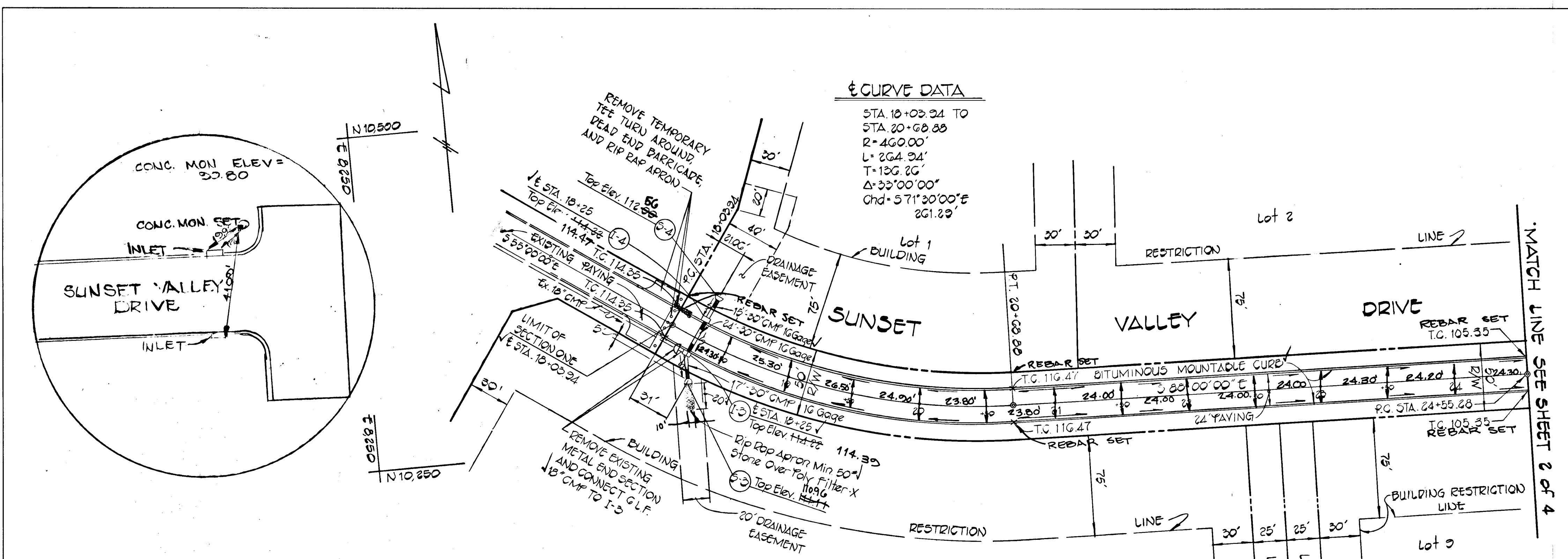
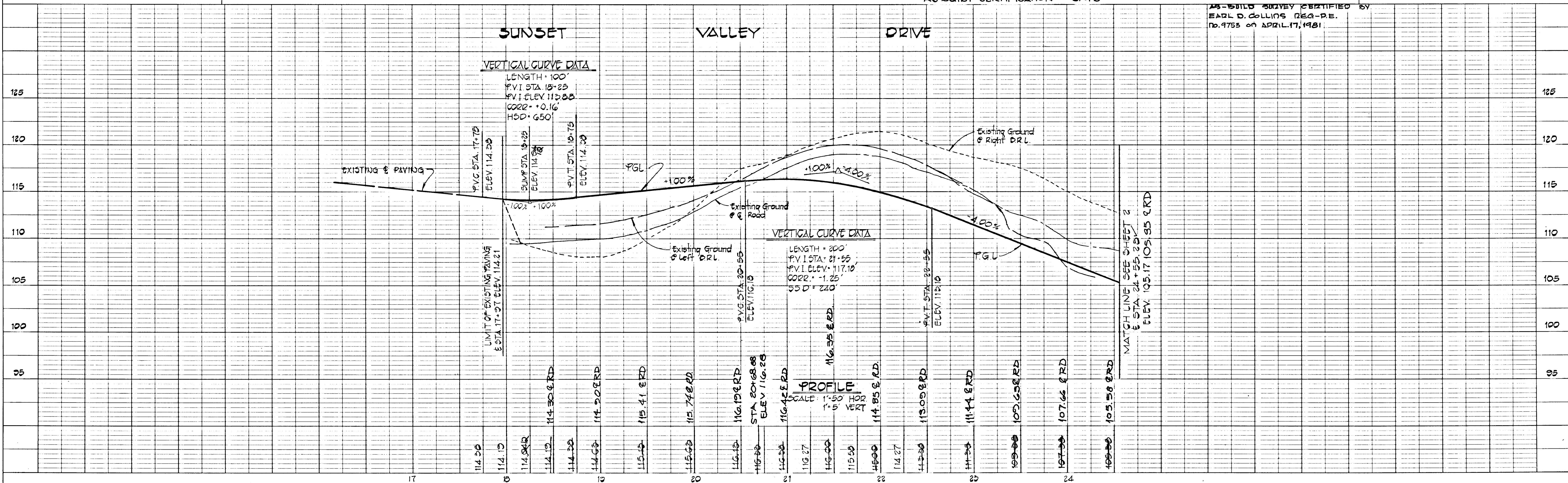


DATE: \_\_\_\_\_  
 BY: \_\_\_\_\_  
 SURVEYED: \_\_\_\_\_  
 PLOTTED: \_\_\_\_\_  
 GRADES CHECKED: \_\_\_\_\_  
 STRUCTURE NOTATIONS CHKD: \_\_\_\_\_  
 NOTE BOOK NO. \_\_\_\_\_

DATE: \_\_\_\_\_  
 BY: \_\_\_\_\_  
 SURVEYED: \_\_\_\_\_  
 PLOTTED: \_\_\_\_\_  
 GRADES CHECKED: \_\_\_\_\_  
 STRUCTURE NOTATIONS CHKD: \_\_\_\_\_  
 NOTE BOOK NO. \_\_\_\_\_

APPROVED  
 DEPARTMENT OF PUBLIC WORKS  
*William E. Ryan* 10/28/81  
 CHIEF, BUREAU OF ENGINEERING  
 10/28/81

APPROVED  
 OFFICE OF PLANNING AND ZONING  
*Lucius F. Palmer* 10-21-81  
 CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION  
 DATE



SECTION 2  
**SUNSET VALLEY**  
 3RD ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

**SUNSET VALLEY DRIVE**  
 PLAN AND PROFILE

OWNER AND DEVELOPER  
 C.J. KARFONTA  
 21 CHRYSLER PLACE  
 CATONSVILLE, MD. 21228

SCALE: AS SHOWN DATE: 4/17/81 DWG. NO. 1 OF 4  
 DES.: C.C. DRN.: D.S. CHK.: E.D.C.

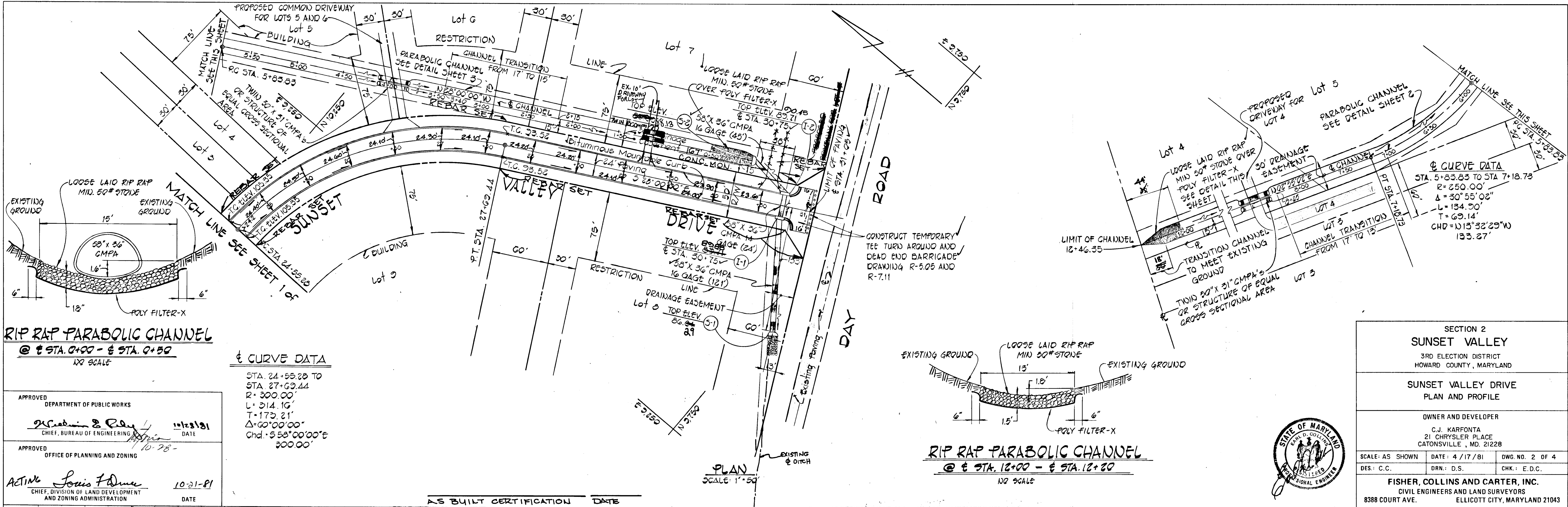
**FISHER, COLLINS AND CARTER, INC.**  
 CIVIL ENGINEERS AND LAND SURVEYORS  
 8388 COURT AVE. ELLICOTT CITY, MARYLAND 21043

2/23/88

AS-BUILT

F-88-115

DATE	
BY	
PLAN	SURVEYED, PLOTTED, ALIGNED, CHECKED, NOTE BOOK NO.



**RIP RAP PARABOLIC CHANNEL**  
 @ STA. 0+00 - @ STA. 0+50  
 NO SCALE

**CURVE DATA**  
 STA. 24+53.88 TO  
 STA. 27+63.44  
 R = 300.00'  
 L = 314.16'  
 T = 173.21'  
 Δ = 60°00'00"  
 Chd = 558'00"00" @ 300.00'

**RIP RAP PARABOLIC CHANNEL**  
 @ STA. 12+00 - @ STA. 12+80  
 NO SCALE

APPROVED DEPARTMENT OF PUBLIC WORKS  
 DEPARTMENT OF PLANNING AND ZONING  
 ACTIVE *Louis F. Adams* CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION  
 DATE 10-21-81

SECTION 2  
**SUNSET VALLEY**  
 3RD ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

**SUNSET VALLEY DRIVE**  
 PLAN AND PROFILE

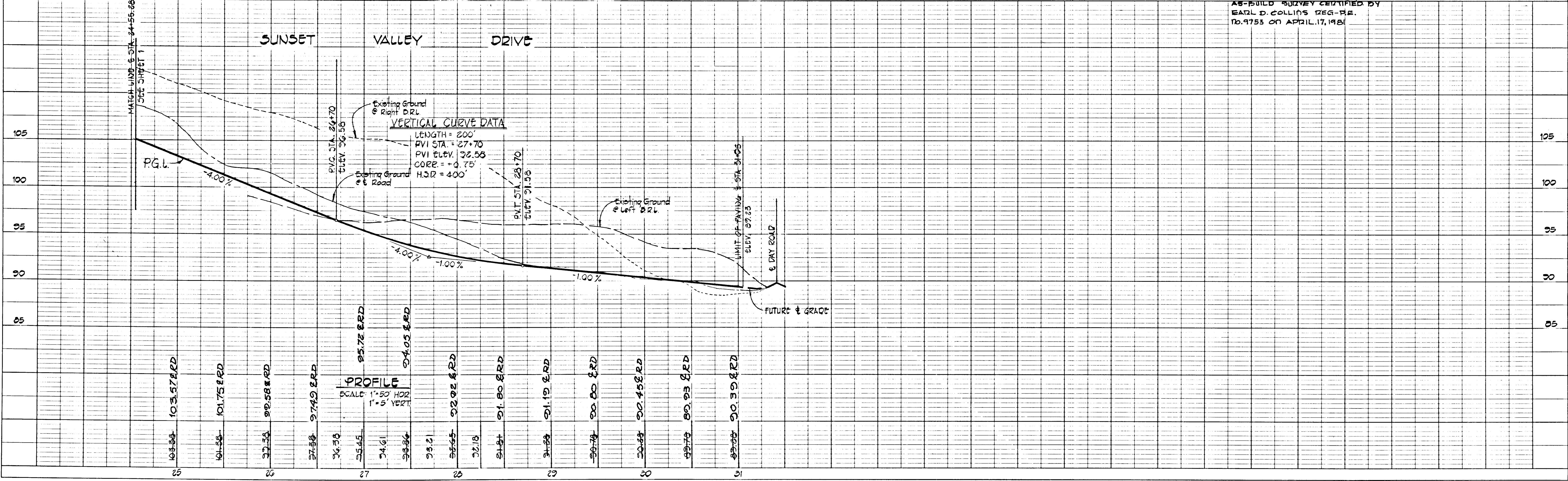
OWNER AND DEVELOPER  
 C.J. KARFONTA  
 21 CHRYSLER PLACE  
 CATONSVILLE, MD. 21228

SCALE: AS SHOWN DATE: 4/17/81 DWG. NO. 2 OF 4  
 DES: C.C. DRN: D.S. CHK: E.D.C.

**FISHER, COLLINS AND CARTER, INC.**  
 CIVIL ENGINEERS AND LAND SURVEYORS  
 8388 COURT AVE. ELLICOTT CITY, MARYLAND 21043



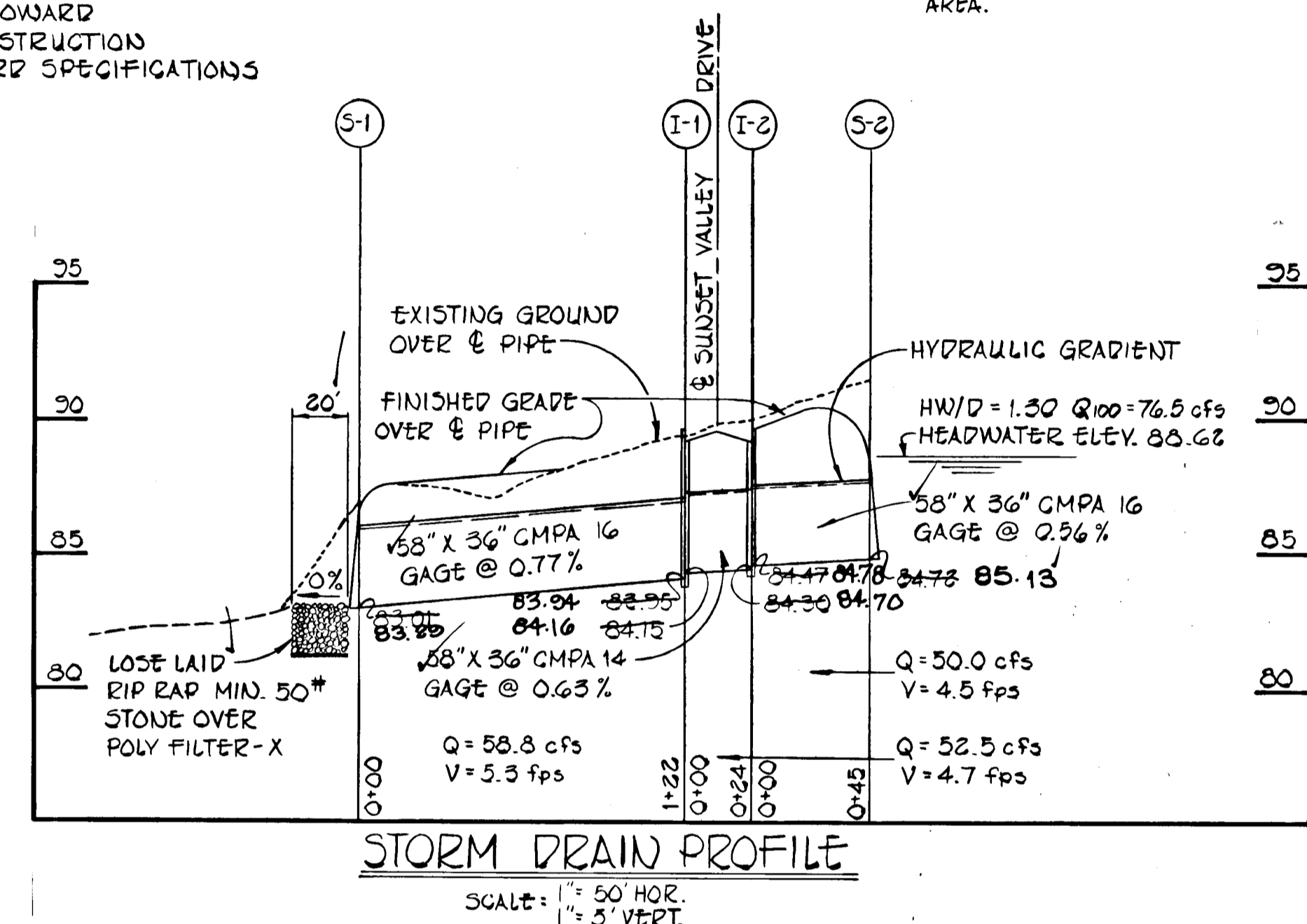
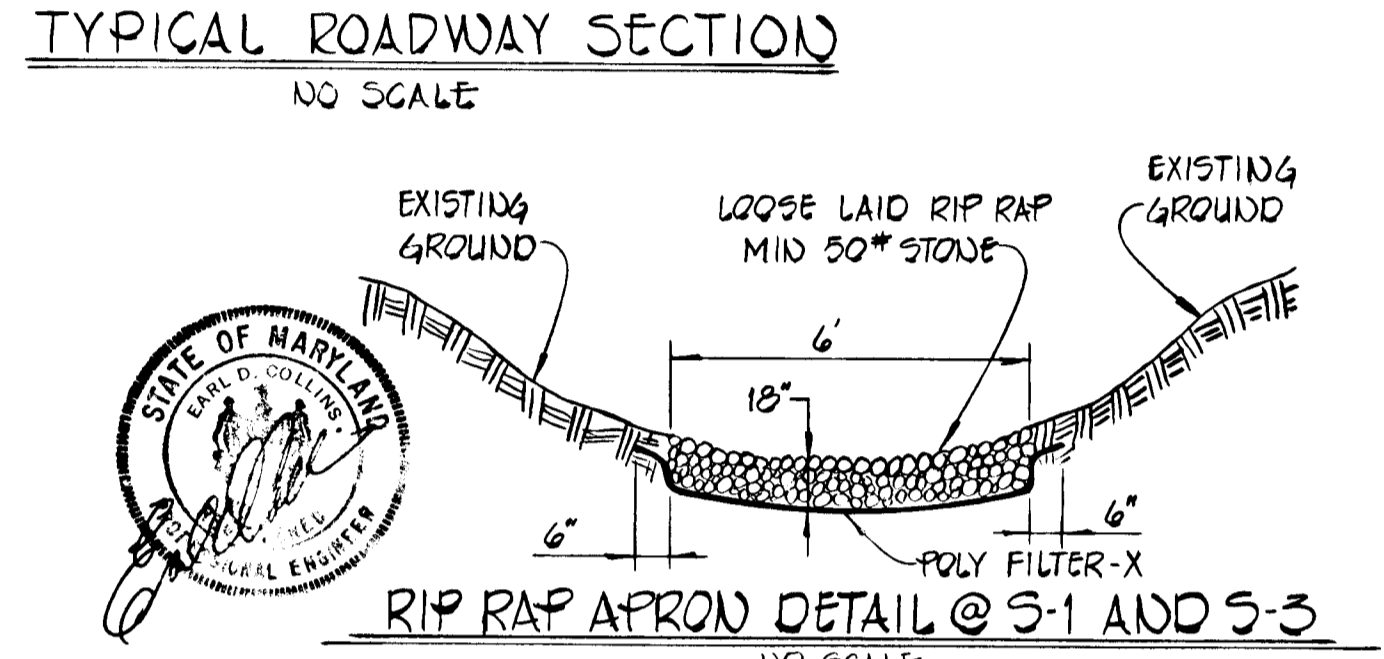
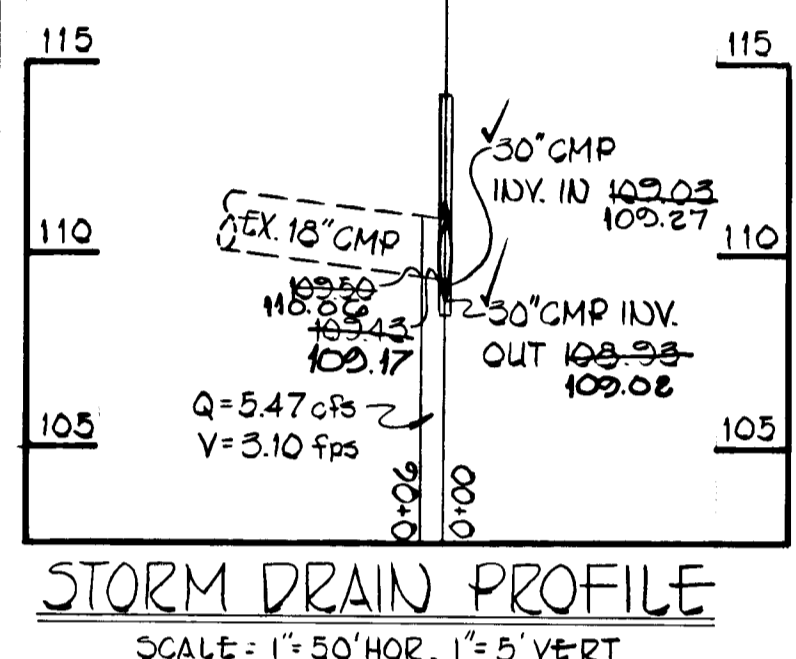
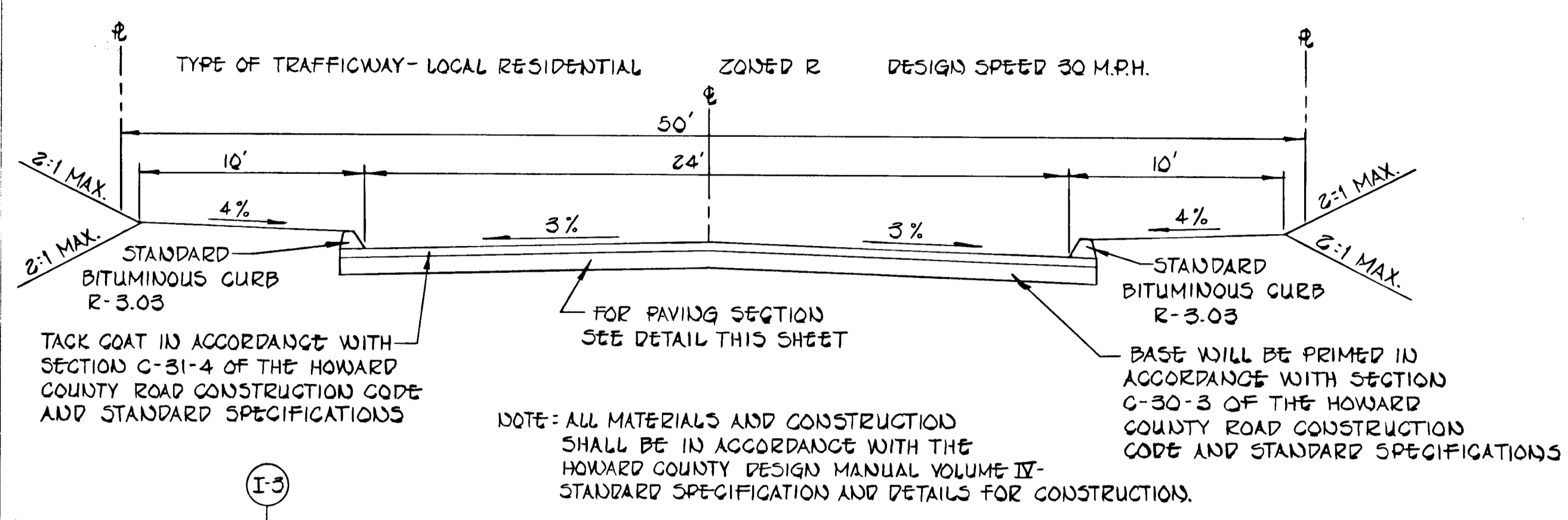
DATE	
BY	
PROFILE	SURVEYED, PLOTTED, GRADES CHECKED, STRUCTURE NOTATIONS CHECKED, NOTE BOOK NO.



**PROFILE**  
 SCALE: 1" = 20' HOR  
 1" = 5' VERT

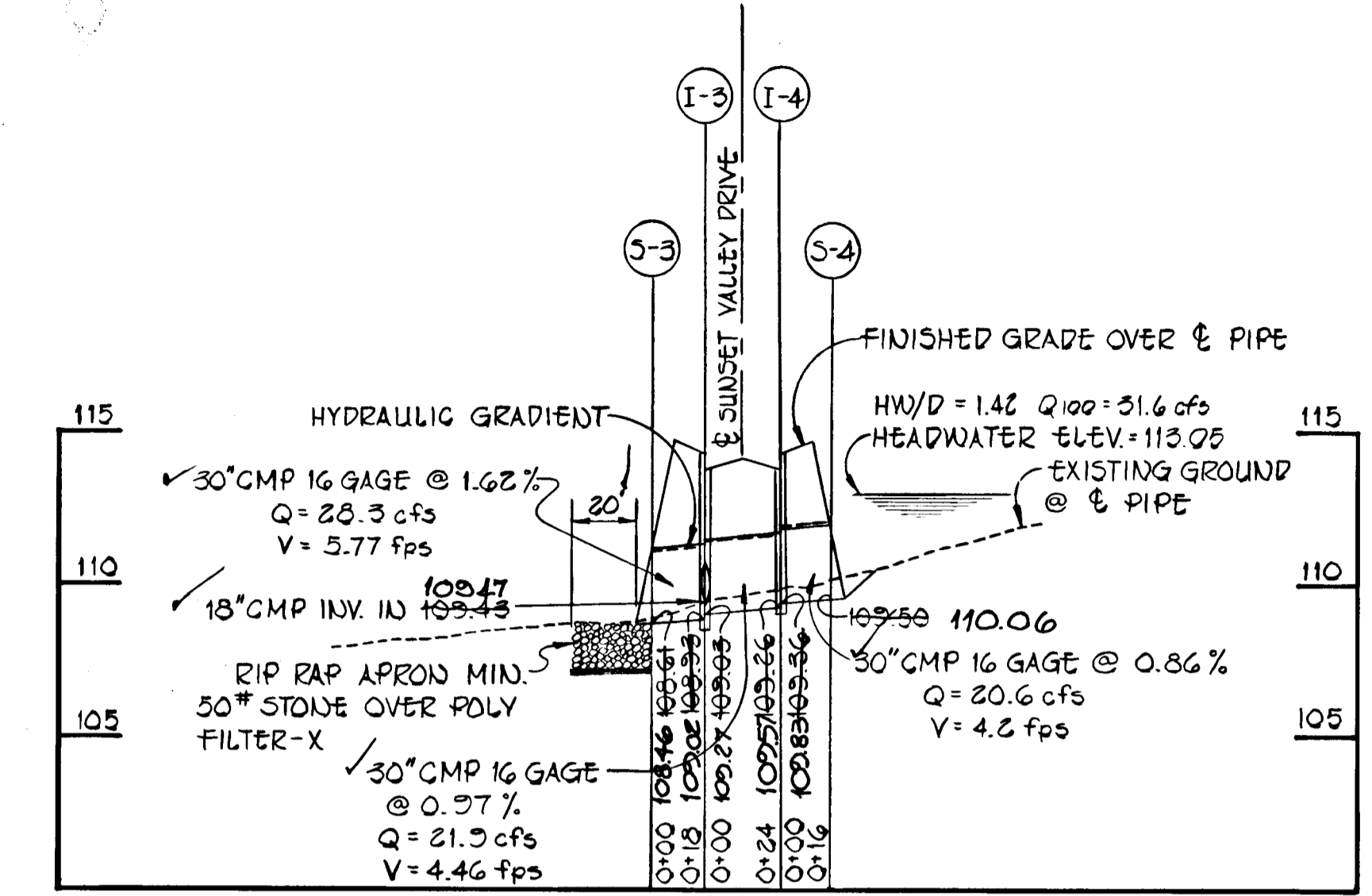
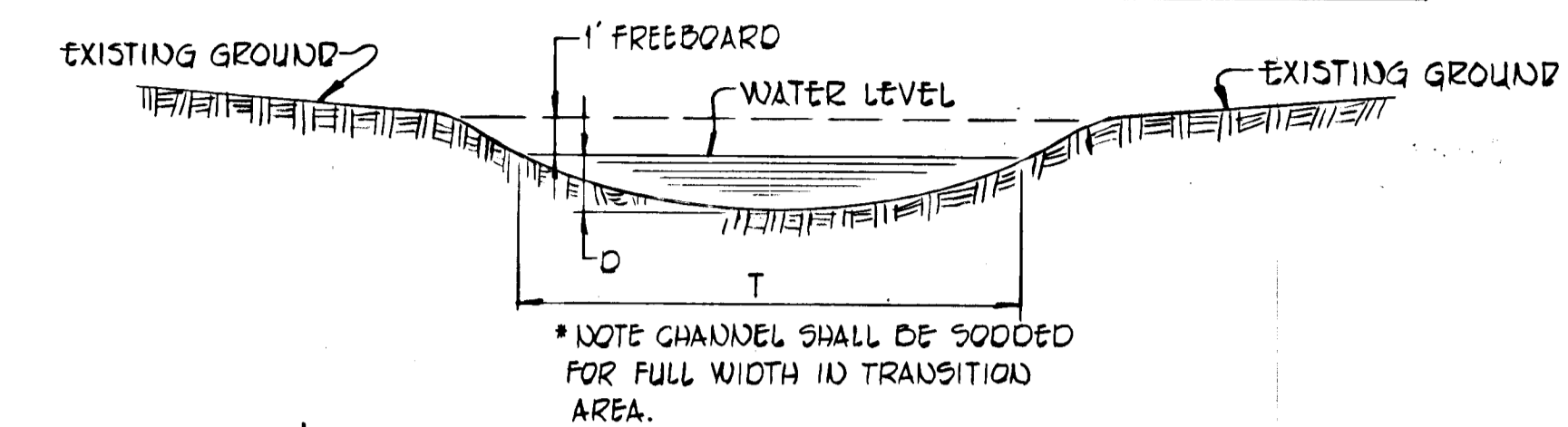
AS-BUILT SURVEY CERTIFIED BY  
 EARL D. COLLINS REG.-P.E.  
 10,975 ON APRIL 17, 1981

#823



PARABOLIC CHANNEL DESIGN DATA

SLOPE	VELOCITY	T	D	Q	% STA
0.75%	3.0 fps	13'	1.8'	50 cfs	2+25 TO 12+20
1.00%	3.5 fps	15'	1.6'	50 cfs	7+52 TO 2+15
1.50%	3.5 fps	17'	1.3'	50 cfs	3+40 TO 7+02



STORM DRAIN PROFILE

APPROVED: *W. R. ...* 10/28/81  
 DEPARTMENT OF PUBLIC WORKS

APPROVED: *Louis ...* 10-21-81  
 OFFICE OF PLANNING AND ZONING

STRUCTURE SCHEDULE

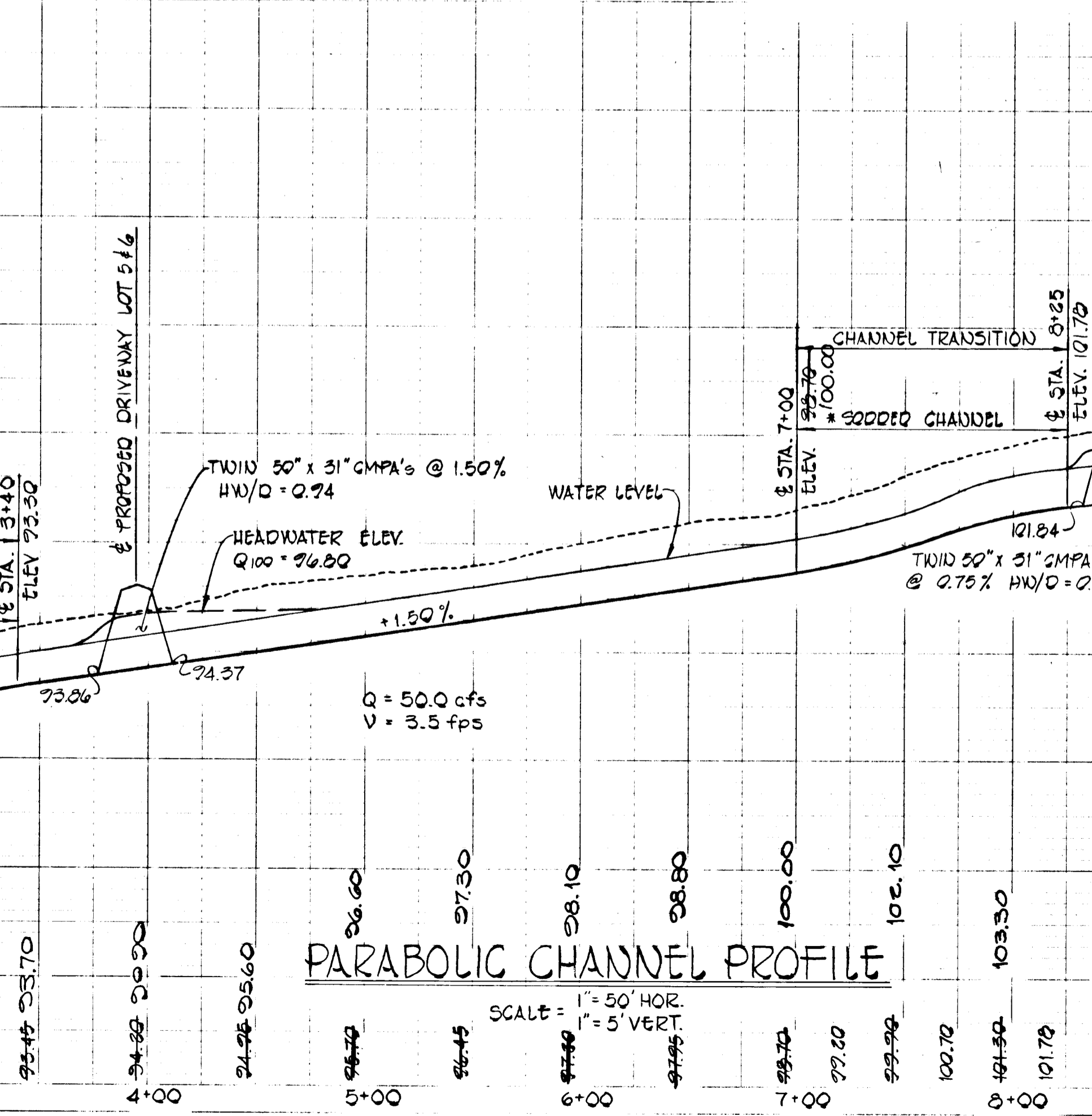
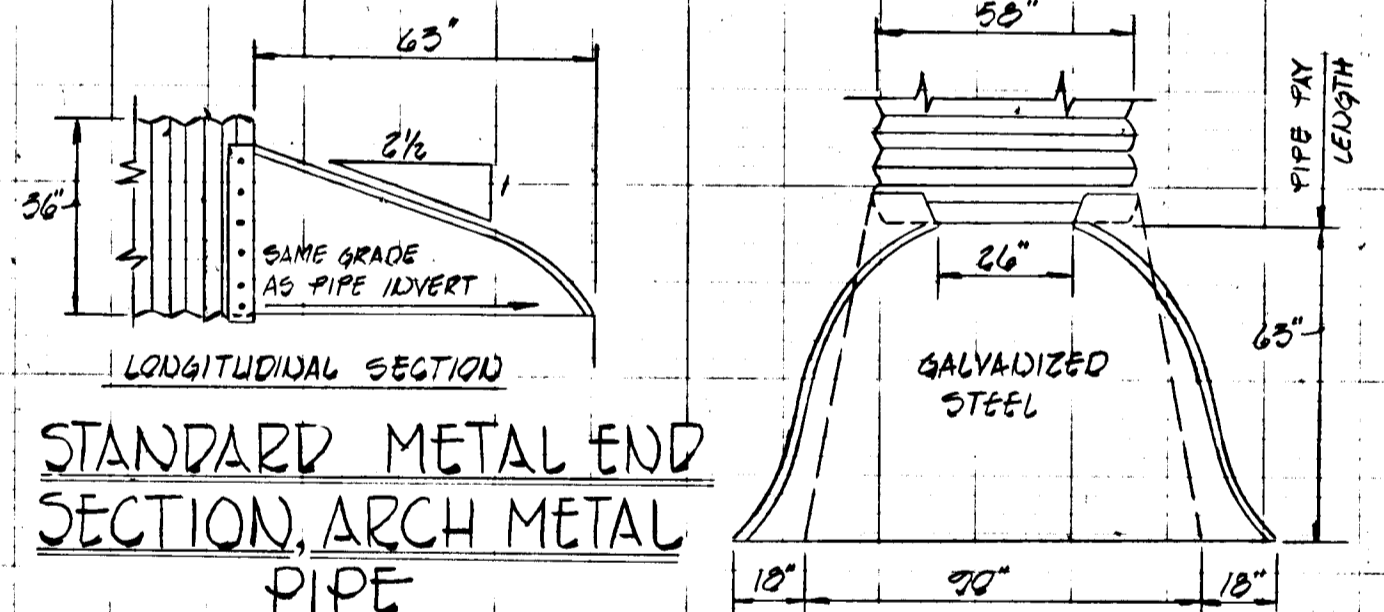
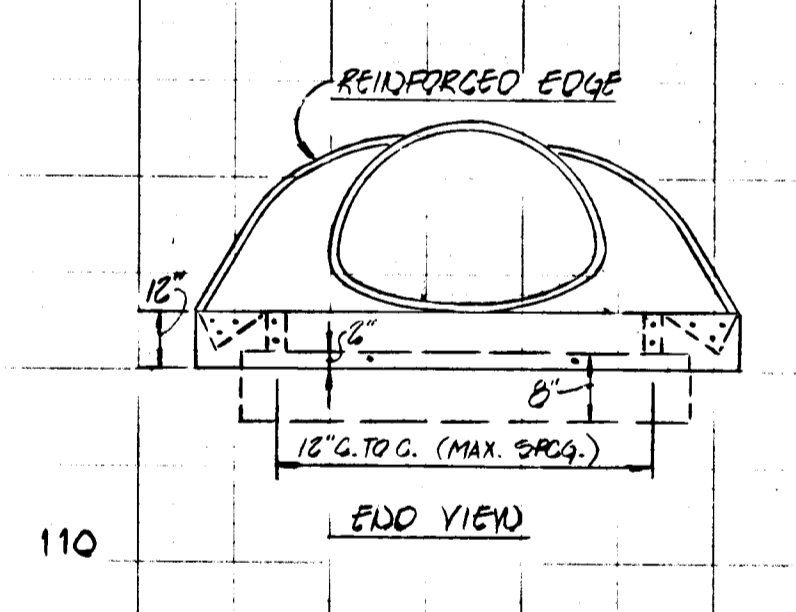
NO.	TYPE	INV. IN	INV. OUT	TOP ELEV.	% STA.	REMARKS
I-1	A-10	84.15	83.35	85.71	30+75	DRAWING SD-4.02
I-2	A-10	84.47	84.30	85.71	30+75	DRAWING SD-4.02
I-3	A-5	109.43	108.23	114.22	18+25	DRAWING SD-4.01
I-4	A-5	109.36	108.26	114.22	18+25	DRAWING SD-4.01
S-1	STR.	-	83.01	86.01	-	SEE DRAWING THIS SHT.
S-2	METAL	84.72	-	87.72	-	SEE DRAWING THIS SHT.
S-3	END	108.61	-	111.11	-	DRAWING SD-5.61
S-4	SECTION	109.50	-	112.00	-	DRAWING SD-5.61

SECTION 2  
 SUNSET VALLEY  
 3RD ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

OWNER AND DEVELOPER  
 C.J. KARFONTA  
 21 CHRYSLER PLACE  
 CATONSVILLE, MD. 21228

SCALE: AS SHOWN DATE: 4/17/81 DWG. NO. 3 OF 4  
 DES: C.C. DRN: A.B. CHK: E.D.C.

FISHER, COLLINS AND CARTER, INC.  
 CIVIL ENGINEERS AND LAND SURVEYORS  
 8388 COURT AVE. ELLICOTT CITY, MARYLAND 21103



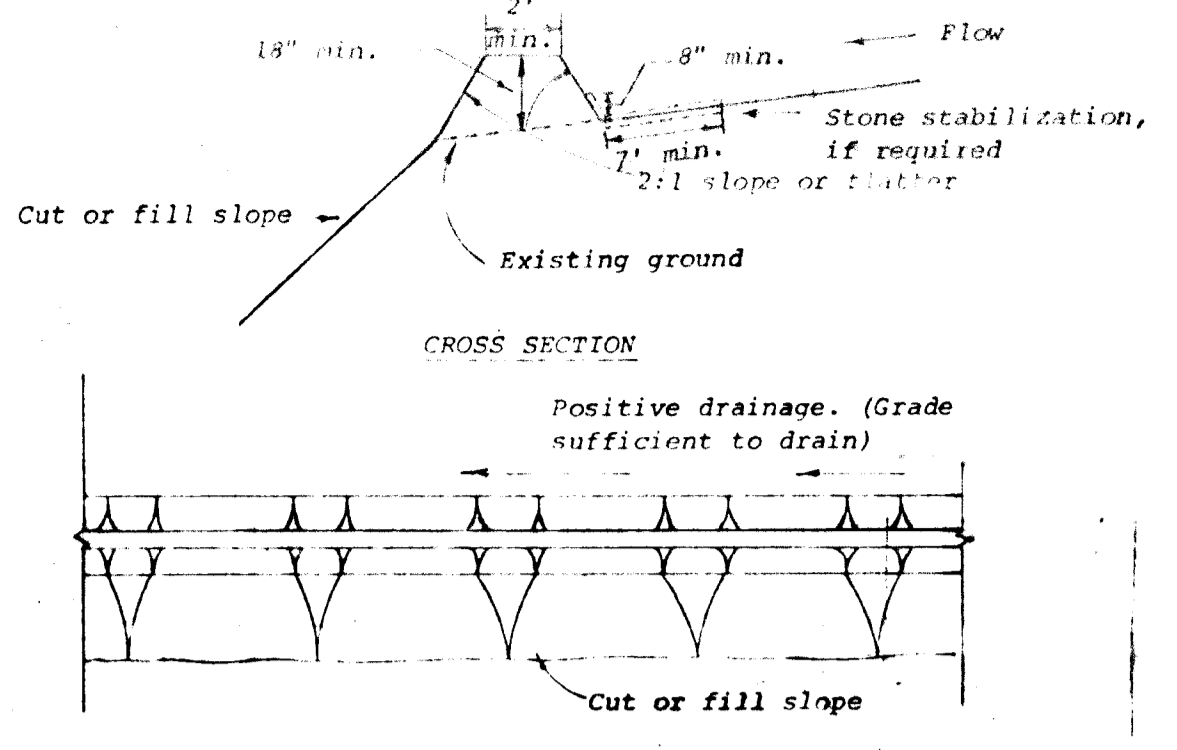
PARABOLIC CHANNEL PROFILE

AS-BUILT SURVEY CERTIFIED BY EARL D. COLLINS DEPT. P.E. No. 9755 ON APRIL 17, 1981

AS-BUILT CERTIFICATION DATE

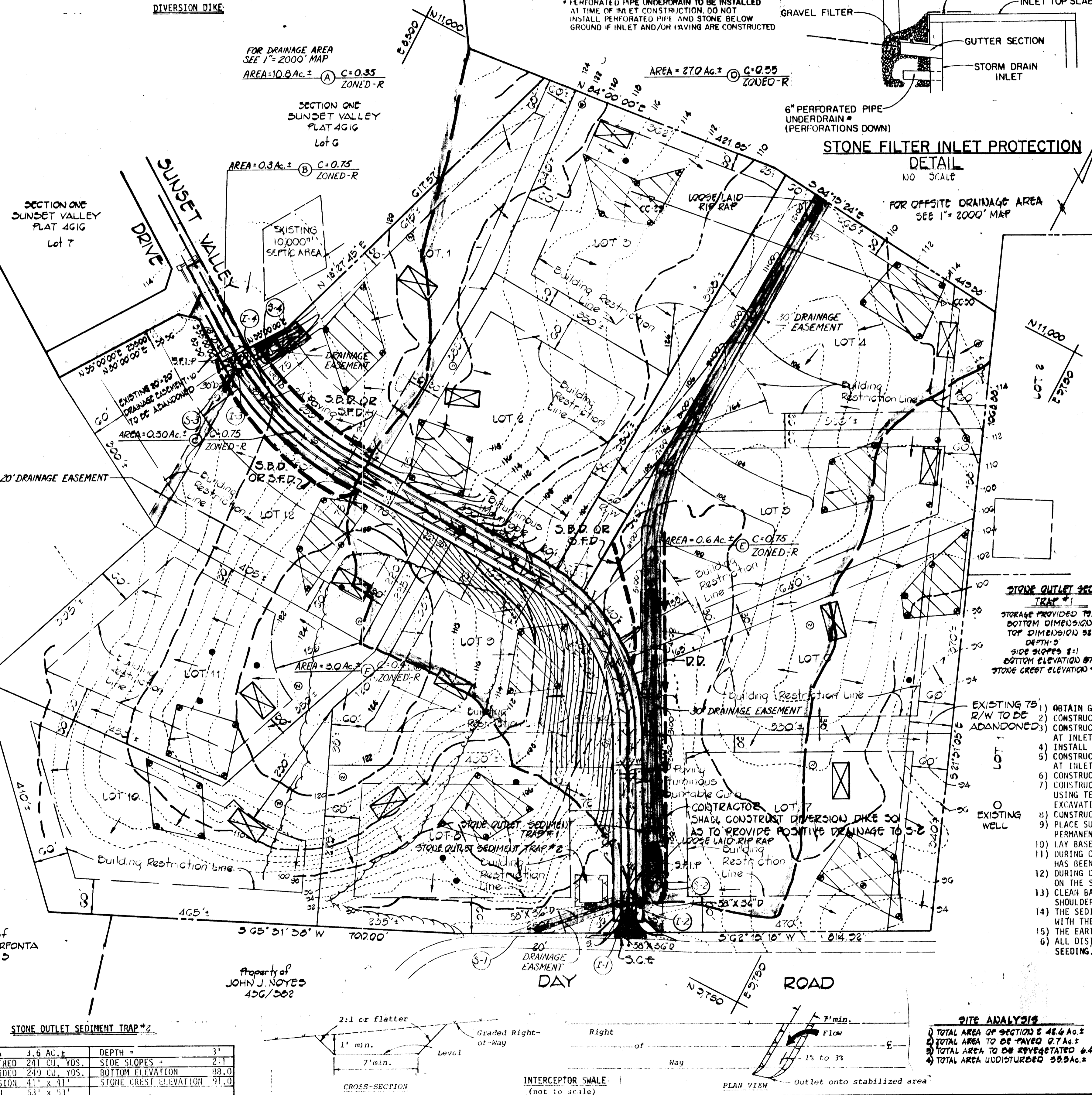
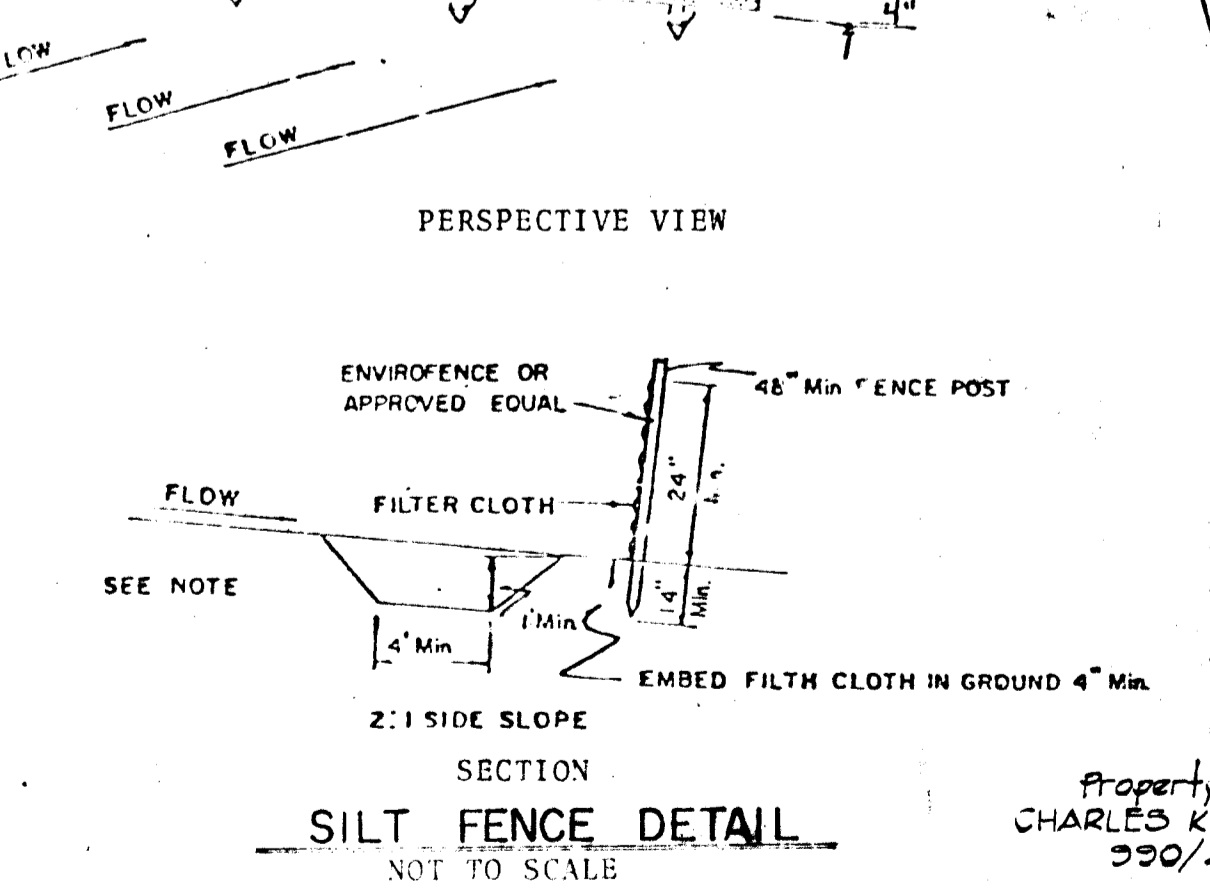
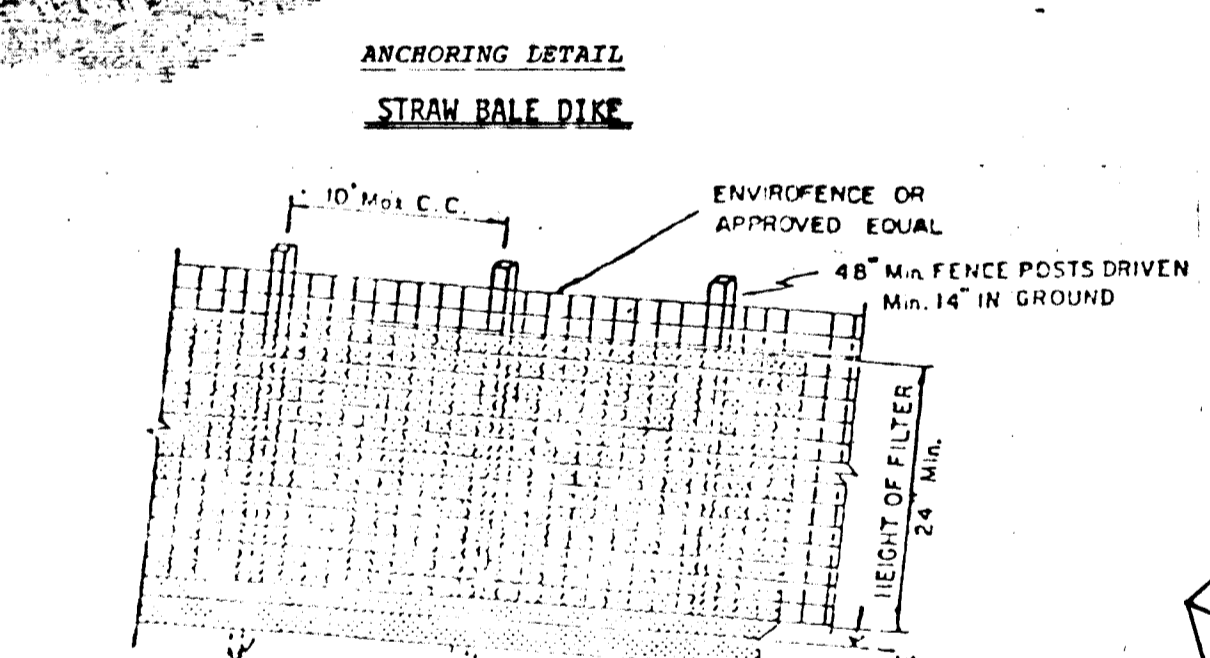
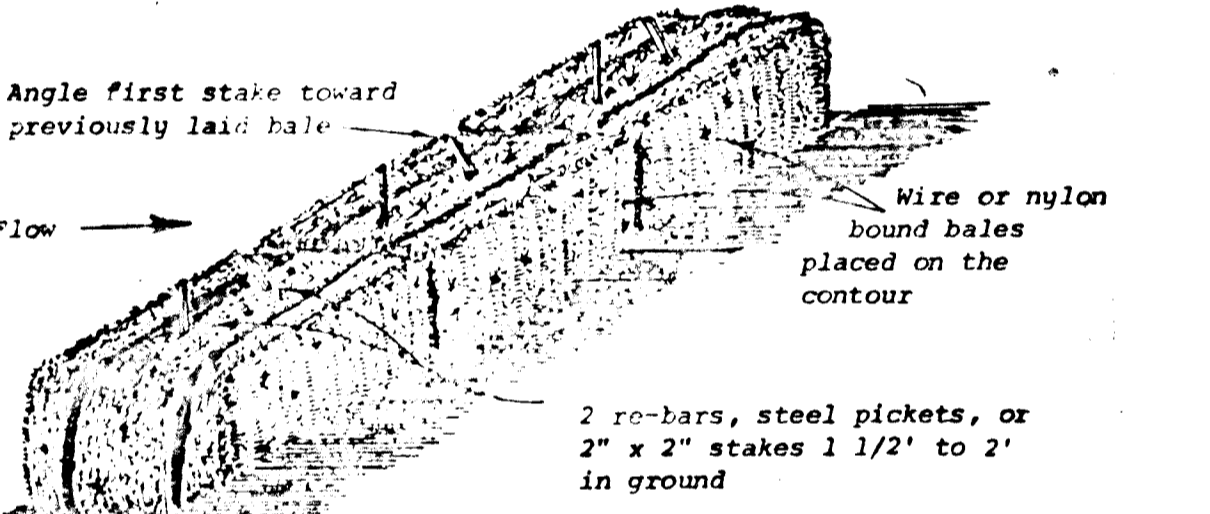
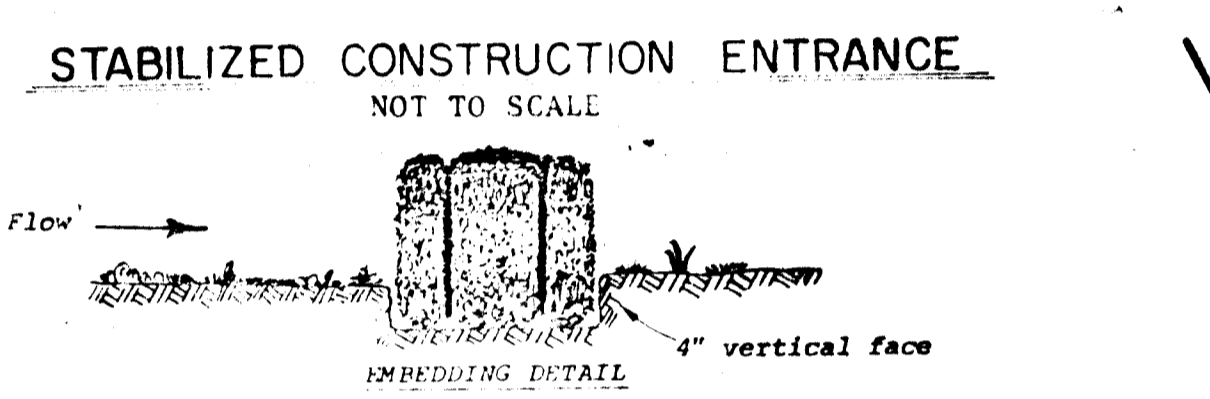
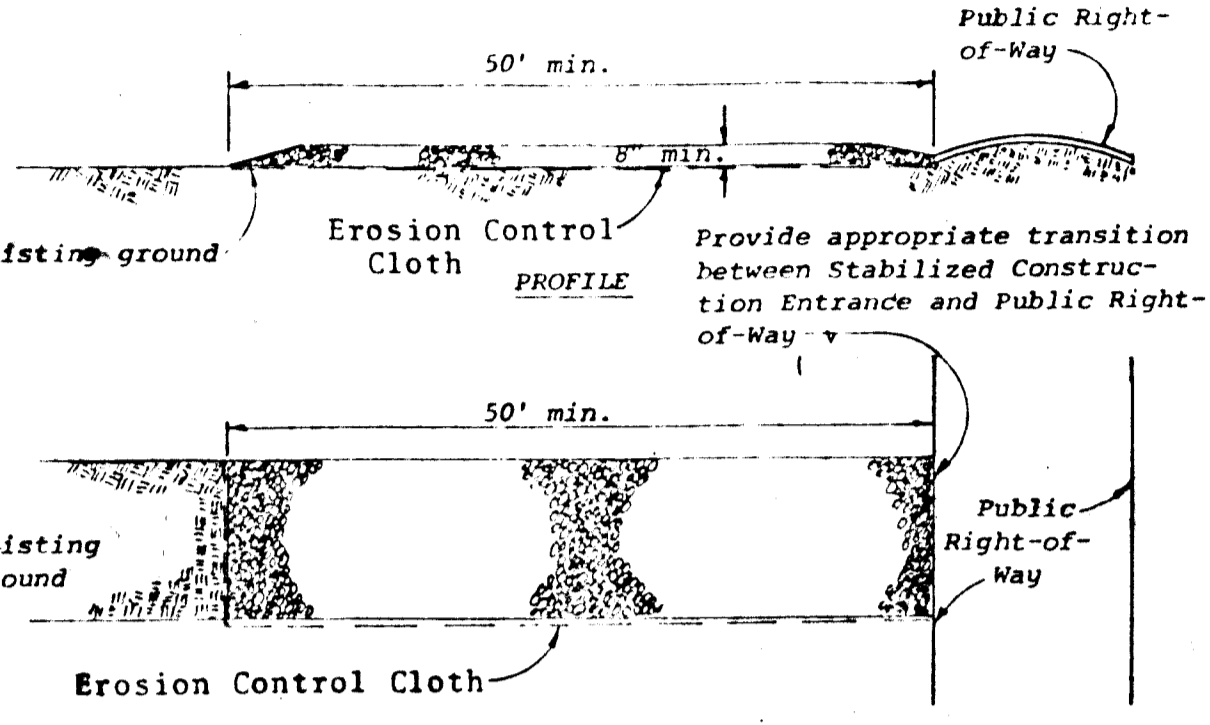
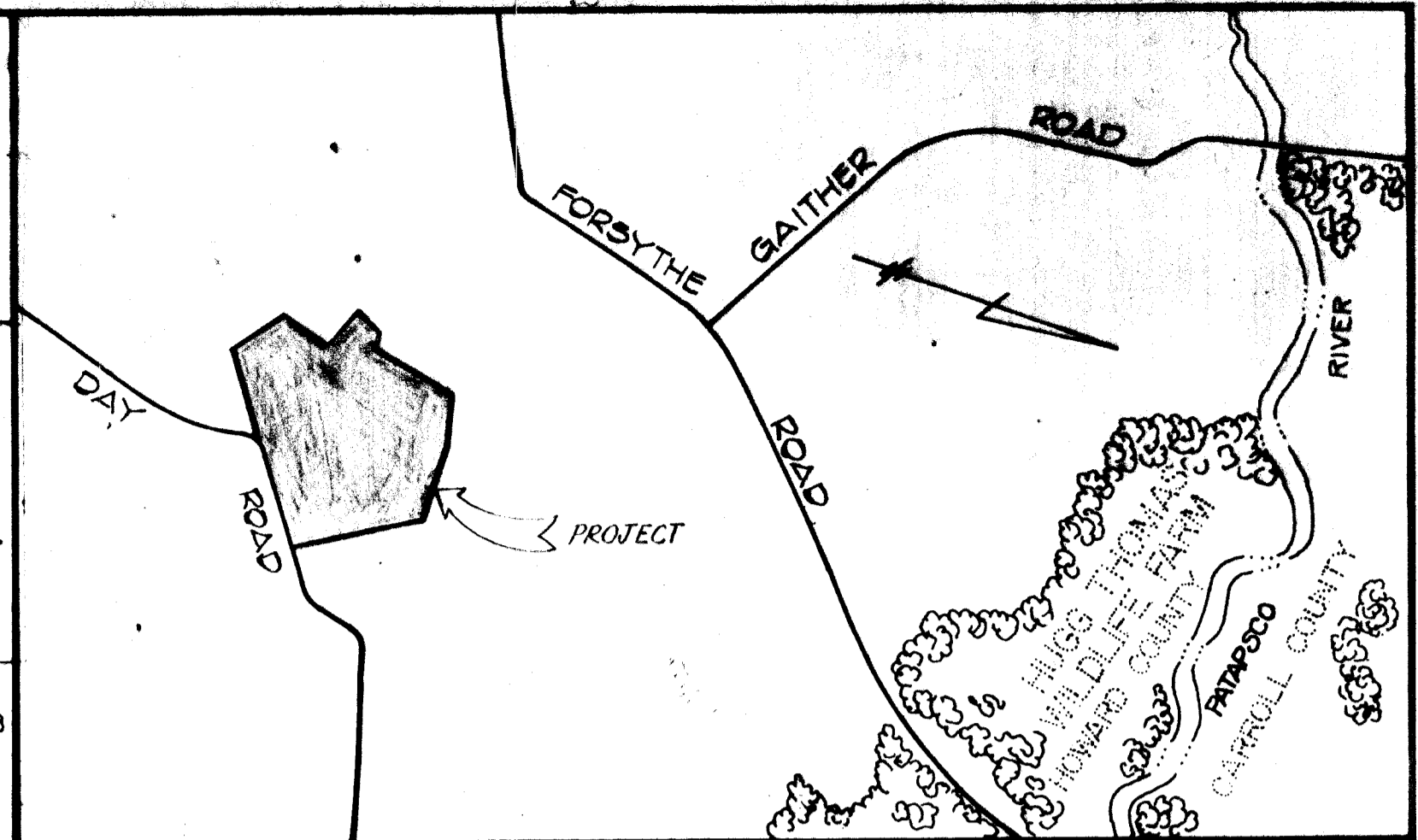
AS-BUILT CERTIFICATION DATE

PERCOLATION TEST DATA		
Lot No.	Average Percolation Time in Minutes for Second Inch	Max. Depth Permitted for Effluent Pipe to Enter Sewage Disposal Area at its Highest Elevation With Reference to Existing Grade at Time of Percolation Test
1	16 MIN	4'
2	11 MIN	4'
3	14 MIN	4'
4	12 MIN	4'
5	10 MIN	4'
6	12 MIN	4'
7	12 MIN	4'
8	19 MIN	4'
9	11 MIN	4'
10	19 MIN	4'
11	10 MIN	4'
12	10 MIN	4'

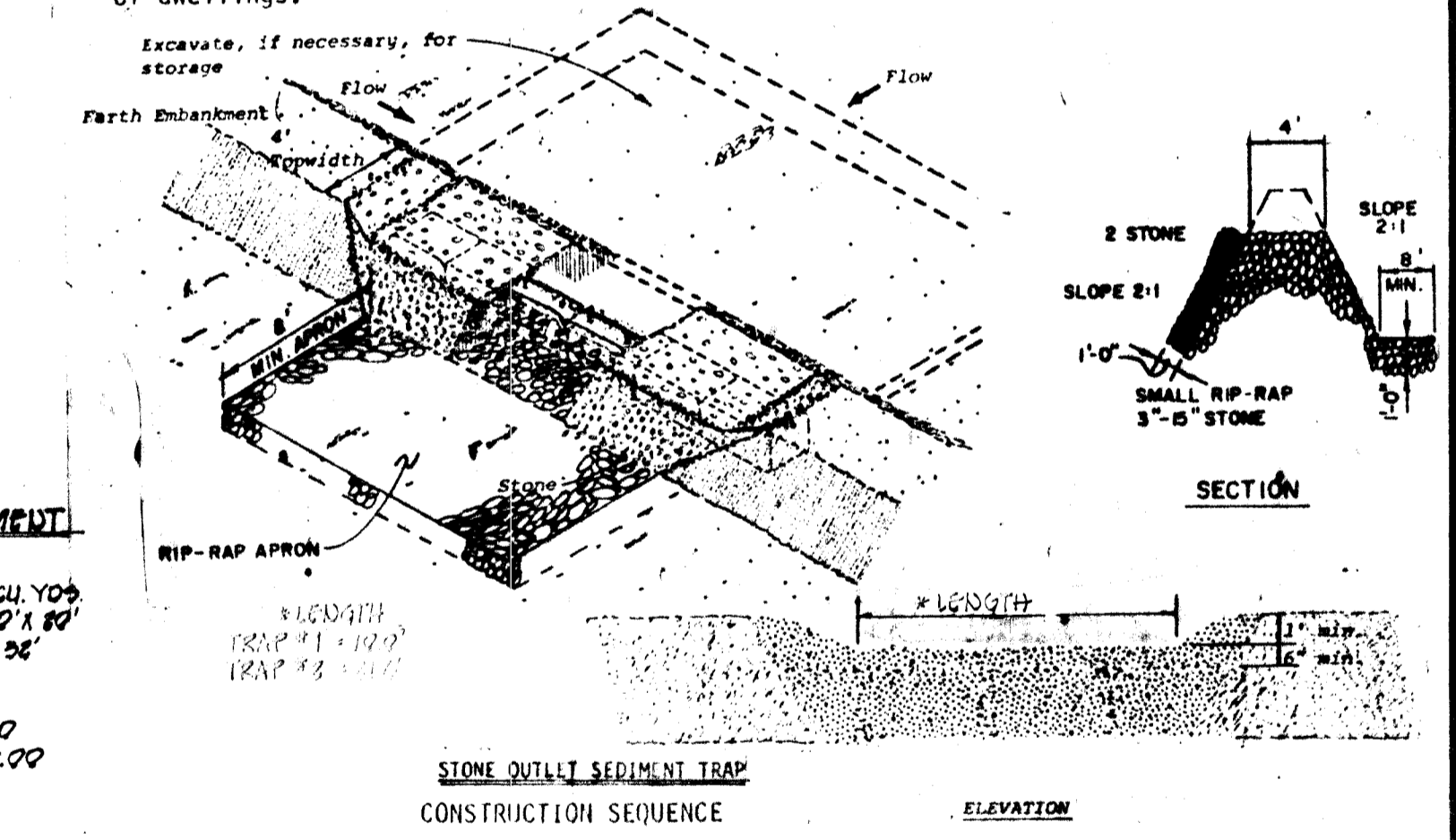


**ENGINEER'S CERTIFICATE**  
 I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.  
 PARL D. COLLINS P.E. REG. NO. 9753 DATE 4/17/81  
 APPROVED: DEPARTMENT OF PUBLIC WORKS  
 CHIEF, BUREAU OF ENGINEERING DATE 4/17/81  
 APPROVED: OFFICE OF PLANNING AND ZONING  
 CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION DATE 4/17/81

**DEVELOPER'S CERTIFICATE**  
 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 PERMITS, CHUTE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.  
 C. J. G. DATE 4/17/81  
 REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS  
 U.S. SOIL CONSERVATION SERVICE DATE  
 THIS DEVELOPMENT PLAN IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.  
 DISTRICT COORDINATOR DATE  
 HOWARD SOIL CONSERVATION DISTRICT



- SEDIMENT CONTROL NOTES**
- Specifications for the Sediment Control Details shown hereon are included in the U.S.D.A. Soil Conservation Service "Standards and Specifications for Soil Erosion and Sediment Control in Developing Areas."
  - The developer shall notify the Howard County Office of Inspection and Permits at least 24 hours prior to beginning any construction shown hereon (992-2433).
  - Sediment control structures to be constructed prior to any on-site grading or disturbance to any existing surface material, and are to be stabilized as soon as constructed.
  - All sediment control structures to remain in place until permission for their removal has been obtained from the Howard County Office of Inspection and Permits. (992-2433).
  - All graded areas not to be sodded shall be stabilized by seeding and mulching in accordance with the following:
    - Site Preparation:
      - Harrow or disc in areas proposed to be seeded the following materials:
        - Pulverized limestone at 2 tons/acre.
        - Commercial fertilizer 10-10-10 at 3/4 tons/acre.
        - Super phosphate at 600 lbs./acre.
      - Seeding:
        - Sow the following seed mixture at the rate of 200 lbs./acre with a mechanical spreader:
          - Temporary: Italian or Perennial Rye Grass
          - Permanent: 40% Marjón Blue Grass, 40% South Dakota Blue Grass and 20% Penn Lawn Creeping Fescue.
        - The seeded area shall then be raked with a York Rake (a minimum of 2 passes) covered and compacted with Cultipacker or other approved method.
      - Mulching:
        - Seeded areas shall be uniformly mulched immediately after seeding with unweathered small grain straw at the rate of 1 1/2-2 tons/acre.
        - Tie mulch down with liquid asphalt at 0.1 gal./sq. y. or emulsified asphalt at 0.04 gal./s.y. or mulch netting.
    - A grading plan must be developed by the builder and approved before beginning construction of dwellings.

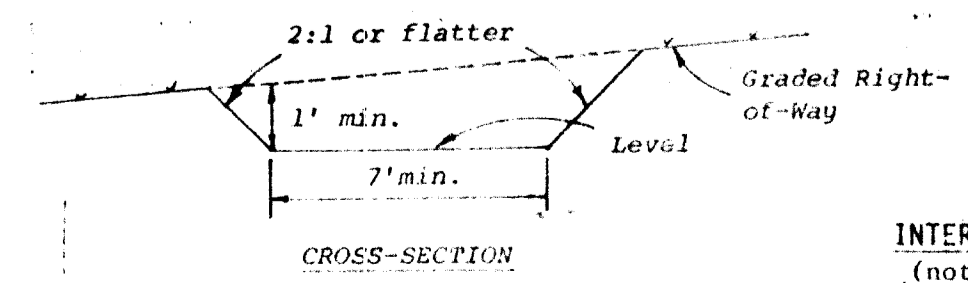


- CONSTRUCTION SEQUENCE**
- OBTAIN GRADING PERMIT.
  - CONSTRUCT STONE CONSTRUCTION ENTRANCE AT DAY ROAD AND SUNSET VALLEY DRIVE.
  - CONSTRUCT STORM DRAIN SYSTEM FROM S-3 TO S-4 AND RIP RAP APRON, INSTALL STONE FILTER INLET PROTECTION DEVICES AT INLETS.
  - INSTALL STRAW BALE DIKES OR SILT FENCE AS SHOWN ON PLAN.
  - CONSTRUCT STORM DRAIN SYSTEM FROM S-1 TO S-2 AND RIP RAP APRON, INSTALL STONE FILTER INLET PROTECTION DEVICES AT INLETS.
  - CONSTRUCT PARABOLIC CHANNEL ACROSS LOTS 4 AND 5 AND STABILIZE USING PERMANENT SEEDING.
  - CONSTRUCT DIVERSION DIKE ON LOTS 5, 6 AND 7 ALONG THE EASTERLY EDGE OF THE 30' DRAINAGE EASEMENT AND STABILIZE USING TEMPORARY SEEDING. MATERIAL USED FOR CONSTRUCTION OF THE DIVERSION DIKE SHALL BE TAKEN FROM THE EXCAVATION OF THE PARABOLIC CHANNEL.
  - CONSTRUCT STONE OUTLET SEDIMENT TRAP.
  - PLACE SUNSET VALLEY DRIVE TO SUBGRADE AND STABILIZE SLOPE AREAS BETWEEN EXISTING GROUND AND BACK OF CURB USING PERMANENT SEEDING.
  - LAY BASE COURSE.
  - DURING CONSTRUCTION, SEDIMENT SHALL BE REMOVED FROM THE STONE OUTLET SEDIMENT TRAP WHEN THE CLEANOUT ELEVATION HAS BEEN REACHED.
  - DURING CONSTRUCTION AND AFTER EACH RAINFALL, THE CONTRACTOR SHALL INSPECT AND PROVIDE NECESSARY MAINTENANCE ON THE SEDIMENT AND EROSION CONTROL STRUCTURES SHOWN HEREON.
  - CLEAR BASE COURSE, APPLY TACK COAT TO BASE COURSE, LAY SURFACE COURSE AND BITUMINOUS CURB AND STABILIZE SHOULDERS.
  - THE SEDIMENT FROM THE TRAP AND STRAW BALE DIKES SHALL BE SPREAD ON LOTS 4 AND 5 AND STABILIZED IN ACCORDANCE WITH THE PERMANENT SEEDING SPECIFICATIONS IN THE SEDIMENT CONTROL NOTES.
  - THE EARTH FROM THE DIVERSION DIKE SHALL BE SPREAD ON LOT 5 AND STABILIZED WITH PERMANENT SEEDING.
  - ALL DISTURBED AREAS DUE TO REMOVAL OF SEDIMENT CONTROL MEASURES SHALL BE GRADED AND STABILIZED BY PERMANENT SEEDING.

**SUNSET VALLEY SECTION TWO**  
 3rd. ELECTION DISTRICT HOWARD COUNTY MD.  
 TAX MAP 9 PARCEL 36  
 APRIL 17, 1981 SHEET 4 OF 4 SCALE: 1" = 100'

FISHER COLLINS AND CARTER, INC.  
 CONSULTING ENGINEERS AND LAND SURVEYORS  
 8380 COURT AVENUE  
 ELLICOTT CITY, MARYLAND 21043

DRAINAGE AREA	J.6 AC.±	DEPTH =	3'
STORAGE REQUIRED	241 CU. YDS.	SIDE SLOPES =	2:1
STORAGE PROVIDED	249 CU. YDS.	BOTTOM ELEVATION	88.0
BOTTOM DIMENSION	41' x 41'	STONE CREST ELEVATION	91.0
TOP DIMENSION	51' x 51'		



**SITE ANALYSIS**  
 1) TOTAL AREA OF SECTION 2 48.6 AC.±  
 2) TOTAL AREA TO BE PAVED 0.7 AC.±  
 3) TOTAL AREA TO BE VEGETATED 6.4 AC.±  
 4) TOTAL AREA UNDISTURBED 39.5 AC.±