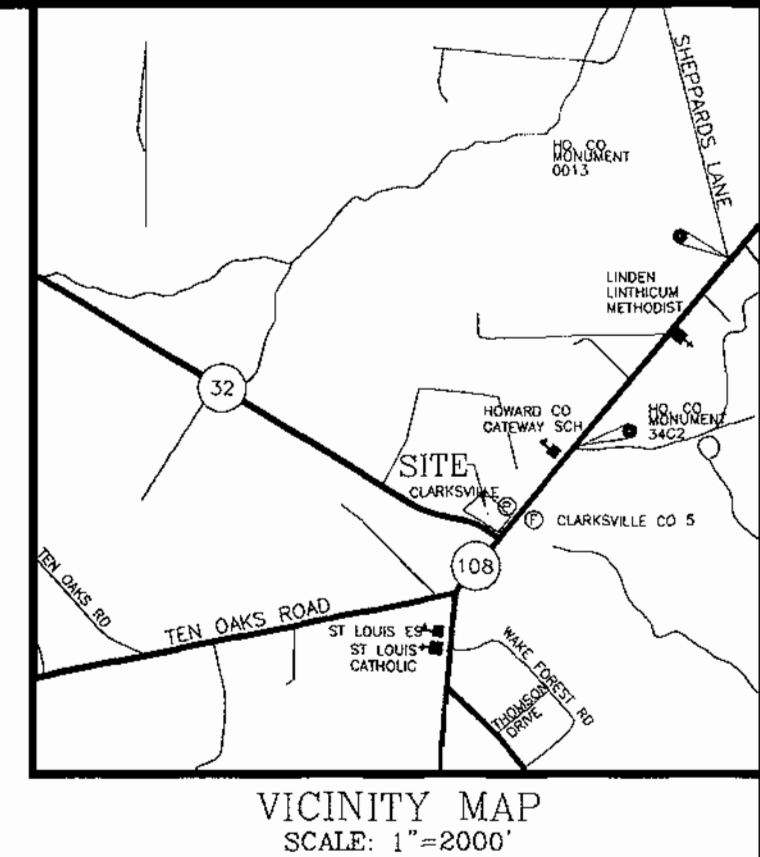


ANTWERPEN USED CAR FACILITY

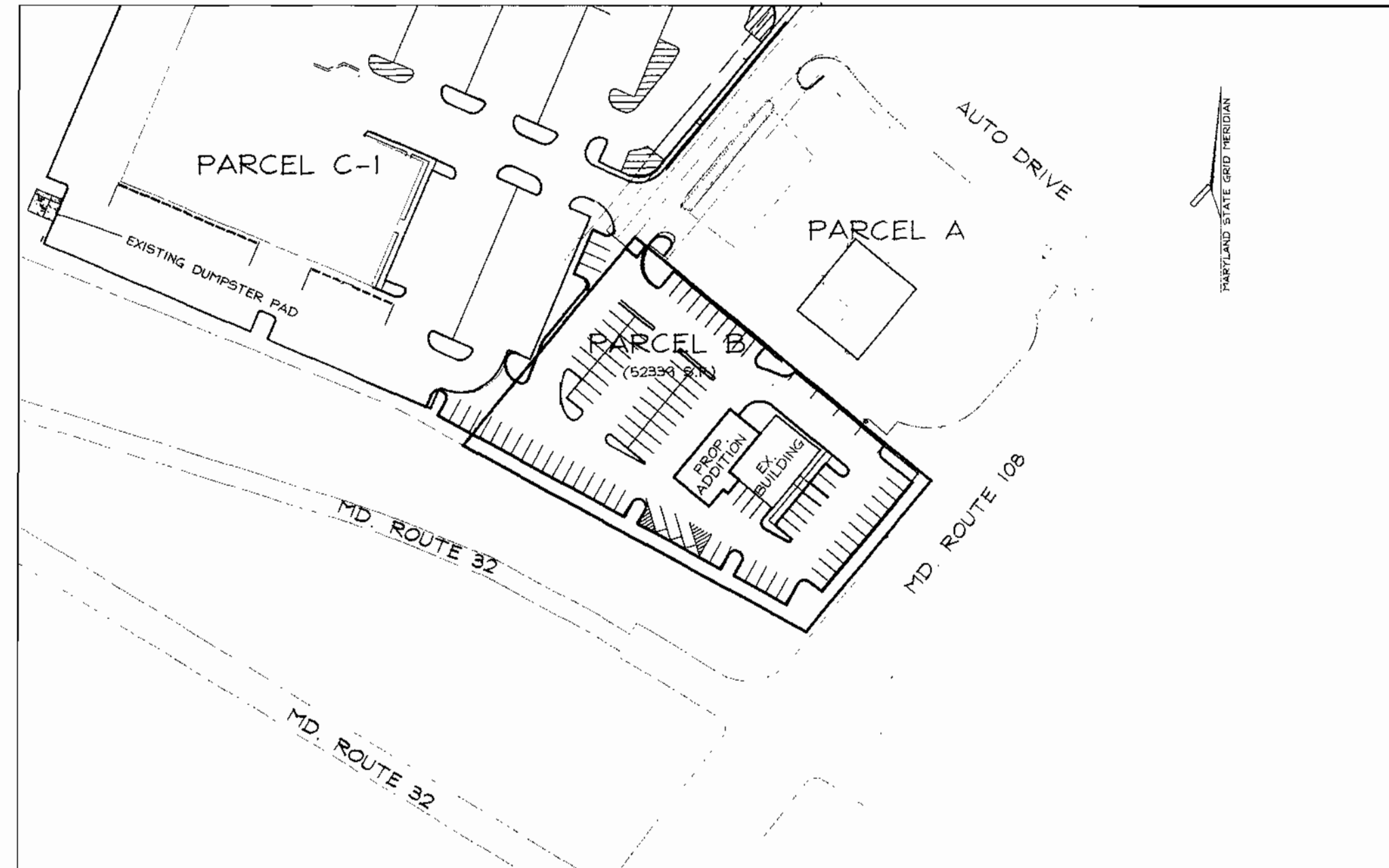
SITE DEVELOPMENT PLAN

PARCEL 'B' HOLWECK SUBDIVISION



GENERAL NOTES

- All construction shall be in accordance with the latest standards and specifications of Howard County plus MSA standards and specifications, if applicable.
- The contractor shall notify "Miss Utility" at 1-800-257-7777 at least 48 hours prior to any excavation work.
- The contractor is to notify the following utilities or agencies at least five days before starting work on these drawings:
 - Miss Utility: 1-800-257-7777
 - Belt Atlantic Telephone Company: 1-888-586-4301
 - Howard County Bureau of Utilities: 313-2366
 - A&T Cable Location Division: 393-3553
 - B.G. & Co. Contractor Services: 850-4620
 - B.G. & Co. Underground Damage Control: 787-4620
 - State Highway Administration: 531-5533
- Site analysis:
 - Area of parcel: 1.2 Ac.±
 - Present zoning: B-2
 - Proposed use of structure: Used car sales and display
 - Current use of structure: Bank
 - Building area: Ex. Building area: 2501 sf Prop. Addition area: 2237 sf
 - Building coverage on site: Ex Bldg .06 Ac. or 5.0 % of gross area
 - Prop. Bldg .05 Ac. or 4.2 % of gross area
 - Total Bldg coverage: 0.11 Ac. or 9.2%
 - Paved parking lot area: 0.82 Ac. or 68.3% of gross area
 - Area of landscape island: 0.03 Ac. = 1,316sf
- Project background:
 - Location: Clarksville, Tax Map 34, Parcel B
 - Zoning: B-2
 - Subdiv. name: Holweck Subdivision
 - Location Area: N/C
 - Site Area: 1.2 Acres
 - DPZ references: SDP-95-23; F-94-38; F-92-161; SP-93-14; ZB-947M
- The contractor shall notify the Department of Public Works/Bureau of Engineering/Construction Inspection Division at (410) 313-1880 at least five (5) working days prior to start of work.
- Any damage to public right-of-ways, paving, or existing utilities will be repaired at the contractor's expense.
- Existing utilities located from Road Construction Plans, Field Surveys, Public Water and Sewer Extension Plans and available record drawings. Approximate location of existing utilities are shown for the contractor's information. Contractor shall locate existing utilities well in advance of construction activities and take all necessary precautions to protect the existing utilities and to maintain uninterrupted service. Any damage incurred due to contractor's operation shall be repaired immediately at the contractor's expense.
- Traffic control devices, markings and signing shall be in accordance with the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD). All street and regulatory signs shall be in place prior to the placement of any asphalt.
- Estimates of earthwork quantities are provided solely for the purpose of calculating fees.
- Soil compaction specifications, requirements, methods and materials are to be in accordance with the recommendations of the project Geotechnical Engineer. Geotechnical Engineer to confirm acceptability of proposed paving section, based on soil test prior to construction.
- All storm drain pipe opening shall be Class 'C'.
- The existing topography is taken from SDP 95-23-SDP 95-97 and SDP 97-96 performed by Potomac Aerial, dated Dec. 1997 and field topography performed by Vogel & Associates, Inc. dated July, 2000. The coordinates shown hereon are based upon the Howard County Geodetic Control NAD 83. Howard County Monument Nos. 34C2 and 0013 were used for this project.
- A noise study is not required for this project.
- All paving to be B-2 paving per details, sheet 5 of 5.
- All curb and gutter to be Howard County Standard concrete Detail 3.01 unless otherwise specified.
- Contractor responsible to construct all handicap parking and handicap access in accordance with current ADA requirements.
- Where drainage flows away from curb, contractor to reverse the gutter pan.
- All elevations are to finished bottom of curb unless otherwise noted.
- All dimensions are to face of curb unless otherwise noted.
- Public water available from existing 2" whc (SDP 95-23). Public sewer is provided by a proposed 4" SMC. Contractor to contact the Health Department for proper septic abandonment prior to public sewer connection.
- Stormwater management quality and quantity is provided with two Extended Detention Facilities under F-94-38.
- All exterior lighting shall conform to Zoning Regulations Section 134.
- Dumpster on Parcel C-1 to be utilized by Parcel B (See Location Map this sheet).
- This project is exempt from the Adequate Public Facilities road test since the existing trips generated by the site exceed the proposed.
- Forest conservation was addressed under F-94-38 for this subdivision.



LOCATION MAP

SCALE: 1"=100'

LEGEND

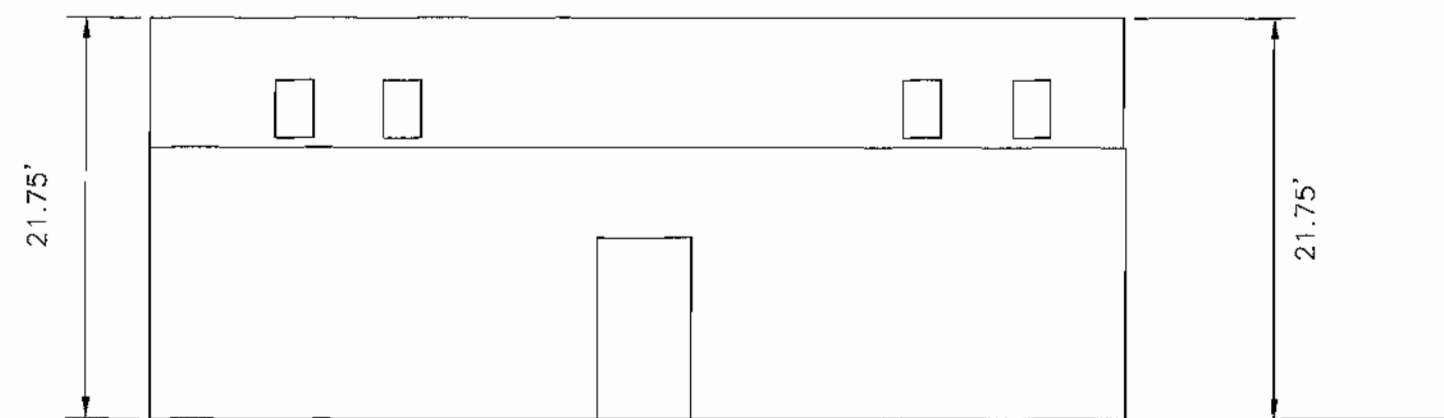
- Existing Contour: 382
- Proposed Contour: +82.53
- Spot Elevation
- Direction of Flow
- Stabilized Construction Entrance
- Silt Fence: SF
- Limit of Disturbance: LOD
- Inlet Protection: IP
- Existing Trees to Remain
- Light Poles: Single Overhead, Double Overhead
- Display Area
- Concrete

BENCHMARKS

Howard County Station 34C2
N 562,821.798 E 1,329,750.722
Howard County Station 0013
N 564,285.946 E 1,331,309.715

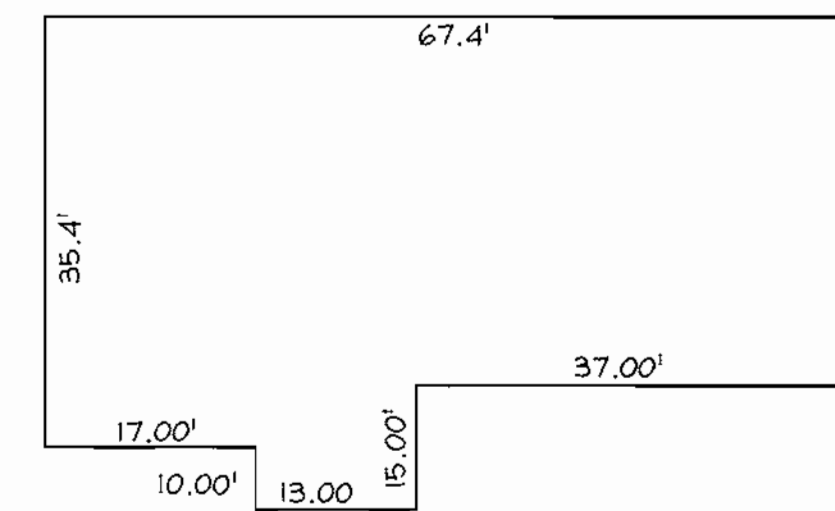
SHEET INDEX

DESCRIPTION	SHEET NO.
Cover Sheet	1 OF 5
Site Development Plan	2 OF 5
Storm Drain Drainage Area Map	3 OF 5
Landscape Plan	4 OF 5
Sediment Control Details Misc. Details and Storm Drain Profile	5 OF 5



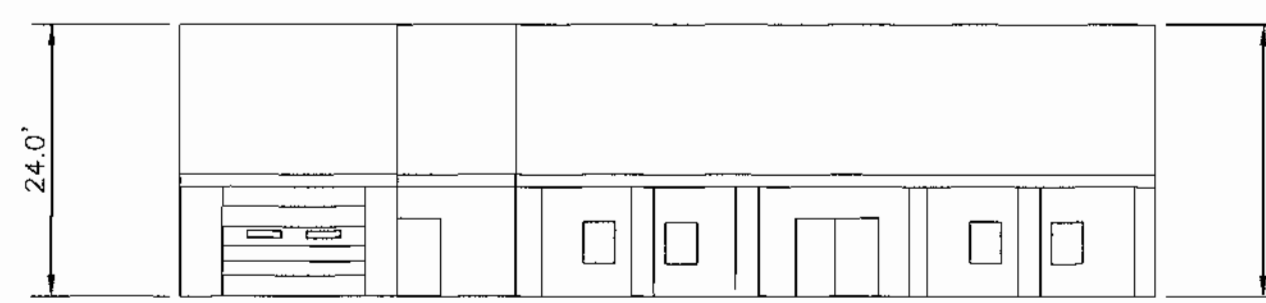
EXISTING BUILDING ELEVATION

NOT TO SCALE



PROPOSED BUILDING PLAN VIEW

NOT TO SCALE



PROPOSED BUILDING ELEVATION

NOT TO SCALE

PARKING TABULATION

	REQUIRED	PROPOSED
Vehicle Display 9643sf x 10 spaces = 9,643sf	10 spaces	
Vehicle Sales Building 4730sf x 20 spaces = 94,600sf	10 spaces	
Service Bays 431sf x 3 bays = 1,293sf	12 spaces	
Handicap spaces	2 spaces	
Total spaces	34 spaces	46 spaces (including 2 handicapped spaces)

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Jacob Antwerpen 1/31/01
DIRECTOR DATE
Cindy Arnold 1/29/01
CHIEF, DIVISION OF LAND DEVELOPMENT DATE
Chad Dawkins 1/10/01
CHIEF, DEVELOPMENT AND ZONING DIVISION DATE

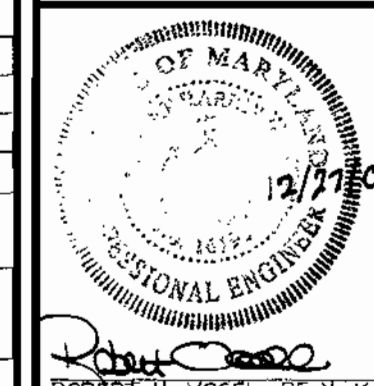
OWNER/DEVELOPER

Jacob Antwerpen
Antey LLC
P.O. Box 144
CLARKSVILLE, MD, 21029
Telephone: (410) 531-5700

ADDRESS CHART

STREET ADDRESS
12410 AUTO DRIVE

SUBDIVISION NAME	SECTION/AREA	PARCEL NUMBER
HOLWECK SUBDIVISION	N/A	B
PLAT NO. 11179	BLOCK NO. 6	ZONE B-2
TAX/ZONE 34	ELECT. DIST. 5	CENSUS TR. 6051.01
WATER CODE: J 07	SEWER CODE: 6453000	



DESIGN BY: JCO / RLP

DRAWN BY: RLP

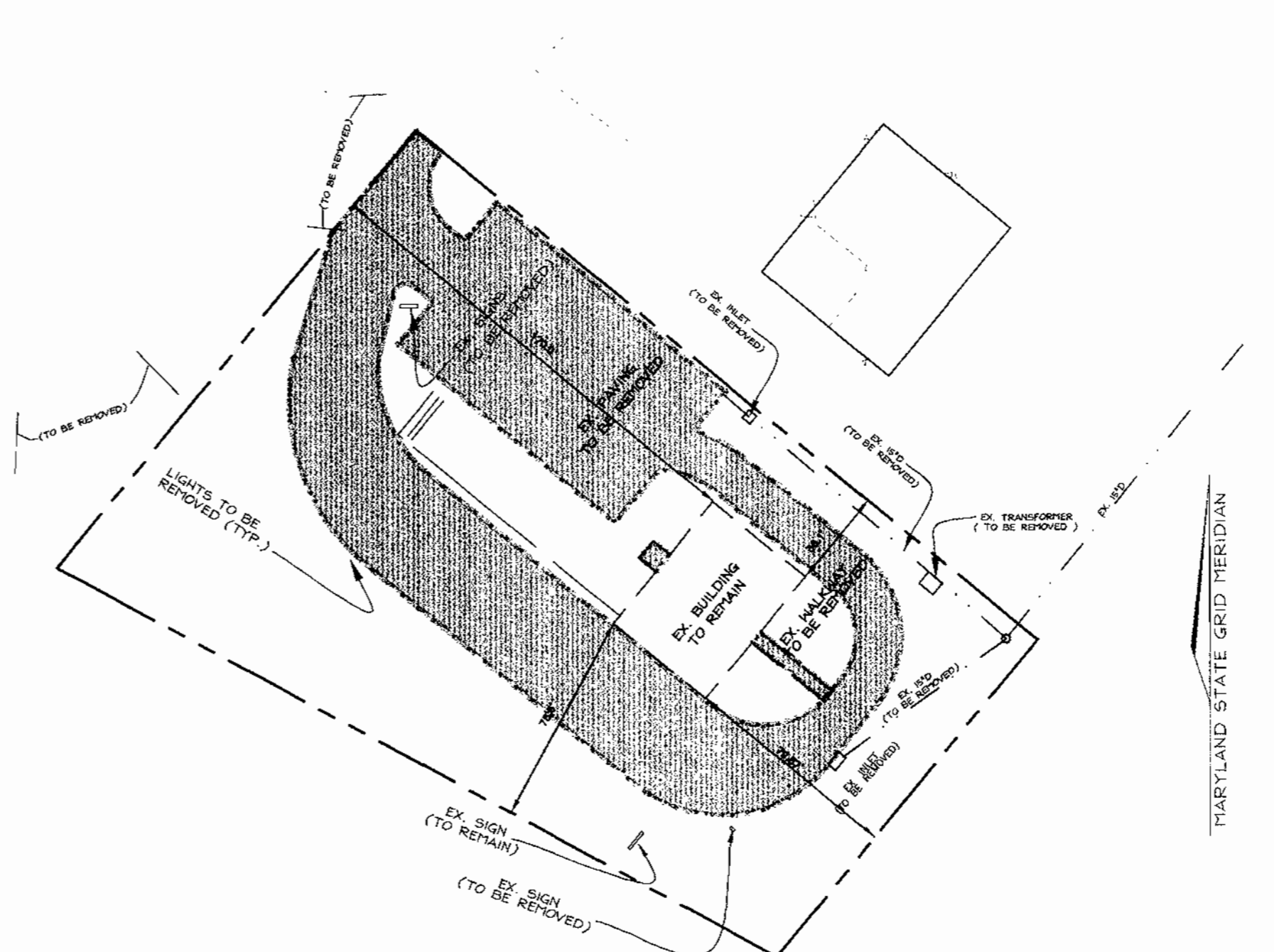
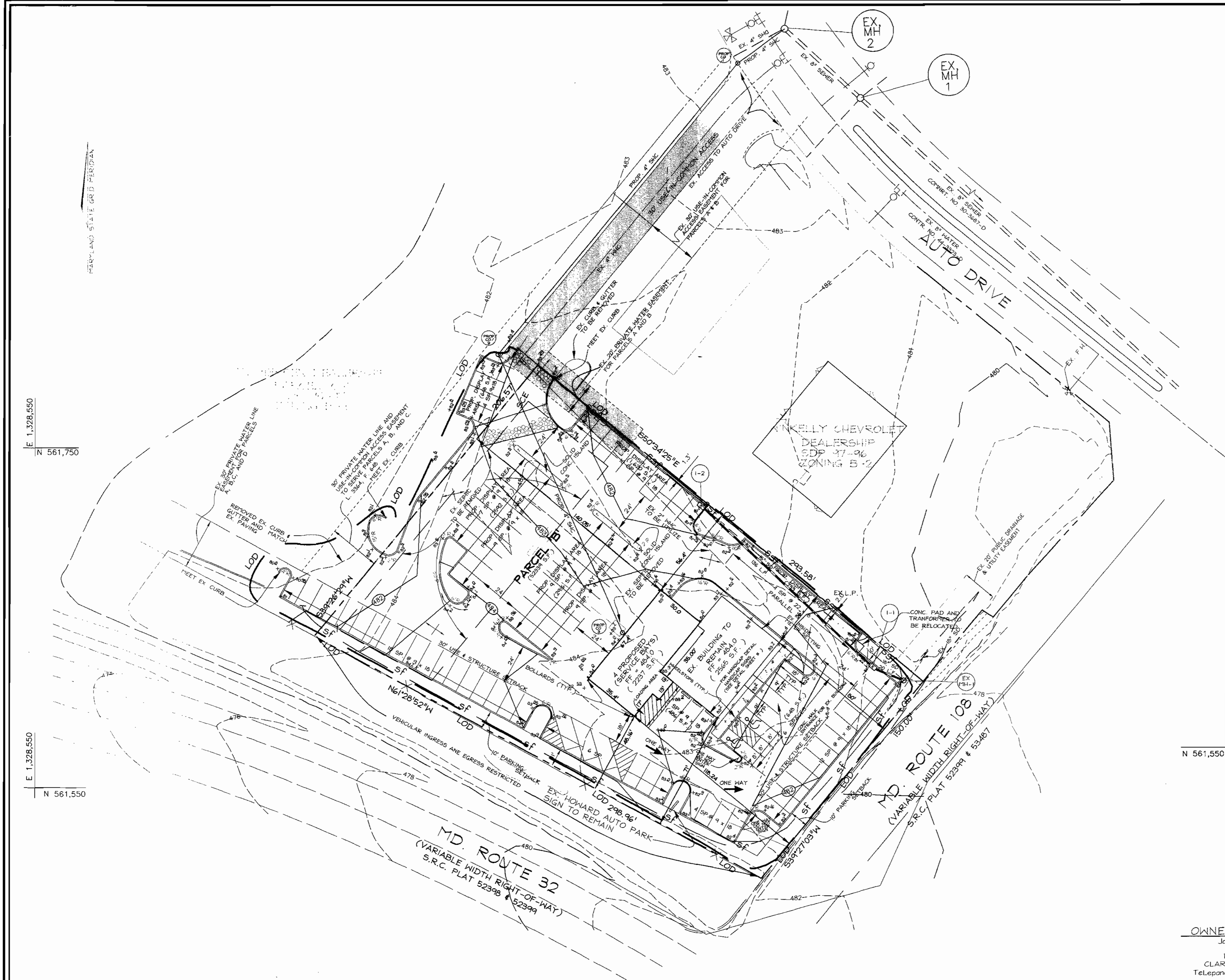
CHECKED BY: RHV

DATE: Dec. 21, 2000

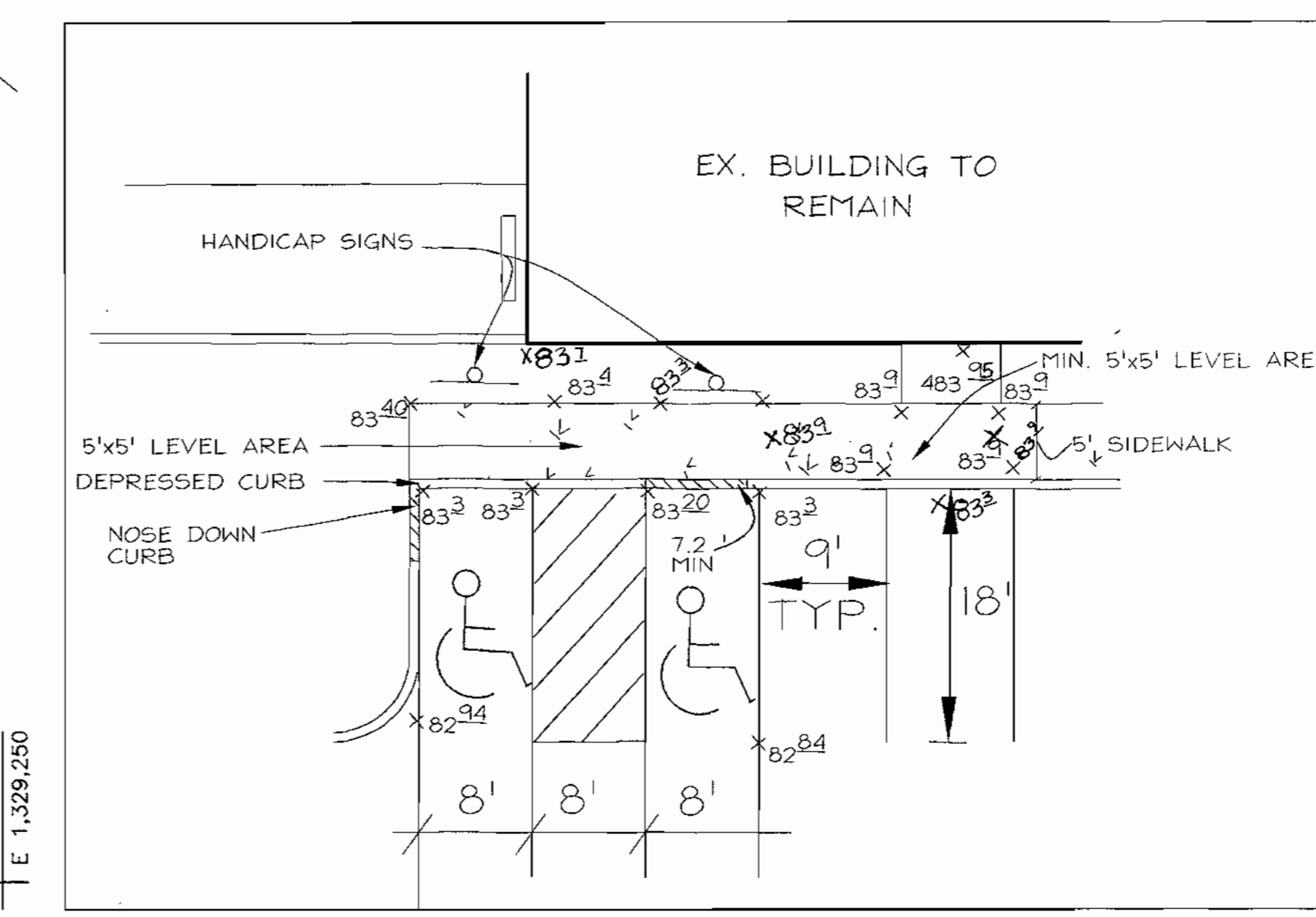
SCALE: AS SHOWN

W.O. NO.: 00-068

1 SHEET OF 5



EXISTING CONDITIONS
SCALE: 1" = 50'



HANDICAP RAMP DETAIL
SCALE: 1" = 10'

PLAN
SCALE: 1" = 30'

OWNER/DEVELOPER
Jacob Antwerpen
Antoy LLC
P.O. Box 144
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SITE DEVELOPMENT PLAN
ANTWERPEN USED CAR FACILITY
PARCEL 'B' HOLWECK SUBDIVISION
TAX MAP #34 REFERENCE F 94-38, SDP 95-23 PARCEL 'B'
5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

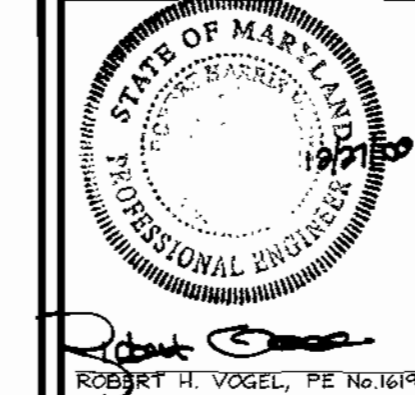
VOGEL & ASSOCIATES
ENGINEERS SURVEYORS PLANNERS
3691 Park Avenue, Suite 101 • Elkott City, Maryland 21043
Tel 410.461.5626 Fax 410.465.3966

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
Chad Damman 1/10/01
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE
David Kowalski 1/29/01
 CHIEF, DIVISION OF PLANNING & DEVELOPMENT DATE
Paul Smith 1/31/01
 DIRECTOR DATE

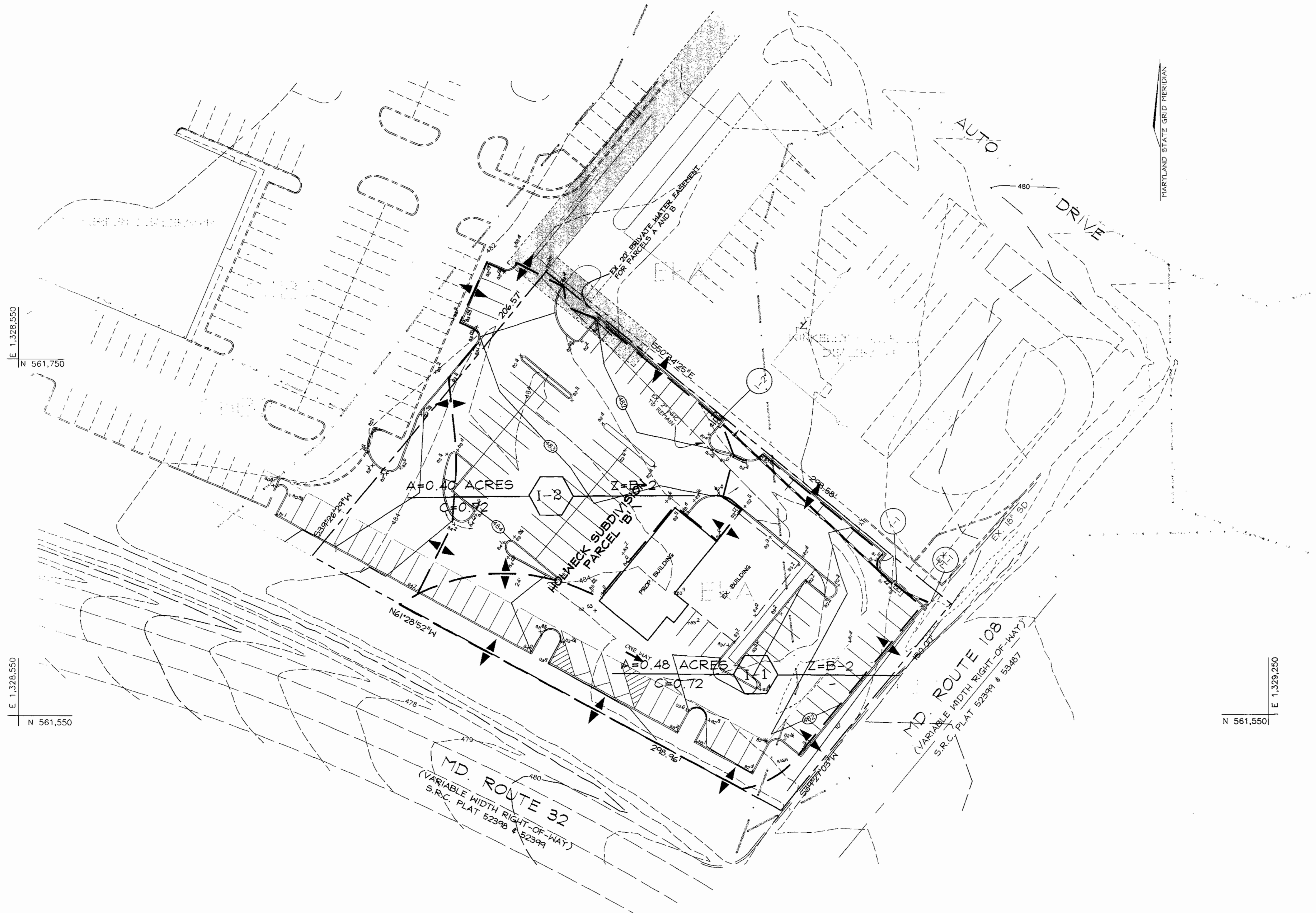
ENGINEERS CERTIFICATE
 "I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."
Robert H. Vogel 12/20/00
 SIGNATURE OF ENGINEER DATE
 ROBERT H. VOGEL

DEVELOPER'S CERTIFICATE
 "I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL 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."
John K. Pluton 12/20/00
 SIGNATURE OF DEVELOPER DATE
 JOHN K. PLUTON

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS
J. A. Warfield 1/18/01
 USA-NATURAL RESOURCES CONSERVATION SERVICE DATE
 THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT
John K. Pluton 1/18/01
 HOWARD SCD DATE



DESIGN BY: JCO
 DRAWN BY: RLP
 CHECKED BY: RHV
 DATE: Dec. 21, 2000
 SCALE: AS SHOWN
 W.C. NO.: 00-068



SOILS LEGEND

SYMBOL	NAME / DESCRIPTION	SOIL GROUP
MgB2	Medium Gravelly loam, 3 to 8 percent slopes, Moderately eroded	B
EKA	Fill or silty loam, 0 to 3 percent slopes	C
M1B2	Medium Gravelly loam, 3 to 8 percent slopes, Moderately eroded	B
E1B2	Fill or silty loam, 3 to 8 percent slopes, Moderately eroded	C

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

[Signature] 1/21/01
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 1/21/01
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 1/31/01
 DIRECTOR DATE

OWNER/DEVELOPER
 Jacob Antwerpen
 Antoy LLC
 P.O. Box 144
 CLARKSVILLE, MD, 21029
 Telephone: (410) 531-5700

**STORM DRAIN PLAN
 AND
 DRAINAGE AREA MAP
 ANTWERPEN USED CAR FACILITY
 PARCEL 'B' HOLWECK SUBDIVISION**

TAX MAP #34 REFERENCE F 94-38, SDP 95-23 PARCEL 'B'
 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

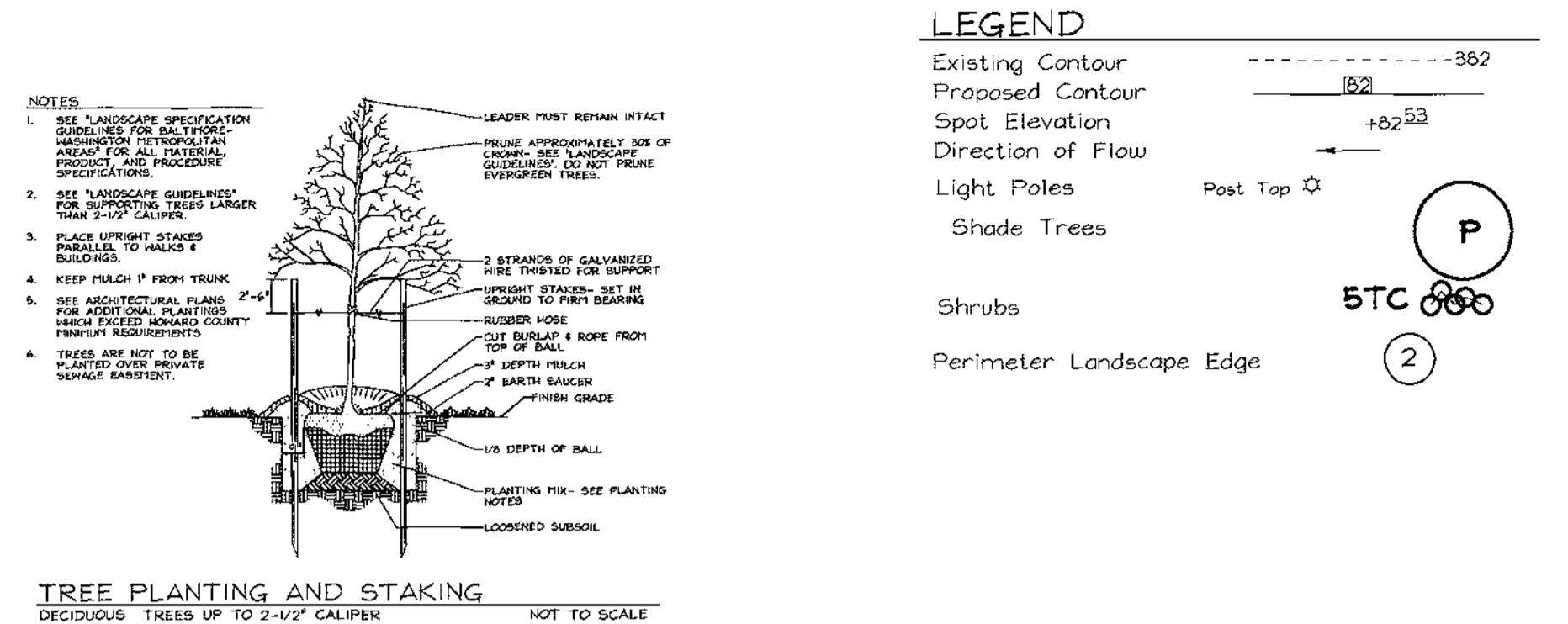
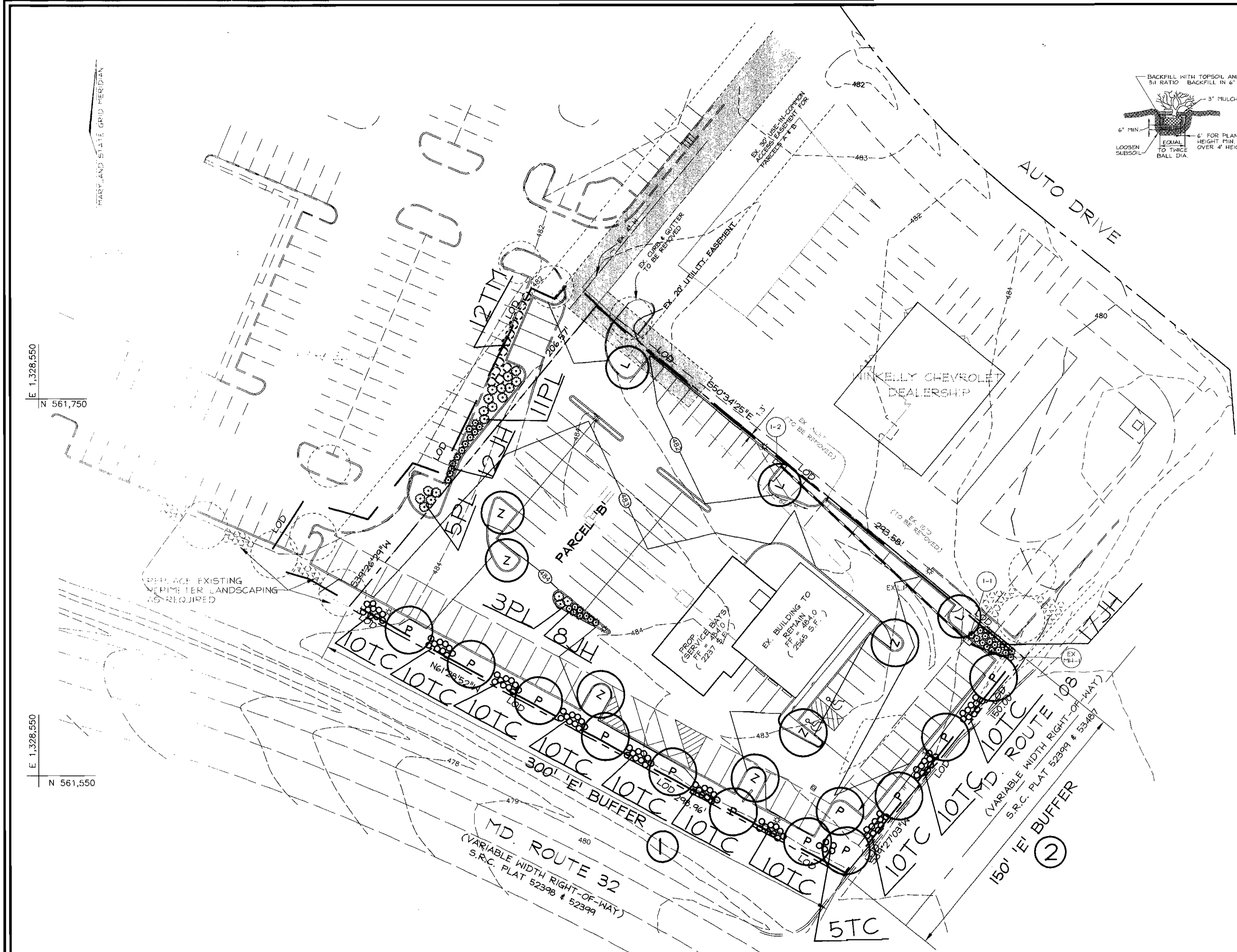
**VOGEL &
 ASSOCIATES**
 ENGINEERS-SURVEYORS-PLANNERS

3691 Park Avenue, Suite 101 • Elkott City, Maryland 21043
 Tel 410.461.5828 Fax 410.465.3966

DESIGN BY: JCO
 DRAWN BY: RLP
 CHECKED BY: RHV
 DATE: Dec. 21, 2000
 SCALE: 1"=30'
 W.O. NO.: 00-068

STATE OF MARYLAND
 PROFESSIONAL ENGINEER
 ROBERT H. VOGEL, PE No. 16198

3 SHEET OF 5



LEGEND

- Existing Contour
- Proposed Contour
- Spot Elevation
- Direction of Flow
- Light Poles
- Shade Trees
- Shrubs
- Perimeter Landscape Edge

LANDSCAPE SCHEDULE

KEY	QUAN.	BOTANICAL NAME	SIZE	REM
Z	8	Zelkova Serrata 'Village Green' Village Green Zelkova	2 1/2" - 3" Cal.	B & B
PL	19	Prunus laurocerasus 'Otto Luykeng' Otto Luykens Cherry Laurel	18" - 24" ht.	B & B or Cont.
JH	37	Juniperus horizontalis 'Plumosa' Sweetgum	24" - 30" Ht.	B & B or Cont.
L	3	Liquidambar styraciflua Sweetgum	2 1/2" - 3" Cal.	B & B or Cont.
P	12	Quercus palustris Pin Oak	2 1/2" - 3" Cal.	B & B or Cont.
TC	95	Taxus cuspidata 'Nana' Dwarf Japanese Yew	30" - 36" Ht.	B & B or Cont.
TM	12	Taxus x media 'Densiflora' Densiflora Yew	30" - 36" Ht.	B & B or Cont.

- ALL PLANT MATERIALS SHALL BE FULL AND HEAVY, BE WELL FORMED AND SYMMETRICAL, CONFORM TO THE MOST CURRENT AAN SPECIFICATIONS AND BE INSTALLED IN ACCORDANCE WITH LCAMM PLANTING SPECIFICATIONS.
- CONTRACTOR SHALL VERIFY LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO DIGGING.
- FINAL LOCATION OF PLANT MATERIAL MAY NEED TO VARY TO MEET FINAL FIELD CONDITIONS. TREES SHALL NOT BE PLANTED IN THE BOTTOM OF DRAINAGE SWALES.
- CONTRACTOR SHALL VERIFY PLANT QUANTITIES PRIOR TO BIDDING. IF PLAN DIFFERS FROM LANDSCAPE SCHEDULE, THE PLAN SHALL GOVERN.

- GENERAL NOTES**
- This plan has been prepared in accordance with the provisions of Section 16.124 of the Howard County code and the Landscape Manual. The required parking and perimeter landscaping will be bonded per this submission.
 - Financial Surety for the required landscaping must be posted as part of the Grading Permit in the amount of \$8490.00 for the required 17 shade trees, and 113 shrubs.
 - Light poles to be 25' black fiberglass. Lights to be Kim Entablature Rectilinear Luminaire with 250 Watt fixtures.
 - This parcel is an internal parcel within a subdivision. No screening between parcels is required by Howard County.

PLAN
SCALE: 1" = 30'

**SCHEDULE B
PARKING LOT INTERNAL LANDSCAPING**

Number of parking spaces	101
Number of trees & islands required	5
Number of trees & islands provided	
Shade Trees	5
Other Trees (2:1 Substitution)	-

**SCHEDULE A
PERIMETER LANDSCAPE EDGE**

CATEGORY	ADJACENT TO ROADWAYS	
	①	②
Perimeter/Frontage Designation	E	E
Landscape Type	E	E
Linear Feet of Roadway	300	150
Credit for Existing Vegetation (Yes, No, Linear Feet Describe below if needed)	No	No
Credit for Wall, Fence or Berm (Yes, No, Linear Feet Describe below if needed)	No	No
Number of Plants Required		
Shade Trees	1:40 8	1:40 4
Evergreen Trees	-	-
Shrubs	1:4 75	1:4 38
Number of Plants Provided		
Shade Trees	8	4
Evergreen Trees	-	-
Other Trees (2:1 Substitution)	-	-
Shrubs (10:1 Substitution)	75	38
Describe Plant Substitution Credits Below if needed)		

OWNER/DEVELOPER
Jacob Antwerpen
Antley LLC
P.O. Box 144
CLARKSVILLE, MD, 21029
Telephone: (410) 531-5700

APPROVED HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

John Dammann 1/10/01
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Coody Hamrick 1/21/01
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

James R. Banta 1/31/01
DIRECTOR DATE

DEVELOPER'S BUILDER'S CERTIFICATE

I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION, A CERTIFICATION OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE(1) YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

[Signature] 12/20/00
SIGNATURE OF DEVELOPER DATE

This parcel is an internal parcel within a subdivision. No screening between parcels is required by Howard County.

LANDSCAPE PLAN
ANTWERPEN USED CAR FACILITY
PARCEL 'B' HOLWECK SUBDIVISION

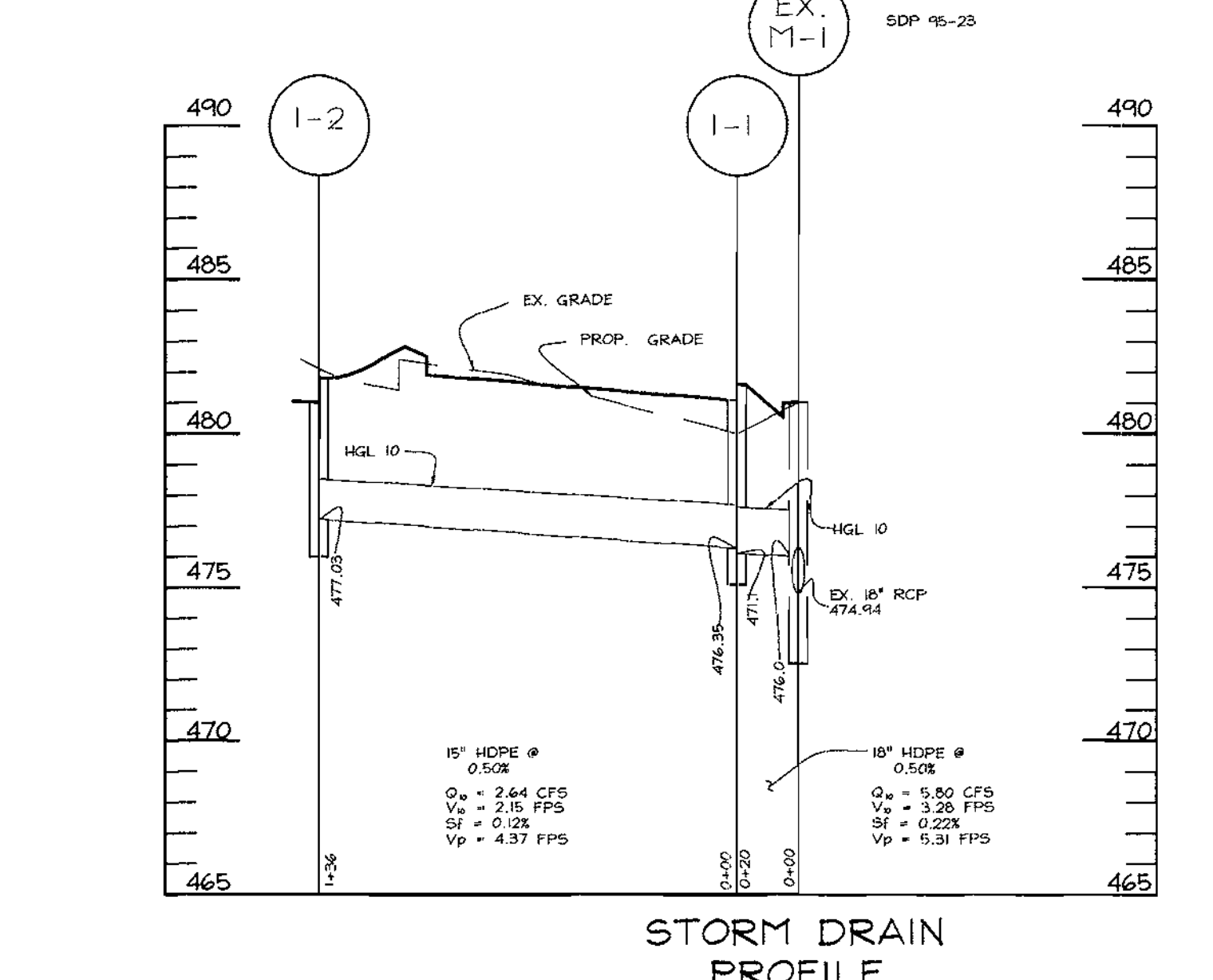
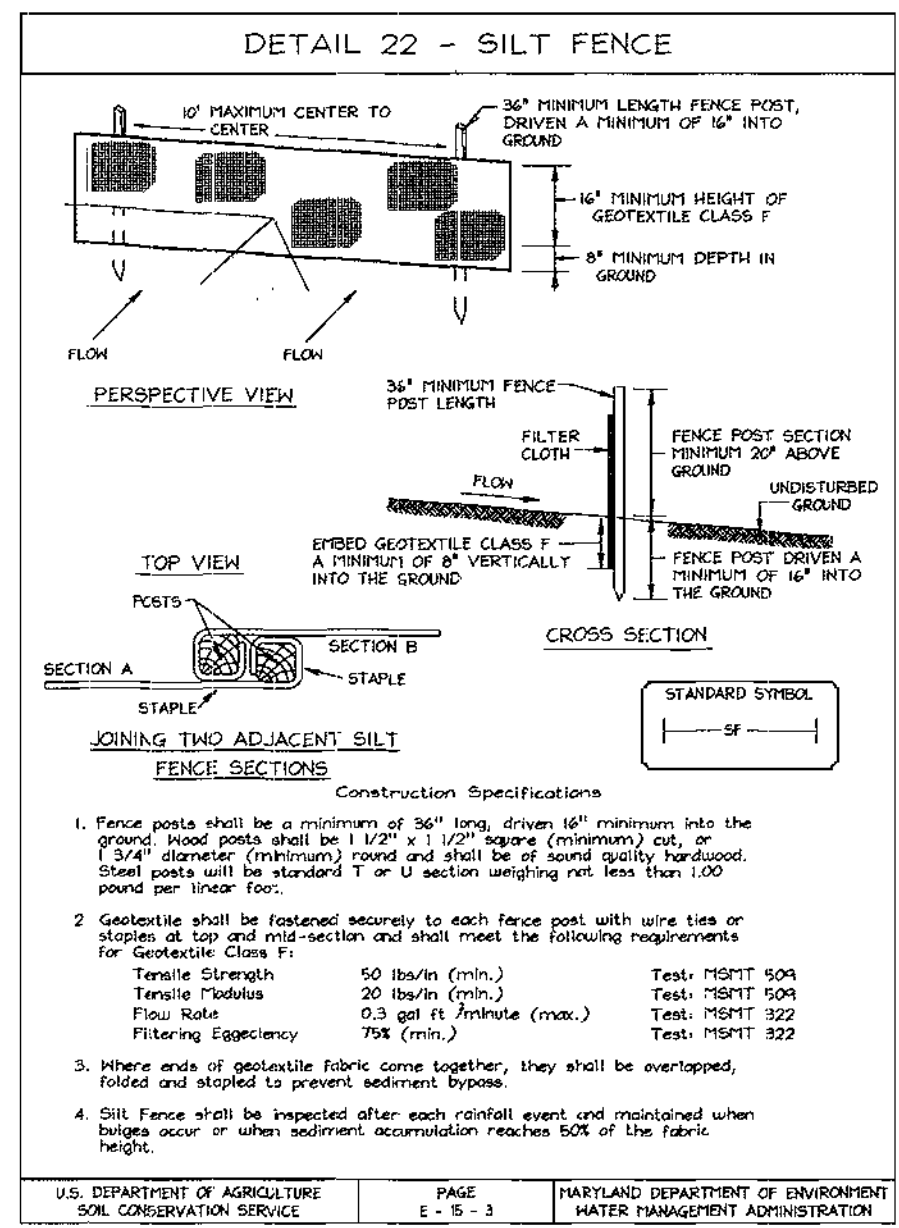
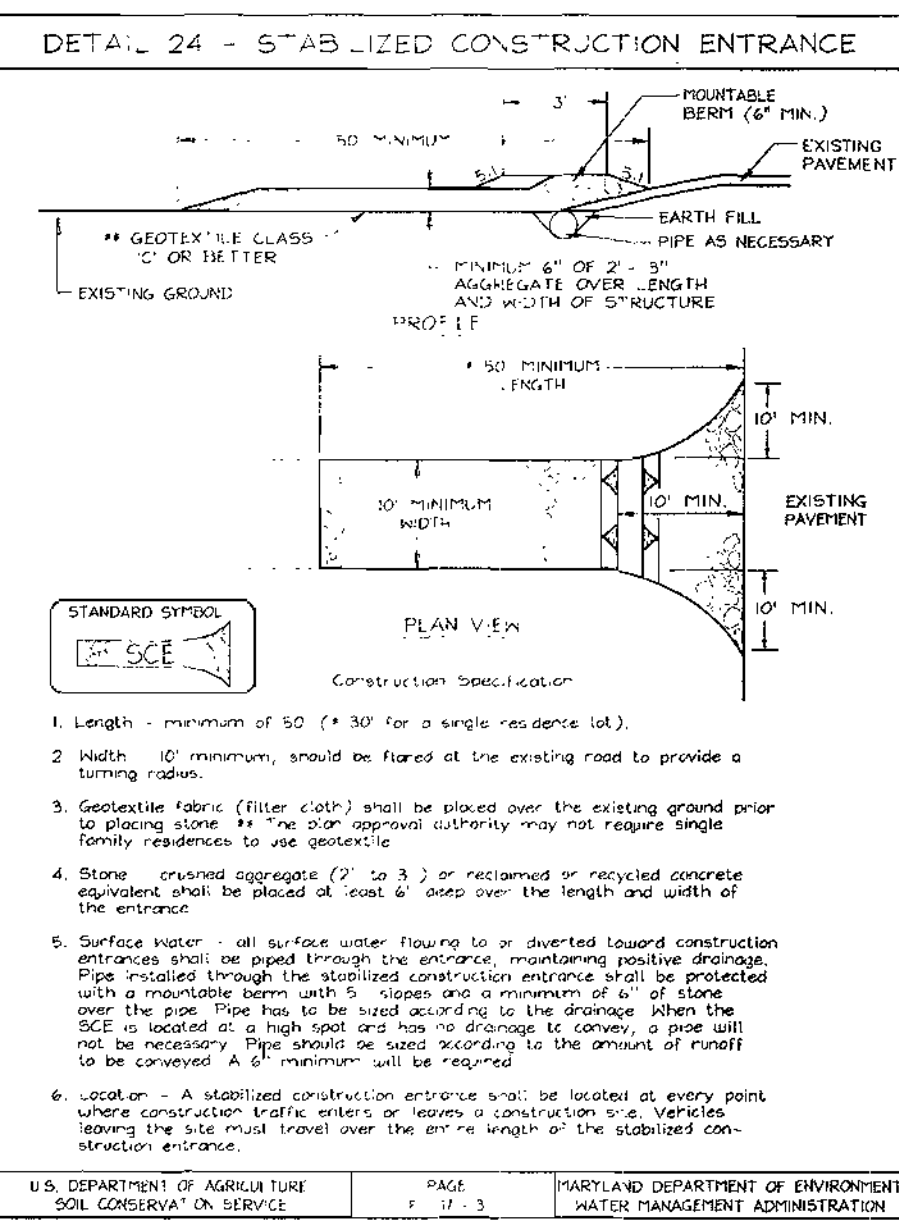
TAX MAP #34 REFERENCE F 94-38, SDP 95-23 PARCEL 'B'
5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

VOGEL & ASSOCIATES
ENGINEERS/SURVEYORS/PLANNERS

3891 Park Avenue, Suite 101 • Ellicott City, Maryland 21043
Tel 410.461.5828 Fax 410.465.3968

DESIGN BY: MHM/RLP
DRAWN BY: RLP
CHECKED BY: MHM
DATE: Dec. 21, 2000
SCALE: AS SHOWN
W.O. NO.: 00-068

4 SHEET OF 5



SEDIMENT CONTROL NOTES

- A minimum of 48 hours notice must be given to the Howard County Department of Inspection, License and Permits Sediment Control Division prior to the start of any construction (313-1855).
- All vegetation and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, and revisions thereto.
- 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 7, HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
- All disturbed areas must be stabilized within the time period specified above in accordance with the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seeding, soil, temporary seeding, and mulching (Sec. C). Temporary stabilization with mulch alone shall 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	1.20 Acres
Area to be seeded or paved	0.93 Acres
Area to be vegetatively stabilized	2.7 Acres
Total Cut	1002 CY
Total Fill	372 CY
- Off-site waste/borrow area location: _____
- 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 Sediment Control Inspector.
- On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.
- Trenches for the construction of utilities is limited to three pipe lengths or shorter, which shall be back-filled and stabilized within one working day, whichever is shorter.
- To be determined by contractor, with pre-approval of the Sediment Control Inspector with or approved and active grading permit.

SEQUENCE OF CONSTRUCTION

- Obtain grading permit.
- Notify Howard County Bureau of Inspections and Permits at (410)313-1880 at least 24 hours before starting any work.
- Install Stabilized Construction Entrance, with permission from Inspector before proceeding. (1 week)
- Clear and rough grade site, remove Ex. Paving and Curb (2 weeks)
- Construct Storm Drain, and install Inlet Protection. (2 weeks)
- Begin Building Construction.
- Fine grade site. (4 days)
- Install curb and gutter, paving and sidewalks. (2 weeks)
- Install Landscaping. (1 week)
- With permission of the Inspector, remove all Sediment Controls from the site. Remove blocking in Riser structure and deaerating device. Install permanent low flow device in Riser structure. Stabilize all disturbed areas immediately. (1 week)
- During grading and after each rainfall, contractor will inspect and provide necessary maintenance to the Sediment Control measures on this plan.
- Following initial soil disturbance or redistribution permanent or temporary stabilization shall be completed within:
 - 7 calendar days for all perimeter Sediment Control Structures, Dikes, Swales and all slopes greater than 3:1.
 - 14 calendar days for all other disturbed areas.

PERMANENT SEEDING NOTES

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

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

SOIL AMENDMENTS: In lieu of soil test recommendations, use one of the following schedules:

- Preferred—Apply 2 tons per acre dolomitic limestone (92 lbs./100 sq.ft.) and 600 lbs. per acre 10-10-10 fertilizer (14 lbs./1000 sq.ft.) before seeding. Harrow or disc into upper three inches of soil. At the time of seeding, apply 400 lbs. per acre 30-0-0 ureamorphic fertilizer (9 lbs./1000 sq.ft.).
- Acceptable—Apply 2 tons per acre dolomitic limestone (92 lbs./100 sq.ft.) and apply 1000 lbs. per acre 10-10-10 fertilizer (23 lbs./1000 sq.ft.) before seeding. Harrow or disc into upper three inches of soil.

SEEDING: For the periods March 1 thru April 30, and August 1 thru October 15, seed with 60 lbs. per acre (1.4 lbs./1000 sq.ft.) of Kentucky 31 Tall Fescue per acre and 2 lbs. per acre (0.5 lbs./1000 sq.ft.) of weeping lovegrass. During the period of October 16 thru February 28, protect site by Option (1) 2 tons per acre well anchored straw mulch and seed as soon as possible in the spring. Option (2) Seed with (2) Seed with 2 tons/acre well anchored straw.

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

MAINTENANCE: Inspect all seeded areas and make needed repairs, replacements and reseeding.

TEMPORARY SEEDING NOTES

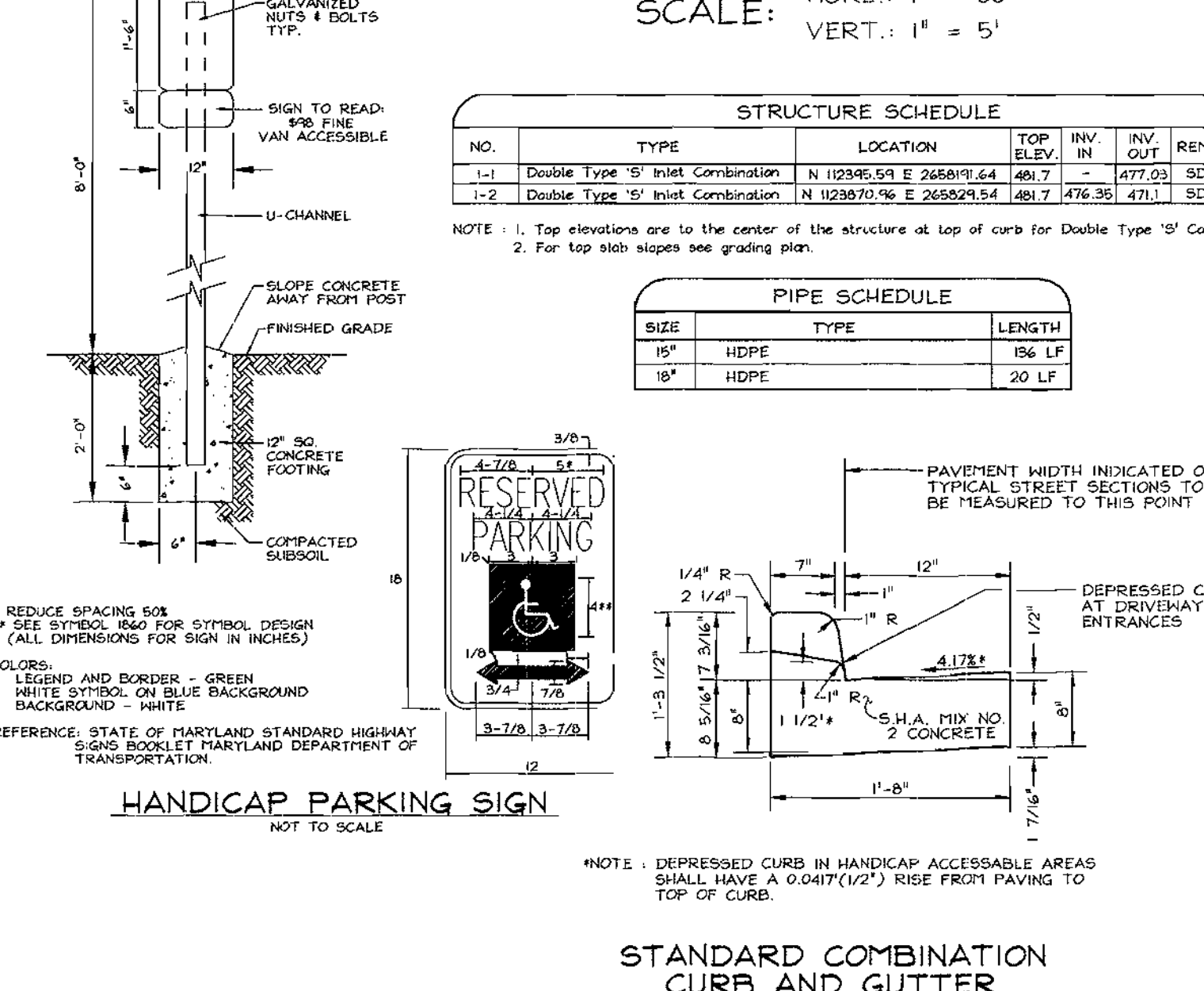
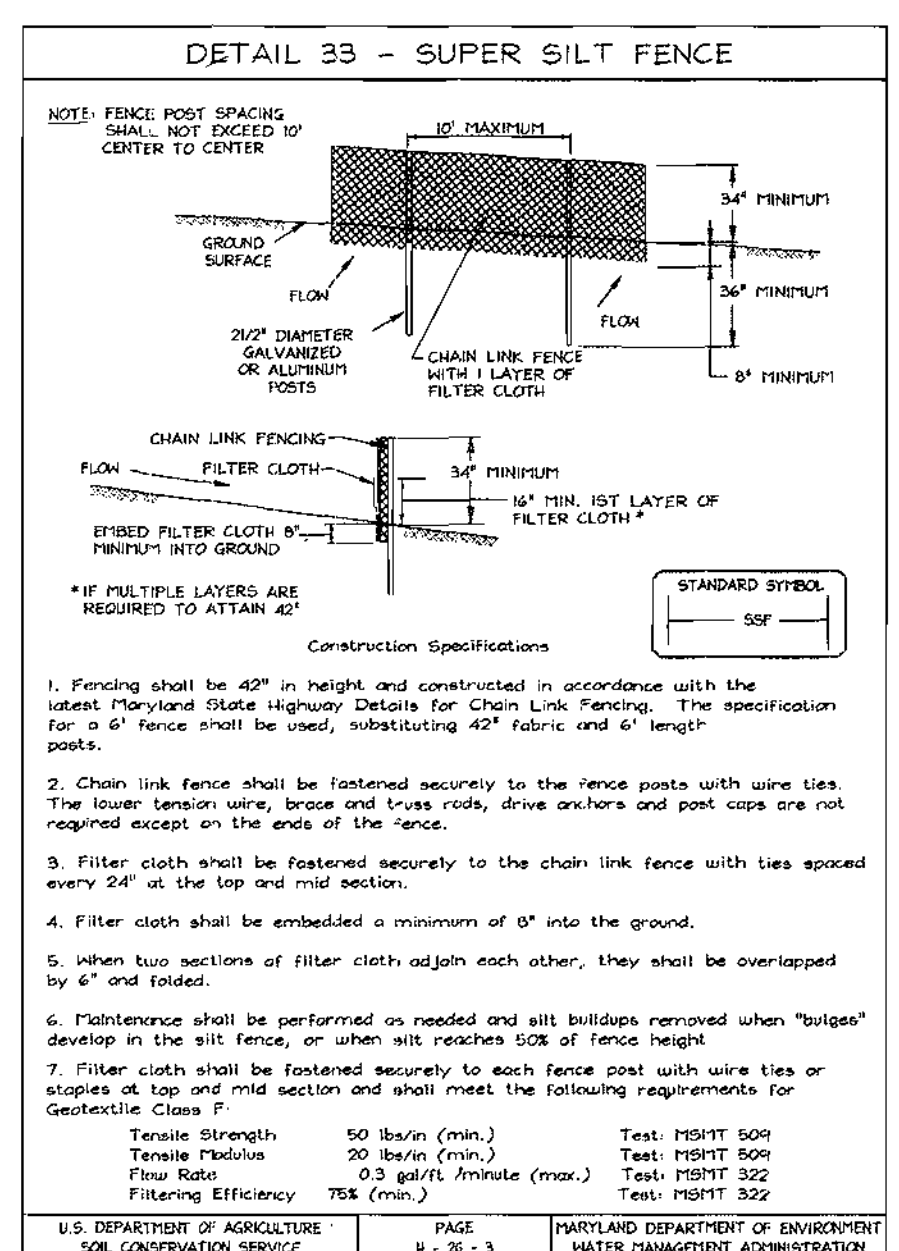
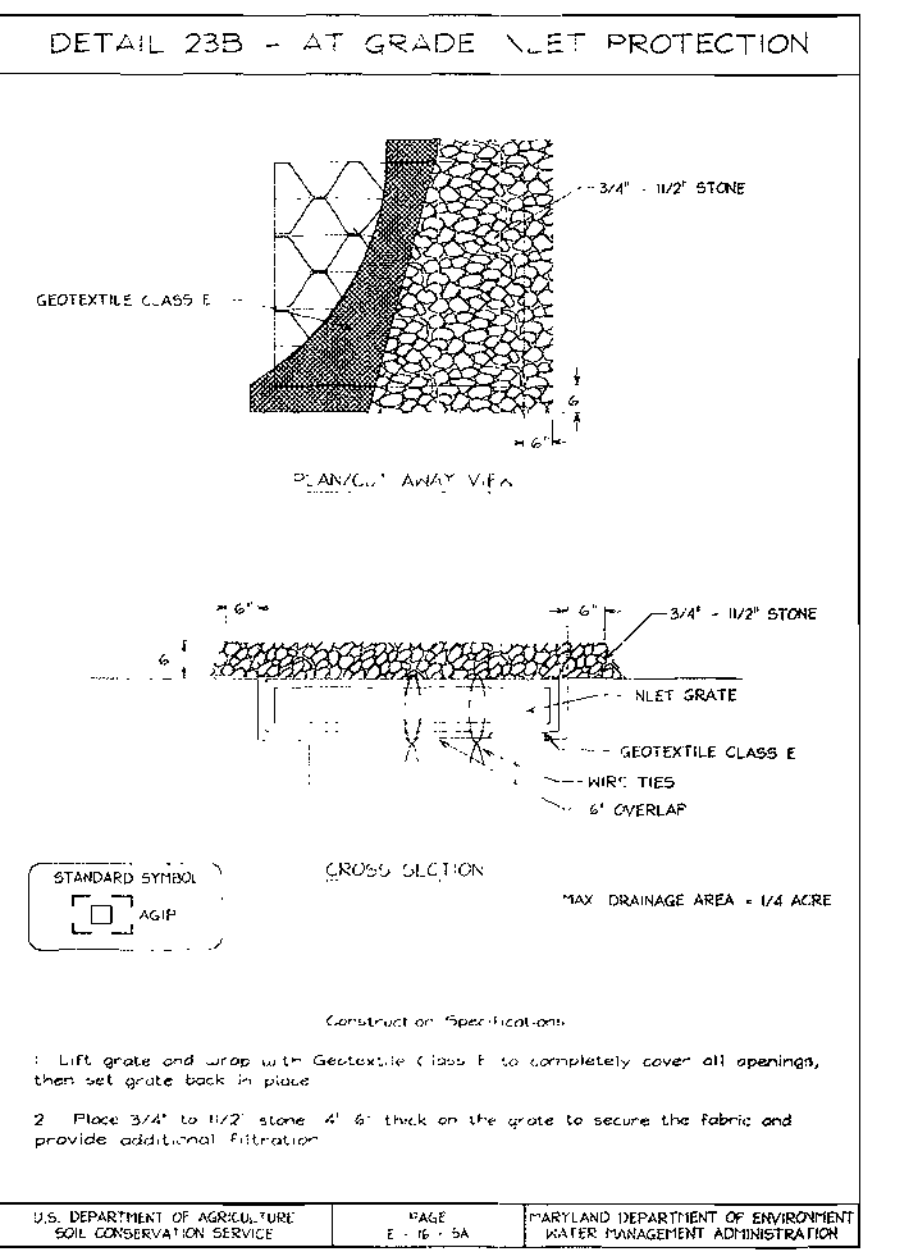
SEEDBED PREPARATION: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding, if not previously loosened.

SOIL AMENDMENTS: Apply 600 lbs. per acre 10-10-10 Fertilizer (14 lbs./1000 sq.ft.).

SEEDING: For periods March 1 thru April 30 and from August 15 thru November 15, seed with 2 1/2 bushel per acre of annual ryegrass (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 lbs./1000 sq.ft.). For the period November 1 thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use sod.

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

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



21.0 STANDARDS AND SPECIFICATIONS FOR TOPSOIL

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

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

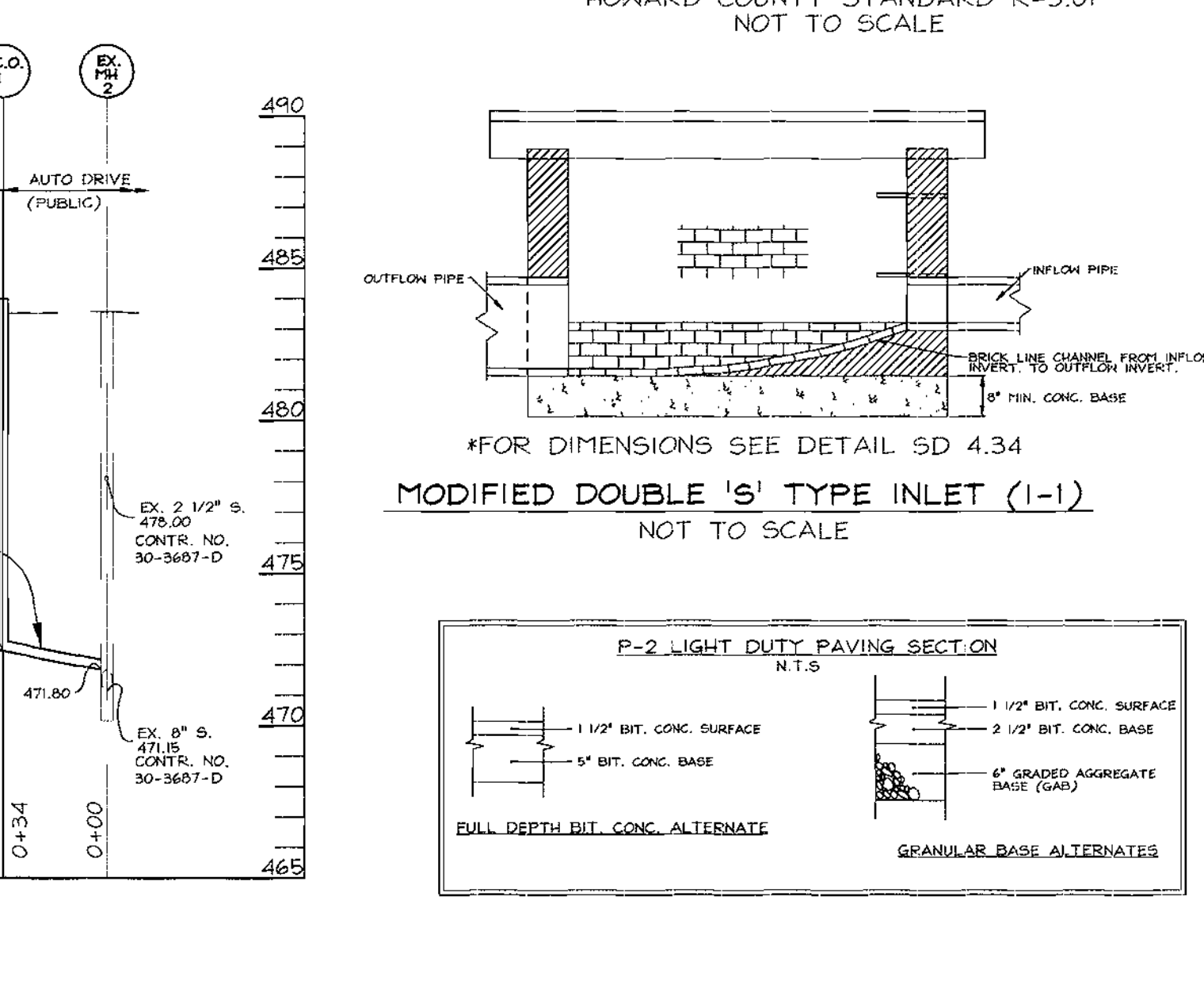
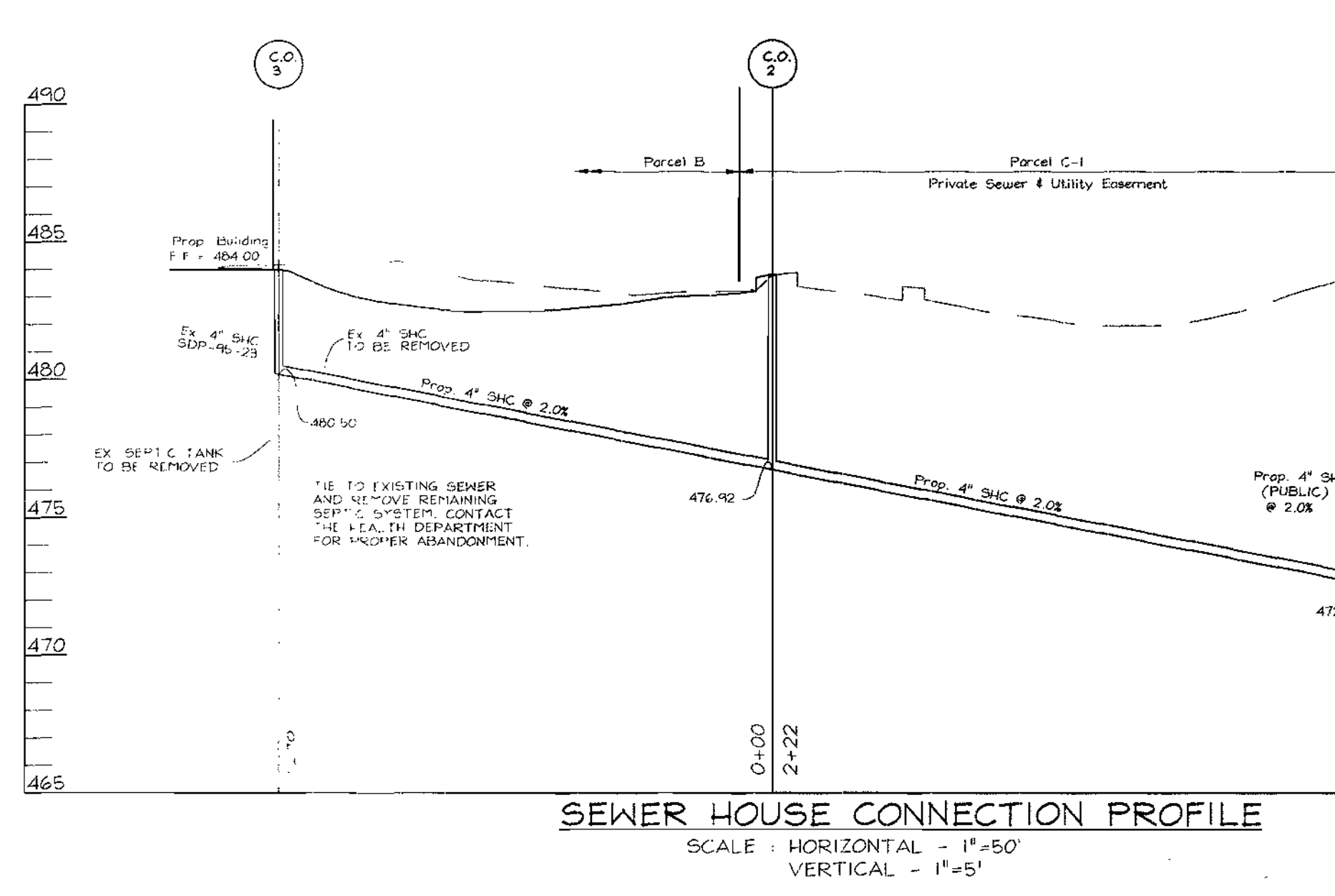
Conditions Where Practice Applies

- This practice is limited to areas having 2:1 or flatter slopes where:
 - 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 limestone is not feasible.
- For the purpose of these Standards and Specifications, areas having slopes steeper than 2:1 require special consideration and design for adequate stabilization. Areas having slopes steeper than 2:1 shall have the appropriate stabilization shown on the plans.

Construction and Material Specifications

- Topsoil salvaged from the existing site may be provided that it meets the standards as set forth in these specifications. Typically, the depth of topsoil to be salvaged for a given soil type can be found in the representative soil profile section in the Soil Survey published by USDA-SCS in cooperation with Maryland Agricultural Experimental Station.
- Topsoil Specifications - Soil to be used as topsoil must meet the following:
 - Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand. Other soils may be used if recommended by an agronomist or a soil scientist and approved by the appropriate approval authority. Regardless, topsoil shall not be a mixture of contrasting textures and shall contain less than 5% by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger than 1 and 1/2" in diameter.
 - Topsoil must be free of plants or plant parts such as Bermuda grass, quackgrass, Johnsongrass, nutcase, poison ivy, thistle, or others as specified.
 - Where the subsoil is either highly acidic or composed of heavy clays, ground limestone shall be spread at the rate of 4-8 tons/acre (200-400 pounds per 1,000 square feet) prior to the placement of topsoil. Lime shall be distributed uniformly over designated areas and worked into the soil in conjunction with tillage operations as described in the following procedures.
- For sites having disturbed areas under 5 acres:
 - Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section 1 - Vegetative Stabilization Methods and Materials.
- Topsoil shall be uniformly distributed in a 4" or 6" layer and lightly compacted to a minimum thickness of 4". Spreading shall be performed in such a manner that sodding or seeding can proceed with a minimum of additional soil preparation and tillage. Any irregularities in the surface resulting from topsoiling or other operations shall be corrected in order to prevent the formation of depressions or water pockets.
- Topsoil shall not be placed while the topsoil or subsoil is in a frozen or muddy condition, when the subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading and seedbed preparation.

SEWER HOUSE CONNECTION PROFILE



SEWER HOUSE CONNECTION PROFILE

SCALE: HORIZONTAL - 1"=50'
VERTICAL - 1"=5'

SEDIMENT CONTROL DETAILS MISCELLANEOUS DETAILS AND STORM DRAIN PROFILE ANTWERPEN USED CAR FACILITY PARCEL 'B' HOLWECK SUBDIVISION

TAX MAP #34 REFERENCE F 94-36, SDP 95-23, PARCEL 'B' 5TH ELECTION DISTRICT

HOWARD COUNTY, MARYLAND

VOGEL & ASSOCIATES
ENGINEERS/SURVEYORS/PLANNERS

3691 Park Avenue, Suite 101 • Ellicott City, Maryland 21043
Tel 410.461.5828 Fax 410.465.3956

DESIGN BY: JCO
DRAWN BY: RLP
CHECKED BY: RHV
DATE: Dec 21, 2000
SCALE: AS-SHOWN
W.C. NO.: 00-066

5 SHEET OF 5

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION

CHIEF, DESIGN AND DEVELOPMENT

DATE: 1/10/01

DATE: 1/29/01

DATE: 1/31/01

ENGINEERS CERTIFICATE

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

SIGNATURE OF ENGINEER: ROBERT H. VOGEL

DATE: 12/28/00

DEVELOPER'S CERTIFICATE

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL 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: [Signature]

DATE: 12/28/00

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS

USA-NATURAL RESOURCES CONSERVATION SERVICE

DATE: 1/8/01

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

SIGNATURE OF SCD: [Signature]

DATE: 1/8/01

OWNER/DEVELOPER

Jacob Antwerpen
P.O. Box 144
CLARKVILLE, MD, 21029
Telephone: (410) 531-5700

STATE OF MARYLAND PROFESSIONAL ENGINEER

ROBERT H. VOGEL, PE #16168