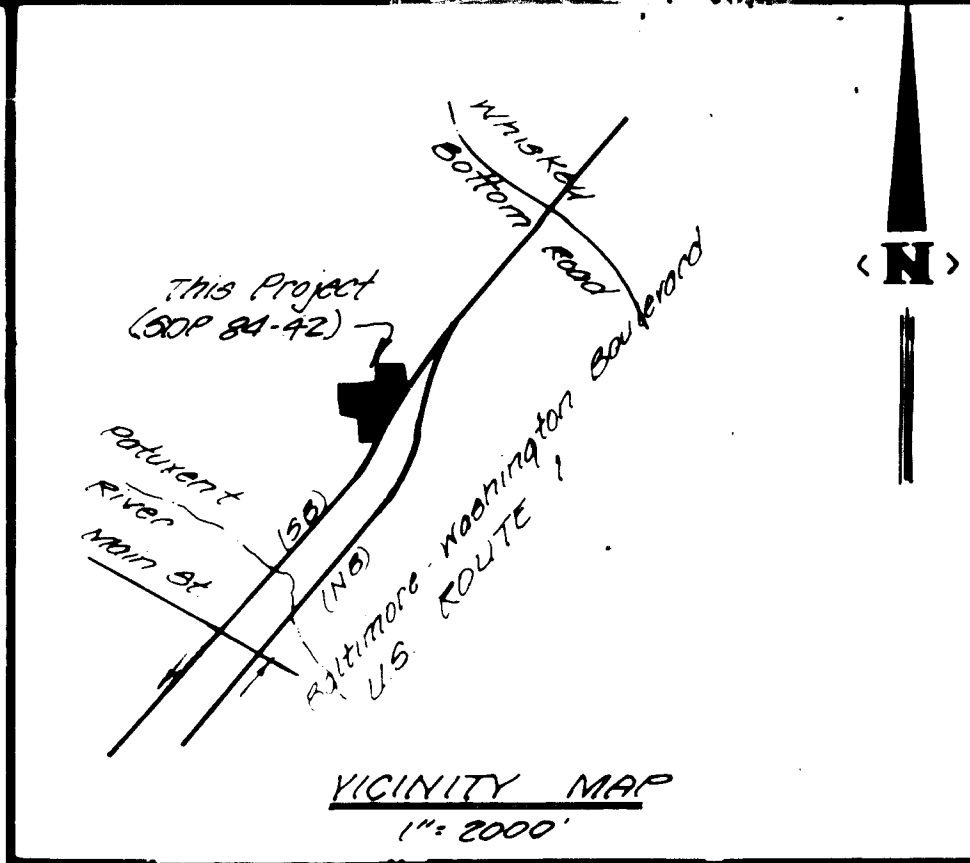


- General Note**
1. Area of parcel: 1.7000 ac or 78,011 sq ft
 2. Property parcel: 0.2 - 75,821 sq ft or 1.7216 ac
 3. Parcel recorded in plat 3/47 dated 6/1/78
 4. All materials & construction shown shall meet or exceed the standards and specifications of the Howard County Road Construction Code, the Howard County Planning Code, Maryland State Highway Administration Specifications and the U.S. Department of Agriculture Soil Conservation Service Standards & Specifications
 5. 5% all graded or disturbed areas over 5'1 slope and 1" which all other graded or disturbed areas. See stabilization notes
 6. Provide 10'0" long transition from new SMA curb to Howard County standard curb
 7. Public water supply & public sewage disposal systems to be utilized on this site
 8. Building to have fire sprinkler system
 9. All on site water mains to be ductiles iron pipe CL 52 or equal
 10. All onsite sanitary sewer pipe to be 15" DIA. VCP, ACP CL 5000 or equal
 11. All exterior lighting shall be directed and/or reflected away from adjacent properties
 12. Handicapped parking spaces to be delineated and marked with appropriate line painting 10'0" x 5'0" in accordance with applicable ordinances and codes
 13. Property zoned as part of the Comprehensive Zoning Plan 10-5-77
 14. Soil Map: 31
 15. Suite: EM (Electron)
 16. Tax Map: 50
 17. Utility connections for proposed building to be connected through existing building
 18. Water and sewer to these lots will be granted under the provisions of section 18.122B of the Howard County Code

LEGEND

| | |
|--------------------|------|
| Existing contours | --- |
| Proposed contours | --- |
| Existing elev. | 62.8 |
| Proposed elev. | 61.8 |
| SMA paving (prop) | |
| Proposed paving | |
| Ribbon curb | --- |
| Proposed curb | --- |
| Proposed sidewalk | --- |
| Handicapped symbol | ♿ |
| Nose down curb | --- |
| Proposed building | |



SURVEYOR'S CERTIFICATE

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

DATE: 12-1-84
SIGNATURE: JEFFERSON D. LAURENCE P.L.S.# 5216

OWNER'S CERTIFICATE

I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT & 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 & EROSION BEFORE BEGINNING THE PROJECT.

DATE: 12-7-84
SIGNATURE: [Signature]

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

DATE: 12-17-84
SIGNATURE: [Signature]
U.S. SOIL CONSERVATION SERVICE

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

DATE: 12-17-84
SIGNATURE: [Signature]
HOWARD SOIL CONSERVATION DISTRICT

APPROVED FOR PUBLIC WATER & PUBLIC SEWERAGE SYSTEMS

HOWARD COUNTY HEALTH DEPARTMENT:

DATE: 12-21-84
SIGNATURE: [Signature]
COUNTY HEALTH OFFICER

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING

DATE: 12-26-84
SIGNATURE: [Signature]
Acting PLANNING DIRECTOR

DATE: 12-26-84
SIGNATURE: [Signature]
Acting CHIEF, DIV. OF LAND DEVELOPMENT & ZONING ADMINISTRATION

APPROVED FOR PUBLIC WATER, PUBLIC SEWERAGE & PUBLIC STORM DRAINAGE SYSTEMS & PUBLIC PLAZAS

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS:

DATE: 12-19-84
SIGNATURE: [Signature]
DIRECTOR

DATE: 12-22-84
SIGNATURE: [Signature]
CHIEF, BUREAU OF ENGINEERING

Site Analysis

1. Total area: 1.7000 ac or 78,011 sq ft
2. Existing building coverage: 3,568 sq ft or 2.1%
3. Proposed building coverage: 9,458 sq ft or 5.5%
4. Total building coverage: 13,026 sq ft or 7.6%
5. Paved area: 24,310 sq ft or 14.3%
6. Disturbed area: 61,320 sq ft or 36.0%
7. Total impervious area: 35,115 sq ft or 20.6%
8. Parking Data:
Required: 114 spaces - 240' x 4' - 600
112 employees - 8' x 2' x 4' - 64 spaces
or 11200 sq ft - 54.1 spaces
Provided: 4 Handicapped, (11' x 20')
60 Regular, (20' x 20')
= 64 spaces TOTAL
9. Total parking lot area: 24,310 sq ft, required landscape: 5%, provide landscape: 1,215 sq ft or 6.0%
10. Total green space: 42,892 sq ft or 25.2%

Address Chart

| Lot Number | Street Address |
|--------------|------------------------|
| 1-6, Block 6 | 10084 U.S. Route 1 |
| 1-3, Block 4 | Laurel, Maryland 20707 |

| | | | |
|-------------------|---------|---------------|-------------|
| SUBDIVISION NAME: | | SECT./AREA | LOT/PARCEL |
| North Laurel Park | | | 1-3 Block 4 |
| PLAT OR L.P. | BLOCK # | TAX./ZONE MAP | ELEC. DIST. |
| 3/47 #1415 | 4 | R-20 50 | G |
| WATER CODE | | SEWER CODE | |
| C 05 | | 7103500 | |

| OWNER | NO. | REVISIONS | DATE |
|--|-----|---|----------|
| Mike Halkos Chaucer House Rest. 10084 Washington Blvd Laurel, Md. 20707 (301) 785-5800 | 1. | Revised as per Planning & Zoning comments | 11-29-83 |
| | 2. | Update for Storm Water Management | Nov. 84 |

DEVELOPMENT CONSULTANTS GROUP, INC.

17904 GEORGIA AVENUE SUITE 102
OLNEY, MARYLAND 20832
301-924-4570

CHAUCER HOUSE RESTAURANT

Building Election District G
Howard County, Maryland

DATE: Aug. 1985
DRAWN: Mike C.
CHECKED: M.C.S.
SCALE: 1" = 20'

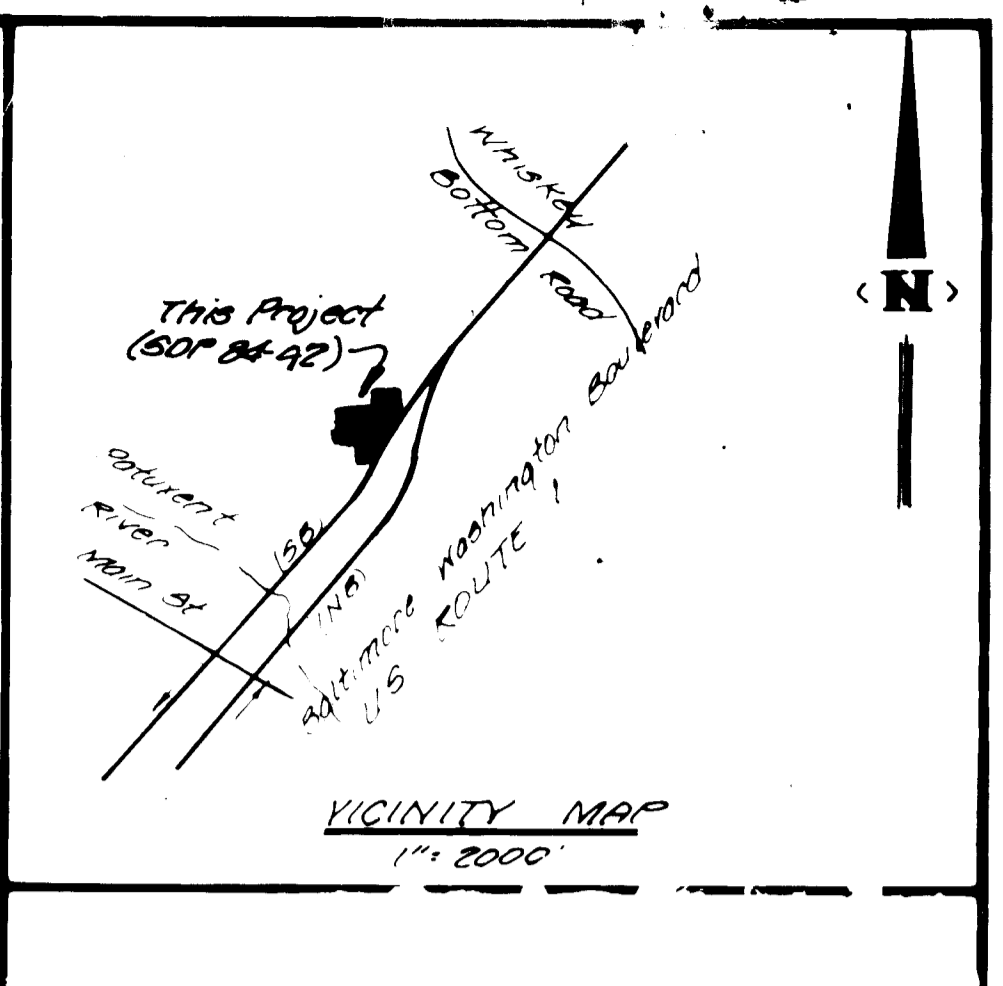
SHEET 1 OF 5
PROJECT NO. 125-01

DECATUR AVE.
(60' R/W)

Stabilization Notes
 1. Cut all ground areas to be stabilized near 5:1 slope.
 2. Apply 4" topsoil or other approved material to stabilized areas.
 3. Apply 10-15 lbs fertilizer @ 25 lbs per 1000 sq ft.
 4. Plant with Kentucky 318 grass per 1000 sq ft.
 5. Mow with straw @ 1/4 to 2 tons per acre.
 6. Another Mow @ approved schedule @ 1 gal/100 sq ft

LEGEND

| | |
|--------------------|-------------------|
| Existing contours | — 52 — |
| Proposed contours | — 52 — |
| Existing elev | 52.00 |
| Proposed elev | 52.00 |
| SHA paving (prop) | [Hatched pattern] |
| Proposed paving | [Hatched pattern] |
| Ribbon curb | [Line with dots] |
| Proposed curb | [Line with dots] |
| Proposed sidewalk | [Hatched pattern] |
| Handicapped symbol | [Wheelchair icon] |
| Nose down curb | [Line with dots] |
| Proposed building | [Hatched pattern] |



SURVEYOR'S CERTIFICATE
 I CERTIFY THAT THIS PLAN OF DEVELOPMENT & PLAN FOR EROSION & SEDIMENT CONTROL REPRESENTS A PRACTICAL & WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS & THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
 DATE: 12-1-84
 JEFFERSON D. LAURENCE P.L.S.# 5216

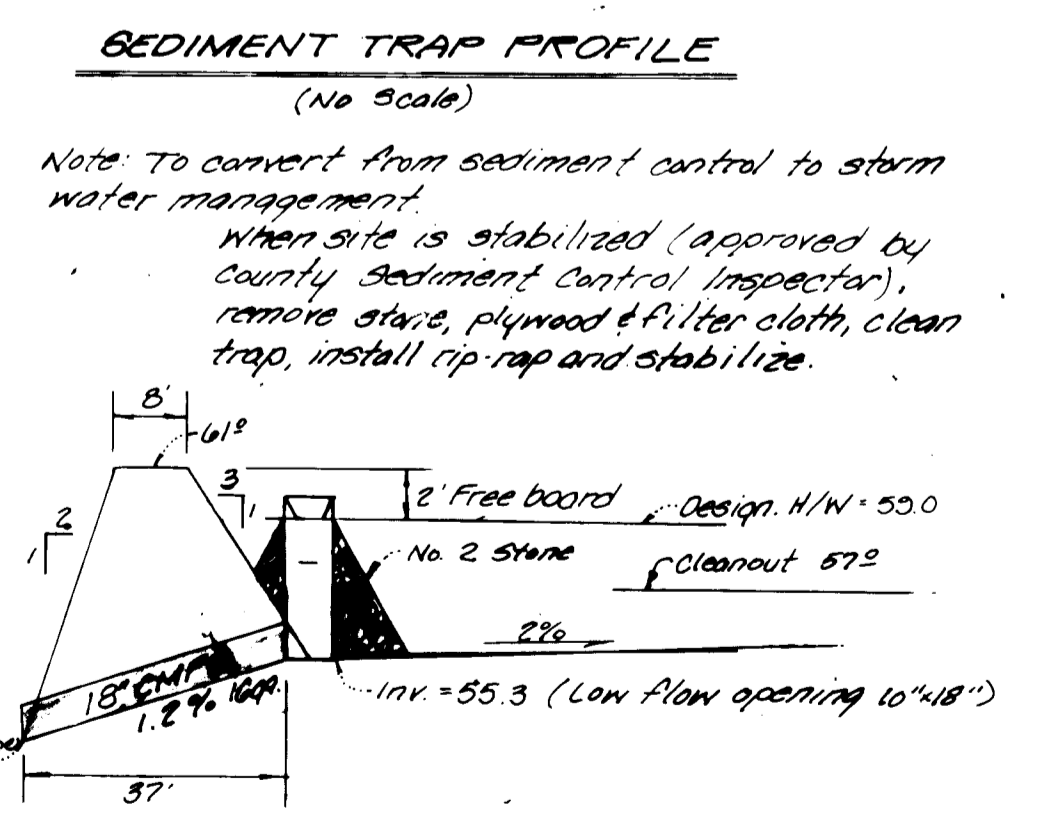
OWNER'S CERTIFICATE
 I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT & THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT & EROSION. THIS PLAN BEGINS ON 12-1-84.
 DATE: 12-1-84
 Michael Halkos
 OWNER

APPROVED:
 DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
 HOWARD COUNTY, MARYLAND
 DATE: 12-7-83
 [Signature]

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
 DATE: 12-17-84
 [Signature]
 U.S. SOIL CONSERVATION SERVICE
 THIS PLAN IS APPROVED FOR SOIL EROSION & SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 DATE: 12-17-84
 [Signature]
 HOWARD SOIL CONSERVATION DISTRICT

APPROVED: FOR PUBLIC WATER & PUBLIC SEWERAGE SYSTEMS
 HOWARD COUNTY HEALTH DEPARTMENT
 DATE: 12-21-84
 [Signature]
 COUNTY HEALTH OFFICER
 APPROVED:
 HOWARD COUNTY OFFICE OF PLANNING & ZONING
 DATE: 12-26-84
 [Signature]
 PLANNING DIRECTOR
 DATE: 12-26-84
 [Signature]
 CHIEF, DIV. OF LAND DEVELOPMENT & ZONING ADMINISTRATION.

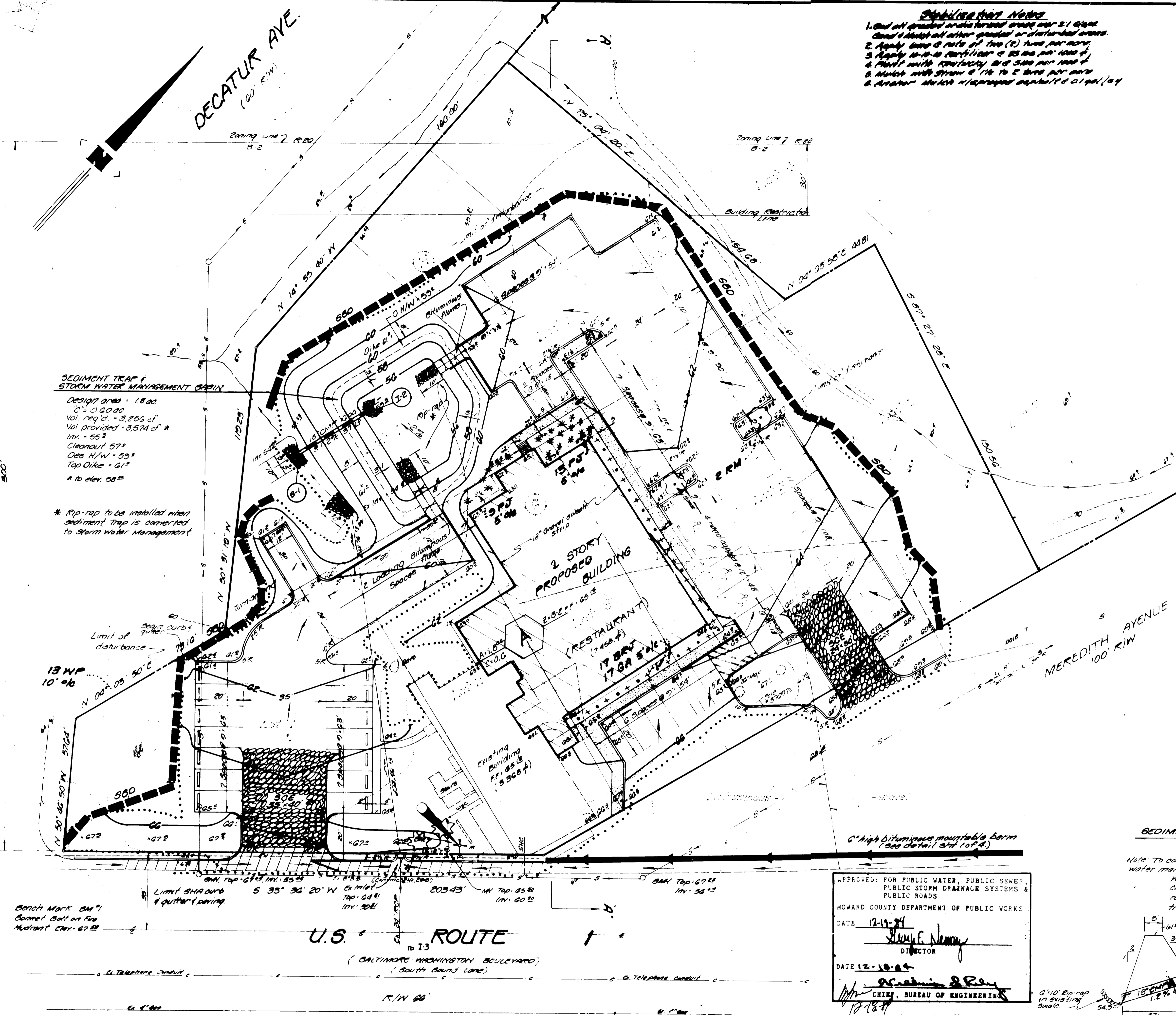
NOTES FOR USE OF STRUCTURE I-2 AS A SEDIMENT CONTROL FACILITY.
 1. Install structure I-2 as per plans and details.
 2. Block low flow openings at elev. 52.5 and 57.7 with plywood covered with 1/4" filter cloth or equal.
 3. Pile stone around structure to elevation 52.0 (invert of throat) until natural angle of repose is met.



APPROVED: FOR PUBLIC WATER, PUBLIC SEWER, PUBLIC STORM DRAINAGE SYSTEMS & PUBLIC ROADS
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DATE: 12-19-84
 [Signature]
 DIRECTOR
 DATE: 12-18-84
 [Signature]
 CHIEF, BUREAU OF ENGINEERING
 SDP 84-42, VP 84-51

SEDIMENT TRAP & STORM WATER MANAGEMENT BASIN
 Design area = 18.00
 C = 0.0000
 Vol. req'd = 3,256 cf
 Vol. provided = 3,574 cf
 Inv. = 55.3
 Cleanout 57.2
 Des. H/W = 50.0
 Top Dike = 61.2
 * to elev. 58.2

* Rip-rap to be installed when sediment trap is converted to storm water management.



| WNER | NO. | REVISIONS | DATE |
|--|-----|--|----------|
| Mike Halkos Chalicer House Rest 10024 Washington Blvd Laurel, Md. 20707 (301) 728-3800 | 1. | Revised as per Planning & Zoning comments. | 11-29-83 |
| | 2. | Update for Storm Water Management | Nov. 84 |

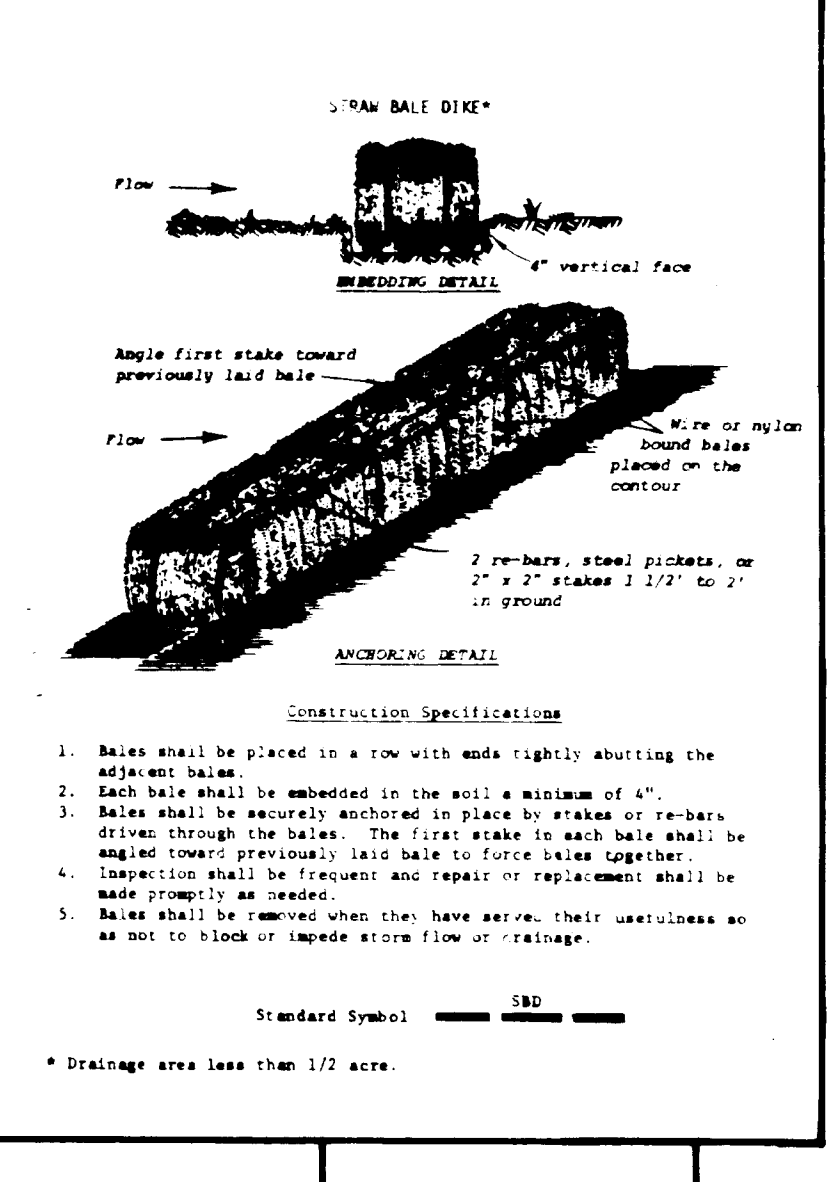
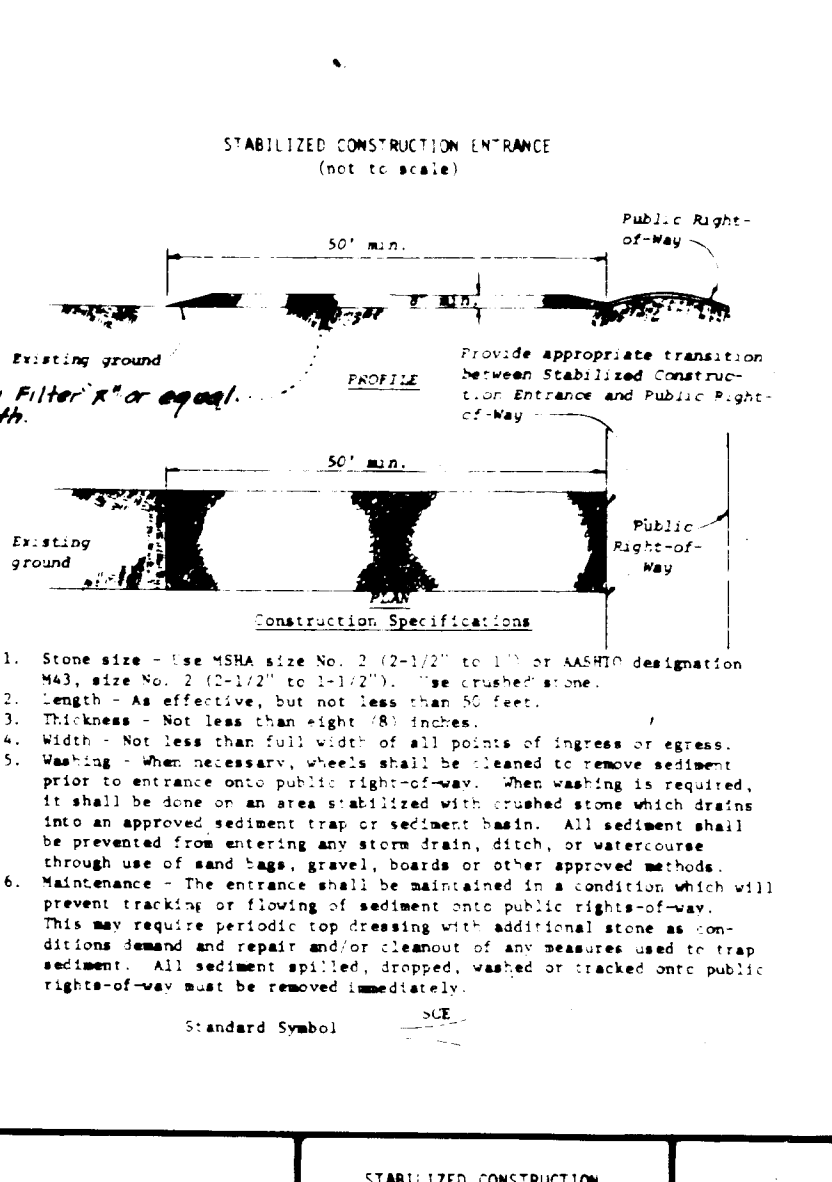
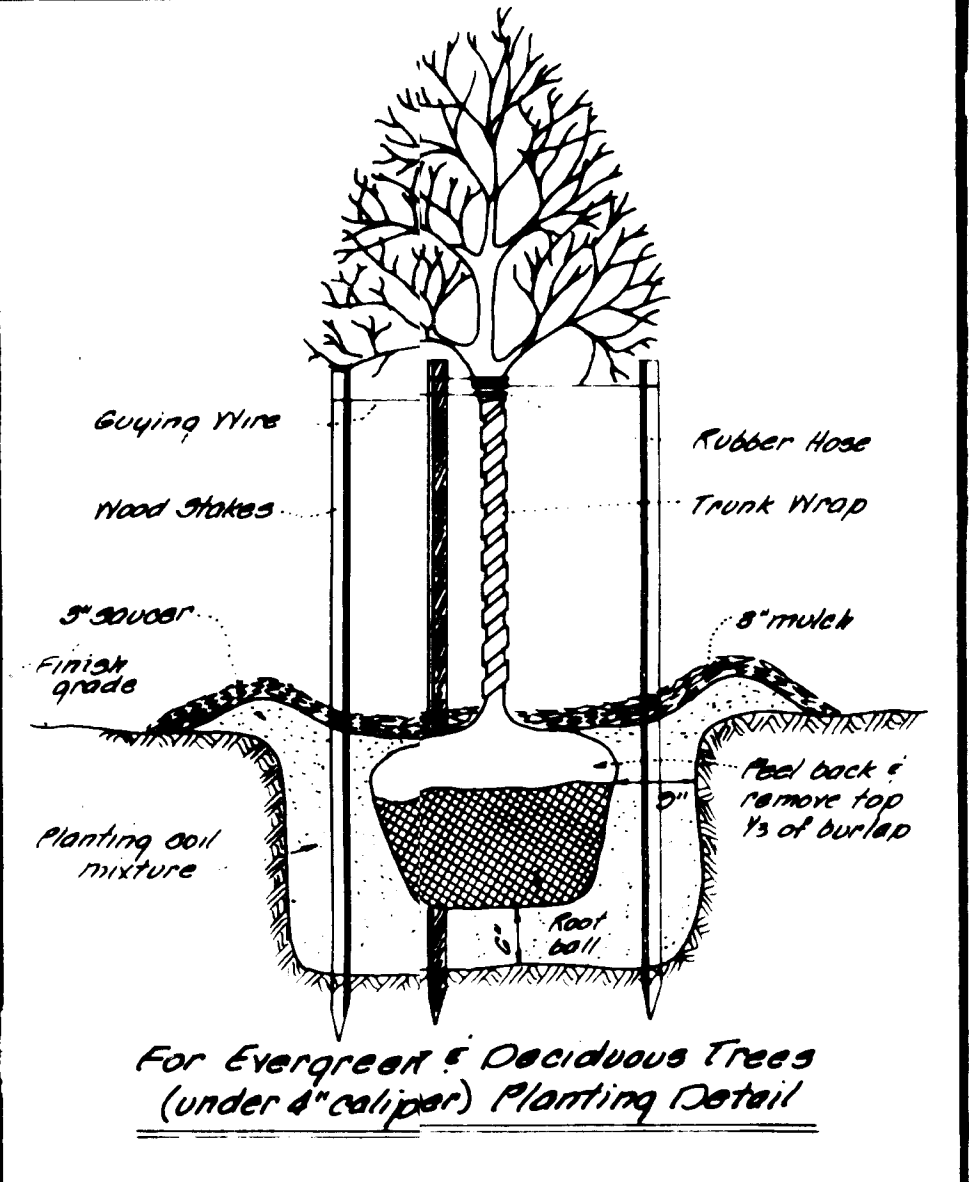
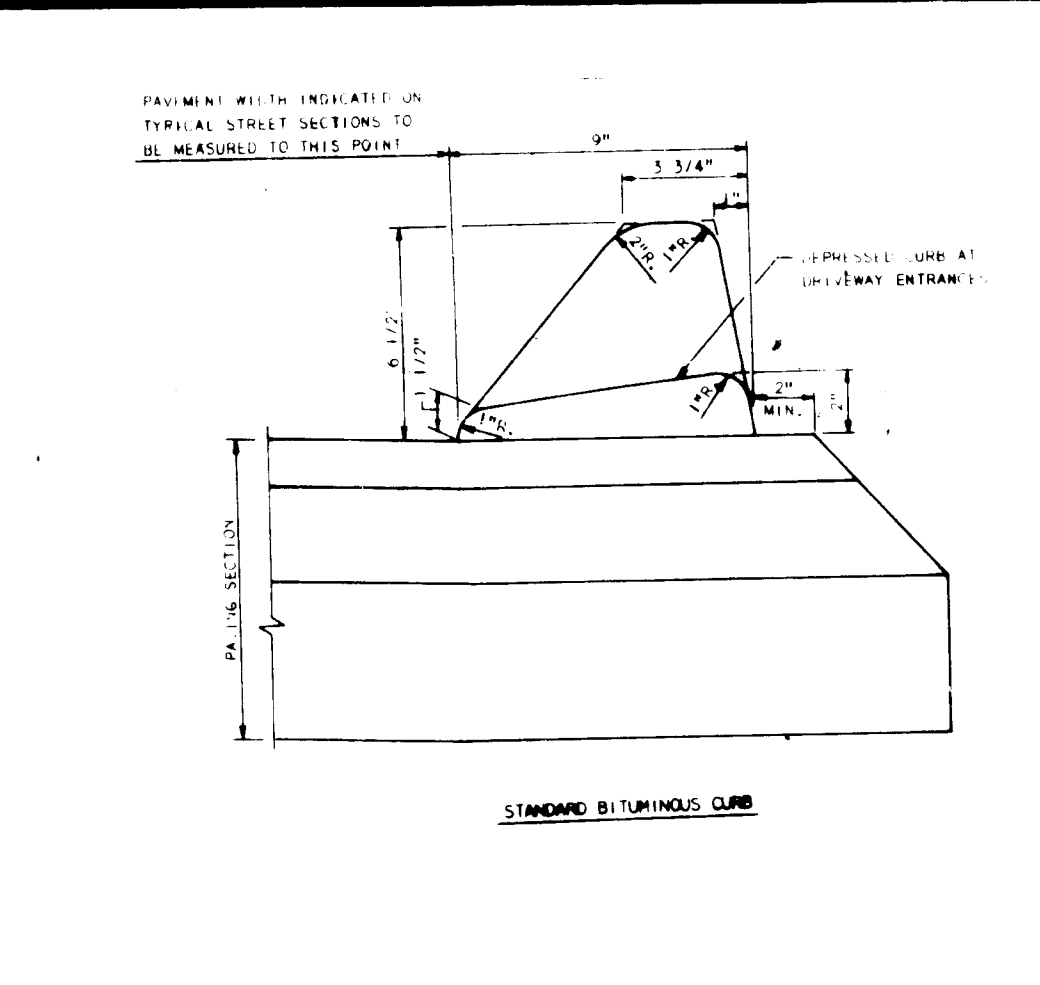
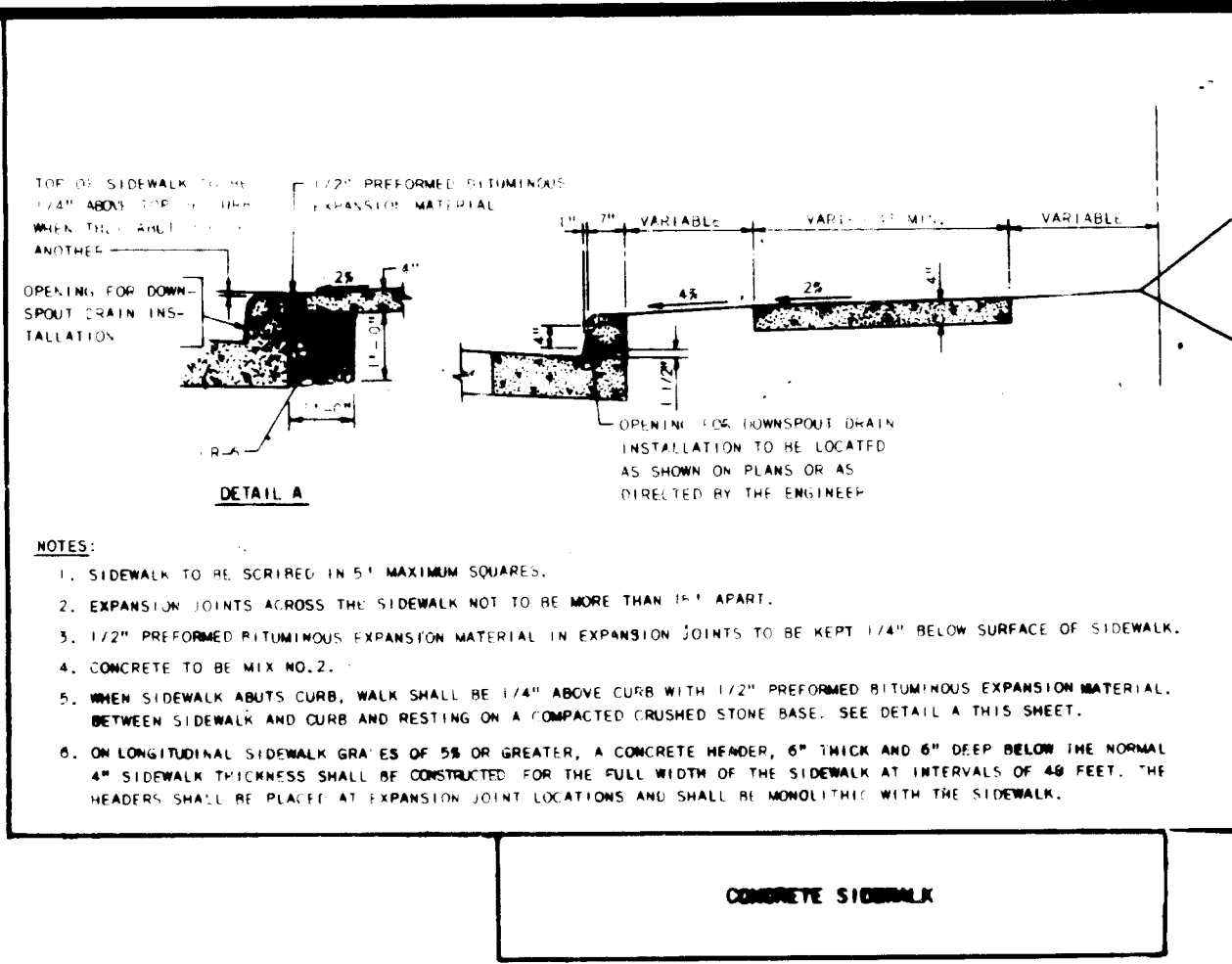


DEVELOPMENT CONSULTANTS GROUP, INC.

17904 GEORGIA AVENUE SUITE 102
 OLNEY, MARYLAND 20832
 301-924-4570

Sediment Control Plan
 Lots 1-G Block B, Lots 1-5 Block H
 NORTH LAUREL PARK
CHALICER HOUSE RESTAURANT
 Building location District G
 Howard County, Maryland

| | |
|-----------------|--------------------|
| DATE: Aug. 1983 | SHEET: 2 |
| DRAWN: Mike C. | OF 5 |
| CHECKED: M.L.S. | PROJECT NO: 103-01 |
| SCALE: 1" = 20' | SDP-84-42 |



APPROVED FOR PUBLIC WATER, PUBLIC SEWER, PUBLIC STORM DRAINAGE SYSTEMS & PUBLIC ROADS

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DATE 12-19-84

Jeffrey M. Miller
DIRECTOR

DATE 12-18-84

Jeffrey M. Miller
CHIEF, BUREAU OF ENGINEERING

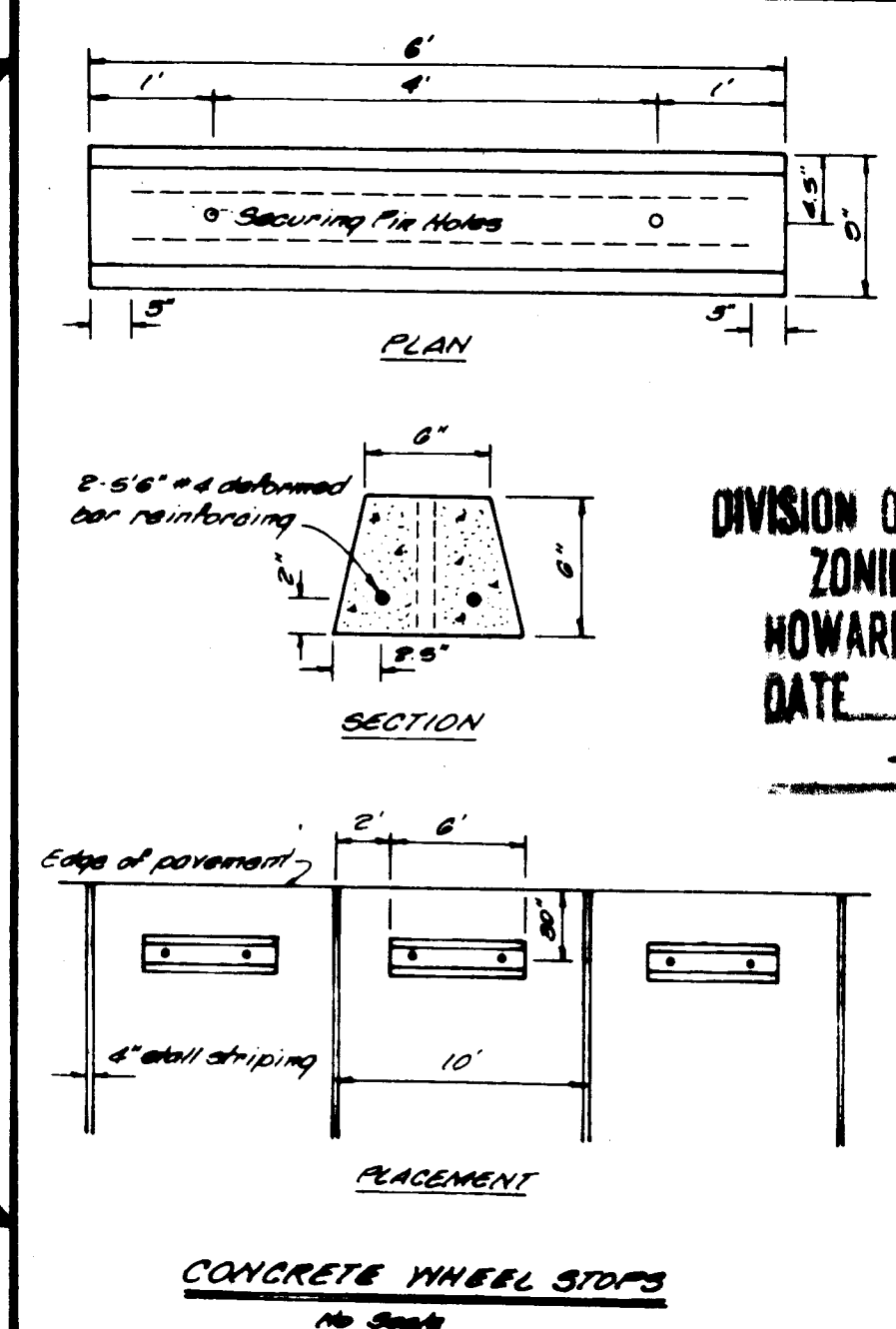
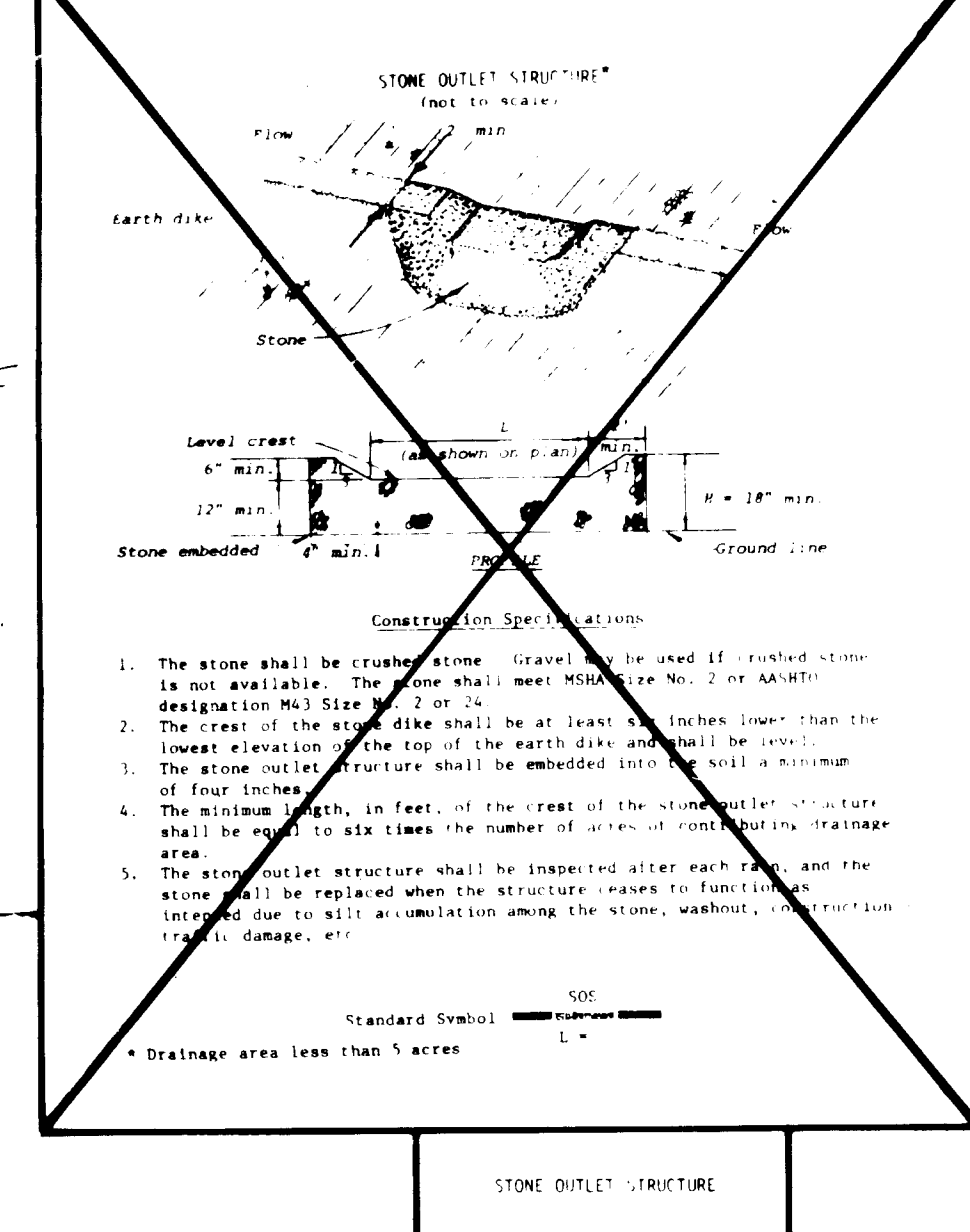
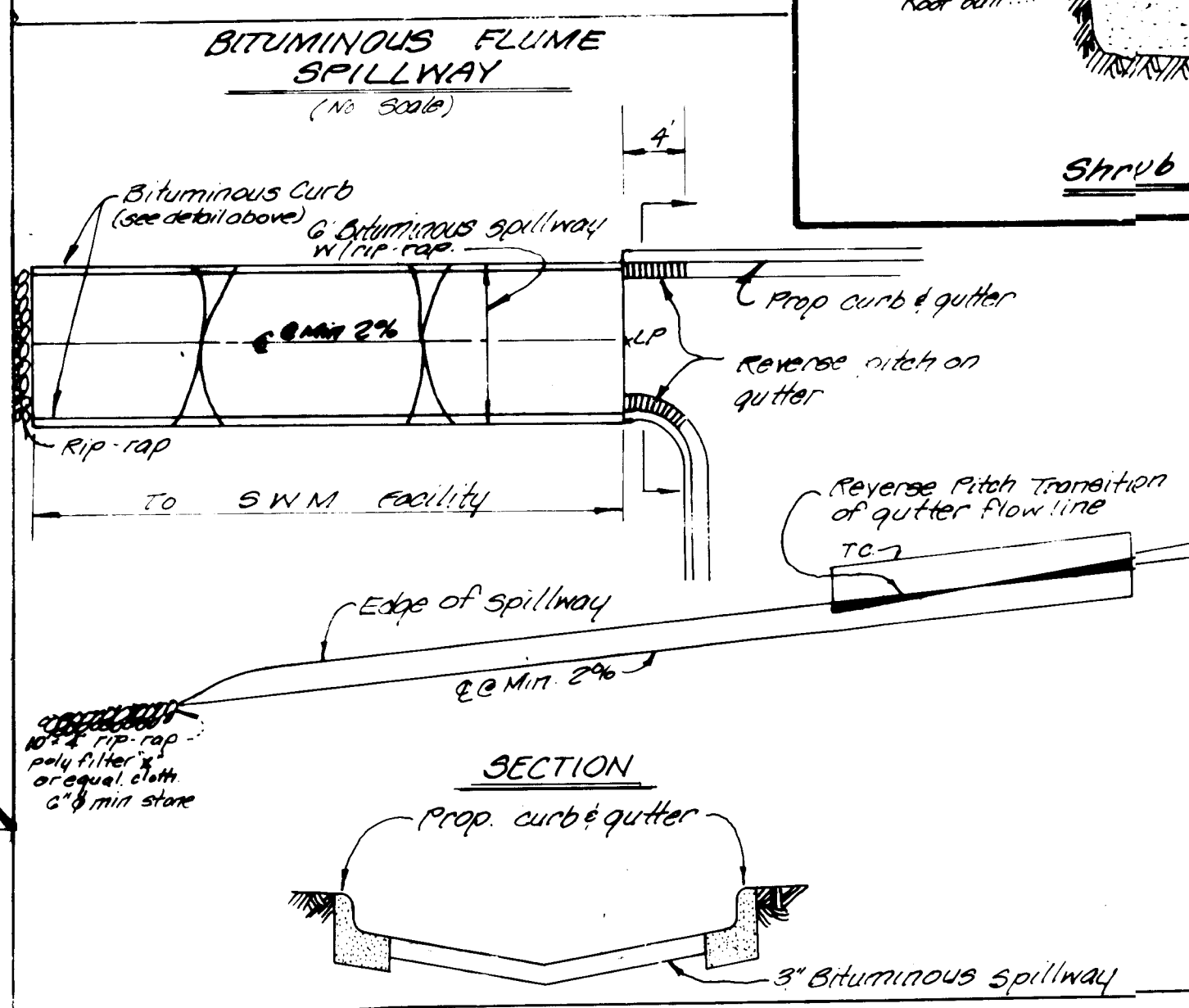
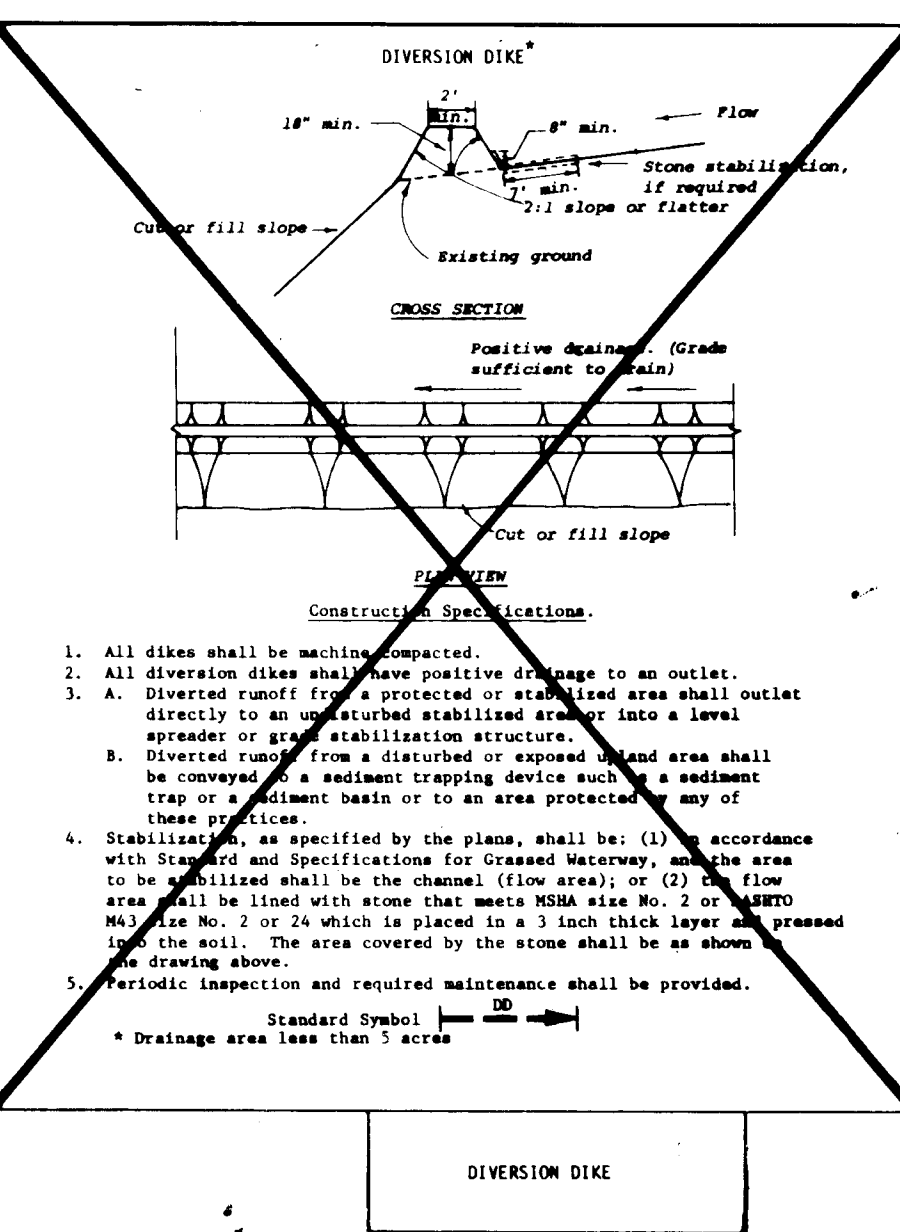
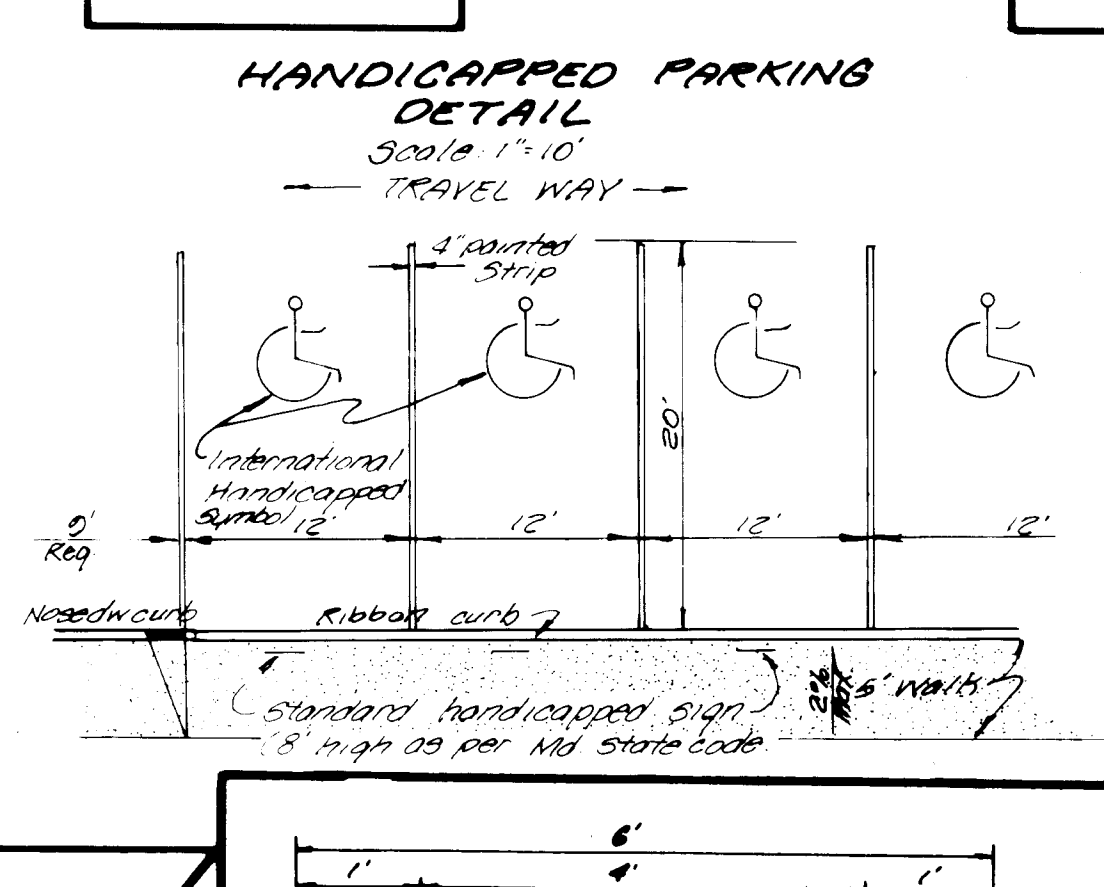
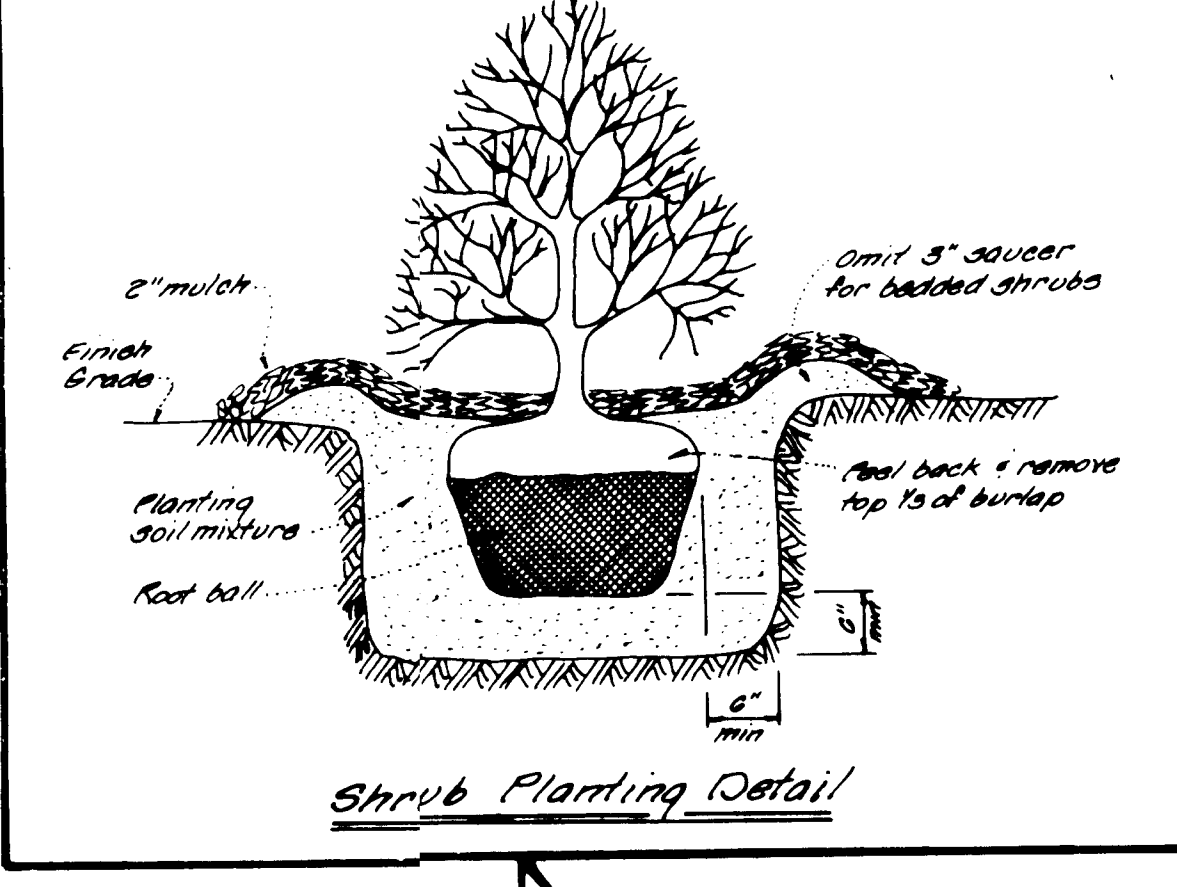
APPROVED FOR HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DATE 12-18-84

Jeffrey M. Miller
CHIEF, BUREAU OF ENGINEERING

Plant Schedule

| Symbol | Quantity | Size | Name |
|--------|----------|-------------|--|
| * PJ | 22 | 20"-30" | <i>Juniperus chinensis pfiterrana</i> (Pfiters juniper) |
| + GA | 26 | 12"-18" | <i>Thuja occ. Woodward Globe</i> Woodward Globe Arborvitae |
| • BRJ | 38 | 8"-12" | <i>Juniperus horizontalis wiltonii</i> (Blue rug juniper) |
| ★ WP | 22 | 2 1/2" cal. | (White Pine) |
| ● RM | 3 | 2 1/2" cal. | <i>Acer rubrum</i> (Red maple) |



APPROVED

DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION

HOWARD COUNTY, MARYLAND

DATE 12-7-83

M. J. F. D.

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

DATE 12-17-84

Stephen L. Huber
SIGNATURE

U.S. SOIL CONSERVATION SERVICE

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

DATE 12-17-84

Stephen L. Huber
SIGNATURE

HOWARD SOIL CONSERVATION DISTRICT

APPROVED FOR PUBLIC WATER & PUBLIC SEWERAGE SYSTEMS

HOWARD COUNTY HEALTH DEPARTMENT

DATE 12-21-84

Joseph J. ...
COUNTY HEALTH OFFICER

APPROVED FOR HOWARD COUNTY OFFICE OF PLANNING & ZONING

DATE 12-26-84

Amel ...
PLANNING DIRECTOR

DATE 12-26-84

Louis F. ...
CHIEF, DIV. OF LAND DEVELOPMENT & ZONING ADMINISTRATION

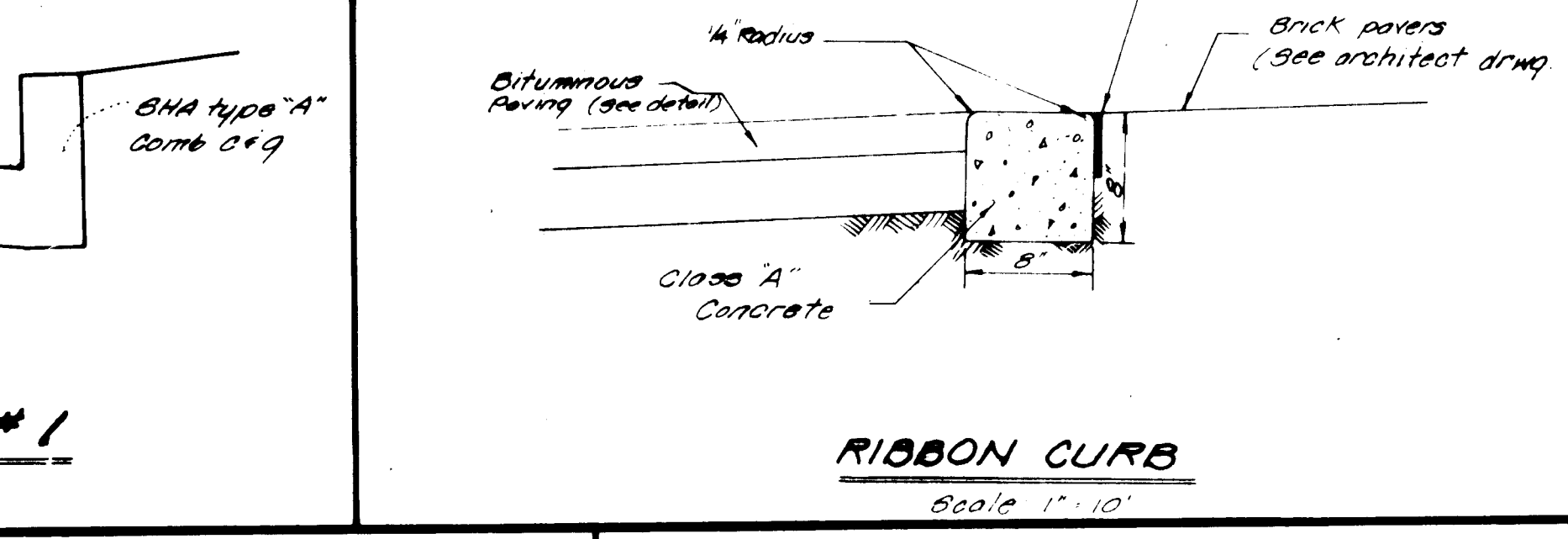
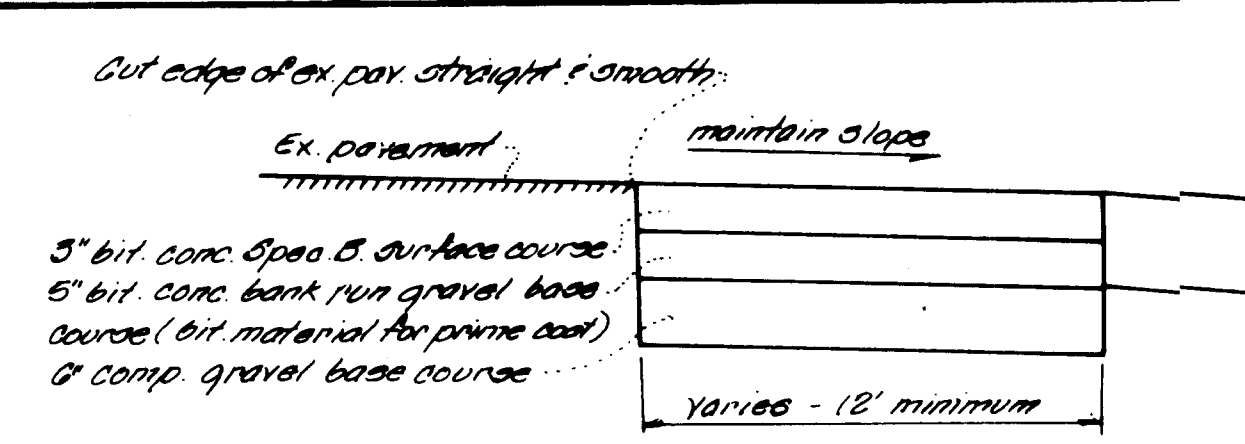
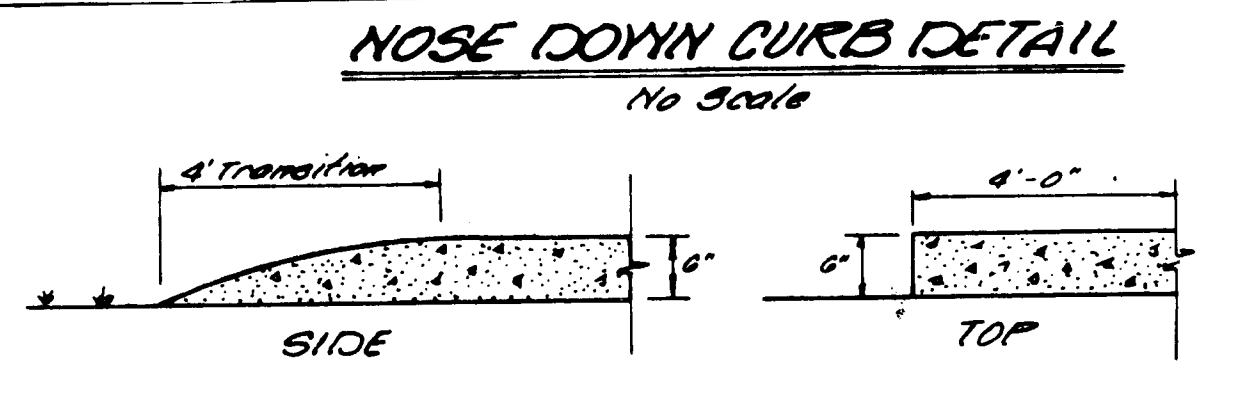
STRUCTURE SCHEDULE

| NO | TYPE | TOP ELEVATIONS | | INV. ELEVATIONS | | REMARKS |
|-----|------------------|----------------|-------|-----------------|------|----------------------------|
| | | UMPER | LOWER | IN | OUT | |
| S-1 | Slit end section | | | | 04.0 | 18" dia. Ho. Co. Slit |
| I-2 | Modified X inlet | 50.50 | 55.5 | | | 4" Co. Slit 30.4.12 & 4.13 |

Throat = 50.0

PIPE SCHEDULE

| SIZE | TYPE | LENGTH |
|------|----------|--------|
| 18" | CMP-1340 | 37' |



| SECTION NUMBER | ROAD AND STREET CLASSIFICATION | PAVEMENT MATERIALS | |
|----------------|--|---|--|
| | | FULL DEPTH BIT. CONC. ALTERNATE | GRANULAR BASE ALTERNATES |
| P-1 | PARKING AREAS AND TRAVELWAYS APARTMENTS AND COMMERCIAL-INDUSTRIAL ZONES WITH NO HEAVY TRUCKS | 1" BIT. CONC. SURFACE 4" BIT. CONC. BASE | 1" BIT. CONC. SURFACE 4" BIT. CONC. BASE 3" BIT. CONC. SURFACE 4" BIT. CONC. BASE |

Owner: Mike Halkos, Chaucer House Rest, 10025 Washington Blvd, Laurel, Maryland 20707, (301) 725-3800

| NO. | REVISIONS | DATE |
|-----|---|----------|
| 1 | Revised as per Planning & Zoning comments | 11-29-83 |
| 2 | Update for Storm Water Management | Nov. 83 |



DEVELOPMENT CONSULTANTS GROUP, INC.

17904 GEORGIA AVENUE SUITE 102
OLNEY, MARYLAND 20832
301-924-4570

CHALICER HOUSE RESTAURANT

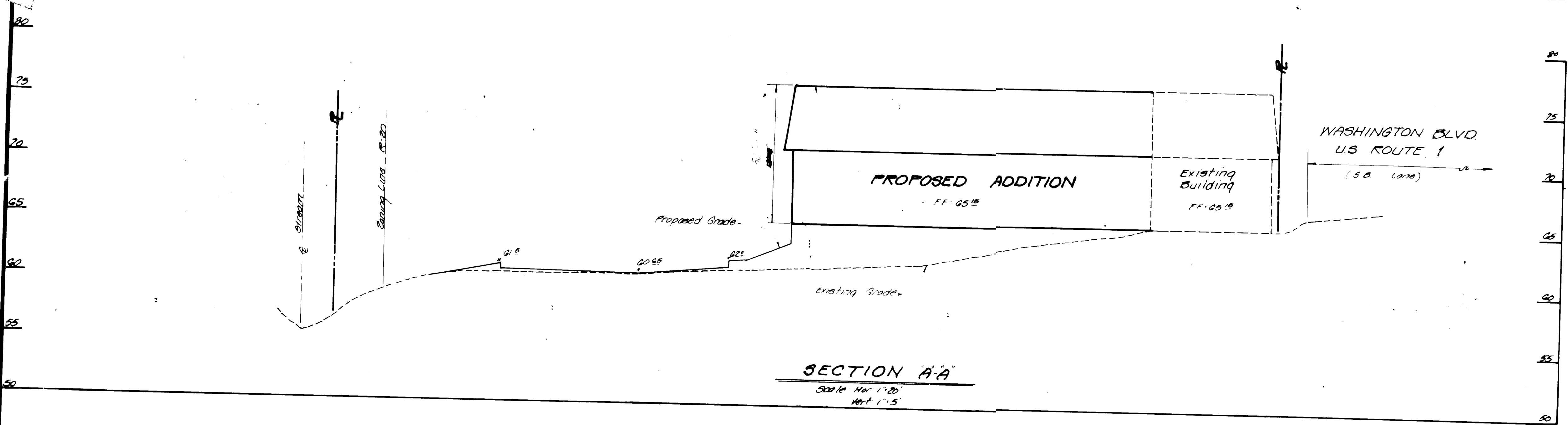
Gulfport Election District 6
Howard County, Maryland

DATE JULY 1983
DRAWN MIKE
CHECKED
SCALE 1/4" = 1'

Sheet 3 of 5

PROJECT NO. 84-42

SDP-84-42

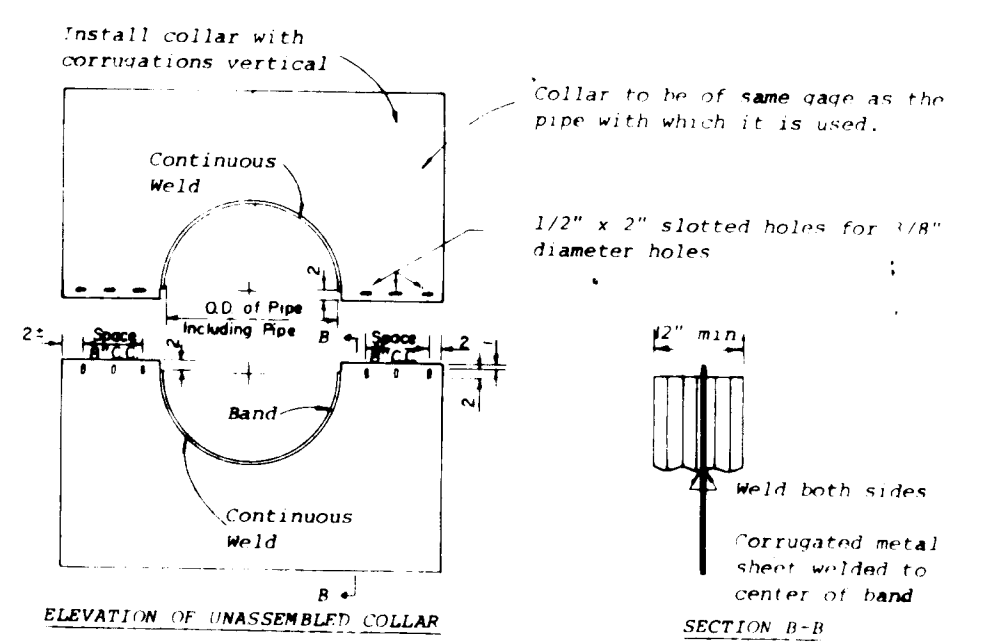
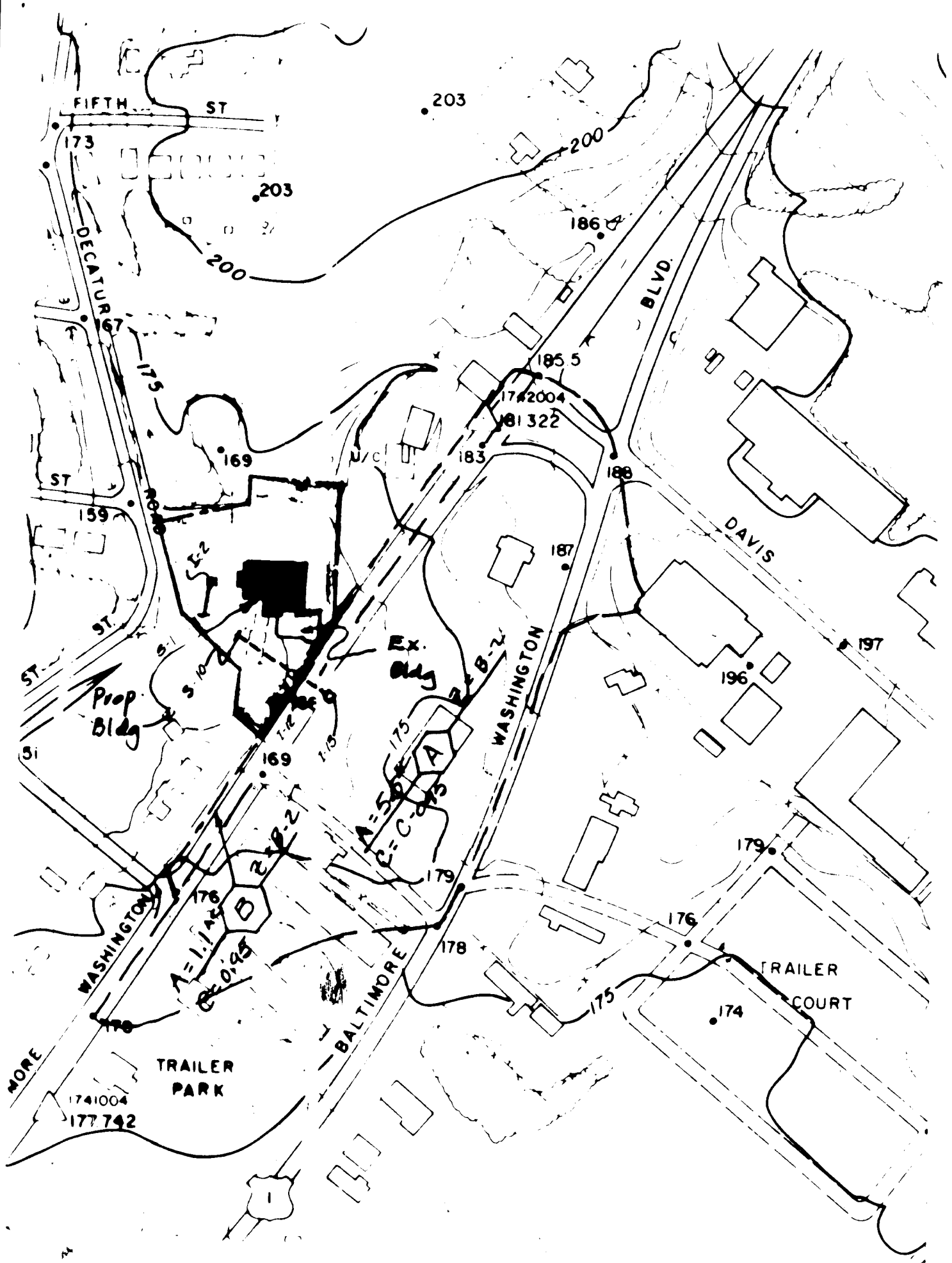


- CONSTRUCTION SEQUENCE**
1. Obtain permits - completed
 2. Install sediment control - completed
 3. Strip site - dispose of excess material to an approved site - completed
 4. Grade site - dispose of excess material to an approved site - completed
 5. Install footings and foundation
 6. Install storm drain, water main and sanitary sewer
 7. Install curbs and concrete walks
 8. Install retaining walls
 9. Place paving base course
 10. Complete building shell
 11. Install Mt. SHA widening and entrance
 12. Install landscaping and stabilize disturbed areas
 13. Place paving surface course
 14. Remove sediment control
- *After approved by Sediment Control Inspector

SURVEYOR'S CERTIFICATE

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

DATE 12-7-84 *Jefferson D. Lawrence*
 JEFFERSON D. LAWRENCE P.L.S.# 5216



- NOTES FOR COLLARS:**
1. All materials to be in accordance with construction and construction material specifications.
 2. When specified on the plans, coating of collars shall be in accordance with construction and construction material specifications.
 3. Unassembled collars shall be marked by painting or tagging to identify matching pairs.
 4. The lap between the two half sections and between the pipe and connecting band shall be caulked with asphalt mastic at time of installation.
 5. Each collar shall be furnished with two 1/2" diameter rods with standard link lugs for connecting the collars to pipe.

APPROVED
 DIVISION OF LAND DEVELOPMENT &
 ZONING ADMINISTRATION
 HOWARD COUNTY, MARYLAND
 DATE 12-7-83
M. L. F.

OWNER'S CERTIFICATE

I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT & 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 & EROSION BEFORE BEGINNING THE PROJECT.

DATE 12-1-84 *Michael J. Ballin*
 MICHAEL J. BALLIN OWNER

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

DATE 12-17-84 *James H. DeLoach*
 JAMES H. DELOACH U.S. SOIL CONSERVATION SERVICE

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

DATE 12-17-84 *Stephen T. Cook*
 STEPHEN T. COOK HOWARD SOIL CONSERVATION DISTRICT

APPROVED: FOR PUBLIC WATER & PUBLIC SEWERAGE SYSTEMS

HOWARD COUNTY HEALTH DEPARTMENT

DATE 12-21-84 *Joseph B. Baker*
 JOSEPH B. BAKER COUNTY HEALTH OFFICER

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING

DATE 12-26-84 *Small Rendell*
 SMALL RENDALL PLANNING DIRECTOR

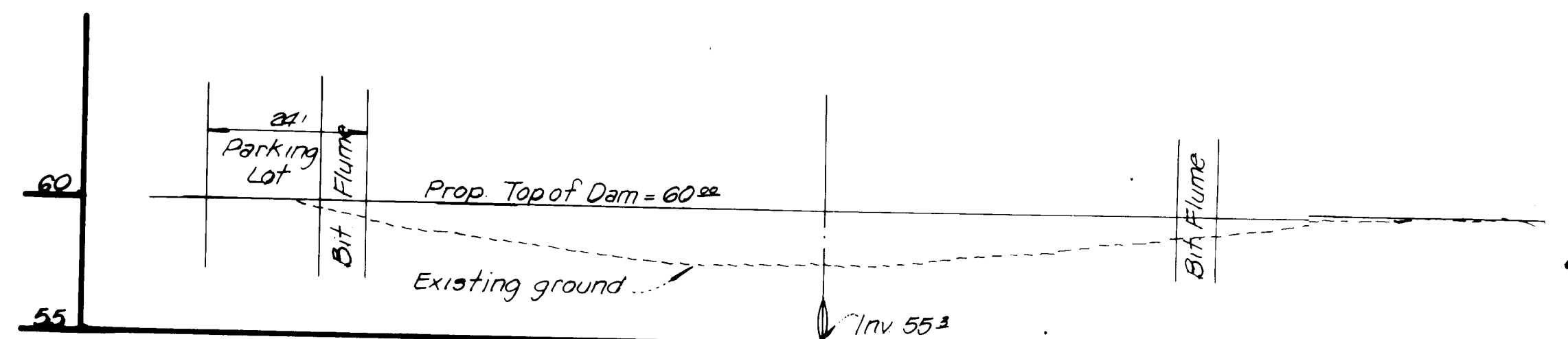
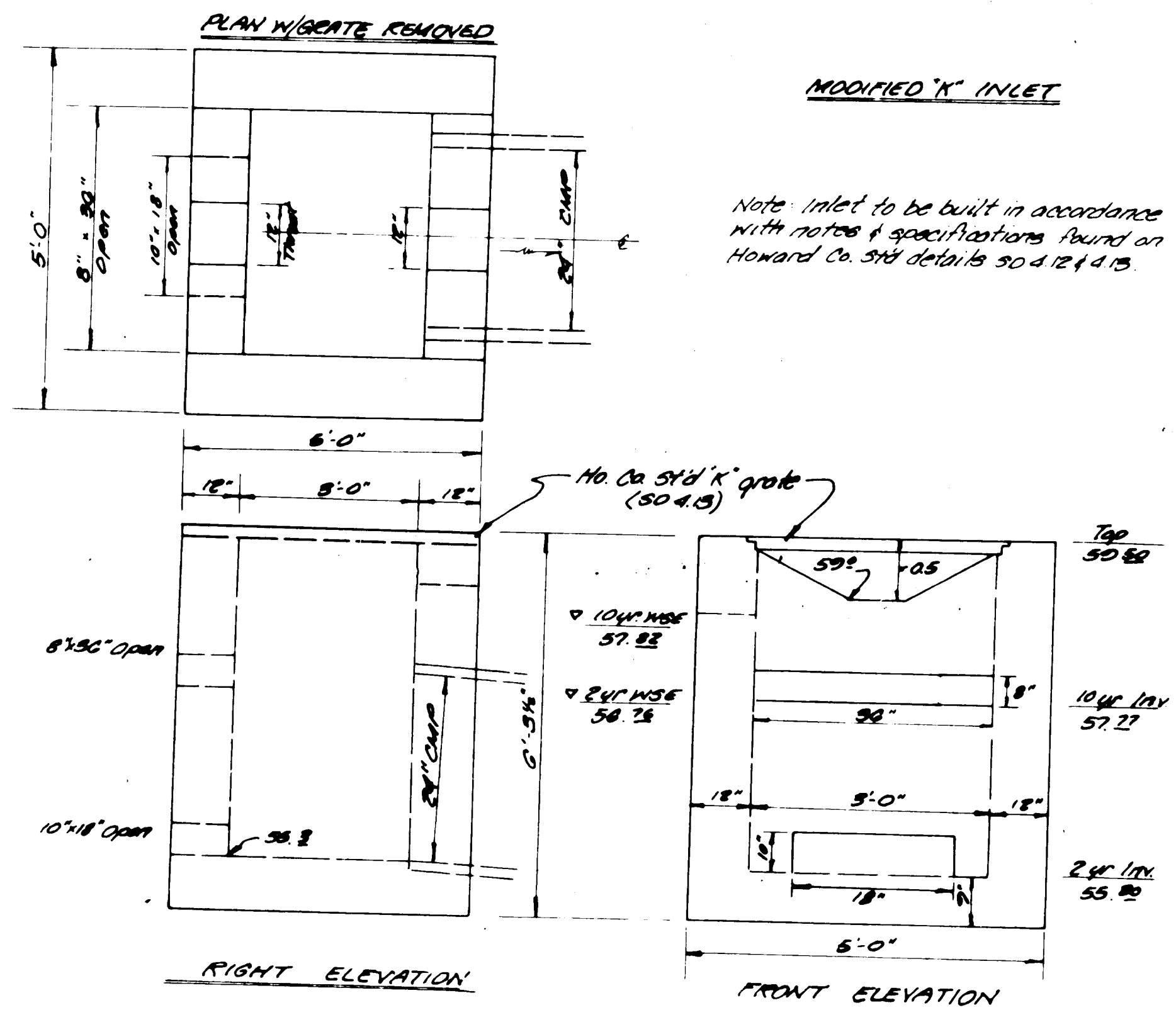
DATE 12-26-84 *Louis F. Oliver*
 LOUIS F. OLIVER CHIEF, DIV. OF LAND DEVELOPMENT & ZONING ADMINISTRATION

APPROVED: FOR PUBLIC WATER, PUBLIC SEWER, PUBLIC STORM DRAINAGE SYSTEMS & PUBLIC ROADS

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DATE 12-28-84 *Charles A. Adams*
 CHARLES A. ADAMS DIRECTOR

DATE 12-28-84 *William B. Kelly*
 WILLIAM B. KELLY CHIEF, BUREAU OF ENGINEERING



| NO. | REVISIONS | DATE |
|-----|--|----------|
| 1 | Revised per Planning & Zoning Comments | 11-29-83 |
| 2 | Update for Storm Water Management | Nov 84 |



DEVELOPMENT CONSULTANTS GROUP, INC.

17904 GEORGIA AVENUE SUITE 102
 OLNEY, MARYLAND 20832
 301-924-4570

Section P-A & Notes
 Lots 1-A, Block B, Lots 1-3, Block H
 NORTH LAUREL PARK
CHAUCER HOUSE RESTAURANT
 Guilford Election District Co
 Howard County, Maryland

| DATE | SHEET |
|----------------|------------|
| Aug 1983 | 4 |
| DRAWN M.L.L. | OF 5 |
| CHECKED M.L.S. | PROJECT NO |
| SCALE | |

SDP-84-42

CONSTRUCTION SPECIFICATIONS
FOR PONDS

These specifications are appropriate to ponds with the scope of the Standard for practices 375, SOIL CONSERVATION SERVICE MARYLAND, CONSTRUCTION SPECIFICATIONS FOR PONDS.

I. SITE PREPARATION

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

Areas to be covered by the pond or reservoir will be cleared of all trees, brush, logs, fences, rubbish and other objectionable material unless otherwise designated on the plans. Trees, brush and stumps shall be cut approximately level with the ground surface.

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

II. EARTH FILL

Material

The fill material shall be taken from pond area. It shall be free of roots, stumps, wood, rubbish, oversize stones, frozen or other objectionable materials. The embankment shall be constructed to an elevation on which provides for anticipated settlement to the design elevation. The fill height all along the length of the embankment shall be increased above the design elevation (including freeboard) by 0.4'.

Placement

Areas on which fill is to be placed shall be scarified prior to placement of fill. Fill materials shall be placed in 8-inch maximum thickness (before compaction) layers which are to be continuous over the entire length of the fill. The most porous borrow material shall be placed in the downstream portions of the embankment.

Compaction

The movement of the hauling and spreading equipment over the fill shall be controlled so that the entire surface of each lift shall be traversed by not less than one tread track of the equipment or compaction shall be achieved by a minimum of four complete passes of a sheepfoot, rubber tire or vibratory roller. Fill material shall contain sufficient moisture such that the required degree of compaction can be obtained with the equipment used.

Cutoff Trench

A cutoff trench shall be excavated along or parallel to the centerline of the embankment as shown on the plans. The bottom width of the trench shall be as shown on the drawings, with the minimum width being four feet. The depth shall be at least four feet. The side slopes of the trench shall be 1 to 1. The backfill material for the cutoff trench shall be the most impervious material available and shall be compacted with equipment or rollers to assure maximum density and minimum permeability.

III. STRUCTURAL BACKFILL

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

IV. PIPE CONDUITS

A. Corrugated Metal Pipe

- Materials - (Steel Pipe) - This pipe and its appurtenances shall be galvanized and fully bituminous coated and shall conform to the requirements of AASHTO Specifications M-190 Type A with watertight coupling bands. Any bituminous coating damaged or otherwise removed shall be replaced with cold applied bituminous coating compound.

Materials - (Aluminum Pipe) - This pipe and its appurtenances shall conform to the requirements of AASHTO Specifications M-196 or M-211 with watertight coupling bands. Coupling bands, anti-seep collars, end sections, etc. must be composed of the same material as the pipe. Metals must be insulated from dissimilar materials with use of rubber or plastic insulating materials at least 24 mils in thickness. Aluminum surfaces that are to be in contact with concrete shall be painted with one coat of zinc chromate primer. Hot dip galvanized bolts may be used for connections. The pH of the surrounding soils shall be less than 9 and greater than 4.

Helically corrugated pipe in addition to the requirements above shall have either continuously welded seams or have lock seams which are caulked, during fabrication, with a neoprene bead.

- Connections - All connections with pipes must be completely watertight. The drain pipe or barrel connection to the riser shall be welded all around when the pipe and riser are metal. Watertight coupling bands shall be used at all joints. Anti-seep collars shall be connected to the pipe in such a manner as to be completely watertight.
- Bedding - The pipe shall be firmly and uniformly bedded throughout its entire length. Where rock or soft, spongy or other unstable soil is encountered, all such material shall be removed and replaced with suitable earth compacted to provide adequate support.
- Laying pipe - The pipe shall be placed with inside circumferential laps pointing downstream and with the longitudinal laps at the sides.
- Backfilling shall conform to structural backfill as shown above.
- Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.

V. CONCRETE

1. Materials

- Cement - Normal Portland cement shall conform to the latest Specification C-150.
- Water - The water used in concrete shall be clean, free from oil, acid, alkali, scales, organic matter or other objectionable substances.
- Sand - The sand used in concrete shall be clean, hard, strong and durable, and shall be well graded with 100 percent passing a one-quarter inch sieve. Limestone sand shall not be used.
- Course Aggregate - The course aggregate shall be clean, hard, strong and durable, and free from clay or dirt. It shall be well graded with a maximum size of one and one-half (1 1/2) inches.
- Reinforcing Steel - The reinforcing steel shall be deformed bars or intermediate grade billet steel or rail steel conforming to ASTM Specification A-615.

- Design Mix - The concrete shall be mixed in the following proportions, measured by weight. The water-cement ratio shall be 5 1/2 to 6 U.S. Gallons of water per 94 pound bag of cement. The proportion of materials for the trial mix shall be 1:2:3 1/2. The combination of aggregates may be adjusted to produce a plastic and workable mix that will not produce harshness in placing or honeycombing in the concrete.

- Mixing - The concrete ingredients shall be mixed in batch mixers until the mixture is homogeneous and of uniform consistency. The mixing of each batch shall continue for not less than one and one-half minutes after all the ingredients, except the full amount of water, are in the mixer. The minimum mixing time is predicated on proper control of the speed of rotation of the mixer and of the introduction of the materials, including water, into the mixer. Water shall be added prior to, during, and following the mixer charging operations. Excessive overmixing requiring the addition of water to preserve the required concrete consistency shall not be permitted. Truck mixing will be allowed provided that the use of this method shall cause no violation of any applicable provisions of the specifications given here.

- Forms - The forms shall have sufficient strength and rigidity to hold the concrete and to withstand the necessary pressure, tamping, and vibration without deflection from the prescribed lines. They shall be mortar-tight and constructed so that they can be removed without hammering or prying against the concrete.

The inside of forms shall be oiled with a non-staining mineral oil or thoroughly wetted before concrete is placed.

Forms may be removed 24 hours after the placement of concrete. All wire ties and other devices used shall be recessed from the surface of the concrete.

- Reinforcing Steel - All reinforcing material shall be free of dirt, rust, scale, oil, paint or any other coatings. The steel shall be accurately placed and securely tied and blocked into position so that no movement of the steel will occur during placement of concrete.

- Consolidating - Concrete shall be consolidated with internal type mechanical vibrators. Vibration shall be supplemented by spading and hand tamping as necessary to insure smooth and dense concrete along form surfaces, in corners, and around embedded items.

- Finishing - Defective concrete, honeycombed areas, voids left by the removal of tie rods, ridges on all concrete surfaces permanently exposed to view or exposed to water on the finished structure, shall be repaired immediately after the removal of forms. All voids shall be removed and completely filled with dry-patching mortar.

- Protection and Curing - Exposed surfaces of concrete shall be protected from the direct rays of the sun for at least the first three (3) days. All concrete shall be kept continuously moist for at least ten (10) days after being placed. Moisture may be applied by spraying or sprinkling as necessary to prevent the concrete from drying. Concrete shall not be exposed to freezing during the curing period. Curing compounds may also be used.

- Placing Temperature - Concrete may not be placed at temperature below 37° F with the temperature falling, or 34° with the temperature rising.

VI. STABILIZATION

All borrow areas shall be graded to provide proper drainage and left in a slightly condition. All exposed surfaces of the embankment, spillway, spoil borrow areas, and berms shall be stabilized by seeding, liming, fertilizing and mulching (if required) in accordance with the vegetative treatment specifications or as shown on the accompanying drawings.

VII. EROSION AND SEDIMENT CONTROL

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

APPROVED
DIVISION OF LAND DEVELOPMENT &
ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 12-7-83

STATE OF MARYLAND
HOWARD COUNTY
DEPARTMENT OF PUBLIC WORKS
PUBLIC STORM DRAINAGE SYSTEMS & PUBLIC ROADS
DATE 12-19-84
George F. Nemis
DIRECTOR

APPROVED: FOR PUBLIC WATER, PUBLIC SEWER, PUBLIC STORM DRAINAGE SYSTEMS & PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DATE 12-19-84
George F. Nemis
DIRECTOR

APPROVED: FOR PUBLIC WATER & PUBLIC SEWAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT
DATE 12-21-84
John Boyd
COUNTY HEALTH OFFICER

APPROVED:
HOWARD COUNTY OFFICE OF PLANNING & ZONING
DATE 12-26-84
Donal Bandal
PLANNING DIRECTOR
DATE 12-26-84
Louis F. Davis
CHIEF, DIV. OF LAND DEVELOPMENT & ZONING ADMINISTRATION

STATE OF MARYLAND
HOWARD COUNTY
DEPARTMENT OF PUBLIC WORKS
PUBLIC STORM DRAINAGE SYSTEMS & PUBLIC ROADS
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PUBLIC STORM DRAINAGE SYSTEMS & PUBLIC ROADS
DATE 12-19-84
George F. Nemis
DIRECTOR

Owner: Mike Halkos
Chaucer House Rest
12002 Washington Blvd
Laurel, Md 20707
(301) 725-3800

| NO. | REVISIONS | DATE |
|-----|-----------------------------------|--------|
| 1 | Update For Storm Water Management | Nov 84 |



DEVELOPMENT CONSULTANTS GROUP, INC.
17904 GEORGIA AVENUE SUITE 102
OLNEY, MARYLAND 20832
301-924-4570

SDP-84-42 VP-84-31
CONSTRUCTION SPECIFICATIONS FOR SWM POND
Lots 1-G, Block "G" and Lots 1-3 Block "H"
"NORTH LAUREL PARK"
CHAUCER HOUSE RESTAURANT
Guilford Election District, G
Howard County, Maryland

| DATE | SHEET |
|----------------|--------------------|
| Nov 84 | 5 |
| DRAWN Greg | of 5 |
| CHECKED M.L.S. | |
| SCALE None | PROJECT NO. 103-01 |