

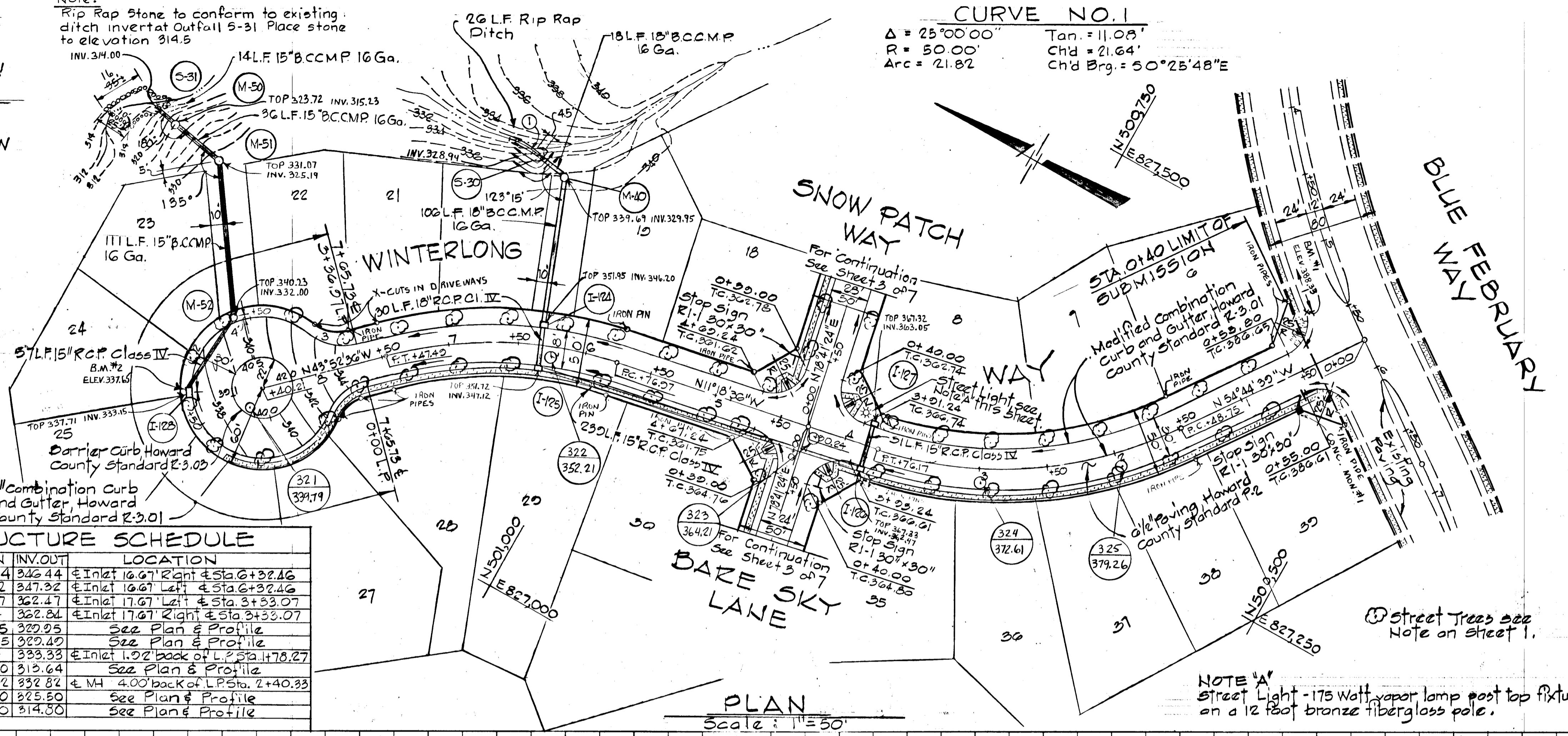
CURVE DATA
 P.C. 1+58.75 to P.T. 3+26.17
 $\Delta = 43^\circ 26' 03''$ Tan. = 119.49
 $R = 300.00'$ Chd. = 222.02'
 $Arc = 227.42'$ Chd. Brg. = $N33^\circ 01' 37'' W$

P.C. 5+86.97 to P.T. 7+57.49
 $\Delta = 32^\circ 34' 00''$ Tan. = 87.63
 $R = 300.00'$ Chd. = 168.23'
 $Arc = 170.52'$ Chd. Brg. = $N27^\circ 35' 36'' W$

NOTE:
 PAVING WIDTH - 28' 30"
 LENGTH OF ROAD - 840'
 5 SEWER MHS IN ROAD R/W

Note:
 Rip Rap Stone to conform to existing ditch invert at Outfall 5-31 Place stone to elevation 314.5

CURVE NO. 1
 $\Delta = 25^\circ 00' 00''$ Tan. = 11.08'
 $R = 50.00'$ Chd. = 21.64'
 $Arc = 21.82'$ Chd. Brg. = $50^\circ 25' 48'' E$



STORM DRAIN STRUCTURE SCHEDULE

NO.	TYPE	TOP EL.	INV. IN	INV. OUT	LOCATION
124	A-5 Inlet (width 25) S.D. 4.01	332.12	346.64	346.44	Inlet 16.67' Right of Sta. 6+32.16
125	A-10 Inlet (width 25) S.D. 4.01	332.12	347.52	347.32	Inlet 16.67' Left of Sta. 6+32.16
126	A-5 Inlet (width 25) S.D. 4.01	337.40	332.27	332.17	Inlet 17.67' Left of Sta. 3+33.07
127	A-5 Inlet (width 25) S.D. 4.01	337.40	332.84	332.84	Inlet 17.67' Right of Sta. 3+33.07
M-40	Standard Manhole G.S. 0.1	333.35	330.15	329.95	See Plan & Profile
S-30	Type "A" Headwall S.D. 5.11	332.55	329.55	329.40	See Plan & Profile
128	A-5 Inlet (width 25) S.D. 4.01	337.77	333.33	333.33	Inlet 1.02' back of L.P. Sta. 1+78.27
S-31	Type "A" Headwall S.D. 5.11	316.70	313.70	313.64	See Plan & Profile
M-32	Standard Manhole G.S. 0.1	340.25	335.02	332.82	4.00' back of L.P. Sta. 2+40.33
M-31	Standard Manhole G.S. 0.1	331.64	325.70	325.50	See Plan & Profile
M-30	Standard Manhole G.S. 0.1	323.50	315.00	314.80	See Plan & Profile

* Inlets with deflectors S.D. 4.83

DEPARTMENT OF PUBLIC WORKS
 CHIEF, BUREAU OF ENGINEERING
OFFICE OF PLANNING & ZONING
 CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION

5/24/85
 Re Date
 Re No
 Revision Description

COLUMBIA
 6TH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

OWNER AND DEVELOPER
 HOWARD RESEARCH AND DEVELOPMENT CORPORATION

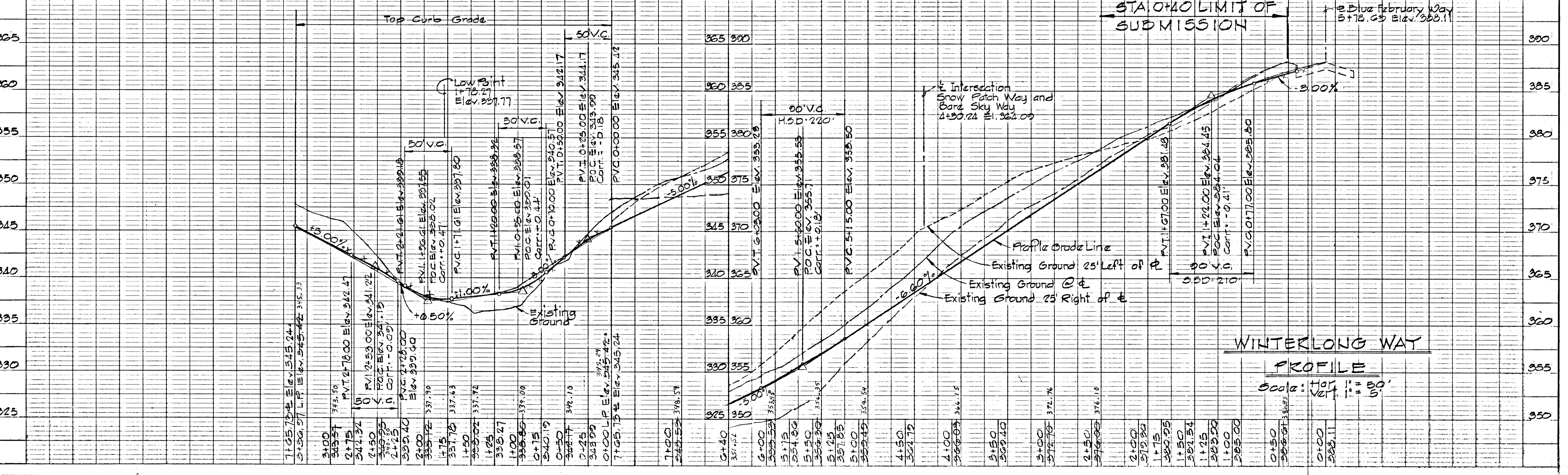
PROJECT AREA
 VILLAGE OF HICKORY RIDGE
 SECTION 3 AREA 11

PROJECT TITLE
 PLAN AND PROFILE
 WINTERLONG WAY

SCALE: AS SHOWN DATE

WHITMAN, REQUARDT & ASSOCIATES
 ENGINEERS
 BALTIMORE, MARYLAND 21218

Kenneth A. McCord
 KENNETH A. MCCORD
 Registered Engineer
 No. 1974



DATE
 BY
 CHECKED
 PLAN
 NOTE BOOK
 NO.

DATE
 BY
 CHECKED
 PROFILE
 NOTE BOOK
 NO.

Note: For storm drain information see Plan on Sheet 2 and Profile on Sheet 5.

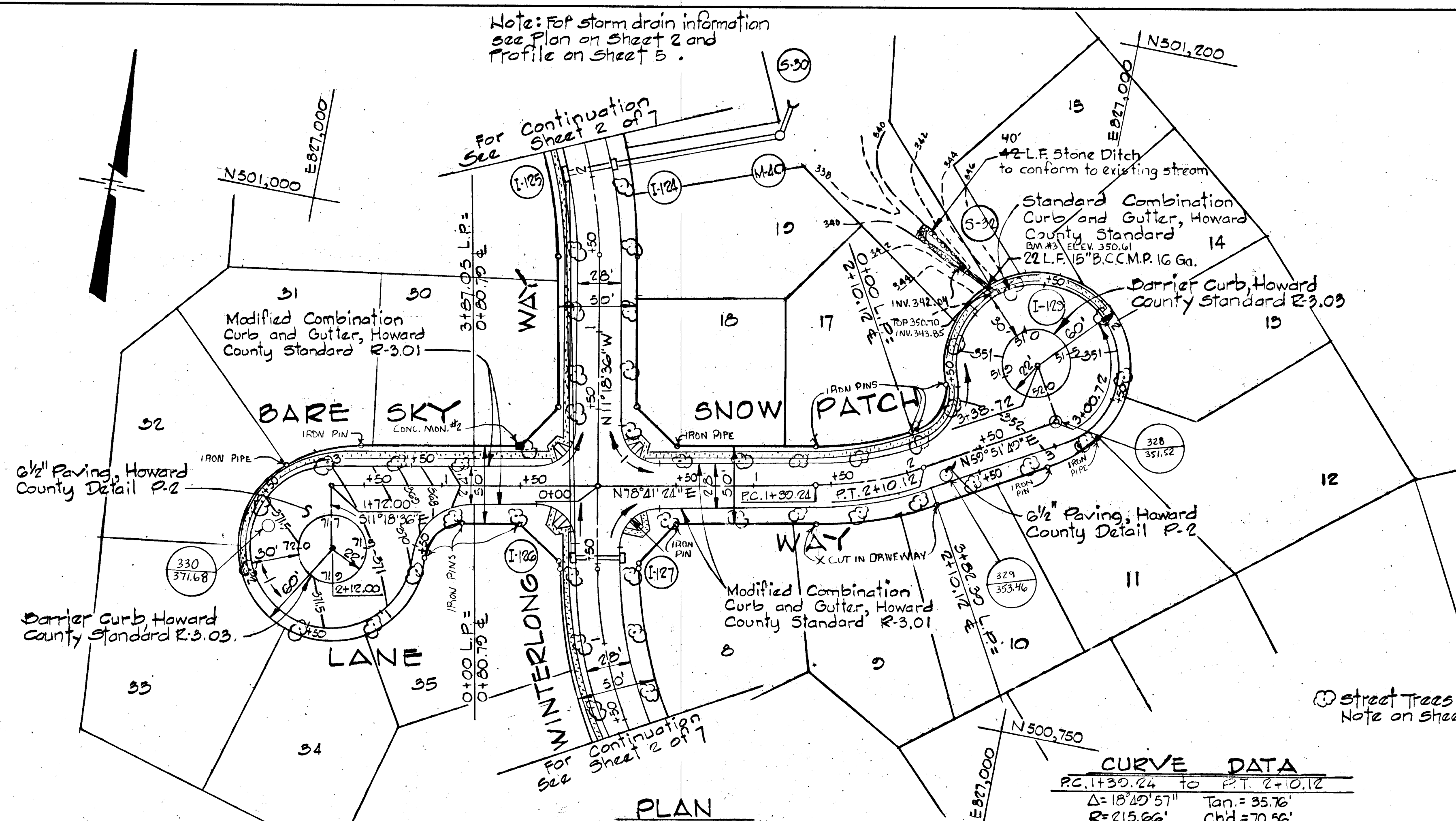
STORM DRAIN STRUCTURE SCHEDULE

NO.	TYPE	TOP EL.	INV. IN	INV. OUT	LOCATION
1-129	A-10 Inlet (with 12" S)	324.40	320.70	323.60	242.40 & Inlet 12" Duct of L.P. Sta. 1+20.72
5-32	Type A Headwall	325.11	325.20	322.20	322.22 See Plan and Profile

DEPARTMENT OF PUBLIC WORKS

CHIEF, BUREAU OF ENGINEERING
 OFFICE OF PLANNING & ZONING
 DATE: 8-12-85
 CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION

NOTE:
 PAVING WIDTHS - 24' ± 28'
 LENGTH OF ROADS - 212' ± 339'
 SEWER MH'S IN ROAD R/W



CURVE DATA
 RC: 1+30.24 TO PT: 2+10.12
 $\Delta = 18^{\circ} 57'$ Tan = 35.76'
 $R = 215.66'$ Chd = 70.56'
 Arc = 70.88' Chd. Brg. = N69°16'37"E

REVDATE	REVNO.	REVISION DESCRIPTION
5/22/85	1	As per DPW and S.C.S. Comments

COLUMBIA
 5TH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

OWNER AND DEVELOPER
 HOWARD RESEARCH AND DEVELOPMENT CORPORATION

PROJECT AREA
 VILLAGE OF HICKORY RIDGE
 SECTION 3 AREA 11

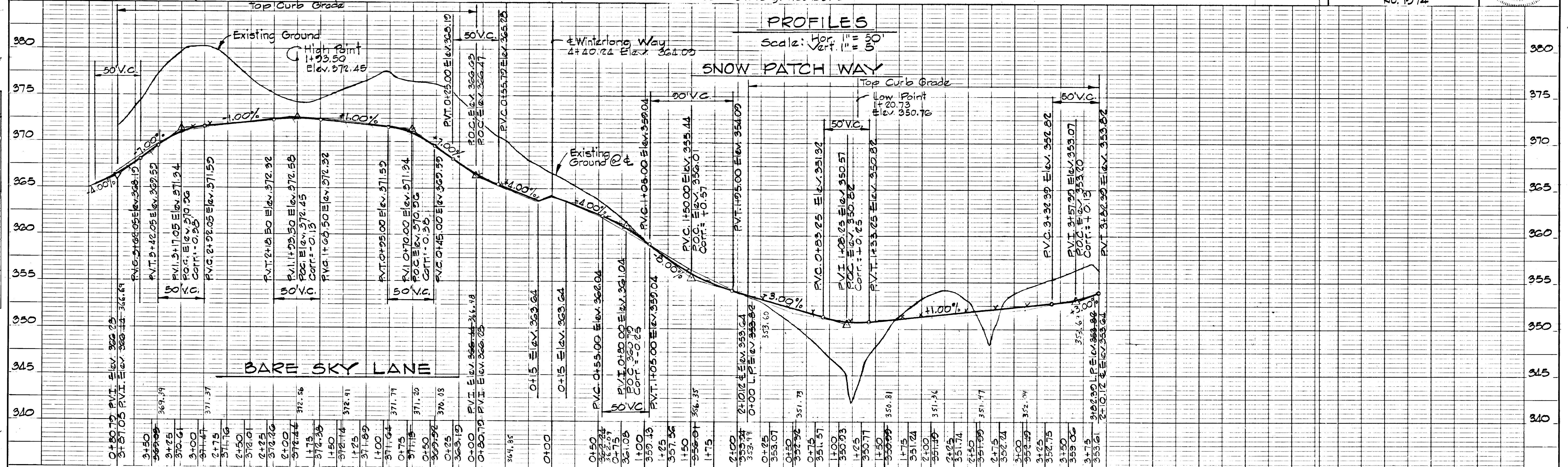
PROJECT TITLE
 PLAN AND PROFILE
 SNOW PATCH WAY AND
 BARE SKY LANE

SCALE: AS SHOWN DATE:

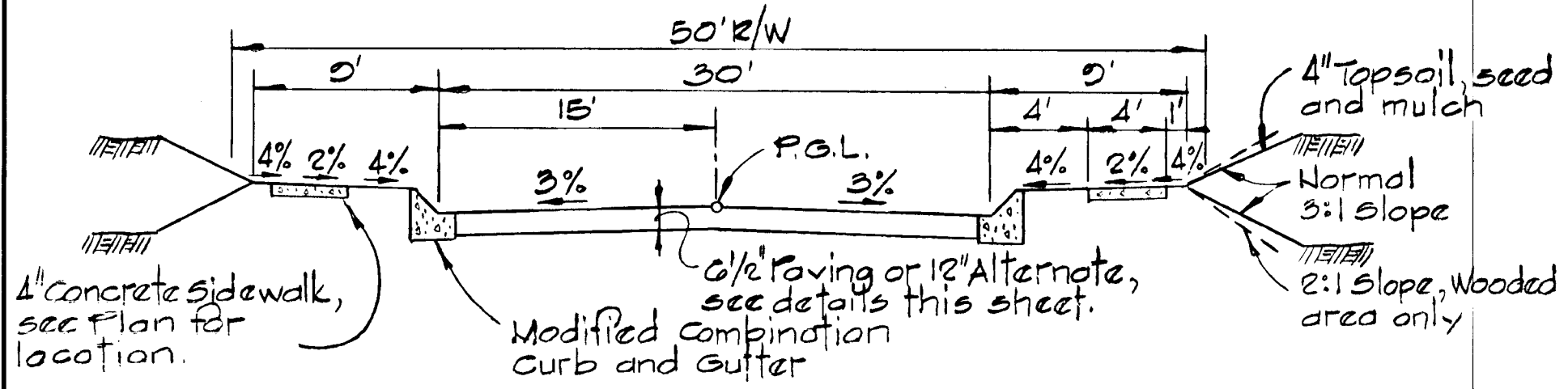
WHITMAN, REQUARDT AND ASSOCIATES
 ENGINEERS
 BALTIMORE, MARYLAND 21218

Kenneth A. McCord
 KENNETH A. MCCORD
 Registered Engineer
 No. 19724

PROFILES

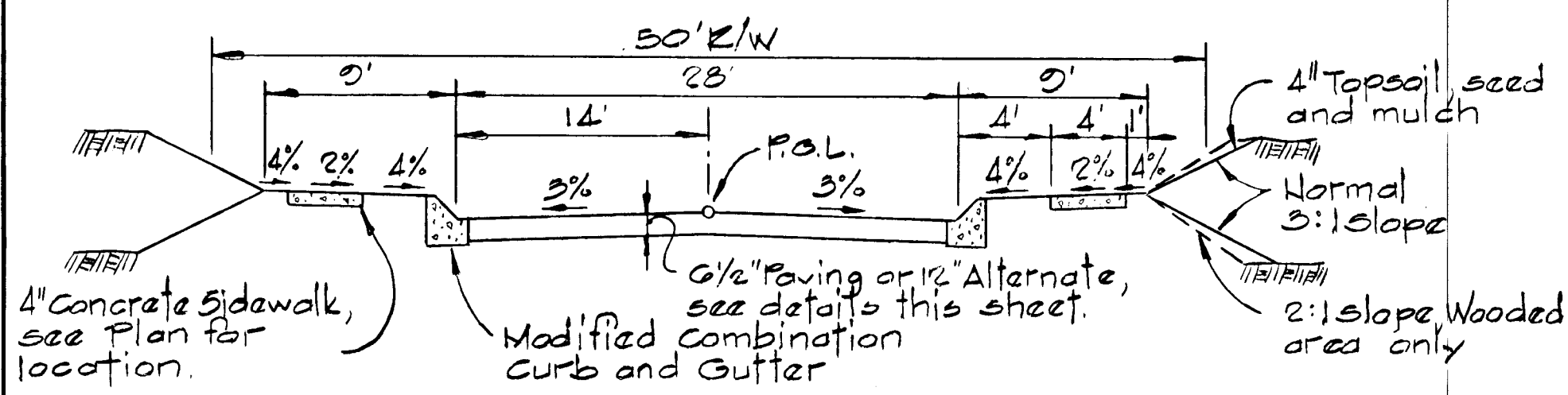


DESIGN SPEED
30M.P.H.



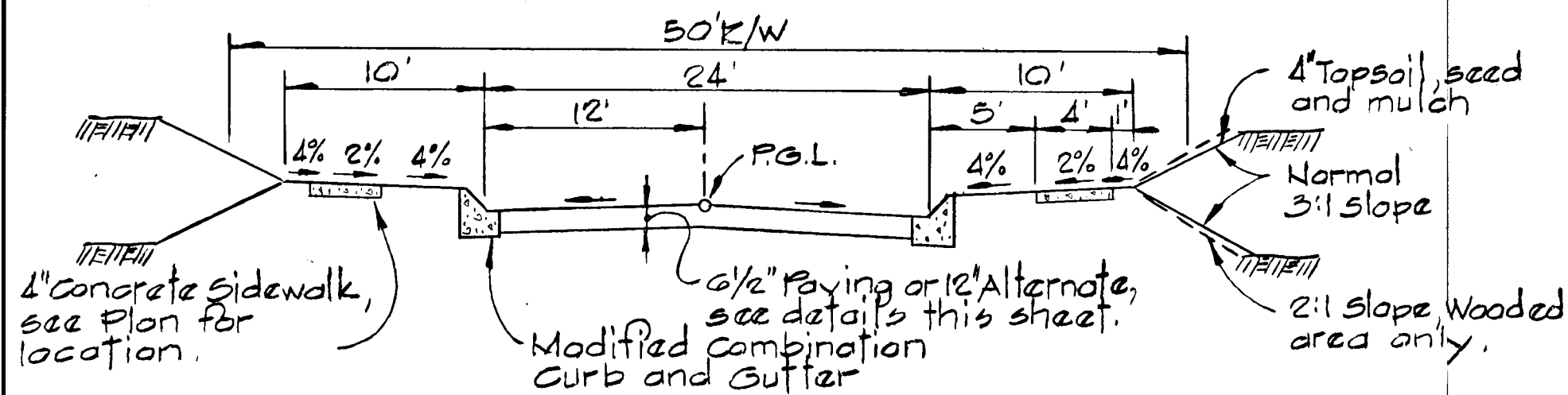
TYPICAL SECTION

No Scale
WINTERLONG WAY 0+53.80 TO 4+30.24



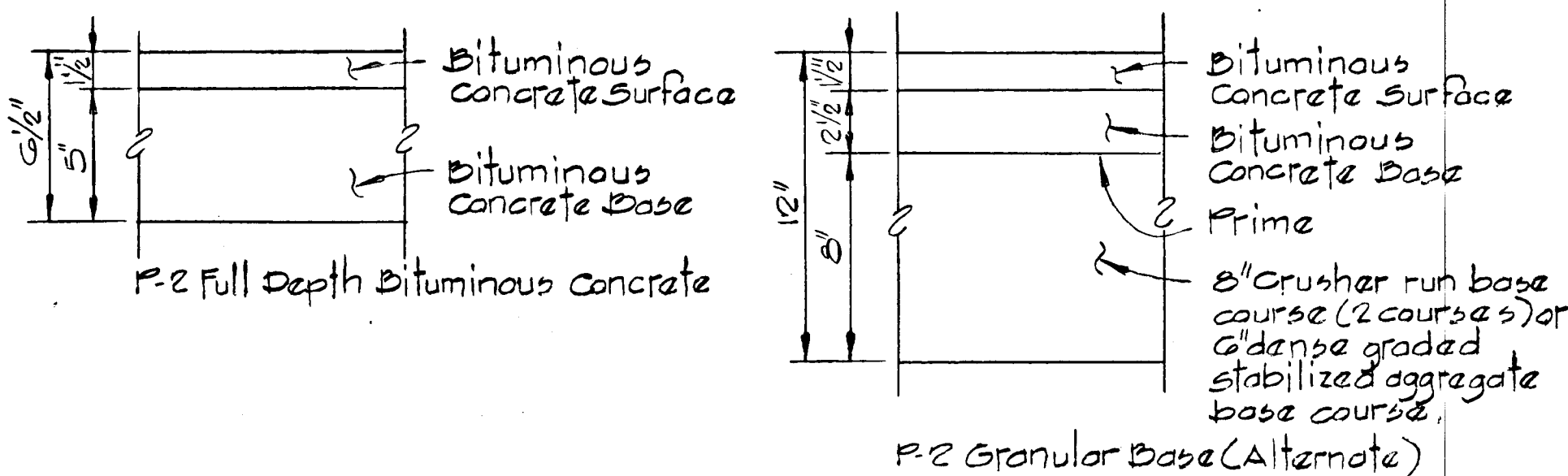
TYPICAL SECTION

No Scale
* LOCAL ROAD
* WINTERLONG WAY 4+30.24 TO 7+05.73
* SNOW PATCH WAY 0+40 TO 2+10.12



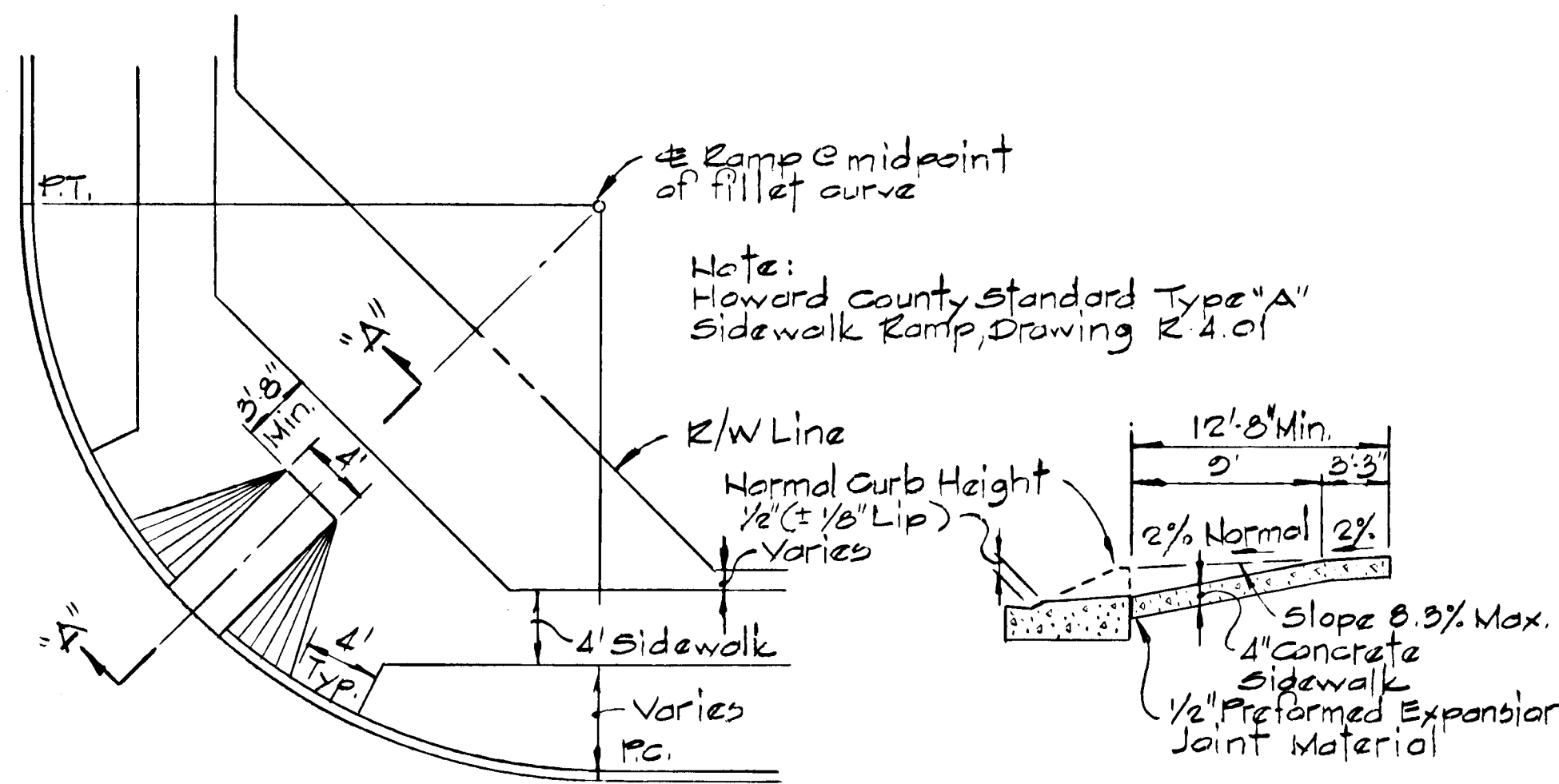
TYPICAL SECTION

No Scale
DARE SKY LANE 0+40 TO 0+80.70



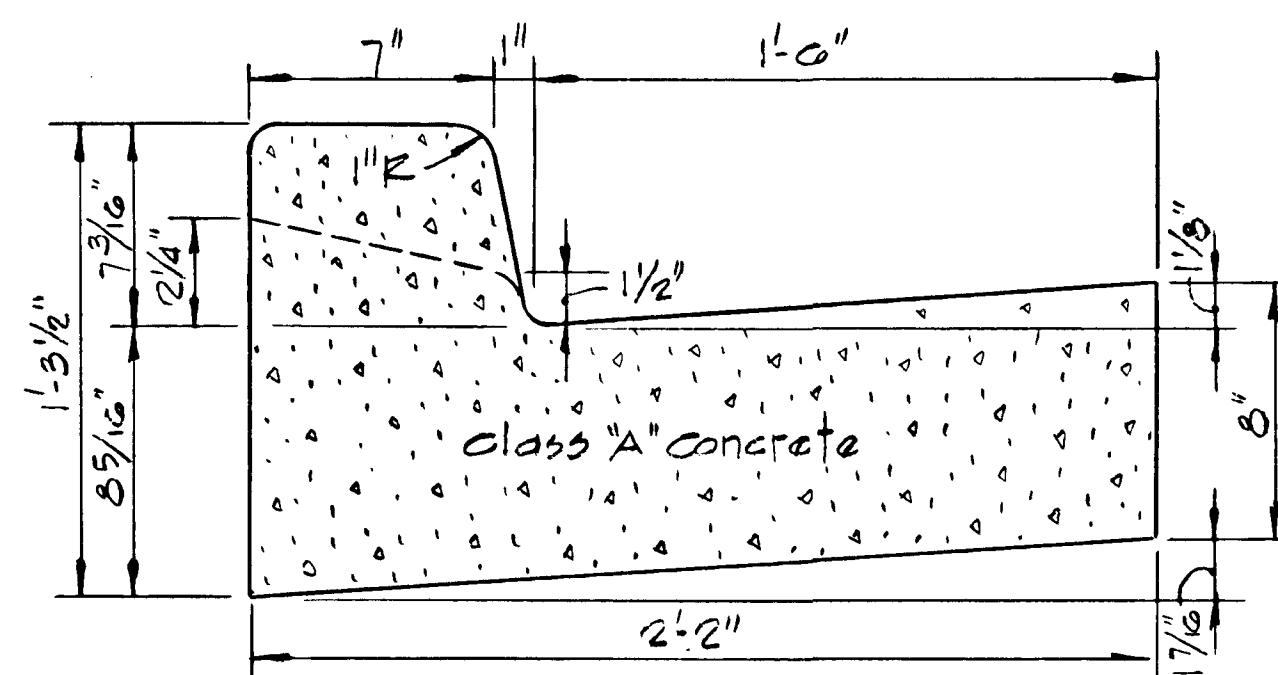
TYPICAL PAVING SECTION

No Scale



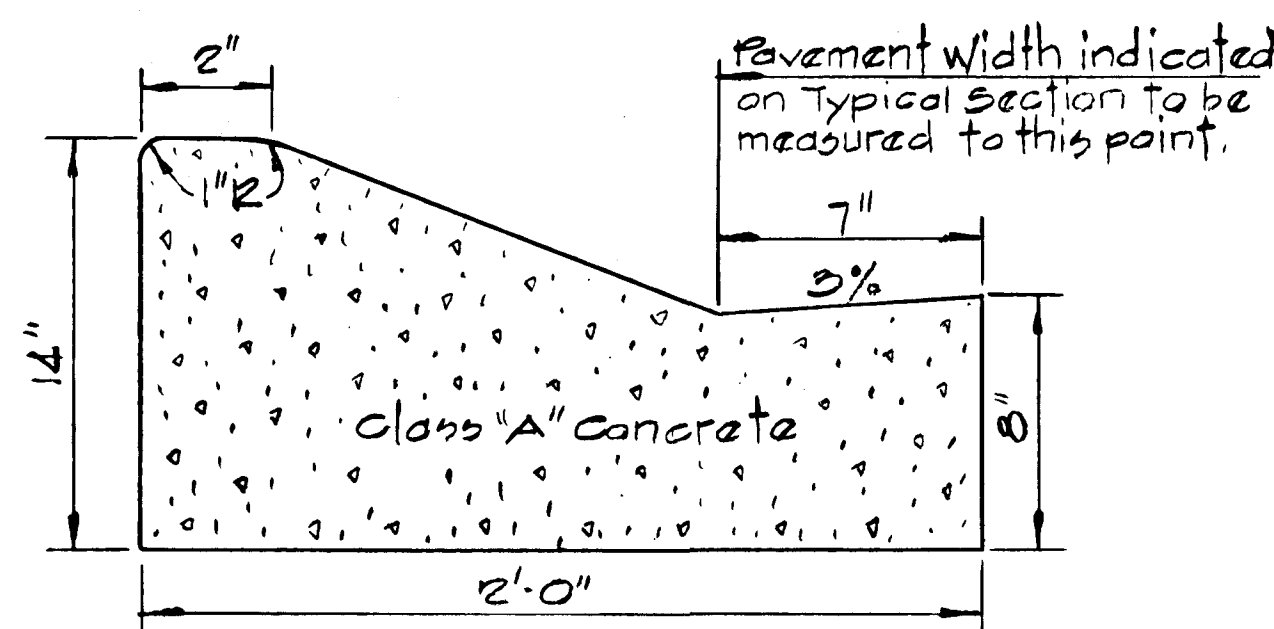
PLAN SECTION "A-A"

WHEEL CHAIR RAMP DETAIL
No Scale



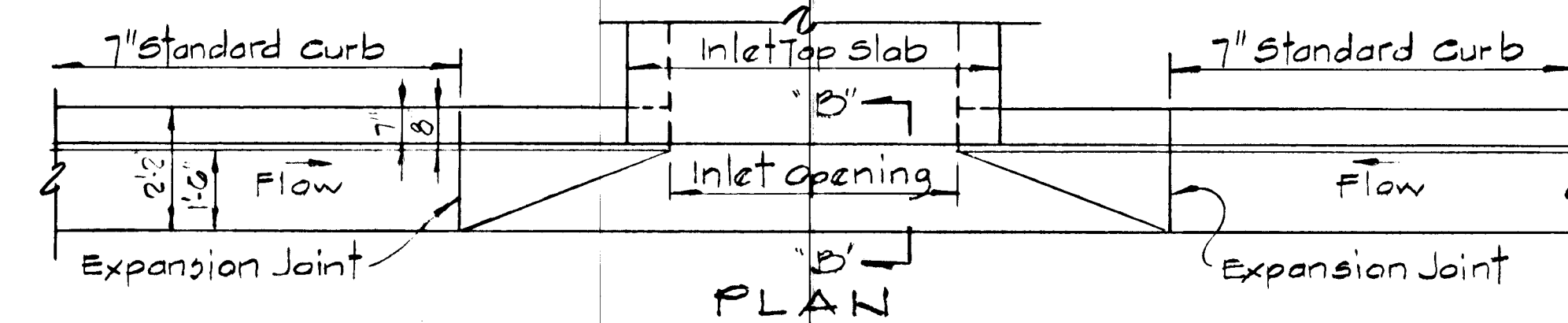
STANDARD 7" COMBINATION CURB & GUTTER

No Scale

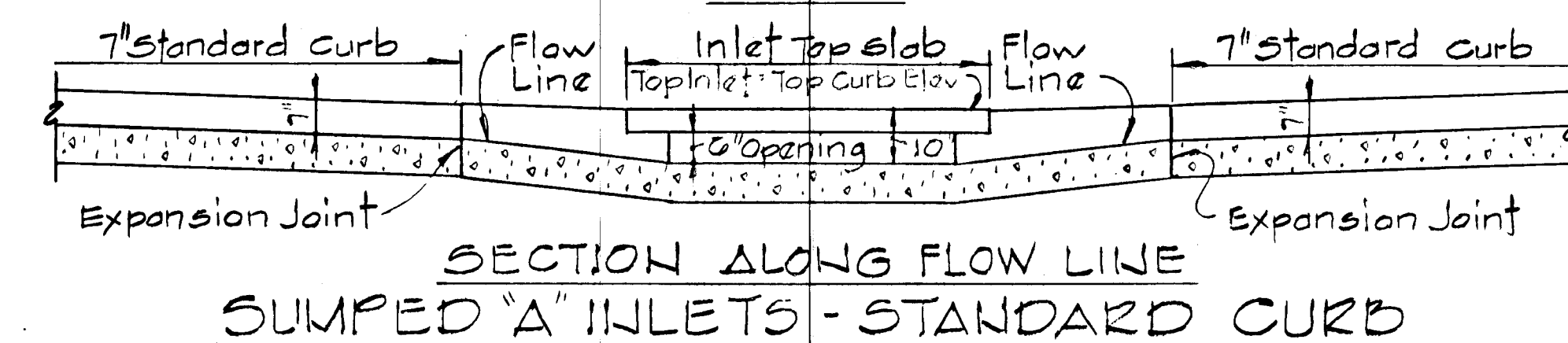


MODIFIED COMBINATION CURB & GUTTER

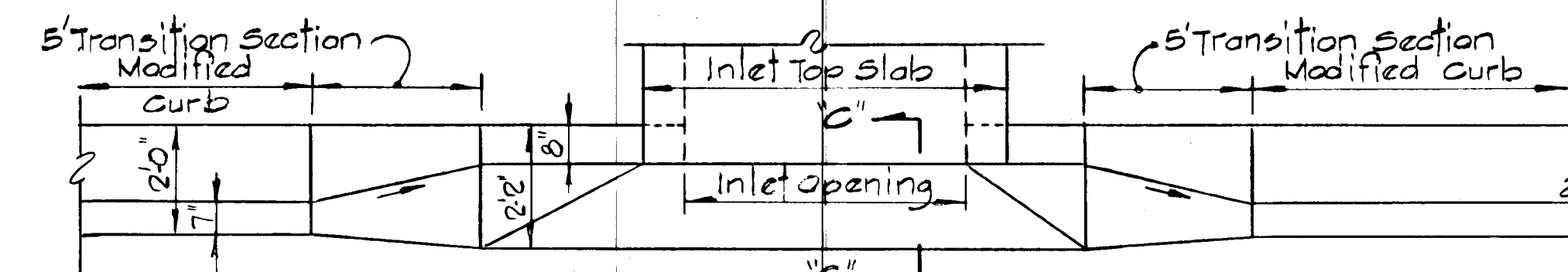
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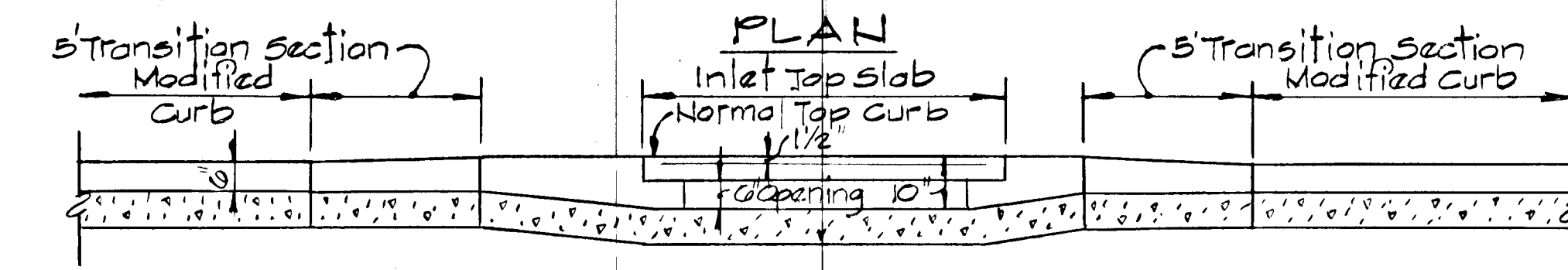
PLAN



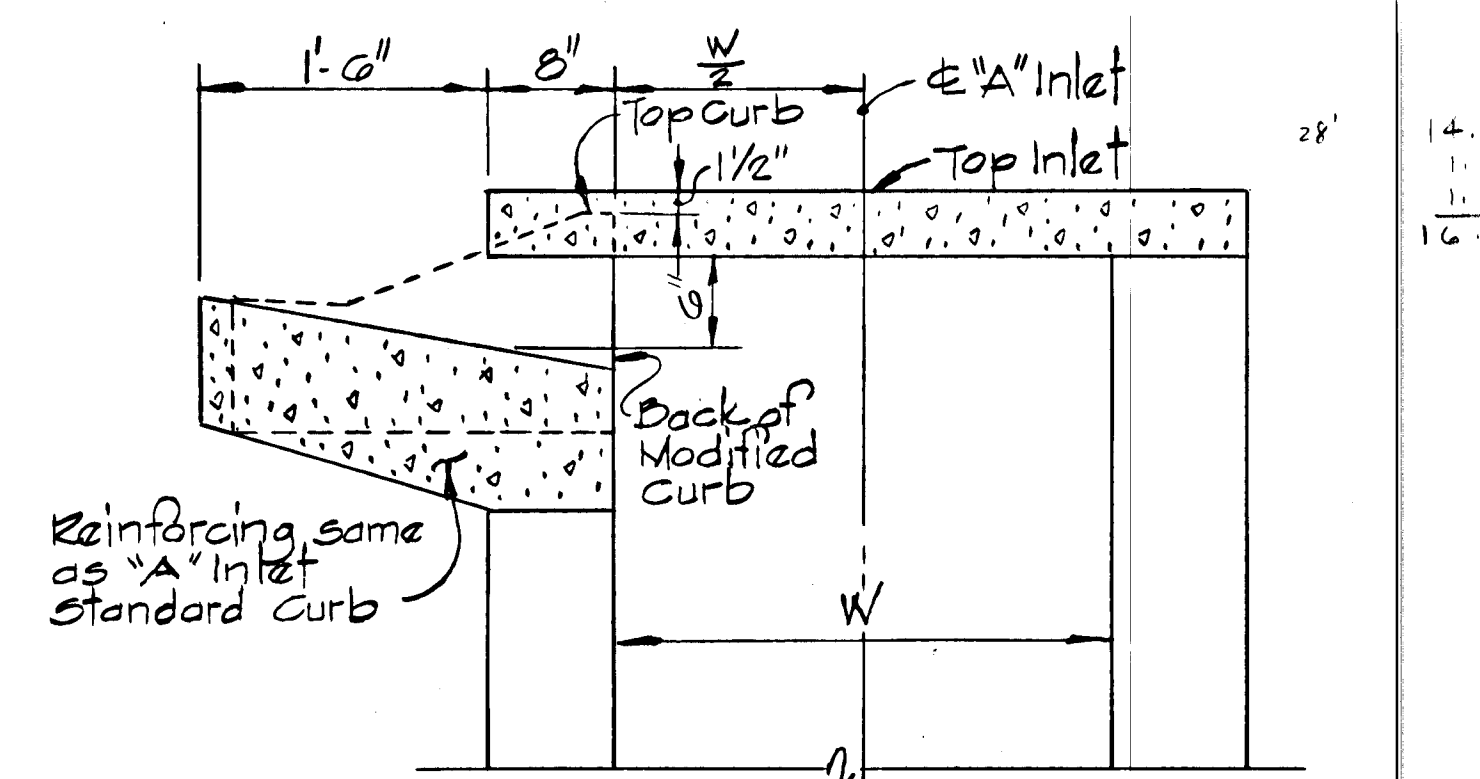
SECTION ALONG FLOW LINE SUMPED "A" INLETS - STANDARD CURB



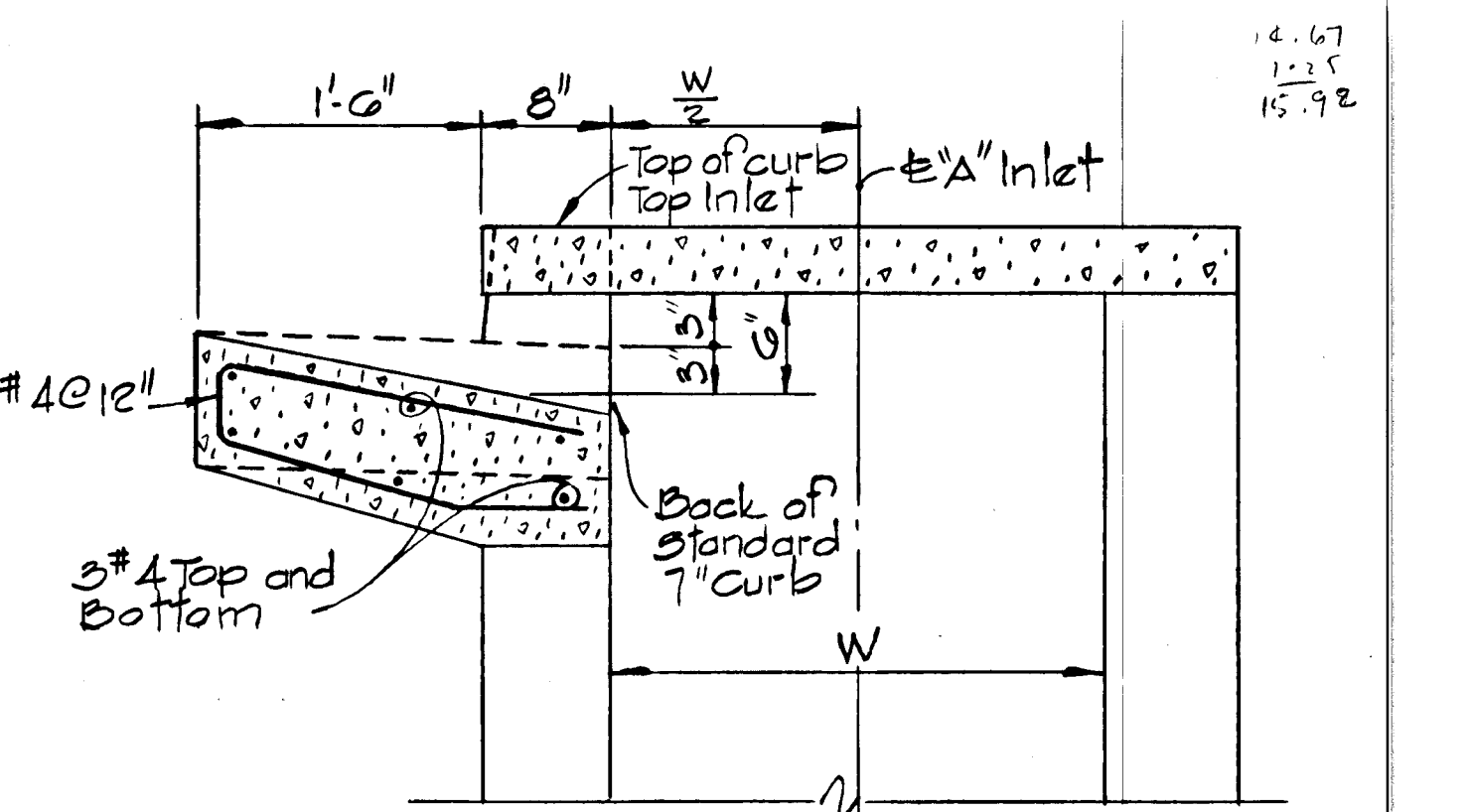
PLAN



SECTION ALONG FLOW LINE "A" INLETS - MODIFIED CURB



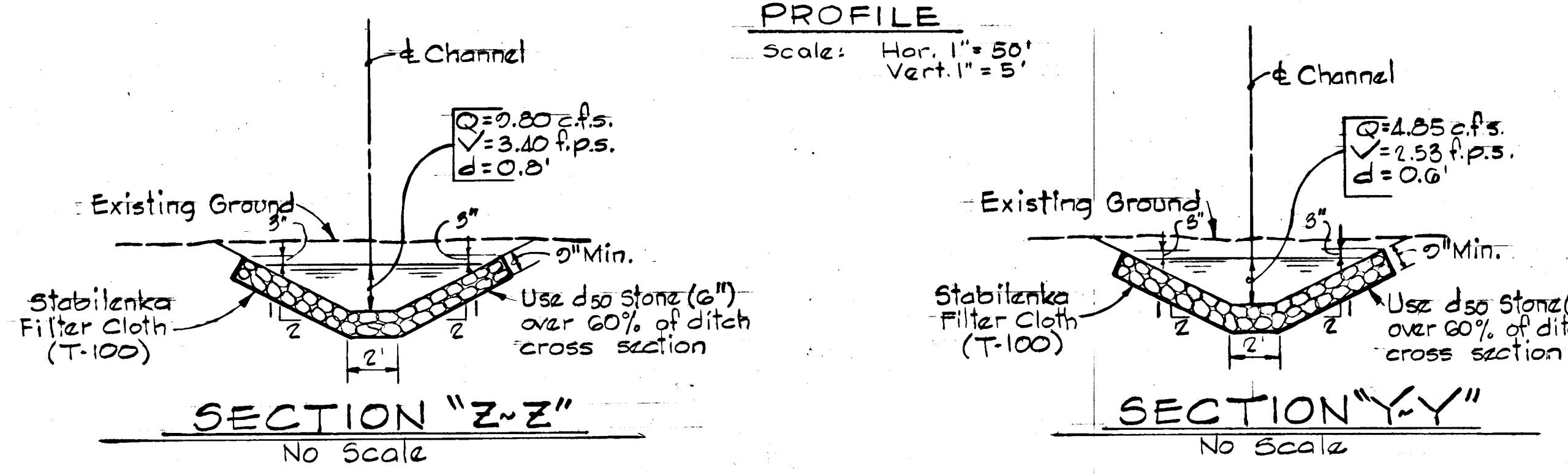
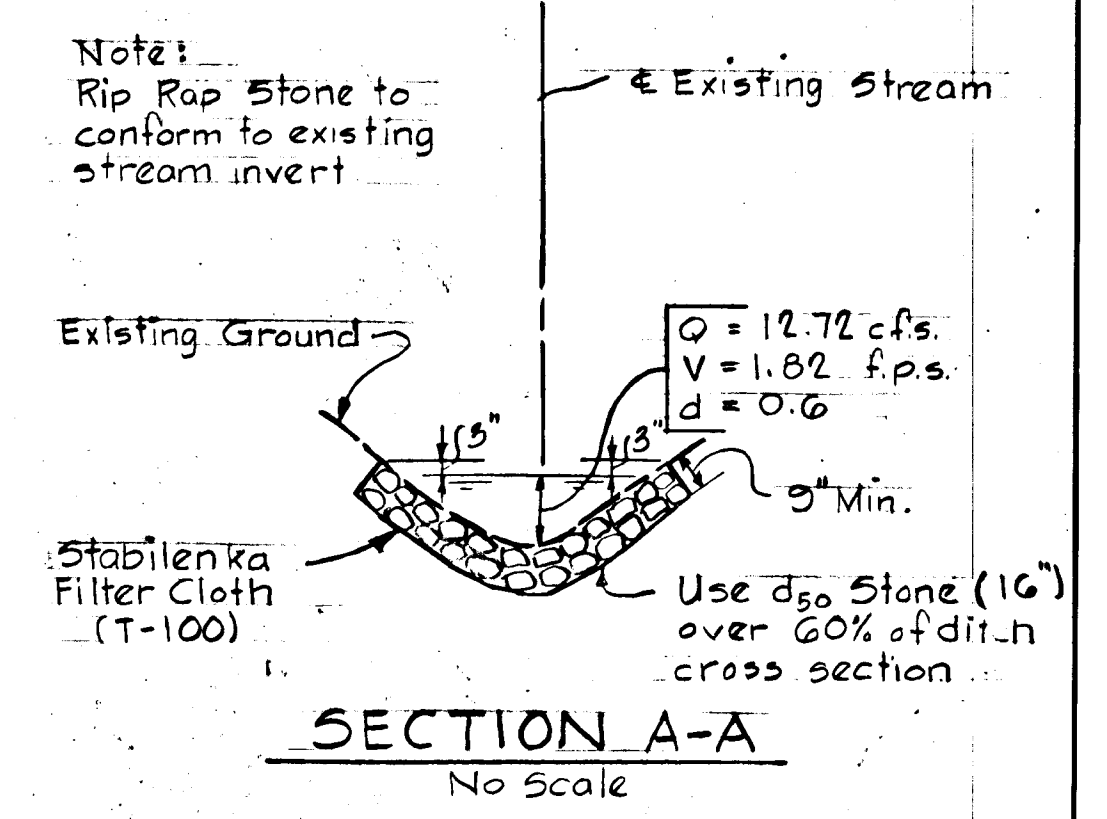
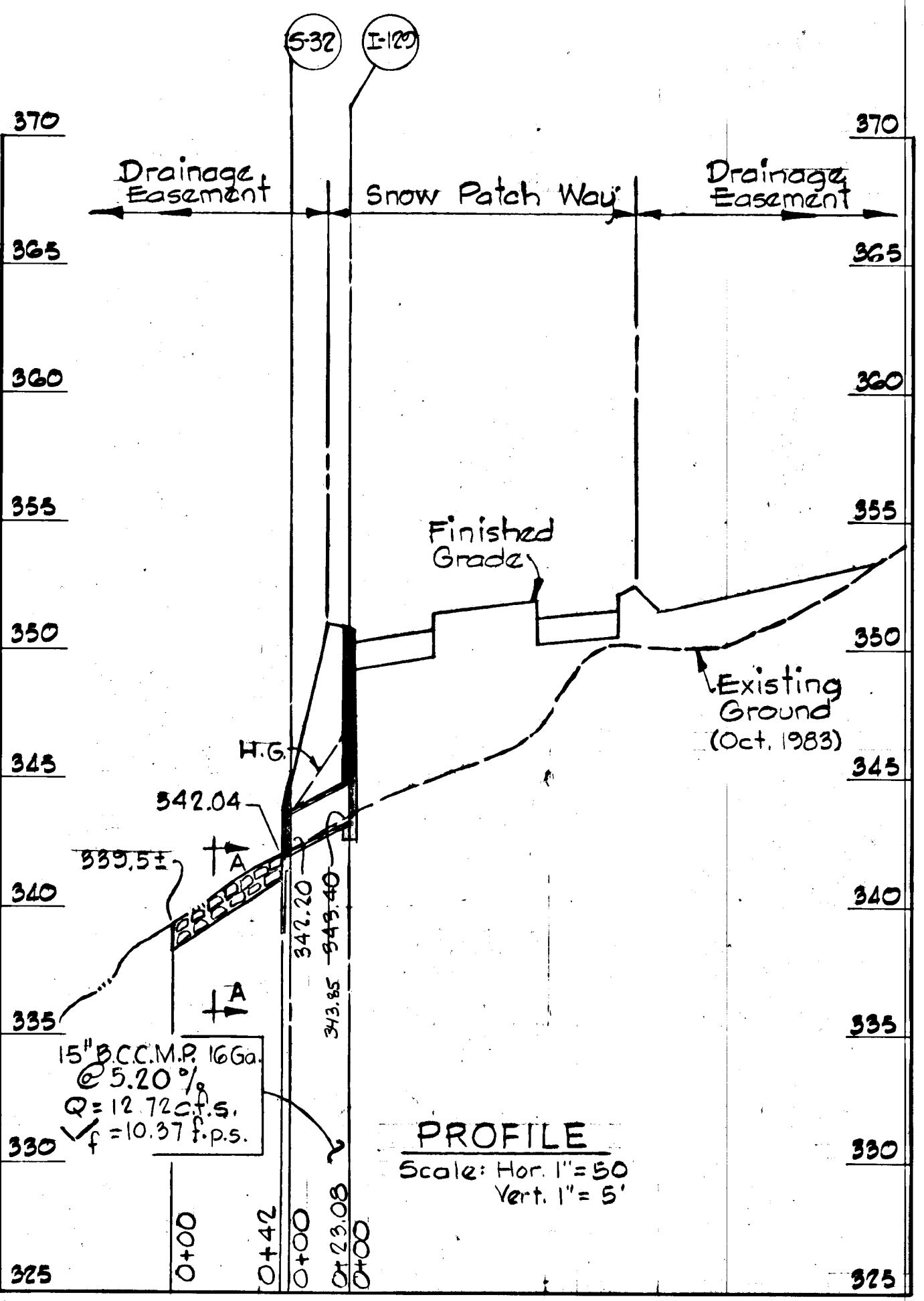
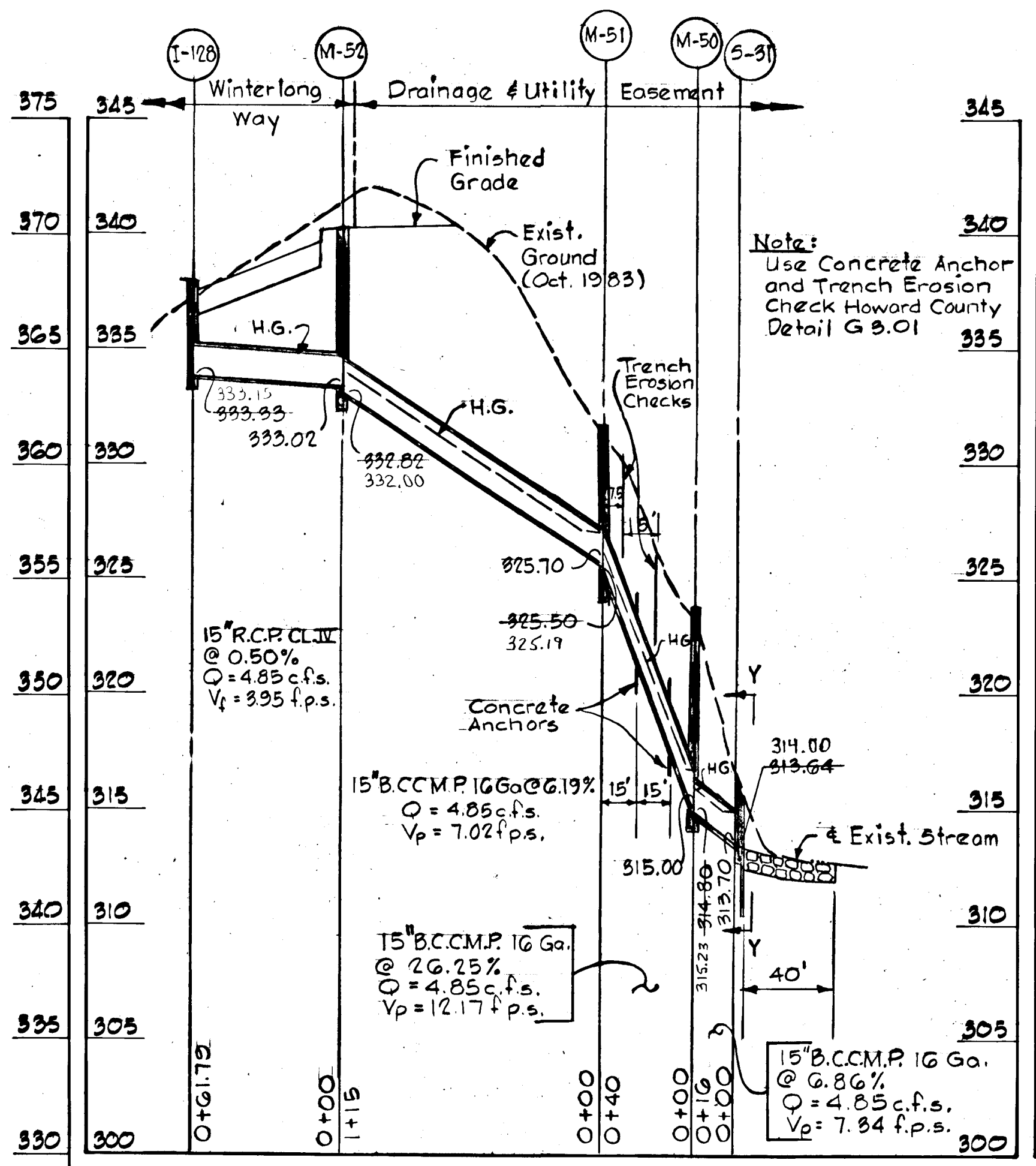
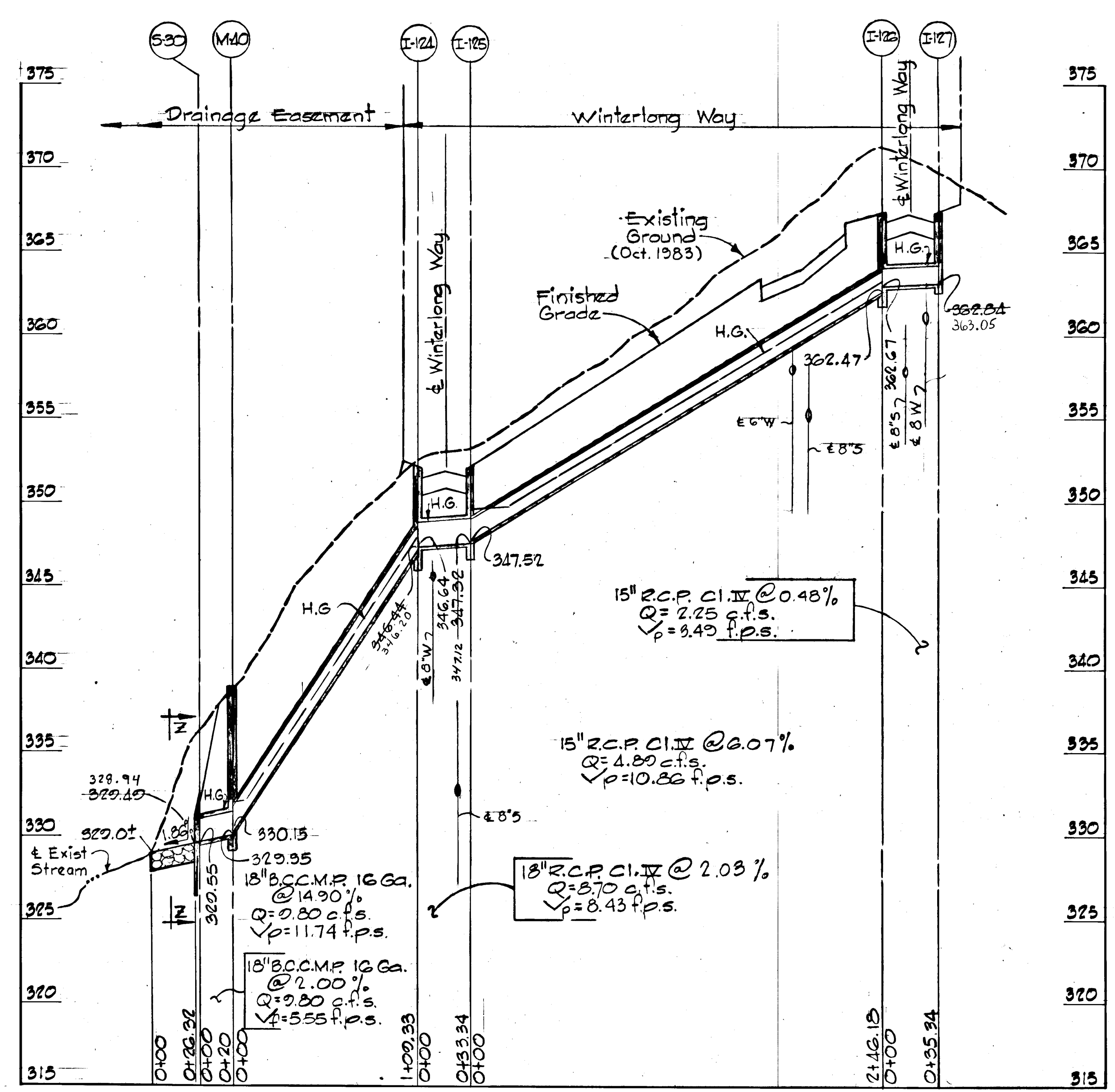
SECTION "C-C" "A" INLET MODIFIED CURB



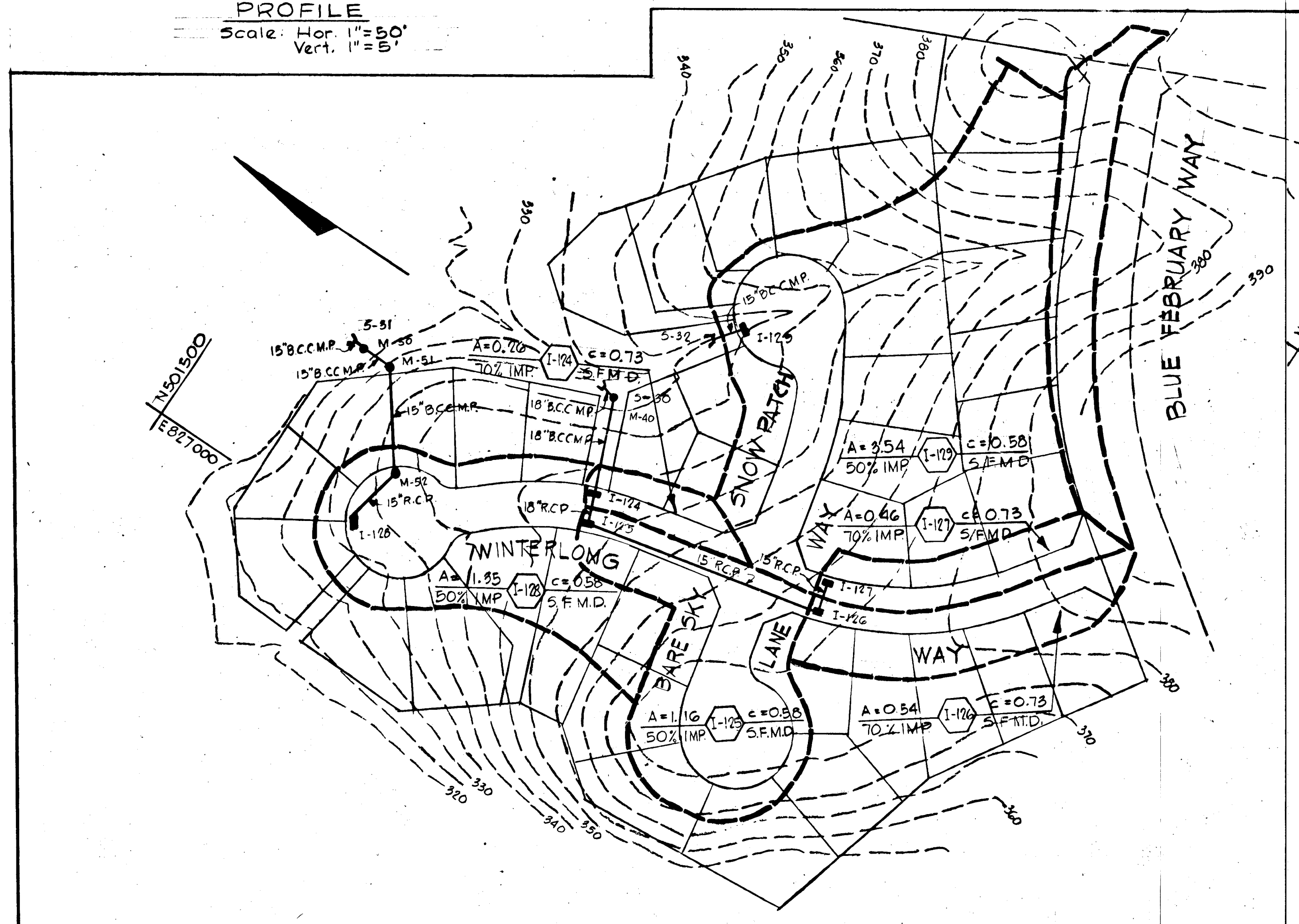
SECTION "B-B" "A" INLET - STANDARD CURB

DEPARTMENT OF PUBLIC WORKS
8-11-85
CHIEF, BUREAU OF ENGINEERING
OFFICE OF PLANNING & ZONING
John M. Macchman 8-12-85
OFFICE, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION

REV. DATE	REV. NO.	AS PER D.P.W. and S.C.S. COMMENTS	REVISION DESCRIPTION
5/22/85	1		
COLUMBIA 5 th ELECTION DISTRICT HOWARD COUNTY, MARYLAND			
OWNER AND DEVELOPER HOWARD RESEARCH AND DEVELOPMENT CORPORATION			
PROJECT AREA VILLAGE OF HICKORY RIDGE SECTION 3 AREA 11			
PROJECT TITLE ROADWAY AND STORM DRAIN DETAILS			
SCALE: AS SHOWN DATE:			
WHITMAN, REQUART AND ASSOCIATES ENGINEERS BALTIMORE, MARYLAND 21218			
Kenneth A. McCord Registered Engineer No. 1074			



Note:
 Type of bedding used for storm drain pipes shall be Class C shaped subgrade. If rock is encountered the trench invert should be over excavated 6 inches and the over excavation of 6 inches refilled with granular material.



5/22/85	1	As Per D.P.W. and S.C.S. Comments
REV DATE	REV NO.	REVISION DESCRIPTION
COLUMBIA 5 th ELECTION DISTRICT HOWARD COUNTY, MARYLAND		
OWNER AND DEVELOPER HOWARD RESEARCH AND DEVELOPMENT CORPORATION		
PROJECT AREA VILLAGE OF HICKORY RIDGE SECTION 3 AREA II		
PROJECT TITLE STORM DRAIN PROFILES		
SCALE: AS SHOWN	DATE	
WHITMAN, REQUARDT AND ASSOCIATES ENGINEERS BALTIMORE, MARYLAND 21218		
Kenneth A. McCord Registered Engineer No. 1074		

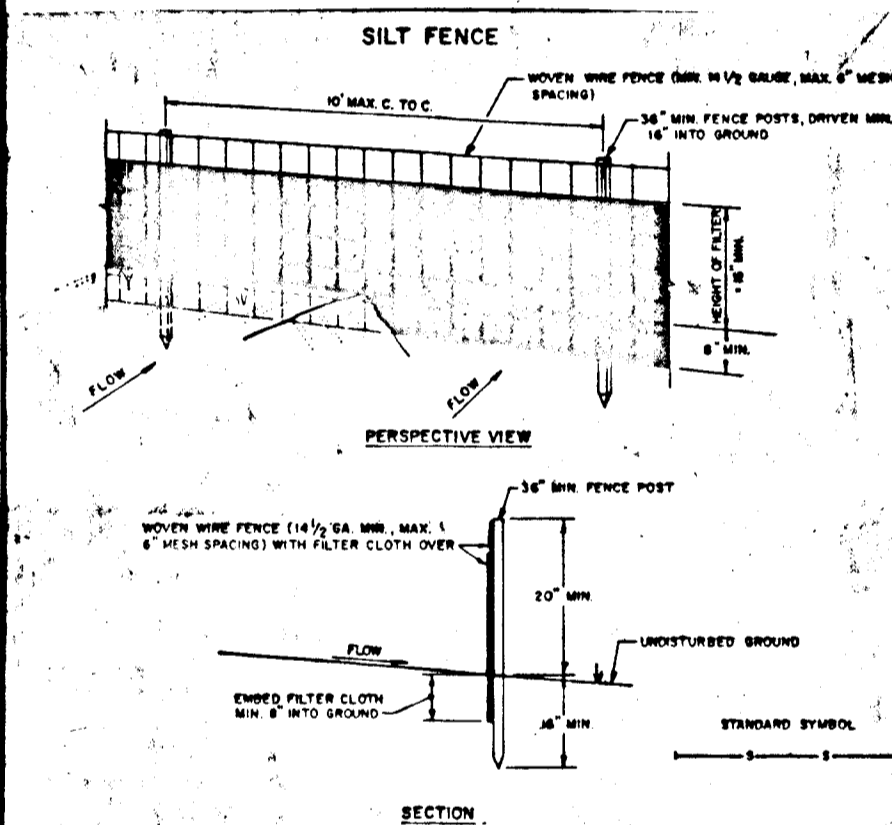
**STONE OUTLET
SEDIMENT TRAP**

DESIGN DATA
 DRAINAGE AREA 11.9 ACRES
 STORAGE REQUIRED 1.9 x 67.1273 CF
 STORAGE PROVIDED 128 CF
 TOP DERM ELEV 334.0
 TOP STONE WEIR ELEV 333.0
 DESIGN CAPACITY ELEV 332.0
 BOTTOM TRAP ELEV 328.0
 STONE OUTLET WIDTH 6'

N 501,250

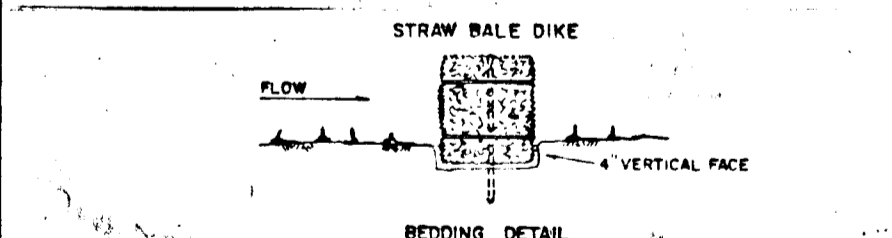
N 501,000

NOTE:
 PROVIDE INLET
 PROTECTION AT
 INLET I-128, SEE
 DETAIL SHEET 7.



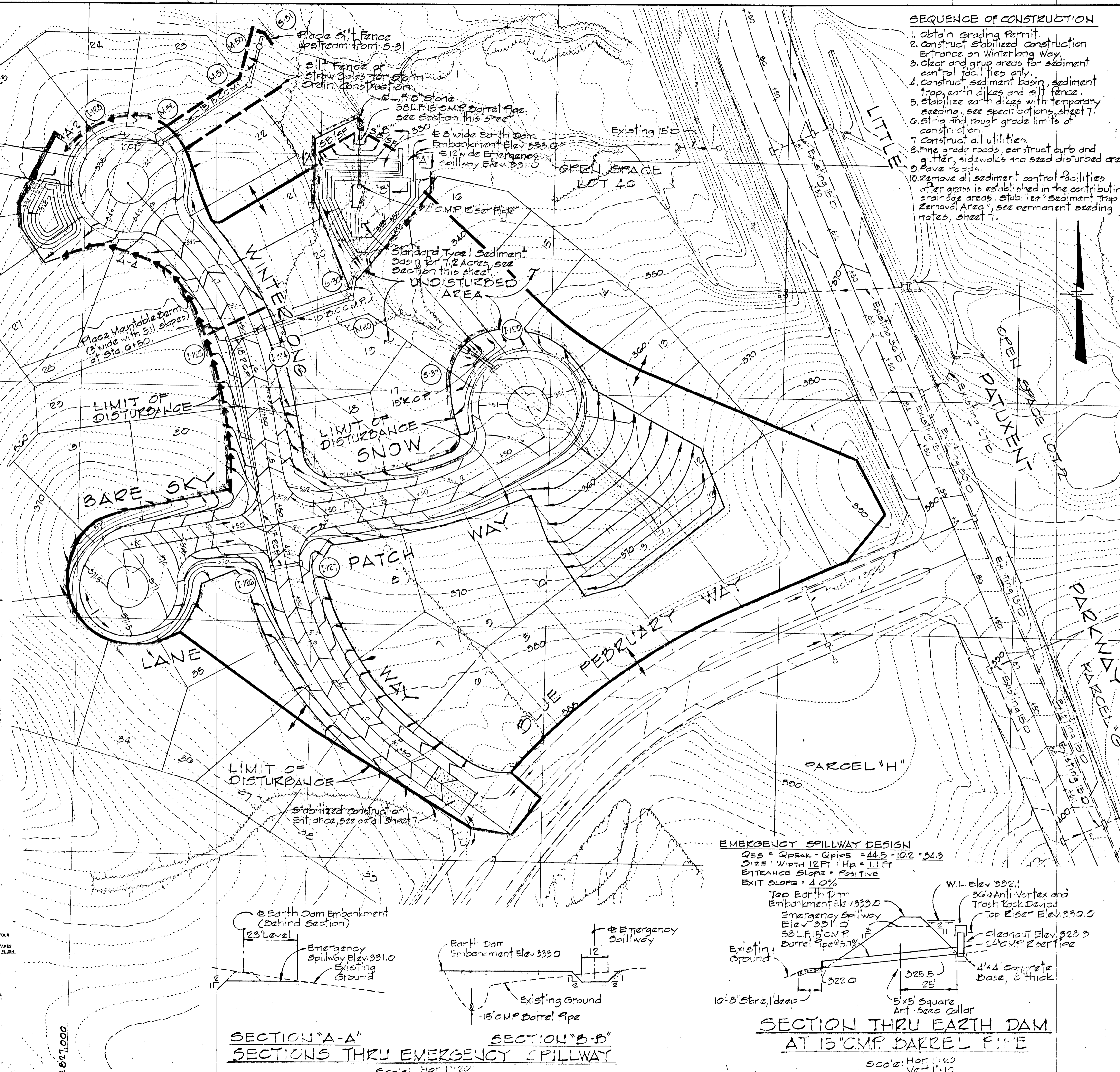
CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES OR STAPLES EVERY 24\"/>



CONSTRUCTION SPECIFICATIONS

1. BALES SHALL BE PLACED AT THE TOE OF A SLOPE OR ON THE CONTOUR AND IN A ROW WITH EACH STAPLE POINTING THE ADJACENT BALES.
2. EACH BALE SHALL BE IMBEDDED IN THE SOIL A MINIMUM OF (4) INCHES, AND PLACED SO THE BINDINGS ARE HORIZONTAL.
3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY EITHER TWO STAPLES OR RE-BARS DRIVEN THROUGH THE BALES. THE FIRST STAPLE IN EACH BALE SHALL BE DRIVEN TOWARD THE PREVIOUSLY Laid BALE AT AN ANGLE TO FORCE THE BALES TOGETHER. STAPLES SHALL BE DRIVEN FLUSH WITH THE BALES.
4. INSPECTION SHALL BE FREQUENT AND REPAIR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
5. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR INFERE WITH FLOW OR DRAINAGE.



- SEQUENCE OF CONSTRUCTION**
1. Obtain Grading Permit.
 2. Construct stabilized construction Entrance on Winterlong Way.
 3. Clear and grub areas for sediment control facilities only.
 4. Construct sediment basin, sediment trap, earth dikes and silt fence.
 5. Stabilize earth dikes with temporary seeding, see specifications, sheet 7.
 6. Strip and rough grade limits of construction.
 7. Construct all utilities.
 8. Fine grade roads, construct curb and gutter, sidewalks and seed disturbed areas.
 9. Pave roads.
 10. Remove all sediment control facilities after grass is established in the contributing drainage areas, stabilize "Sediment Trap Removal Area", see permanent seeding notes, sheet 7.

DEPARTMENT OF PUBLIC WORKS
 William R. Row 8-14-85
 CHIEF, BUREAU OF ENGINEERING DATE
OFFICE OF PLANNING & ZONING
 Johnson M. Massman 8-12-85
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE
 AND ZONING ADMINISTRATION

REVIEWED FOR HOWARD S.C.D.
 AND MEETS TECHNICAL REQUIREMENTS
 J. Helms 8/19/85
 DATE
 U.S. SOIL CONSERVATION SERVICE
 THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 APPROVED Stephen L. Miller
 HOWARD S.C.D. DATE 8/19/85

CERTIFICATION BY THE DEVELOPER
 I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPT OF NATURAL RESOURCES 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 OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.

Walter E. Woodford 4/3/85
 WALTER E. WOODFORD DATE

CERTIFICATION 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.

Kenneth A. McCord 4/3/85
 KENNETH A. MCCORD P.E. 1974 DATE

Rev. No.	Revision Description
5/20/85	As Per D.P.W. and S.C.S. Comments

COLUMBIA
 5TH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 OWNER AND DEVELOPER
 HOWARD RESEARCH AND DEVELOPMENT CORP

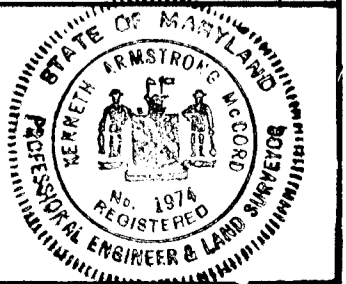
PROJECT AREA
 VILLAGE OF HICKORY RIDGE
 SECTION 3 AREA 11

PROJECT TITLE
SEDIMENT CONTROL PLAN

SCALE: 1" = 50' DATE:

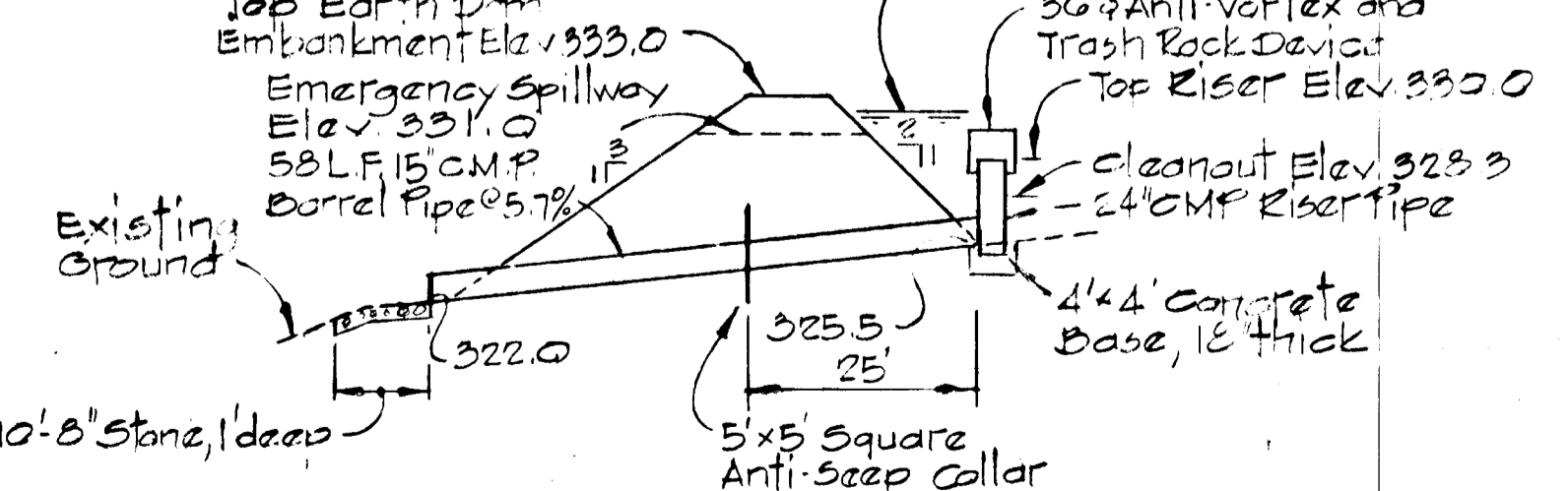
WHITMAN, REQUARDT AND ASSOCIATES
 ENGINEERS
 2315 ST. PAUL STREET
 BALTIMORE, MARYLAND 21202

Kenneth A. McCord
 KENNETH A. MCCORD
 Registered Engineer
 No. 1974



EMERGENCY SPILLWAY DESIGN

QES = QPEAK - QPIPE = 44.5 - 10.2 = 34.3
 SIZE: WIDTH 12 FT; HP = 1.1 FT
 ENTRANCE SLOPE = POSITIVE
 EXIT SLOPE = 4.0%



**SECTION THRU EARTH DAM
AT 15\"/>**

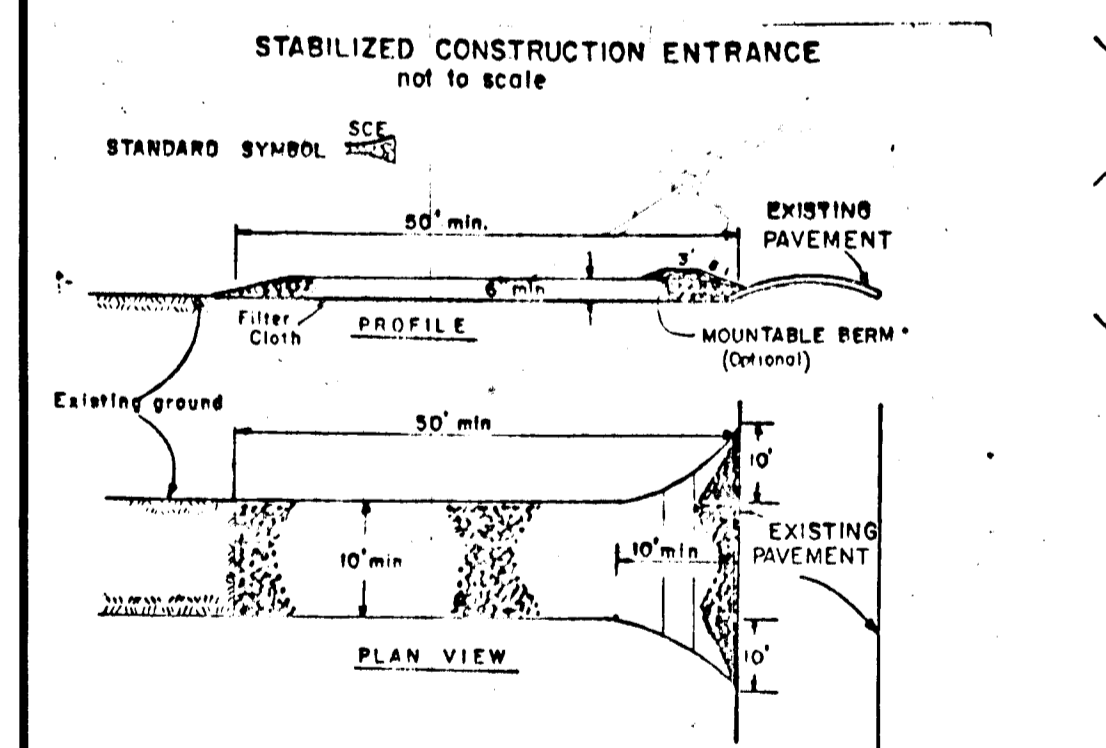
Scale: Hor 1" = 20'
 Vert 1" = 10'

**SECTION "A-A"
SECTIONS THRU EMERGENCY SPILLWAY**

Scale: Hor 1" = 20'
 Vert 1" = 10'

TEMPORARY 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, discing or other acceptable means before seeding.
Soil Amendments: In lieu of soil test recommendations, use one of the following schedules:
 1) Preferred - Apply 1 ton per acre dolomitic limestone (92 lbs/1000 sq ft) before seeding. 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft) before seeding. Narrow or disc into upper three inches of soil. At time of seeding, apply 400 lbs per acre 30-0-0 urea-form fertilizer (9 lbs/1000 sq ft).
 2) Acceptable - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sq ft) and 1000 lbs per acre 10-10-10 fertilizer (23 lbs/1000 sq ft) before seeding. Narrow 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) Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs Kentucky 31 Tall Fescue per acre and 2 lbs per acre (0.05 lbs/1000 sq ft) of weeping lovegrass. During the period of October 16 thru February 28, protect site by Option (1) 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring. Option (2) Use sod. Option (3) Seed with 60 lbs Kentucky 31 Tall Fescue and mulch 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 218 gallons per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes, 8 ft 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 reseedings.
TEMPORARY SEEDING NOTES
 Apply to graded or cleared areas likely to be reseeded under a short-term vegetative cover is needed.
Seeded Preparation: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding.
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 25 bushels 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 (0.07 lbs/1000 sq ft). For the period November 16 thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use sod.
Mulching: Apply 1 1/2 to 2 tons per acre (70 to 90 lbs/1000 sq ft) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes, 8 ft 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.

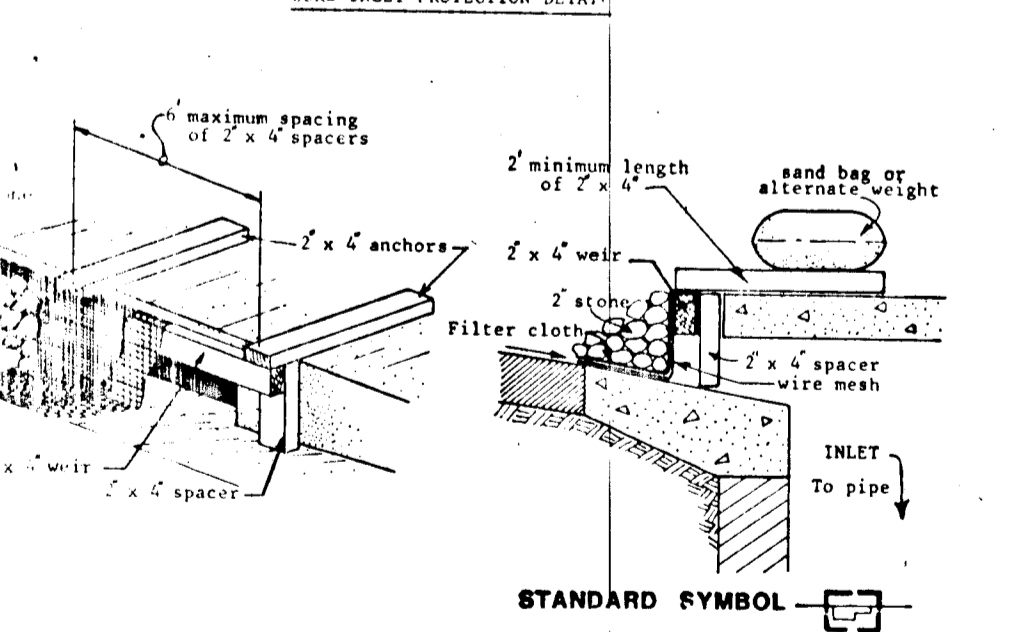
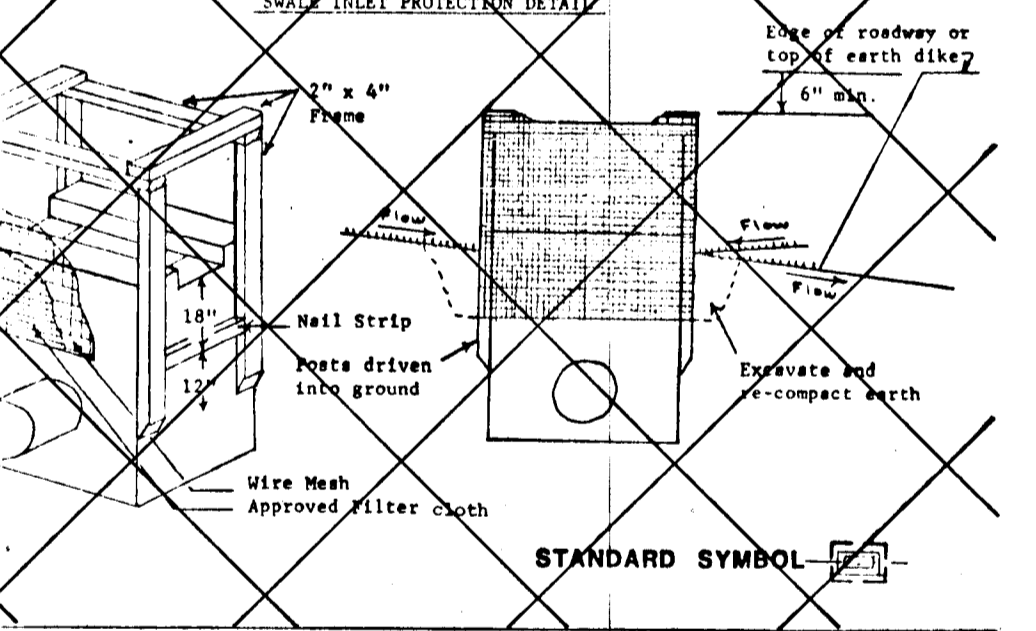
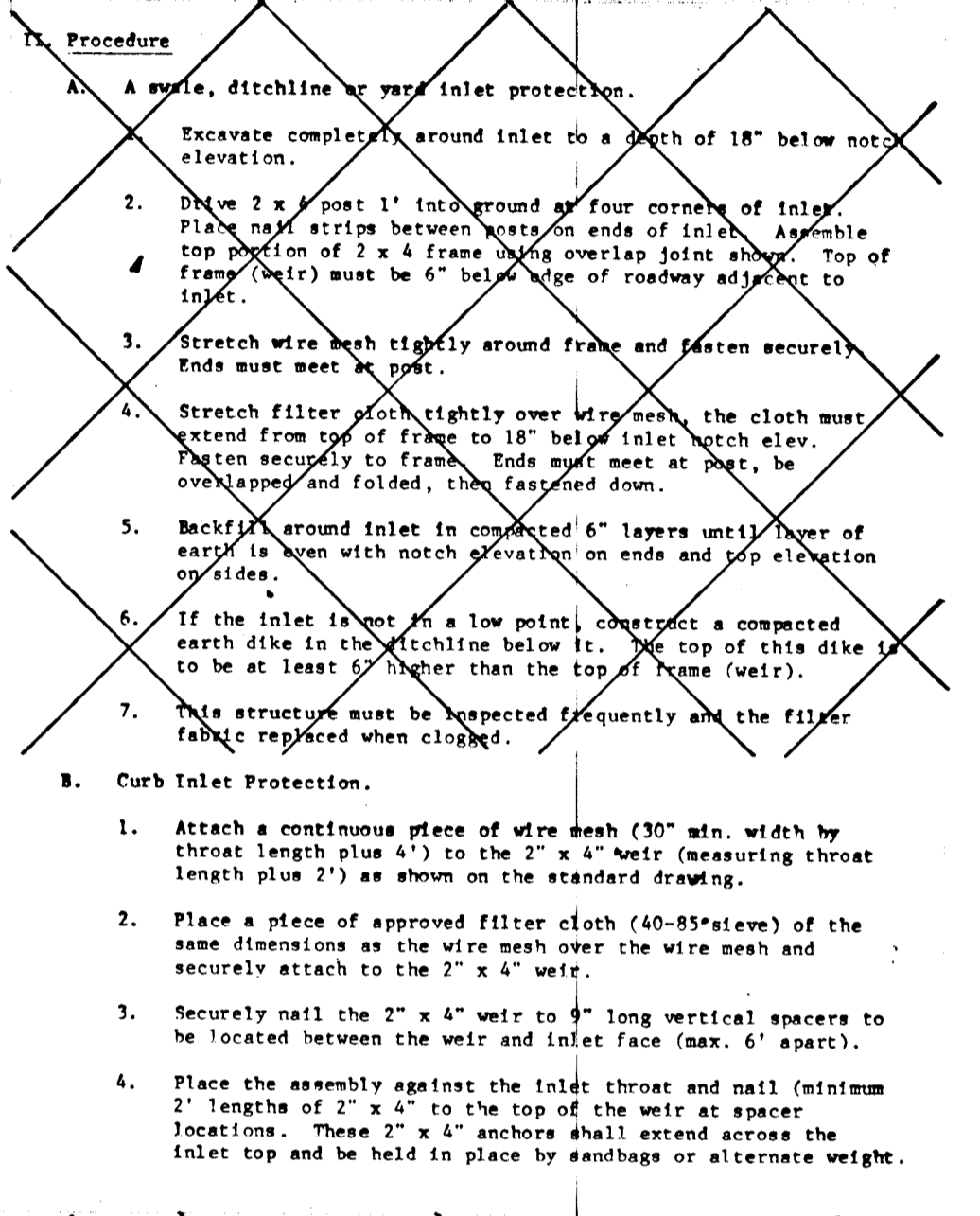
SEEDING CONTROL NOTES
 1) A minimum of 24 hours notice must be given to the Howard County Office of Inspections and Permits prior to the start of any construction (992-2437).
 2) All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
 3) Following initial soil disturbance or recontouring, permanent or temporary stabilization shall be completed within 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1. It shall be to all other disturbed or graded areas on the project site.
 4) All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with 1, Chapter 12, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
 5) All disturbed areas must be stabilized within the time period specified above in accordance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings (Sec. 31) and sod (Sec. 34), temporary seedings (Sec. 30) and mulching (Sec. 32). Temporary stabilization with mulch alone can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
 6) All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.
 7) Site Analysis:
 Total Area of Site: 11.0 acres
 Area to be graded or paved: 2.2 acres
 Area to be vegetatively stabilized: 8.8 acres
 Total Cut: 0 cu. yds.
 Total Fill: 0 cu. yds.
 Office waste/borrow area location:
 8) Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
 9) Additional sediment controls must be provided, if deemed necessary by the Howard County IDW sediment control Inspector.
***SEE NOTE 10 BELOW**



CONSTRUCTION SPECIFICATIONS
 1. Stone Size - Use 2" stone, or reclaimed or recycled concrete equivalent.
 2. Length - As required, but not less than 30 feet (except on a single residential lot where a 30 foot minimum length would apply).
 3. Thickness - Not less than six (6) inches.
 4. Width - Ten (10) foot minimum, but not less than the full width at points where ingress or egress occurs.
 5. Filter Cloth - Will be placed over the entire area prior to placing of stone. Filter will not be required on a single family residence lot.
 6. Surface Water - All surface water flowing or diverted toward construction entrances shall be placed across the entrance. If piping is impractical, a suitable berm with 3:1 slope will be permitted.
 7. Maintenance - The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as additional stone demand and repair and/or cleanup of any resources used to trap sediment. All sediment applied, dropped, washed or tracked onto public rights-of-way must be removed immediately.
 8. Washing - Wheels shall be cleaned to remove sediment prior to entrance onto public rights-of-way. When washing is required, it shall be done on an area stabilized with stone and which drains into an approved sediment trapping device.
 9. Periodic inspection and needed maintenance shall be provided after each rain.

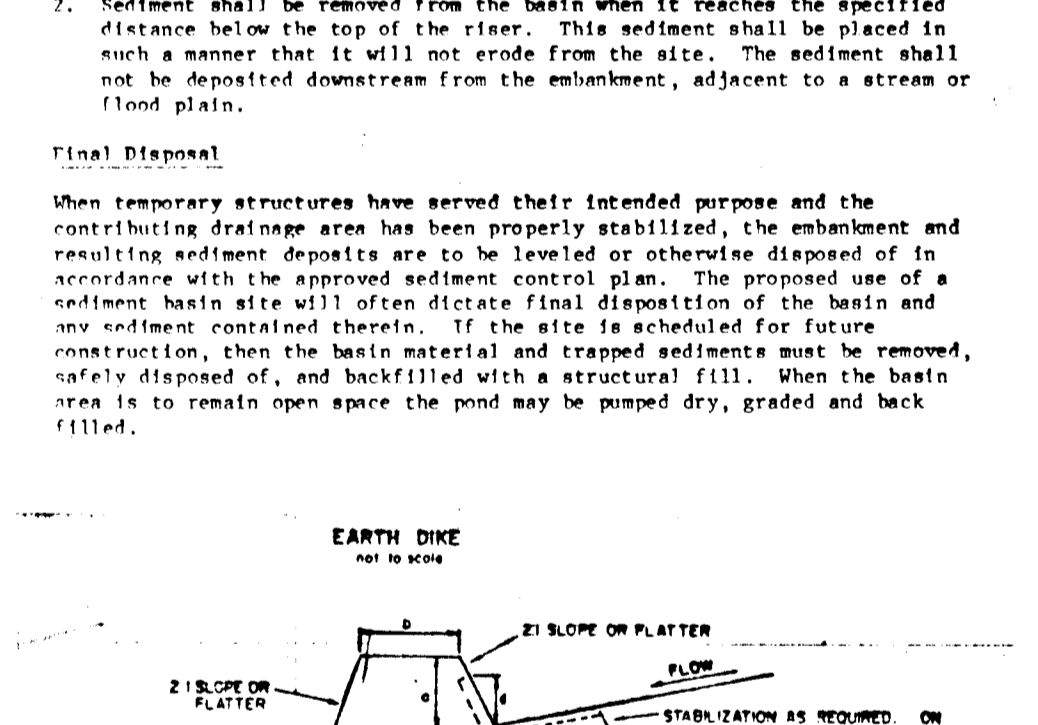
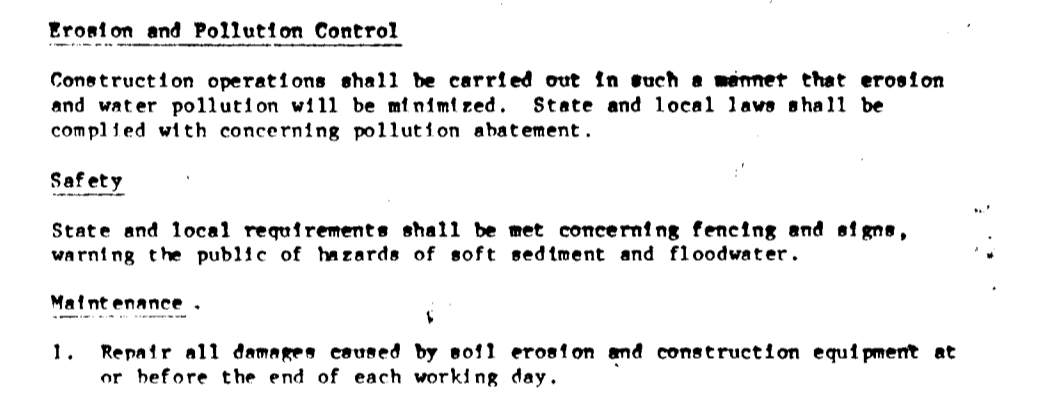
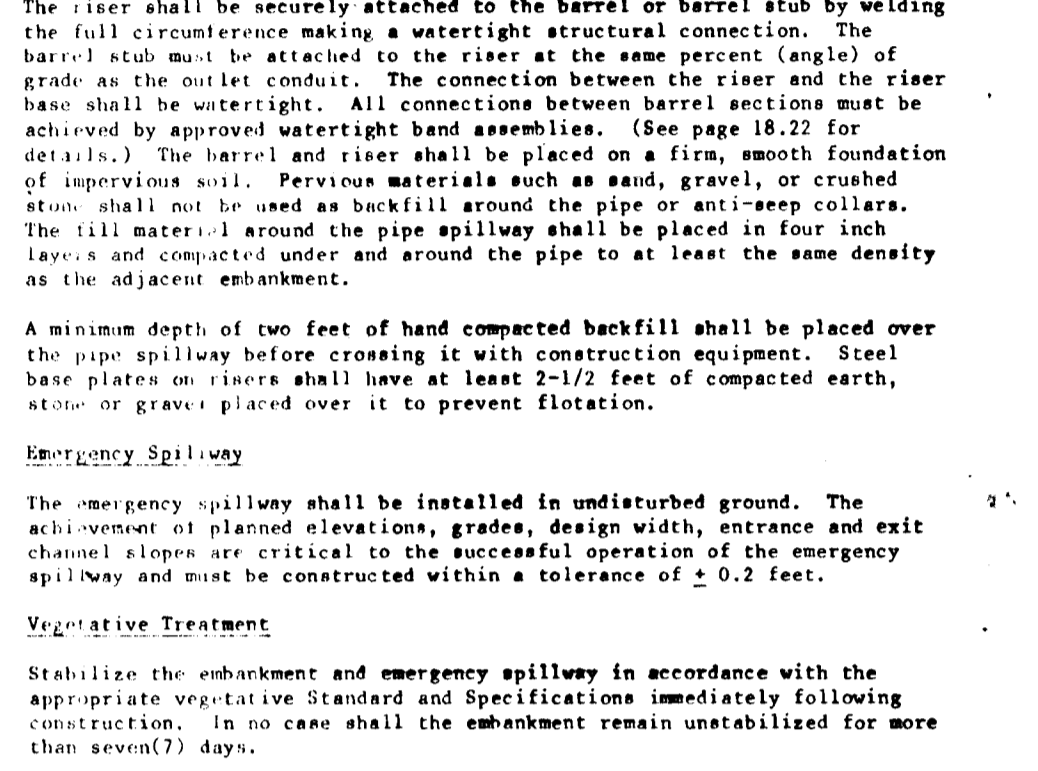
REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS
 APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.
 J. Kelly 8/19/85 DATE
 APPROVED Stephen L. Muly 8/19/85 DATE
 HOWARD S.C.D. DATE
 U.S. SOIL CONSERVATION SERVICE

STANDARD AND SPECIFICATIONS FOR STORM DRAIN INLET PROTECTION
Definition
 Filter cloth installed around inlets in the form of a fence or across an opening, thereby reducing sediment content of sediment laden water.
Purpose
 To prevent sediment laden water from entering a storm drain system through inlets.
Conditions Where Practice Applies
 This practice shall be used where the drainage area to an inlet is disturbed, it is not possible to temporarily divert the storm drain outlet into a sediment trapping device and watertight blocking of inlets is not advisable. It is not to be used in place of sediment trapping devices. This practice may be used in conjunction with storm drain diversion to help prevent siltation of pipes installed with a low slope angle.
Construction Specifications
 1. Materials
 A. Wooden frame is to be constructed of 2" x 4" construction grade lumber.
 B. Wire mesh must be of sufficient strength to support filter fabric, and stone for curb inlets, with water fully impounded against it.
 C. Filter cloth must be of a type approved for this purpose; resistant to sunlight with sieve size, EUS, 40-85, to allow sufficient passage of water and removal of sediment.
 D. Stone is to be 2" in size and clean, since fines would clog the cloth.
Procedure
 1. A curbs, ditchline or yard inlet protection.
 2. Excavate completely around inlet to a depth of 18" below noted elevation.
 3. Dig 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.
 4. Stretch wire mesh tightly around frame and fasten securely. Ends must meet at post.
 5. 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.
 6. Backfill around inlet in compacted 6" layers until layer of earth is even with notch elevation on ends and top elevation on sides.
 7. 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).
 8. This structure must be inspected frequently and the filter fabric replaced when clogged.
Curb Inlet Protection
 1. 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 4") as shown on the standard drawing.
 2. 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.
 3. Securely nail the 2" x 4" weir to 9" long vertical spacers to be located between the weir and inlet face (max. 6' apart).
 4. Place the assembly against the inlet throat and nail (minimum 2" lengths of 2" x 4" to the top of the weir at spacer locations). These 2" x 4" anchors shall extend across the inlet top and be held in place by sandbags or alternate weight.



#10. On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.

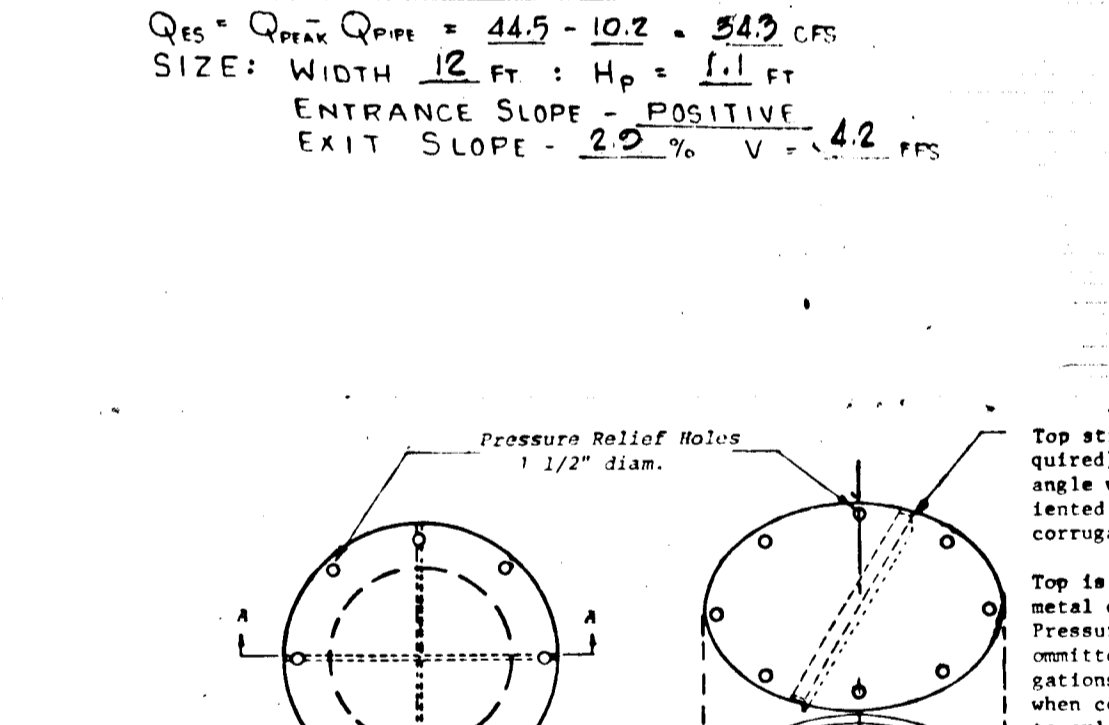
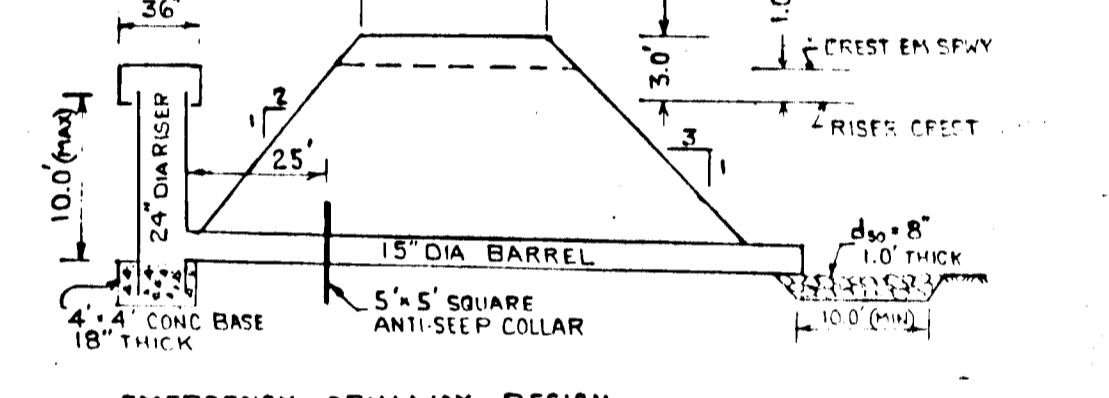
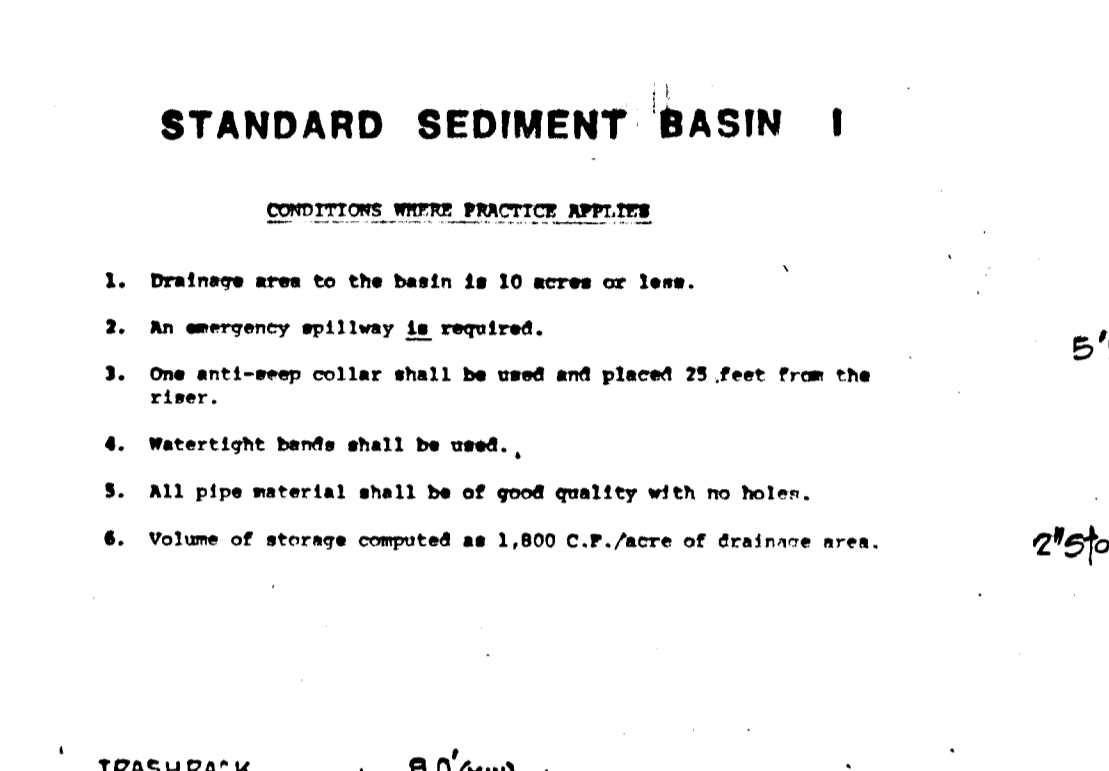
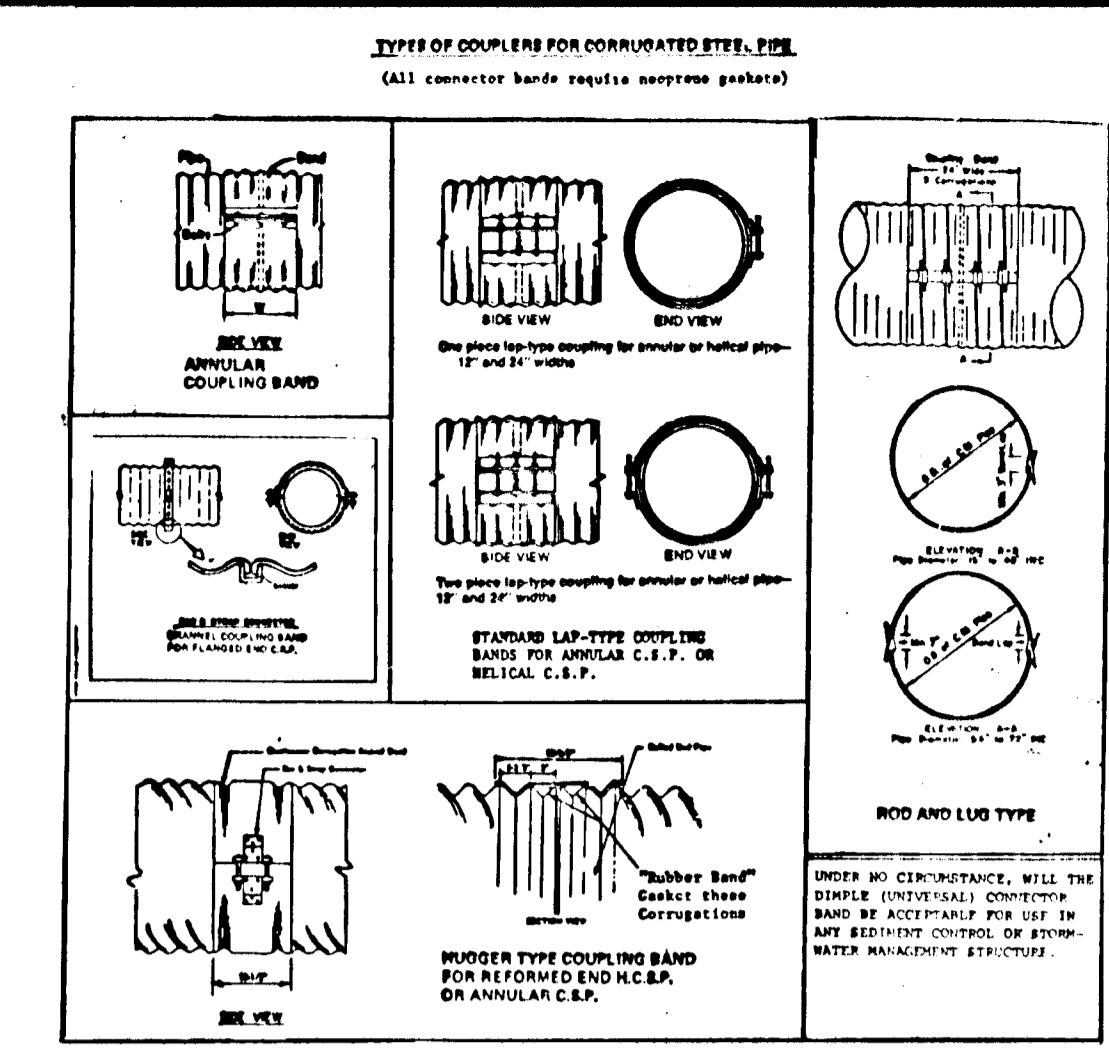
CONSTRUCTION SPECIFICATIONS
Site Preparation
 Areas under the embankment shall be cleared, grubbed, and stripped of topsoil to remove trees, vegetation, roots or other objectionable material. In order to facilitate clean-out and restoration, the pool area (measured at the top of the pipe spillway) will be cleared of all brush, trees, and other objectionable materials.
Cut-off Trench
 A cut-off trench shall be excavated along the centerline of earth fill embankments. The minimum depth shall be two feet. The cut-off trench shall extend on both abutments to the riser crest elevation. The minimum bottom width shall be four feet, but wide enough to permit operation of excavation and compaction equipment. The side slopes shall be no steeper than 1:1. Construction requirements shall be the same as those for embankment. The trench shall be dewatered during the backfilling-compaction operations.
Embankment
 The fill material shall be taken from approved areas shown on the plans. It shall be clean, mineral soil free of roots, woody vegetation, oversized stones, rocks, or other objectionable material. Relatively pervious materials such as sand or gravel (Unified Soil Classes OM, GP, SW & SP) shall not be placed in the embankment. Areas on which fill is to be placed shall be aerated prior to placement of fill. The fill material shall contain sufficient moisture so that it can be formed by hand into a ball without crumbling. If water can be squeezed out of the ball, it is too wet for proper compaction. Fill material shall be placed six-inch to eight-inch thick continuous layers over the entire length of the fill. Compaction shall be obtained by routing and hauling the construction equipment over the fill so that the entire surface of each layer of the fill is traversed by at least one wheel or tread track of the equipment or by the use of a vibratory compactor. The embankment shall be constructed to an elevation 10 percent higher than the design height to allow for settlement.
Pipe Spillways
 The riser shall be securely attached to the barrel or barrel stub by welding the full circumference making a watertight structural connection. The barrel stub must be attached to the riser at the same percent (angle) of grade as the outlet conduit. The connection between the riser and the riser base shall be watertight. All connections between barrel sections must be achieved by outlet watertight band assemblies. (See page 18.22 for details). The barrel and riser shall be placed on a firm, smooth foundation of impervious soil. Pervious materials such as sand, gravel, or crushed stone shall not be used as backfill around the pipe or anti-seep collars. The fill material around the pipe spillway shall be placed in four inch layers and compacted under and around the pipe to at least the same density as the adjacent embankment.
 A minimum depth of two feet of hand compacted backfill shall be placed over the pipe spillway before crossing it with construction equipment. Steel base plates on risers shall have at least 2-1/2 feet of compacted earth, stone or gravel placed over it to prevent flotation.
Emergency Spillway
 The emergency spillway shall be installed in undisturbed ground. The achievement of planned elevations, grades, design width, entrance and exit channel slopes are critical to the successful operation of the emergency spillway, and must be constructed within a tolerance of ± 0.2 feet.
Vegetative Treatment
 Stabilize the embankment and emergency spillway in accordance with the appropriate vegetative Standard and Specifications immediately following construction. In no case shall the embankment remain unvegetated for more than seven(7) days.
Erosion and Pollution Control
 Construction operations shall be carried out in such a manner that erosion and water pollution will be minimized. State and local laws shall be complied with concerning pollution abatement.
Safety
 State and local requirements shall be met concerning fencing and signs, warning the public of hazards of soft sediment and floodwater.
Maintenance
 1. Repair all damage caused by soil erosion and construction equipment at or before the end of each working day.
 2. Sediment shall be removed from the basin when it reaches the specified distance below the top of the riser. This sediment shall be placed in such a manner that it will not erode from the site. The sediment shall not be deposited downstream from the embankment, adjacent to a stream or flood plain.
Final Disposal
 When temporary structures have served their intended purpose and the contributing drainage area has been properly stabilized, the embankment and resulting sediment deposits are to be leveled or otherwise disposed of in accordance with the approved sediment control plan. The proposed use of a sediment basin site will often dictate final disposition of the basin and any sediment contained therein. If the site is scheduled for future construction, then the basin material and trapped sediments must be removed, safely disposed of, and backfilled with a structural fill. When the basin area is to remain open space the pond may be pumped dry, graded and back filled.



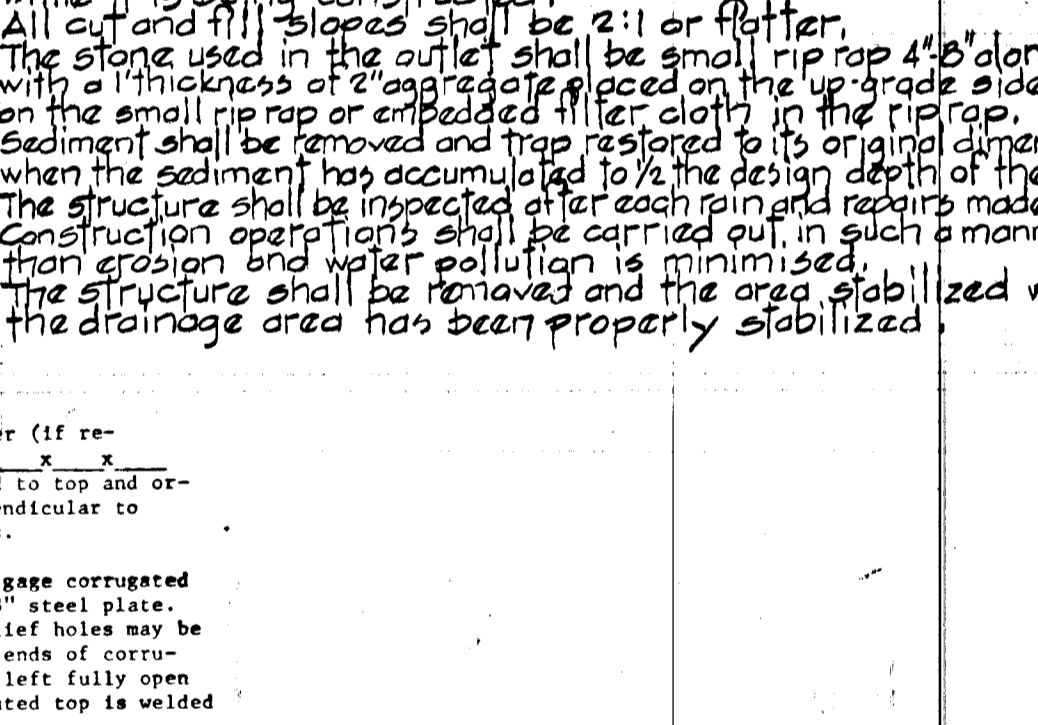
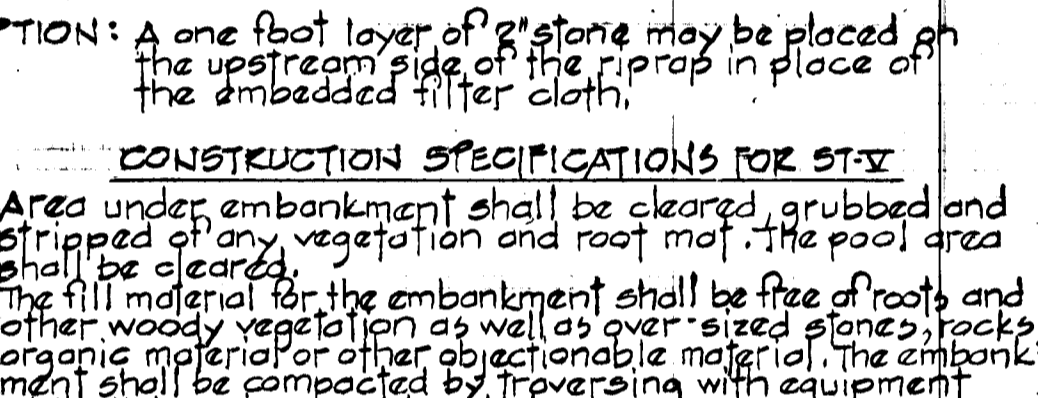
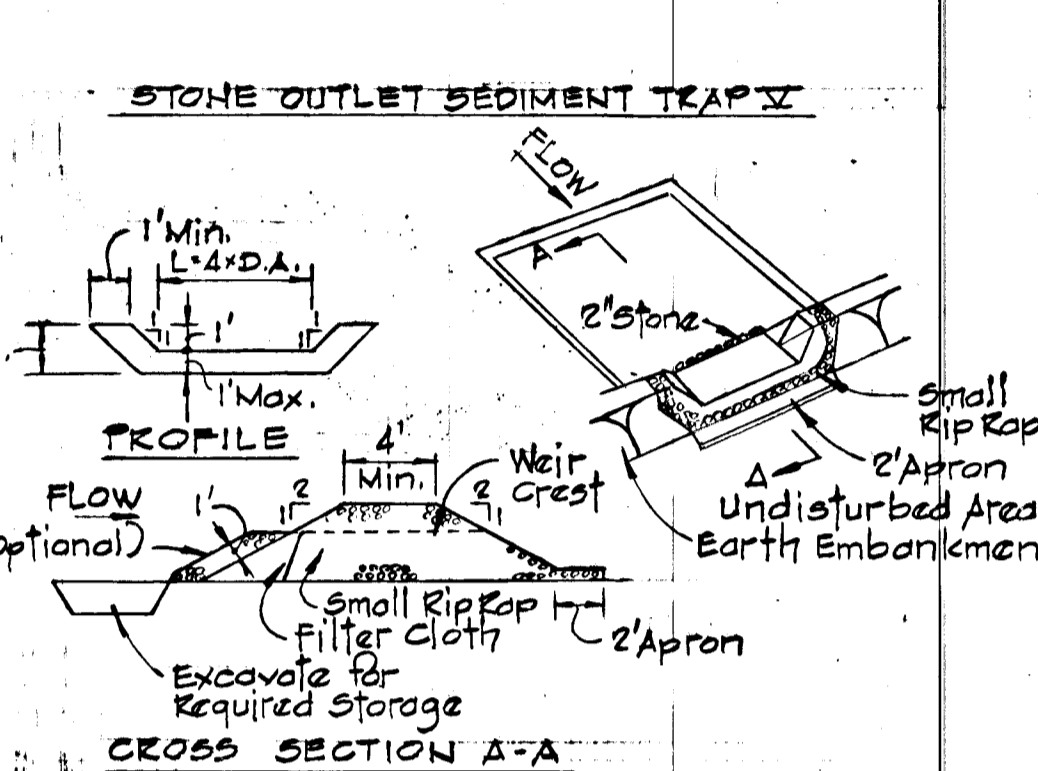
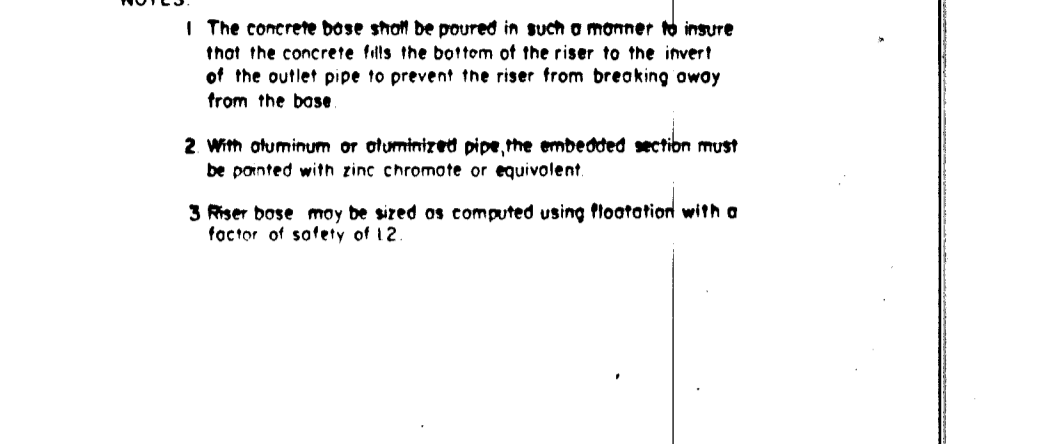
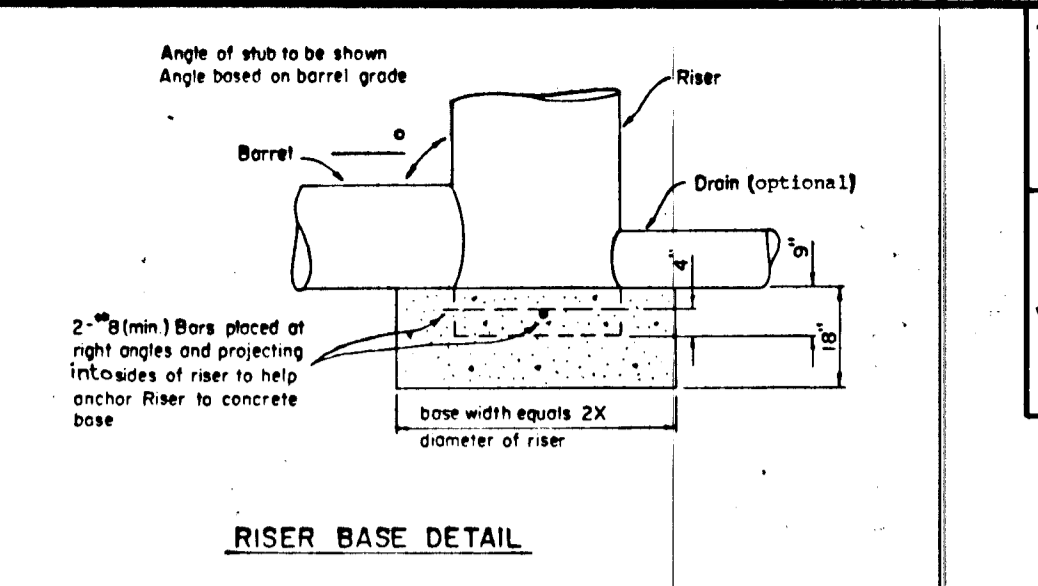
SLOPE CHANNEL STABILIZATION

TYPE OF TREATMENT	CHANNEL	DIVIDE A	DIVIDE B
1	5-3.0C	SEED AND STRAW MULCH	SEED AND STRAW MULCH
2	3.1-5.0C	SEED AND STRAW MULCH	SEED LIME, MULCH, OR EXCELERATOR; SEED; 2" STONE
3	5.1-8.0C	SEED WITH MULCH OR SOIL	LINED RIP-RAP 4-8"
4	8.1-20C	LINED RIP-RAP 4-8"	ENGINEERING DESIGN

A. Stone to be 2" round stone, or recycled concrete equivalent, in a layer at least 3 inches in thickness and be pressed into the soil with construction equipment.
 B. STONE RACK SHALL BE PLACED IN A LAYER AT LEAST 3 INCHES THICK AND BE PRESSED INTO THE SOIL.
 C. PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.



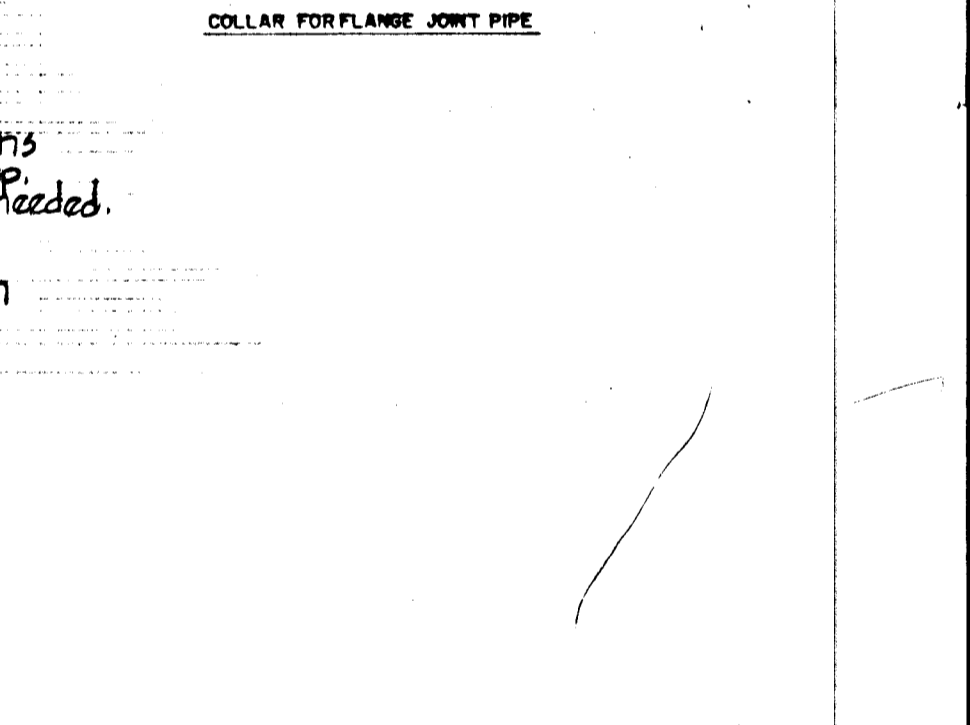
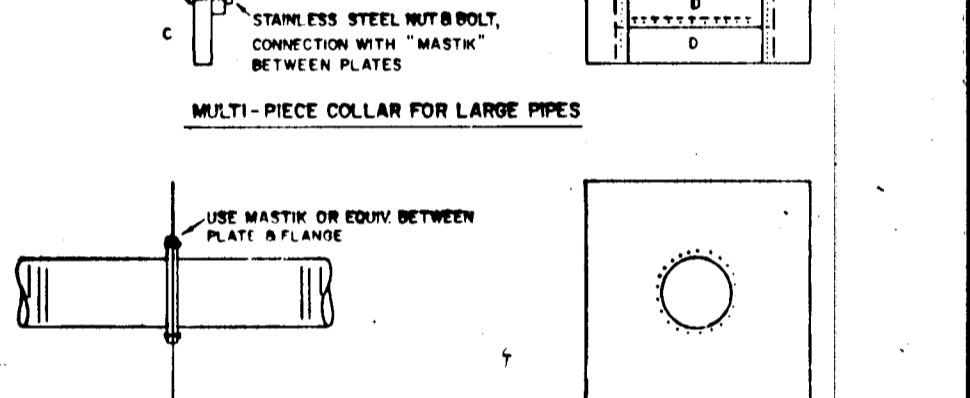
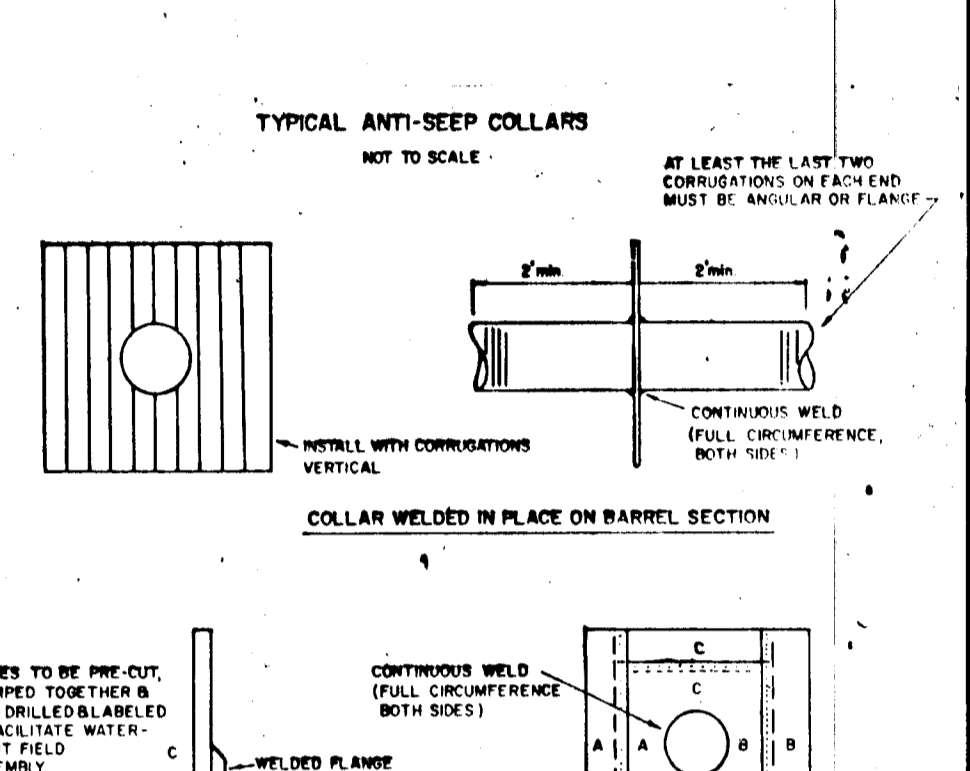
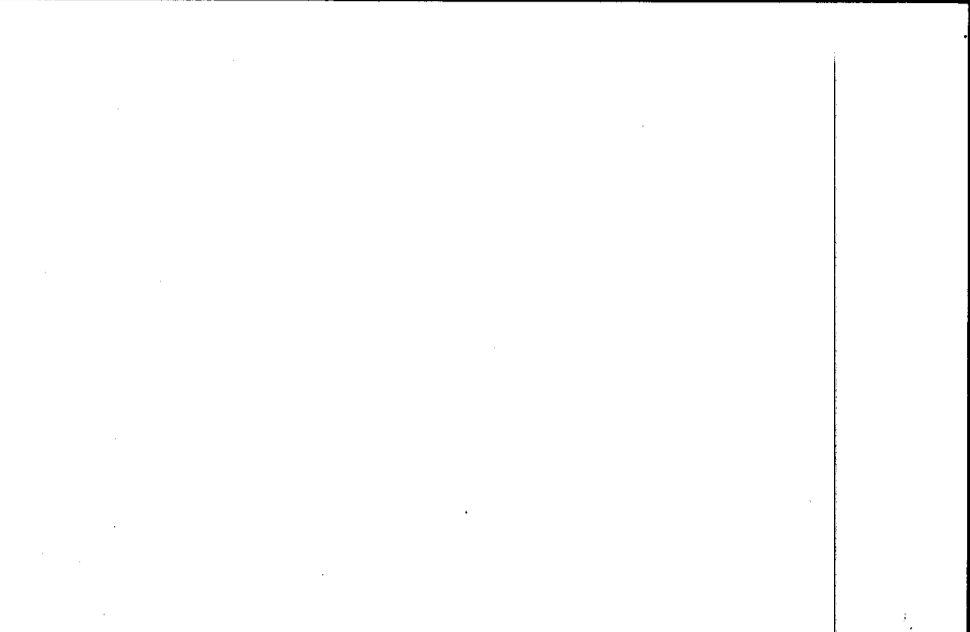
CERTIFICATION BY THE ENGINEER
 "I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."
 Kenneth A. McCord 4/3/85
 KENNETH A. MCCORD PE 1974 DATE



REVDATE	REV. NO.	DESCRIPTION
5/22/85	1	As Per D.P.W. and S.C.S. Comments

COLUMBIA
 5th ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 OWNER AND DEVELOPER
 HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 PROJECT AREA
 VILLAGE OF HICKORY RIDGE
 SECTION 3 AREA 11
 PROJECT TITLE
 SEDIMENT CONTROL
 DETAILS
 SCALE: AS SHOWN DATE:
 WHITMAN, REQUARDT AND ASSOCIATES
 ENGINEERS
 BALTIMORE, MARYLAND 21218

CERTIFICATION BY THE DEVELOPER
 "I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL 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. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY."
 Kenneth A. McCord 4/3/85
 WALTER E. WOODFORD DATE



REVDATE	REV. NO.	DESCRIPTION
5/22/85	1	As Per D.P.W. and S.C.S. Comments

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