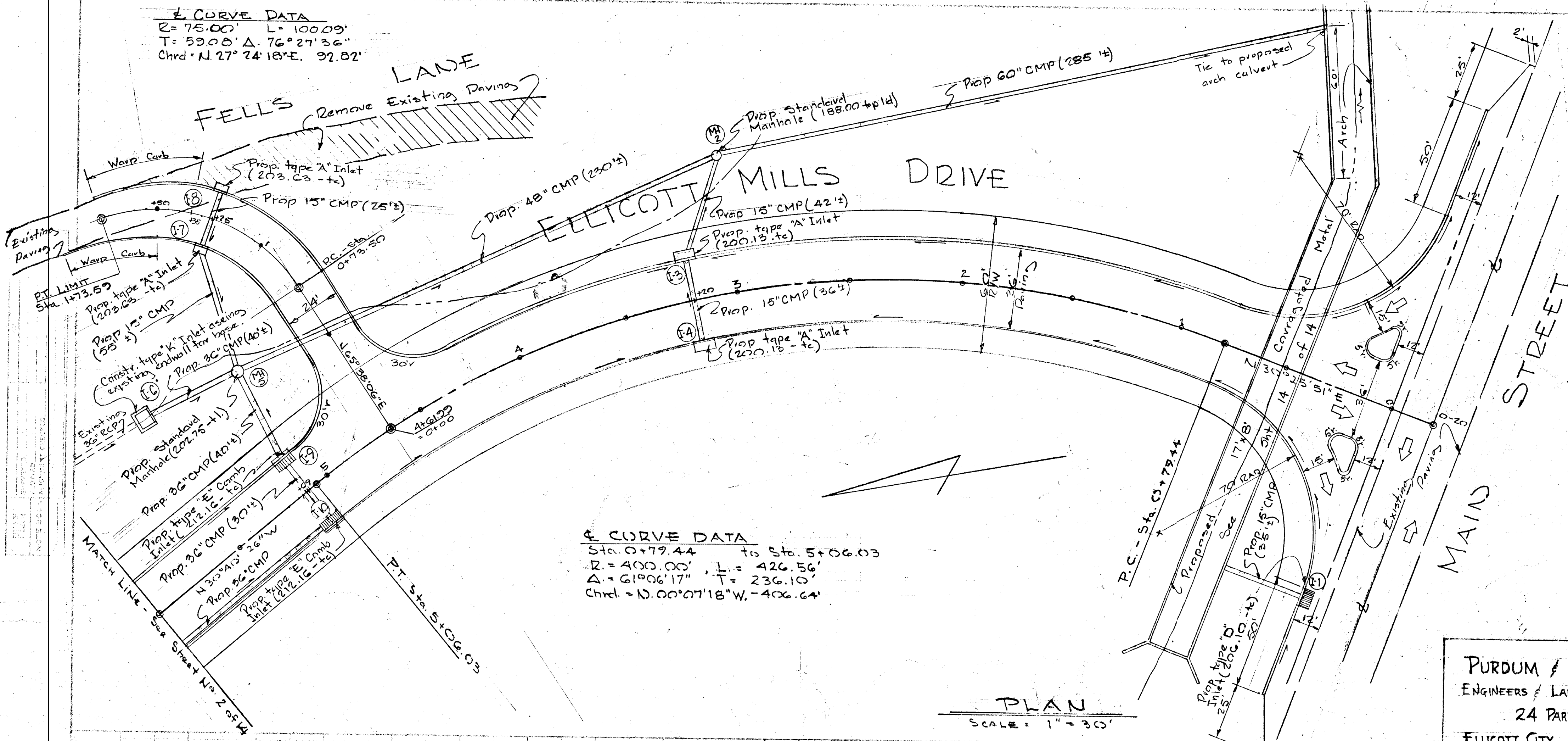


**Curve Data**  
 R = 75.00' L = 100.00'  
 T = 59.00' Δ = 76° 27' 36"  
 Chrd = N 27° 24' 18" E. 97.82'



**Curve Data**  
 Sta. 0+79.44 to Sta. 5+06.03  
 R = 400.00' L = 426.56'  
 Δ = 61° 06' 17" T = 236.10'  
 Chrd = N 00° 07' 18" W. 406.64'

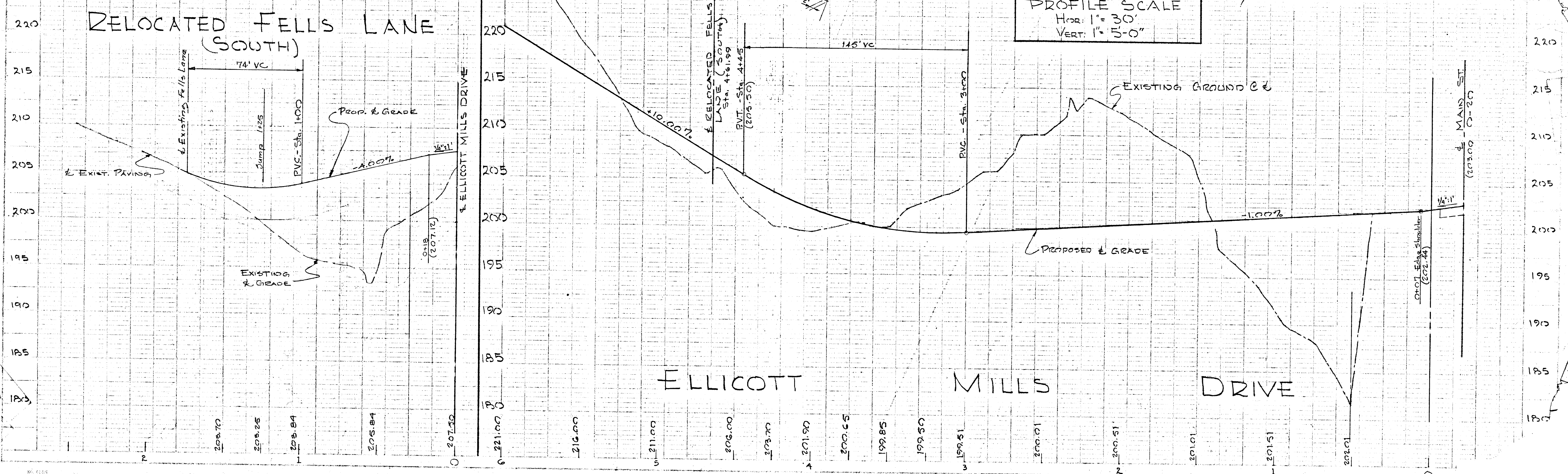
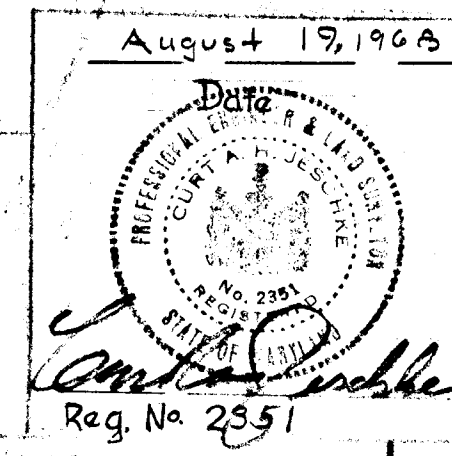
**PLAN**  
 SCALE: 1" = 30'

- GENERAL NOTES**
- 1) For details of "type D" Inlet, see drawing 65, page 120, of the Howard County Road Code and Standard Specifications.
  - 2) For details of Standard type MI, see drawing 103, page 158, of the above mention spec.
  - 3) For details of "type K" Inlet, see drawing 93, page 148, of the above mention spec.
  - 4) For details of type "E" Comb. Inlet, see drawing 68, page 123, of the above mention spec.
  - 5) For details of Bit. Curb, see drawing 39, page 94, of the above mention spec.
  - 6) For details of type Dble. S Inlet, see drawing 98, page 153, of the above mention spec.
  - 7) For details of type "G" endwall, see drawing 61, page 116, of the above mention spec.
  - 8) For details of type "C" endwall, see drawing 52, page 107, of the above mention spec.
  - 9) For details of type "E" Inlet, see drawing 67, page 122, of the above mention spec.
  - 10) For details of type "A" Inlet, see attached sheet.
  - 11) For details of type Dble. "E" Comb. Inlet, see attached sheet.
  - 12) For details of type Dble. "E" Inlet, see attached sheet (without curb head piece).
  - 13) For details of special drop - see detail sheet 4 of 14.
  - 14) For detail of Combination Concrete Curb & Gutter. See drawing D-40, page 35, of the above mentioned spec. Reverse cross-slope of gutter pan as directed by the Engineer in the field.
  - 15) All parking bays shall be 20' deep minimum; all spaces shall be 10' wide, and all access aisles shall be a minimum of 24' in width.
  - 16) The designation C.M.P. as shown herein shall refer to either Corrugated Steel or Aluminum Pipe.

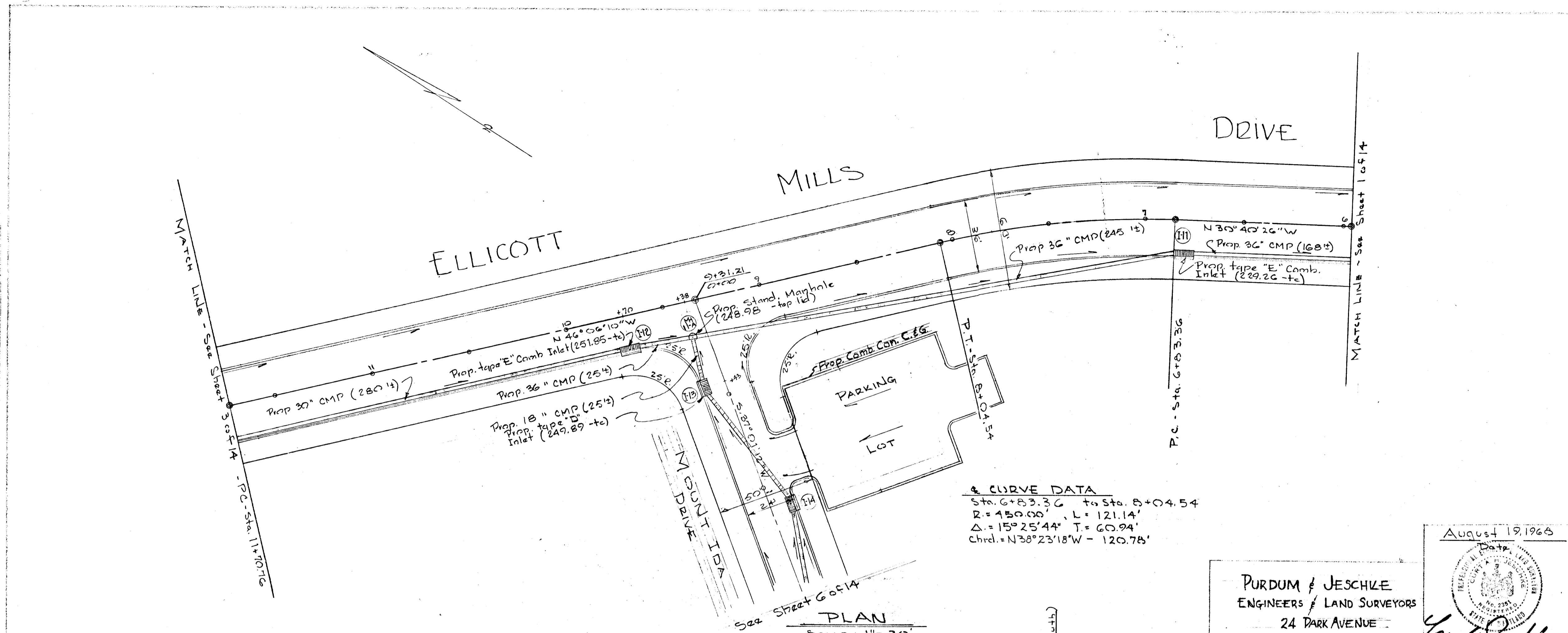
APPROVED: HOWARD COUNTY PLANNING COMM.  
*J.H. Clawson*  
 Chief Engineer Date 2-20-69  
 APPROVED: HOWARD COUNTY METROPOLITAN COMM.  
 As To Public Water & Public Sewer  
*[Signature]*  
 Chief Engineer Date 2-20-69

**PLAN AND PROFILE SHOWING**  
**PROPOSED**  
**FELLS LANE URBAN RENEWAL PROJECT**  
**ELLICOTT MILLS DRIVE**  
 SECOND ELECTION DISTRICT - HOWARD COUNTY, MD.  
 SEPT. 27, 1968 - SCALE: AS SHOWN  
 (Fells Lane Loc-11-6-68) SHEET No. 1 of 14  
 APPROVED: HOWARD COUNTY ROADS DEPARTMENT  
*J.P. McKeand*  
 ROADS SUPERINTENDENT DATE 2-11-69

**PURDUM & JESCHKE**  
 ENGINEERS & LAND SURVEYORS  
 24 PARK AVENUE  
 ELLICOTT CITY, MARYLAND



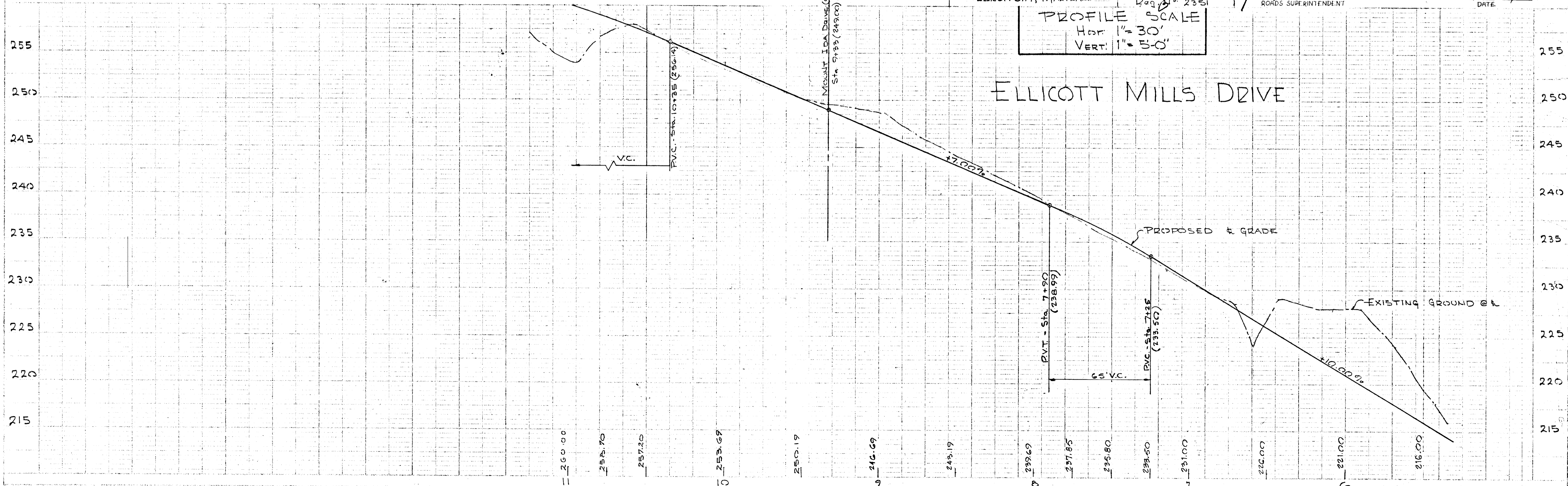
**PROFILE SCALE**  
 HOR: 1" = 30'  
 VERT: 1" = 5'-0"



**CURVE DATA**  
 Sta. 6+83.36 to Sta. 8+04.54  
 R = 150.00', L = 121.14'  
 Δ = 15° 25' 44" T = 60.94'  
 Chrd. = N 38° 23' 18" W - 120.78'

August 19, 1968  
 PURDUM & JESCHKE  
 ENGINEERS & LAND SURVEYORS  
 24 PARK AVENUE  
 ELICOTT CITY, MARYLAND  
 Seal: Cambridge

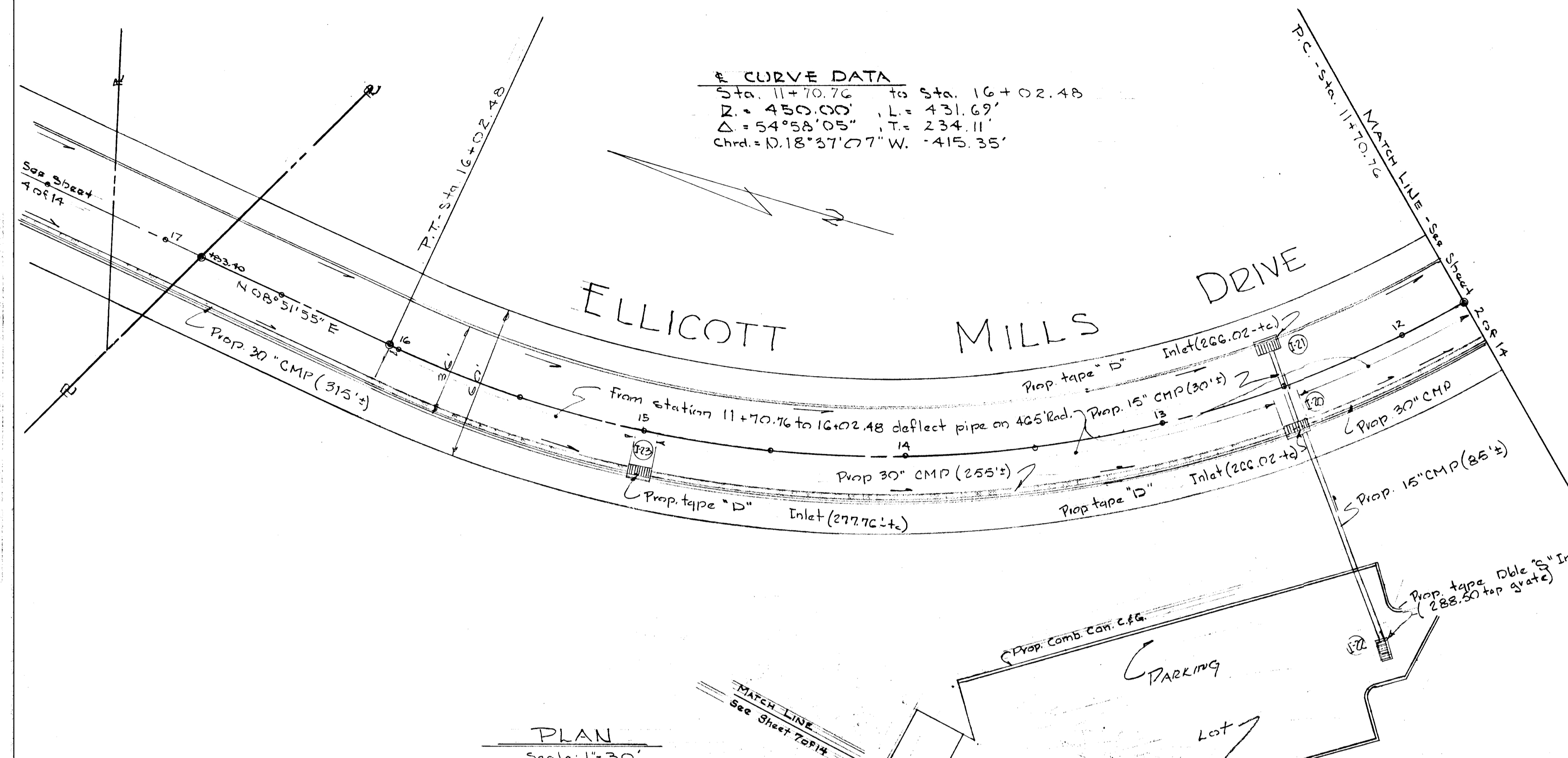
APPROVED: HOWARD COUNTY PLANNING COMM. 2-20-69  
 Chief Engineer  
 APPROVED: HOWARD COUNTY METROPOLITAN COMM. AS TO PUBLIC WATER & PUBLIC SEWER 2-20-69  
 Chief Engineer  
 PLAN AND PROFILE  
 SHOWING  
 FELL'S LANE URBAN RENEWAL PROJECT  
 PROPOSED  
**ELICOTT MILLS DRIVE**  
 SECOND ELECTION DISTRICT - HOWARD COUNTY, MARYLAND  
 SEPT. 27, 1968 SHEET No. 2 of 14 SCALE: AS SHOWN  
 APPROVED: HOWARD COUNTY ROADS DEPARTMENT 2-11-69  
 Roads Superintendent DATE



#193

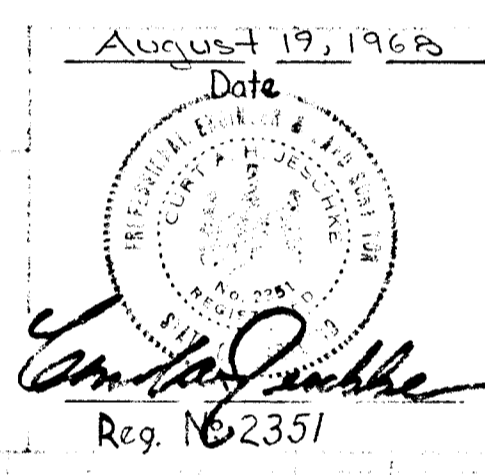
F 68-92

**Curve Data**  
 Sta. 11+70.76 to Sta. 16+02.48  
 R = 450.00' L = 431.69'  
 Δ = 54°58'05" T = 234.11'  
 Chrd. = 10.18°37'07" W. 415.35'

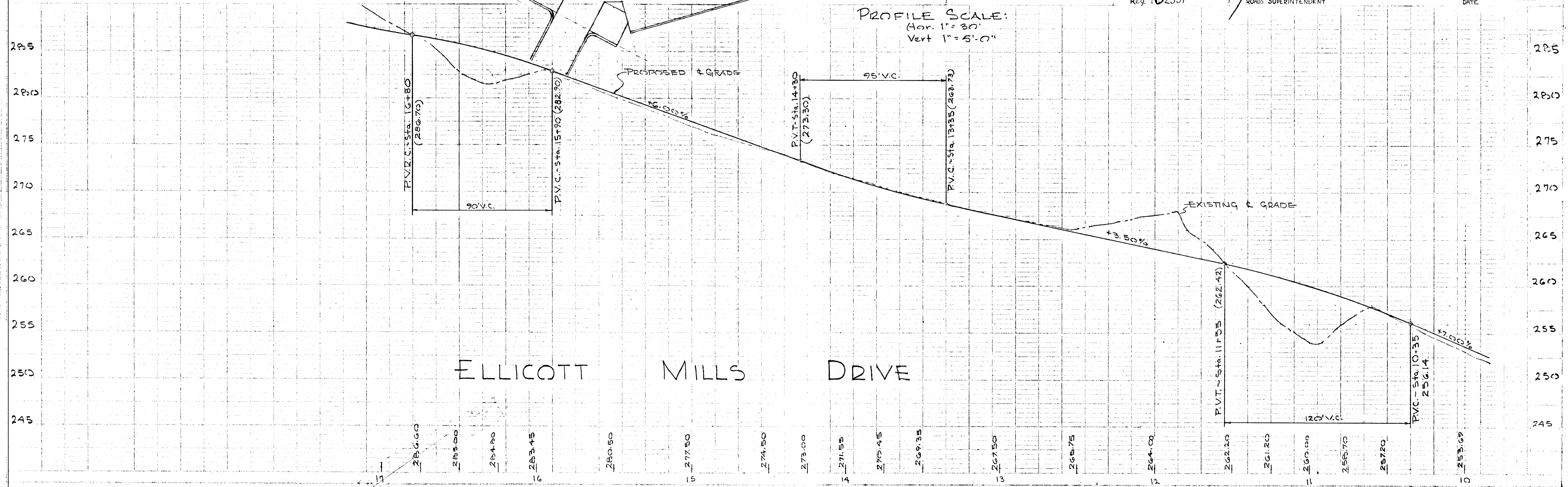


PLAN  
Scale: 1" = 30'

PURDUM & JESCHKE  
 ENGINEERS & LAND SURVEYORS  
 24 PARK AVENUE  
 ELLICOTT CITY MARYLAND



PROFILE SCALE:  
 Hor. 1" = 30'  
 Vert 1" = 5' 0"

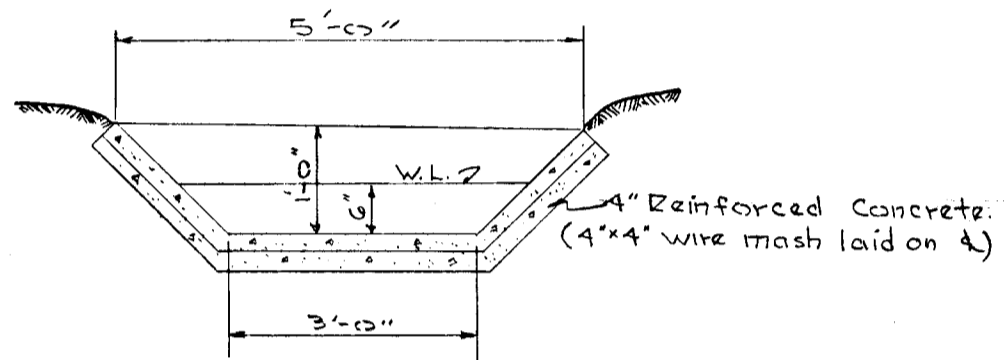
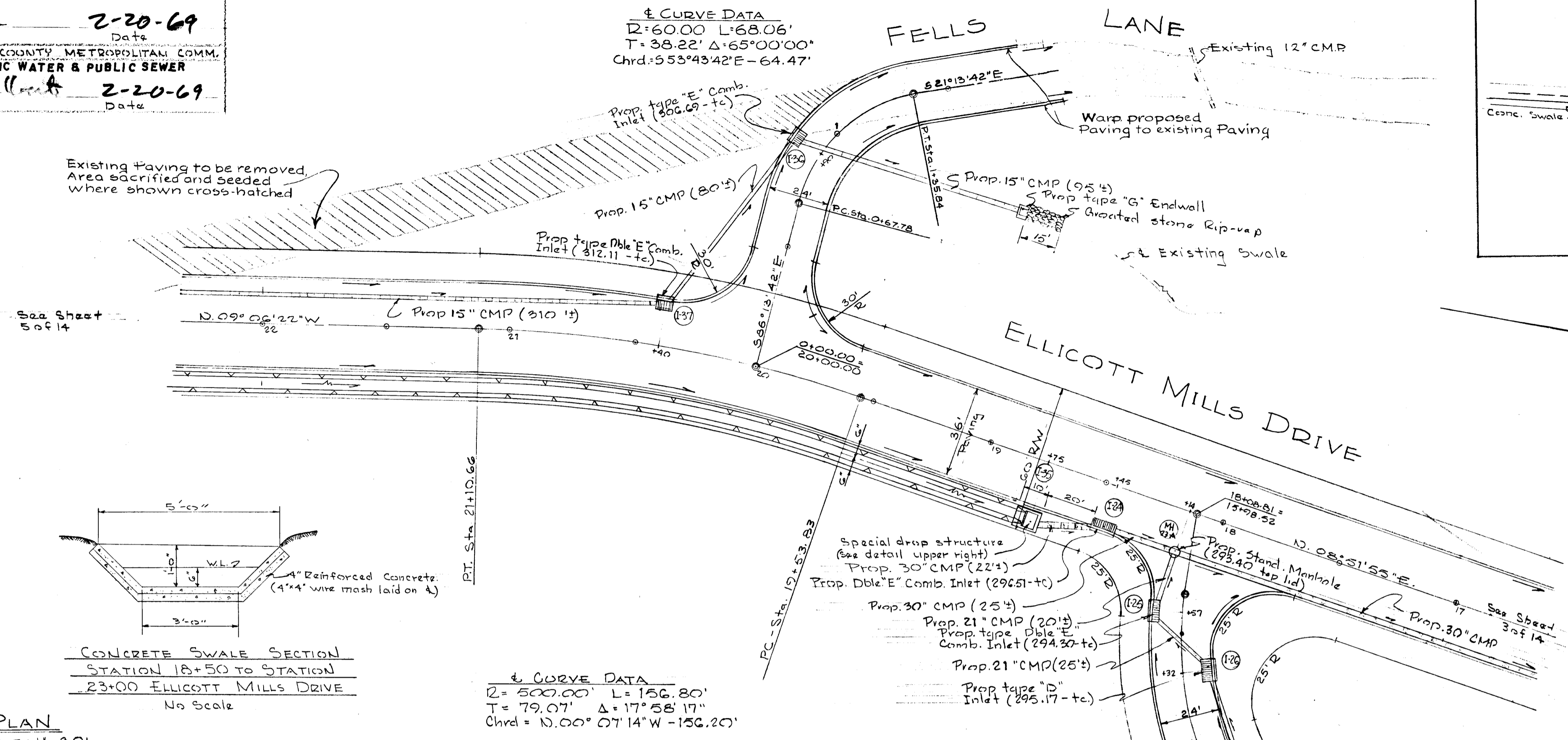
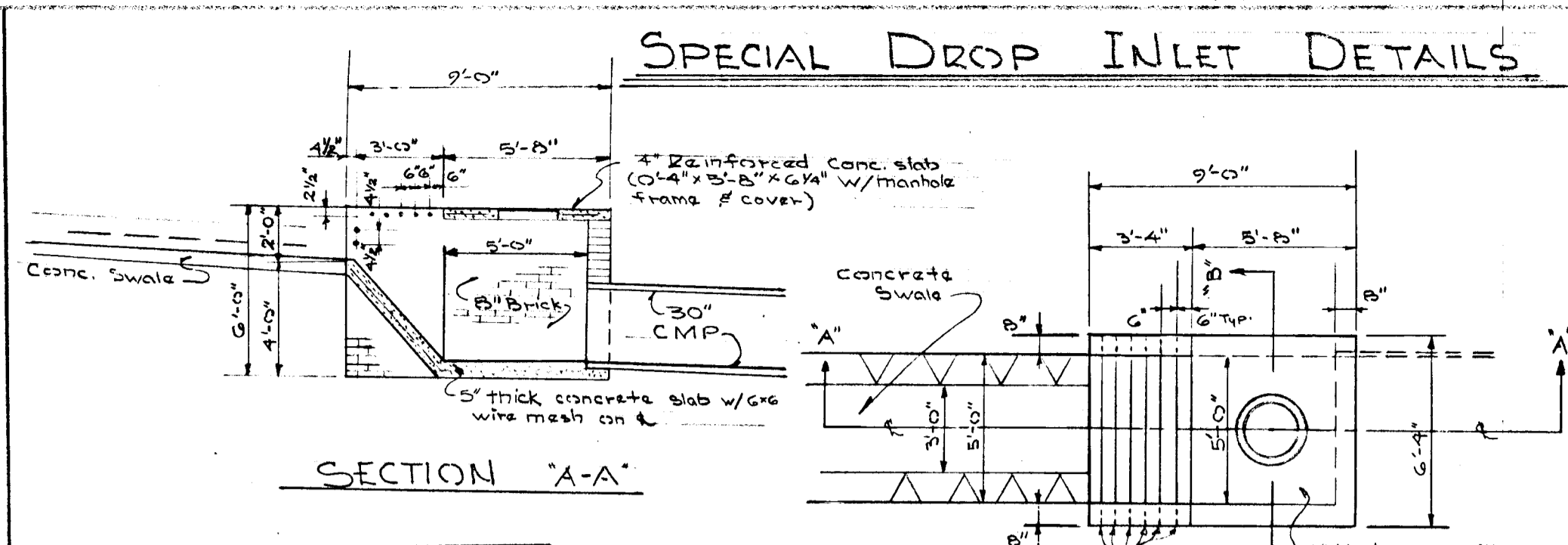


APPROVED: HOWARD COUNTY PLANNING COMM.  
*J.H. Clawson* 2-20-69  
 Chief Engineer Date  
 APPROVED: HOWARD COUNTY METROPOLITAN COMM.  
*W.O. Pallett* 2-20-69  
 Chief Engineer Date  
 PLAN AND PROFILE  
 SHOWING  
 FELS LANE URBAN RENEWAL PROJECT  
 PROPOSED  
**ELLICOTT MILLS DRIVE**  
 SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
 SEPT. 27, 1968 SCALE: AS SHOWN  
 SHEET No. 3 of 14  
 APPROVED: HOWARD COUNTY ROADS DEPARTMENT  
*G.W. McCreary* 2-11-69  
 ROADS SUPERINTENDENT DATE

#193

APPROVED: HOWARD COUNTY PLANNING COMM.  
**J.H. Clawson, Jr.** 2-20-69  
 Chief Engineer Date  
 APPROVED: HOWARD COUNTY METROPOLITAN COMM.  
**W.O. Hall** 2-20-69  
 Chief Engineer Date  
 ASTO PUBLIC WATER & PUBLIC SEWER

± CURVE DATA  
 R=60.00 L=68.06'  
 T=38.22' Δ=65°00'00"  
 Chrd=553°43'42"E-64.47'



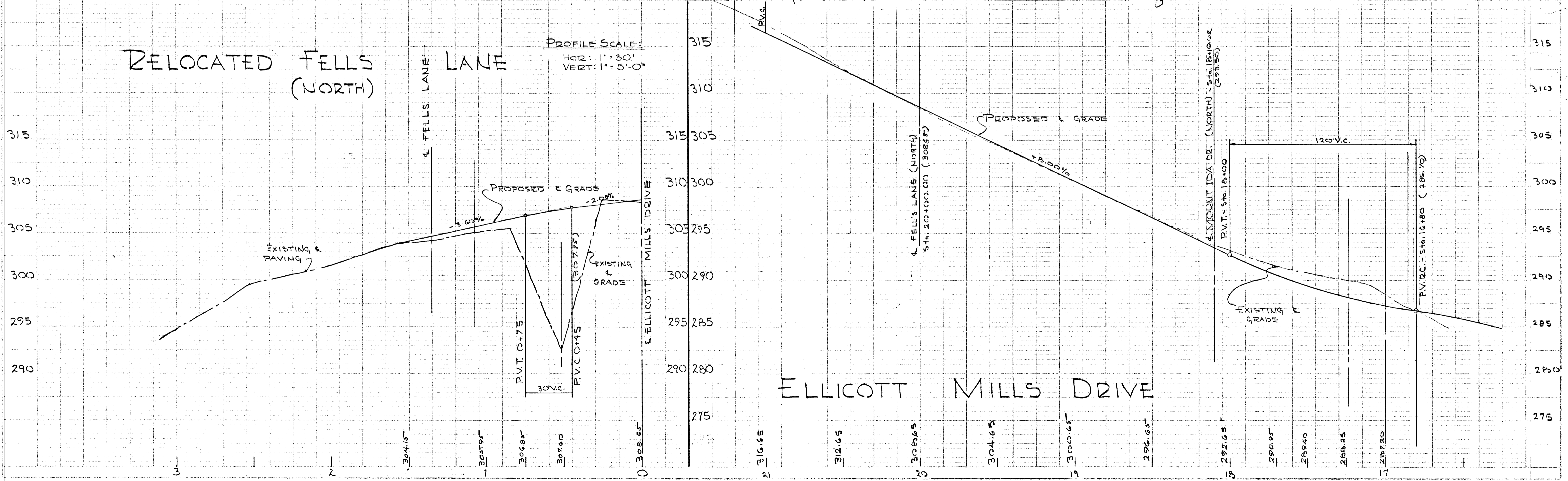
PLAN  
 SCALE: 1"=30'

August 19, 1968  
 Date  
 [Professional Seal]  
 Reg. No. 2351

PURDUM JESCHKE  
 ENGINEERS & LAND SURVEYORS  
 24 PARK AVENUE  
 ELICOTT CITY, MARYLAND

PLAN AND PROFILE  
 SHOWING  
 PROPOSED  
 FELLS LANE URBAN RENEWAL PROJECT  
**ELICOTT MILLS DRIVE**  
 SECOND ELECTION DISTRICT - HOWARD COUNTY, MARYLAND  
 SEPT. 27, 1968  
 SCALE: AS SHOWN

SHEET No. 4 of 14  
 APPROVED: HOWARD COUNTY ROADS DEPARTMENT  
**J.W. Williams** 2-11-69  
 Roads Superintendent Date

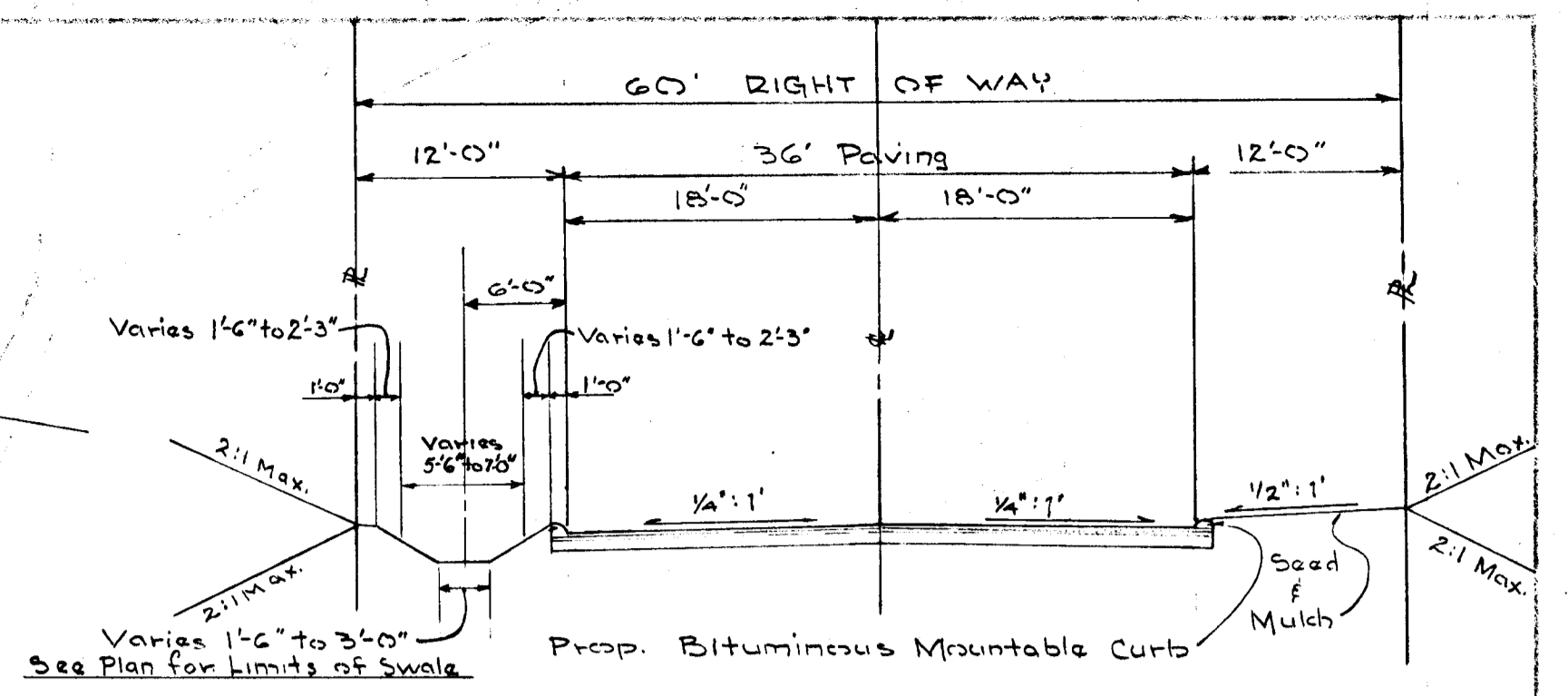
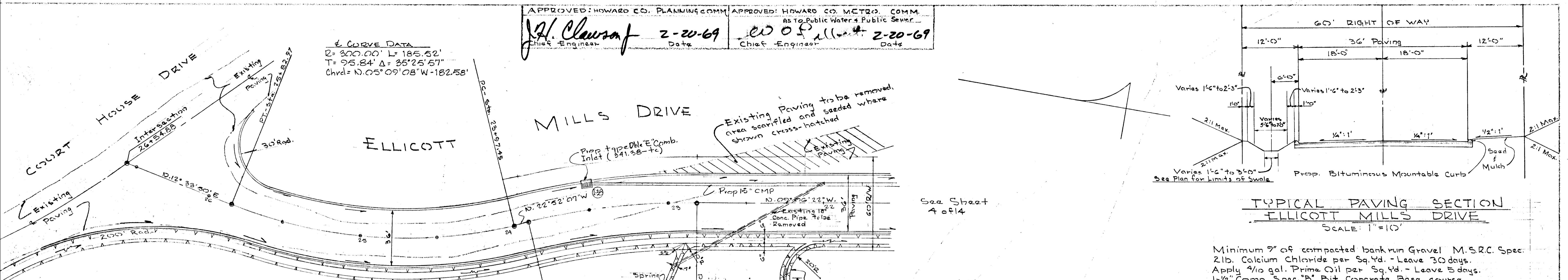


APPROVED: HOWARD CO. PLANNING COMM. APPROVED: HOWARD CO. METRO. COMM.  
AS TO PUBLIC WATER & PUBLIC SEWER

J.H. Clawson Chief Engineer Date 2-20-69

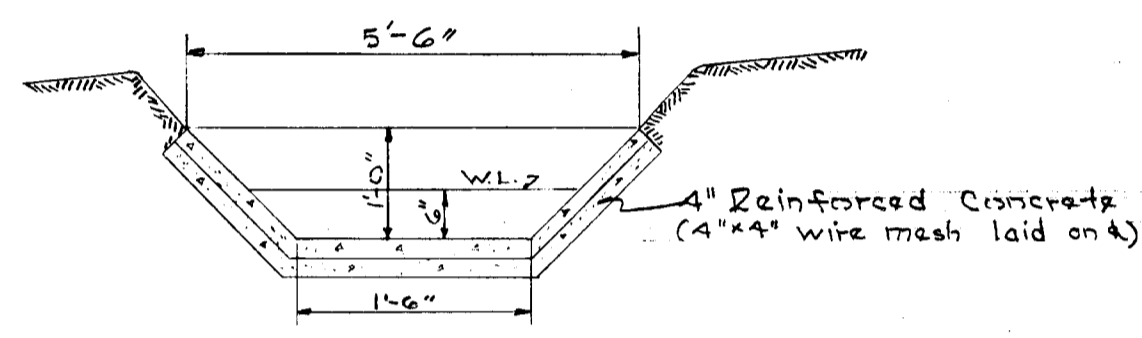
W.O.P. Chief Engineer Date 2-20-69

Curve Data  
R=300.00' L=185.52'  
T=95.84' Δ=35°25'57"  
Chrd=N.05°09'08"W-182.58'



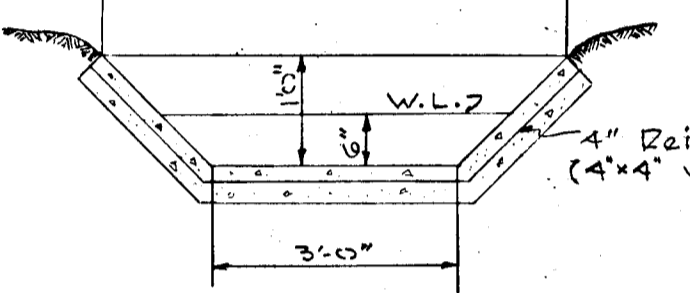
TYPICAL PAVING SECTION  
ELLICOTT MILLS DRIVE  
SCALE: 1"=10'

Minimum 9" of compacted bank run Gravel M.S.R.C. Spec. 21b. Calcium Chloride per Sq.Yd. - Leave 30 days. Apply 4/10 gal. Prime Oil per Sq.Yd. - Leave 5 days. 1-1/2" Comp. Spec. "B" Bit. Concrete Base course. 1" Comp. Spec. "B" Bit. Concrete Surface course. (This surface type to be constructed in accordance with Article C31 Howard Co. Rd. Spec.)



CONCRETE SWALE SECTION  
STATION 23+00 TO EXISTING  
PIPE OUTLET @ SOUTH ENTRANCE  
No Scale

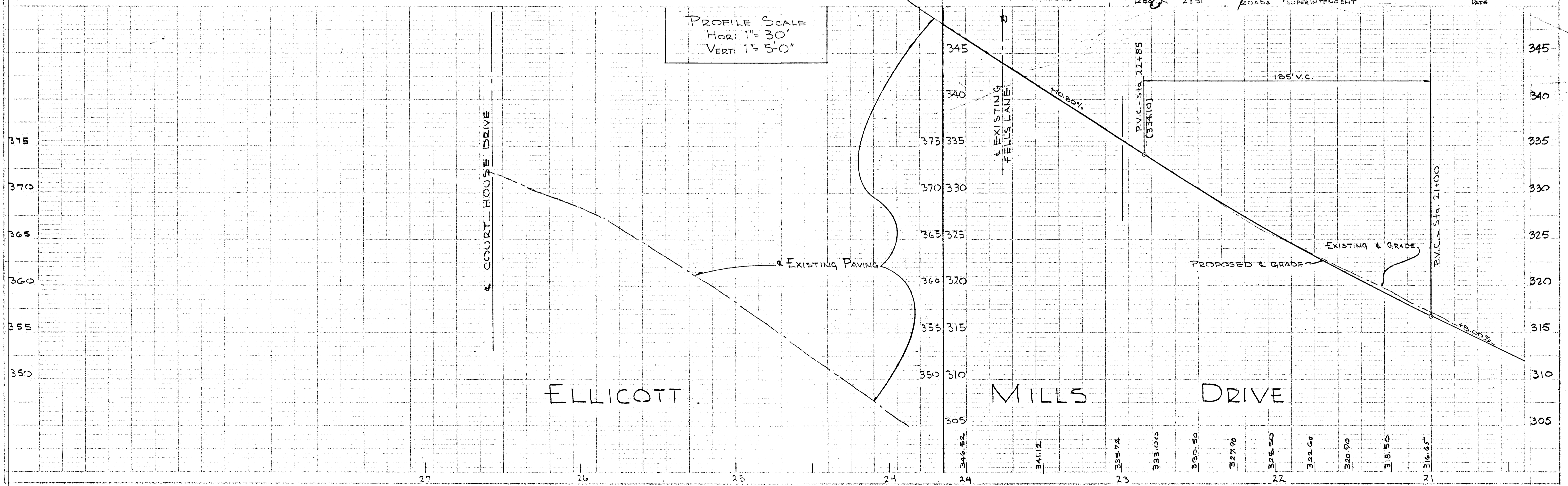
Curve Data  
R=450.00' L=108.09'  
T=54.23' Δ=13°45'45"  
Chrd=N.15°59'15"W-107.87'



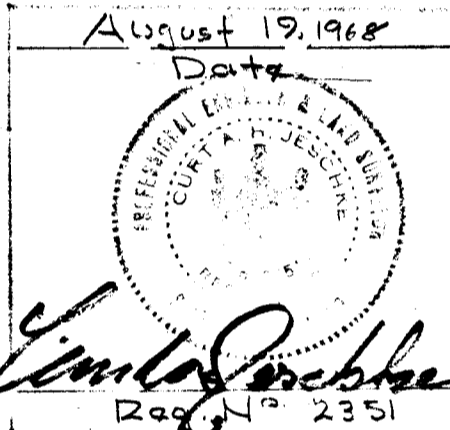
CONCRETE SWALE SECTION  
STATION 18+50 TO STATION  
23+00 - ELLICOTT MILLS DRIVE  
No Scale

PLAN  
SCALE: 1"=30'

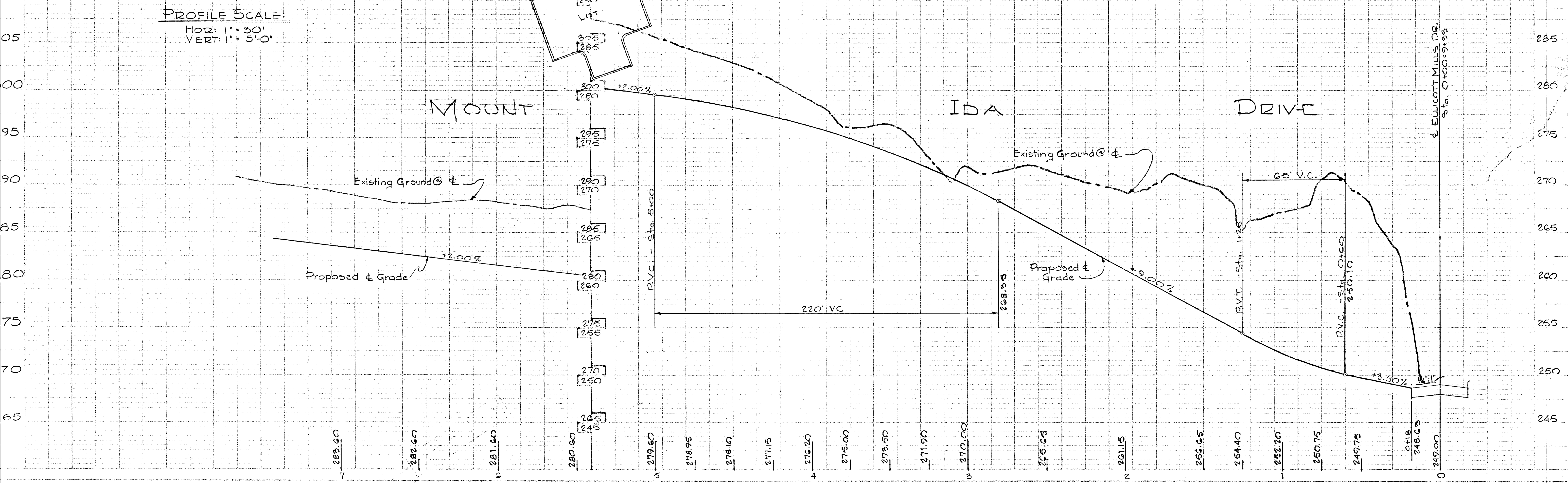
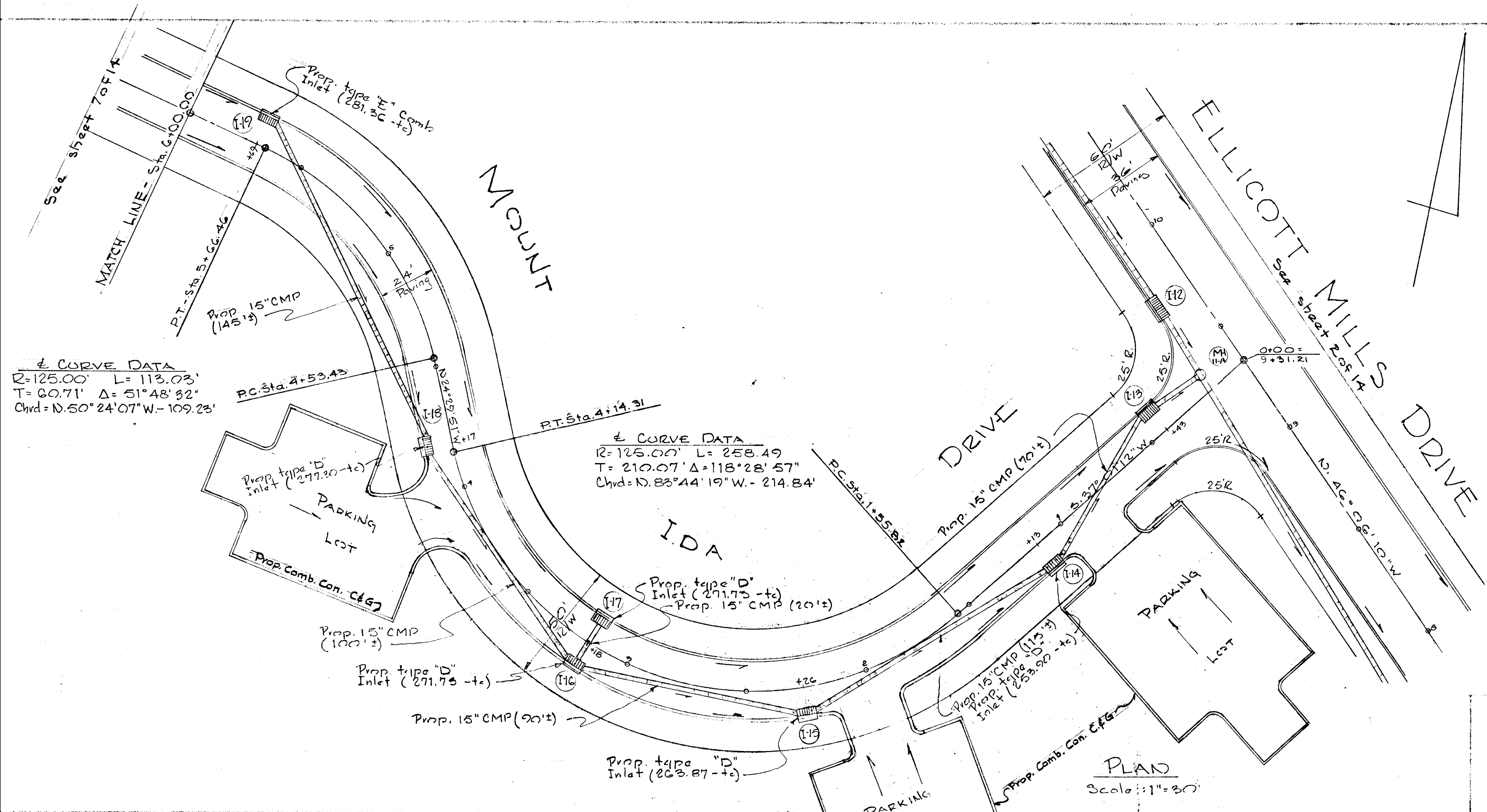
PROFILE SCALE  
HOR: 1"=30'  
VERT: 1"=5-0"



PURDUM & JESCHKE  
ENGINEERS & LAND SURVEYORS  
24 PARK AVENUE  
ELLICOTT CITY - MARYLAND

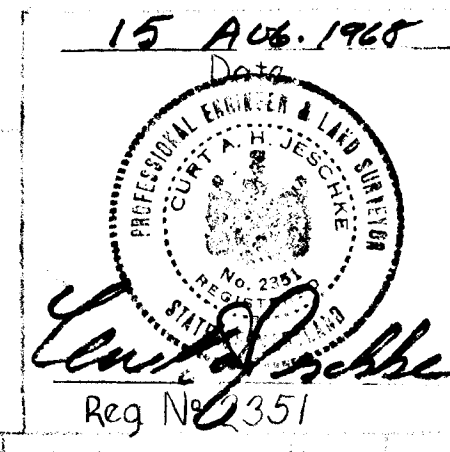


PLAN AND PROFILE  
SHOWING  
PROPOSED  
FELLS LANE URBAN RENEWAL PROJECT  
ELLICOTT MILLS DRIVE  
SECOND ELECTION DISTRICT - HOWARD COUNTY, MARYLAND  
SEPT. 27, 1968 SCALE: AS SHOWN  
SHEET No 5 OF 14  
HOWARD COUNTY ROADS DEPT.  
SUPERINTENDENT  
DATE 2-11-69



APPROVED: HOWARD COUNTY PLANNING COMM. 2-20-69  
Date  
*J.H. Clawson*  
 Chief Engineer  
 APPROVED: HOWARD COUNTY METROPOLITAN COMM. 2-20-69  
Date  
 AS TO PUBLIC WATER & PUBLIC SEWER  
*W.O. Pitt*  
 Chief Engineer

PLAN AND PROFILE  
 MOUNT IDA DRIVE  
 FELS LANE  
 URBAN RENEWAL PROJECT  
 SECOND ELECTION DISTRICT - HOWARD COUNTY MARYLAND  
 SEPT. 27, 1968 SCALE: AS SHOWN  
 SHEET No 6 of 14  
 APPROVED: HOWARD COUNTY ROADS DEPARTMENT 2-11-69  
Date  
*W.A. Williams*  
 Roads Superintendent

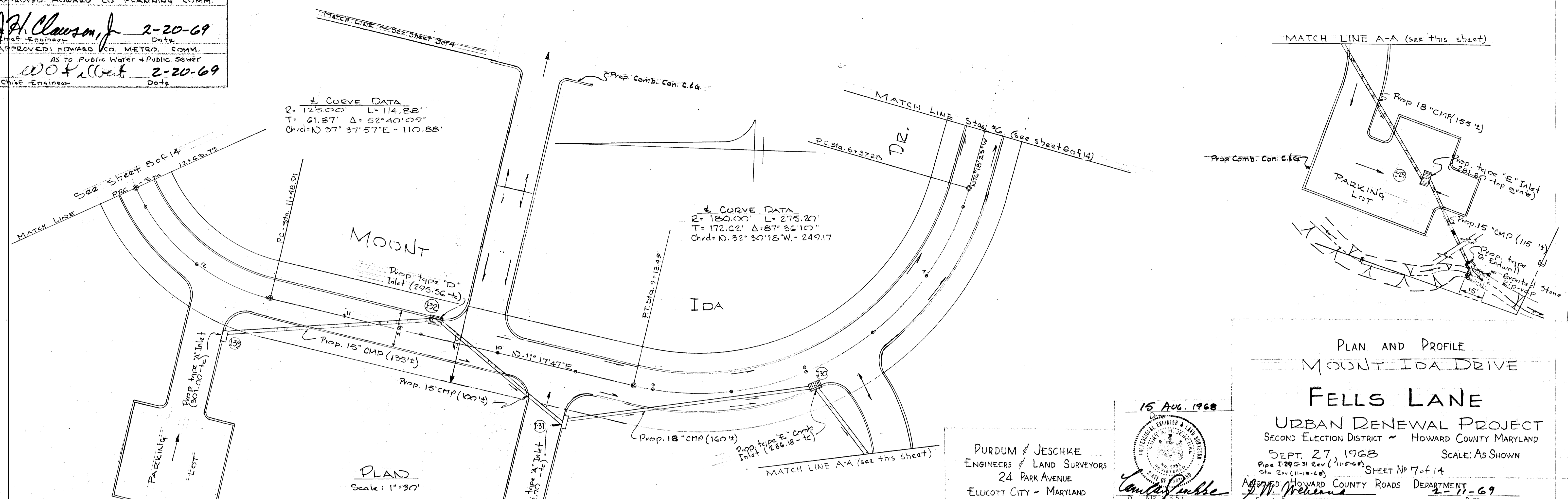


PURDUM & JESCHKE  
 ENGINEERS & LAND SURVEYORS  
 24 PARK AVENUE  
 ELLICOTT CITY, MARYLAND

APPROVED: HOWARD CO. PLANNING COMM.  
*J.H. Clauson* 2-20-69  
 Chief Engineer Date  
 APPROVED: HOWARD CO. METRO. COMM.  
 AS TO Public Water & Public Sewer  
*W.O. Albert* 2-20-69  
 Chief Engineer Date

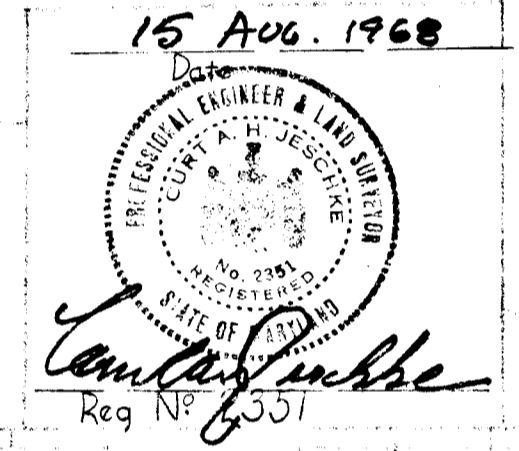
# CURVE DATA  
 R=125.00' L=114.88'  
 T=61.87' Δ=52°40'09"  
 Chrd=D 37°37'57"E - 110.88'

# CURVE DATA  
 R=180.00' L=275.20'  
 T=172.02' Δ=87°36'10"  
 Chrd=N 32°30'18"W - 249.17'

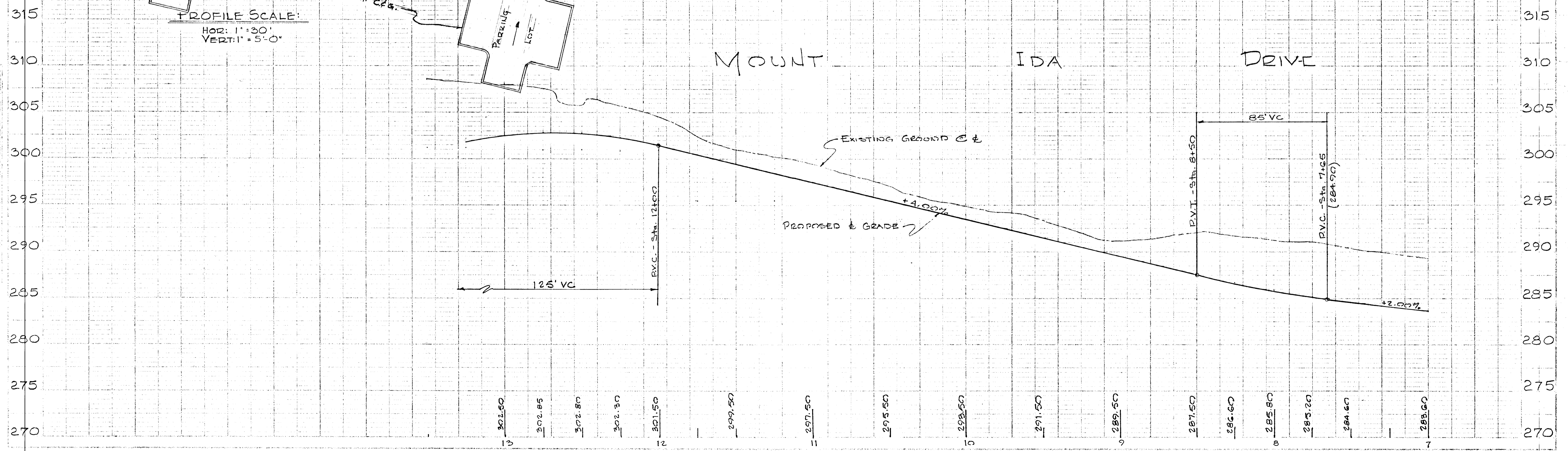


15 AUG. 1968

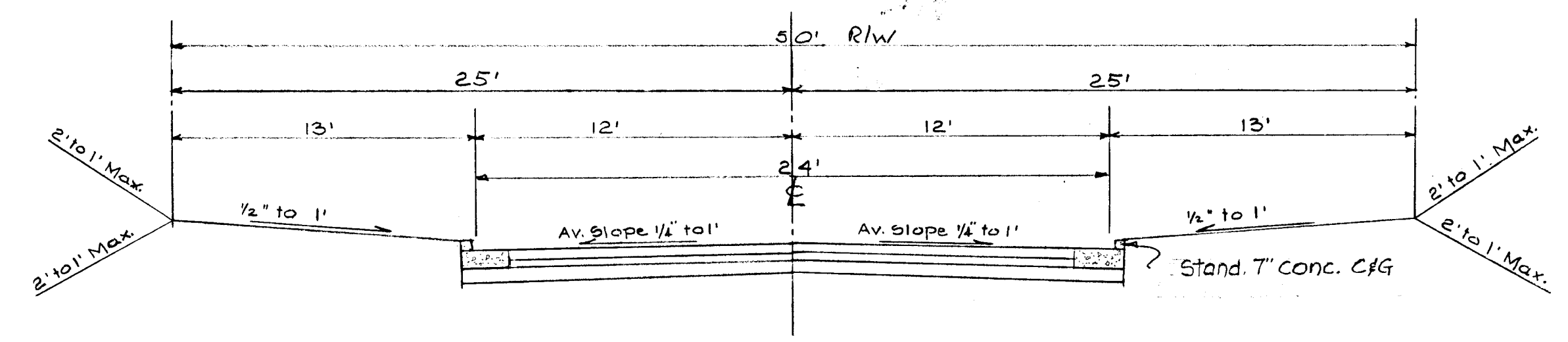
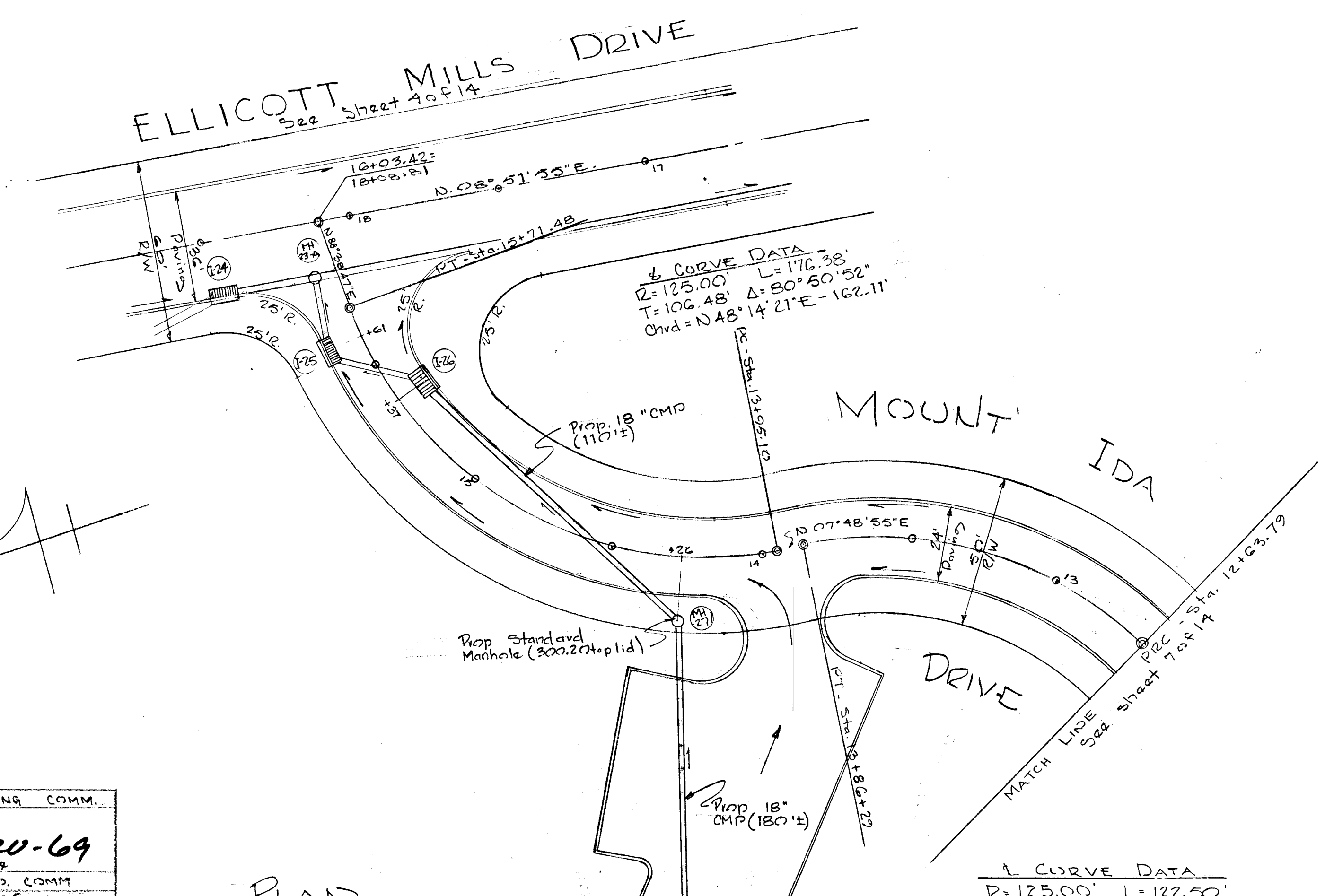
PURDUM / JESCHKE  
 ENGINEERS & LAND SURVEYORS  
 24 PARK AVENUE  
 ELLICOTT CITY - MARYLAND



PLAN AND PROFILE  
 MOUNT IDA DRIVE  
 FELS LANE  
 URBAN RENEWAL PROJECT  
 SECOND ELECTION DISTRICT - HOWARD COUNTY MARYLAND  
 SEPT. 27, 1968 SCALE: AS SHOWN  
 SHEET No 7 of 14  
 HOWARD COUNTY ROADS DEPARTMENT  
 DATE 2-11-69



#193



Minimum 9" of Compacted Bank Run Gravel M.S.D.C. Spec.  
 2 Lb. Calcium Chloride Per sq. Yd. - Leave 30 days  
 Apply 4/10 Gal. Prime Oil Per sq. Yd. - Leave 5 days  
 1-1/2" Comp. Spec. "B" Bit. Concrete Base Course  
 1" Comp. Spec. "B" Bit. Concrete Surface Course  
 (This Surface Type to be constructed in Accordance with Article C31 Howard County Road Spec.)

TYPICAL PAVING SECTION

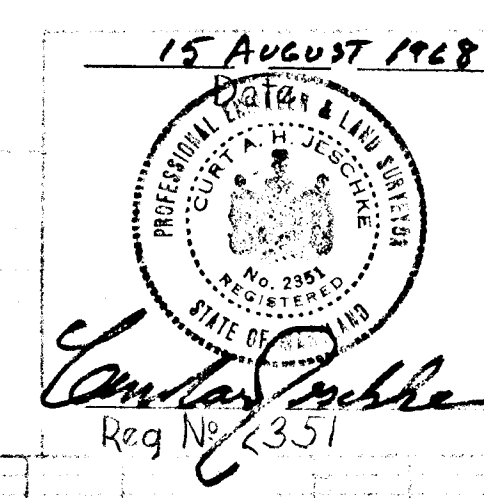
APPROVED: HOWARD COUNTY PLANNING COMM.  
 J. J. Clawson 2-20-69  
 Chief Engineer Date  
 APPROVED: HOWARD COUNTY METRO. COMM.  
 As to Public Water & Public Sewer  
 W. O. F. [Signature] 2-20-69  
 Chief Engineer Date

PLAN  
 SCALE: 1" = 30'

CURVE DATA  
 R=125.00' L=122.50'  
 T=66.68' Δ=50° 09' 01"  
 Chrd. N 35° 53' 26" E - 117.63'

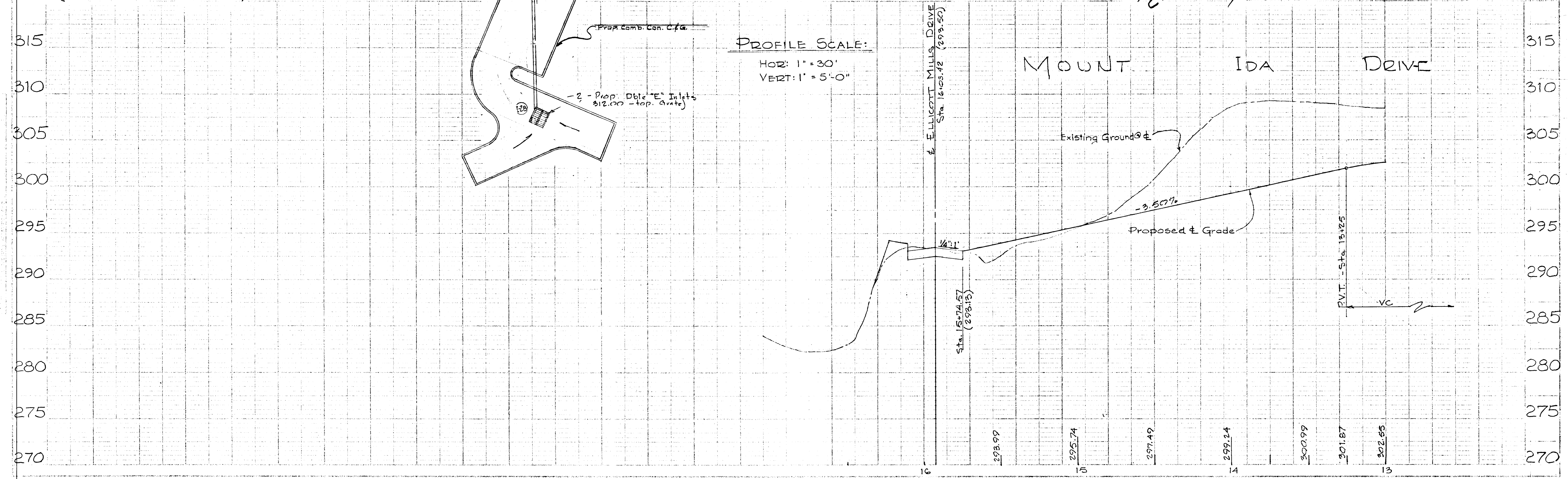
PROFILE SCALE:  
 HOR: 1" = 30'  
 VERT: 1" = 5'-0"

PURDUM & JESCHKE  
 ENGINEERS & LAND SURVEYORS  
 24 PARK AVENUE  
 ELLICOTT CITY - MARYLAND

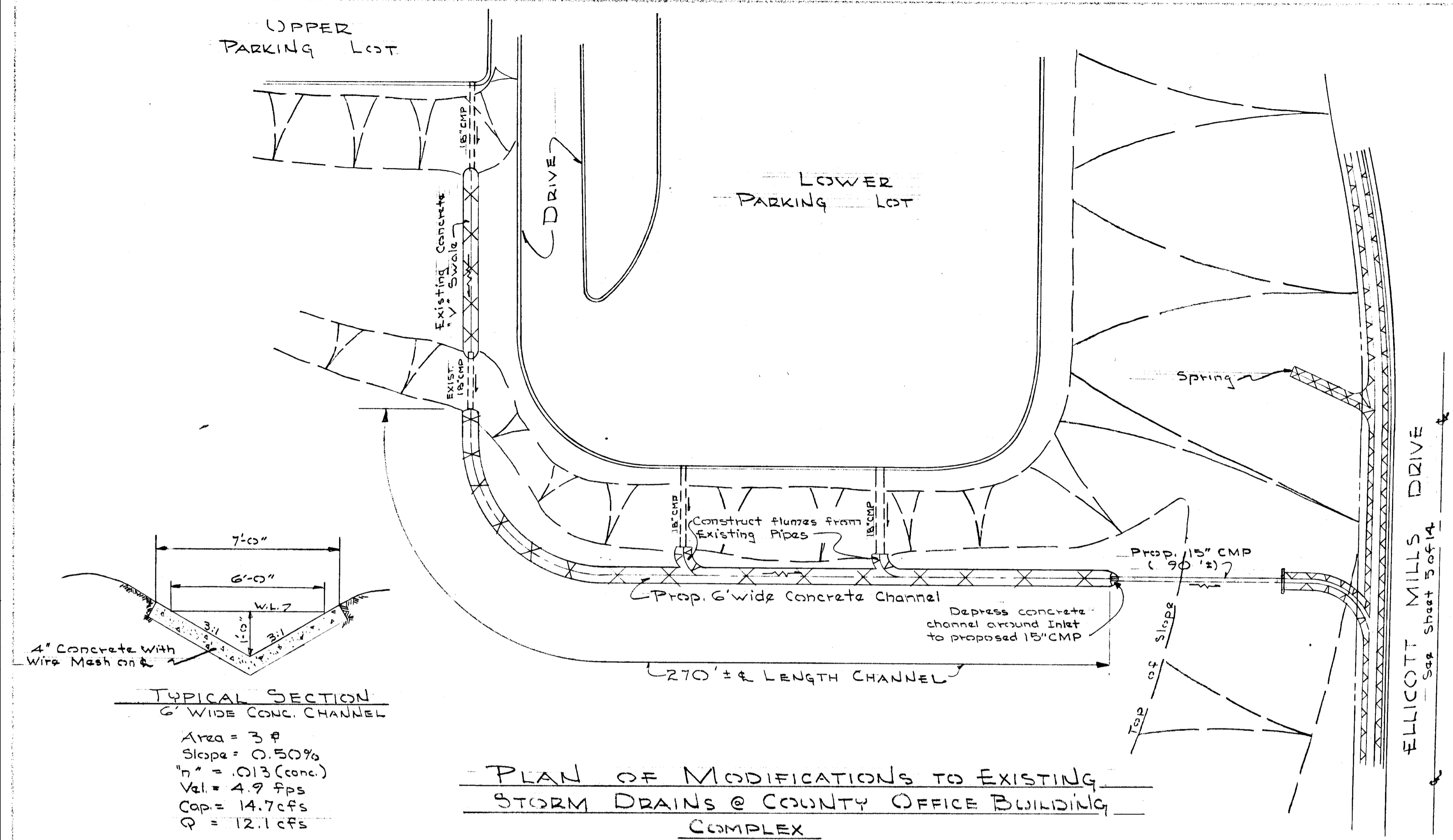


PLAN AND PROFILE  
 MOUNT IDA DRIVE  
 FELLS LANE

URBAN RENEWAL PROJECT  
 SECOND ELECTION DISTRICT - HOWARD COUNTY MARYLAND  
 SEPT. 27, 1968  
 Sta. Rev. (11-15-68) SHEET No 8 of 14  
 APPROVED: HOWARD COUNTY ROADS DEPARTMENT  
 [Signature] DATE 2-11-69







**TYPICAL SECTION**  
6' WIDE CONC. CHANNEL

Area = 3 #  
Slope = 0.50%  
 $n = .013$  (conc.)  
Vel = 4.9 fps  
Cap = 14.7 cfs  
 $Q = 12.1$  cfs

No Scale

**PLAN OF MODIFICATIONS TO EXISTING STORM DRAINS @ COUNTY OFFICE BUILDING COMPLEX**  
SCALE: 1" = 30'

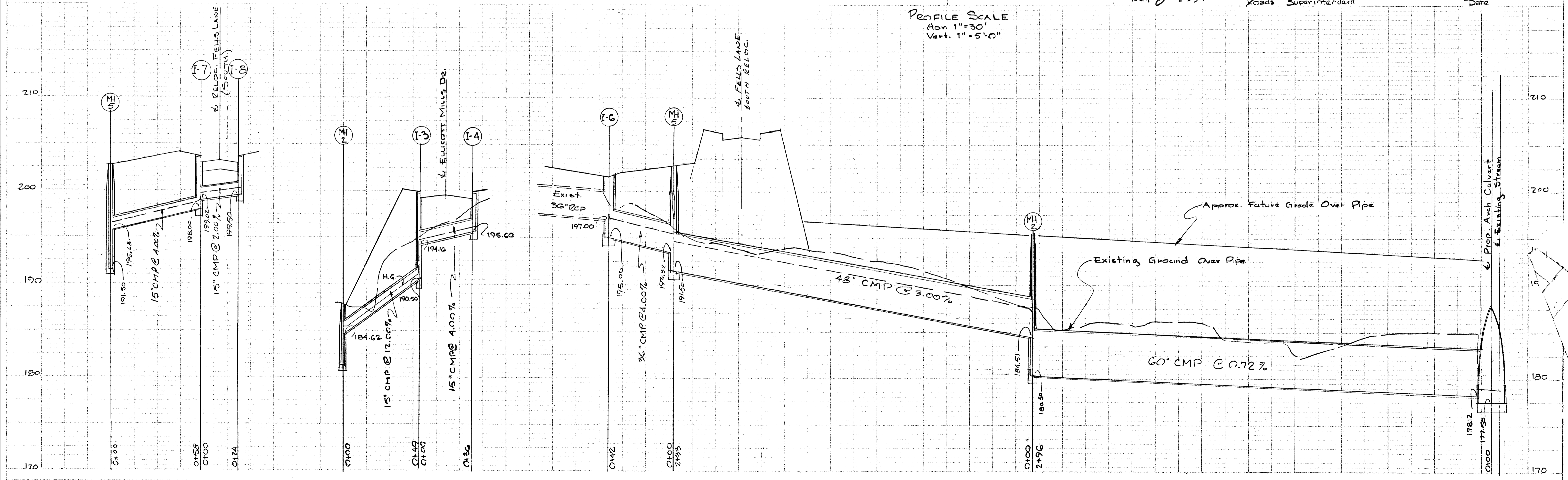
APPROVED: HOWARD COUNTY PLANNING COMM.  
*J.H. Clawson* 2-20-69  
 Chief Engineer Date  
 APPROVED: HOWARD COUNTY METROPOLITAN COMM.  
 AS TO PUBLIC WATER & PUBLIC SEWER  
*J.P. Pallet* 2-20-69  
 Chief Engineer Date

13 SEPT 1968  
 PROFESSIONAL ENGINEER & LAND SURVEYOR  
 STATE OF MARYLAND  
*Carroll D. Pickett*  
 Reg. No. 2351

DURDUM & WESCHKE  
 ENGINEERS & LAND SURVEYORS  
 74 PARK AVENUE  
 ELLICOTT CITY - MARYLAND

STORM DRAIN PROFILES AND DETAILS  
 FELLS LANE URBAN RENEWAL PROJECT  
 SECOND ELECTION DISTRICT - HOWARD COUNTY, MD.  
 27, SEPTEMBER 1968 SCALE: AS SHOWN  
 H.G. REV: 10-4-68 Sheet No 9 of 14  
 Pipe Prof: 11-6-68  
 APPROVED: HOWARD COUNTY ROADS DEPARTMENT  
*D.W. Wilband* 2-11-69  
 Roads Superintendent Date

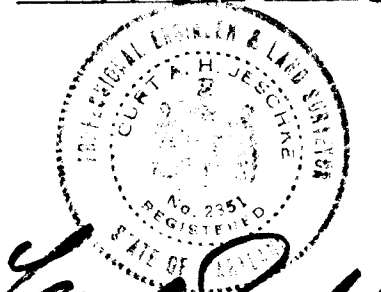
PROFILE SCALE  
 Hor. 1" = 30'  
 Vert. 1" = 5'-0"



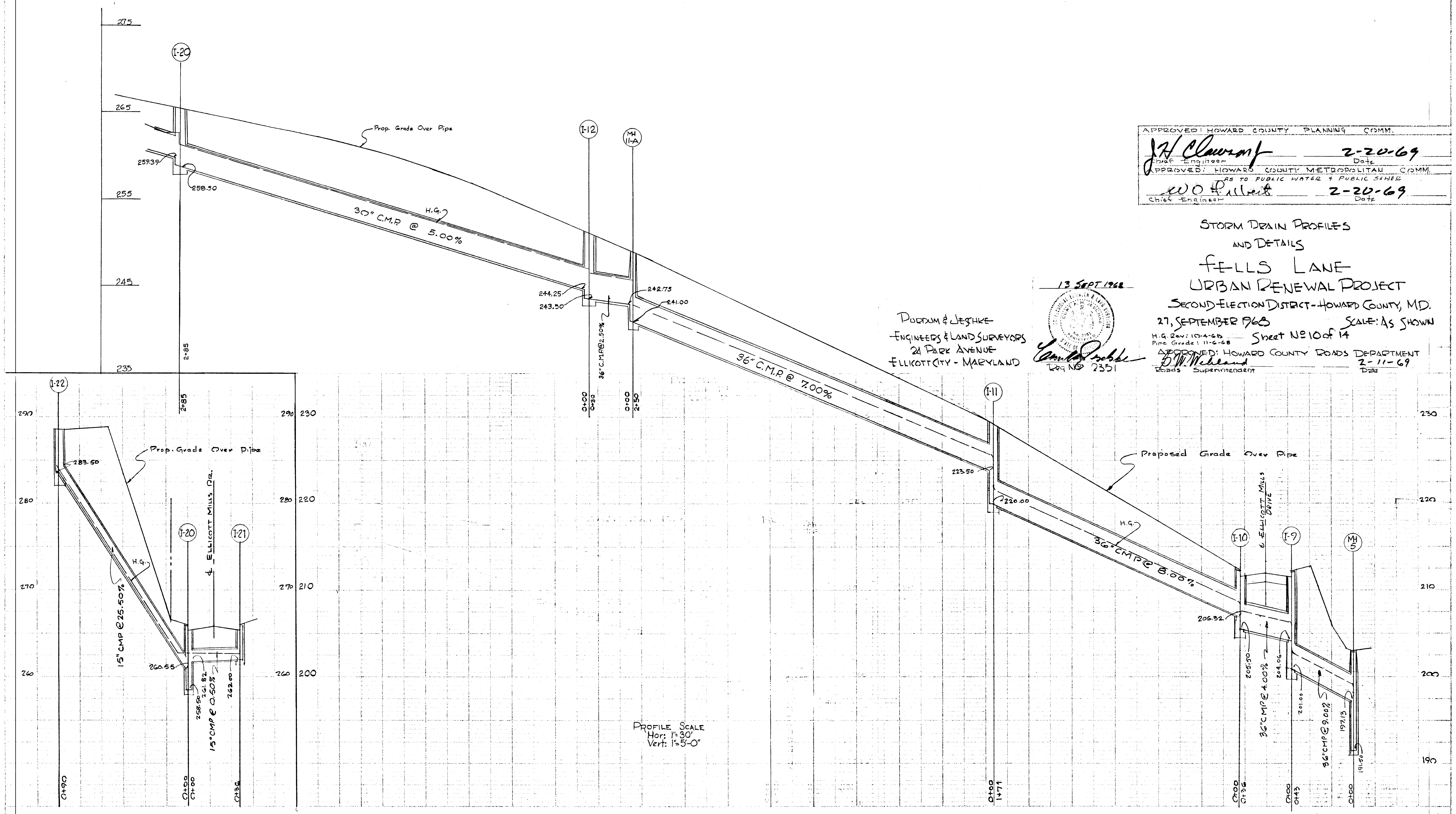
APPROVED: HOWARD COUNTY PLANNING COMM.  
*J.H. Clawson* 2-20-69  
 Chief Engineer Date  
 APPROVED: HOWARD COUNTY METROPOLITAN COMM.  
 AS TO PUBLIC WATER & PUBLIC SEWER  
*W.O. Pallett* 2-20-69  
 Chief Engineer Date

STORM DRAIN PROFILES  
 AND DETAILS  
 F-LLS LANE  
 URBAN RENEWAL PROJECT

SECOND ELECTION DISTRICT - HOWARD COUNTY, MD.  
 27, SEPTEMBER 1968 SCALE: AS SHOWN  
 H.G. Rev: 10-4-68 Sheet No 10 of 14  
 Pipe Grade: 11-6-68  
 APPROVED: HOWARD COUNTY ROADS DEPARTMENT  
*D.W. Weiland* 2-11-69  
 Roads Superintendent Date

13 SEPT 1968  
  
*James P. Probbie*  
 Reg No 2351

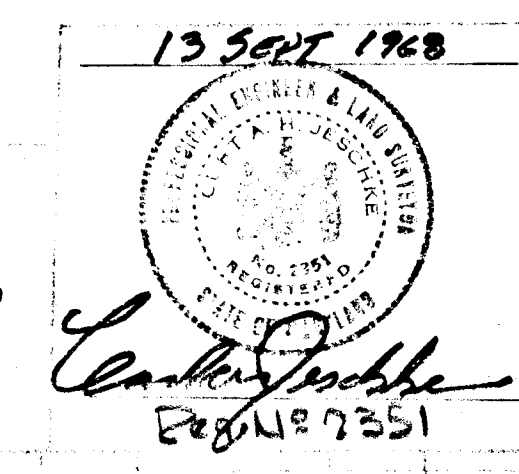
PODDUM & LESCHKE  
 ENGINEERS & LAND SURVEYORS  
 21 PARK AVENUE  
 ELLIKOTT CITY - MARYLAND



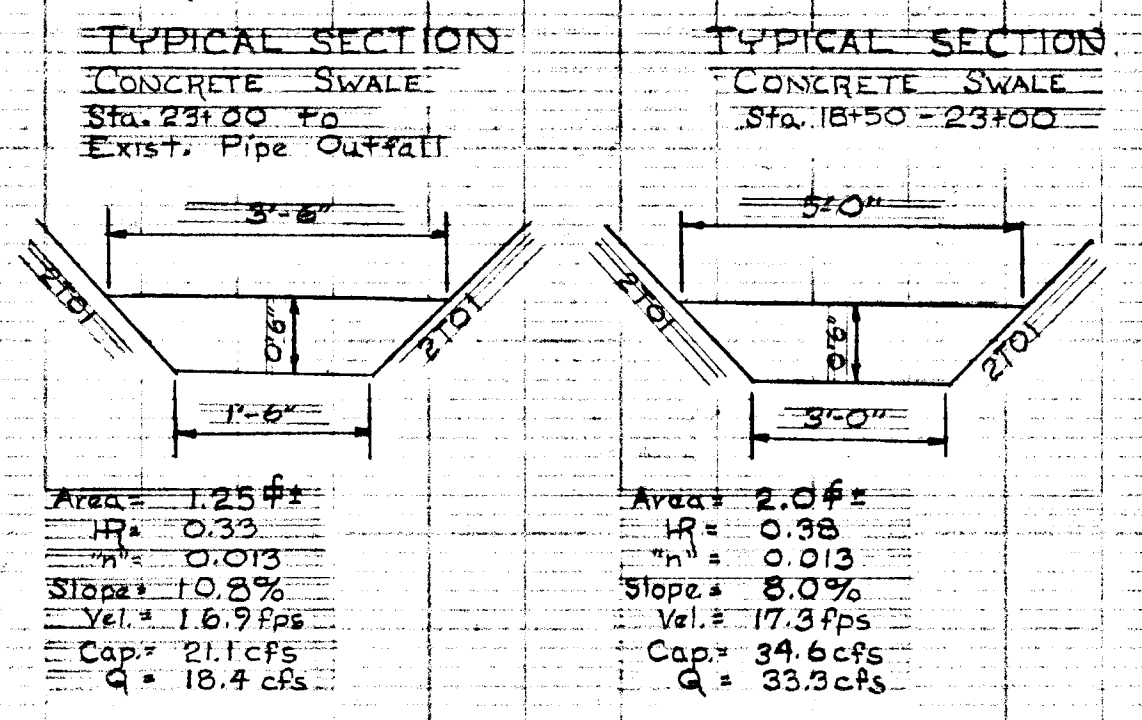
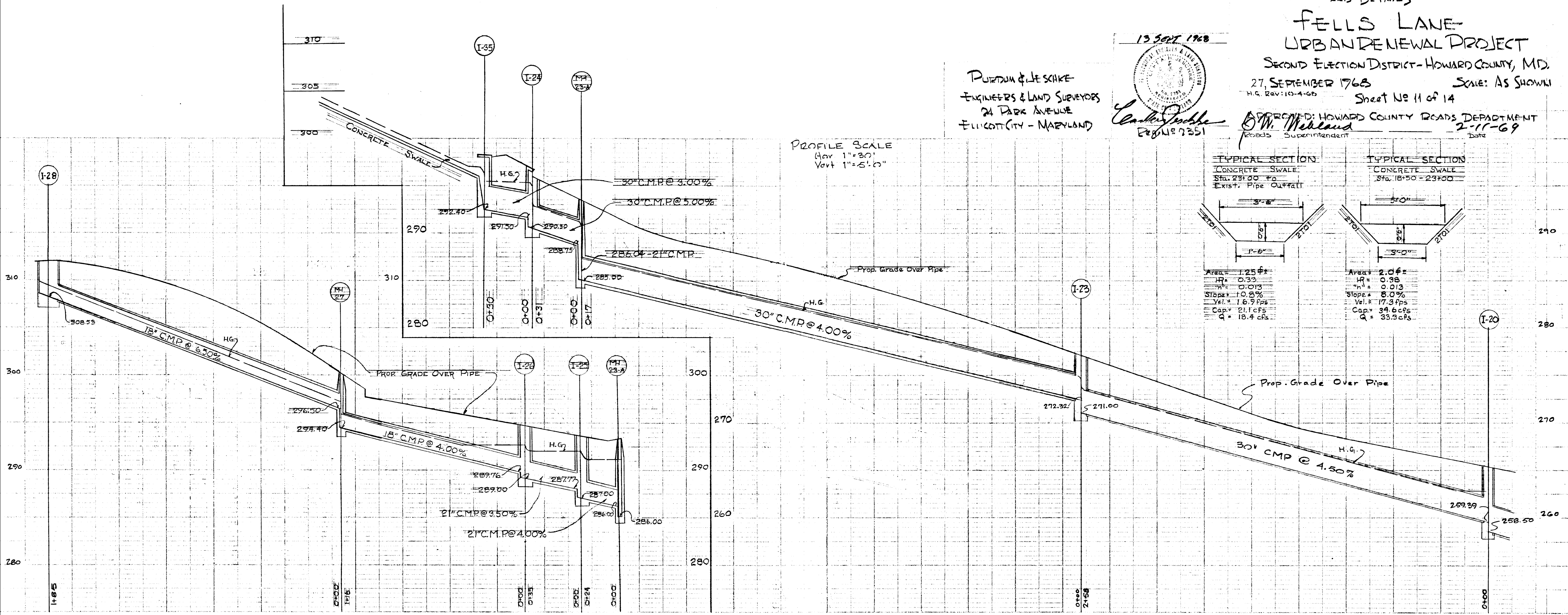
APPROVED: HOWARD COUNTY PLANNING COMM.  
*J.H. Clewson* 2-20-69  
 Date  
 APPROVED: HOWARD COUNTY METROPOLITAN COMM.  
 AS TO PUBLIC WATER & PUBLIC SEWER  
*W.O. P. [Signature]* 2-20-69  
 Check Engineer Date

STORM DRAIN PROFILES  
 AND DETAILS  
**FELLS LANE**  
 URBAN RENEWAL PROJECT  
 SECOND ELECTION DISTRICT - HOWARD COUNTY, MD.  
 27, SEPTEMBER 1968 SCALE: AS SHOWN  
 H.C. Rev: 10-4-68 Sheet No 11 of 14

PURDUM & LE SCHKE  
 ENGINEERS & LAND SURVEYORS  
 24 PARK AVENUE  
 ELICOTT CITY - MARYLAND

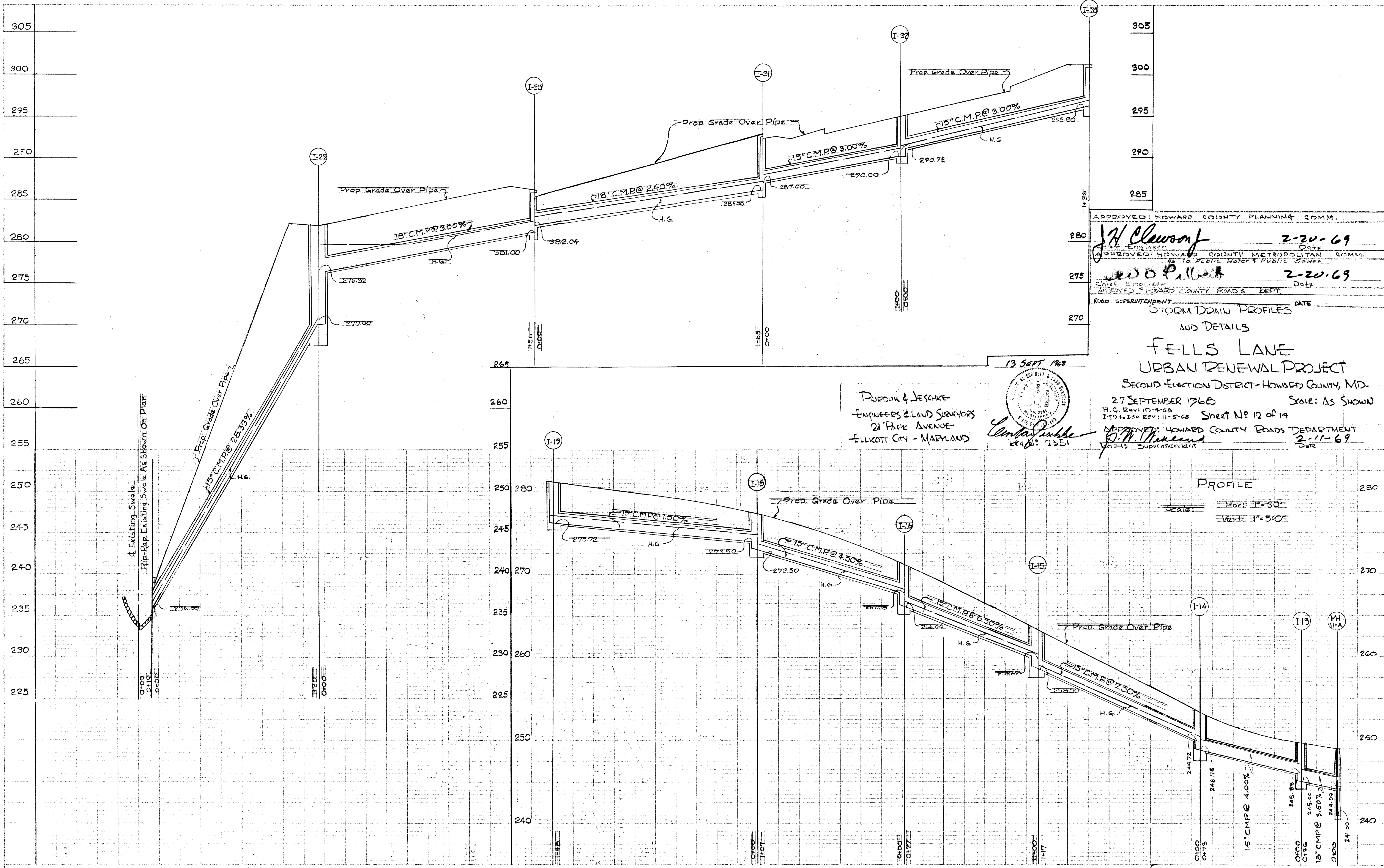


APPROVED: HOWARD COUNTY ROADS DEPARTMENT  
*D.W. Millard* 2-11-69  
 Roads Superintendent Date



#193

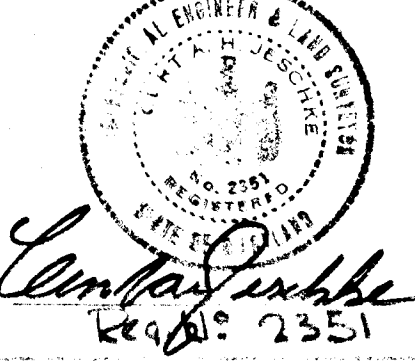
F68-92



APPROVED: HOWARD COUNTY PLANNING COMM.  
*J.H. Clawson* 2-20-69  
 Chief Engineer Date  
 APPROVED: HOWARD COUNTY METROPOLITAN COMM.  
*W.S. Pallas* 2-20-69  
 Chief Engineer Date  
 APPROVED: HOWARD COUNTY ROADS DEPT.  
 ROAD SUPERINTENDENT DATE

STORM DRAIN PROFILES  
 AND DETAILS  
**FELLS LANE**  
 URBAN RENEWAL PROJECT  
 SECOND ELECTION DISTRICT - HOWARD COUNTY, MD.  
 27 SEPTEMBER 1968 SCALE: AS SHOWN  
 H.G. Rev: 10-4-68  
 I-29 to I-30 Rev: 11-5-68 Sheet No 12 of 14  
 APPROVED: HOWARD COUNTY ROADS DEPARTMENT  
*G.W. Threlkeld* 2-11-69  
 Road Superintendent Date

PURDUM & JESCHKE  
 ENGINEERS & LAND SURVEYORS  
 21 PACE AVENUE  
 ELLICOTT CITY - MARYLAND



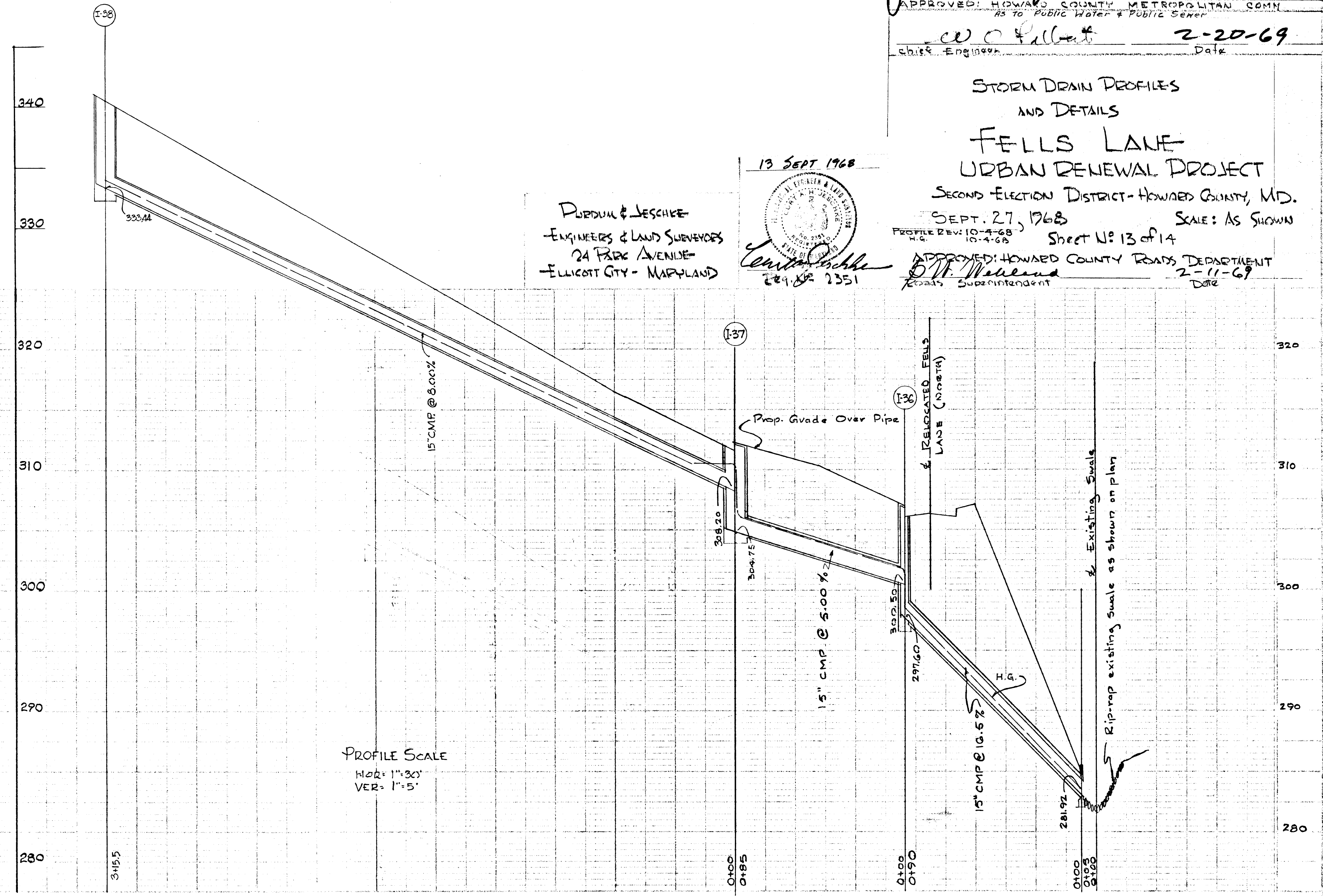
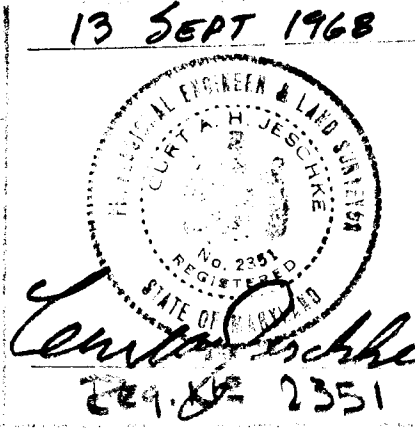
PROFILE  
 Scale: Hbr: 1"=30'  
 Vert: 1"=5.0'

#193

APPROVED: HOWARD COUNTY PLANNING COMM.  
*J.H. Clawson* 2-20-69  
 Chief Engineer Date  
 APPROVED: HOWARD COUNTY METROPOLITAN COMM.  
 AS TO PUBLIC WATER & PUBLIC SEWER  
*W.C. Pickett* 2-20-69  
 Chief Engineer Date

STORM DRAIN PROFILES  
 AND DETAILS  
**FELLS LANE**  
 URBAN RENEWAL PROJECT  
 SECOND ELECTION DISTRICT - HOWARD COUNTY, MD.  
 SEPT. 27, 1968 SCALE: AS SHOWN  
 PROFILE REV. 10-4-68 Sheet No. 13 of 14  
 H.G.  
 APPROVED: HOWARD COUNTY ROADS DEPARTMENT  
*D.W. Williams* 2-11-69  
 Roads Superintendent Date

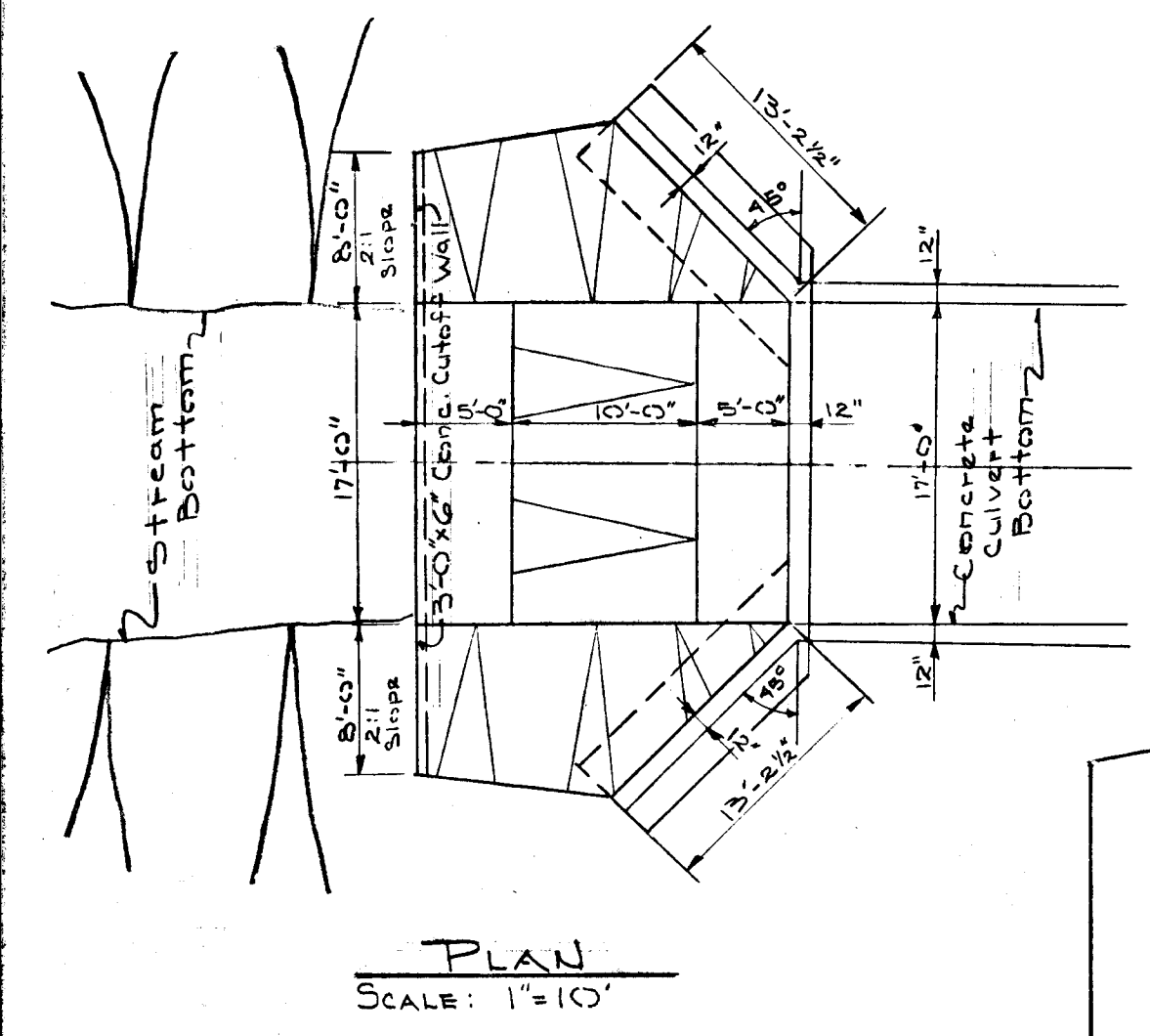
13 SEPT 1968  
 PURDUM & LESCHKE  
 ENGINEERS & LAND SURVEYORS  
 24 FAIRFAX AVENUE  
 ELLICOTT CITY - MARYLAND



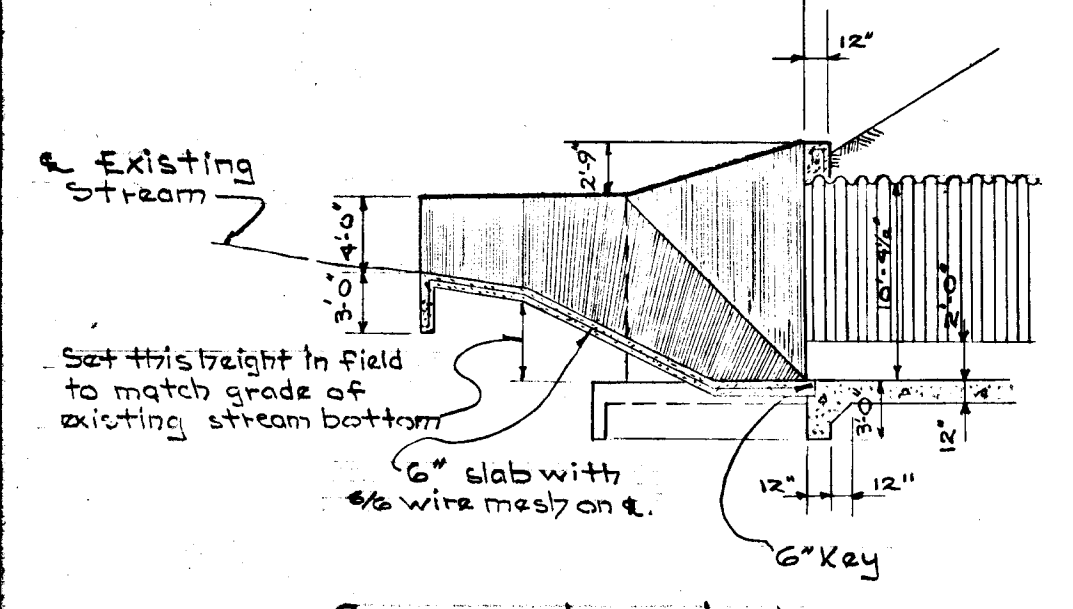
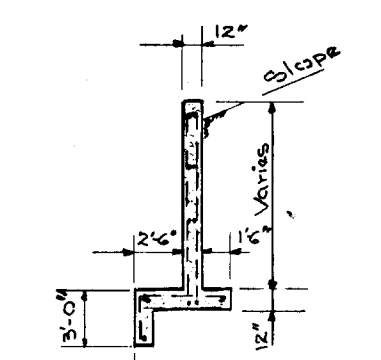
PROFILE SCALE  
 HOR: 1"=30'  
 VER: 1"=5'

#193

**APRON & WINGWALL DETAILS**

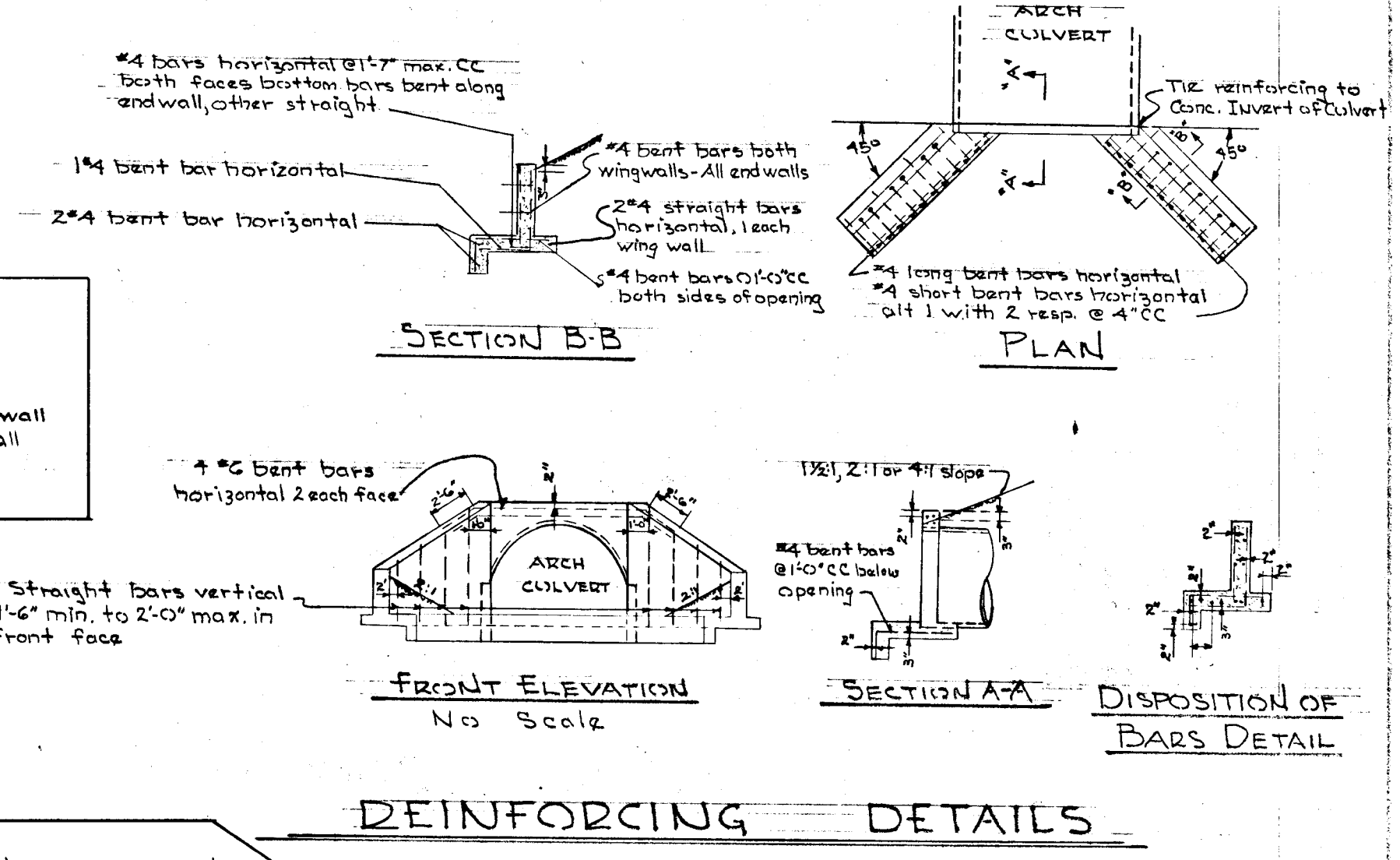
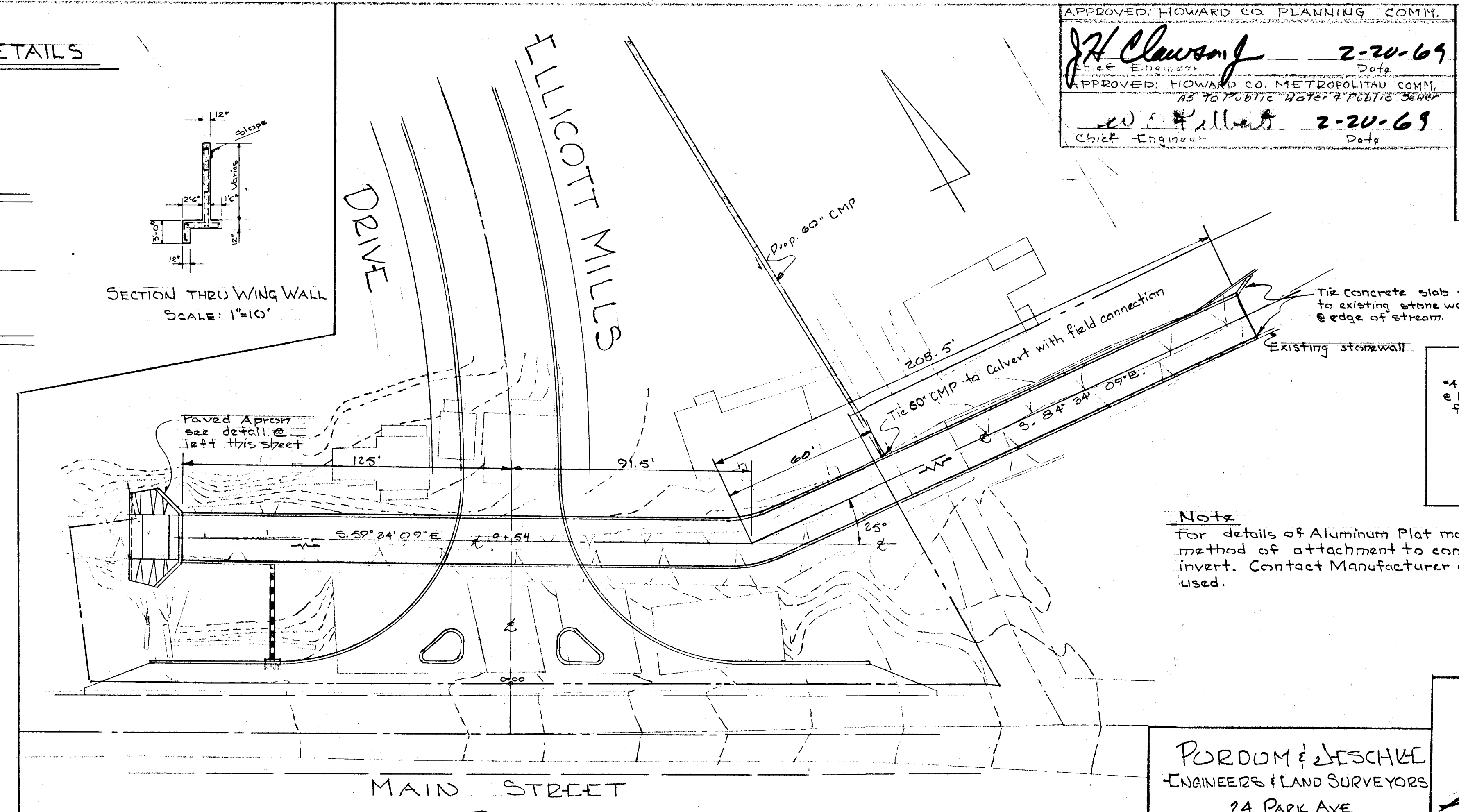


SECTION THRU WING WALL  
SCALE: 1"=10'



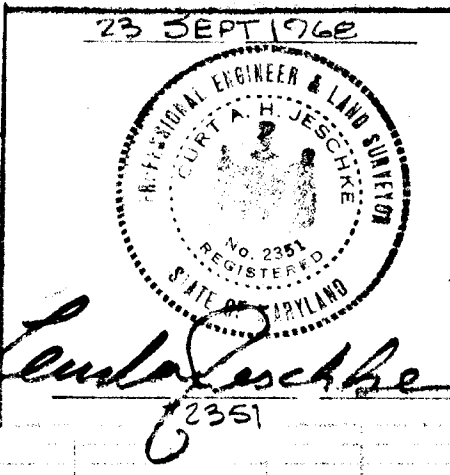
See upper right for Reinforcing Details

APPROVED: HOWARD CO. PLANNING COMM.  
*J.H. Clawson* 2-20-69  
 Chief Engineer Date  
 APPROVED: HOWARD CO. METROPOLITAN COMM.  
 "AS TO PUBLIC WATER & PUBLIC SEWER"  
*W.E. Kellert* 2-20-69  
 Chief Engineer Date



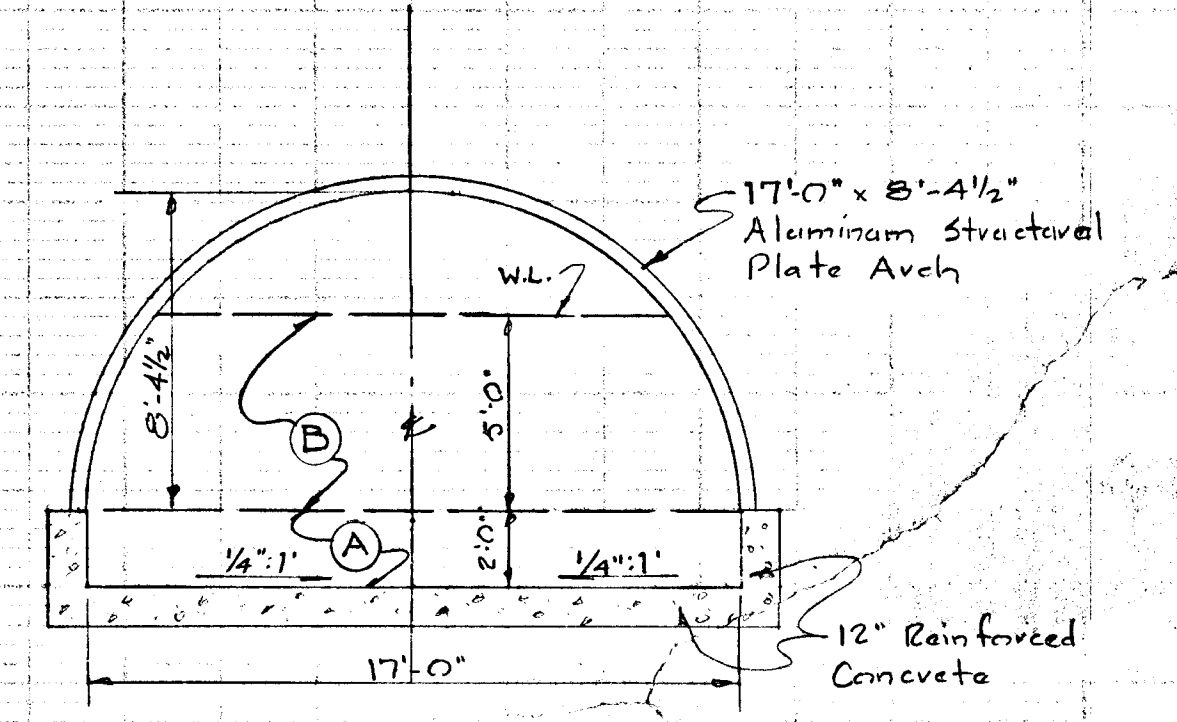
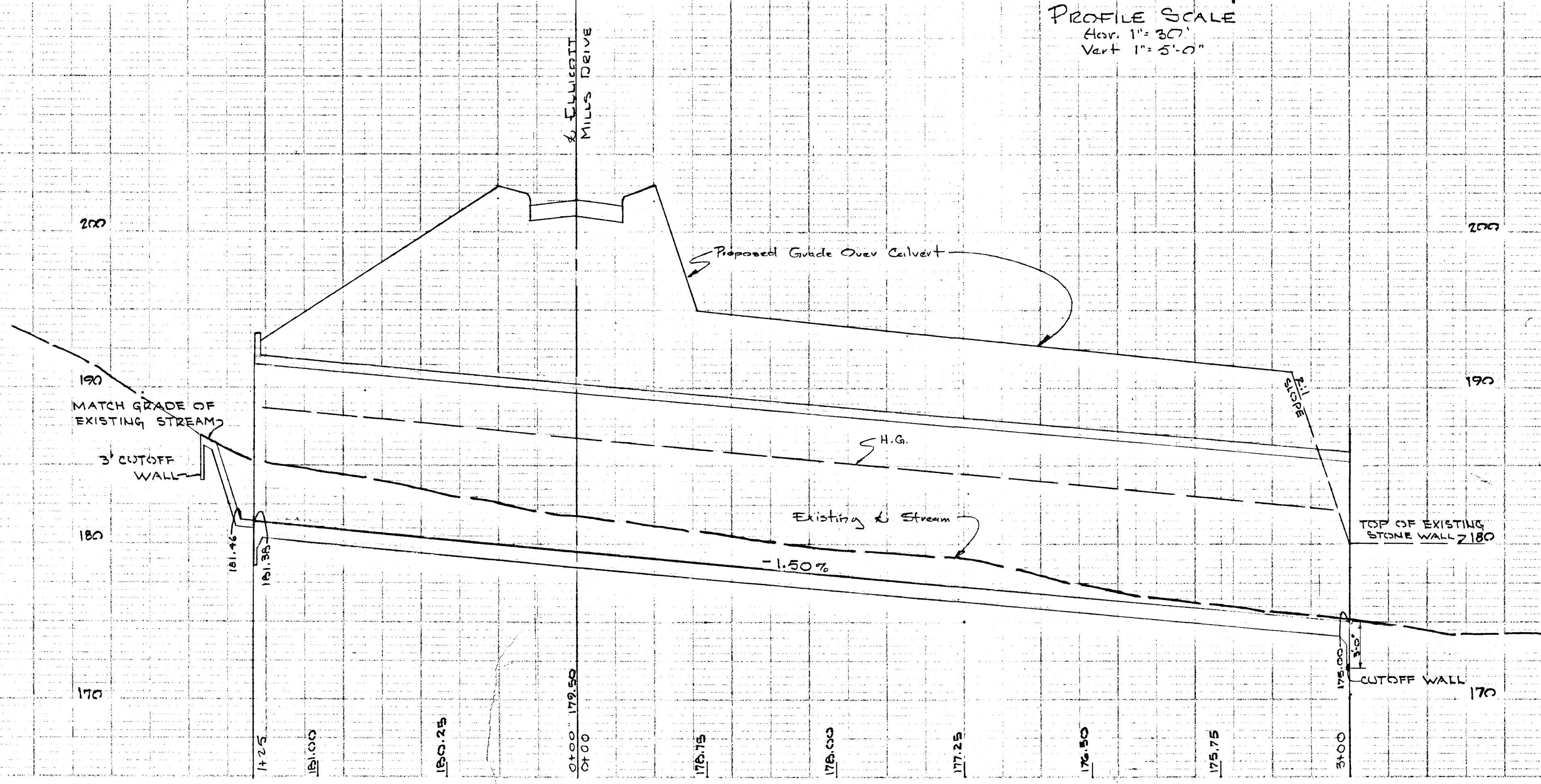
Note  
 For details of Aluminum Plate make-up for Arch & method of attachment to concrete slab invert. Contact Manufacturer of material used.

PORDOM & JESCHKE  
 ENGINEERS & LAND SURVEYORS  
 24 PARK AVE  
 ELLCOTT CITY, MD



PLAN: PROFILE: CULVERT  
**FELLS LANE**  
 URBAN RENEWAL PROJECT  
 2<sup>ND</sup> ELECTION DISTRICT, + HOWARD COUNTY, MARYLAND  
 27 SEPT 1968 SHEET 14 of 14 SCALE: AS SHOWN  
 APPROVED: HOWARD COUNTY ROADS DEPARTMENT  
*D.M. Moresand* 2-11-69  
 Roads Superintendent Date

PROFILE SCALE  
 Hor. 1"=30'  
 Vert 1"=5'-0"



FLOW DATA

(A)	(B)
Area = 34.4	Area = 79.79 ft <sup>2</sup>
W.P. = 21'	W.P. = 27.7'
HZ = 1.62	HZ = 2.68
Slope = 1.50%	Slope = 1.50%
"n" = .013	"n" = .019
Vel. = 19.3 fps	Vel. = 19.4
Cap. = 656.3 cfs	Cap. = 1548.0 cfs

TOTAL  
 A = 113.79 ft<sup>2</sup>  
 "n" = .016  
 Vel = 19.4 fps  
 Cap = 2204 cfs  
 Q = 2185 cfs