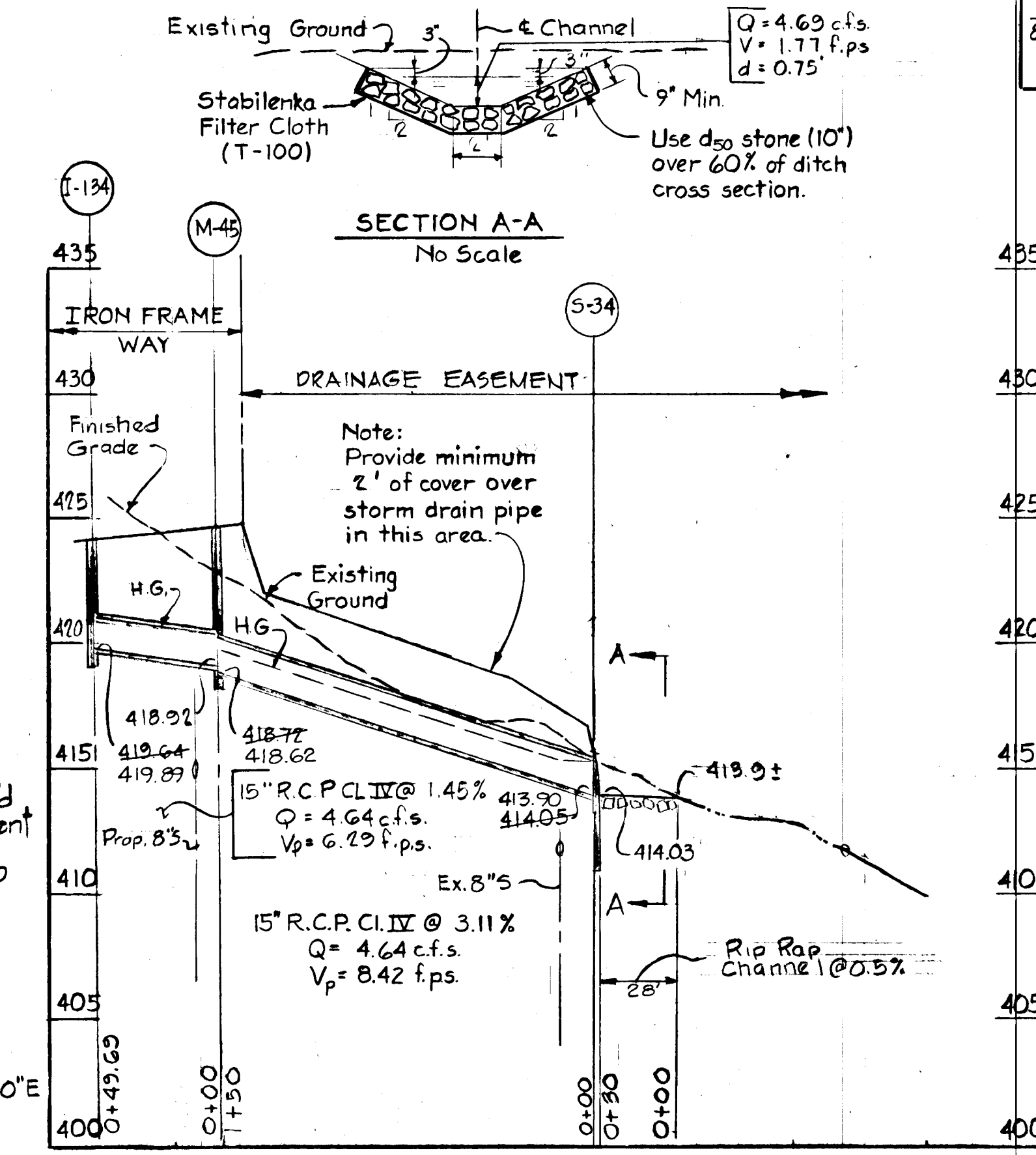
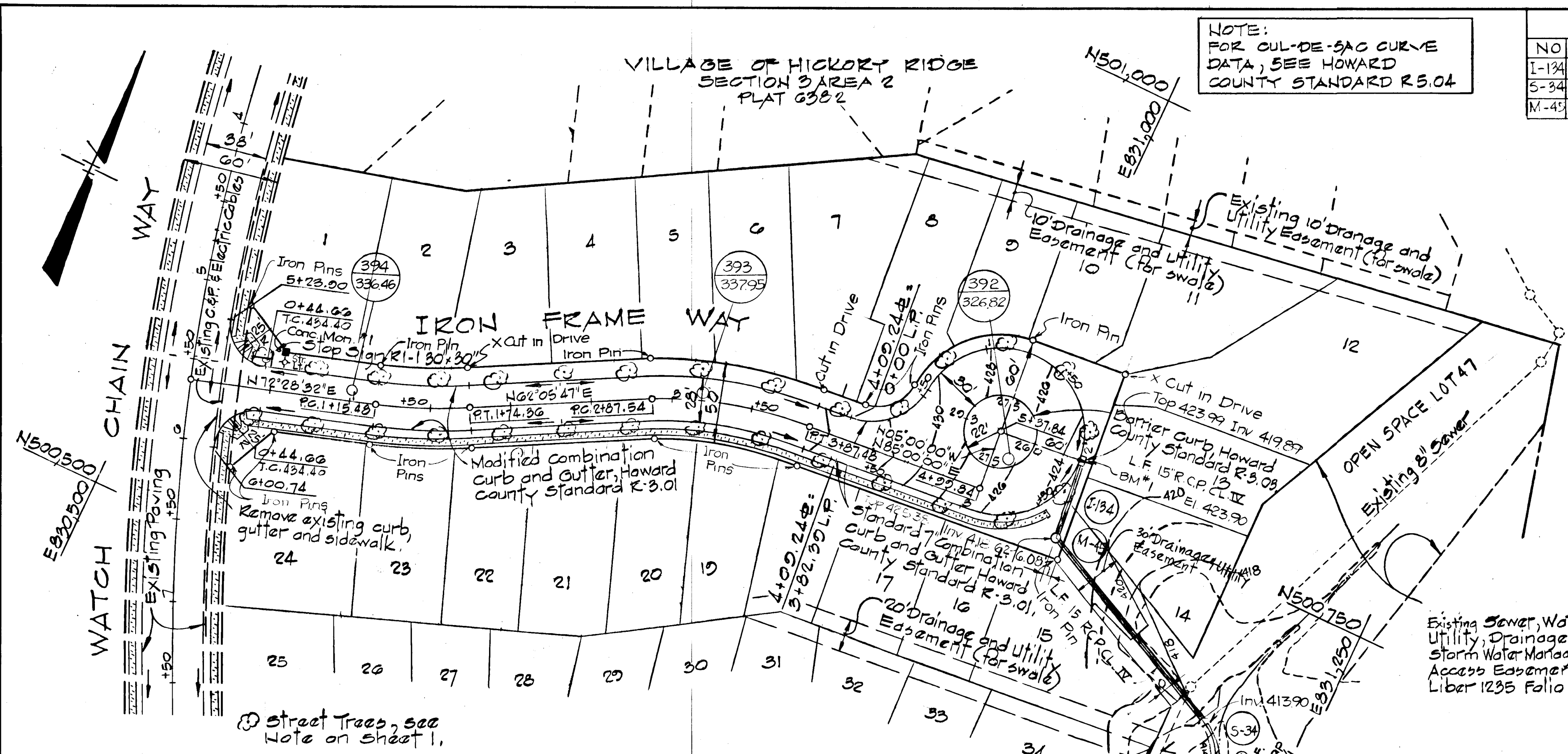


NOTE:
FOR CUL-DE-SAC CURVE
DATA, SEE HOWARD
COUNTY STANDARD R5.04

NO	TYPE	TOPEL	IN IN	IN OUT	LOCATION
I-134	A-B Inlet (width 2.5') 5D401	424.08		419.64	± Inlet 1.92' Back of L.P. Sta 2+09.93
S-34	Type A Headwall 5D5.11	417.08	414.05	414.08	See Plan & Profile
M-43	Standard Manhole	424.80	418.92	418.74	See Plan & Profile

APPROVED: DEPARTMENT OF
PUBLIC WORKS
Kenneth A. McCord 3/31/86
CHIEF, BUREAU OF ENGINEERING DATE
OFFICE OF PLANNING & ZONING
John W. Murchison 3/25/86
CHIEF, DIVISION OF LAND DEVELOPMENT DATE
AND ZONING ADMINISTRATION

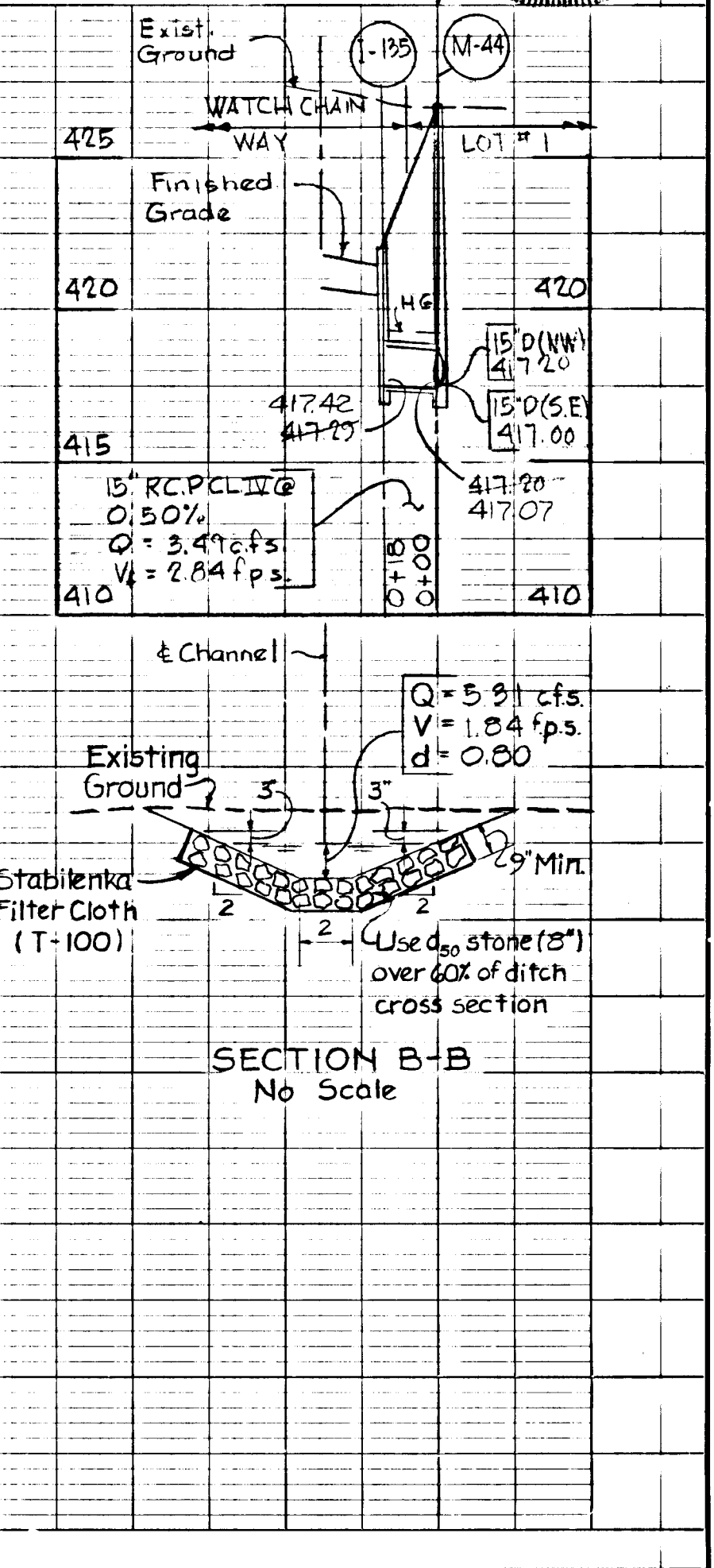
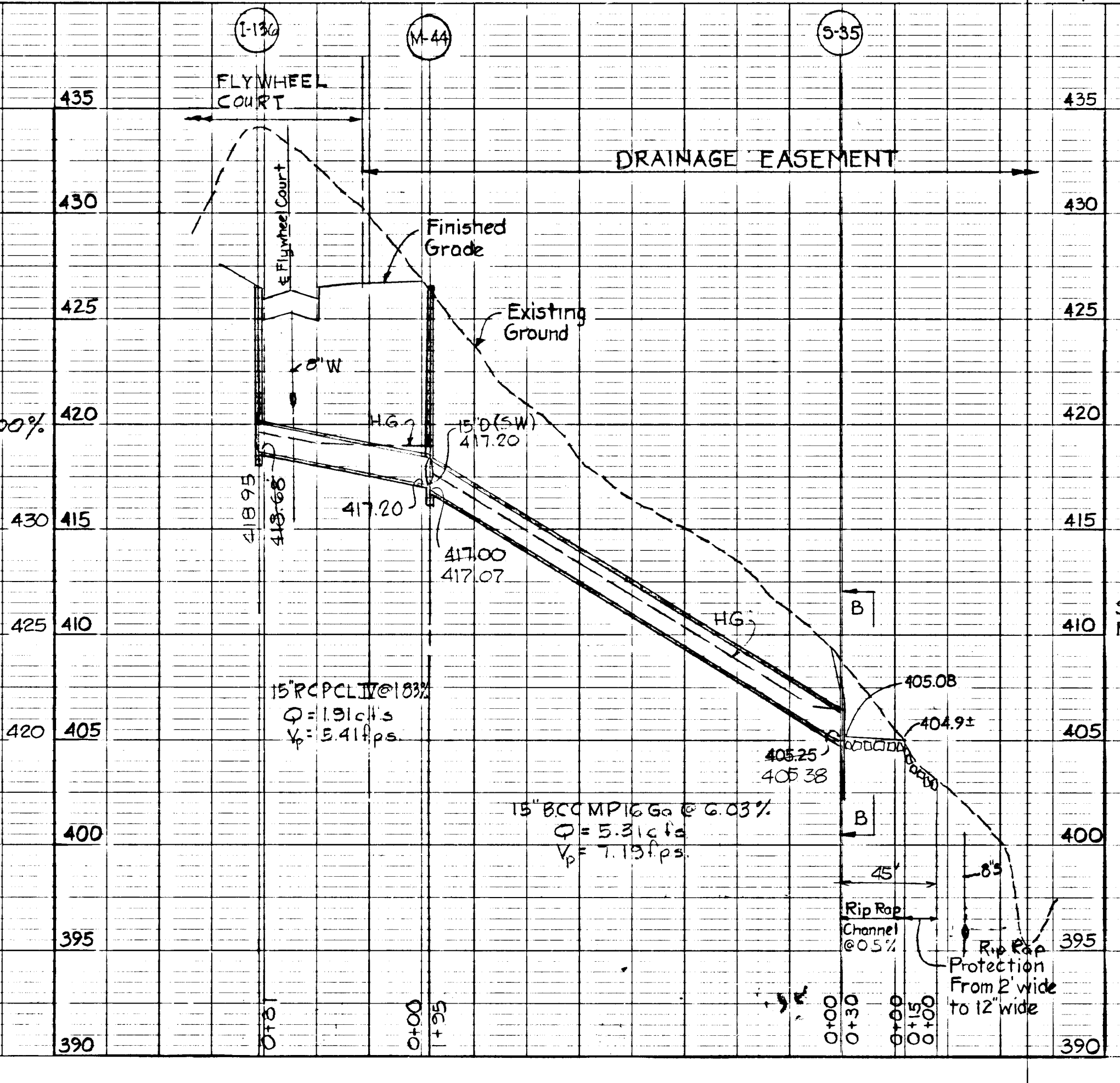
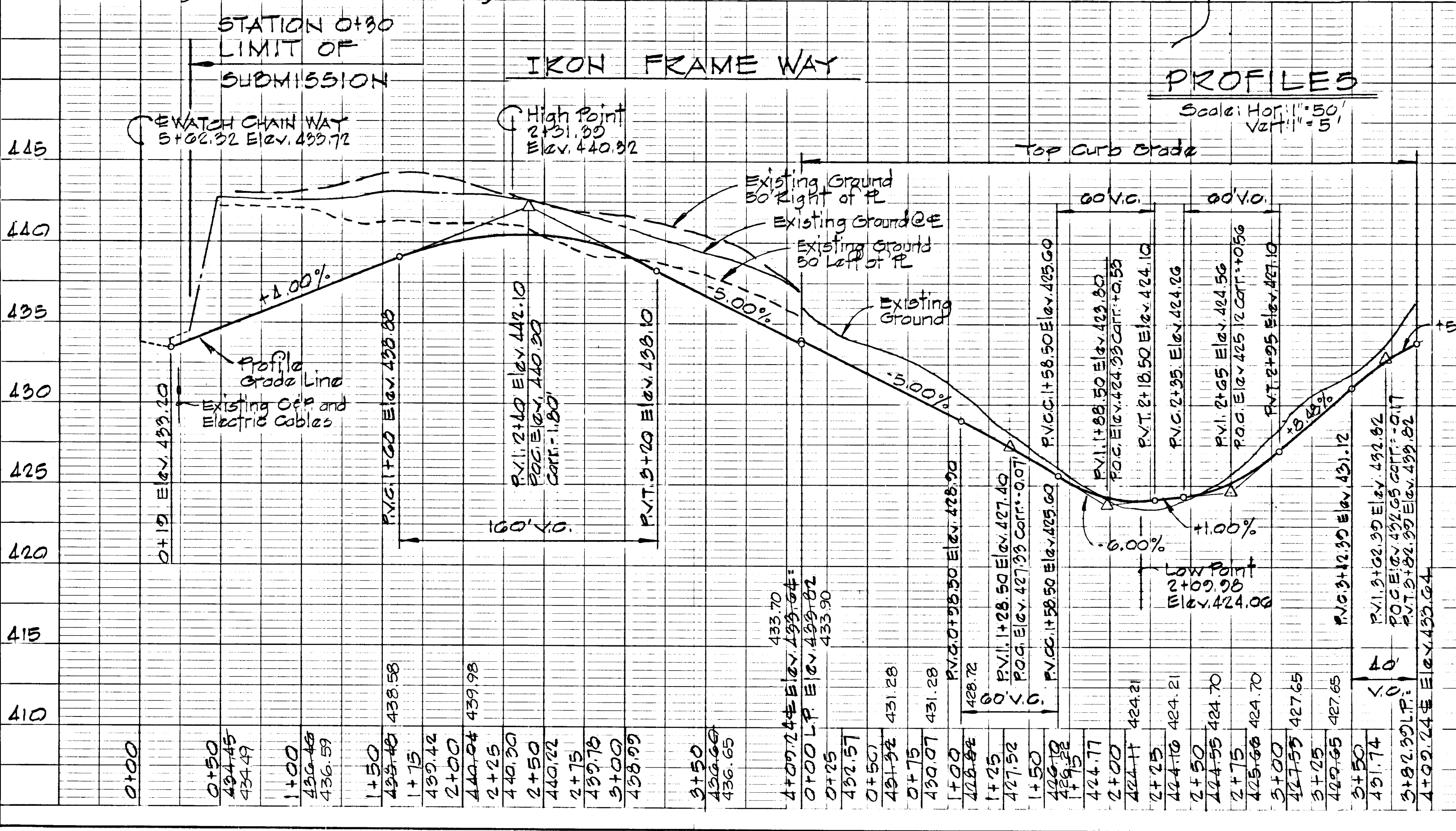


± CURVE DATA - IRON FRAME WAY
 P.C. 115.48 TO P.T. 1174.96
 $\Delta = 10^\circ 26' 40''$ $\tan = 20.52'$
 $R = 925.00'$ $\text{chd} = 58.80'$
 $\text{Arc} = 58.88'$ $\text{chd. Dir.} = N61^\circ 17' 09'' E$
 P.C. 2187.54 TO P.T. 2187.48
 $\Delta = 22^\circ 54' 13''$ $\tan = 50.64'$
 $R = 250.00'$ $\text{chd} = 99.27'$
 $\text{Arc} = 99.94'$ $\text{chd. Dir.} = N79^\circ 32' 58'' E$

PLAN
Scale: 1" = 50'

NOTE:
PAVING WIDTH - 28'
LENGTH OF ROAD - 538'
3 SEWER MHS IN ROAD R/W

CURVE NO. 1
 Rad = 95.00' $\text{chd} = 29.10'$
 $\Delta = 49^\circ 08' 08''$ $\text{chd. Dir.} = S42^\circ 0' 0'' E$
 Arc = 80.00' $\tan = 16.00'$



PROFILE
NOTE BOOK
NO.

F42

CURVE DATA

PC: 1+54.82 TO PT. 2+07.82
 Δ: 23°24'31" Tan: 72.51'
 R: 350.00' Chd: 142.00'
 Arc: 143.00' Chd Brg: N76°36'40"

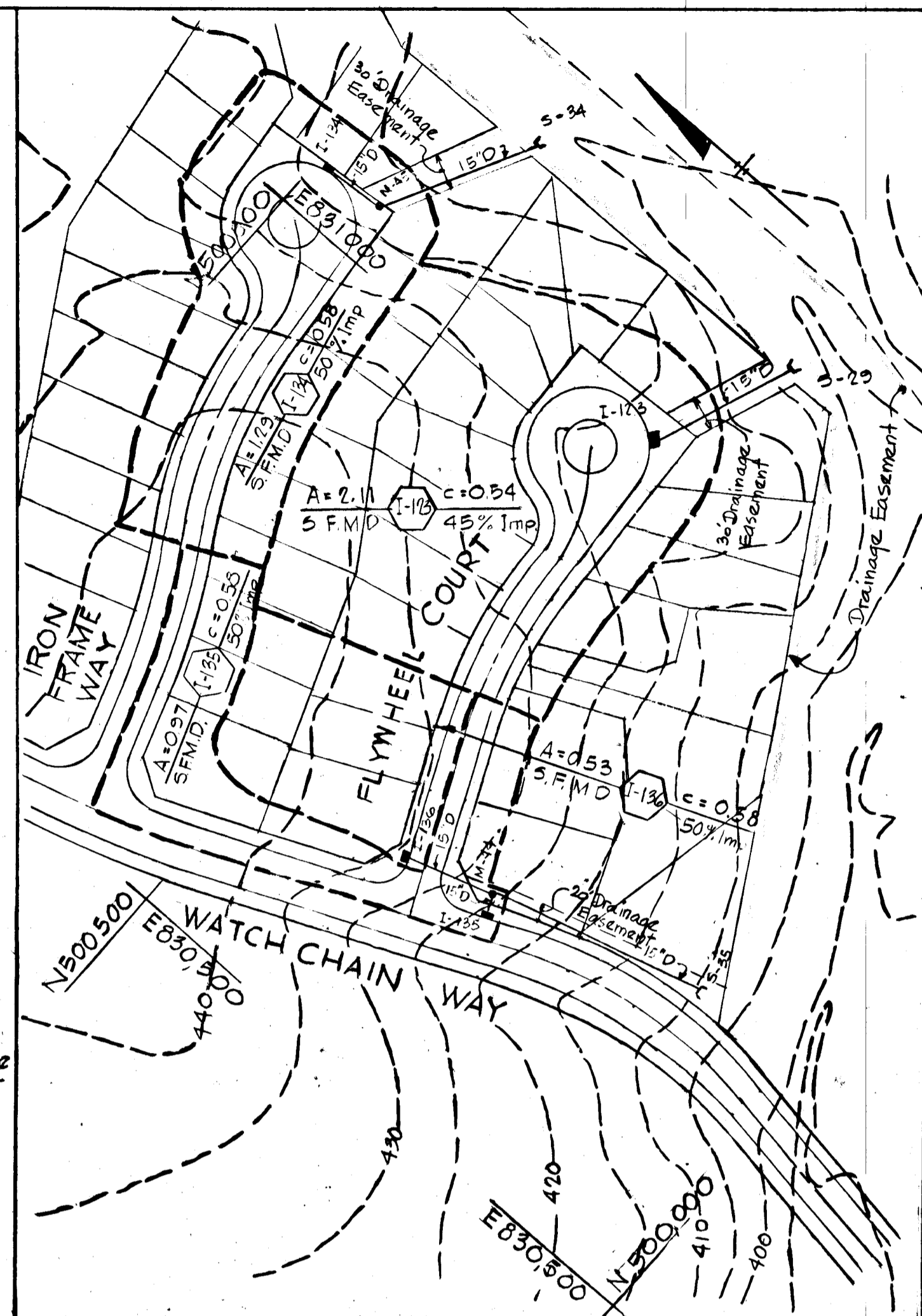
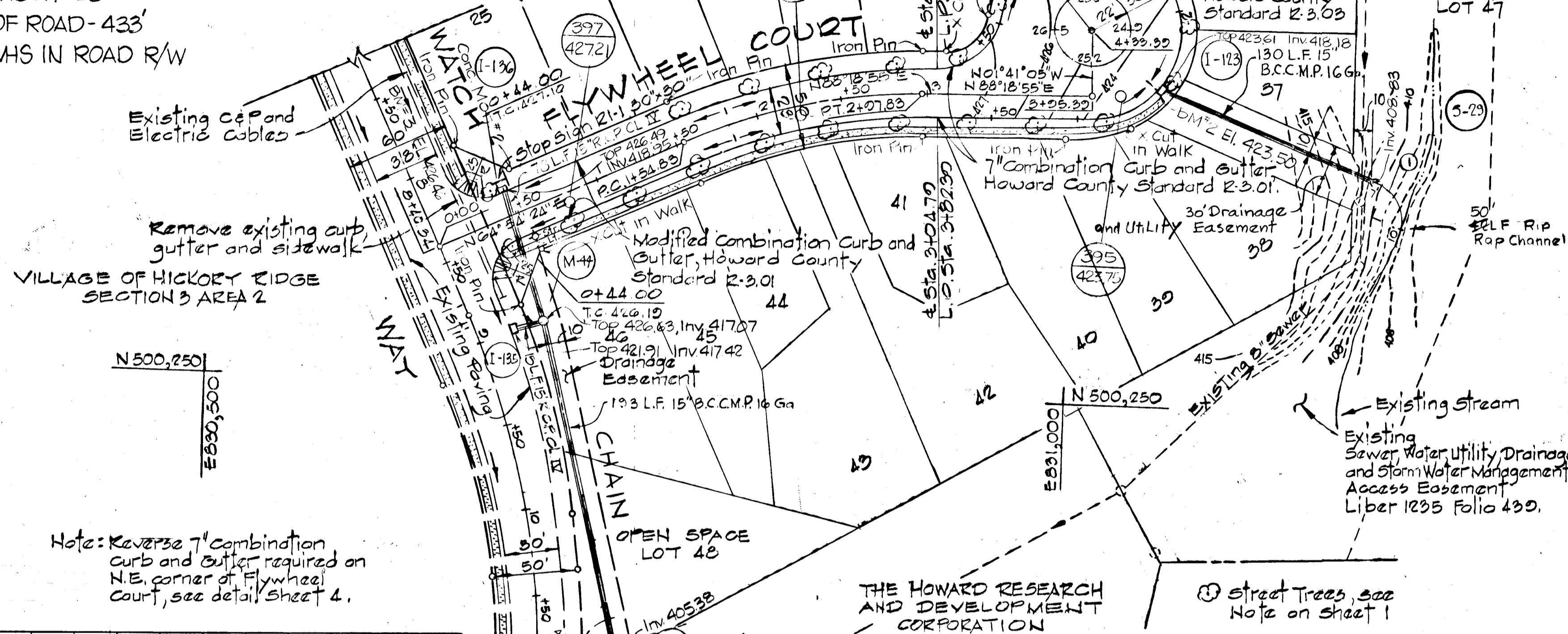
CURVE NO. 1

Arc = 23.00' Chd = 23.41'
 Rad. = 20.00' Chd Brg = 525°0'0"E
 Tan = 14.44' Δ = 71°39'22"

N 500,500
 E 390,500

NOTE:
 PAVING WIDTH - 28'
 LENGTH OF ROAD - 433'
 3 SEWER MHS IN ROAD R/W

DATE	
BY	
PLAN	
NOTE BOOK	



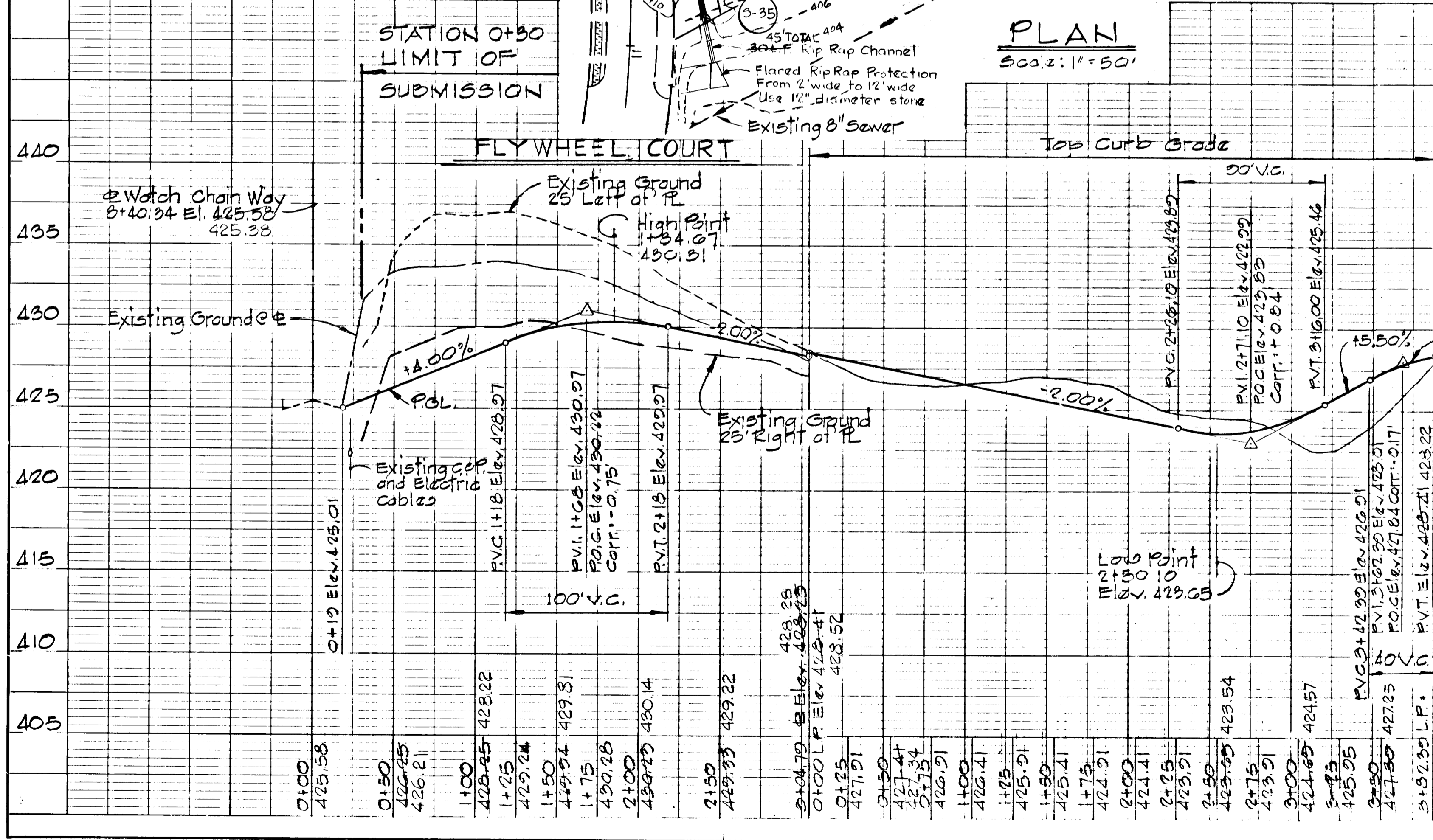
DEPARTMENT OF PUBLIC WORKS
 CHIEF, BUREAU OF ENGINEERING
 OFFICE OF PLANNING & ZONING
 JOHN W. MURPHY
 CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION

AS-BUILT SURVEY CERTIFIED BY KENNETH A. MCCORD, P.E. #1974 ON JAN. 15, 1988

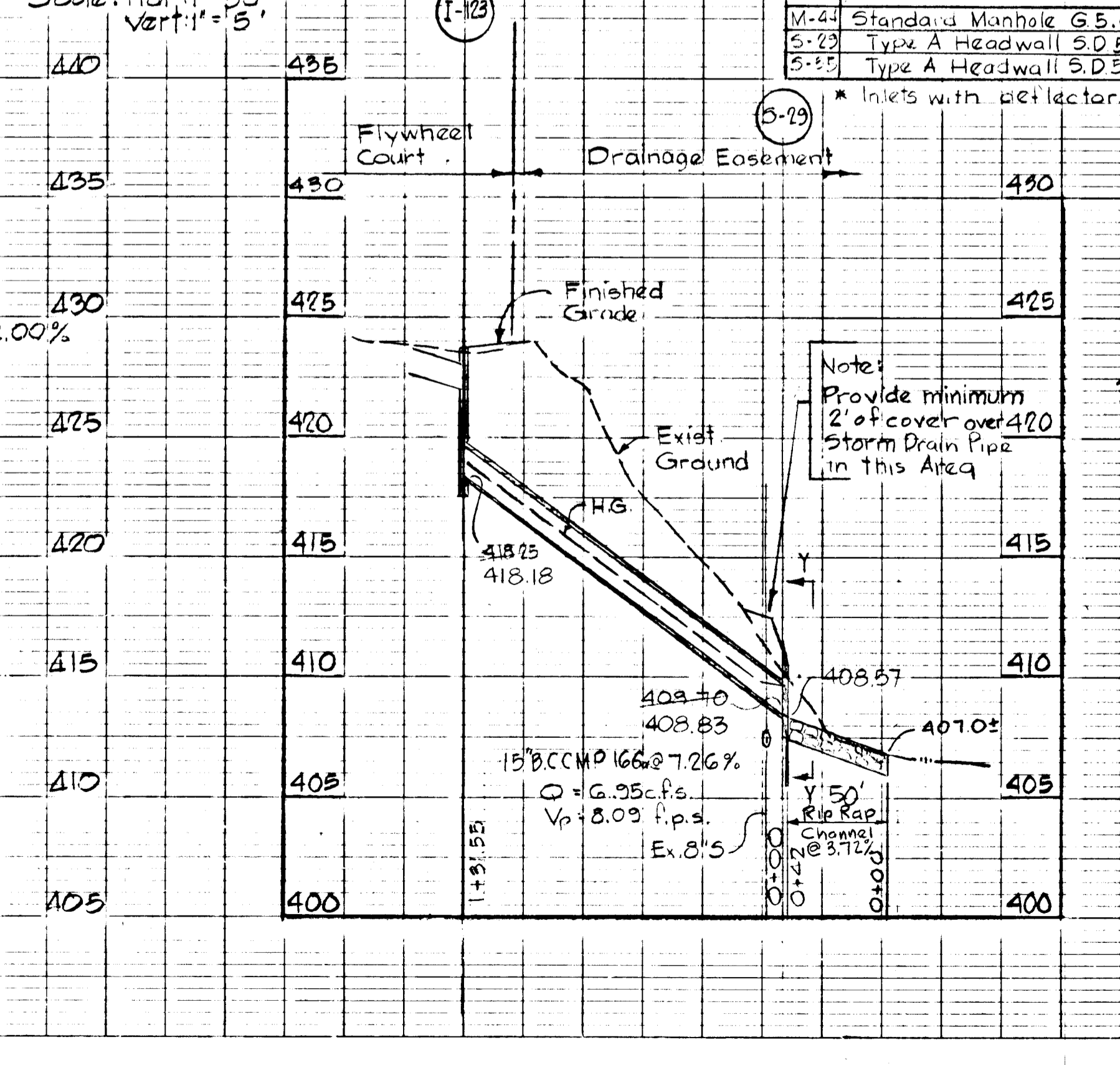
3-19-86	1	As per Planning, DPW and SCS Comments
REV. DATE	REV. NO.	REVISION DESCRIPTION
COLUMBIA 5th ELECTION DISTRICT HOWARD COUNTY, MARYLAND		
OWNER AND DEVELOPER HOWARD RESEARCH AND DEVELOPMENT CORPORATION		
PROJECT AREA VILLAGE OF HICKORY RIDGE SECTION 3 AREA 10		
PROJECT TITLE PLAN AND PROFILE FLYWHEEL COURT		
SCALE: AS SHOWN		DATE:
WHITMAN, REQUARDT AND ASSOCIATES ENGINEERS BALTIMORE, MARYLAND 21218		
Kenneth A. McCord KENNETH A. MCCORD Registered Engineer No. 1974		

DATE	
BY	
PROFILE	
NOTE BOOK	

PLAN
 Scale: 1" = 50'

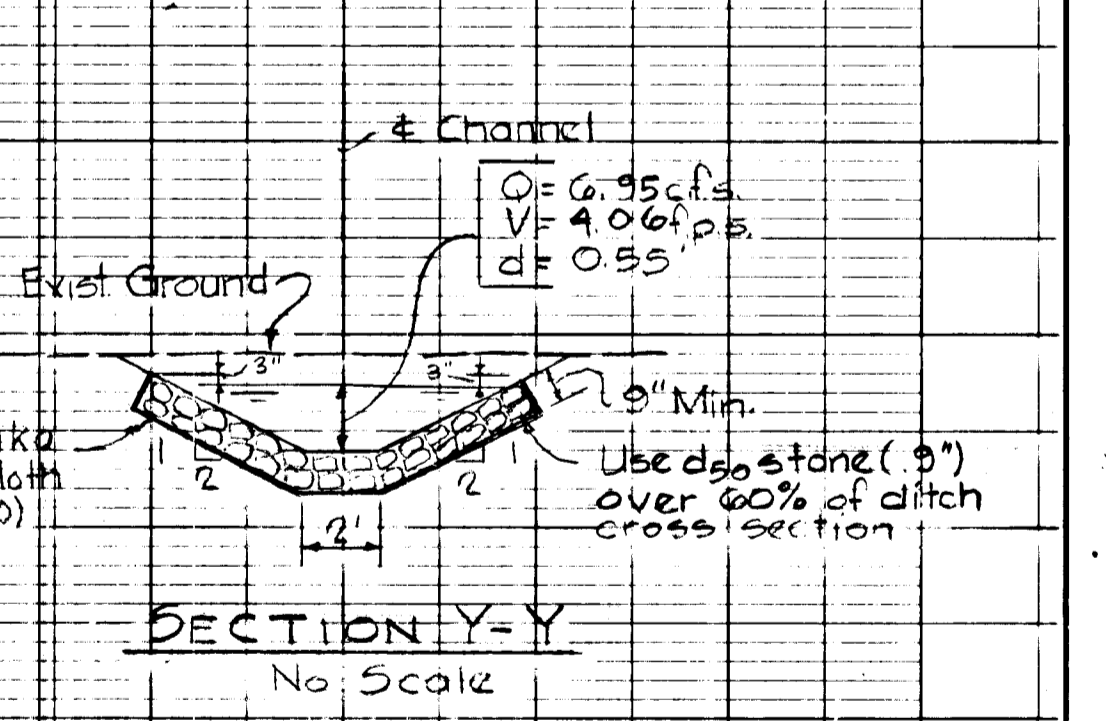


PROFILES
 Scale: Hor. 1" = 50', Vert. 1" = 5'

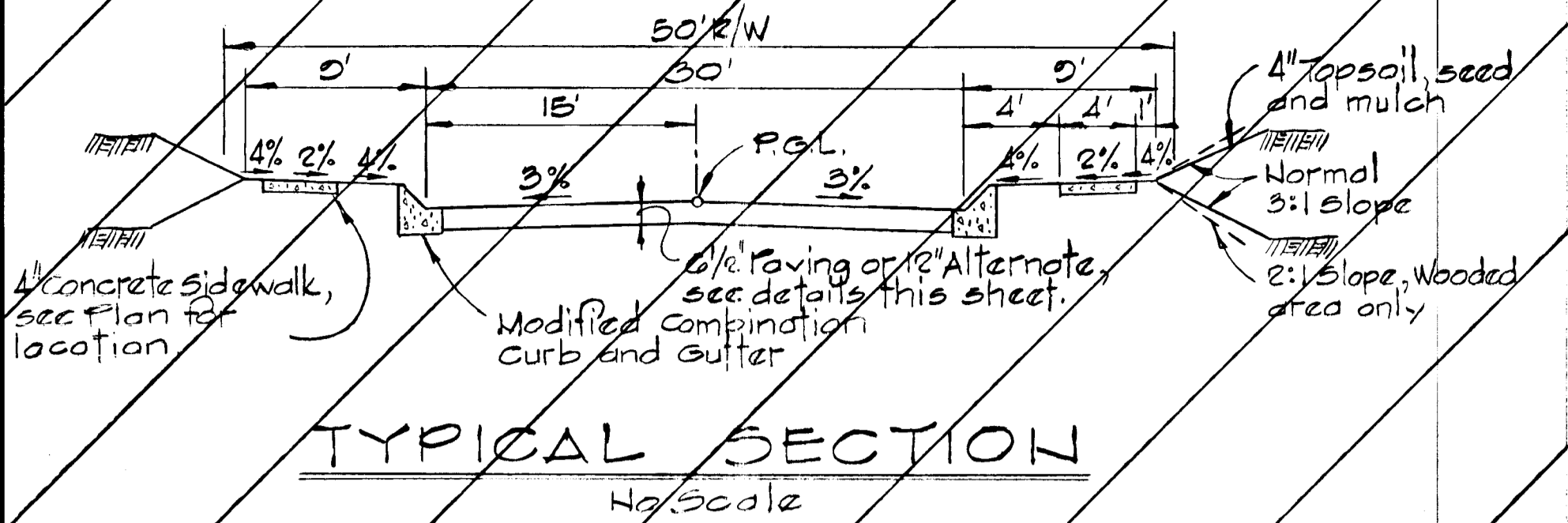


STORM DRAIN STRUCTURE SCHEDULE

NO.	TYPE	TOP EL.	INV. IN.	INV. OUT.	LOCATION
I-123	A-10 Inlet (width 25") 5D.4.01	423.65	—	418.25	€ Inlet 192' Back of LP Sta. 2+50.10
I-135	A-5 Inlet (width 25") 5D.4.01	421.73	—	417.23	€ Inlet 192' Back of Exist. curb @ Sta. 9+03
I-134	A-5 Inlet (width 25") 5D.4.01	426.43	—	416.63	€ Inlet 15.92' Left of Sta. 0+46
M-24	Standard Manhole 65.01	426.70	417.20	417.00	€ Manhole 400' Left of Sta. 9+06
S-29	Type A Headwall 5D.5.11	411.70	408.70	408.57	See Plan & Profile
S-55	Type A Headwall 5D.5.11	405.25	405.25	405.03	€ Headwall 450' Left of Sta. 10+86

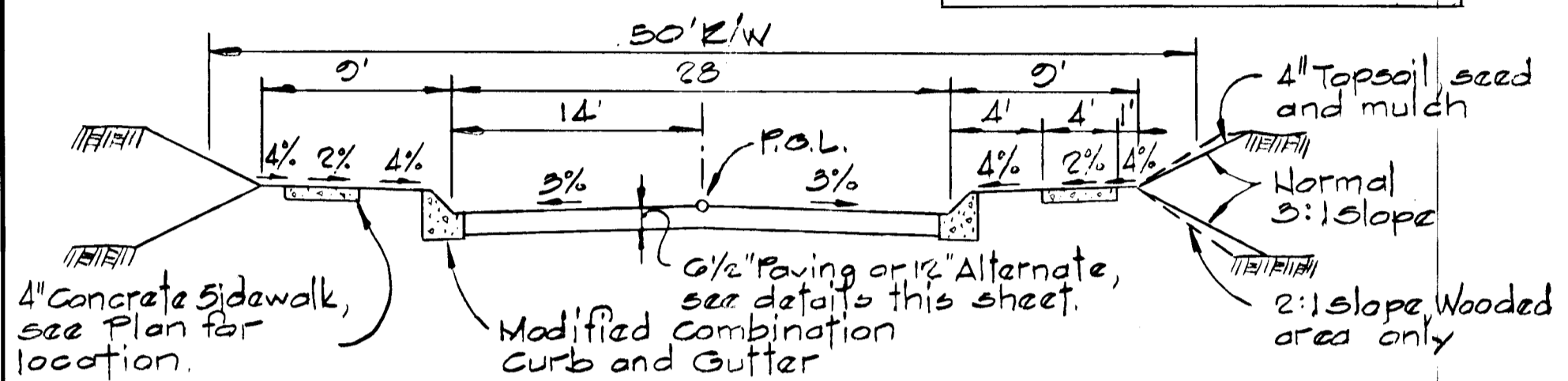


DESIGN SPEED
30 M.P.H.



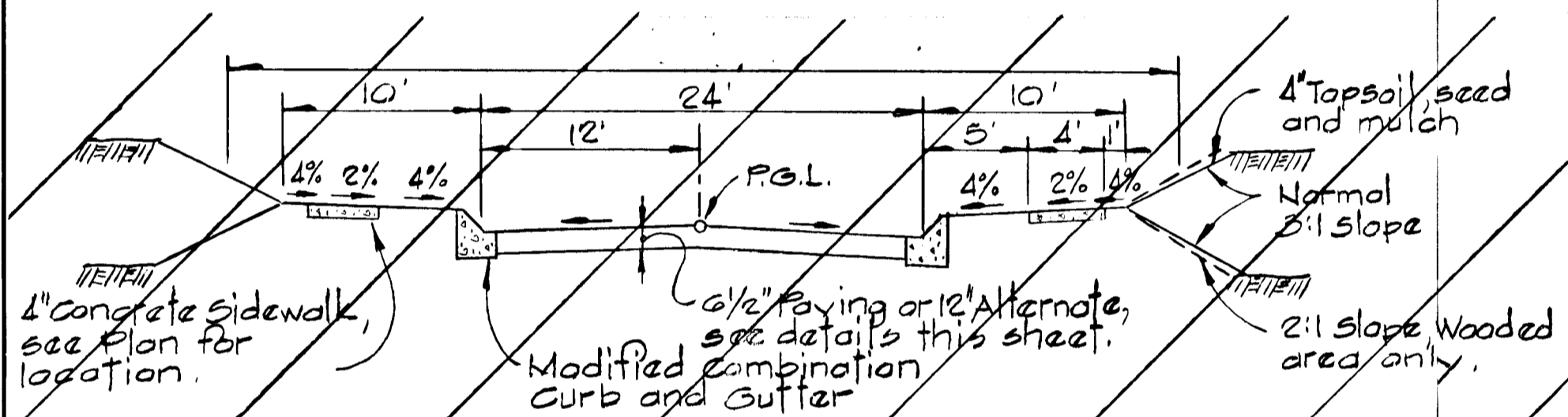
TYPICAL SECTION
No Scale

CUL-DE-SAC DESIGN
SPEED - 25 M.P.H.

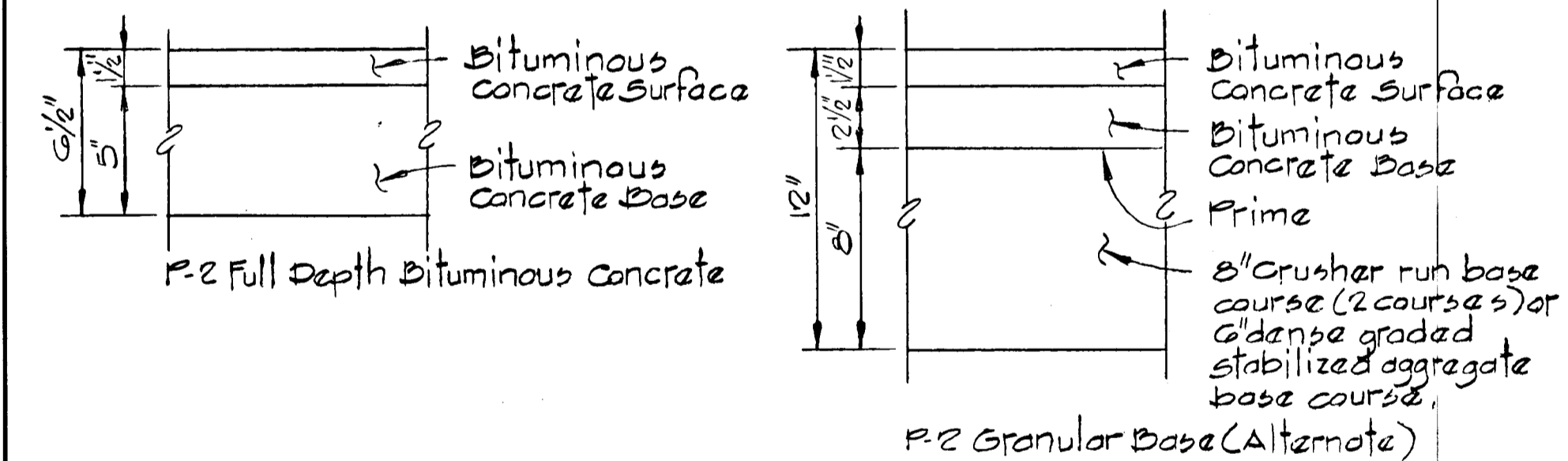


TYPICAL SECTION
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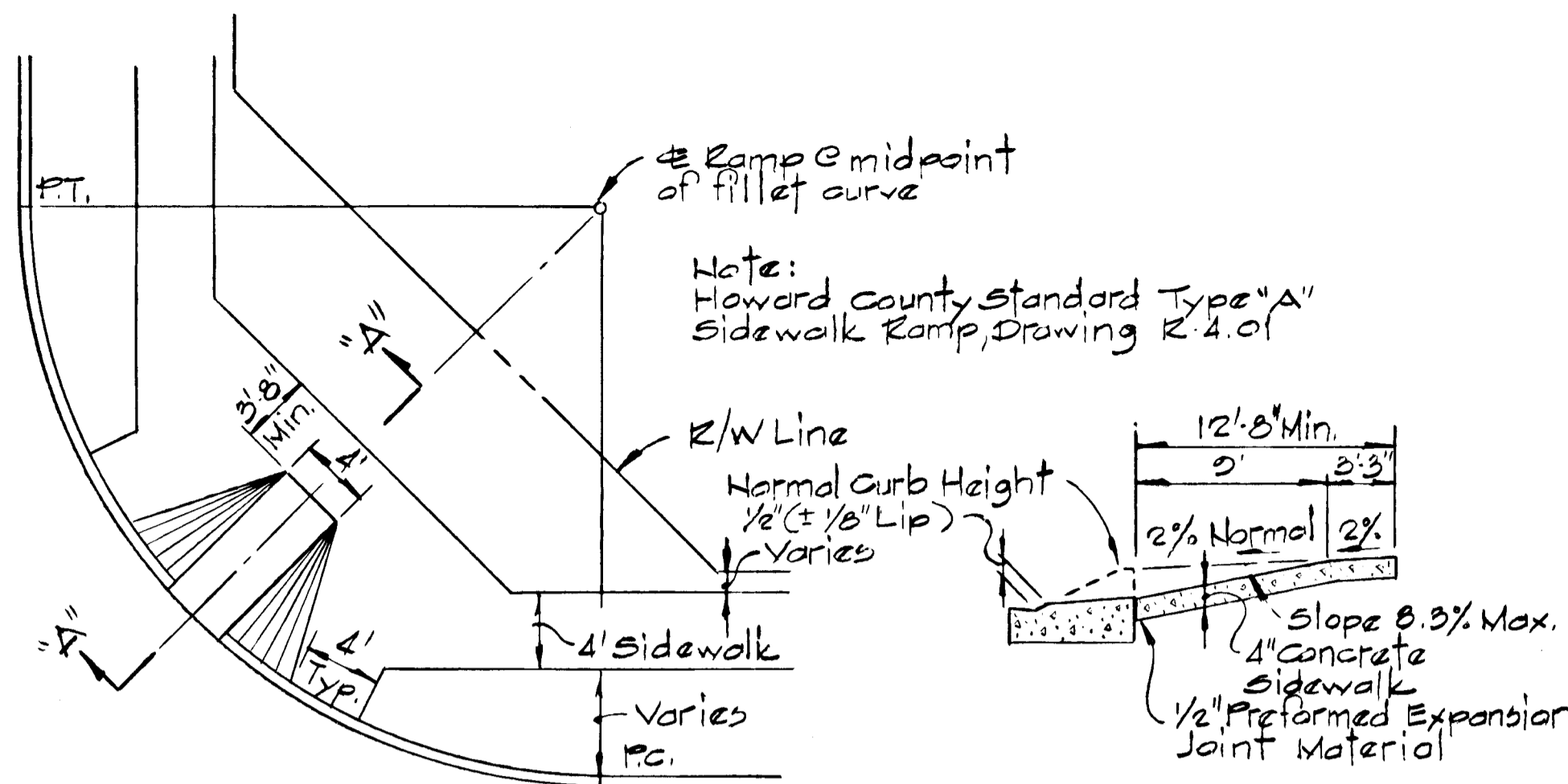
IRON FRAME WAY - STA. 0+44.66 TO STA. 4+09.24
FLYWHEEL COURT - STA. 0+44.00 TO STA. 3+04.79



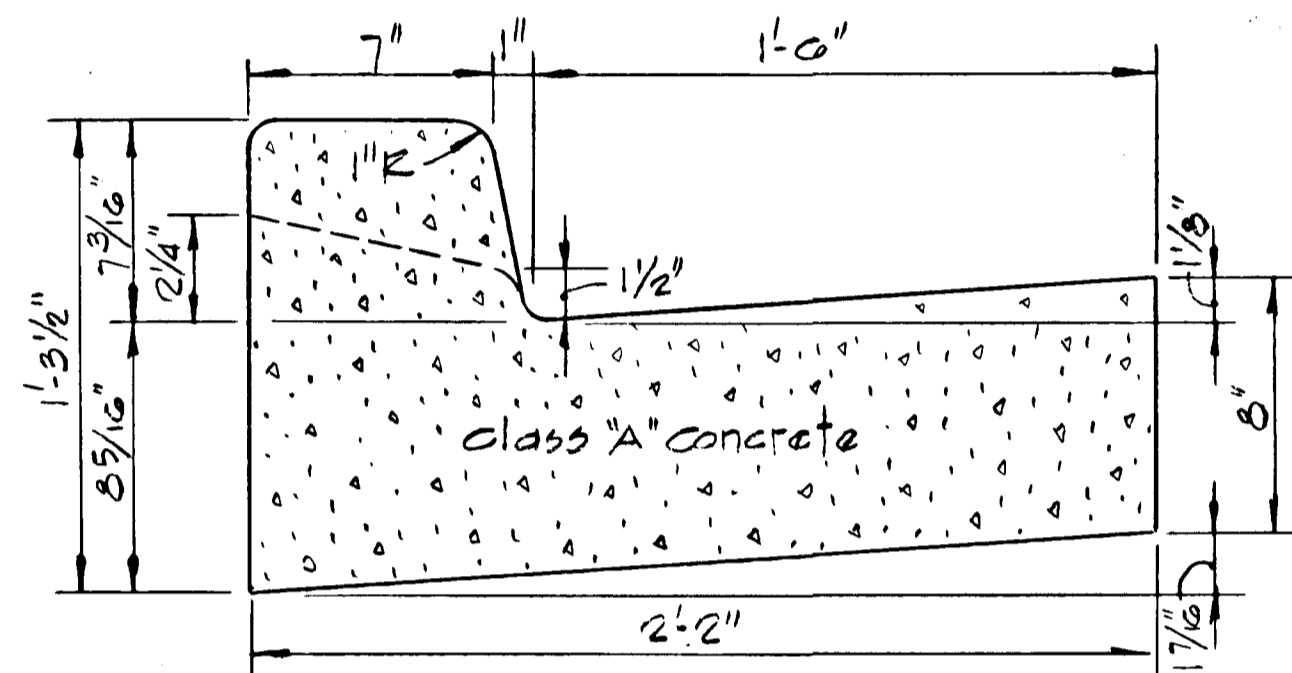
TYPICAL SECTION
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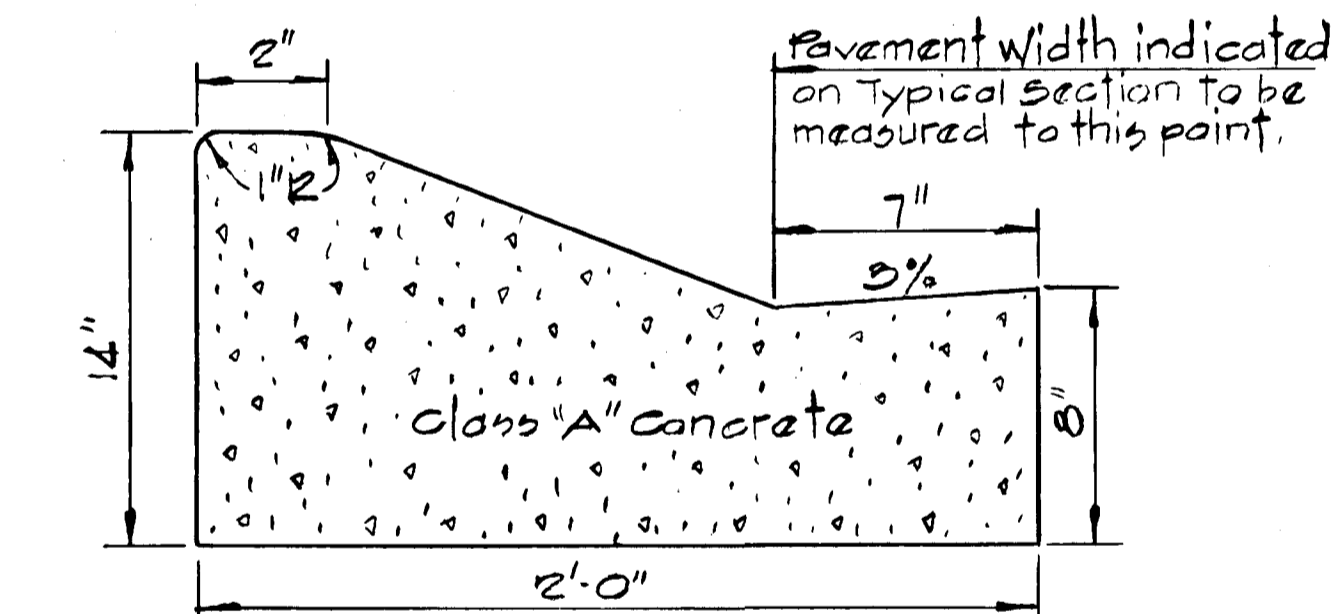
TYPICAL PAVING SECTION
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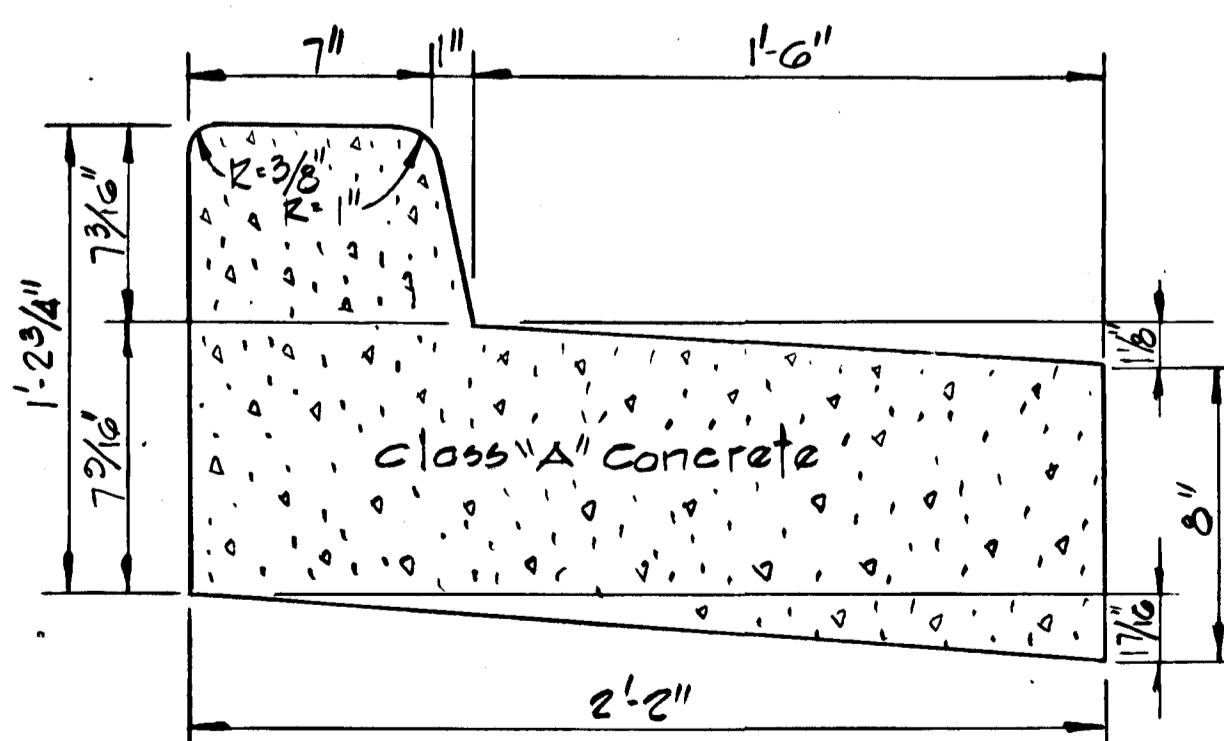
PLAN SECTION "A-A"
WHEEL CHAIR RAMP DETAIL
No Scale



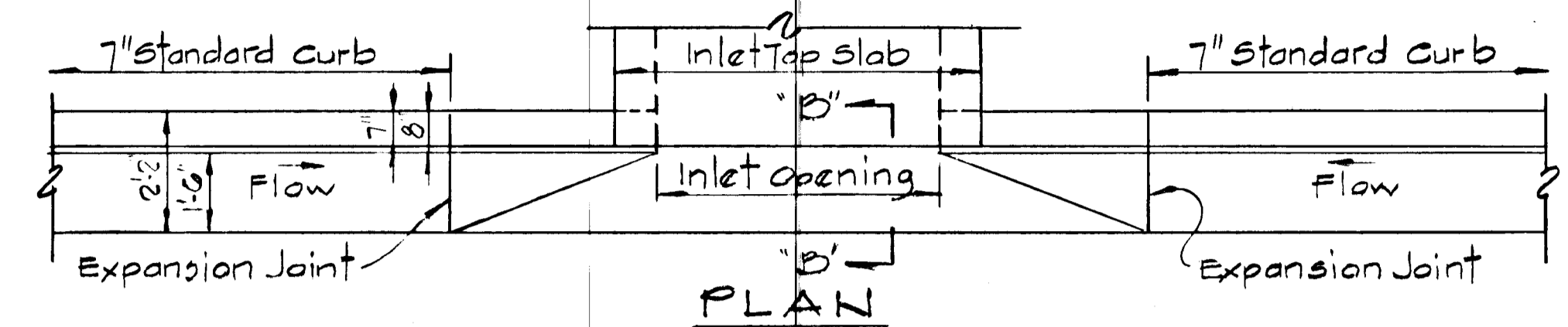
STANDARD 7" COMBINATION CURB & GUTTER
No Scale



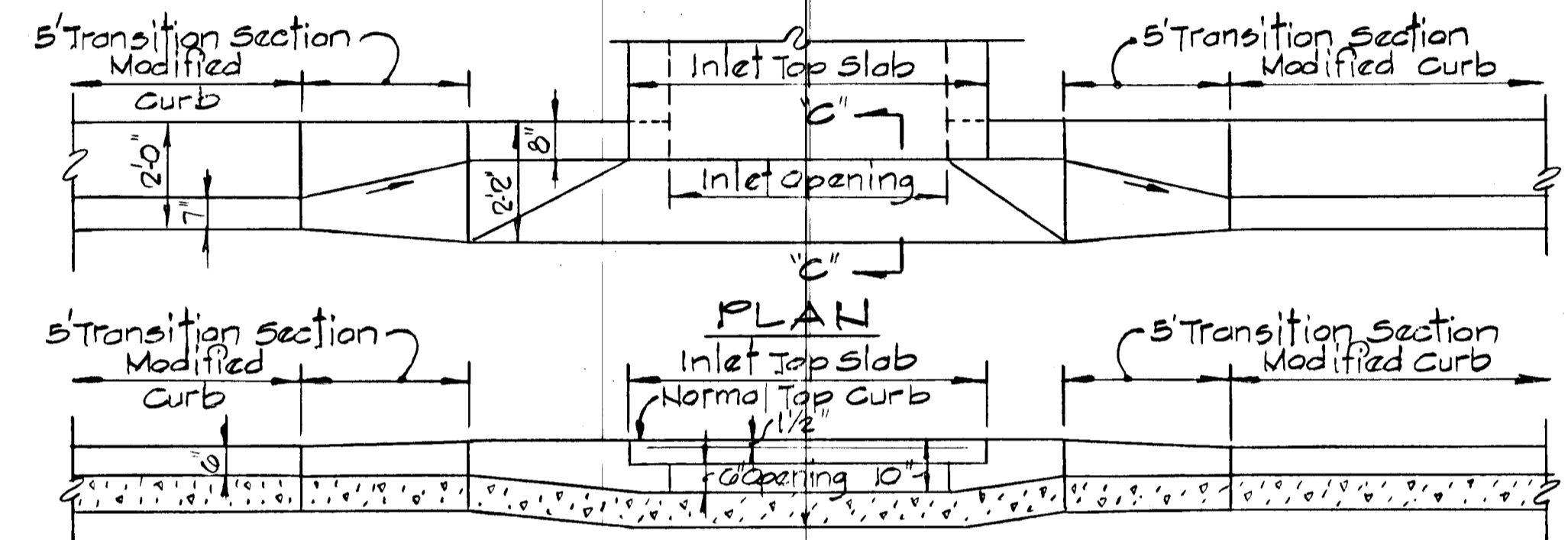
MODIFIED COMBINATION CURB & GUTTER
No Scale



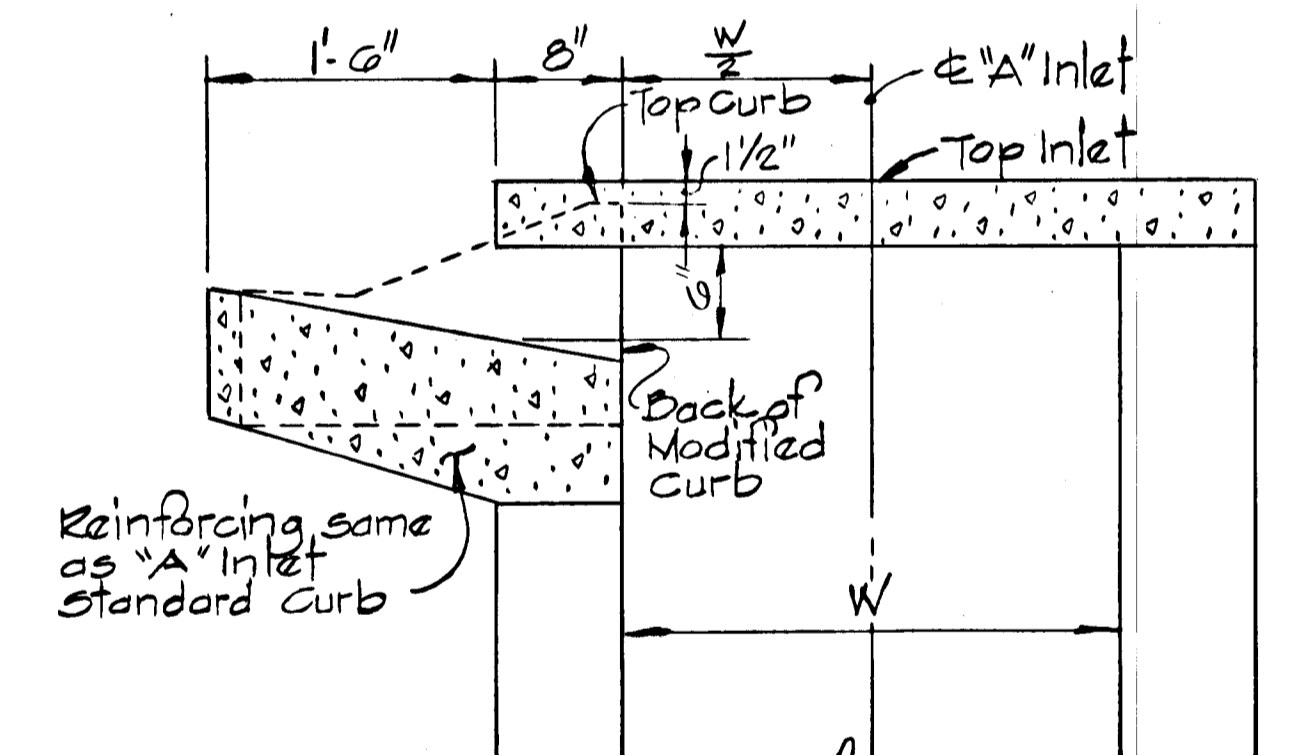
REVERSE 7" COMBINATION CURB AND GUTTER
No Scale



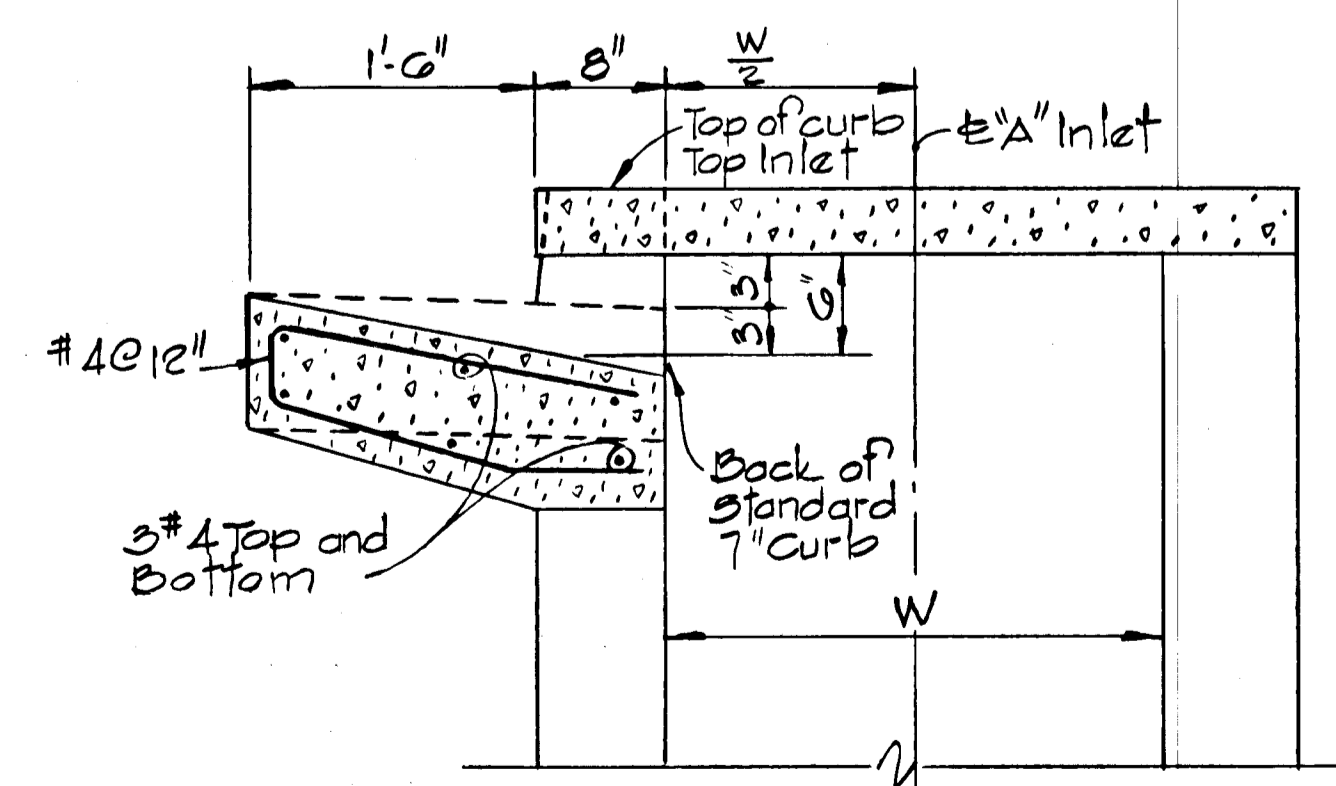
PLAN SECTION "B-B"
SUMPED "A" INLETS - STANDARD CURB



PLAN SECTION "C-C"
"A" INLETS - MODIFIED CURB



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



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

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

REV. DATE	REV. NO.	REVISION DESCRIPTION
3-19-86	1	As per Planning, DPW and SCS 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 10

PROJECT TITLE
ROADWAY AND
STORM DRAIN DETAILS

SCALE: AS SHOWN DATE:

WHITMAN, REQUART AND ASSOCIATES
ENGINEERS
BALTIMORE, MARYLAND 21218

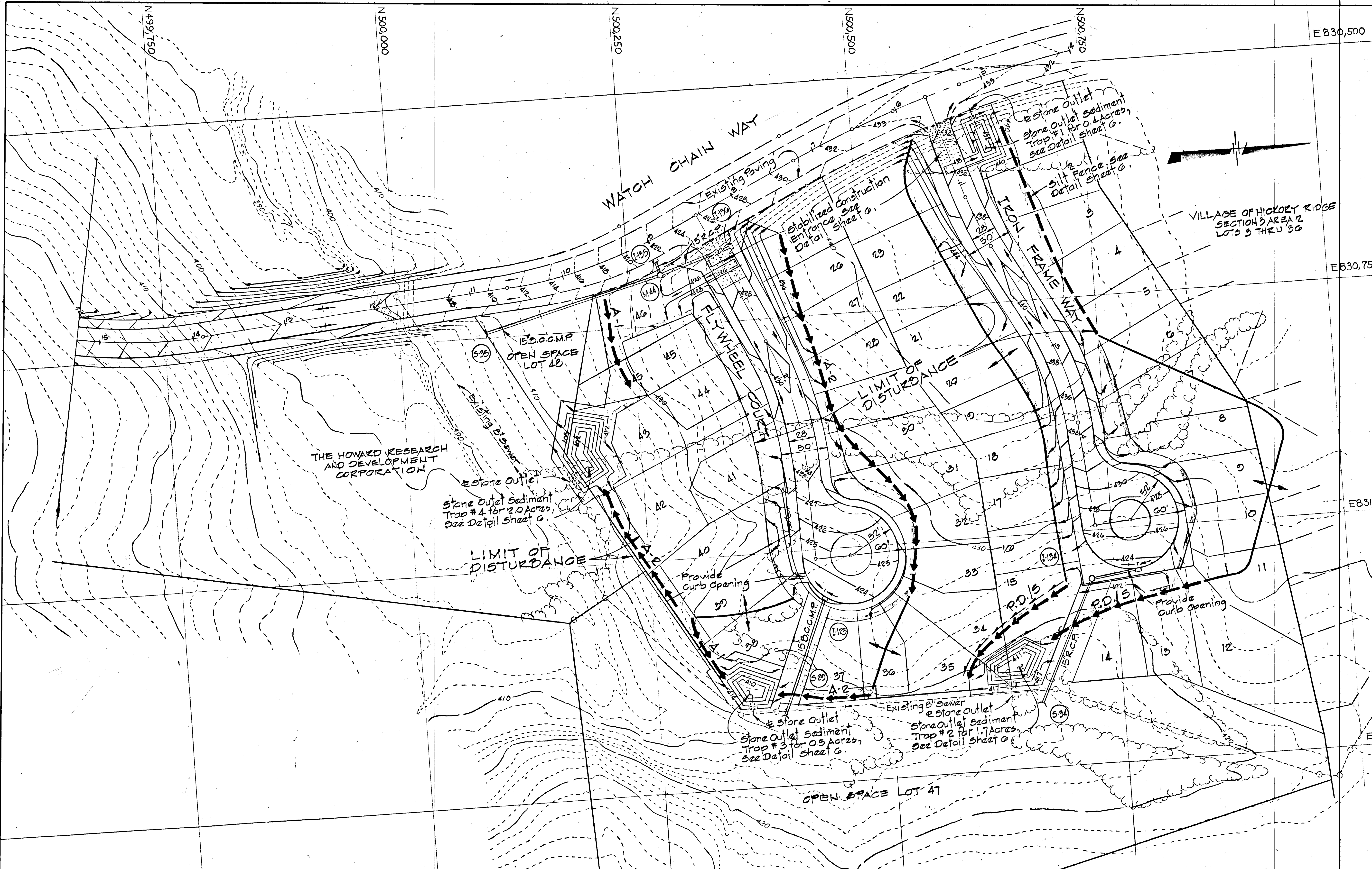
Kenneth A. McCord
KENNETH A. MCCORD
Registered Engineer
No. 1074

AS-BUILT 1-15-88

F-86-138

2/11/86

SHEET 4 OF 6



APPROVED: DEPARTMENT OF PUBLIC WORKS
 CHIEF, BUREAU OF ENGINEERING
 OFFICE OF PLANNING & ZONING
 JOHN W. WOODFORD
 CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION

SEDIMENT TRAP #1
DESIGN DATA
 DRAINAGE AREA = 0.4 ACRES
 VOLUME REQUIRED = 0.4 x 67 = 26.8 C.Y.
 VOLUME AVAILABLE = 31 C.Y.
 TOP BERM ELEV. = 436.0
 TOP STONE WEIR ELEV. = 435.0
 WIDTH OF STONE WEIR = 5'
 STORAGE ELEV. = 434.0
 BOTTOM TRAP ELEV. = 432.0

SEDIMENT TRAP #2
DESIGN DATA
 DRAINAGE AREA = 1.7 ACRES
 VOLUME REQUIRED = 1.7 x 67 = 113.9 C.Y.
 VOLUME AVAILABLE = 135 C.Y.
 TOP BERM ELEV. = 417.0
 TOP STONE WEIR ELEV. = 416.0
 WIDTH OF STONE WEIR = 7'
 STORAGE ELEV. = 415.0
 BOTTOM TRAP ELEV. = 411.0

SEDIMENT TRAP #3
DESIGN DATA
 DRAINAGE AREA = 0.5 ACRES
 VOLUME REQUIRED = 0.5 x 67 = 33.5 C.Y.
 VOLUME AVAILABLE = 40 C.Y.
 TOP BERM ELEV. = 414.0
 TOP STONE WEIR ELEV. = 413.0
 WIDTH OF STONE WEIR = 5'
 STORAGE ELEV. = 412.0
 BOTTOM TRAP ELEV. = 410.0

SEDIMENT TRAP #4
DESIGN DATA
 DRAINAGE AREA = 2.0 ACRES
 VOLUME REQUIRED = 2.0 x 67 = 134 C.Y.
 VOLUME AVAILABLE = 138 C.Y.
 TOP BERM ELEV. = 408.0
 TOP STONE WEIR = 407.0
 WIDTH OF STONE WEIR = 6'
 STORAGE ELEV. = 406.0
 BOTTOM TRAP ELEV. = 402.0

ALL INLETS TO HAVE INLET PROTECTION, SEE DETAIL SHEET G.

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 12-9-85
 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 12-9-85
 DATE

STORM WATER MANAGEMENT FOR THIS PROJECT HAS BEEN PROVIDED IN THE VILLAGE OF HICKORY RIDGE SECTION 3 AREA 1, F83-120 AND SECTION 3 AREA 5, F84-51.

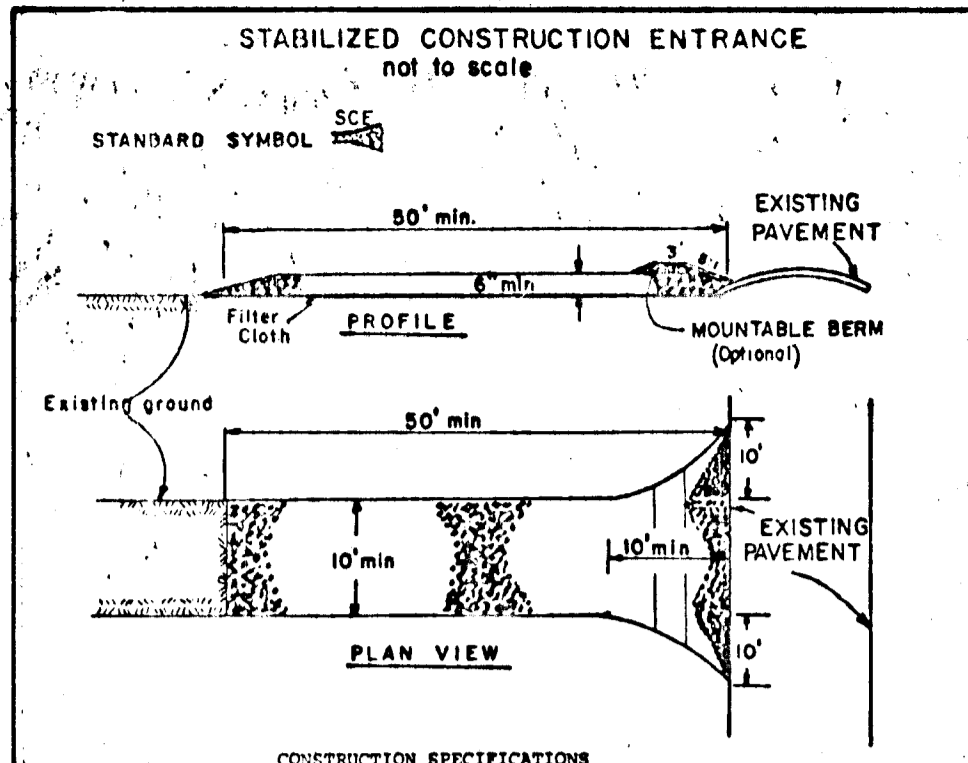
REVIEWED FOR HOWARD S.O.D. AND MEETS TECHNICAL REQUIREMENTS

James M. Miller 3/25/86
 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 J. ... 3/25/86
 HOWARD S.O.D. DATE
 AS-BUILT 1-15-83

9/19/86	1	As per S.O.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 10		
PROJECT TITLE SEDIMENT CONTROL PLAN		
SCALE: 1" = 50'	DATE:	
WHITMAN, REQUARDT AND ASSOCIATES ENGINEERS BALTIMORE, MARYLAND 21218		
Kenneth A. McCord Registered Engineer No. 1072		



STABILIZED CONSTRUCTION ENTRANCE
 not to scale

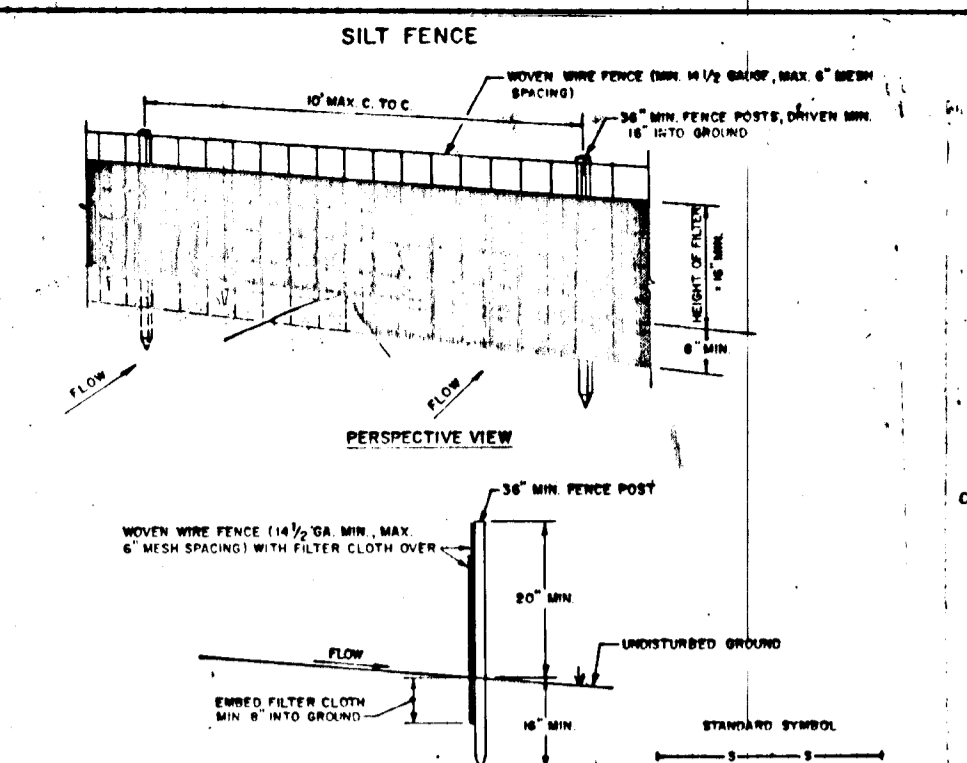
STANDARD SYMBOL
 A 2 B 3

EXISTING PAVEMENT
 50' min.
 10' min.
 10' min.
 10' min.

EXISTING GROUND
 50' min.
 10' min.

CONSTRUCTION SPECIFICATIONS

- Stone Size - Use 2" stone, or recycled or recycled concrete equivalent.
- Length - as required, but not less than 40 feet (except on a single residential lot where a 30 foot minimum length would apply).
- Thickness - Not less than six (6) inches.
- Width - Ten (10) foot minimum, but not less than the full width at points where ingress or egress occurs.
- Filter Cloth - will be placed over the entire area prior to placing of stone. Filter cloth will not be required on a single family residence lot.
- Surface Water - All surface water flowing or diverted toward construction entrances shall be piped across the entrance. If piping is impractical, a mountable beam with 5/8 slope will be permitted.
- 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 conditions demand and repair and/or cleanup of any measures used to trap sediment. All sediment, spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately.
- 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 structure with stone and which drains into an approved sediment trapping structure with stone and which drains into an approved sediment trapping structure with stone.
- Periodic inspection and needed maintenance shall be provided after each rain.

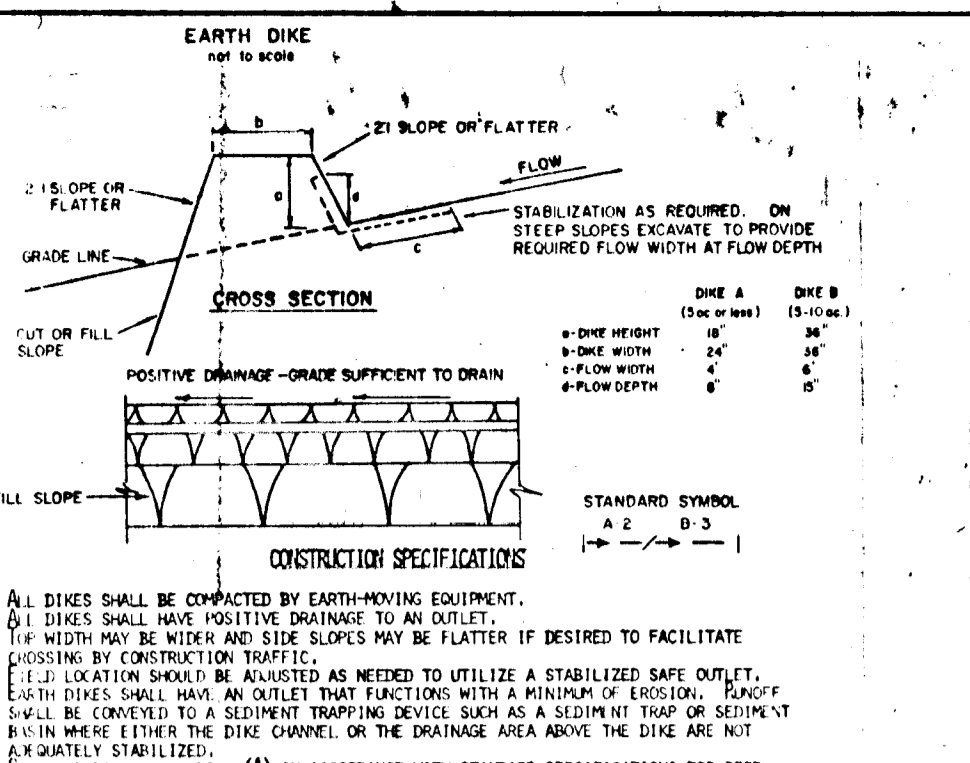


SILT FENCE
 not to scale

CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

- WIRE FENCE TO BE FASTENED SECURELY TO WOOD POSTS WITH NAILS OR CHAINS.
- FILTER CLOTH TO BE FASTENED SECURELY TO WIRE FENCE WITH NAILS SPACED AT 24" ON TOP AND 18" ON BOTTOM.
- NO TWO SECTIONS OF FILTER CLOTH TO BE OVERLAPPED BY SIX INCHES OR FOLDED.
- MAINTENANCE SHALL BE PROVIDED AS NEEDED AND INITIAL REPAIRS MADE IMMEDIATELY.

POSTS: STEEL EIGHT (8) OR TEN (10) INCH DIAMETER
 WIRE: WIRE MESH, 1/2" GA. OR 1/4" GA. WIRE OPENING
 FILTER CLOTH: FILTER X, RUFAT 1000, STAB-LINER 1200 OR APPROVED EQUAL
 PREPARED UNIT: GEOPAR, ENVIROFLEX, OR APPROVED EQUAL



EARTH DIKE
 not to scale

CONSTRUCTION SPECIFICATIONS

- ALL DIKES SHALL BE CONSTRUCTED BY EARTH-MOVING EQUIPMENT.
- DIKES SHALL HAVE POSITIVE DRAINAGE TO AN OUTLET.
- IF WIDTH MAY BE WIDER AND SIDE SLOPES MAY BE FLATTER IF DESIRED TO FACILITATE CROSSING BY CONSTRUCTION EQUIPMENT.
- IF LOCATION SHOULD BE ADJUSTED AS NEEDED TO UTILIZE A STABILIZED SAFE OUTLET.
- SOUTH DIKES SHALL HAVE AN OUTLET TRAP FUNCTION WITH A MINIMUM OF 18" DIAMETER. SOUTH DIKES SHALL BE CONSTRUCTED TO A SEDIMENT TRAPPING DEVICE SUCH AS A SEDIMENT TRAP OR SEDIMENT BASIN, WHEN EITHER THE DIKE CHANNEL OR THE DRAINAGE AREA ABOVE THE DIKE ARE NOT EASILY STABILIZED.
- STABILIZATION SHALL BE DONE IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR SEDIMENT TRAPPING DEVICES.

ELONG CHANNEL STABILIZATION

TYPE OF PROTECTION	CHANNEL	DIKE A	DIKE B
1	5-5.00	SEED AND STRAW MULCH	SEED AND STRAW MULCH
2	3.15-5.00	SEED AND STRAW MULCH	SEED USING JUTE, OR GEOTEXTILE, SOUL, 2" STONE
3	5.1-8.00	SEED WITH JUTE, OR SOUL	LINED RIP-RAP 4-8"
4	8.1-200	LINED RIP-RAP 4-8"	ENGINEERING DESIGN

A. Stone to be 2" inch stone, or recycled concrete equivalent, in a layer at least 3 inches in thickness and be pressed into the soil with construction equipment.
 B. RIP-RAP TO BE 4-8 INCHES IN A LAYER AT LEAST 8 INCHES THICKNESS AND PRESSED INTO SOIL.
 C. APPROVED EQUIVALENTS CAN BE SUBSTITUTED FOR ANY OF THE ABOVE MATERIALS.
 PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.

SEDIMENT CONTROL NOTES

- A minimum of 24 hours notice must be given to the Howard County Office of Inspection and Permits prior to the start of any construction. (8924-2373)
- All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
- Following initial soil disturbance or redistribution, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all permanent sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1, b) 14 days as to all other disturbed or graded areas on the project site.
- All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chapter 12, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
- All disturbed areas must be stabilized within the time period specified above in accordance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings (Sec. 51) and (Sec. 54), temporary seeding (Sec. 50) and mulching (Sec. 52). Temporary stabilization with mulch alone can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
- All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.
- Site Analysis:
 Total Area of Site: 8.71 Acres
 Area Disturbed: 2.5 Acres
 Area to be roofed or paved: 0.9 Acres
 Area to be vegetatively stabilized: 2.0 Acres
 Total Cut: 2,000 Cu. yds.
 Total Fill: 1,000 Cu. yds.
 Offsite waste/borrow area location: Yes
- Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
- Additional sediment controls must be provided, if deemed necessary by the Howard County DPW sediment control inspector.
- 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.

PERMANENT SEEDING NOTES

Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.

Seeded Preparation: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding.

Soil Amendments: In lieu of soil test recommendations, use one of the following schedules:
 1) Preferred - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sq ft) and 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft) before seeding. Harrow or disc into upper three inches of soil. At time of seeding, apply 600 lbs per acre 30-0-0 urea based fertilizer (9 lbs/1000 sq ft).
 2) Acceptable - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sq ft) and 1000 lbs per acre 10-10-10 fertilizer (23 lbs/1000 sq ft) before seeding. Harrow or disc into upper three inches of soil.

Seeding - For the periods March 1 thru April 30, and August 1 thru October 15, seed with 60 lbs per acre (14 lbs/1000 sq ft) of 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 (.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 1/2 anchored straw mulch and seed as soon as possible in the spring. Option (2) Use do. Option (3) Seed with 60 lbs/acre 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 untreated small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons 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 redistributed where 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)

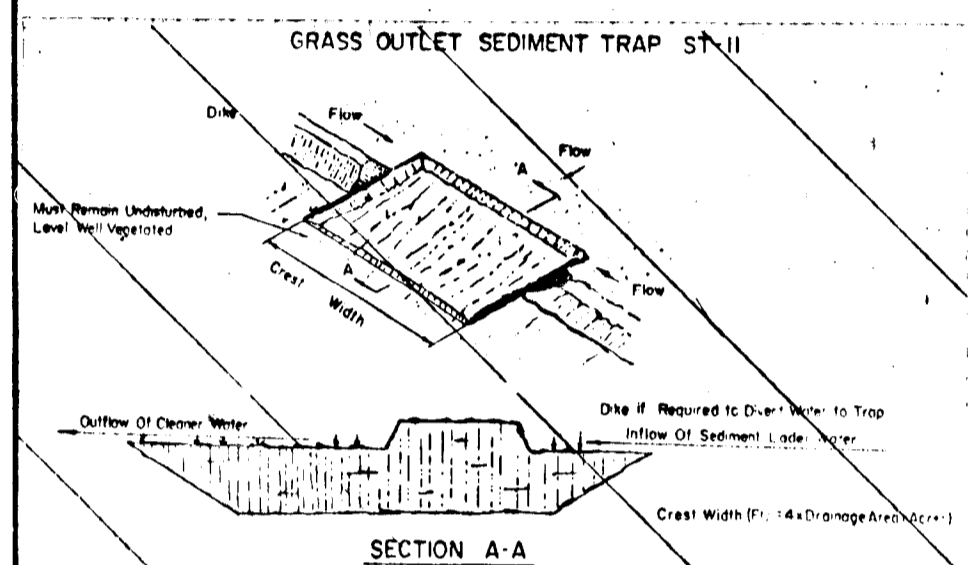
Seeding: For periods March 1 thru April 30 and from August 15 thru November 15, seed with 75 bushel per acre of annual ryegrass (3.2 lbs/1000 sq ft). For the period May 1 thru August 14, seed with 3 lbs per acre of weeping lovegrass (.07 lbs/1000 sq ft). For the period November 16 thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use seed.

Mulching: Apply 1 1/2 to 2 tons per acre (70 to 90 lbs/1000 sq ft) of untreated small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes 8 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.

SEQUENCE OF CONSTRUCTION

- Obtain Grading Permit.
- Construct stabilized construction entrance on Iron Frame Way and Flywheel Court. (2 Days)
- Clear and grub areas for sediment control facilities only. (4 Days)
- Construct sediment traps, earth dikes, perimeter dike with swale and silt fence. (3 Days)
- Stabilize earth dikes with temporary seeding, see specifications in this sheet. (1 Day)
- Strip and rough grade limits of construction. (3 Weeks)
- Construct all utilities. (4 Weeks)
- Final grade roads, construct curb and gutter (allow for 10' long curb openings at locations indicated), construct sidewalks and seed disturbed areas. (2 Weeks)
- Pave Roads. (1 Week)
- All sediment facilities to remain in place for house construction and lot grading.

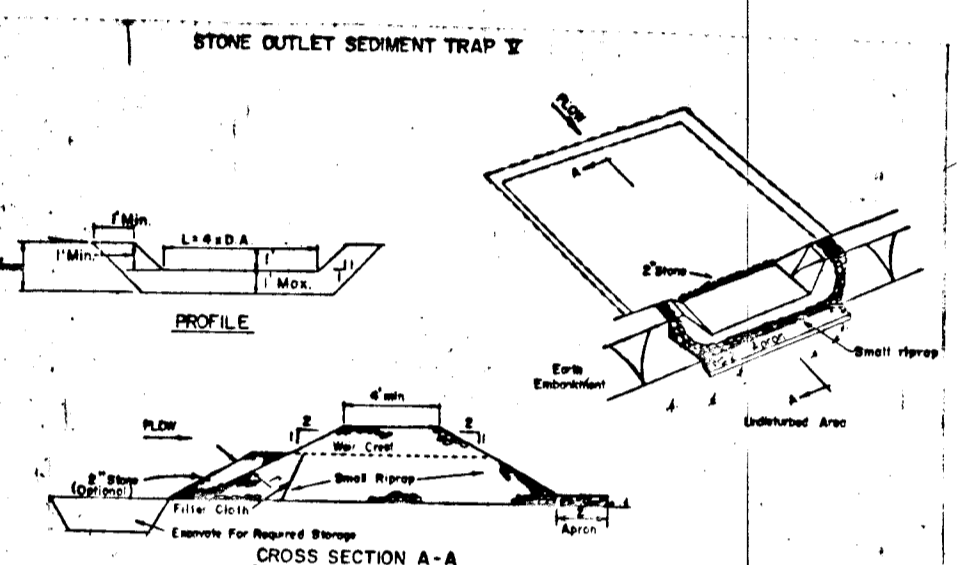


GRASS OUTLET SEDIMENT TRAP
 not to scale

CONSTRUCTION SPECIFICATION FOR ST-11

- Volume of sediment storage shall be 1800 cubic feet per acre of contributing drainage area.
- Minimum length shall be 4 x Drainage Area.
- Sediment shall be removed and trap returned to its original dimensions when the sediment has accumulated to the design depth of the trap. Removed sediment shall be deposited in a suitable area and in such a manner that it will not erode.
- The structure shall be inspected after each rain and repairs made as needed.
- Construction operations shall be carried out in such a manner that erosion and water pollution is minimized.
- The sediment trap shall be removed and area stabilized when the remaining drainage area has been properly stabilized.
- All out-slopes shall be 1:1 or flatter.

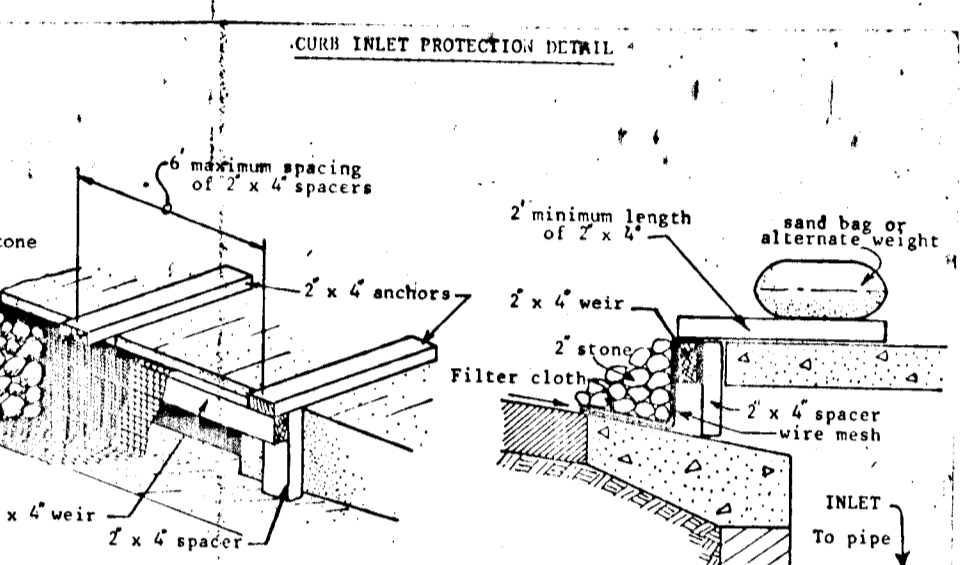
Maximum Drainage Area: 5 Acres



STONE OUTLET SEDIMENT TRAP
 not to scale

CONSTRUCTION SPECIFICATIONS FOR ST-1

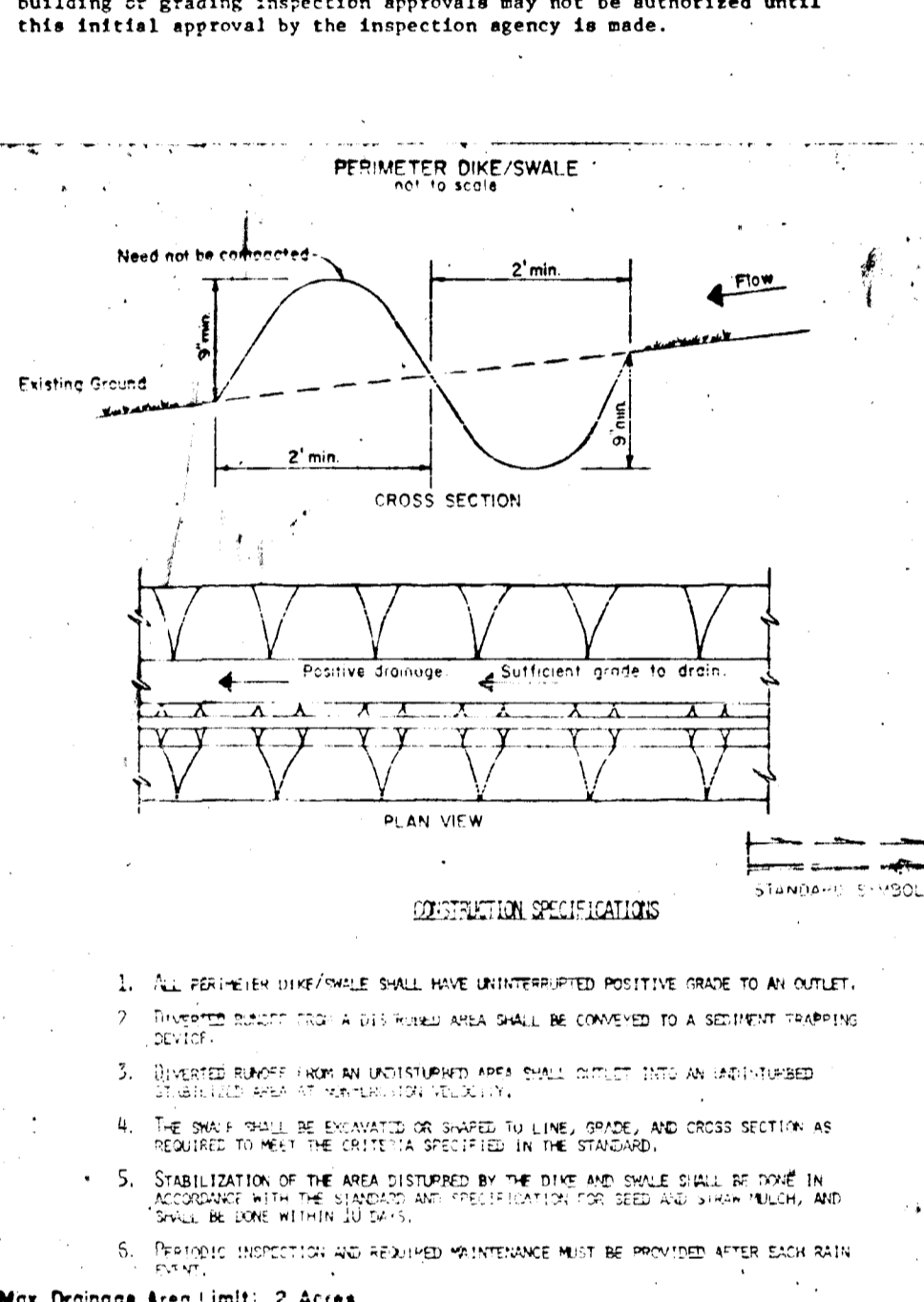
- Area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The pool area shall be cleared.
- The fill material for the embankment shall be free of roots and other woody vegetation as well as over-sized stones, rocks, organic material or other objectionable material. The embankment shall be compacted by treading with equipment while it is being constructed.
- All out and fill slopes shall be 2:1 or flatter.
- The stone used in the outlet shall be small riprap 4-8" along with a 1" thickness of 2" aggregate placed on the upgrade side on the small riprap 20' subgrade filter cloth in the riprap.
- Sediment shall be removed and trap returned to its original dimensions when the sediment has accumulated to the design depth of the trap.
- The structure shall be inspected after each rain and repairs made as needed.
- Construction operations shall be carried out in such a manner that erosion and water pollution is minimized.
- The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.



CURB INLET PROTECTION
 not to scale

CONSTRUCTION SPECIFICATIONS

- Attach a continuous piece of wire mesh (30" min. width by throat length plus 4") to the 2" x 4" weir (measuring throat length plus 2") as shown on the standard drawing.
- Place a piece of approved filter cloth (40-85 sieve) of the same dimensions as the wire mesh over the wire mesh and securely attach to the 2" x 4" weir.
- Securely nail the 2" x 4" weir to 9" long vertical spacers to be located between the weir and inlet face (max. 6' apart).
- Place the assembly against the inlet throat and nail (minimum 2" lengths of 2" x 4" to the top of the weir at spacer locations. These 2" x 4" anchors shall extend across the inlet top and be held in place by sandbags or alternate weight.



PERIMETER DIKE/SWALE
 not to scale

CONSTRUCTION SPECIFICATIONS

- ALL PERIMETER DIKE/SWALE SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET.
- DIKES SHALL BE 4' HIGH AND SHALL BE CONFINED TO A SEDIMENT TRAPPING DEVICE.
- DIKES SHALL HAVE AN UNINTERRUPTED AREA SHALL BE CONFINED TO AN APPROVED SEDIMENT TRAPPING DEVICE.
- THE DIKE SHALL BE EVALUATED OR SHAPED TO LINE, GRADE, AND CROSS SECTION AS NECESSARY TO MEET THE CRITERIA SPECIFIED IN THE STANDARD.
- STABILIZATION OF THE AREA DISTURBED BY THE DIKE AND SWALE SHALL BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR SEDIMENT TRAPPING DEVICES AND SHALL BE DONE WITHIN 30 DAYS.
- PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.

Max Drainage Area Limit: 2 Acres

#42

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 12-9-85
 DATE

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. Woodruff 12-9-85
 DATE

REVIEWED FOR HOWARD SCD
 AND MEETS TECHNICAL REQUIREMENTS

AS-BUILT 1-15-86

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

APPROVED Stephen A. Cook 3/25/86
 HOWARD SCD DATE

3/10/86	1	As Per 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 10		
PROJECT TITLE SEDIMENT CONTROL DETAILS		
SCALE: AS SHOWN		DATE:
WHITMAN, REQUARDT AND ASSOCIATES ENGINEERS BALTIMORE, MARYLAND 21218		
APPROVED Kenneth A. McCord Registered Engineer No. 1974		