURA STANDARDS MANDATE NEW CUSTOMER SERVICE REQUIREMENTS. THE FOLLOWING IMPROVEMENTS PERTAIN TO SERVICE CUSTOMER INTAKE PROCEDURES AND PROTOCOLS. THE BUILDING UPGRADE WILL INCLUDE THE ADDITION OF A NEW ENCLOSED SERVICE PARKING AREA, A CAR WASH AREA AND ASSOCIATED SPACE. EXISTING DEALERSHIP CANOPIES WILL BE ENCLOSED FOR THESE PROPOSED IMPROVEMENTS.

MICRO-BIORETENTION SEQUENCE OF CONSTRUCTION

- INSTALL STORM DRAIN INFLOW SYSTEM I-1 TO E-1. BLOCK I-1 UNTIL ESD HAS BEEN STABILIZED AND READY FOR STORMWATER TREATMENT.
- INSTALL ESD OVERFLOW INLET R-1 AND OUTFALL PIPE TO EXISTING I-5. TEMPORARILY BLOCK R-1 UNTIL FACILITY IS STABILIZED AND READY FOR STORMWATER TREATMENT.
- EXCAVATE FACILITY TO SUBGRADE AND FINE GRADE AREAS WITHIN LIMIT OF DISTURBANCE. STABILIZE SITE WITH VEGETATION.
- ONCE SITE HAS BEEN STABILIZED AND SUBGRADE ELEVATIONS HAVE BEEN VERIFIED, PLACE 3" OF 10" GRAVEL JACKET OF NO.57 OR NO.6 AGGREGATE IN THE BOTTOM OF EXCAVATION.
- PLACE 3" WIDE STRIPS OF FILTER FABRIC DOWN ON 3" GRAVEL LAYER TO SUPPORT UNDERDRAIN SYSTEM. PLACE UNDERDRAINS IN CENTER OF FABRIC & TIE PIPES TO INLET WALLS AT THEIR PRESCRIBED INVERT ELEVATIONS.
- PLACE REMAINDER (7") OF THE 10" GRAVEL JACKET. CHECK FOR LEVELNESS.
- PLACE 2" PEA GRAVEL LAYER OVER GRAVEL JACKET.
- BACKFILL TOPSOIL FILTER MEDIA IN LIFTS OF 12" TO 18". DO NOT COMPACT. INSTALL LANDSCAPE PLANTINGS.
- INSTALL RIP RAP INFLOW PROTECTION AT ALL CURB OPENING INFLOW POINTS.
- SEED OR SOD 3:1 SIDE SLOPES. ADD 3" MULCH LAYER.
- INSTALL MICRO BIO-RETENTION PLANTINGS

07-23-15	ACURA WEST DEALERSHIP SERVICE AREA EXPANSION
DATE	NO. REVISION DESCRIPTION

NORRIS ACURA WEST

8559 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MD 21043
HOWARD COUNTY, MARYLAND

OWNER / DEVELOPER

NORRIS AUTO GROUP
925 MERRITT BOULEVARD
BALTIMORE, MD 21222
CONTACT: DAVID NORRIS COOK



501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286
P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM

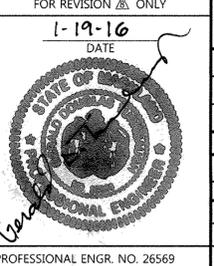
MICRO-BIORETENTION DETAILS AND NOTES

SUBDIVISION NAME	LANGELOTTA PROP	SECT./AREA	LOT/PARCEL #
PLAT# OR L/F	6656	TAX/ZONE MAP	199
WATER CODE		ELEC. DIST.	2
		CENSUS TR.	602900

ADDRESS CHART		
LOT NUMBER	STREET ADDRESS	
32	8559 BALTIMORE NATIONAL PIKE	
DES. BY ERS	SCALE: AS SHOWN	PROJ. NO. 15028
DRN. BY GMO	DATE: 1/19/16	
CHK'D. BY	APPROVED	7 OF 11

PROFESSIONAL CERTIFICATION

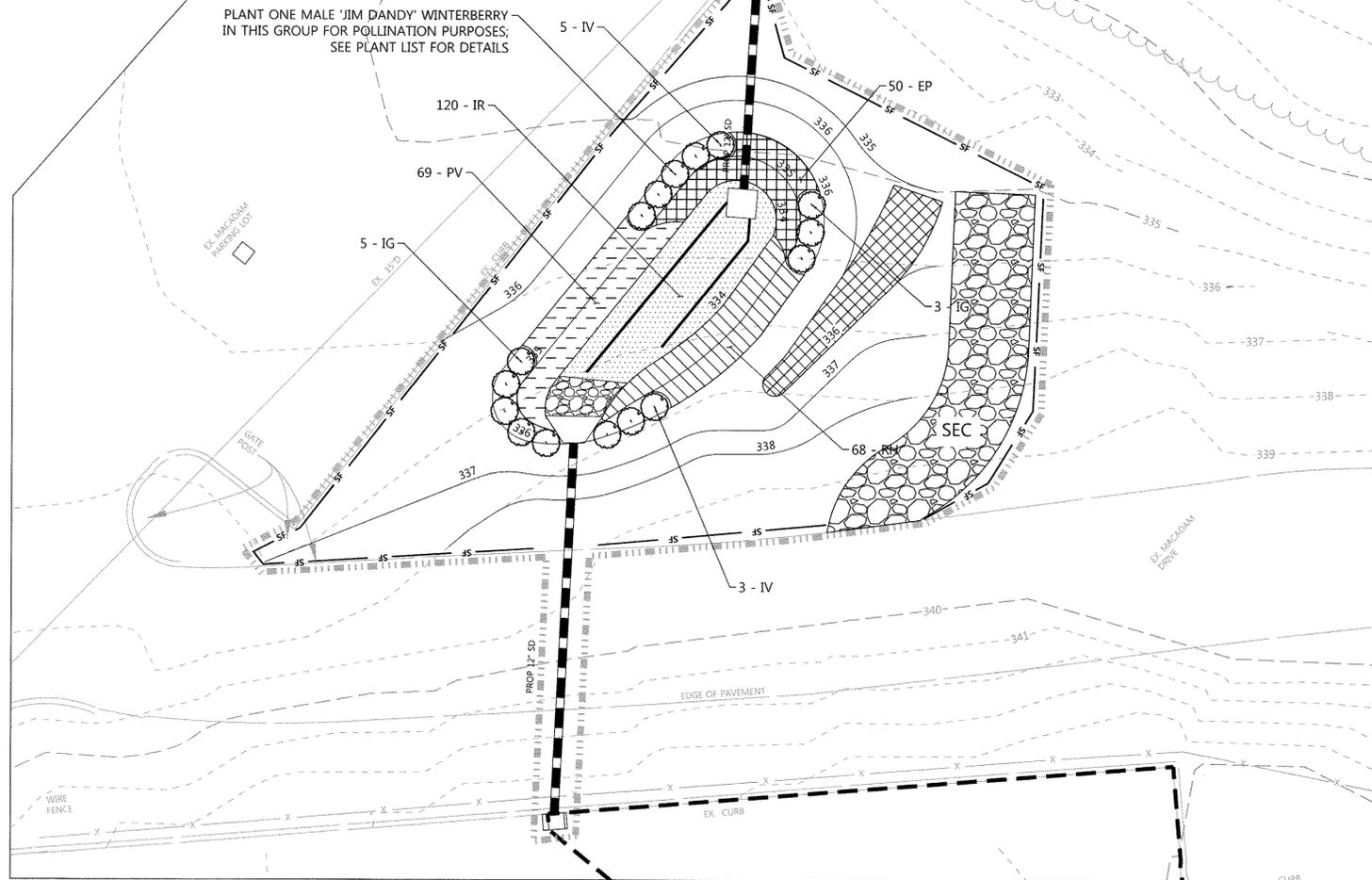
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 26569, EXPIRATION DATE: 7-18-17.



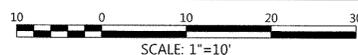
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
APPROVED: DEPARTMENT OF PLANNING AND ZONING
DATE: 2-26-16
CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE: 3-01-16
CHIEF, DIVISION OF LAND DEVELOPMENT
DATE: 3-2-16
DIRECTOR
HOWARD-SCD DATE



PLANT ONE MALE 'JIM DANDY' WINTERBERRY IN THIS GROUP FOR POLLINATION PURPOSES; SEE PLANT LIST FOR DETAILS



MICRO-BIORETENTION PLANTING PLAN



LEGEND

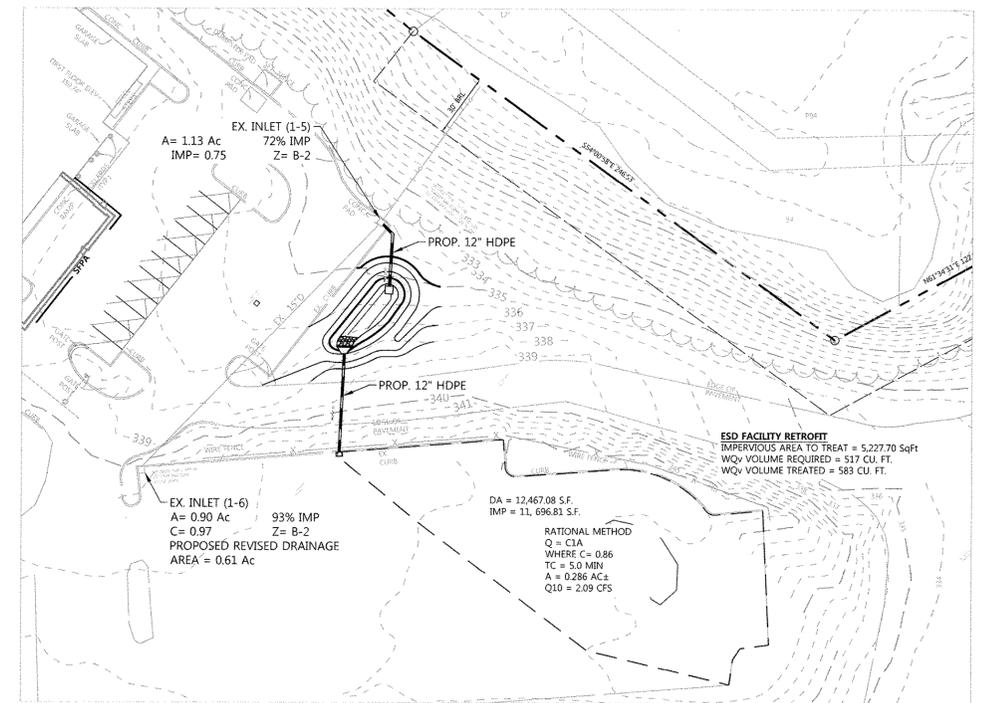
- SSF — SUPER SILT FENCE
- SFD — DIVERSION FENCE
- — — LIMIT OF DISTURBANCE
- — — DRAINAGE AREA DIVIDE
- — — EXISTING EASEMENT
- — — 200 — EXISTING CONTOURS
- — — EXISTING ROADWAY
- — — EXISTING WETLANDS
- — EXISTING INLET
- — EXISTING MANHOLE
- ⊙ — EXISTING STORM DRAIN MANHOLE
- — PROPOSED INLET
- — PROPOSED MANHOLE
- 15" D — PROPOSED STORM DRAIN
- 210 — PROPOSED MAJOR CONTOURS
- 214 — PROPOSED MINOR CONTOURS
- ▨ — PROPOSED SWM PERENNIAL PLANTINGS
- — PROPOSED SHRUB PLANTINGS

MICROBIORETENTION PLANTING PLAN NOTES:

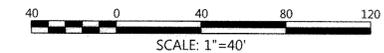
- SEE LANDSCAPE PLAN FOR FURTHER SITE PLANTINGS OUTSIDE OF SWM AREA, PLANTING NOTES, AND PLANTING DETAILS.
- SEE SWM SHEETS FOR MICROBIORETENTION AND SWM NOTES AND DETAILS.
- VERIFY LOCATION OF ALL UTILITIES AND SITE STRUCTURES EXISTING AND PROPOSED PRIOR TO PLANTING.

MICRO-BIORETENTION PLANT LIST						
KEY	BOTANICAL NAME	COMMON NAME	SPEC./HABIT	SPACING	QUANTITY	STATUS
RH	RUDBECKIA HIRTA	BLACK EYED SUSAN	1 GAL./CONT.	18" O.C.	68	FACU
EP	EUPATORIUM DUBIUM	DWARF JOE PYE WEED	1 GAL./CONT.	18" O.C.	50	FAC
IR	IRIS VERSICOLOR	BLUEFLAG	1 GAL./CONT.	18" O.C.	120	OBL
PV	PANICUM VIRGATUM	SWITCH GRASS	1 GAL./CONT.	18" O.C.	69	FAC
IG	ILEX GLABRA 'SHAMROCK'	SHAMROCK INKBERRY	3 GAL./CONT.	3.0' O.C.	8	FACW
IV*	ILEX VERTICILLATA 'WINTER RED'	WINTERBERRY	3 GAL./CONT.	3.0' O.C.	8	FACW

* PLANT ONE MALE 'JIM DANDY' WINTERBERRY IN PLACE OF ONE 'WINTER RED' AS SHOWN ON PLANTING PLAN FOR POLLINATION PURPOSES.



MICRO-BIORETENTION DRAINAGE AREA



PURPOSE STATEMENT: REDLINE REVISION #8

THE PURPOSE OF THIS REDLINE REVISION IS TO BRING THE EXISTING BUILDING TO CURRENT ACURA SHOWCASE STANDARDS. THE NEW ACURA STANDARDS MANDATE NEW CUSTOMER SERVICE REQUIREMENTS. THE FOLLOWING IMPROVEMENTS PERTAIN TO SERVICE CUSTOMER INTAKE PROCEDURES AND PROTOCOLS. THE BUILDING UPGRADE WILL INCLUDE THE ADDITION OF A NEW ENCLOSED SERVICE PARKING AREA, A CAR WASH AREA AND ASSOCIATED SPACE. EXISTING DEALERSHIP CANOPIES WILL BE ENCLOSED FOR THESE PROPOSED IMPROVEMENTS.

07-23-15	ACURA WEST DEALERSHIP SERVICE AREA EXPANSION
DATE	NO.
REVISION DESCRIPTION	

NORRIS ACURA WEST

8559 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MD 21043
HOWARD COUNTY, MARYLAND

OWNER / DEVELOPER

NORRIS AUTO GROUP
925 MERRITT BOULEVARD
BALTIMORE, MD 21222
CONTACT: DAVID NORRIS COOK



501 FAIRMOUNT AVENUE SUITE 300 TOWSON, MD 21286
P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM

ESD LANDSCAPING AND SEDIMENT AND EROSION CONTROL DETAILS AND NOTES

SUBDIVISION NAME	SECT./AREA	LOT/PARCEL #
LAKELONNA PROPERTY		199
PLAT# OR L/V	BLOCK#	ZONE
6656	1	B-2
WATER CODE	TAX/ZONE MAP	ELEC. DIST.
	25	2
SEWER CODE	CENSUS TR.	
	602900	

ADDRESS CHART	
LOT NUMBER	STREET ADDRESS
81	8559 BALTIMORE NATIONAL PIKE

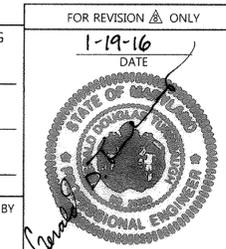
DES. BY ERS	SCALE: AS SHOWN	PROJ. NO. 15028
DRN. BY GMO	DATE: 1/19/16	

CHK'D. BY	APPROVED	8 OF 11
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APPROVED: DEPARTMENT OF PLANNING AND ZONING

<i>[Signature]</i>	2-26-16
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE
<i>[Signature]</i>	3-01-16
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE
<i>[Signature]</i>	3-2-16
DIRECTOR	DATE

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 26569, EXPIRATION DATE: 7-18-17.



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

HOWARD SCD	DATE
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PROFESSIONAL ENGR. NO. 26569

