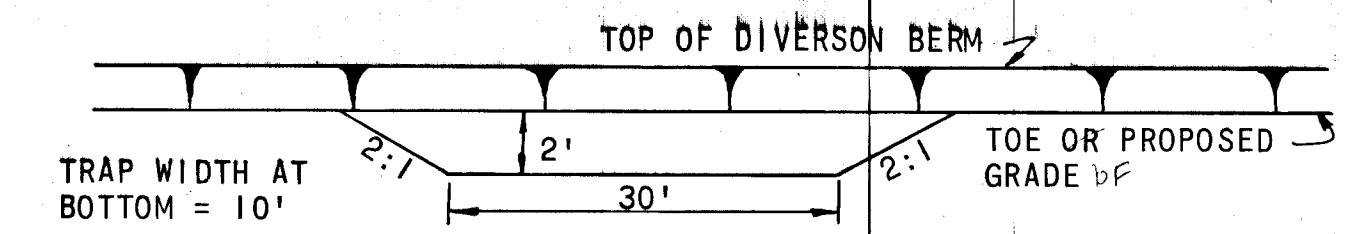
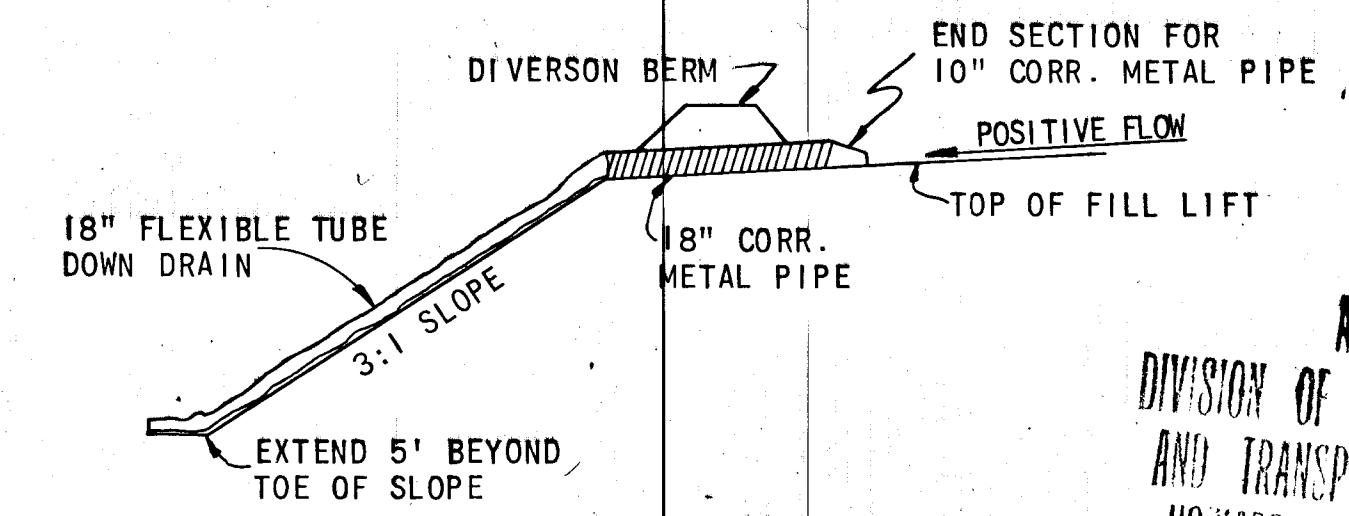


SEDIMENT CONTROL NOTES

1. IMMEDIATELY FOLLOWING THE START OF GRADING OPERATIONS THE DIVERSION BERMS SHOWN ON THIS PLAN WILL BE CONSTRUCTED USING 18" FLEXIBLE TUBE DOWN DRAINS WHERE GRADE STABILIZATION STRUCTURES ARE SHOWN.
2. DIVERSION BERMS WILL BE REBUILT AS THE FILLING OPERATION PROCEEDS IN LIFTS. SILT TRAPS, SWALES AND BERMS WILL BE RETAINED AFTER FINAL LIFT.
3. DISTURBED AREAS ARE TO BE MAINTAINED IN A ROUGH GRADED CONDITION UNTIL PROPER WEATHER CONDITIONS EXIST FOR THE ESTABLISHMENT OF PERMANENT VEGETATIVE COVER.
4. NO SLOPES SHALL BE STEEPER THAN 1' VERTICAL ON 3' HORIZONTAL (3:1).
5. FINAL STABILIZATION WITH VEGETATIVE COVER WILL TAKE PLACE AS EARLY IN THE SPRING AS WEATHER CONDITIONS PERMIT. IT WILL BE DONE AS FOLLOWS:
 - A. APPLY GROUND AGRICULTURAL LIMESTONE AT ONE TON PER ACRE.
 - B. APPLY 10-10-10 FERTILIZER 1000 LBS. PER ACRE.
 - C. WORK BOTH INTO SOIL AND PREPARE SEEDING AREA WITH YORK RAKE.
 - D. SEEDING.
 1. SEED FLAT AREAS WITH 60 LBS. KENTUCKY 31 TALL FESCUE PER ACRE
 2. SEED ALL 3:1 SLOPES WITH 15 LBS. GROWN FETCH (INNOCULATED) PER ACRE 40 LBS. KENTUCKY 31 TALL FESCUE PER ACRE.
 - E. MULCHING.
 1. UNWEATHERED SMALL GRAIN STRAW WILL BE APPLIED AT 1 1/2-2 TONS PER ACRE. MULCH WILL BE TIED DOWN WITH ASPHALT.
6. ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND MAINTAINED IN EFFECTIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD SOIL CONSERVATION DISTRICT. (465-3180 OR 465-5000 EXT. 291)
7. A MINIMUM 24 HOUR NOTICE MUST BE GIVEN TO THE HOWARD CONSERVATION DISTRICT (465-3180) PRIOR TO THE START OF ANY WORK.
8. SILT TRAPS WILL BE CLEANED OUT WHENEVER SILT REACHES A DEPTH OF ONE FOOT.
9. 18" FLEXIBLE TUBE DOWN DRAIN AVAILABLE AS "RELDRAIN-NO" FROM ELPHINSTONE INC. ROUTE 16, BALTIMORE, MD. OR AS APPROVED EQUAL.

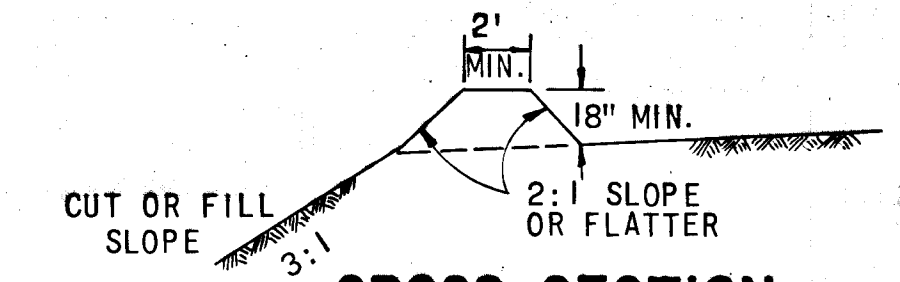


SILT TRAP SECTION

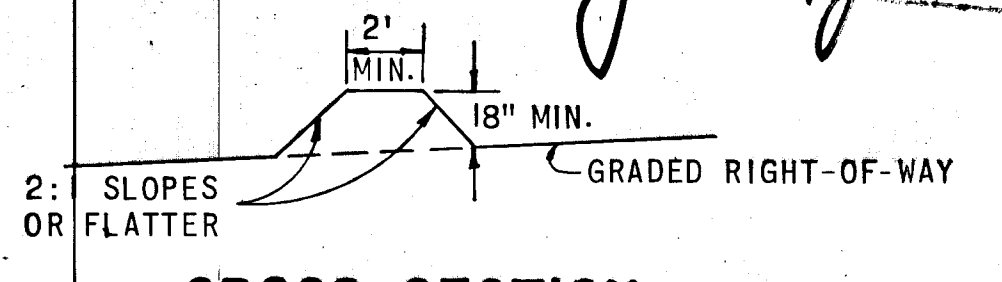


FLEXIBLE TUBE DOWN DRAIN

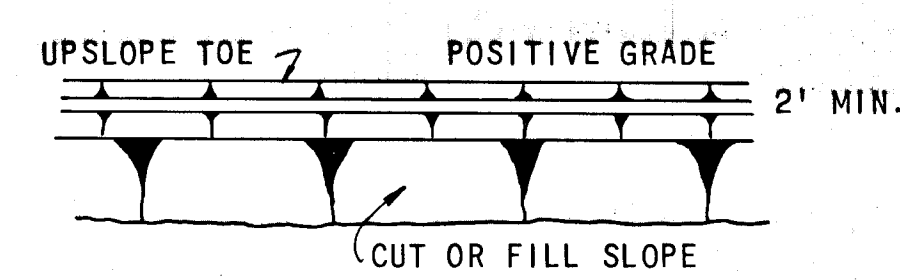
APPROVED
DIVISION OF LAND DEVELOPMENT
AND TRANSPORTATION PLANNING
HOWARD COUNTY, MARYLAND
DATE 8/18/72
J.T.J.



CROSS SECTION

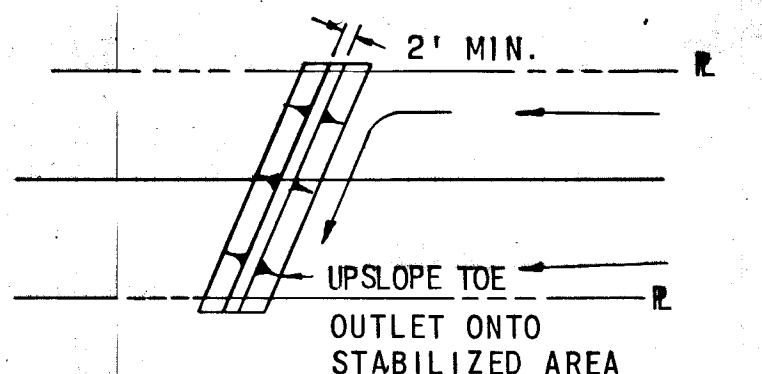


CROSS SECTION



DIVERSION BERM

PLAN VIEW

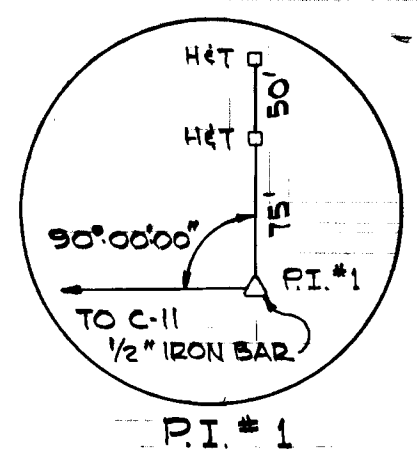
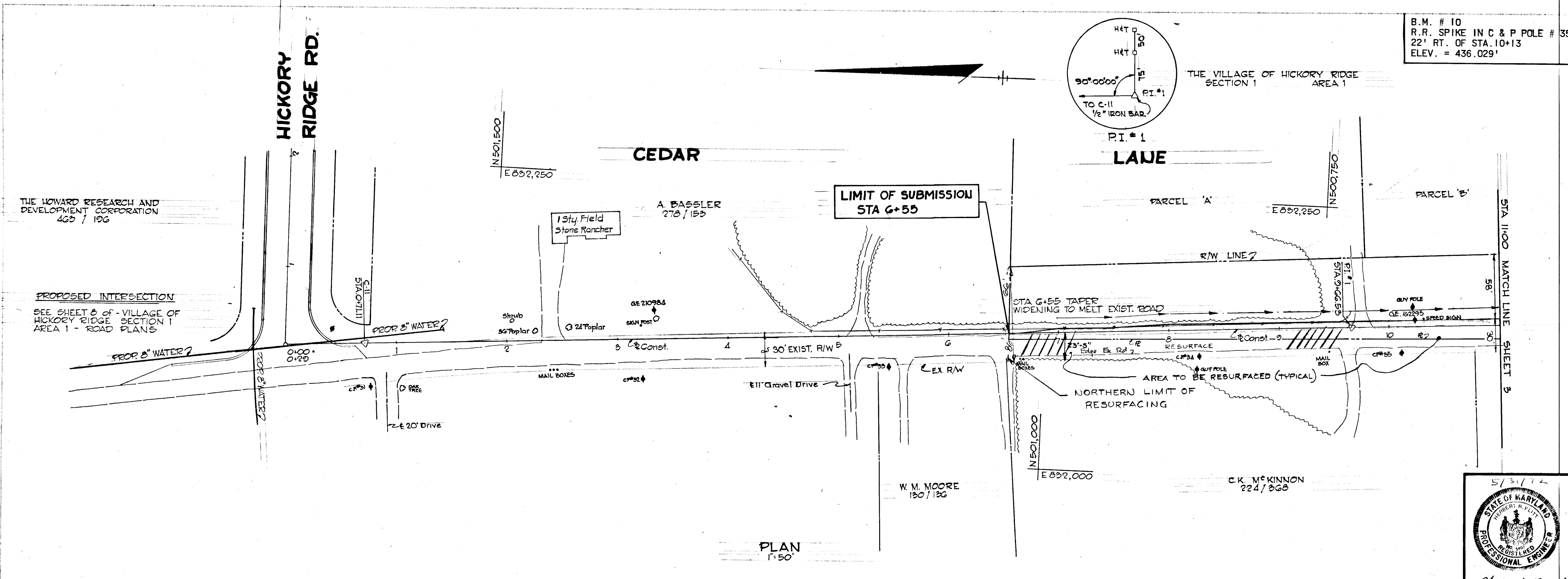


INTERCEPTOR BERM

PLAN VIEW

SEDIMENT CONTROL DETAILS

CERTIFICATION BY THE PROFESSIONAL ENGINEER I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENTATION 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 AND CONSERVATION DISTRICT. <i>Robert C. Olt</i> 8/11/72 SIGNATURE OF ENGINEER DATE			Rev. Date Rev. No. Revision Description _____ _____ _____ COLUMBIA MARYLAND 5TH ELECTION DISTRICT HOWARD COUNTY OWNER AND DEVELOPER HOWARD RESEARCH AND DEVELOPMENT CORP. COLUMBIA, MARYLAND
APPROVED: HOWARD SOIL CONSERVATION DISTRICT <i>Robert W. Zick</i> 8/18/72 DISTRICT CONSERVATIONIST SOILS CONSERVATIONIST DEPARTMENT OF PUBLIC WORKS			PROJECT AREA THE VILLAGE OF HICKORY RIDGE SECTION 1 AREA 1 PROJECT TITLE SEDIMENT CONTROL DETAILS
APPROVED: DEPARTMENT OF PUBLIC WORKS <i>W. O. Falbert</i> 8-18-72 CHIEF, BUREAU OF HIGHWAYS DATE OFFICE OF PLANNING AND ZONING		GREEN ASSOCIATES, INC. ENGINEERS ARCHITECTS PLANNERS TOWSON, MARYLAND	PROJECT AREA THE VILLAGE OF HICKORY RIDGE SECTION 1 AREA 1 PROJECT TITLE SEDIMENT CONTROL DETAILS Drawn By J.T.J. Scale NONE Date MARCH 1972 Page No. 28 Checked By T.Y. Date MARCH 1972 C.E. No. Approved By J.T.J. Date _____
CHIEF, DIVISION OF LAND DEVELOPMENT AND TRANSPORTATION PLANNING DATE			



B.M. # 10
 R.R. SPIKE IN C & P POLE # 35
 22' RT. OF STA. 10+13
 ELEV. = 436.029'

APPROVED
 DIVISION OF LAND DEVELOPMENT
 AND TRANSPORTATION PLANNING
 HOWARD COUNTY, MARYLAND
 DATE 8/13/72

DEPARTMENT OF PUBLIC WORKS
 CHIEF, BUREAU OF HIGHWAYS DATE 8/13/72

OFFICE OF PLANNING AND ZONING
 CHIEF DIVISION OF LAND DEVELOPMENT AND TRANSPORTATION PLANNING DATE

GREEN ASSOCIATES, INC.
 CONSULTING ENGINEERS
 BALTIMORE, MARYLAND

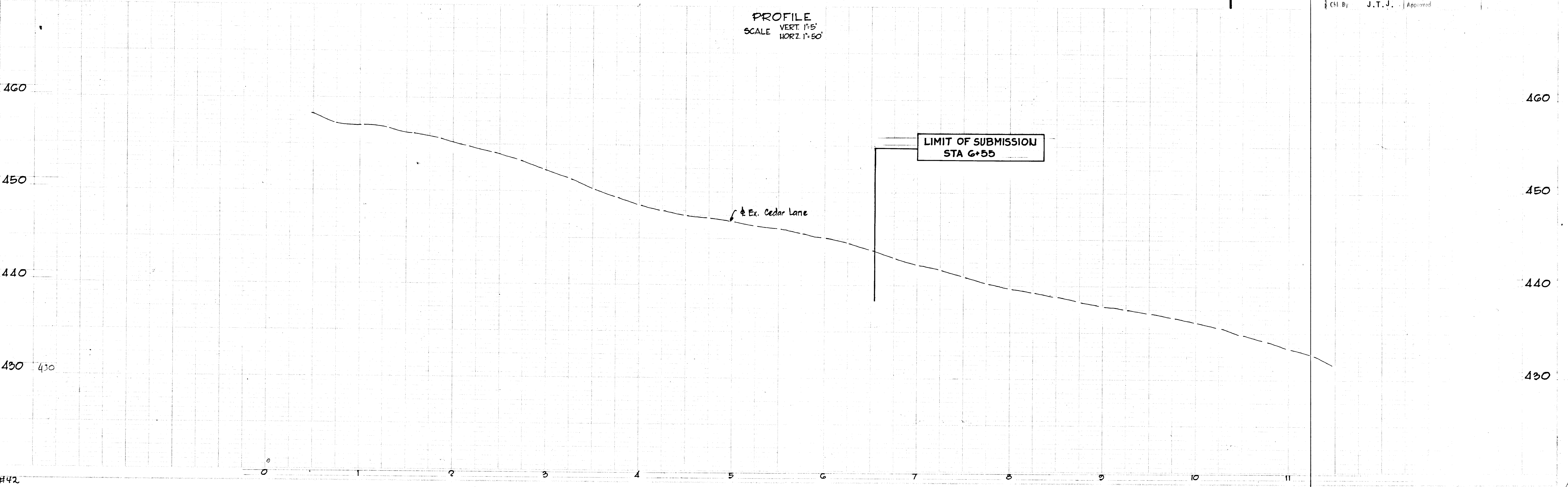
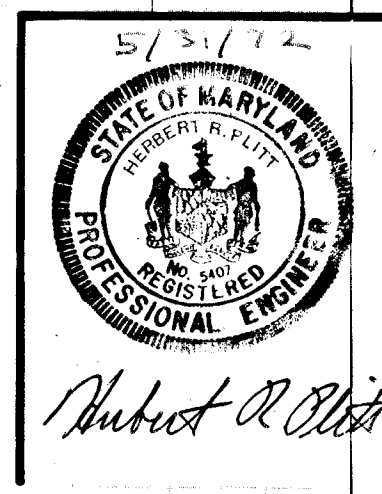
9-27-72 1 RESURFACING AREA ADDED.

COLUMBIA
 MARYLAND
 6TH ELECTION DISTRICT HOWARD COUNTY
 OWNER OF DEVELOPER
 HOWARD RESEARCH AND DEVELOPMENT CORP.
 COLUMBIA, MARYLAND

PROJECT AREA
 THE VILLAGE OF HICKORY RIDGE
 SECTION 1 AREA 1

PROJECT TITLE
 CEDAR LANE
 PLAN & PROFILE

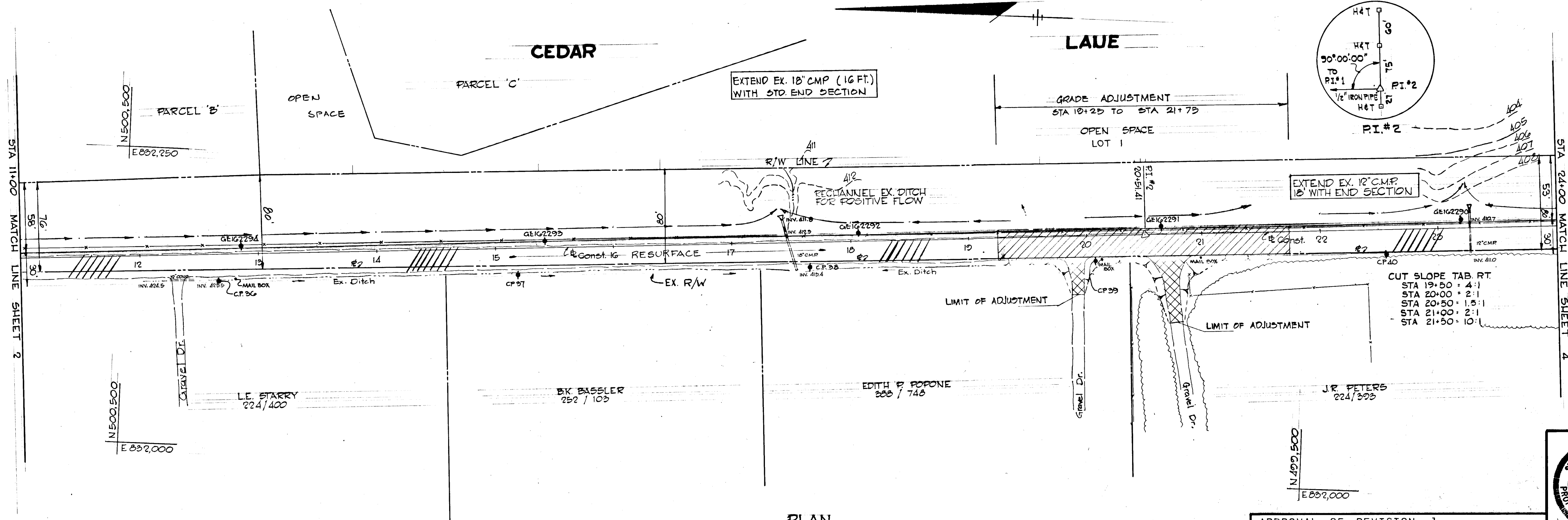
Des. By J.T.J. Scale AS SHOWN Dwg. No. 2 of 8
 Dwn. By F.T. Date MAY, 1972 C.E.F. No.
 Chk. By J.T.J. Approved



THE VILLAGE OF HICKORY RIDGE
SECTION 1 AREA 1

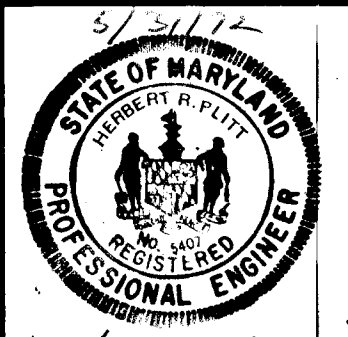
B.M. # 20
R.R. SPIKE IN C & P POLE # 39
22' RT. OF STA. 20+07
ELEV. = 419.782'

APPROVED
DIVISION OF LAND DEVELOPMENT
AND TRANSPORTATION PLANNING
HOWARD COUNTY, MARYLAND
DATE 8/10/72
J. T. J.



PLAN
1" = 50'

APPROVAL OF REVISION 1
DEPARTMENT OF PUBLIC WORKS
CHIEF, BUREAU OF HIGHWAYS
DATE



DEPARTMENT OF PUBLIC WORKS
8/31/72
CHIEF, BUREAU OF HIGHWAYS
DATE

OFFICE OF PLANNING AND ZONING
CHIEF DIVISION OF LAND DEVELOPMENT
AND TRANSPORTATION PLANNING
DATE

GREEN ASSOCIATES, INC.
CONSULTING ENGINEERS
BALTIMORE, MARYLAND

9/15/72
REVISE P.G.L. ELEVATIONS, INDICATE RESURFACING

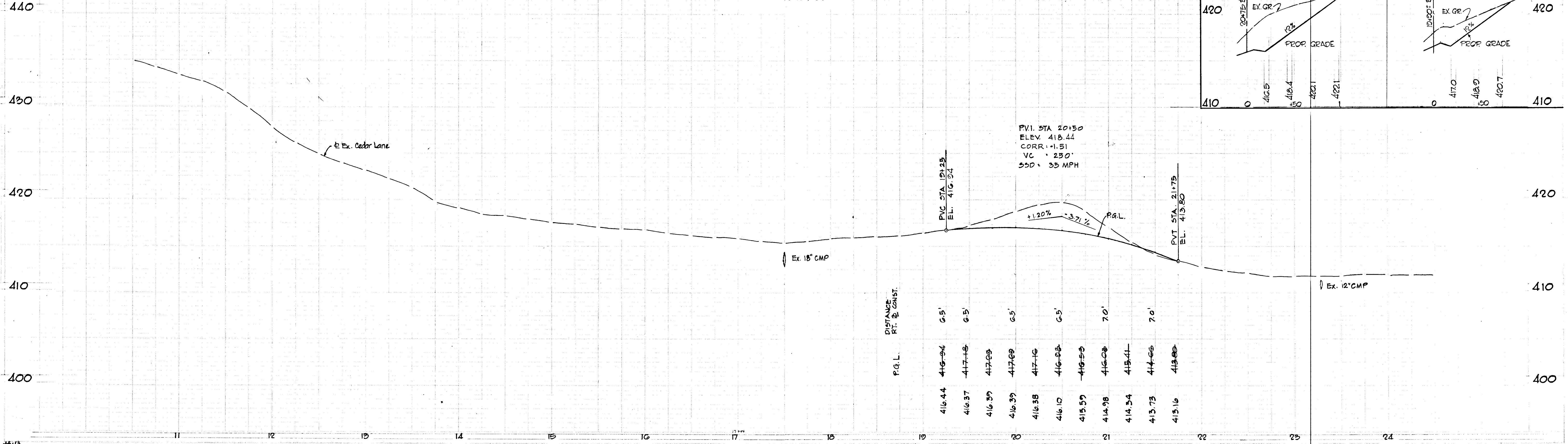
COLUMBIA
MARYLAND
6TH ELECTION DISTRICT
HOWARD COUNTY
HOWARD RESEARCH AND DEVELOPMENT CORP.
COLUMBIA, MARYLAND

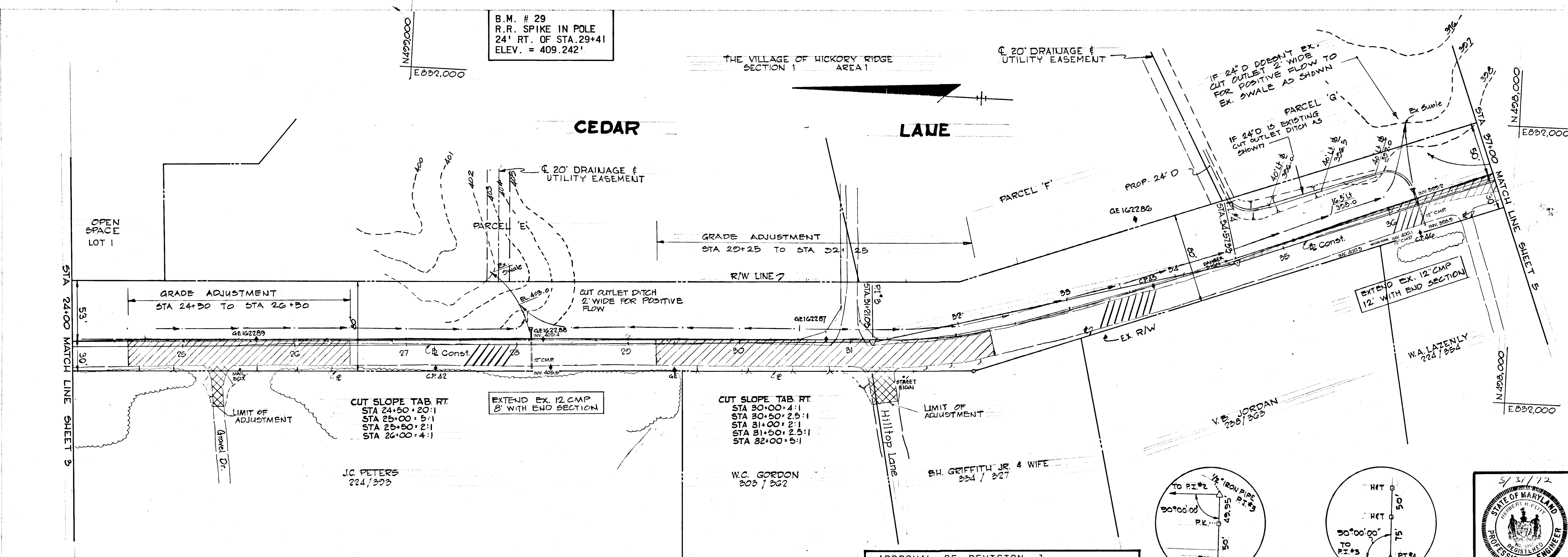
PROJECT AREA
THE VILLAGE OF HICKORY RIDGE
SECTION 1 AREA 1

PROJECT TITLE
CEDAR LANE
PLAN & PROFILE

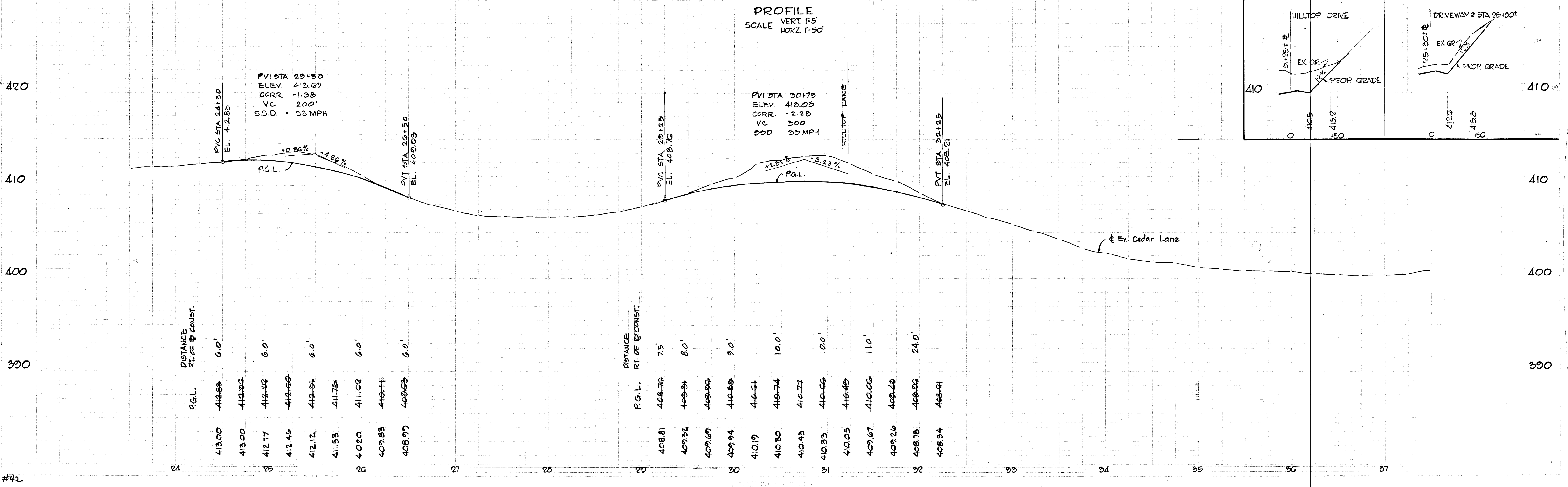
Des. By J. T. J. Scale AS SHOWN Cont. No. 3 of 8
Dir. By F. T. Date MAY 1972 C.C.F. No.
Chk. By J. T. J. Approved

PROFILE
VERT. 1" = 5'
SCALE
HORIZ. 1" = 50'

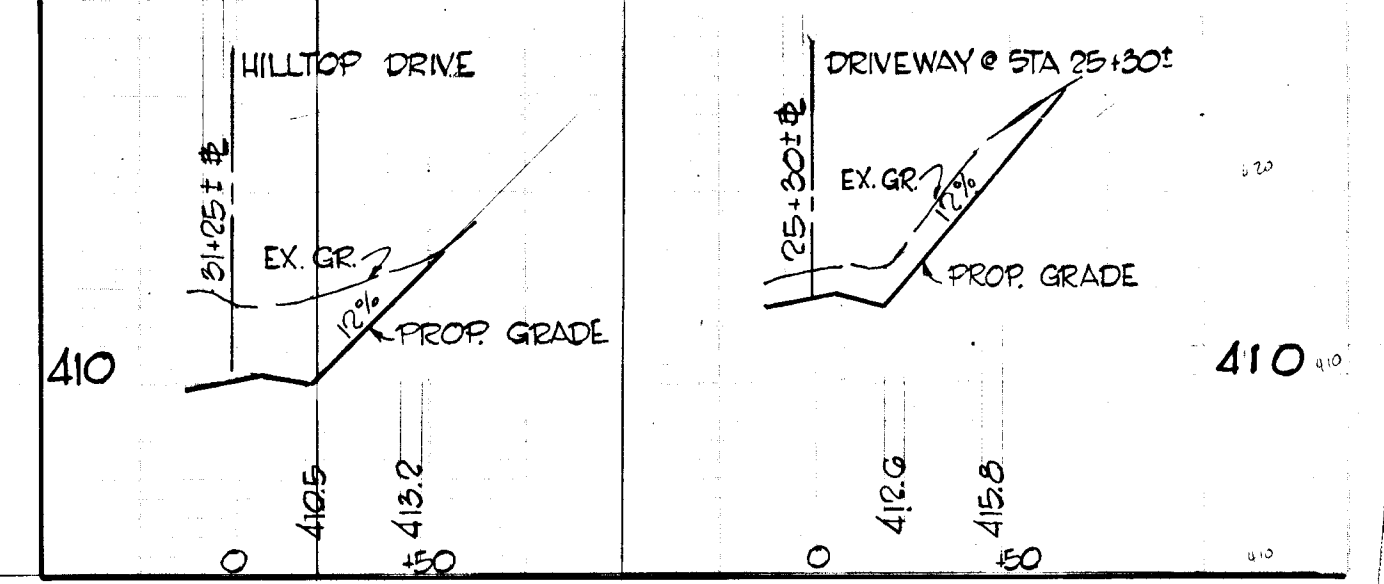




APPROVAL OF REVISION 1
DEPARTMENT OF PUBLIC WORKS
CHIEF, BUREAU OF HIGHWAYS
DATE



5/31/72
STATE OF MARYLAND
REGISTERED PROFESSIONAL ENGINEER
Robert R. O'Neil



APPROVED
DIVISION OF LAND DEVELOPMENT
AND TRANSPORTATION PLANNING
HOWARD COUNTY, MARYLAND
DATE 5/18/72
J.T.J.

DEPARTMENT OF PUBLIC WORKS
8/31/72
G. M. McLeod
CHIEF, BUREAU OF HIGHWAYS
DATE

OFFICE OF PLANNING AND ZONING
CHIEF DIVISION OF LAND DEVELOPMENT
AND TRANSPORTATION PLANNING
DATE

GREEN ASSOCIATES, INC.
CONSULTING ENGINEERS
BALTIMORE, MARYLAND

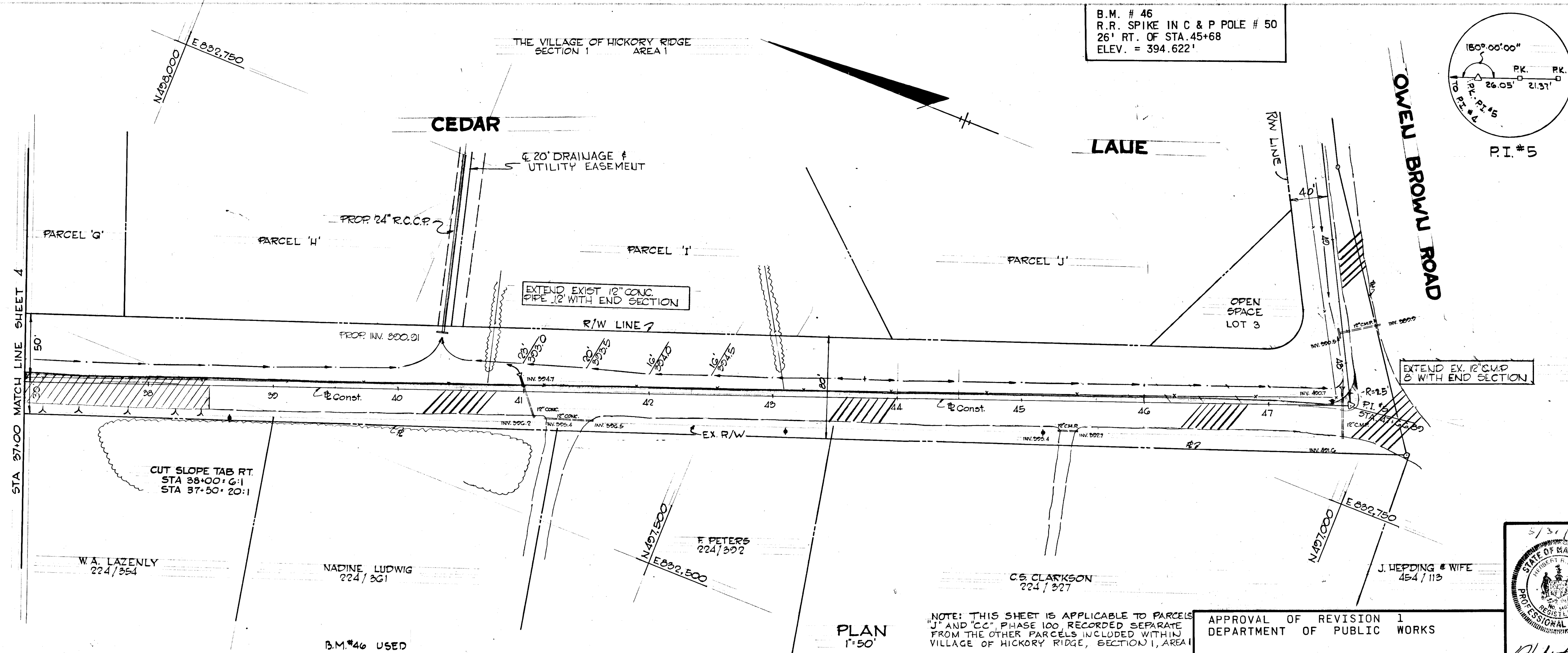
5/18/72
REVISE RGL ELEVATIONS, INDICATE RESURF.
DATE Rev No

COLUMBIA
MARYLAND
6TH ELECTION DISTRICT HOWARD COUNTY
HOWARD RESEARCH AND DEVELOPMENT CORP.
COLUMBIA, MARYLAND

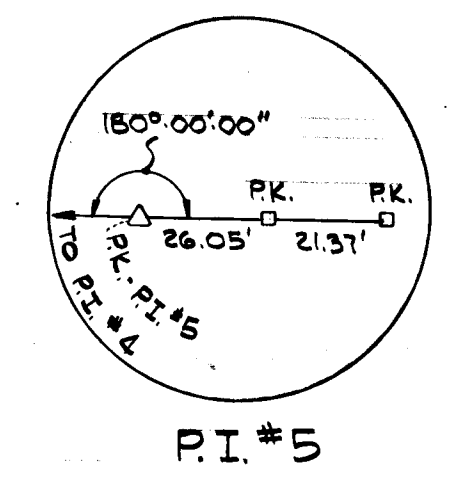
PROJECT AREA
THE VILLAGE OF HICKORY RIDGE
SECTION 1 AREA 1

PROJECT TITLE
CEDAR LANE
PLAN & PROFILE

By: J.T.J. Scale: AS SHOWN Day No: 4 of 8
By: F.T. Date: MAY 1972 C.E.T. No.
By: J.T.J. Approved



B.M. # 46
R.R. SPIKE IN C & P POLE # 50
26' RT. OF STA. 45+68
ELEV. = 394.622'



APPROVED
DIVISION OF LAND DEVELOPMENT
AND TRANSPORTATION PLANNING
HOWARD COUNTY, MARYLAND
DATE 8/18/72
J. T. J.

DEPARTMENT OF PUBLIC WORKS
D. M. McLeod 8/31/72
CHIEF, BUREAU OF HIGHWAYS

OFFICE OF PLANNING AND ZONING
CHIEF DIVISION OF LAND DEVELOPMENT
AND TRANSPORTATION PLANNING

GREEN ASSOCIATES, INC.
CONSULTING ENGINEERS
BALTIMORE, MARYLAND

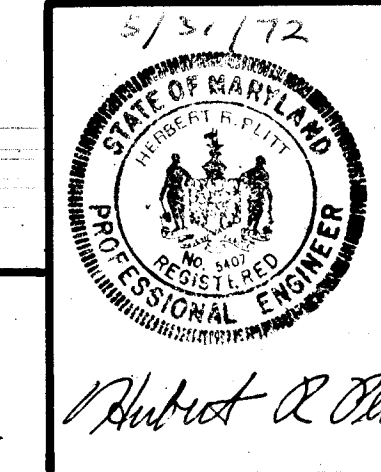
9/15/72
REVISE PGL ELEV. INDICATE RESURF. ADD NOTE

COLUMBIA
MARYLAND
6TH ELECTION DISTRICT HOWARD COUNTY
HOWARD RESEARCH AND DEVELOPMENT CORP.

PROJECT AREA THE VILLAGE OF HICKORY RIDGE
SECTION 1 AREA 1

PROJECT TITLE CEDAR LANE
PLAN & PROFILE

Des. By J. T. J. Scale AS SHOWN Proj. No. 5 of 8
Dir. By F. T. Date MAY 1972 C.C.F. No.
Chk. By J. T. J. Approved



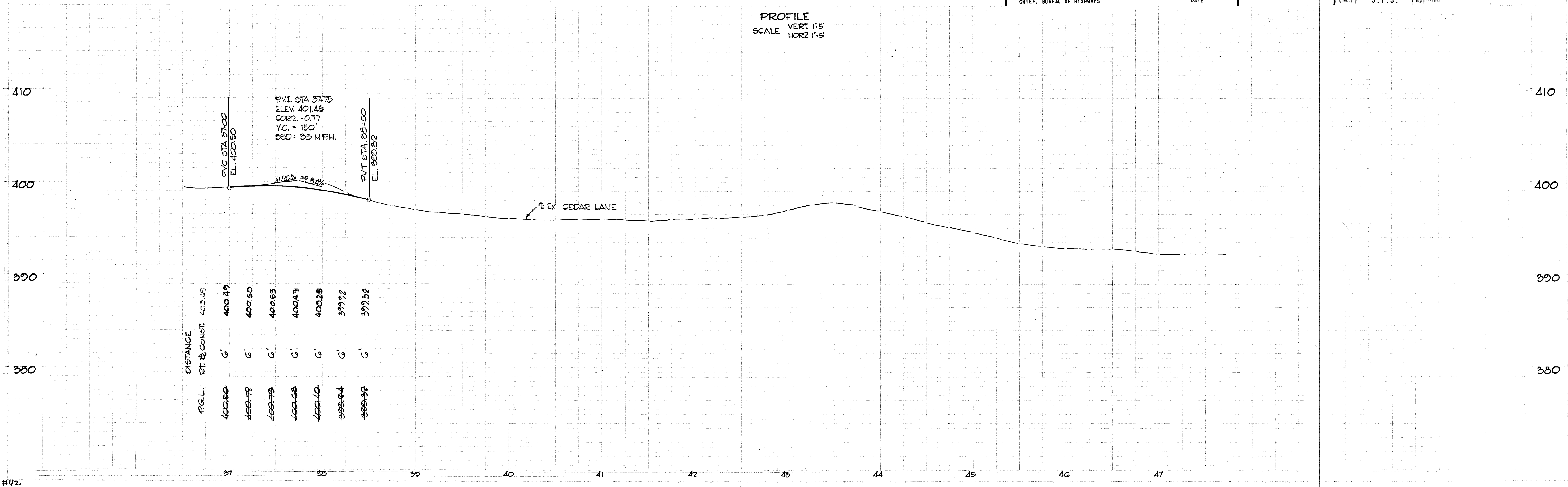
PLAN
1"=50'

NOTE: THIS SHEET IS APPLICABLE TO PARCELS
"J" AND "CC" PHASE 100, RECORDED SEPARATE
FROM THE OTHER PARCELS INCLUDED WITHIN
VILLAGE OF HICKORY RIDGE, SECTION 1, AREA 1

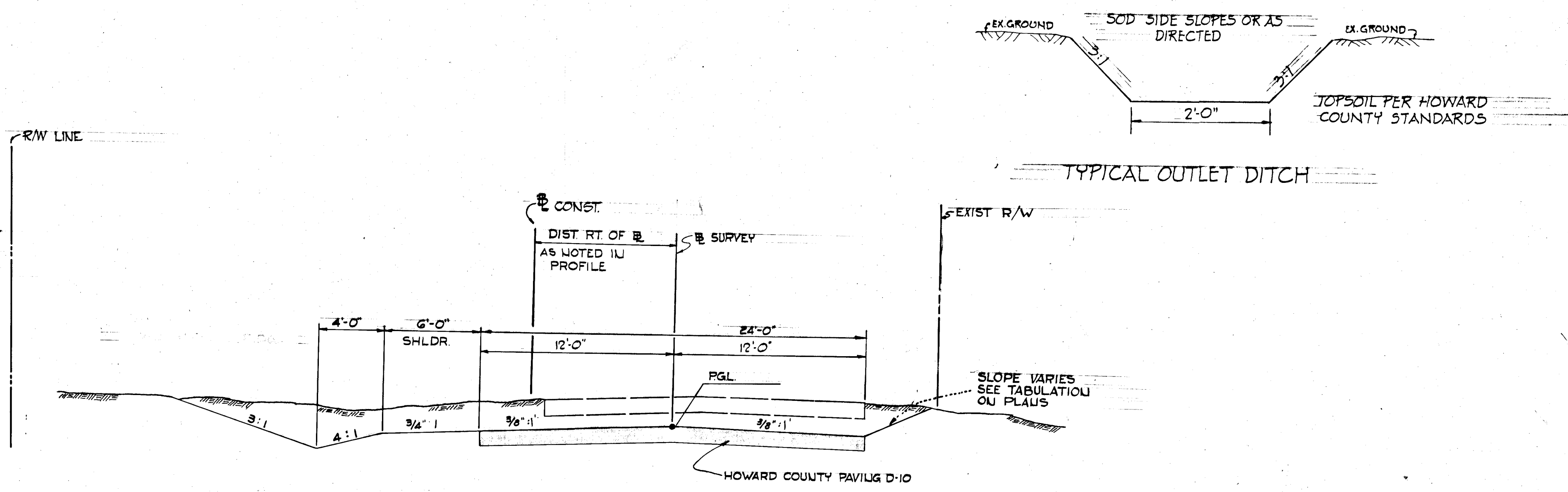
APPROVAL OF REVISION 1
DEPARTMENT OF PUBLIC WORKS

CHIEF, BUREAU OF HIGHWAYS

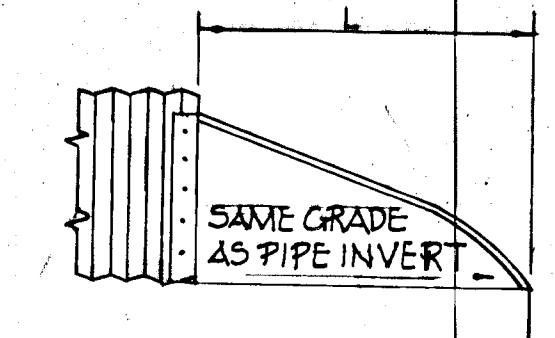
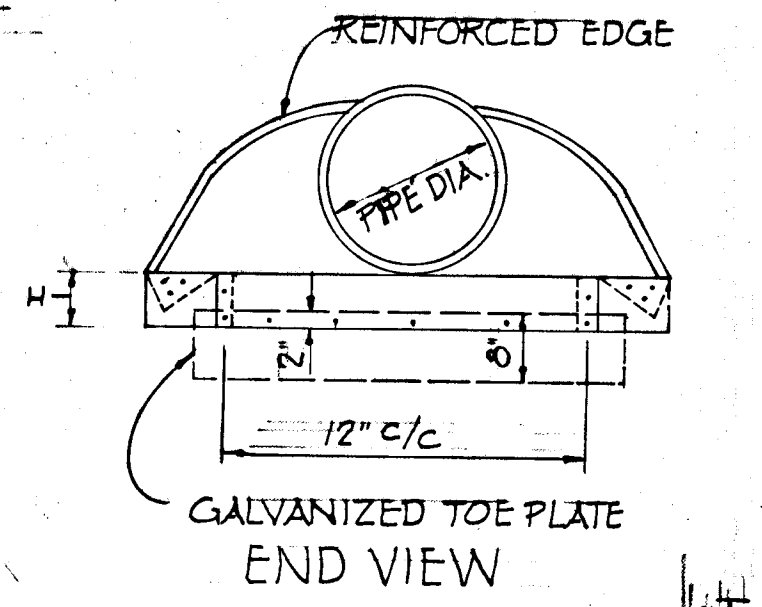
PROFILE
SCALE VERT. 1"=5'
HORIZ. 1"=5'



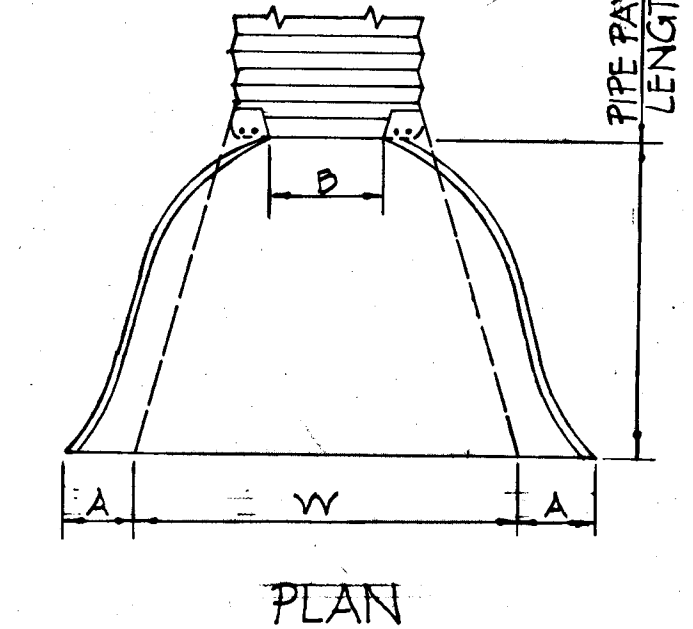
VILLAGE OF HICKORY RIDGE SECTION 1 AREA 1



TYPICAL OUTLET DITCH



LONGITUDINAL SECTION



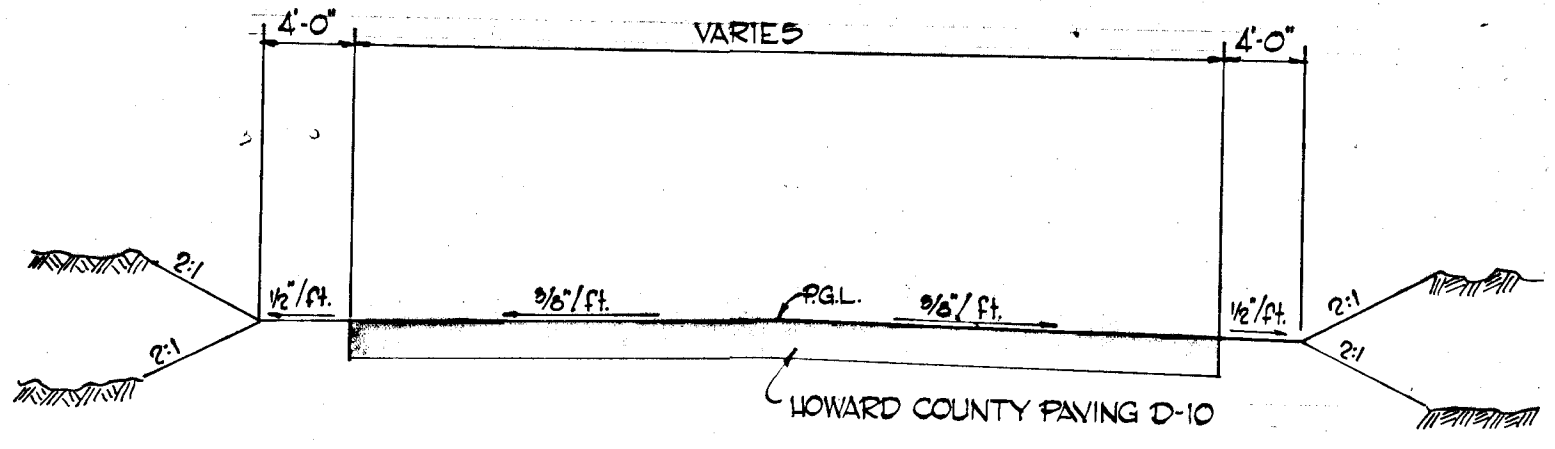
STANDARD METAL END SECTION

All 3 piece bodies to have 12 ga. sides and 10 ga. center panels. Width of center panels to be greater than 20% of the pipe periphery. Multiple panel bodies to have lap seams which are to be tightly joined by 3/8 galvanized rivets or bolts.

TABLE OF DIMENSIONS							
PIPE DIAM.	GA.	A	D	H	L	W	APPROX. SLOPE
12"	16	6'-11"	6'-11"	6'-2 1/2"	2'-11"	2'-2 1/2"	2 1/2
18"	16	9'-11"	9'-11"	6'-2 1/2"	3'-11"	3'-4 1/2"	2 1/2

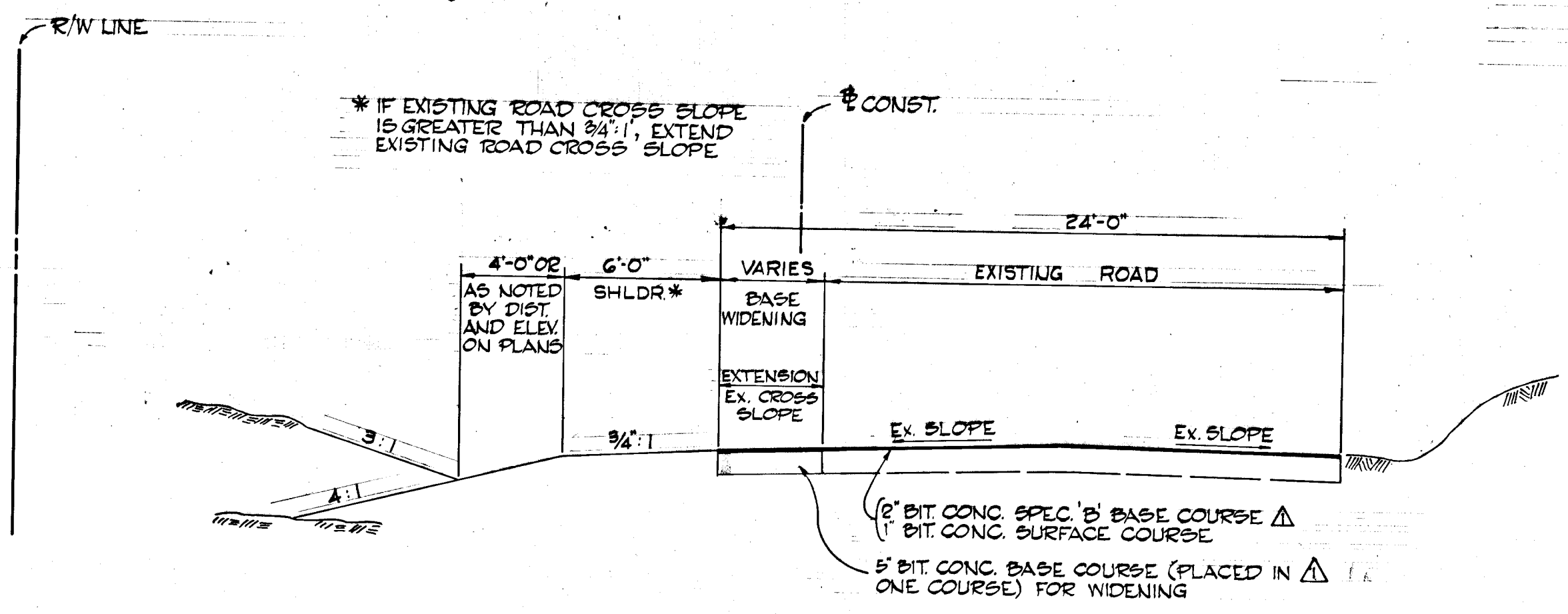
CEDAR LANE - NEW CONSTRUCTION

STA 17+25 TO 21+75
 STA 24+50 TO 26+50
 STA 29+25 TO 32+25
 STA 37+00 TO 38+50



TYPICAL DRIVEWAY IMPROVEMENT @ CEDAR LANE NEW CONSTRUCTION

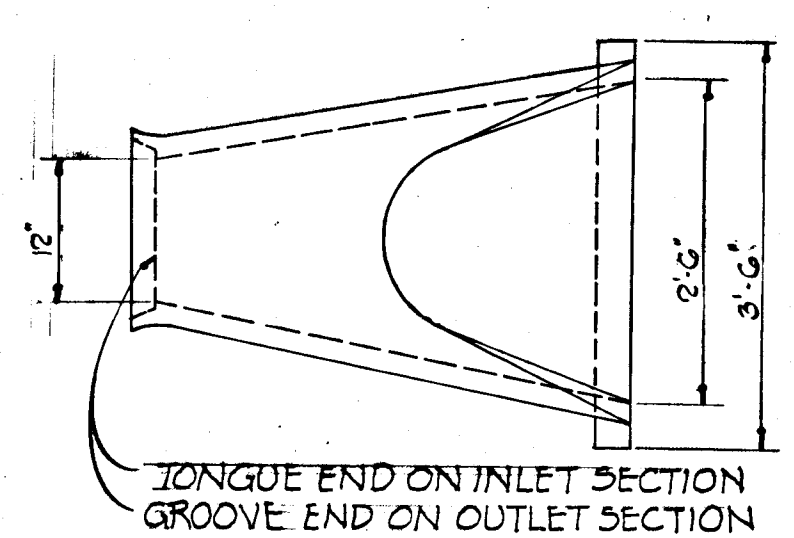
VILLAGE OF HICKORY RIDGE SECTION 1 AREA 1



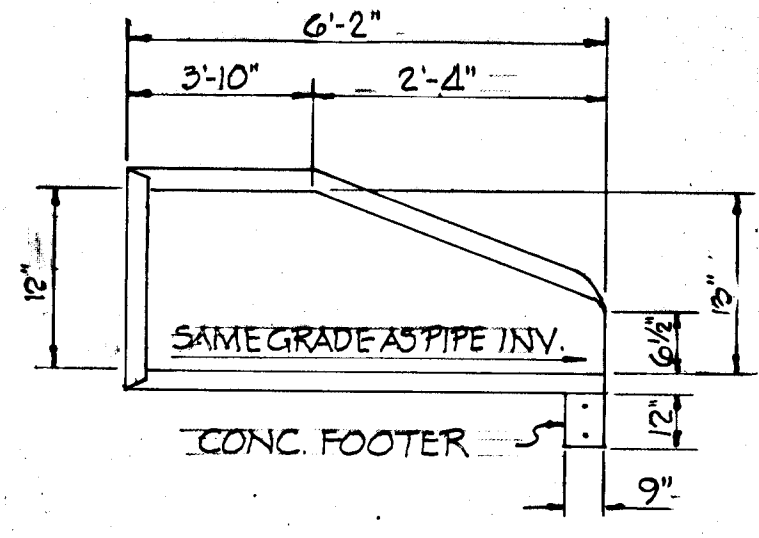
CEDAR LANE - BASE WIDENING

STA 6+55 TO 19+25
 STA 21+75 TO 24+50
 STA 22+50 TO 29+25
 STA 32+25 TO 37+00
 STA 38+50 TO 47+67

END SECTIONS MUST BE REINFORCED TO CONFORM WITH CLIX PIPE



PLAN

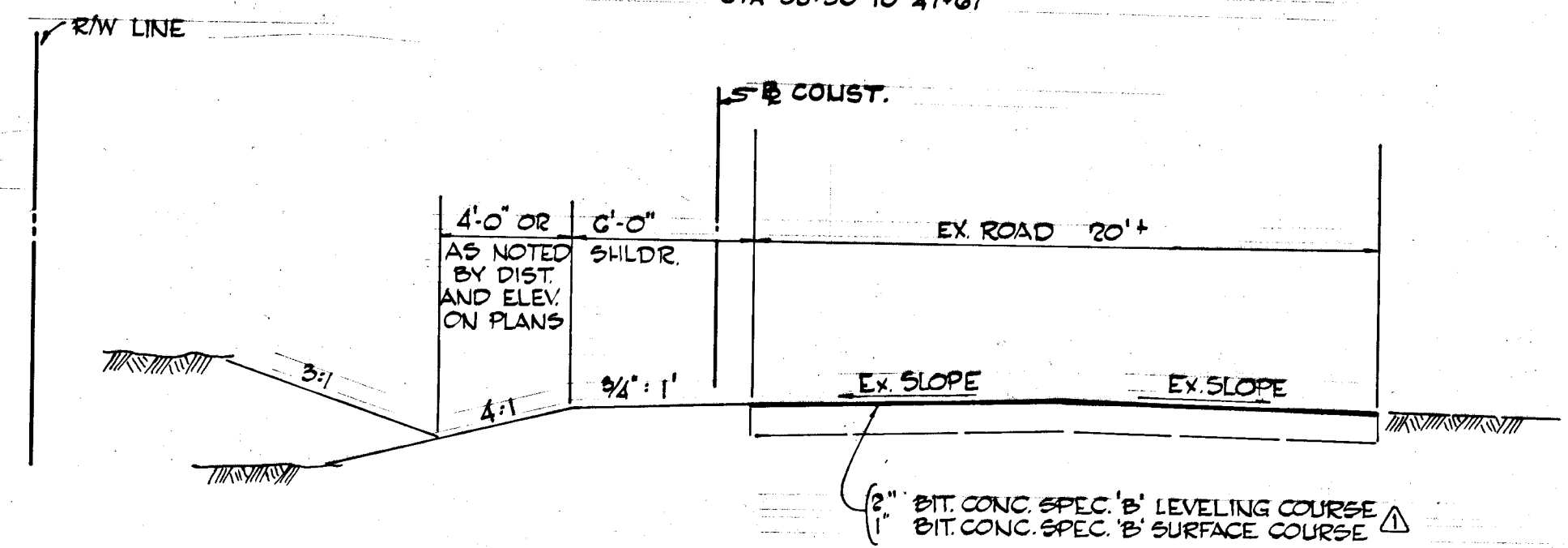


LONGITUDINAL SECTION

STANDARD CONCRETE END SECTION

NOTE: TRANSITION RESURFACING TO UNGRADED SHOULDERS WITH CR-6 STONE.

VILLAGE OF HICKORY RIDGE SECTION 1 AREA 1



OWEN BROWN ROAD

APPROVED
 DIVISION OF LAND DEVELOPMENT AND TRANSPORTATION PLANNING
 J. M. McLeod

DEPARTMENT OF PUBLIC WORKS
 S. M. McLeod 8/31/72
 CHIEF, BUREAU OF HIGHWAYS

OFFICE OF PLANNING AND ZONING
 CHIEF DIVISION OF LAND DEVELOPMENT AND TRANSPORTATION PLANNING

GREEN ASSOCIATES, INC.
 CONSULTING ENGINEERS
 BALTIMORE, MARYLAND

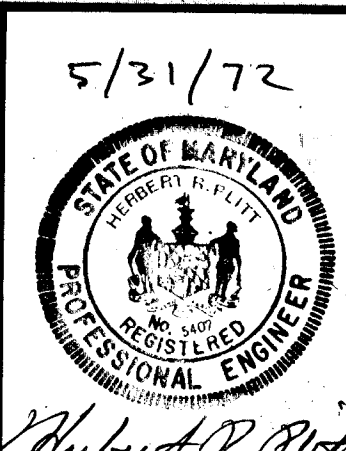
2/15/72 REVISION 1
 REVISE TYPICAL SECTIONS OF OWEN BROWN ROAD & CEDAR LANE

COLUMBIA MARYLAND
 6TH ELECTION DISTRICT HOWARD COUNTY
 HOWARD RESEARCH AND DEVELOPMENT CORP.

PROJECT AREA: THE VILLAGE OF HICKORY RIDGE SECTION 1 AREA 1
 PROJECT TITLE: CEDAR LANE TYPICAL SECTIONS AND DETAILS

Drawn By: F.T. Scale: NO SCALE Sheet No: 8 of 8
 Check By: A.R. Date: JUNE 1972
 Chief: J.T.J.

APPROVAL OF REVISION 1
 DEPARTMENT OF PUBLIC WORKS



CHIEF, BUREAU OF HIGHWAYS

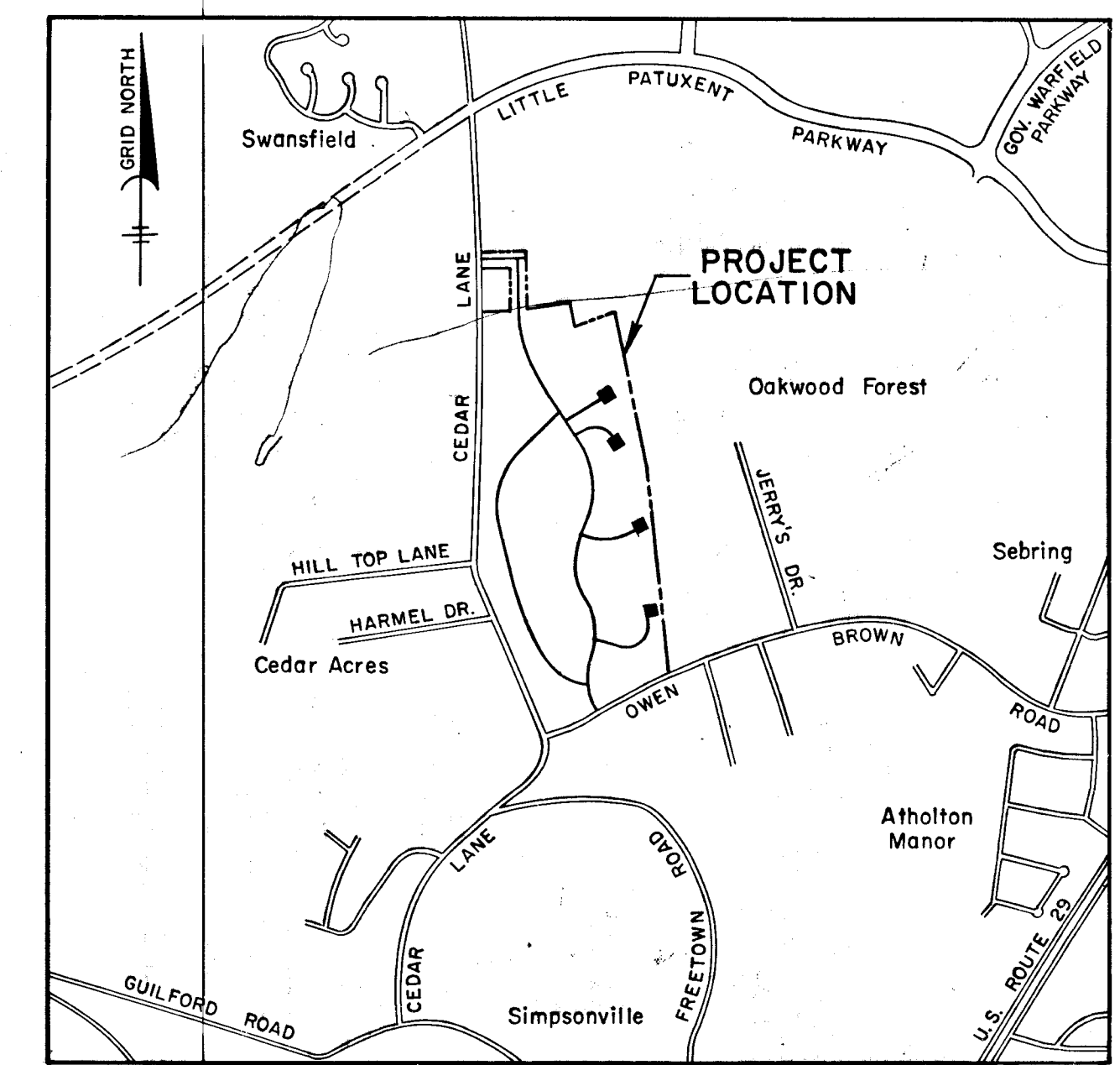
SHEET INDEX	
NO.	DESCRIPTION
1.	TITLE SHEET
2.	DRAINAGE AREA MAP
3.	DRAINAGE AREA MAP
4.	SUNNY SPRING - STA. 0+00 TO STA. 12+28.77
5.	SUNNY SPRING - STA. 2+28.77 TO STA. 23+94.76
6.	SUNNY SPRING - STA. 23+94.76 TO STA. 36+00
7.	SUNNY SPRING - STA. 36+00 TO STA. 48+32.37
8.	HICKORY RIDGE ROAD
9.	BRIGHT PLUME - STA. 0+00 TO STA. 11+74.16
10.	BRIGHT PLUME - STA. 11+74.16 TO STA. 21+00
11.	BRIGHT PLUME - STA. 21+00 TO STA. 28+05.81
12.	GOLDEN HOOK - STA. 0+00 TO STA. 5+00
13.	GOLDEN HOOK - STA. 5+00 TO STA. 11+19.74
14.	CRICKET PASS
15.	PLAITED REED
16.	SLENDER SKY
17.	STORM DRAIN PLAN
18.	STORM DRAIN PROFILES
19.	STORM DRAIN PLAN & PROFILES
20.	STORM DRAIN PROFILES
21.	STORM DRAIN PROFILES
22.	STORM DRAIN PROFILES
23.	STREAM RELOCATION
24.	TYPICAL SECTIONS
25.	DETAILS
26.	ENDWALL DETAILS - 9'-6" x 6'-5" M.P.P.A.
27.	ENDWALL DETAILS - 12" IN 2'-2" x 5'-9" M.P.P.A.
28.	SEDIMENT CONTROL DETAILS

COLUMBIA

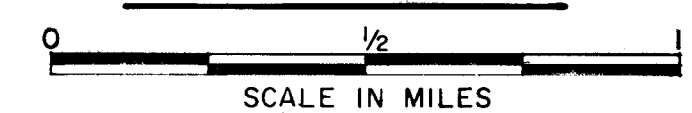
HOWARD COUNTY, MARYLAND
5TH ELECTION DISTRICT

ROAD CONSTRUCTION PLANS

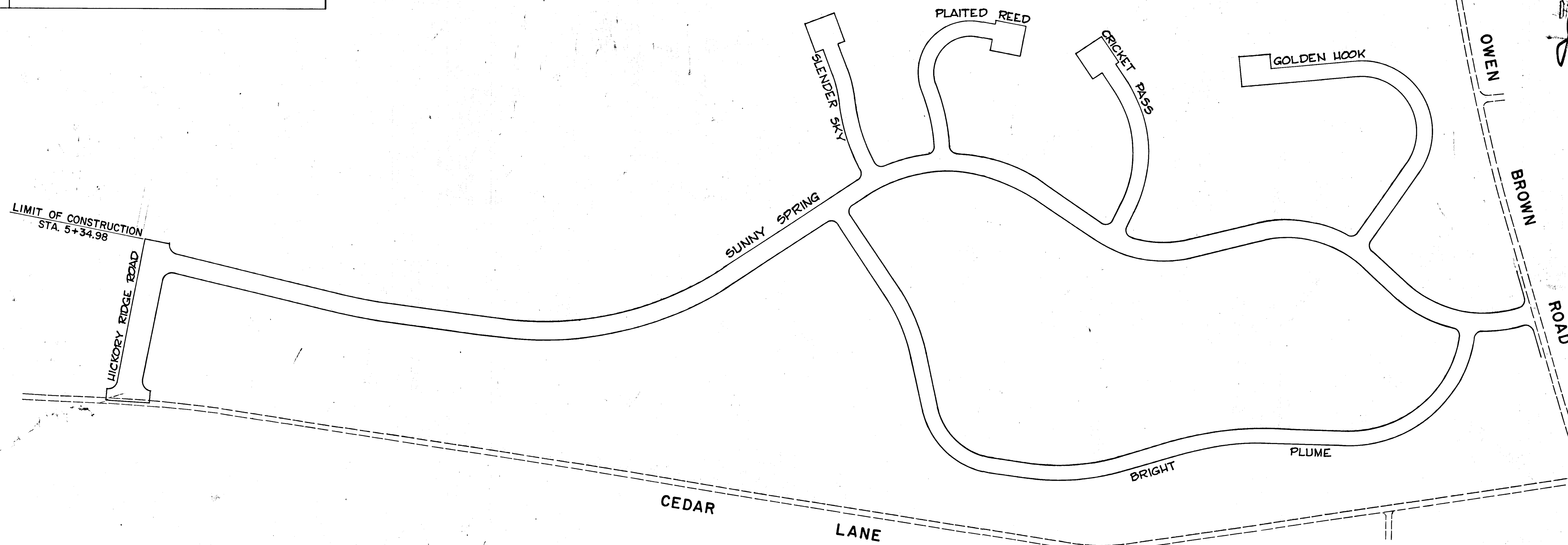
VILLAGE OF HICKORY RIDGE
SECTION I AREA I



VICINITY MAP



SCALE: 1" = 200'



APPROVED
DIVISION OF LAND DEVELOPMENT
AND TRANSPORTATION PLANNING
HOWARD COUNTY, MARYLAND
DATE 8/18/72
JAC/CF

GENERAL NOTES

- FOR ALL DETAILS NOT SHOWN ON DRAWINGS, SEE HOWARD COUNTY ROAD CONSTR. CODE AND ST'D. SPECS. AS REVISED AUGUST 6, 1968.
- TREES ARE TO BE PROTECTED AGAINST DAMAGE TO THE MAXIMUM EXTENT REASONABLE. TREES WHICH ARE TO REMAIN IN STREETS AND OTHER RIGHTS OF WAY WILL BE MARKED BY THE ENGINEER PRIOR TO COMMENCING OF CONSTRUCTION OPERATIONS.
- DEVELOPER WILL PLACE ROADS TO SUBGRADE FOR THE FULL WIDTH OF THE RIGHT OF WAY BEFORE INSTALLATIONS OF UTILITIES.
- THE DEVELOPER SHALL ACCOMPLISH ALL GRADING WITHIN EASEMENT AREAS WHERE UTILITIES ARE TO BE INSTALLED BEFORE NOTICE TO PROCEED WILL BE ISSUED.
- CONTRACTOR TO NOTIFY THE FOLLOWING UTILITIES AT LEAST THREE DAYS BEFORE STARTING WORK SHOWN ON THIS/ THESE DRAWINGS:
BELL TELEPHONE SYSTEM 393-3649
LONG DISTANCE CABLE DIVISION 393-3553 OR 3554
BALTIMORE GAS & ELECTRIC CO. 539-8000 EXT. 691
- ALL DETAILS ARE FROM THE "ROAD CONSTRUCTION CODE AND STANDARD SPECIFICATIONS" ISSUED OR APPROVED BY THE COUNTY COMMISSIONERS AND HOWARD COUNTY ROAD DEPARTMENT.
- ALL LOCAL ROADS ARE DESIGNED IN ACCORDANCE WITH THE AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIAL STANDARDS. COLLECTOR STREETS 35 M.P.H.; RESIDENTIAL STREETS 25 M.P.H.
- ALL ELEVATIONS SHOWN ARE BASED ON U.S.C. AND G.S. MEAN SEA LEVEL DATUM 1929.
- ALL INLET BOXES AND MANHOLES TO HAVE A MINIMUM OF 8" CONCRETE FOOTER.
- TEMPORARY COMPACTED EARTH FILLED DIVERSION DIKES ARE TO BE CONSTRUCTED AT THE TOP OF ALL CUT OR FILL SLOPES OVER 4 FEET IN HEIGHT CONCURRENTLY WITH THE INITIAL GRADING, AND DIRECTED TO UNDISTURBED SOIL AT THE END OF EACH DAY (SEE SH. 25)
- ALL SWALES SHALL BE SODDED AND TAMPED, AND ALL SLOPES SHALL BE SEED OR SODDED IN COMPLIANCE WITH THE HOWARD COUNTY SOIL CONSERVATION DISTRICT AND THE HOWARD COUNTY PLANNING BOARD STANDARDS ENTITLED "STANDARD AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN URBANIZING AREAS".
- CONTRACTOR TO NOTIFY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT 465-3180 AT LEAST THREE DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS.
- ALL DISTURBED SLOPE AREAS TO BE STABILIZED AS SOON AS GRADING IS COMPLETED.
- ON ALL FILLS IN SUMP AREAS, RELIANCE PLASTIC & CHEMICAL COMPANY "FLEXIBLE TUBE DOWN DRAINS AND PANS" OR APPROVED EQUAL, SHALL BE USED. SEE SHEET NO. 28.
- INSTALLATION OF TRAFFIC CONTROL DEVICES, MARKING, AND SIGNING SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, 1971 EDITION.

16. INTERCEPTOR DIKES WILL BE SPACED NO MORE THAN 300 FT. APART, OUTLETTING ONTO UNDISTURBED SOIL OR THROUGH FLEXIBLE TUBE DOWN DRAINS AND PANS.

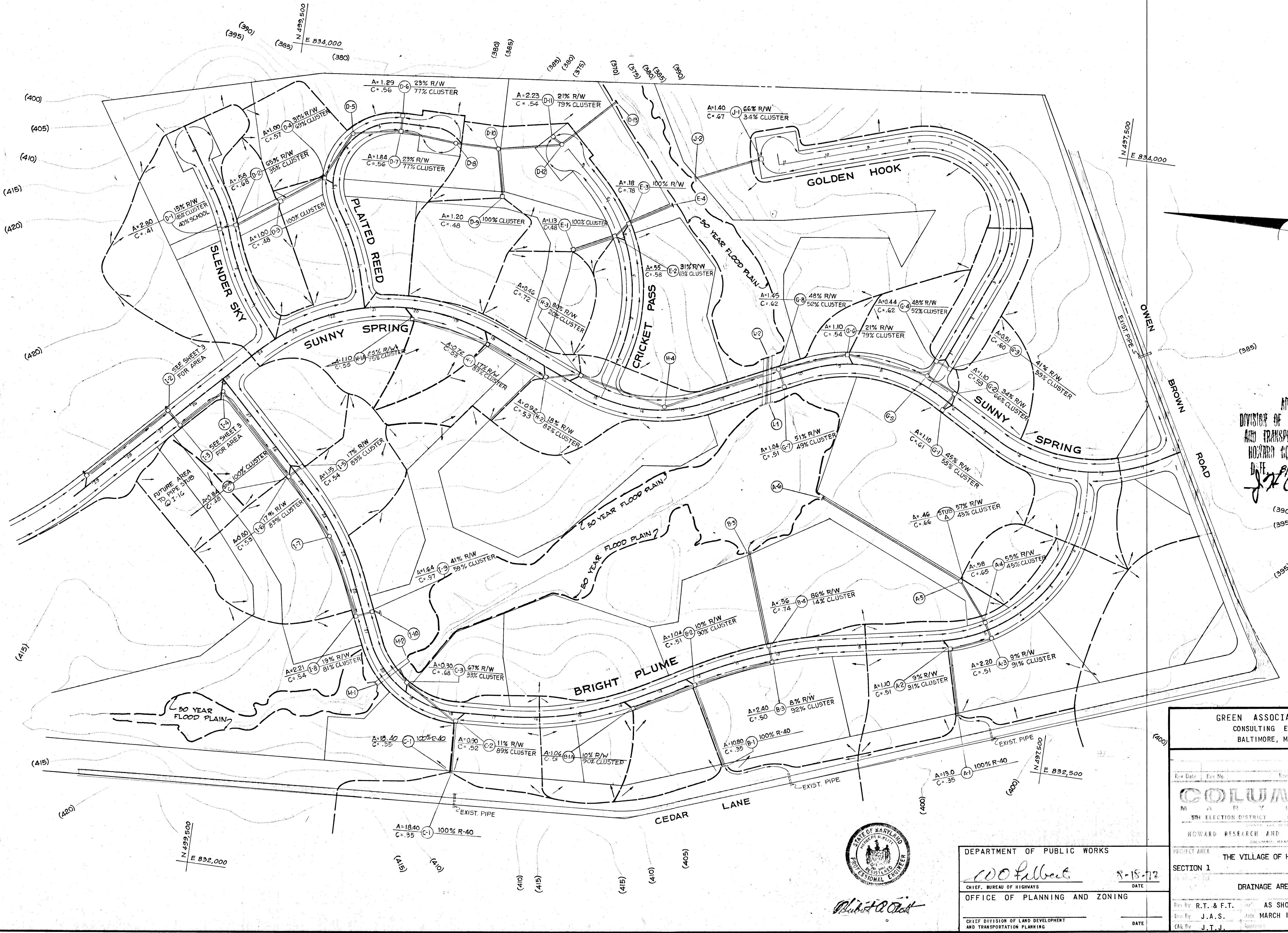
DEPARTMENT OF PUBLIC WORKS	
<i>W.O. Filbert</i> CHIEF, BUREAU OF HIGHWAYS	8-18-72 DATE
OFFICE OF PLANNING AND ZONING	
<i>J.H. Clawson</i> CHIEF DIVISION OF LAND DEVELOPMENT AND TRANSPORTATION PLANNING	8-22-72 DATE
GREEN ASSOCIATES, INC. CONSULTING ENGINEERS 32 WEST ROAD BALTIMORE, MARYLAND	

<i>Robert W. ...</i> Reg. No. 5407	8/22/72 Date
---------------------------------------	-----------------

OWNER AND DEVELOPER
THE HOWARD RESEARCH AND DEVELOPMENT CORP.
COLUMBIA, MARYLAND

CERTIFICATION BY THE PROFESSIONAL ENGINEER I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENTATION 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 AND CONSERVATION DISTRICT.	
<i>Robert W. ...</i> SIGNATURE OF ENGINEER	8/18/72 DATE
APPROVED: HOWARD SOIL CONSERVATION DISTRICT	
<i>James M. ...</i> DISTRICT CONSERVATIONIST	8/18/72 DATE

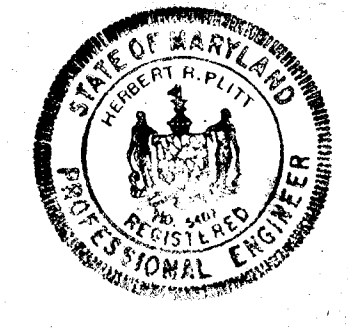
CERTIFICATION BY THE DEVELOPER I certify that all development and/or construction will be done according to this plan of development and plan of silt and sediment control.	
<i>Robert W. ...</i> Signature	8/18/72 Date
This development plan is approved for soil erosion and sediment control by the Howard Soil Conservation District.	
Reviewed <i>James M. ...</i> Dist. Conservationist	8/18/72 Date
Approved <i>Robert W. ...</i> Howard Soil Conservation District	8/18/72 Date



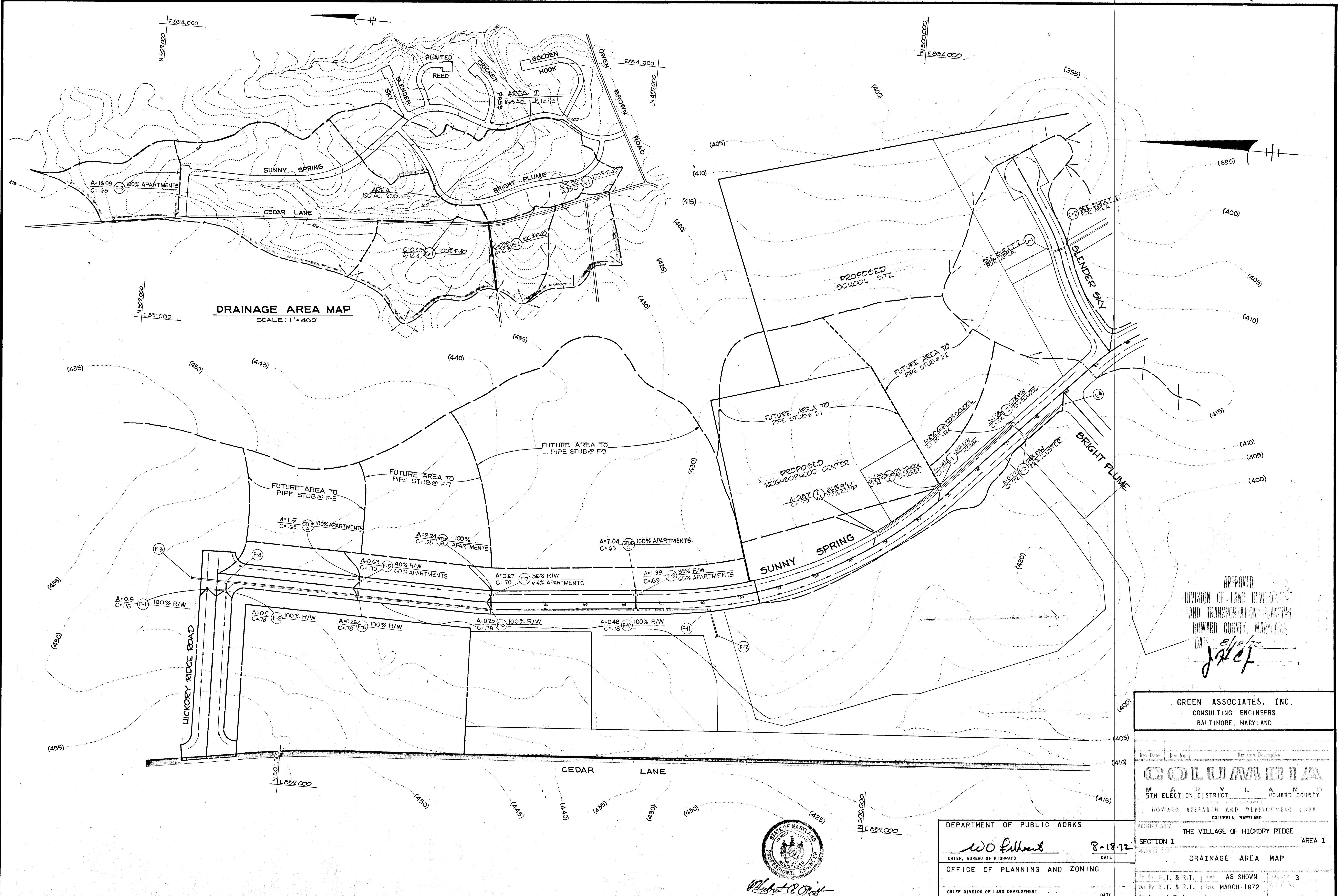
APPROVED
 DIVISION OF LAND DEVELOPMENT
 AND TRANSPORTATION PLANNING
 HOWARD COUNTY, MARYLAND
 DATE 8/15/72
[Signature]

GREEN ASSOCIATES, INC. CONSULTING ENGINEERS BALTIMORE, MARYLAND		
Rev. Date	Rev. No.	Revision Description
5TH ELECTION DISTRICT HOWARD COUNTY		
HOWARD RESEARCH AND DEVELOPMENT CORP. COLUMBIA, MARYLAND		
PROJECT AREA	THE VILLAGE OF HICKORY RIDGE	
SECTION 1	AREA 1	
DRAINAGE AREA MAP		
Des. By: R.T. & F.T.	AS SHOWN	Sheet No. 2
Chk. By: J.A.S.	DATE: MARCH 1972	
Chk. By: J.T.J.	DATE:	

DEPARTMENT OF PUBLIC WORKS
W. O. Fulbert
 CHIEF, BUREAU OF HIGHWAYS
 OFFICE OF PLANNING AND ZONING
 CHIEF DIVISION OF LAND DEVELOPMENT
 AND TRANSPORTATION PLANNING



Robert O. [Signature]



DRAINAGE AREA MAP
SCALE: 1"=400'

APPROVED
DIVISION OF LAND DEVELOPMENT
AND TRANSPORTATION PLANNING
HOWARD COUNTY, MARYLAND
DATE 8/18/72
J.P.C.

GREEN ASSOCIATES, INC.
CONSULTING ENGINEERS
BALTIMORE, MARYLAND

Rev. Date: Rev. No: Revision Description:
COLUMBIA
M A R Y L A N D
5TH ELECTION DISTRICT HOWARD COUNTY
HOWARD RESEARCH AND DEVELOPMENT CORP.
COLUMBIA, MARYLAND

PROJECT AREA: THE VILLAGE OF HICKORY RIDGE
SECTION 1 AREA 1

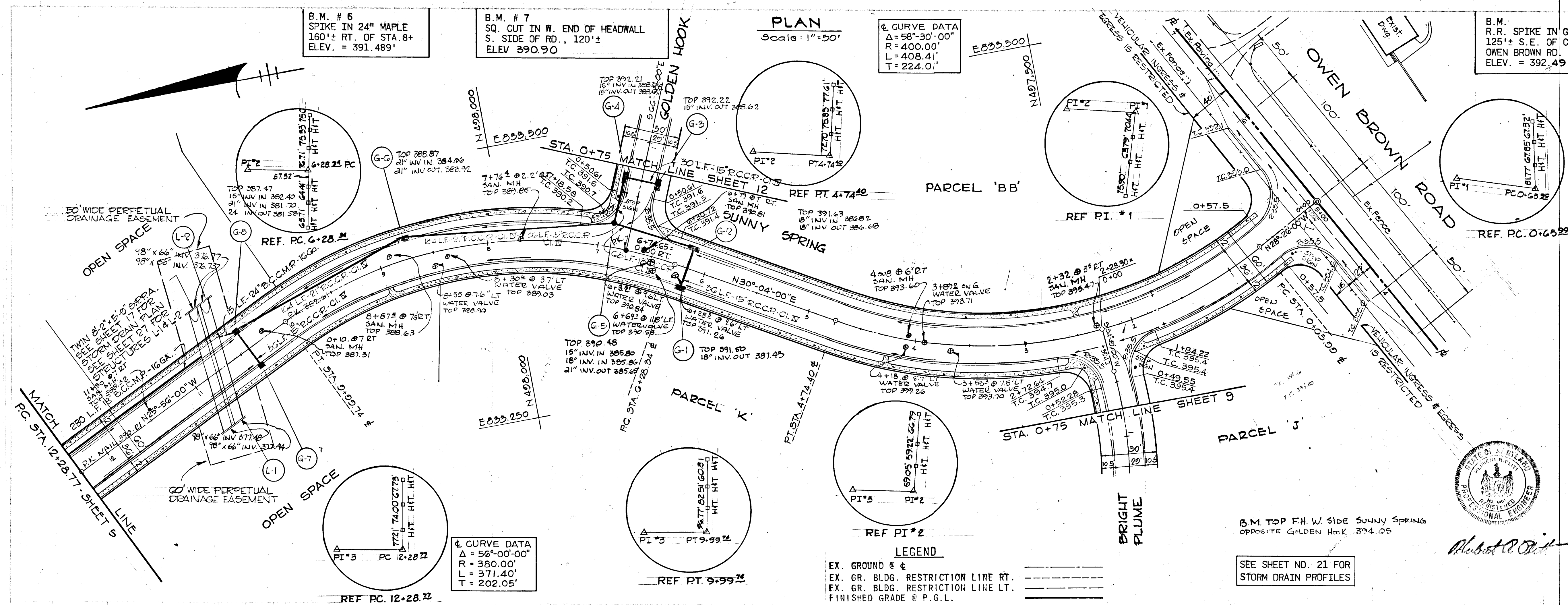
PROJECT TITLE: DRAINAGE AREA MAP

Des. By: F.T. & R.T.	Scale: AS SHOWN	Drawn By: 3
Dir. By: F.T. & R.T.	Date: MARCH 1972	Checked: C.C.F.
Ch. By: J.T.J.	Approved:	

DEPARTMENT OF PUBLIC WORKS
W.O. Fellows 8-18-72
CHIEF, BUREAU OF HIGHWAYS DATE
OFFICE OF PLANNING AND ZONING
CHIEF DIVISION OF LAND DEVELOPMENT AND TRANSPORTATION PLANNING DATE



W.O. Fellows



PLANNING OF PUBLIC WORKS

W. O. Albert 8-18-72
 CHIEF, BUREAU OF HIGHWAYS DATE

OFFICE OF PLANNING AND
 CHIEF, DIVISION OF LAND DEVELOPMENT AND TRANSPORTATION PLANNING DATE

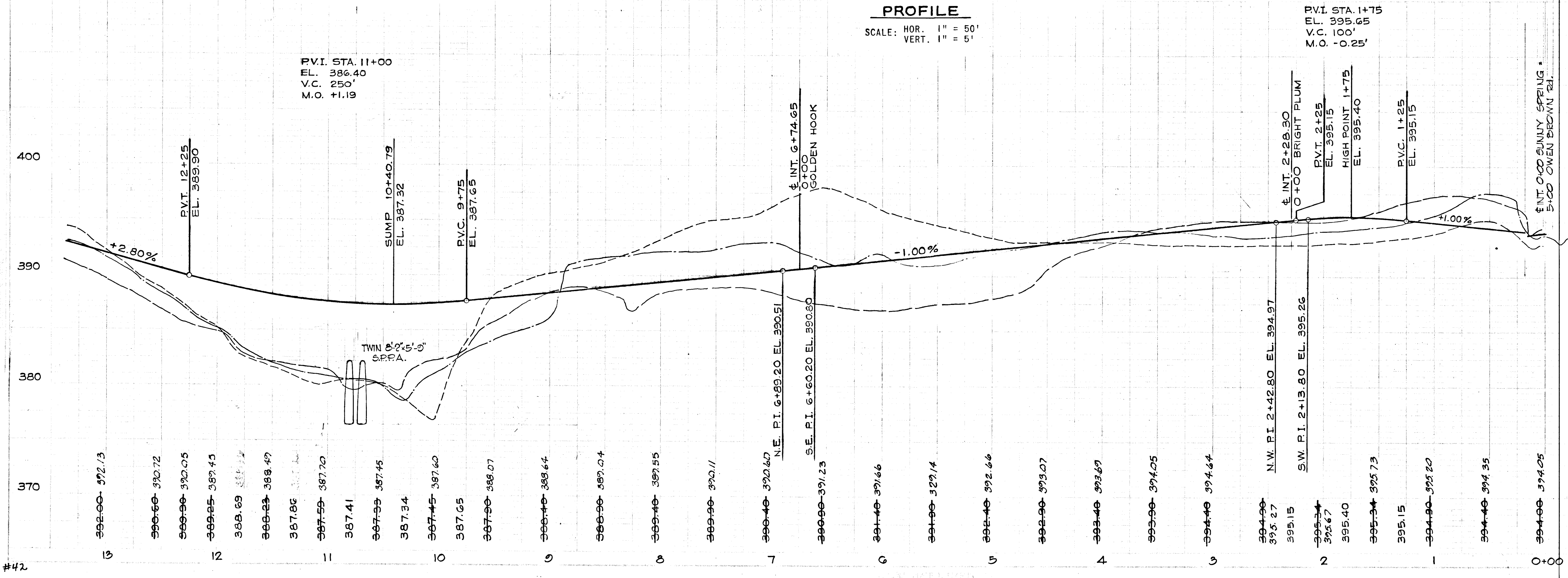
GREEN ASSOCIATES, INC.
 CONSULTING ENGINEERS
 BALTIMORE, MARYLAND

Rev. Date	Rev. No.	Revision Description

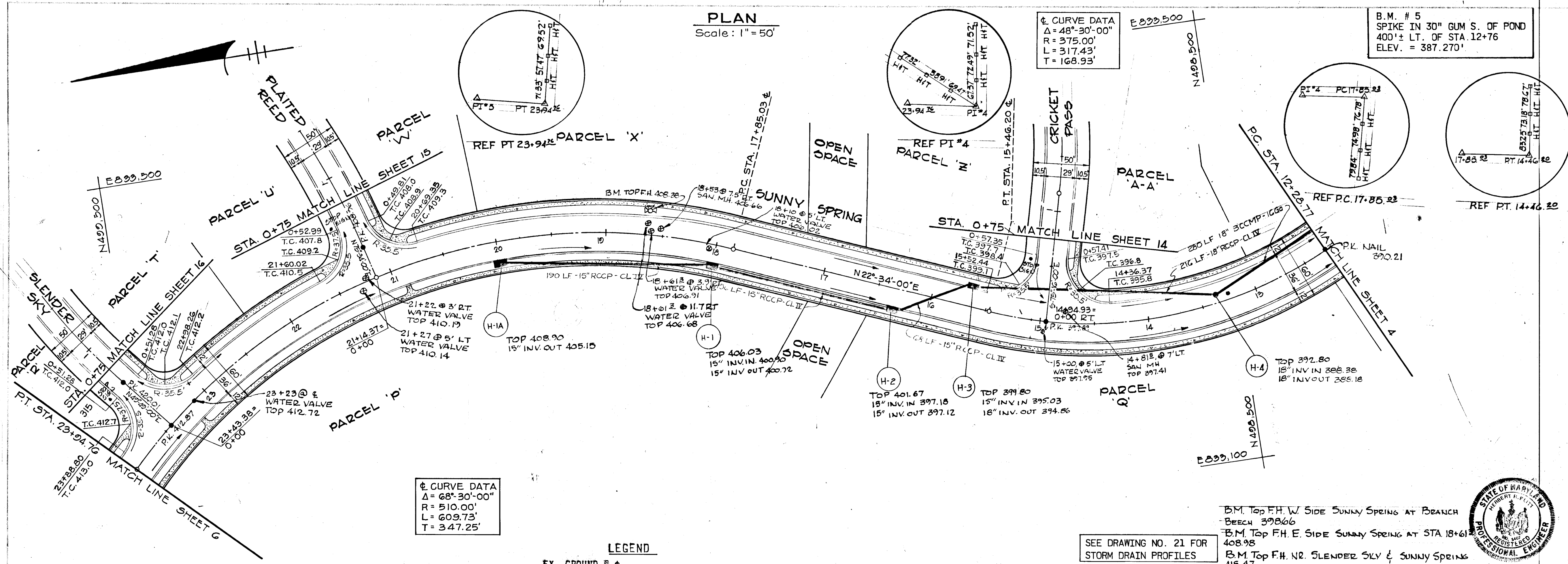
COLUMBIA
 MARYLAND
 5TH ELECTION DISTRICT HOWARD COUNTY
 HOWARD RESEARCH AND DEVELOPMENT CORP.
 COLUMBIA, MARYLAND

PROJECT AREA: THE VILLAGE OF HICKORY RIDGE
 SECTION 1 AREA 1
 PROJECT: SUNNY SPRING - STA. 0+00 TO 12+28.77

Des. By: F. T. Scale: AS SHOWN
 Drawn By: J. A. S. Date: MARCH 1972
 Check By: J. T. J. Approved:



APPROVED
 DIVISION OF LAND DEVELOPMENT AND TRANSPORTATION PLANNING
 HOWARD COUNTY, MARYLAND
 DATE: 8/18/72
J. A. S.



DEPARTMENT OF PUBLIC WORKS
Robert A. Albert 8-18-72
 CHIEF, BUREAU OF HIGHWAYS DATE

OFFICE OF PLANNING AND ZONING
 CHIEF DIVISION OF LAND DEVELOPMENT AND TRANSPORTATION PLANNING DATE

GREEN ASSOCIATES, INC.
 CONSULTING ENGINEERS
 BALTIMORE, MARYLAND

Rev. Date	Rev. No.	Revision Description

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

PROJECT AREA THE VILLAGE OF HICKORY RIDGE
 SECTION 1 AREA 1
 SUNNY SPRING - STA. 12+28.77 TO 23+94.76

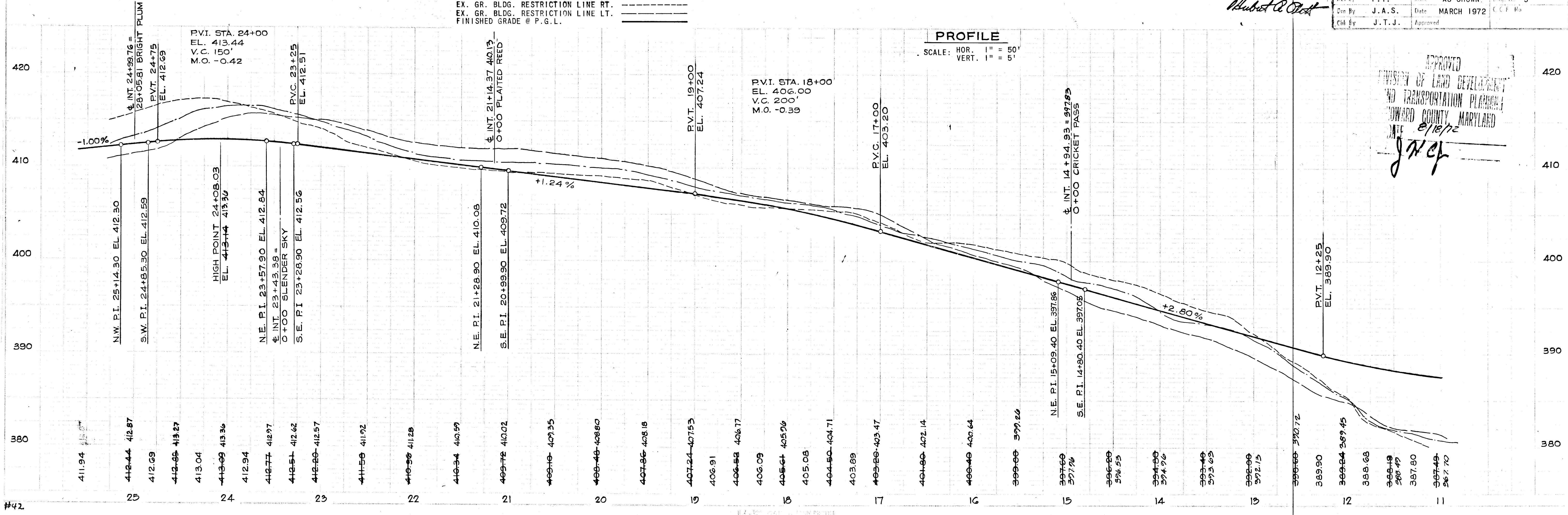
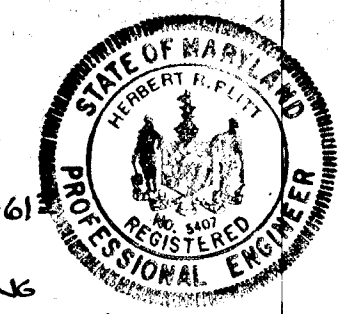
Des. By F. T. Scale AS SHOWN Pub. No. 5
 Dir. By J. A. S. Date MARCH 1972 C.C.F. No.
 Chk. By J. T. J. Approved

LEGEND

EX. GROUND @ ϕ
 EX. GR. BLDG. RESTRICTION LINE RT.
 EX. GR. BLDG. RESTRICTION LINE LT.
 FINISHED GRADE @ P.G.L.

SEE DRAWING NO. 21 FOR STORM DRAIN PROFILES

B.M. Top F.H. W. Side Sunny Spring at Branch
 BECH 39866
 B.M. Top F.H. E. Side Sunny Spring at STA. 18+61
 408.98
 B.M. Top F.H. NE. SLENDER SKY & SUNNY SPRING
 415.47

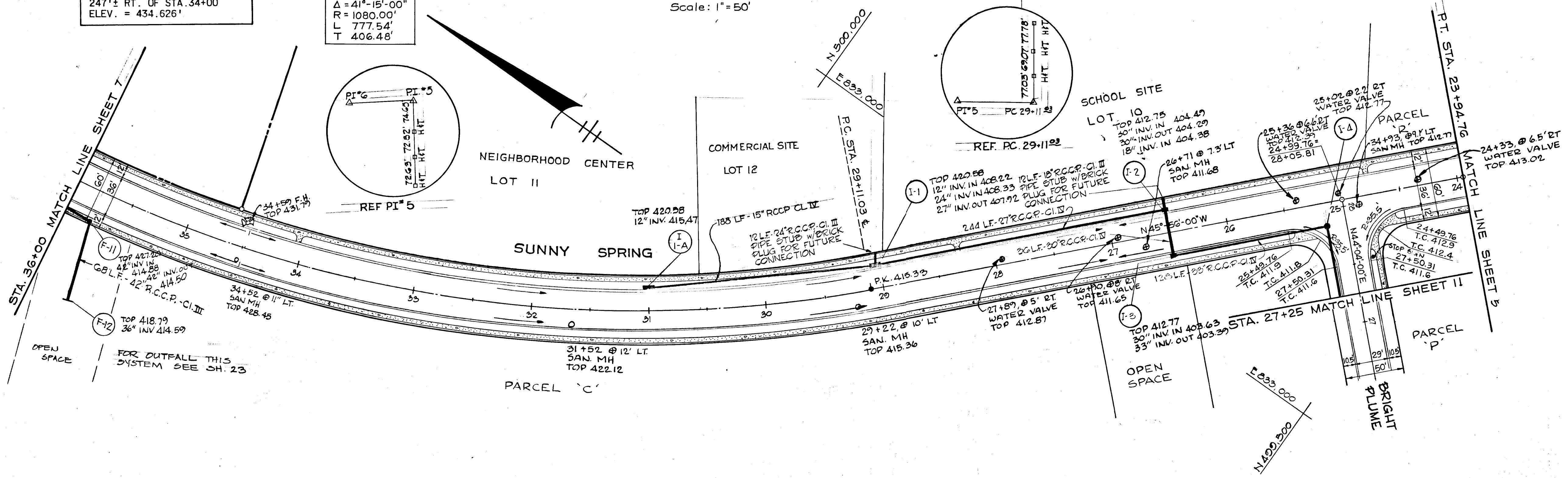


APPROVED
 DIVISION OF LAND DEVELOPMENT AND TRANSPORTATION PLANNING
 HOWARD COUNTY, MARYLAND
 DATE 8/18/72
J.H.C.

B.M. # 4
SPIKE IN 48" CHERRY TREE
247'± RT. OF STA. 34+00
ELEV. = 434.626'

☉ CURVE DATA
Δ = 41°-15'-00"
R = 1080.00'
L = 777.54'
T = 406.48'

PLAN
Scale: 1" = 50'

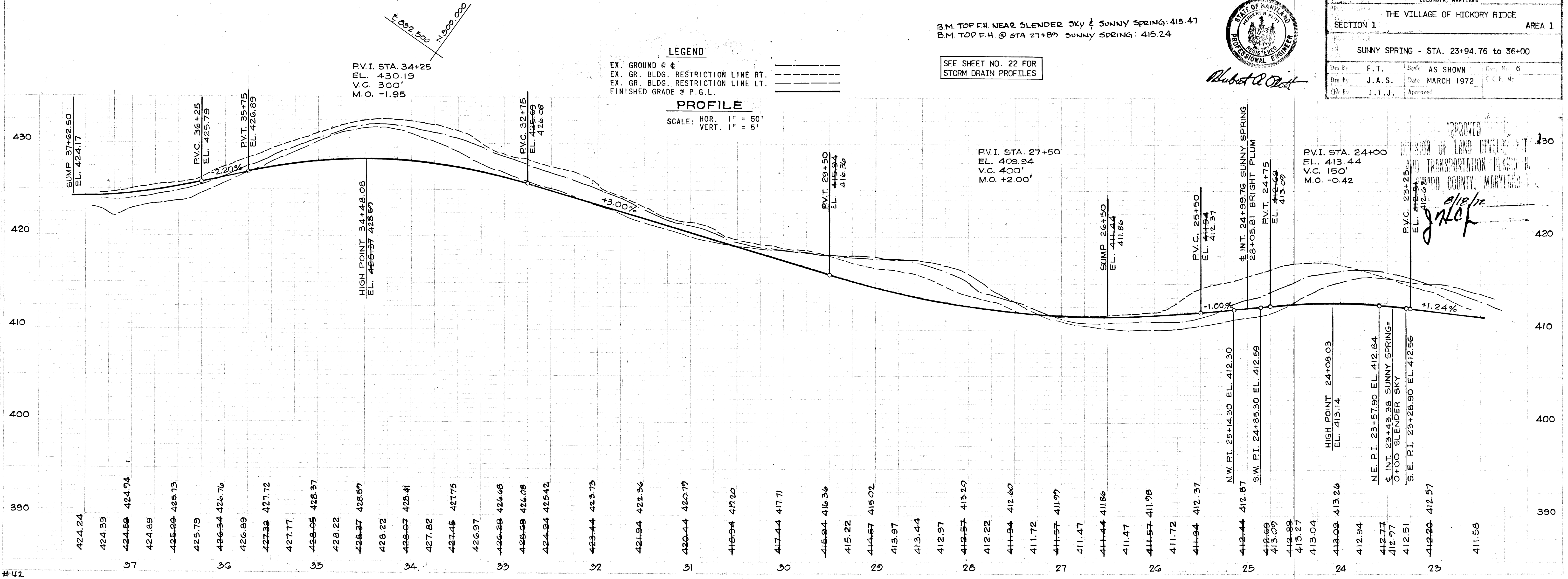


DEPARTMENT OF PUBLIC WORKS
W.C. Albert 8-18-72
OFFICE OF PLANNING AND ZONING
CHIEF, DIVISION OF LAND DEVELOPMENT AND TRANSPORTATION PLANNING
GREEN ASSOCIATES, INC.
CONSULTING ENGINEERS
BALTIMORE, MARYLAND

Rev. Date	Rev. No.	Revision Description
COLUMBIA		
M A R Y L A N D 5TH ELECTION DISTRICT HOWARD COUNTY HOWARD RESEARCH AND DEVELOPMENT CORP. COLUMBIA, MARYLAND		
THE VILLAGE OF HICKORY RIDGE		
SECTION 1		AREA 1
SUNNY SPRING - STA. 23+94.76 to 36+00		
Des. By	F.T.	Scale AS SHOWN
Dir. By	J.A.S.	Date MARCH 1972
Chk. By	J.T.J.	Approved

LEGEND
EX. GROUND @ ☉
EX. GR. BLDG. RESTRICTION LINE RT.
EX. GR. BLDG. RESTRICTION LINE LT.
FINISHED GRADE @ P.G.L.

PROFILE
SCALE: HOR. 1" = 50'
VERT. 1" = 5'



APPROVED
DIVISION OF LAND DEVELOPMENT AND TRANSPORTATION PLANNING
HOWARD COUNTY, MARYLAND
g. j. j.

B.M. # 1
SPIKE IN ROOT OF 24" OAK
87'± RT. OF STA. 45+15
ELEV. = 439.416'

B.M. # 2
SPIKE IN 16" OAK
80'± RT. OF STA. 40+69
ELEV. = 430.993'

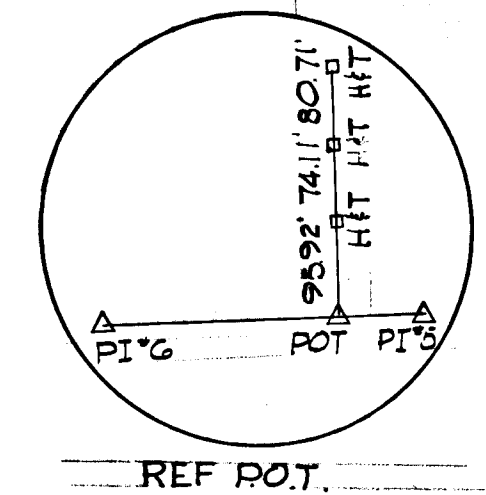
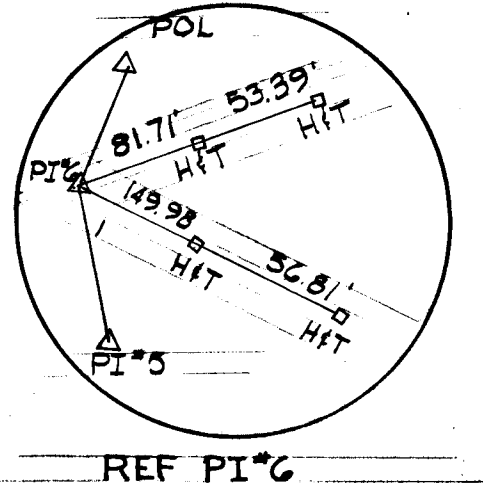
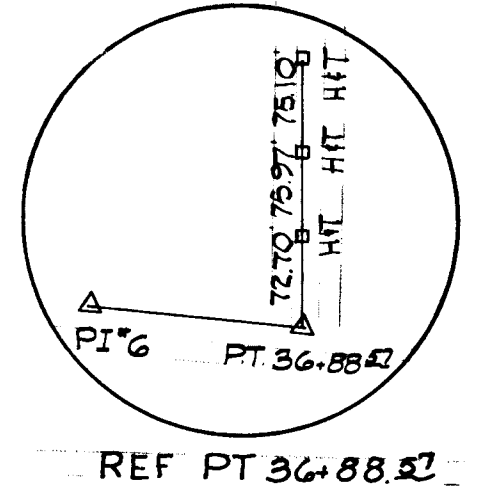
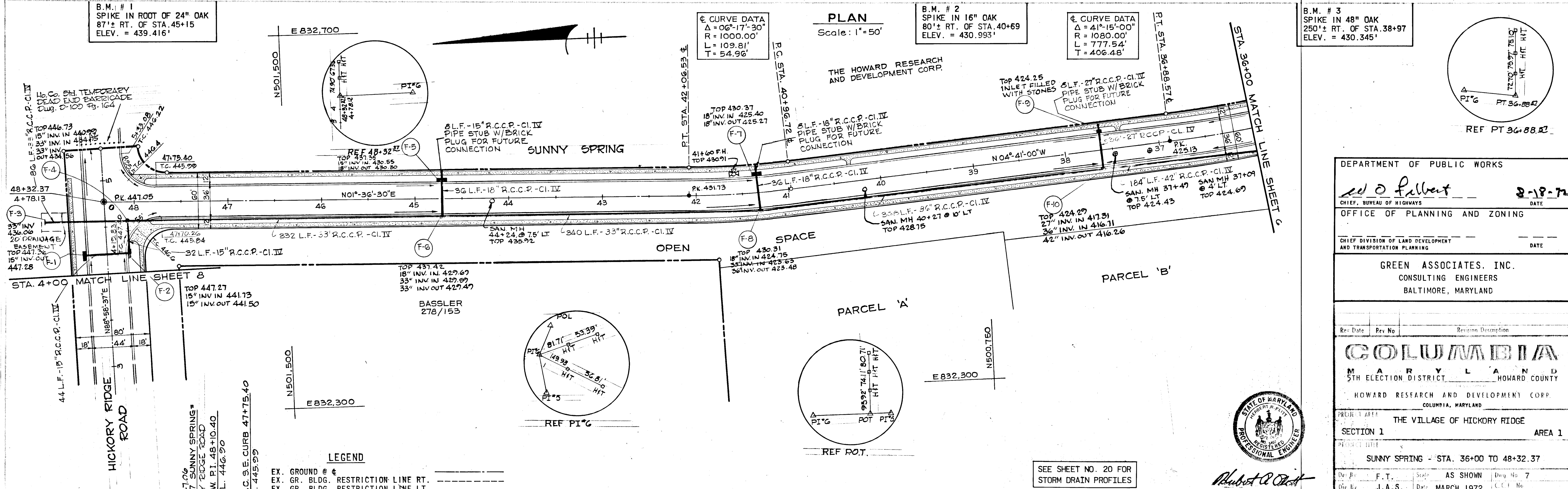
B.M. # 3
SPIKE IN 48" OAK
250'± RT. OF STA. 38+97
ELEV. = 430.345'

☉ CURVE DATA
Δ = 06°-17'-30"
R = 1000.00'
L = 109.81'
T = 54.96'

☉ CURVE DATA
Δ = 41°-15'-00"
R = 1080.00'
L = 777.54'
T = 406.48'

PLAN
Scale: 1" = 50'

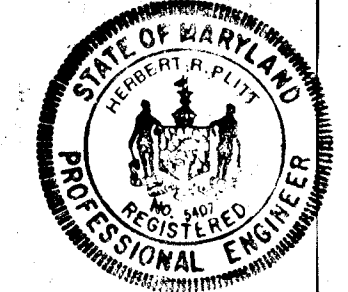
THE HOWARD RESEARCH
AND DEVELOPMENT CORP.



LEGEND

- EX. GROUND @ ☉
- EX. GR. BLDG. RESTRICTION LINE RT.
- EX. GR. BLDG. RESTRICTION LINE LT.
- FINISHED GRADE @ P.G.L.

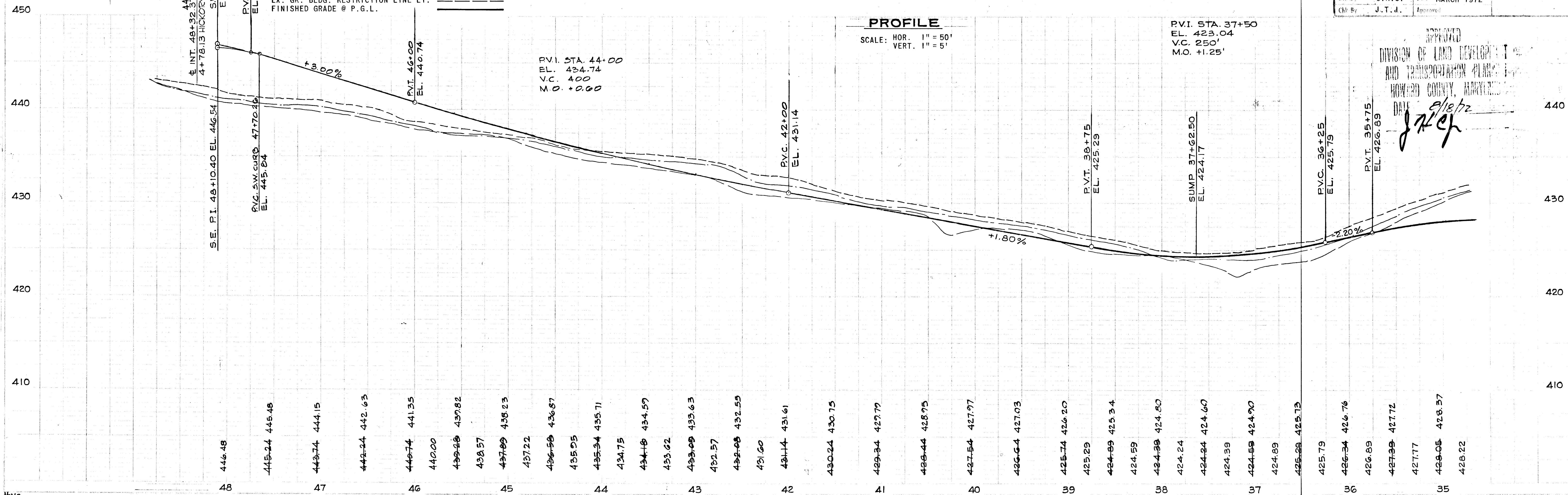
SEE SHEET NO. 20 FOR
STORM DRAIN PROFILES



PROFILE

SCALE: HOR. 1" = 50'
VERT. 1" = 5'

P.V.I. STA. 37+50
EL. 423.04
V.C. 250'
M.O. +1.25'



DEPARTMENT OF PUBLIC WORKS

ed O. Falbert 3-18-72
CHIEF, BUREAU OF HIGHWAYS DATE

OFFICE OF PLANNING AND ZONING

CHIEF DIVISION OF LAND DEVELOPMENT AND TRANSPORTATION PLANNING DATE

GREEN ASSOCIATES, INC.
CONSULTING ENGINEERS
BALTIMORE, MARYLAND

Rev. Date	Rev. No.	Revision Description

COLUMBIA
MARYLAND
5TH ELECTION DISTRICT HOWARD COUNTY

HOWARD RESEARCH AND DEVELOPMENT CORP.
COLUMBIA, MARYLAND

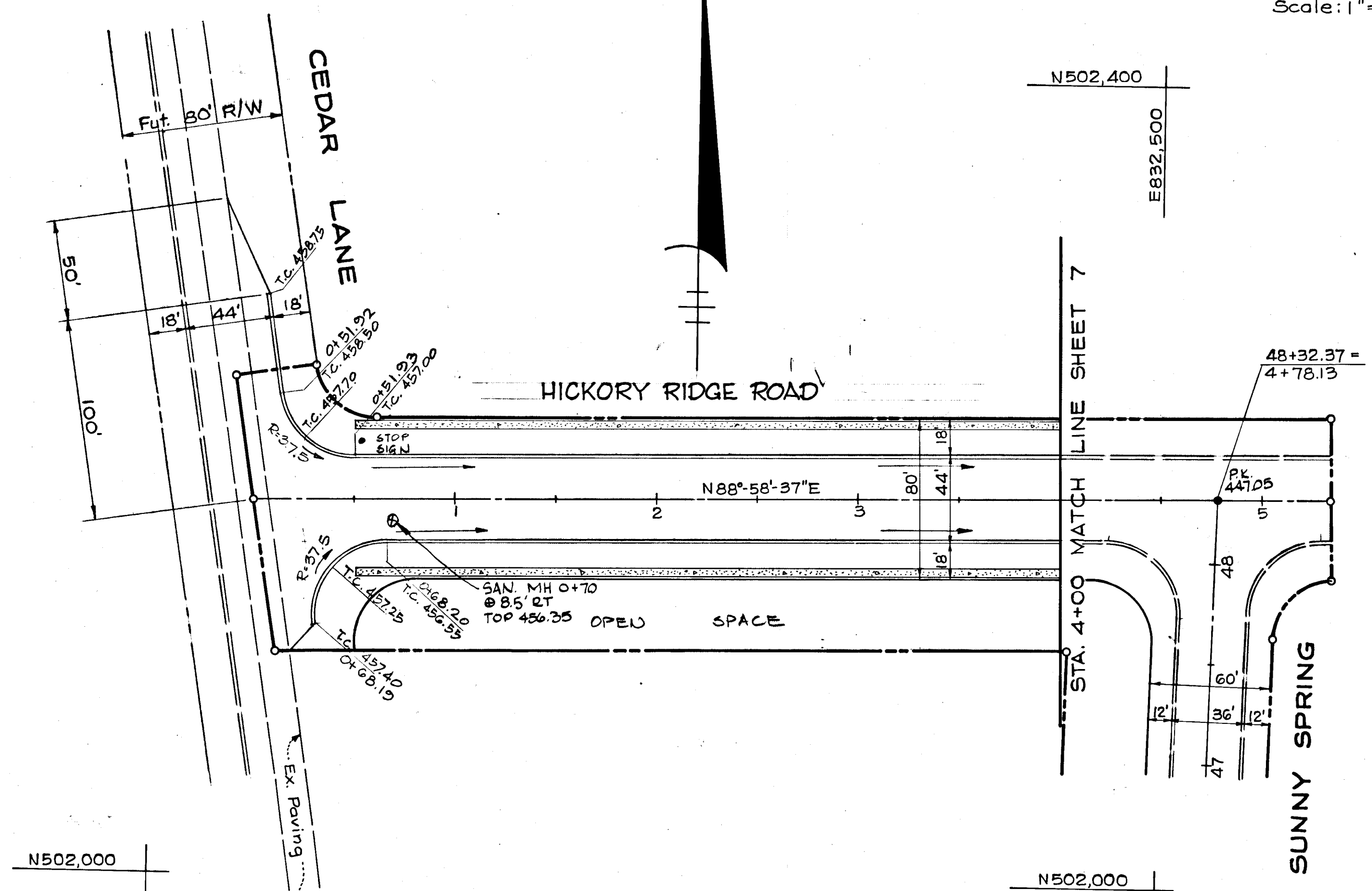
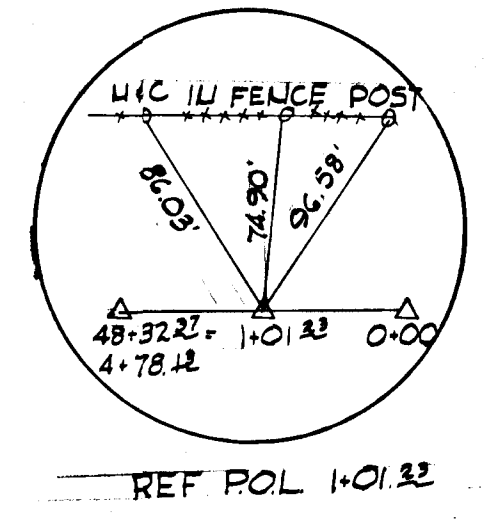
PROJECT TITLE: THE VILLAGE OF HICKORY RIDGE
SECTION 1 AREA 1

PROJECT DATE: SUNNY SPRING - STA. 36+00 TO 48+32.37

Des. By: F.T.	Scale: AS SHOWN	Draw. No. 7
Dir. By: J.A.S.	Date: MARCH 1972	C.C.T. No.
Chk. By: J.T.J.	Approved:	

APPROVED
DIVISION OF LAND DEVELOPMENT
AND TRANSPORTATION PLANNING
HOWARD COUNTY, MARYLAND
DATE: 3/18/72
J.A.S.

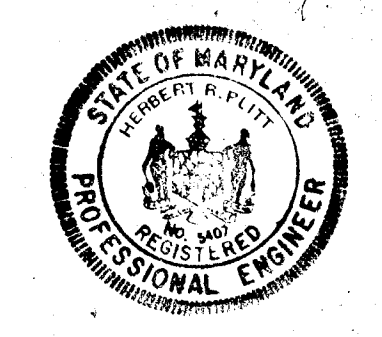
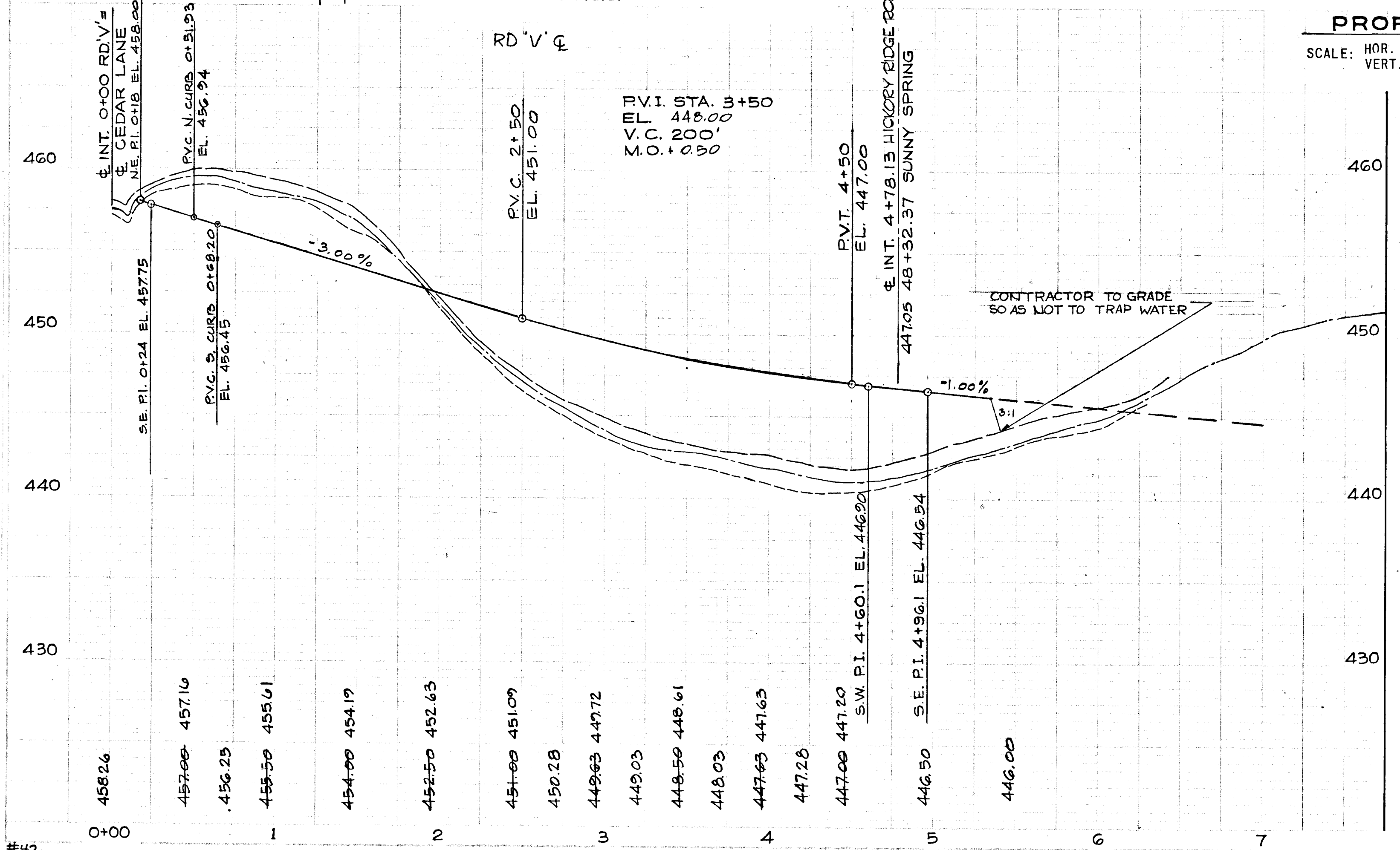
PLAN
Scale: 1" = 50'



LEGEND
 EX. GROUND @ ϕ
 EX. GR. BLDG. RESTRICTION LINE RT. ---
 EX. GR. BLDG. RESTRICTION LINE LT. ---
 FINISHED GRADE @ P.G.L. ———

PROFILE

SCALE: HOR. 1" = 50'
 VERT. 1" = 5'



Robert R. O'Neil

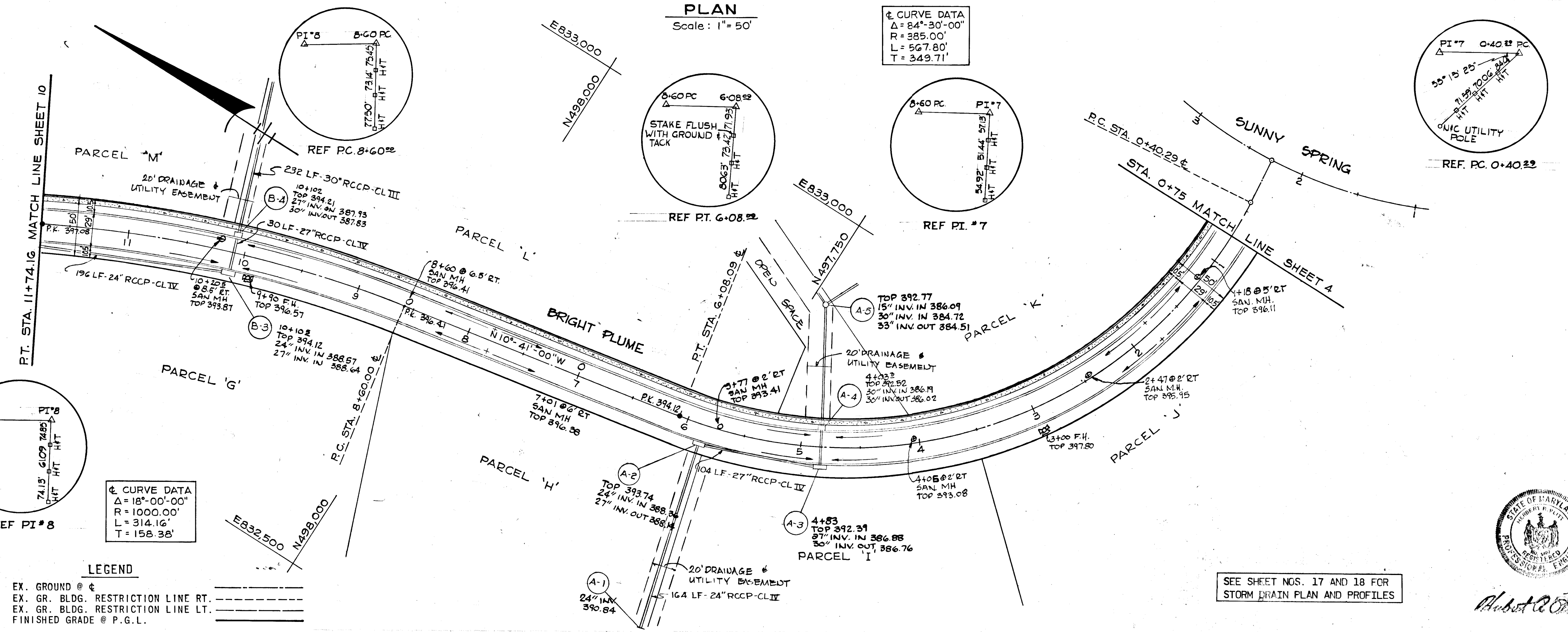
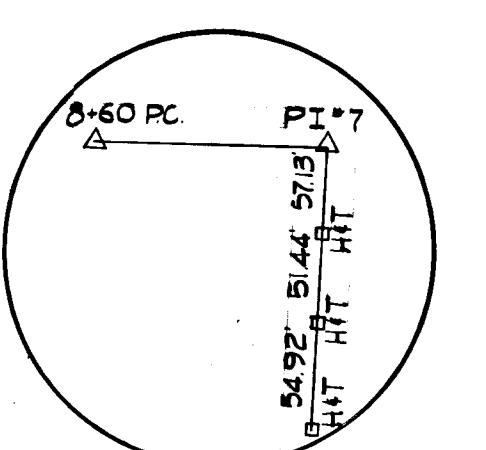
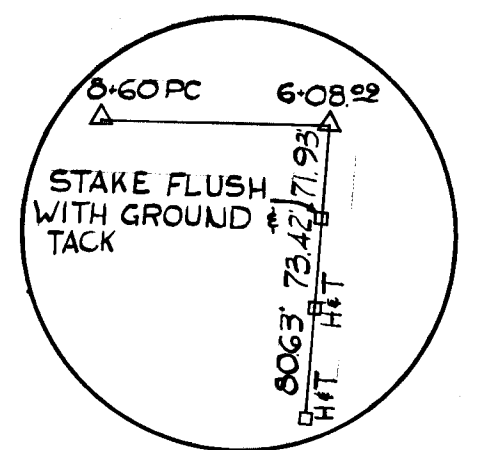
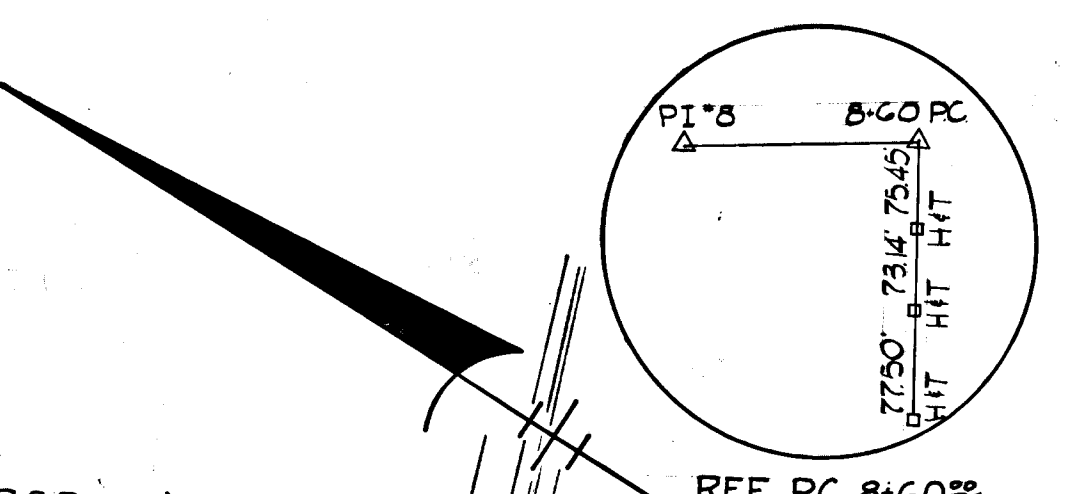
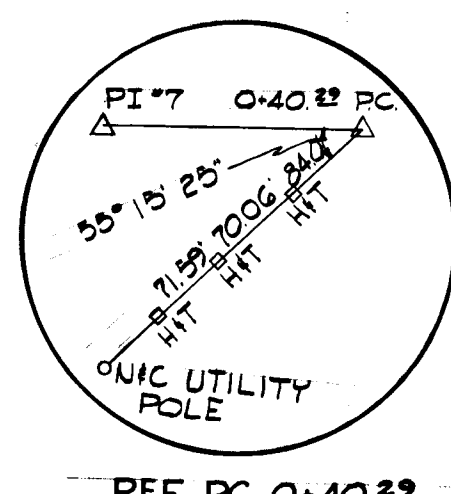
DEPARTMENT OF PUBLIC WORKS		
<i>W. O. Falbert</i>		8-18-72
CHIEF, BUREAU OF HIGHWAYS		DATE
OFFICE OF PLANNING AND ZONING		
CHIEF DIVISION OF LAND DEVELOPMENT AND TRANSPORTATION PLANNING		DATE
GREEN ASSOCIATES, INC. CONSULTING ENGINEERS BALTIMORE, MARYLAND		
Rev. Date	Rev. No.	Revision Description
COLUMBIA		
M A R Y L A N D		
5TH ELECTION DISTRICT HOWARD COUNTY		
HOWARD RESEARCH AND DEVELOPMENT CORP. COLUMBIA, MARYLAND		
PROJECT AREA THE VILLAGE OF HICKORY RIDGE		
SECTION 1		AREA 1
PROJECT TITLE HICKORY RIDGE ROAD		
Des. By	F. T.	Scale AS SHOWN
Drawn By	J. A. S.	Date MARCH 1972
Chk. By	J. T. J.	Approved

APPROVED
 DIVISION OF LAND DEVELOPMENT
 AND TRANSPORTATION PLANNING
 HOWARD COUNTY, MARYLAND
 3/18/72
JHE

PLAN

Scale: 1" = 50'

☉ CURVE DATA
 $\Delta = 84^\circ - 30' - 00''$
 $R = 385.00'$
 $L = 567.80'$
 $T = 349.71'$



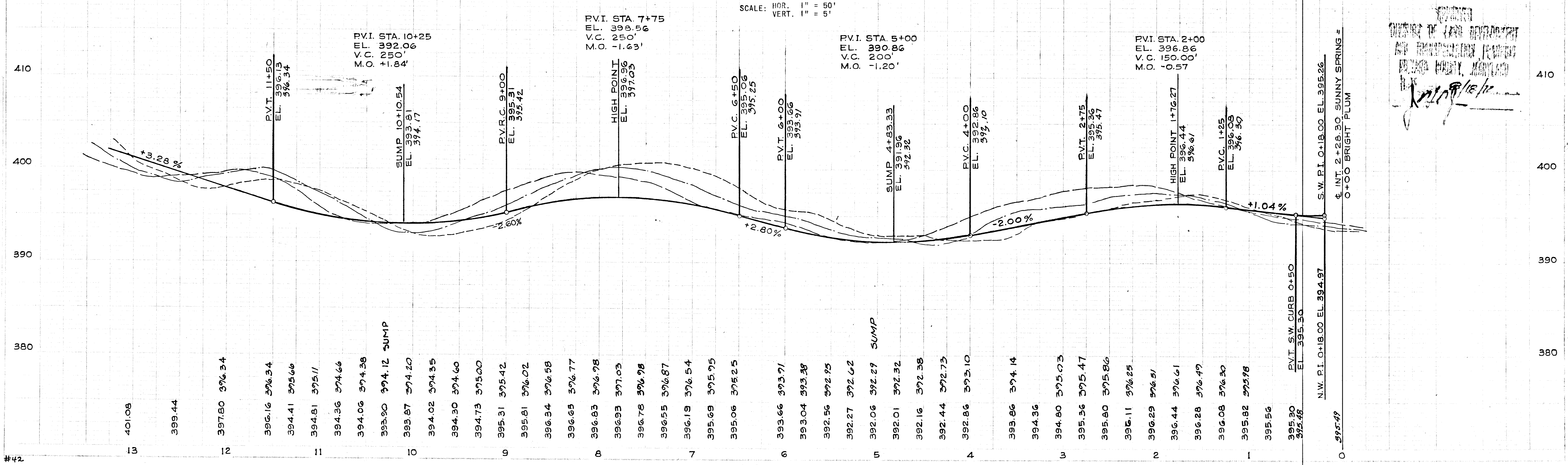
☉ CURVE DATA
 $\Delta = 18^\circ - 00' - 00''$
 $R = 1000.00'$
 $L = 314.16'$
 $T = 158.38'$

LEGEND

- EX. GROUND @ ☉
- EX. GR. BLDG. RESTRICTION LINE RT.
- EX. GR. BLDG. RESTRICTION LINE LT.
- FINISHED GRADE @ P.G.L.

PROFILE

SCALE: HOR. 1" = 50'
 VERT. 1" = 5'



DEPARTMENT OF PUBLIC WORKS

W O Albert 8-18-72
 CHIEF, BUREAU OF HIGHWAYS DATE

OFFICE OF PLANNING AND ZONING

CHIEF, DIVISION OF LAND DEVELOPMENT AND TRANSPORTATION PLANNING DATE

GREEN ASSOCIATES, INC.
 CONSULTING ENGINEERS
 BALTIMORE, MARYLAND

Rev Date Rev No Revision Description

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

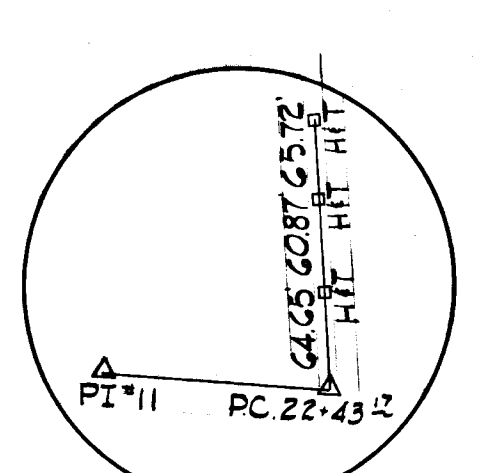
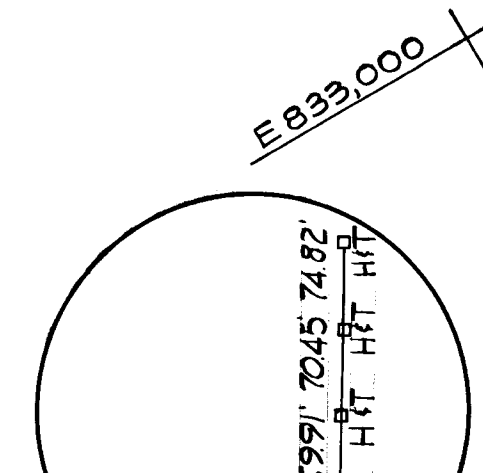
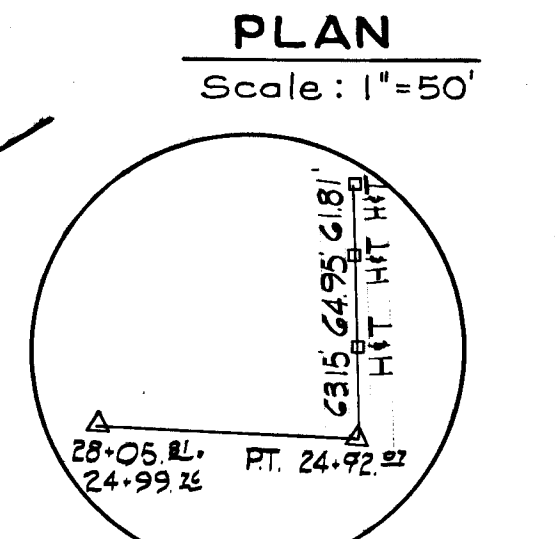
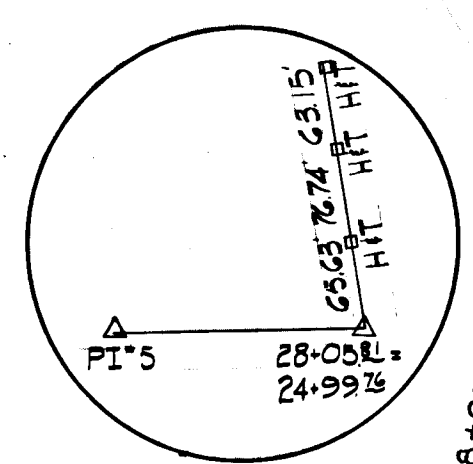
PROJECT AREA THE VILLAGE OF HICKORY RIDGE
 SECTION 1 AREA 1

BRIGHT PLUME - STA. 0+00 TO 11+74.16

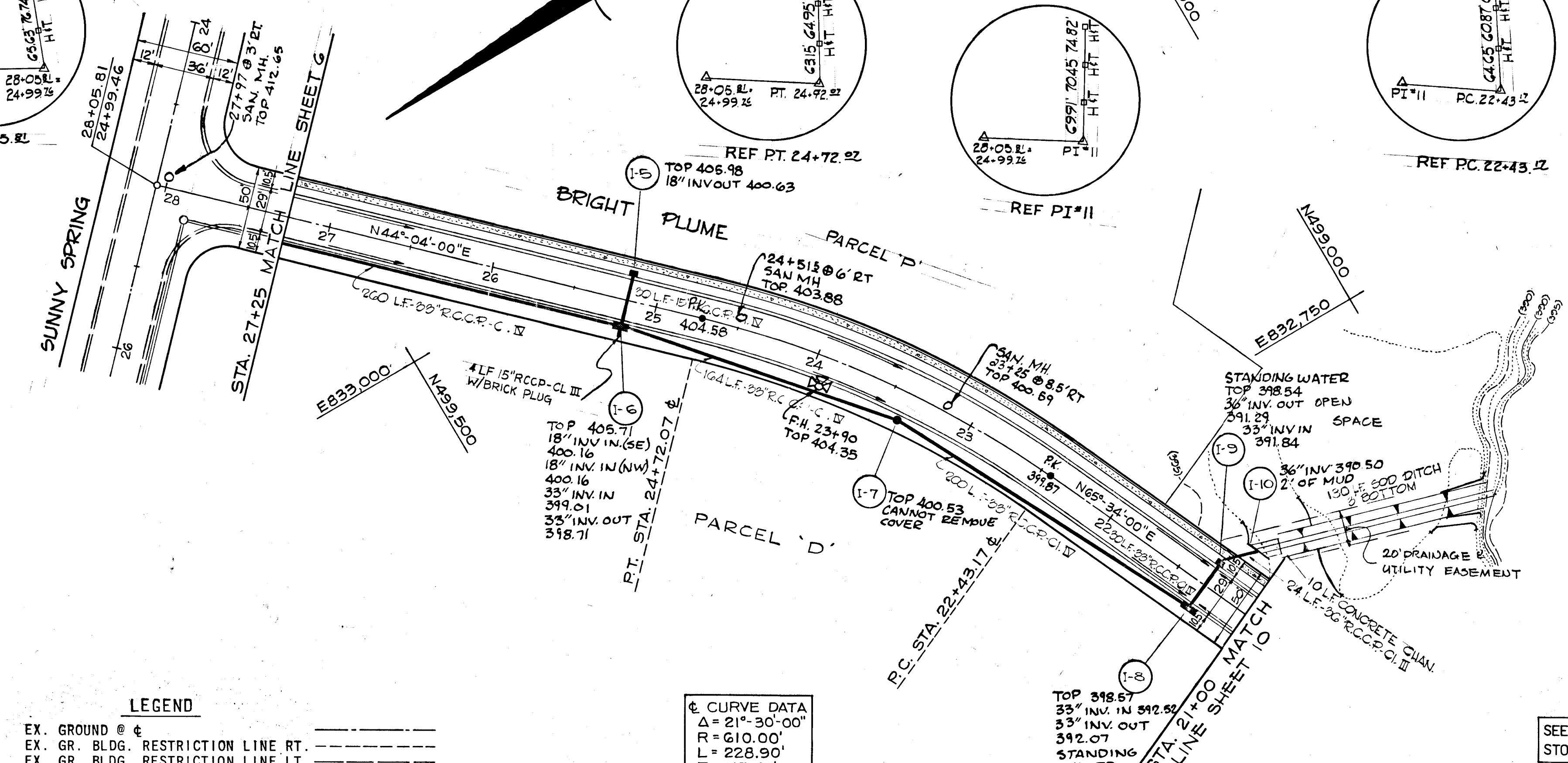
Des By F.T. Scale AS SHOWN Dwg No 9
 Drawn By J.A.S. Date MARCH 1972 C.C.F. No
 Chk By J.T.J. Approved



OFFICE OF LAND DEVELOPMENT AND TRANSPORTATION PLANNING
 BALTIMORE, MARYLAND
 3/18/72



PLAN
Scale: 1"=50'

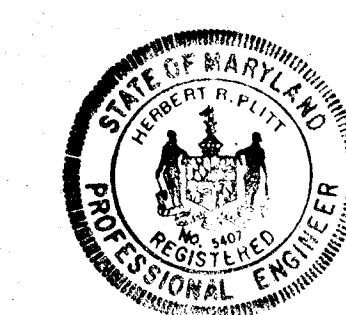
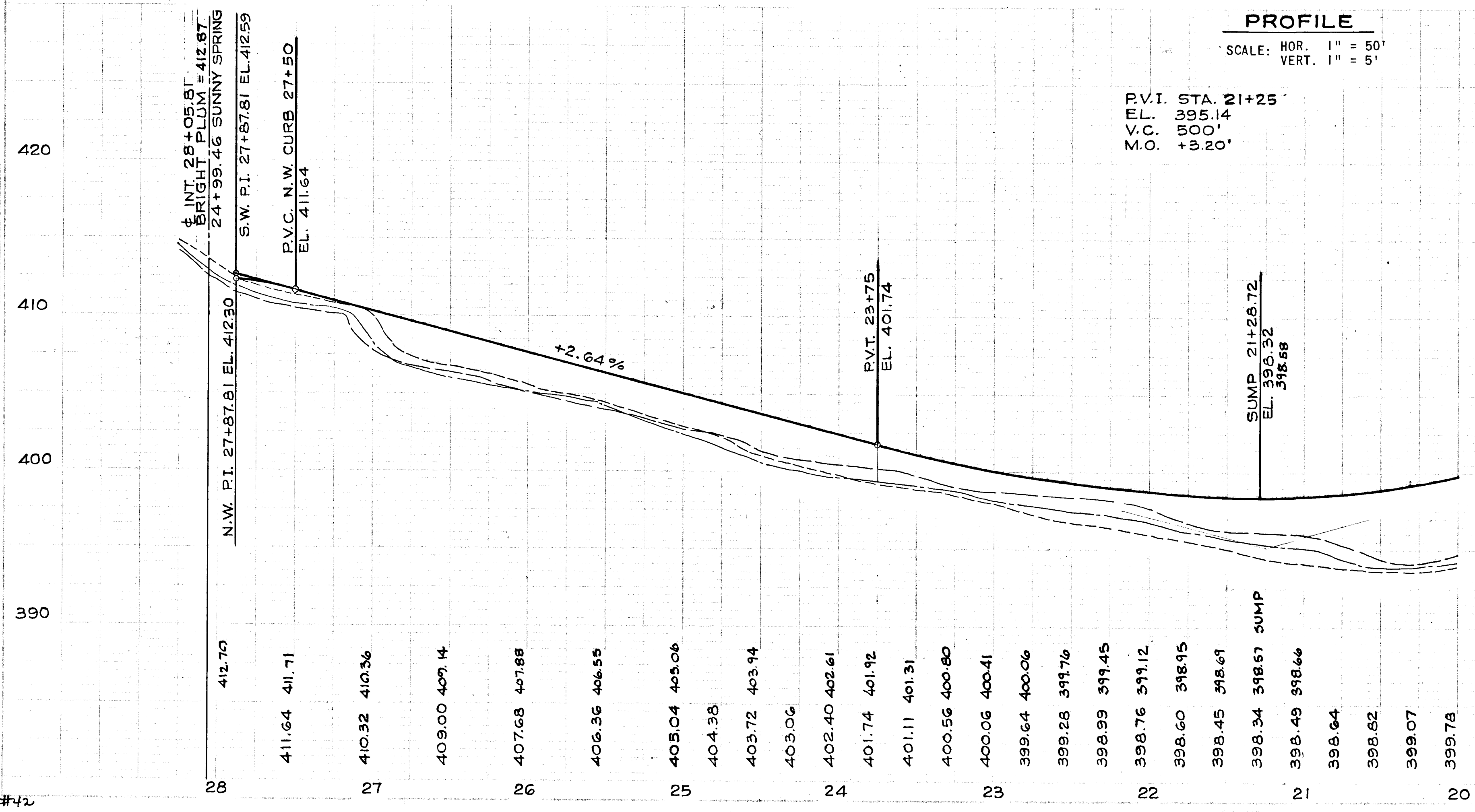


LEGEND
 EX. GROUND @ ϕ
 EX. GR. BLDG. RESTRICTION LINE RT.
 EX. GR. BLDG. RESTRICTION LINE LT.
 FINISHED GRADE @ P.G.L.

¢ CURVE DATA
 A = 210.30'
 R = 610.00'
 L = 228.90'
 T = 115.81'

SEE SHEET NO. 22 FOR
STORM DRAIN PROFILES

PROFILE
SCALE: HOR. 1" = 50'
VERT. 1" = 5'



Albert A. O'Neil

DEPARTMENT OF PUBLIC WORKS
 Chief, Bureau of Highways
 Office of Planning and Zoning
 Chief, Division of Land Development and Transportation Planning

W. O. Albert 8-18-72
 DATE

GREEN ASSOCIATES, INC.
 CONSULTING ENGINEERS
 BALTIMORE, MARYLAND

Rev. Date: Rev. No.: Revision Description:

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

PROJECT: THE VILLAGE OF HICKORY RIDGE
 SECTION 1 AREA 1
 PROJECT TITLE: BRIGHT PLUME - STA. 21+00 TO 28+05.81

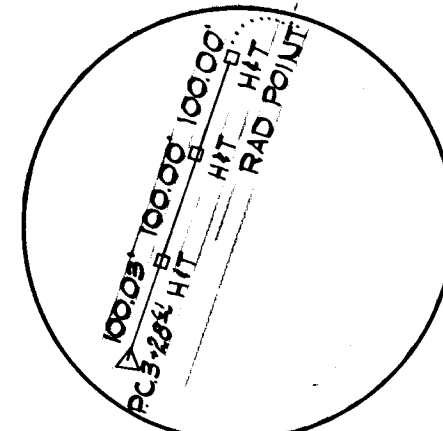
Des. By: F. T. Scale: AS SHOWN Des. No. 11
 Dra. By: J. A. S. Date: MARCH 1972 C.C.F. No.
 Chk. By: J. T. J. Approved

APPROVED
 DIVISION OF LAND DEVELOPMENT
 AND TRANSPORTATION PLANNING
 HOWARD COUNTY, MARYLAND
 DATE: *3/18/72*

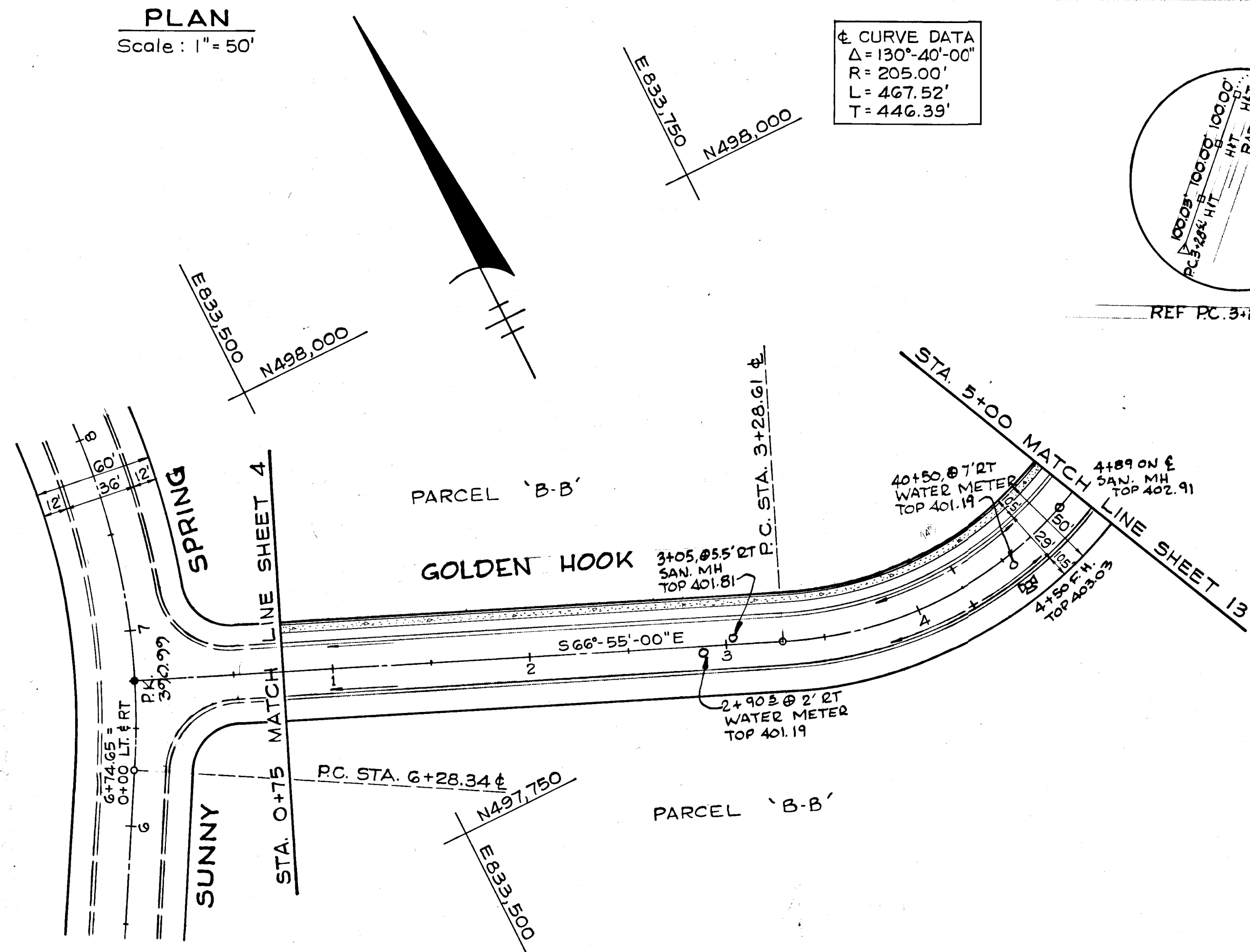
F-10-910

PLAN
Scale: 1" = 50'

☒ CURVE DATA
Δ = 130°-40'-00"
R = 205.00'
L = 467.52'
T = 446.39'



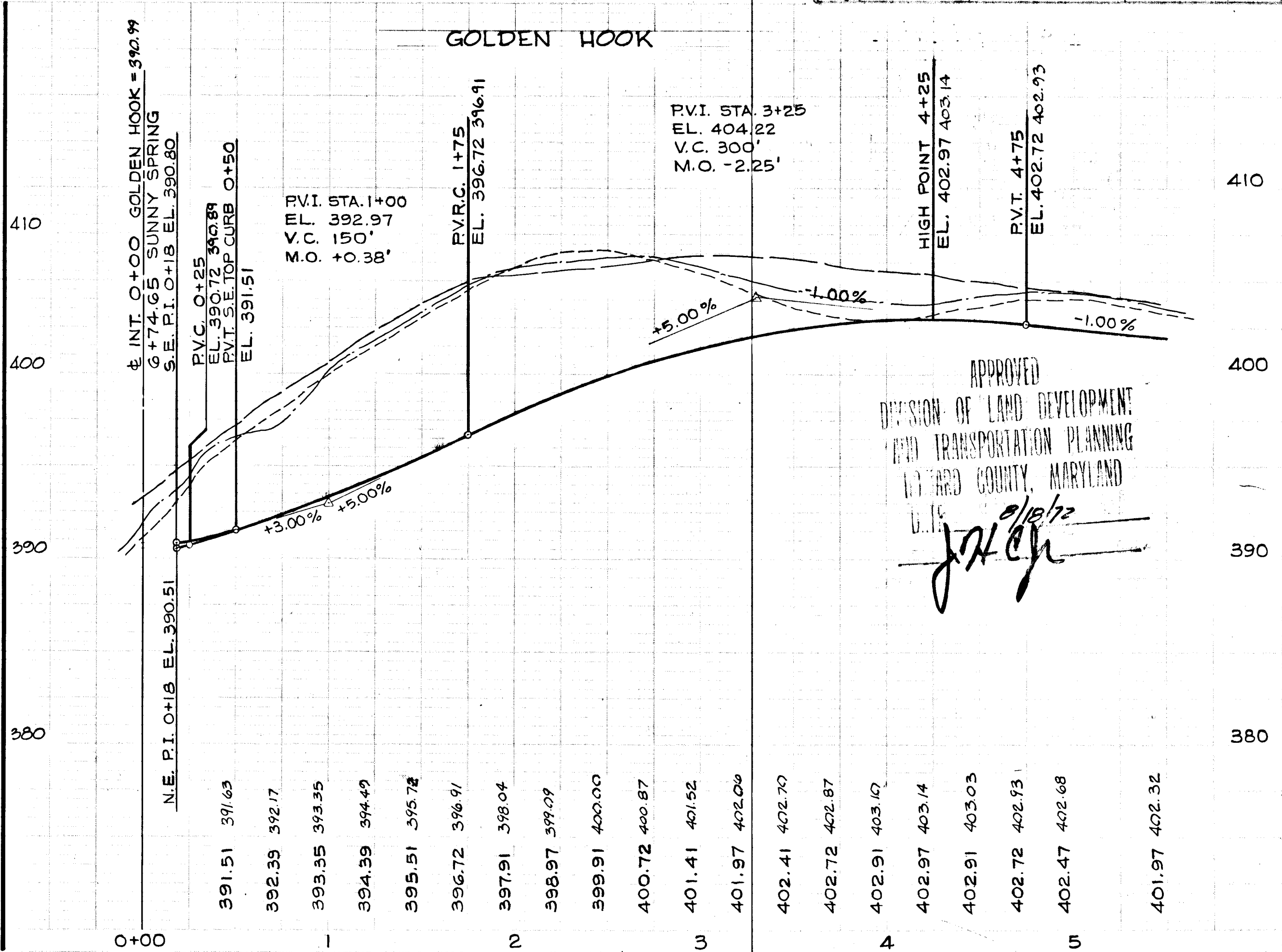
REF PC 3+28.84



LEGEND
 EX. GROUND @ ☒
 EX. GR. BLDG. RESTRICTION LINE RT. ---
 EX. GR. BLDG. RESTRICTION LINE LT. ---
 FINISHED GRADE @ P.G.L. ———

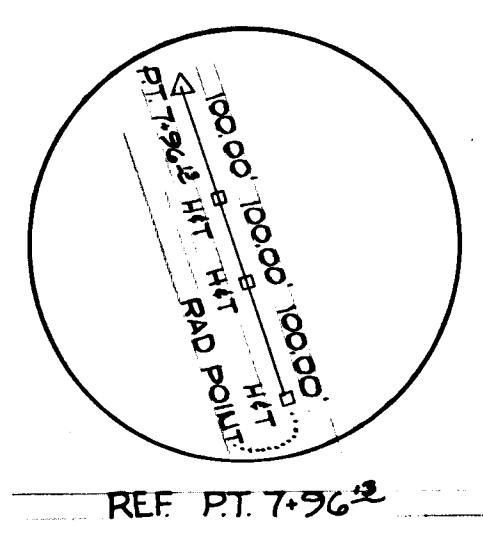
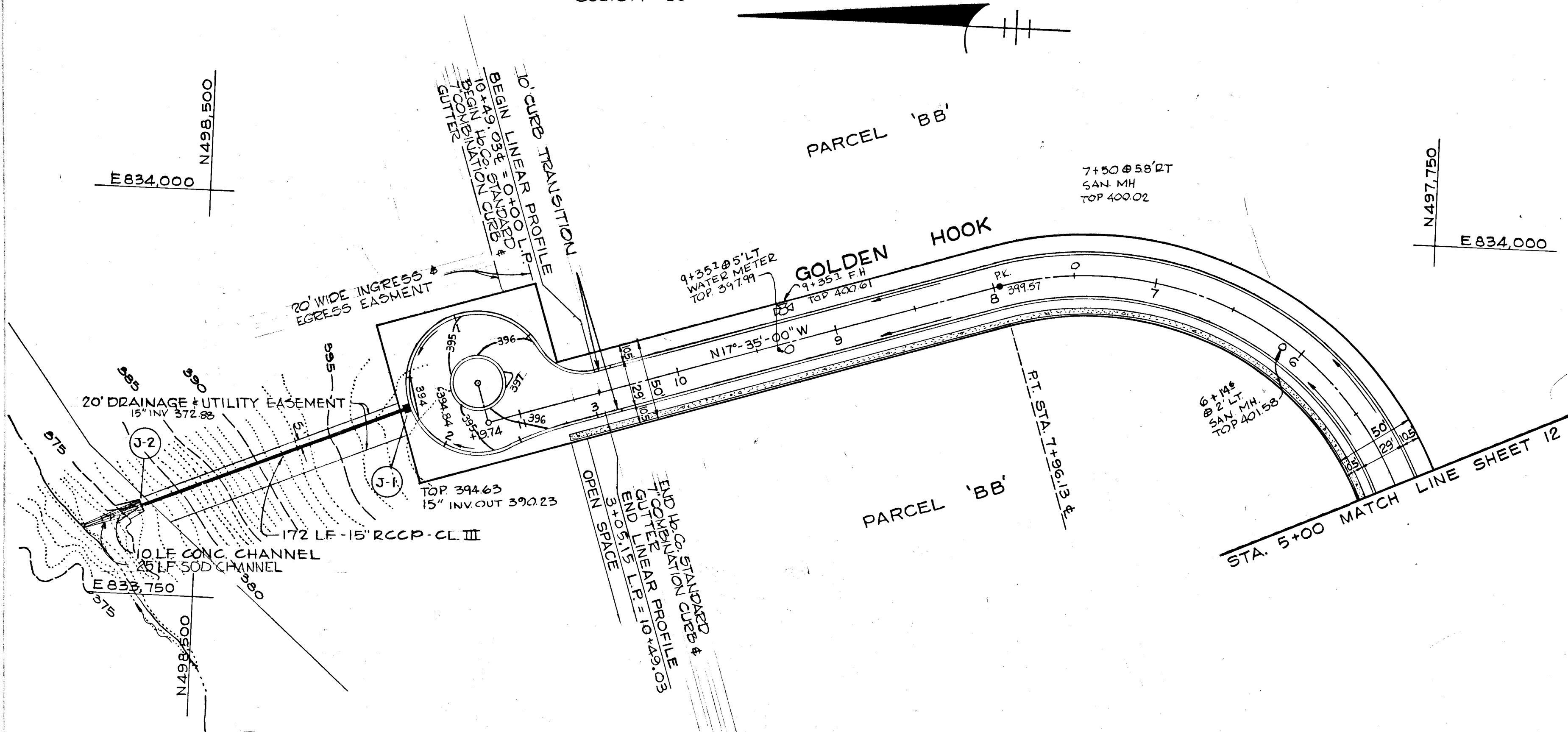
DEPARTMENT OF PUBLIC WORKS	
<i>W O Fulbert</i>	8-18-72
CHIEF, BUREAU OF HIGHWAYS	DATE
OFFICE OF PLANNING AND ZONING	
CHIEF, DIVISION OF LAND DEVELOPMENT AND TRANSPORTATION PLANNING	DATE
GREEN ASSOCIATES, INC. CONSULTING ENGINEERS BALTIMORE, MARYLAND	
Rev. Date	Rev. No. / Revision Description
COLUMBIA	
M. A. R. V. L. A. N. D. 5TH ELECTION DISTRICT HOWARD COUNTY	
HOWARD RESEARCH AND DEVELOPMENT CORP. COLUMBIA, MARYLAND	
PROJECT AREA: THE VILLAGE OF HICKORY RIDGE	
SECTION 1 AREA 1	
PROJECT TITLE: GOLDEN HOOK - STA. 0+00 TO 5+00	
Des. By: F. T. J.	Scale: AS SHOWN / Day No. 12
Des. By: J. A. S.	Date: MARCH 1972 / C.C.F. No.
Des. By: J. T. J.	

PROFILE
SCALE: HOR. 1" = 50'
VERT. 1" = 5'



APPROVED
 DIVISION OF LAND DEVELOPMENT
 AND TRANSPORTATION PLANNING
 HOWARD COUNTY, MARYLAND
J. H. C.
 8/18/72

PLAN
Scale: 1" = 50'

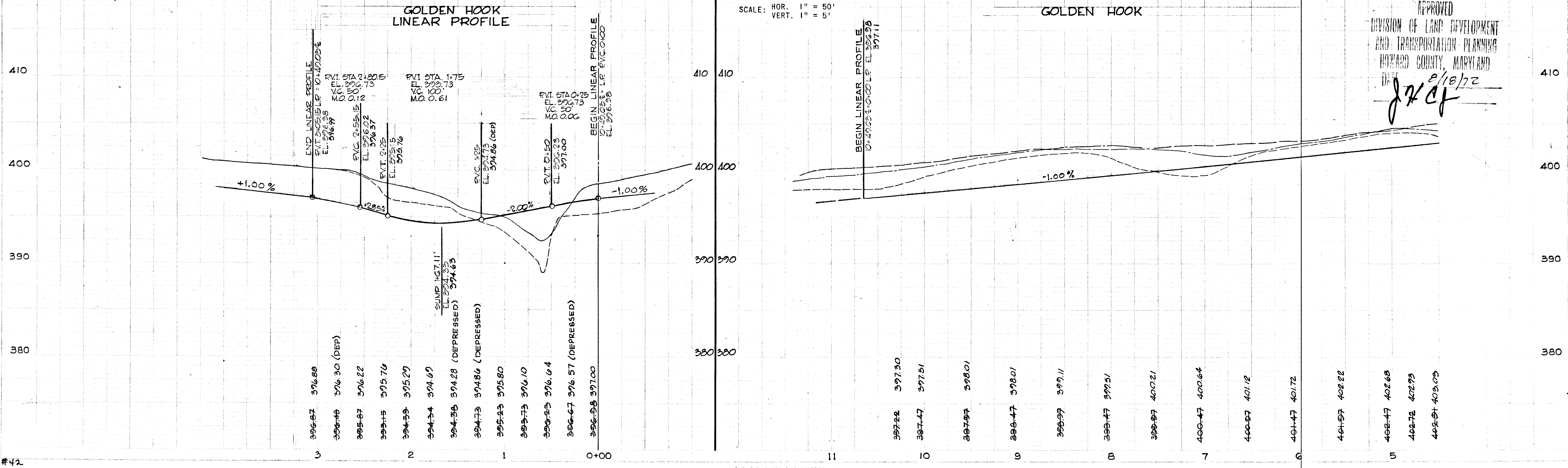


LEGEND
 EX. GROUND @ ϕ
 EX. GR. BLDG. RESTRICTION LINE RT.
 EX. GR. BLDG. RESTRICTION LINE LT.
 FINISHED GRADE @ P.G.L.

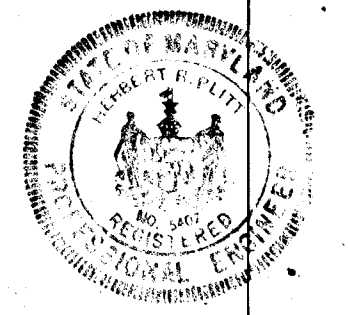
SEE SHEET NO. 18 FOR
STORM DRAIN PROFILE

CURVE DATA
 $\Delta = 130^{\circ}40'00''$
 $R = 205.00'$
 $L = 467.52'$
 $T = 446.39'$

PROFILE
SCALE: HOR. 1" = 50'
VERT. 1" = 5'



DEPARTMENT OF PUBLIC WORKS
W. O. Falbert 8-18-72
 CHIEF, BUREAU OF HIGHWAYS DATE
 OFFICE OF PLANNING AND ZONING
 CHIEF, DIVISION OF LAND DEVELOPMENT AND TRANSPORTATION PLANNING DATE
 GREEN ASSOCIATES, INC.
 CONSULTING ENGINEERS
 BALTIMORE, MARYLAND
 Rev. Date Rev. No. Revision Description
COLUMBIA
 MARYLAND
 5TH ELECTION DISTRICT HOWARD COUNTY
 HOWARD RESEARCH AND DEVELOPMENT CORP.
 COLUMBIA, MARYLAND
 PROJECT AREA THE VILLAGE OF HICKORY RIDGE
 SECTION 1 AREA 1
 PROJECT TITLE GOLDEN HOOK - STA. 5+00 TO 11+19.74
 Des. By: F.T. Scale: AS SHOWN Div. No. 13
 Dir. By: J.A.S. Date: MARCH 1972 C.C.T. No.
 Chk. By: J.T.J.



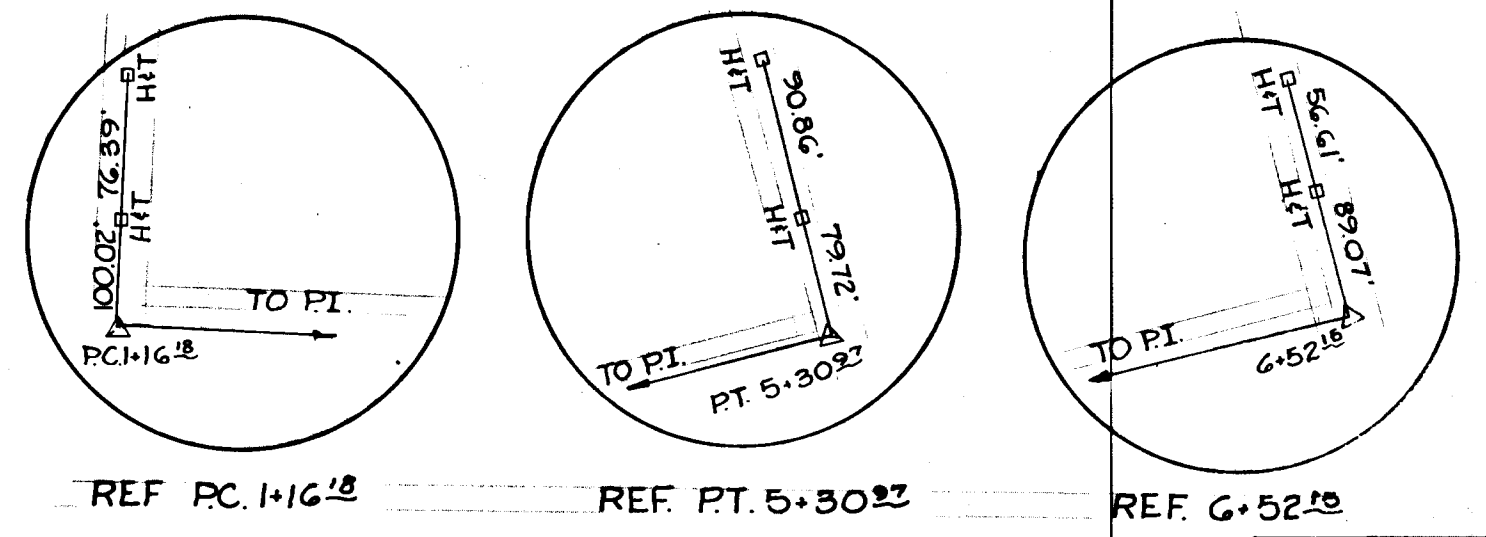
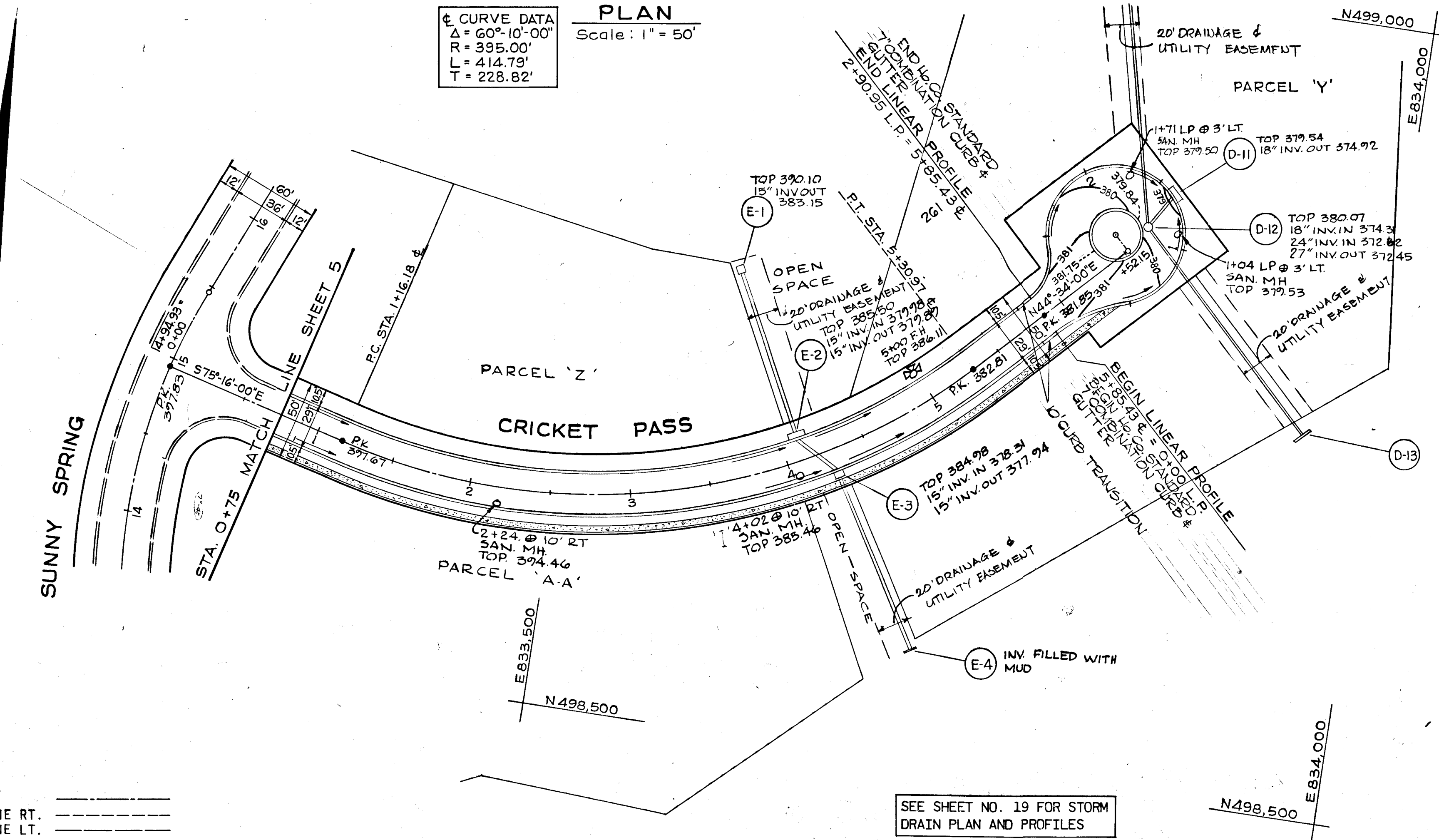
APPROVED
 DIVISION OF LAND DEVELOPMENT
 AND TRANSPORTATION PLANNING
 HOWARD COUNTY, MARYLAND
 8/18/72
J.K.C.

PLAN

PROFILE

± CURVE DATA
 $\Delta = 60^{\circ}-10'-00''$
 $R = 395.00'$
 $L = 414.79'$
 $T = 228.82'$

PLAN
 Scale: 1" = 50'



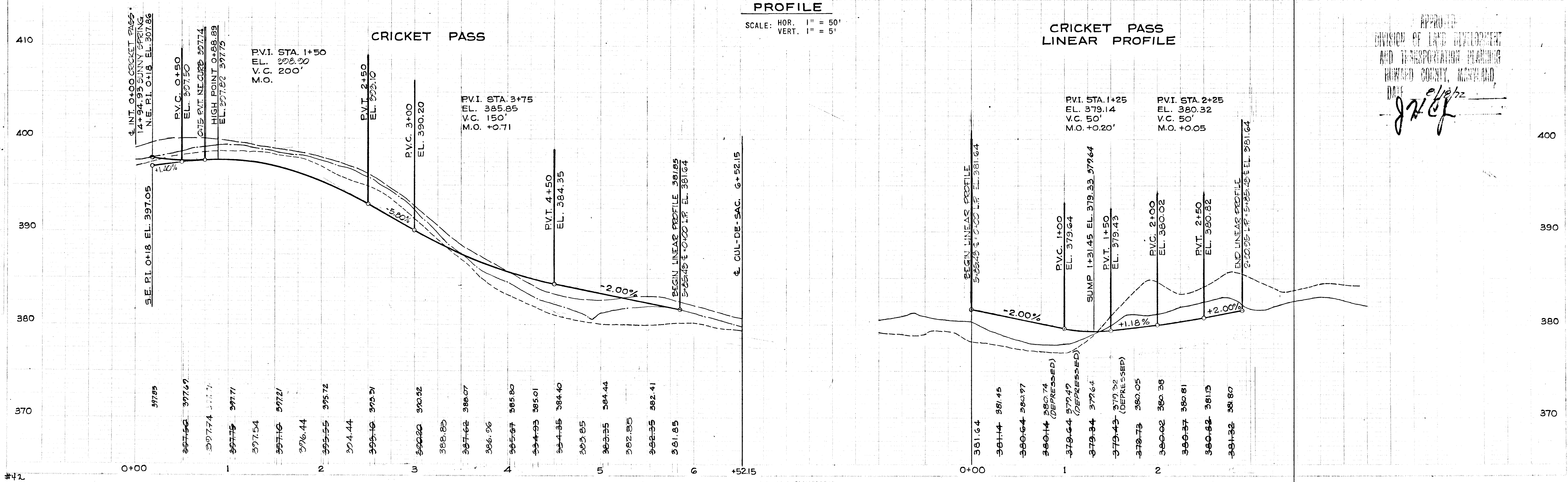
LEGEND
 EX. GROUND @ ±
 EX. GR. BLDG. RESTRICTION LINE RT.
 EX. GR. BLDG. RESTRICTION LINE LT.
 FINISHED GRADE @ P.G.L.

SEE SHEET NO. 19 FOR STORM DRAIN PLAN AND PROFILES

PROFILE

SCALE: HOR. 1" = 50'
 VERT. 1" = 5'

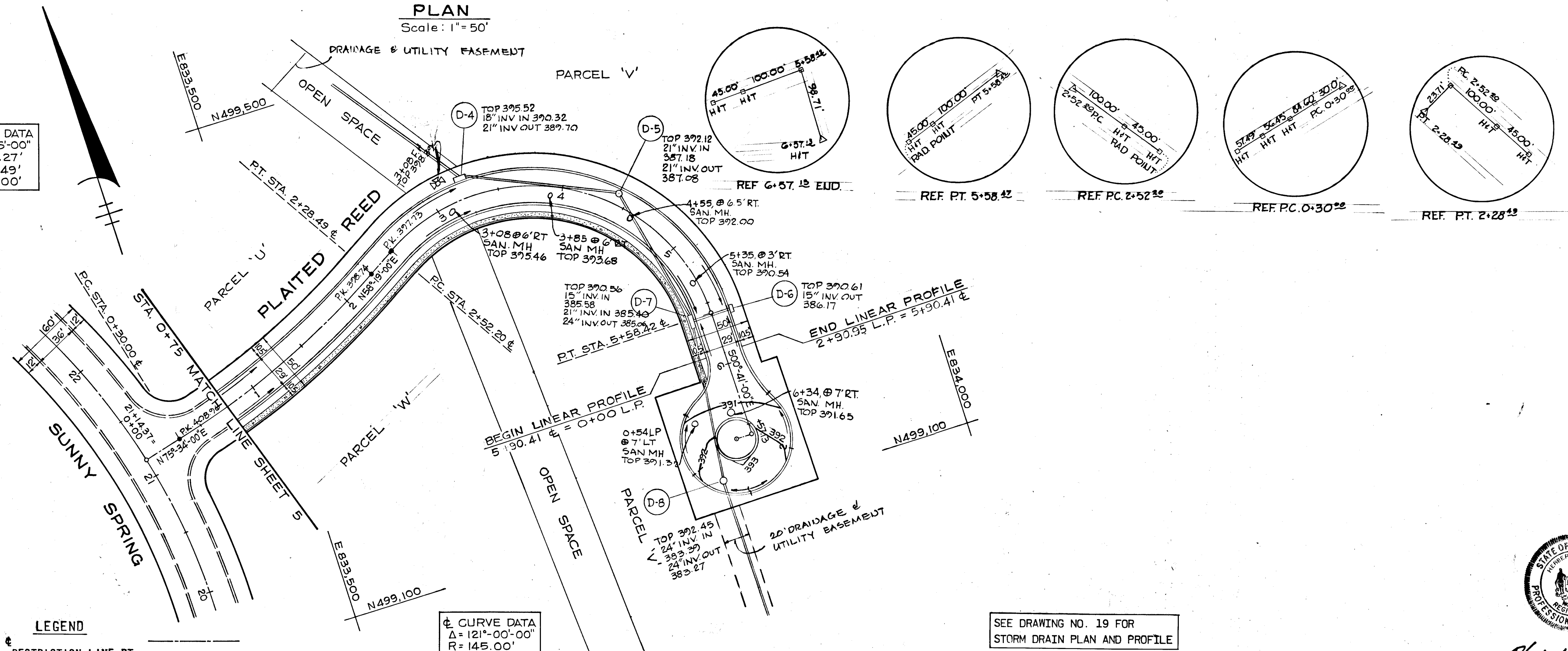
**CRICKET PASS
 LINEAR PROFILE**



DEPARTMENT OF PUBLIC WORKS		
<i>Ed O. Falbert</i>		8-18-72
CHIEF, BUREAU OF HIGHWAYS		DATE
OFFICE OF PLANNING AND ZONING		
CHIEF, DIVISION OF LAND DEVELOPMENT AND TRANSPORTATION PLANNING		DATE
GREEN ASSOCIATES, INC. CONSULTING ENGINEERS BALTIMORE, MARYLAND		
Rev. Date	Rev. No.	Revision Description
COLUMBIA MARYLAND 5TH ELECTION DISTRICT HOWARD COUNTY HOWARD RESEARCH AND DEVELOPMENT CORP. COLUMBIA, MARYLAND		
PROJECT DATA		
THE VILLAGE OF HICKORY RIDGE		
SECTION 1		AREA 1
PROJECT TITLE		
CRICKET PASS		
Des. By	F.T.	Scale AS SHOWN
Drawn By	J.A.S.	Date MARCH 1972
Checked By	J.T.J.	Approved

APPROVED
 DIVISION OF LAND DEVELOPMENT
 AND TRANSPORTATION PLANNING
 HOWARD COUNTY, MARYLAND
 DATE *8/18/72*

Δ = 17°-15'-00"
 R = 659.27'
 L = 198.49'
 T = 100.00'



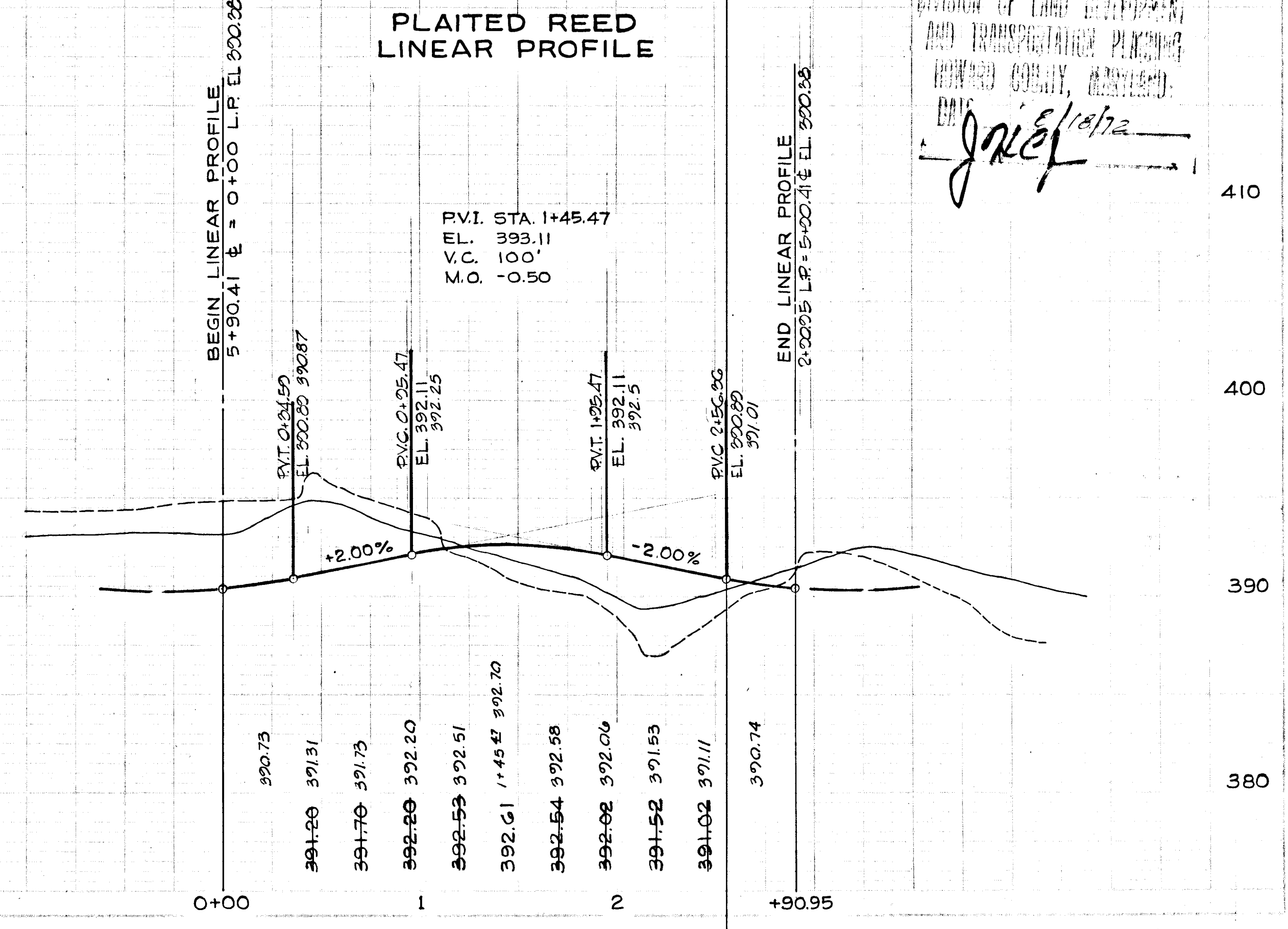
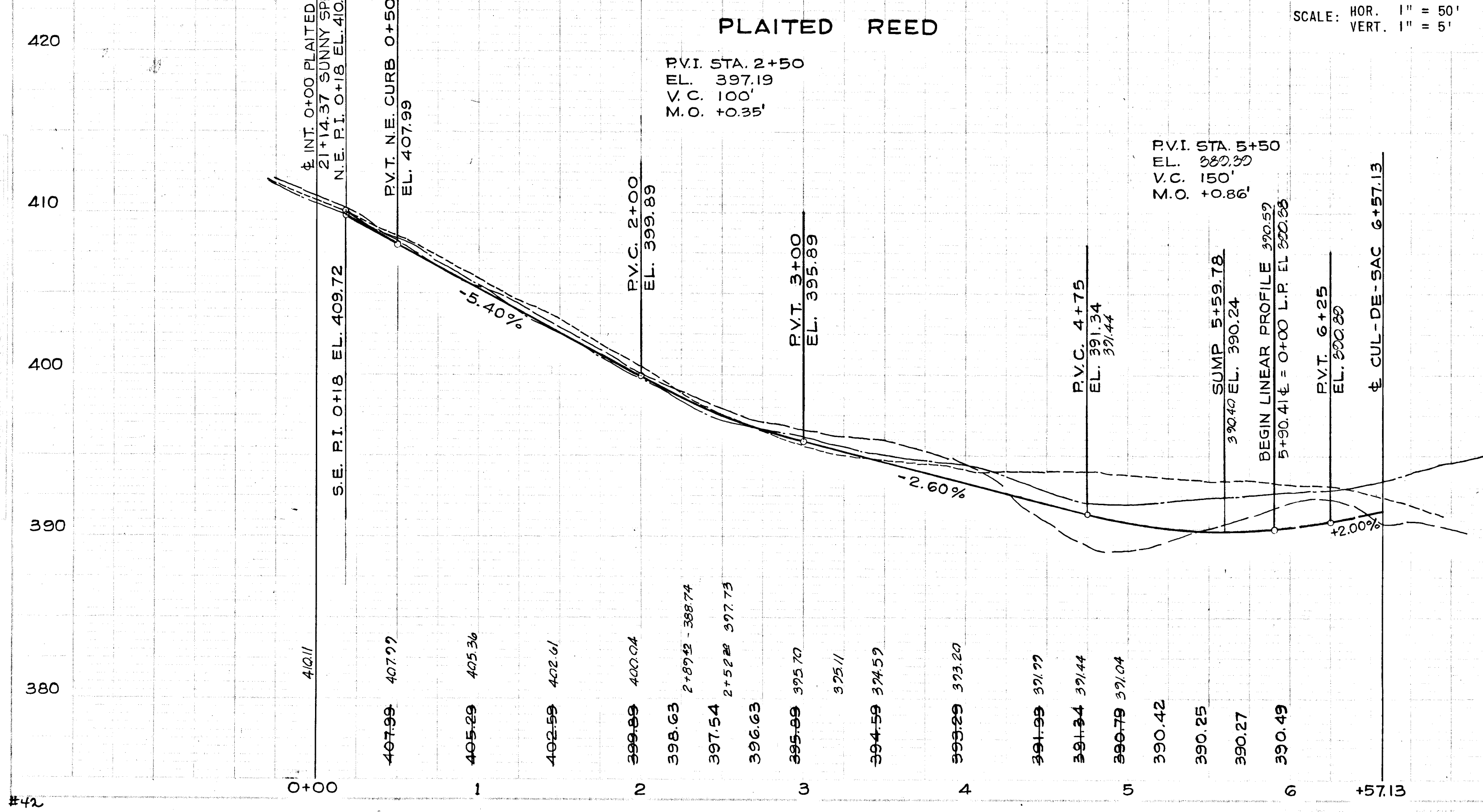
LEGEND

EX. GROUND @ ϕ
 EX. GR. BLDG. RESTRICTION LINE RT.
 EX. GR. BLDG. RESTRICTION LINE LT.
 FINISHED GRADE @ P.G.L.

Δ = 121°-00'-00"
 R = 145.00'
 L = 306.22'
 E = 256.29'

PROFILE

SCALE: HOR. 1" = 50'
 VERT. 1" = 5'



DEPARTMENT OF PUBLIC WORKS

W. O. Fallick 8-18-72
 CHIEF, BUREAU OF HIGHWAYS DATE

OFFICE OF PLANNING AND ZONING

CHIEF DIVISION OF LAND DEVELOPMENT AND TRANSPORTATION PLANNING DATE

GREEN ASSOCIATES, INC.
 CONSULTING ENGINEERS
 BALTIMORE, MARYLAND

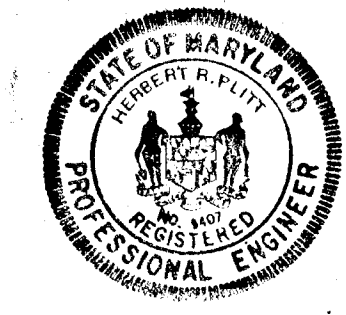
Rev. Date	Rev. No.	Revision Description

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

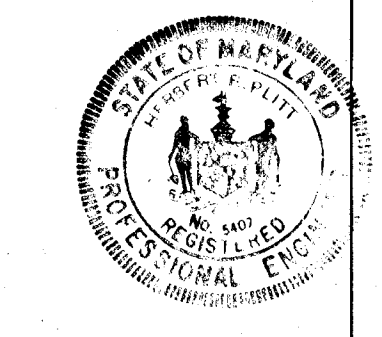
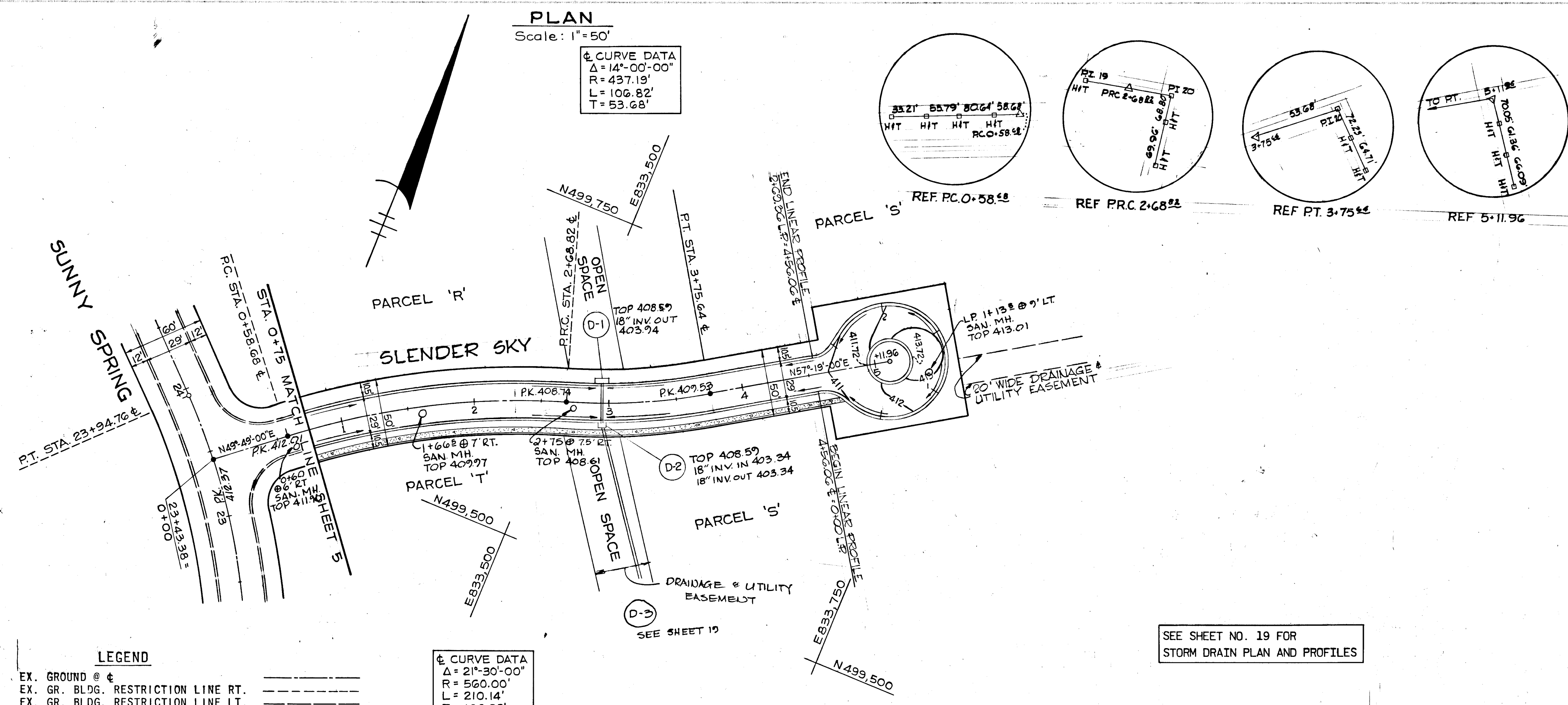
PROJECT AREA: THE VILLAGE OF HICKORY RIDGE
 SECTION 1 AREA 1

PLATED REED

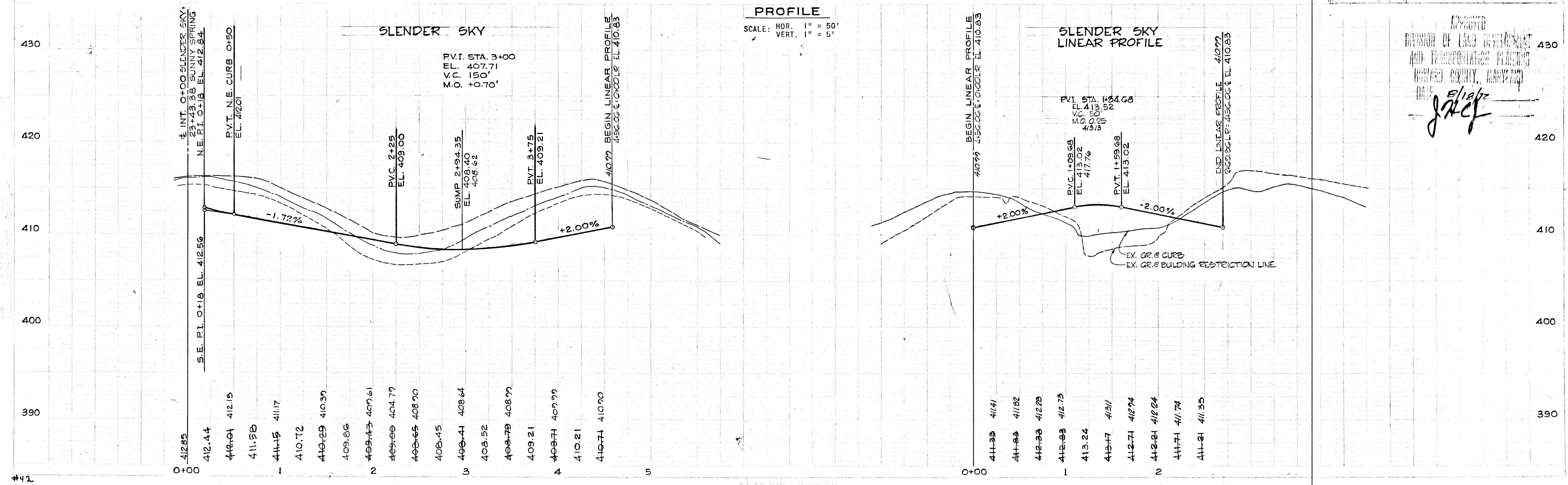
Drawn By: F.T. Scale: AS SHOWN Dwg No: 15
 Date: MARCH 1972 C.C.F. No:
 Checked By: J.T.J. Approved:



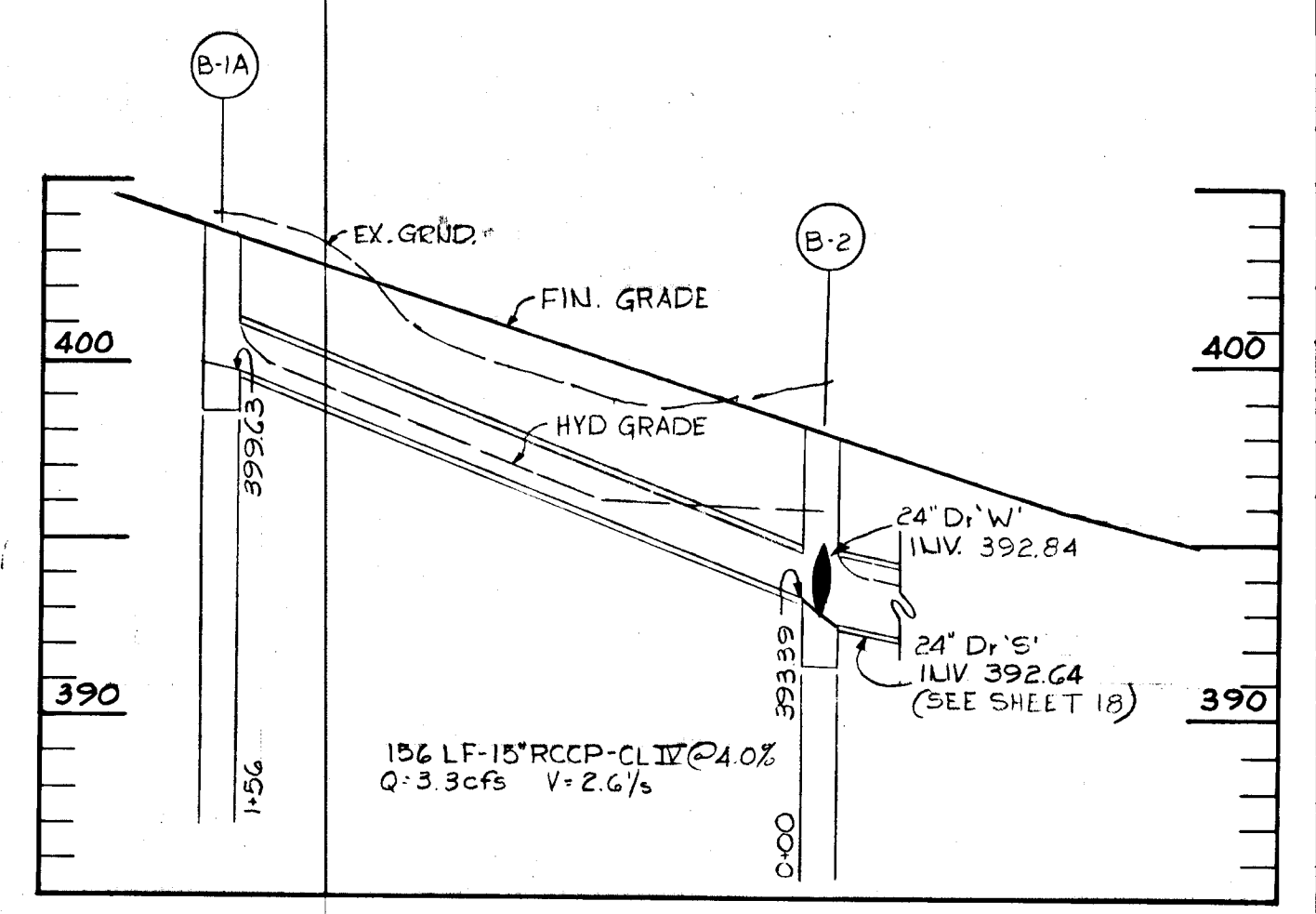
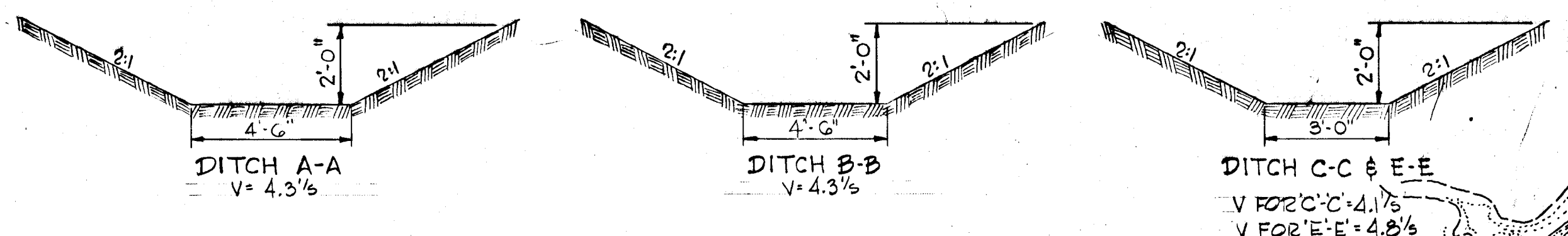
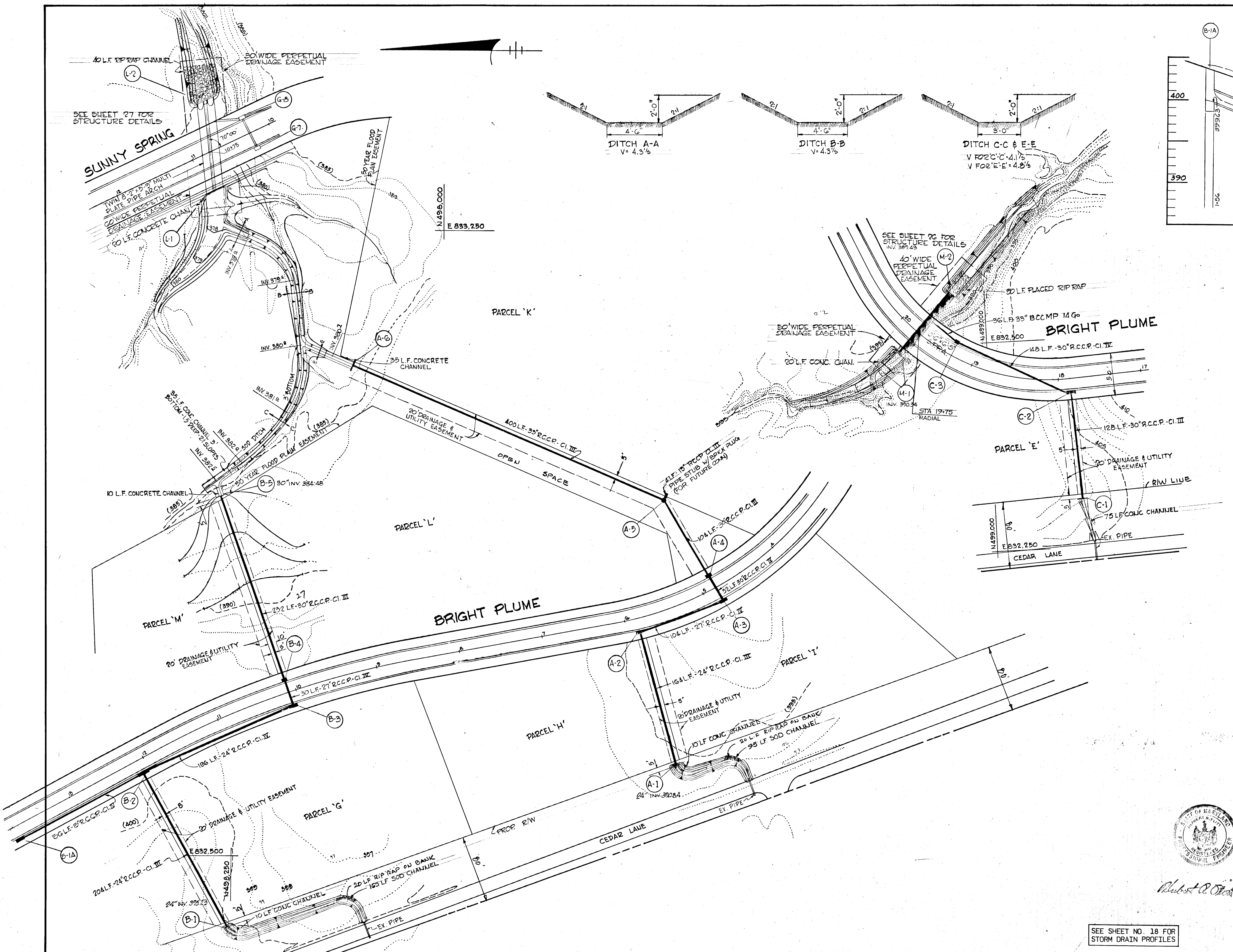
APPROVED
 DIVISION OF LAND DEVELOPMENT
 AND TRANSPORTATION PLANNING
 HOWARD COUNTY, MARYLAND
J. Fallick 8/18/72



DEPARTMENT OF PUBLIC WORKS	
<i>W. O. Filbert</i>	8-18-72
CHIEF, BUREAU OF HIGHWAYS	DATE
OFFICE OF PLANNING AND ZONING	
CHIEF, DIVISION OF LAND DEVELOPMENT AND TRANSPORTATION PLANNING	
DATE	
GREEN ASSOCIATES, INC. CONSULTING ENGINEERS BALTIMORE, MARYLAND	
Rev. Date	Revision Description
COLUMBIA MARYLAND 5TH ELECTION DISTRICT HOWARD COUNTY HOWARD RESEARCH AND DEVELOPMENT CORP. COLUMBIA, MARYLAND PROJECT AREA: THE VILLAGE OF HICKORY RIDGE SECTION 1 AREA 1 PROJECT TITLE: SLENDER SKY	
Prep. By: F.T.	Scale: AS SHOWN
Drawn By: J.A.S.	Date: MARCH 1972
Check By: J.T.J.	Approved:



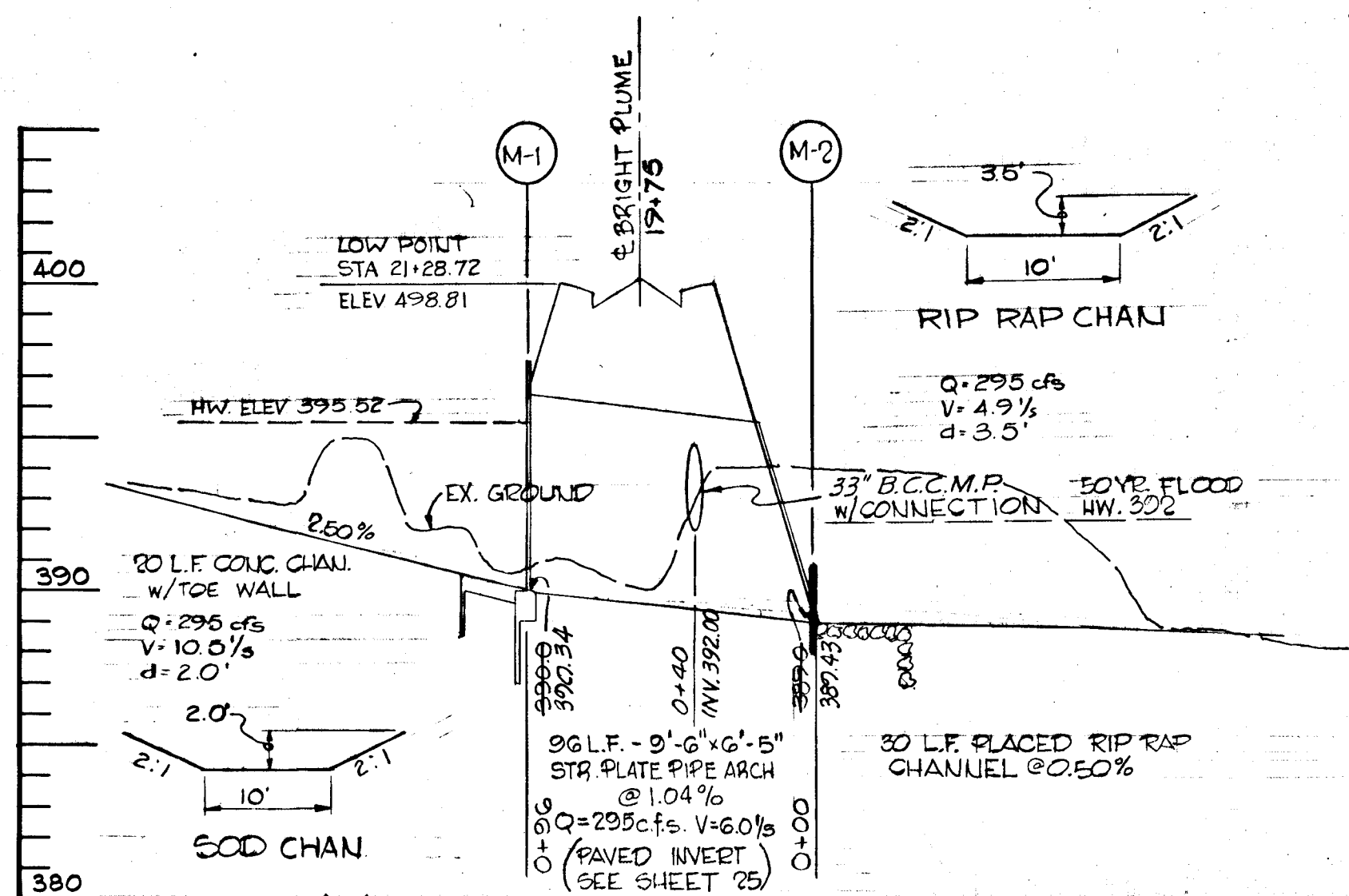
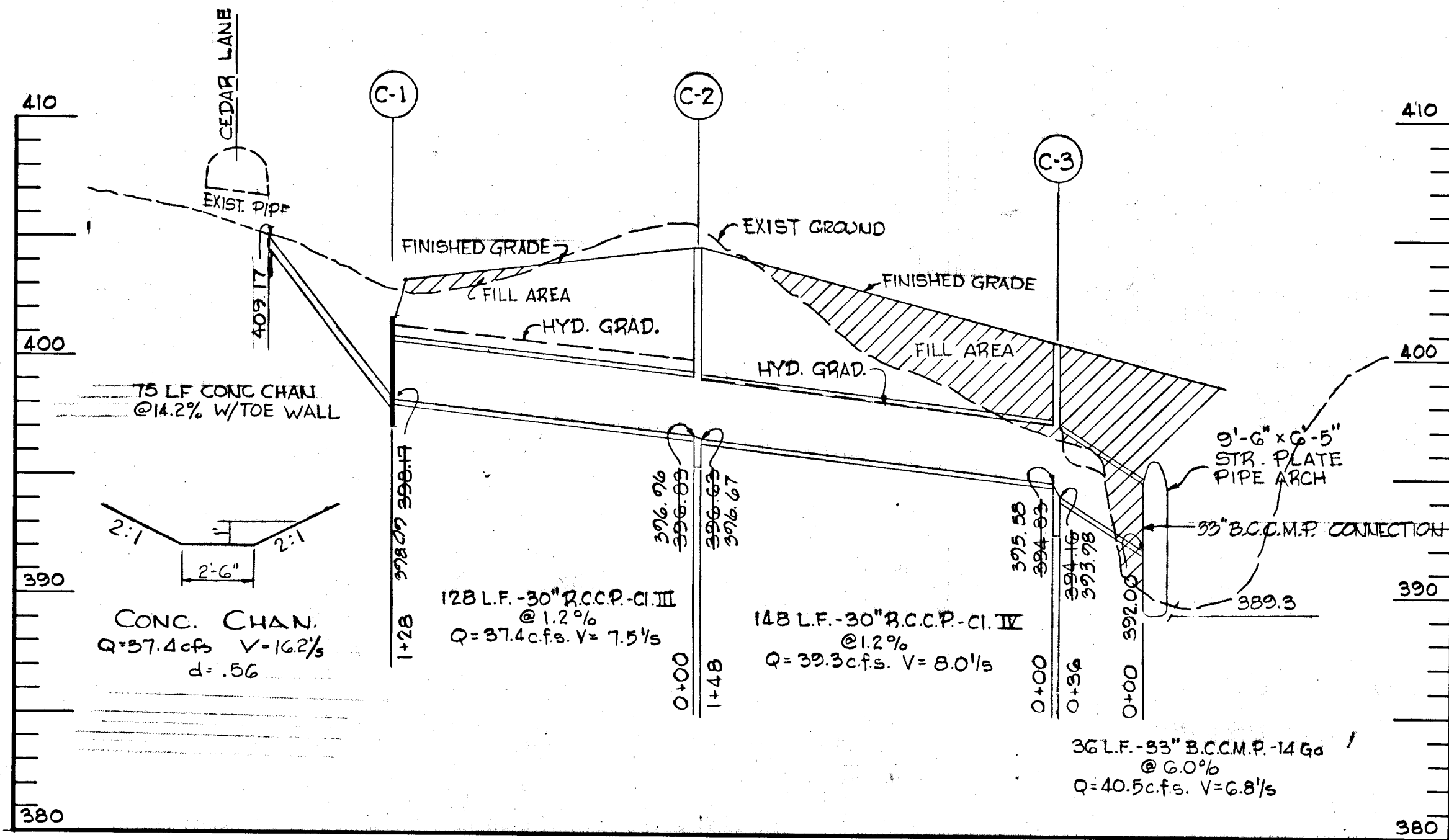
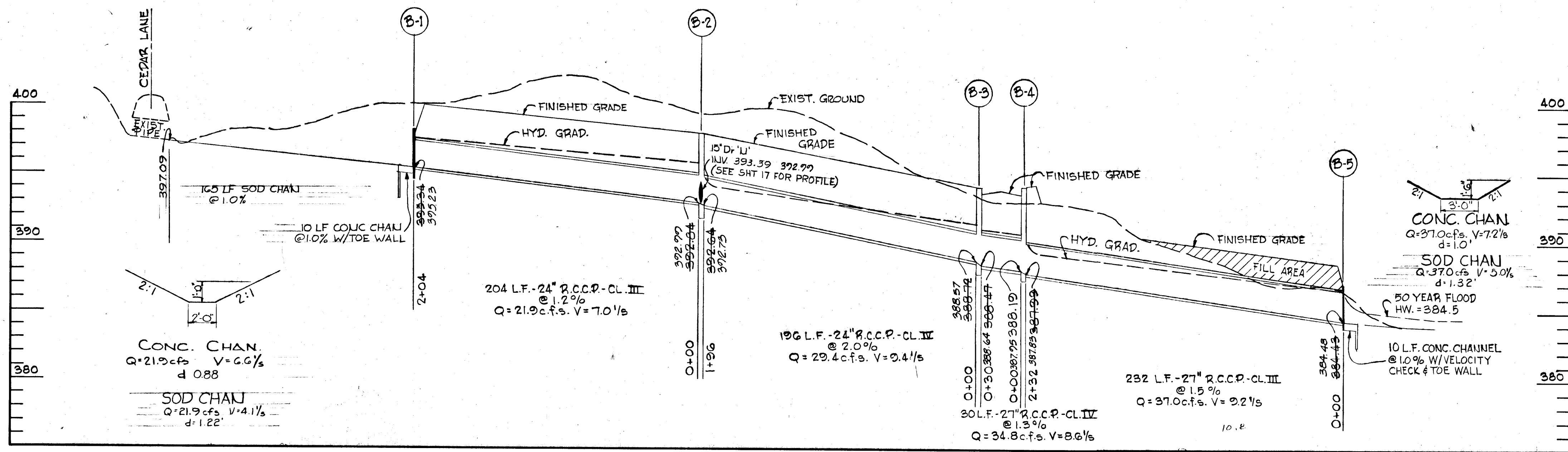
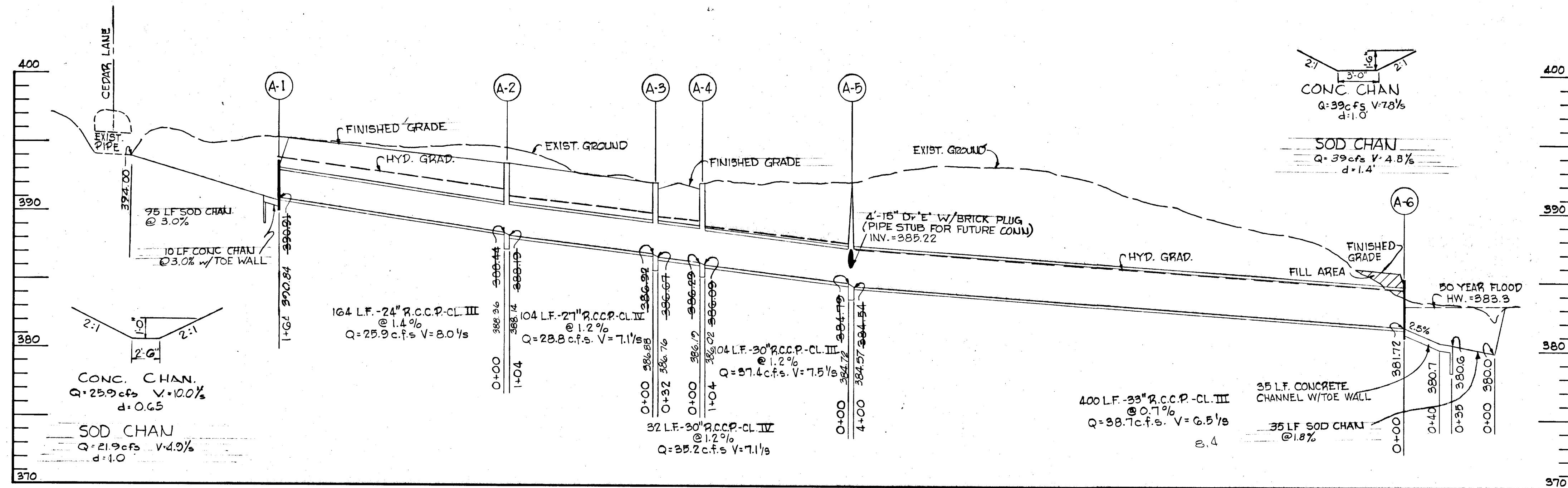
APPROVED
DIVISION OF LAND DEVELOPMENT
AND TRANSPORTATION PLANNING
HOWARD COUNTY, MARYLAND
DATE: 3/18/72
J. A. S.



APPROVED
 STATE OF MARYLAND
 DEPARTMENT OF PUBLIC WORKS
 8/18/72
J.H.P.

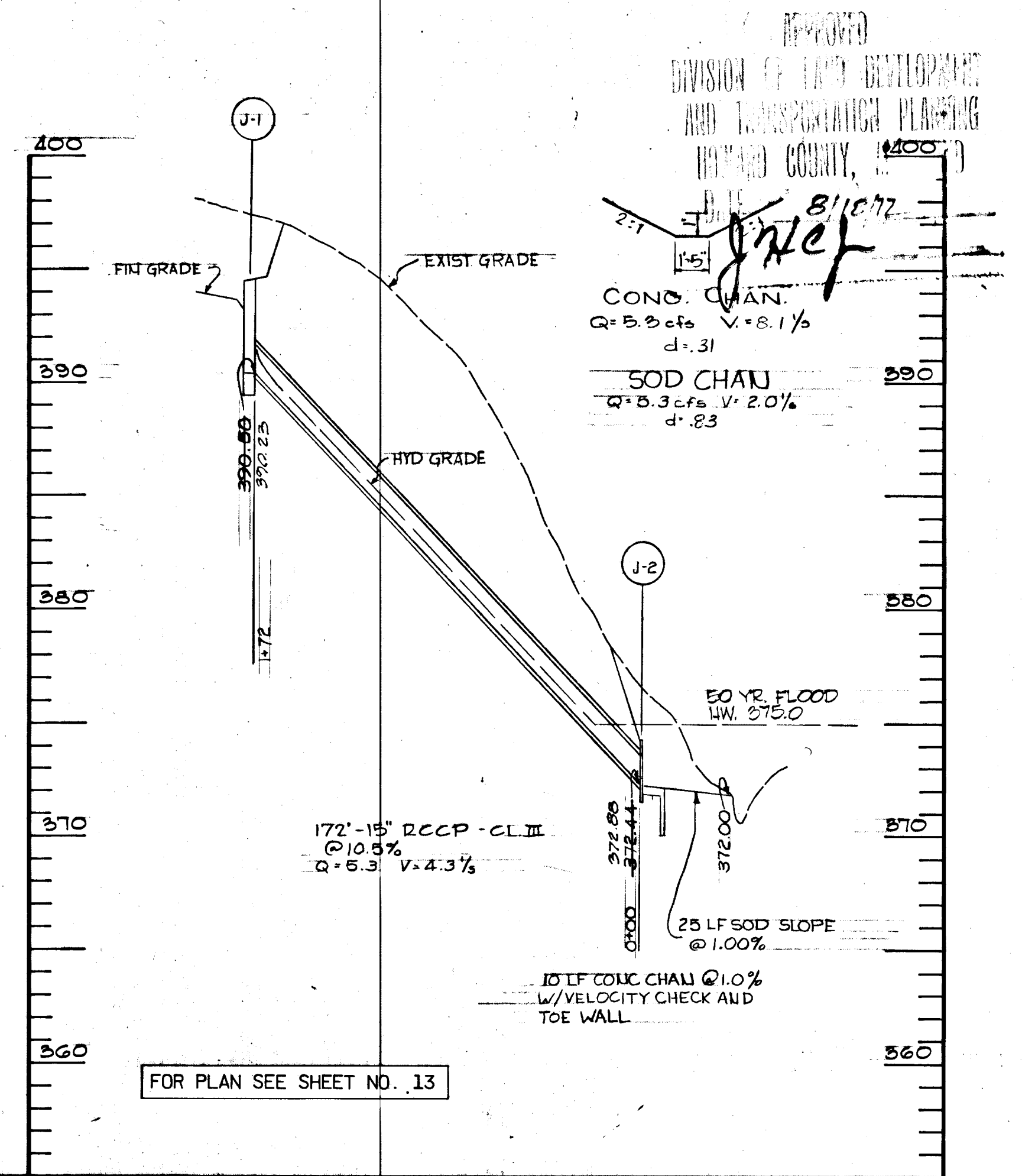
DEPARTMENT OF PUBLIC WORKS		
<i>W. O. Falbert</i>	8-18-72	DATE
CHIEF, BUREAU OF HIGHWAYS		
OFFICE OF PLANNING AND ZONING		
CHIEF, DIVISION OF LAND DEVELOPMENT AND TRANSPORTATION PLANNING		
GREEN ASSOCIATES, INC. CONSULTING ENGINEERS BALTIMORE, MARYLAND		
Rev. Date	Rev. No.	Revision Description
COLUMBIA MARYLAND 5TH ELECTION DISTRICT HOWARD COUNTY HOWARD RESEARCH AND DEVELOPMENT CORP. COLUMBIA, MARYLAND		
PROJECT AREA		AREA 1
SECTION 1		AREA 1
PROJECT TITLE		
STORM DRAIN PLANS		
Des. By	R.T.	Scale 1" = 50'
Des. By	E.M.P.	Date MARCH 1972
CH. By	J.T.J.	Approved
Drawn		Drawn No. 17 OF
Checked		C.C.E. III

SEE SHEET NO. 18 FOR STORM DRAIN PROFILES



STRUCTURE SCHEDULE						
NO.	TYPE	LOCATION	INV. IN	INV. OUT	T.C.P.	REMARKS
A-1	TYPE 'C' ENDWALL	SEE PLAN	390.91			HO.CO.DWG.D-52 PG.107
A-2	A-10 INLET	STA. 5+84.31-14.00'LT	388.44	388.19	393.55/393.22	HO.CO.DWG.D-64A PG.119-A
A-3	A-10 INLET	STA. 4+83.33-14.00'LT	386.92	386.67	392.13	HO.CO.DWG.D-64A PG.119-A
A-4	A-5 INLET	STA. 4+83.33-14.00'RT	386.29	386.09	392.13	HO.CO.DWG.D-64A PG.119-A
A-5	STD. MANHOLE	SEE PLAN	385.22	384.79	392.50	HO.CO.DWG.D-103 PG.158
A-6	STD 'C' ENDWALL	SEE PLAN	381.72			HO.CO.DWG.D-52 PG.107
B-1	STD 'C' ENDWALL	SEE PLAN	395.34			HO.CO.DWG.D-52 PG.107
B-2	A-10 INLET	STA. 12+08.99-14.00'LT	392.84	392.64	398.52/398.03	HO.CO.DWG.D-64A PG.119-A
B-3	A-10 INLET	STA. 10+10.54-14.00'LT	388.72	388.47	393.98	HO.CO.DWG.D-64A PG.119-A
B-4	A-5 INLET	STA. 10+10.54-14.00'LT	388.19	387.99	393.98	HO.CO.DWG.D-64A PG.119-A
B-5	STD 'C' ENDWALL	SEE PLAN	384.43			HO.CO.DWG.D-52 PG.107
C-1	STD 'C' ENDWALL	SEE PLAN	398.17			HO.CO.DWG.D-52 PG.107
C-2	A-10 INLET	STA. 17+86.64-14.00'LT	396.83	396.63	405.56/405.83	HO.CO.DWG.D-64A PG.119-A
C-3	A-5 INLET	STA. 19+25-14.00'RT	394.83	394.16	400.83/400.93	HO.CO.DWG.D-64A PG.119-A
J-1	A-5 INLET	STA. 1+67.11 L.P.	390.50	394.50		HO.CO.DWG.D-64A PG.119-A
J-2	TYPE 'C' ENDWALL	SEE PLAN	372.44			HO.CO.DWG.D-52 PG.107
B-1A	A-10 INLET	STA. 12+75-14.00'LT	399.63	403.39/403.57		HO.CO.DWG.D-64A PG.119-A

NOTE: 1. ALL OFFSET DISTANCES SHOWN ARE TO FACE OF INLET THROAT
 2. FOR MINIMUM INLET WIDTHS, SEE SHEET 25



DEPARTMENT OF PUBLIC WORKS
 Chief, Bureau of Highways
 Office of Planning and Zoning
 Chief, Division of Land Development and Transportation Planning

8-18-72
 DATE

FOR PLAN SEE SHEET NO. 9, 10 AND 17

GREEN ASSOCIATES, INC.
 CONSULTING ENGINEERS
 BALTIMORE, MARYLAND

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

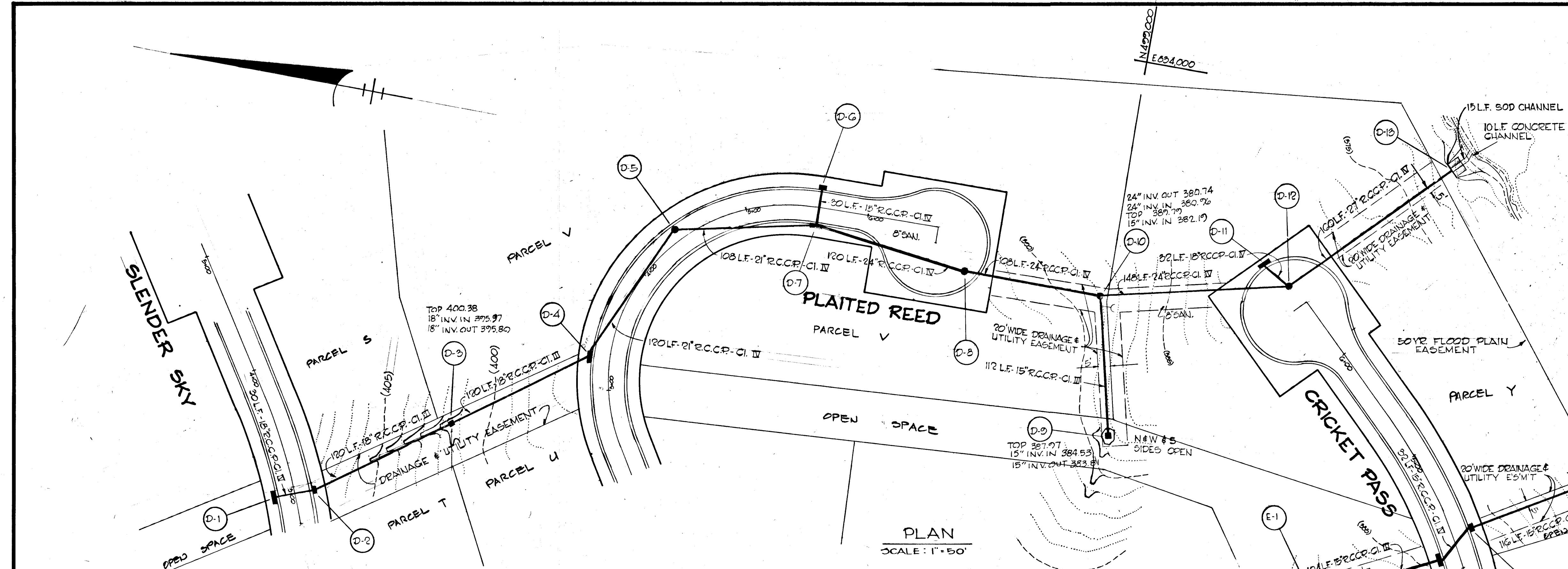
PROJECT AREA: THE VILLAGE OF HICKORY RIDGE
 SECTION 1 AREA 1
 STORM DRAIN PROFILES

Rev. Date: Rev. No.: Revision Description:
 Drawn By: R.T. Scale: 1" = 25' VERT., 1" = 50' HORIZ. Date: MARCH, 1972
 Checked By: E.M.P. Date: Approved By: J.T.J.

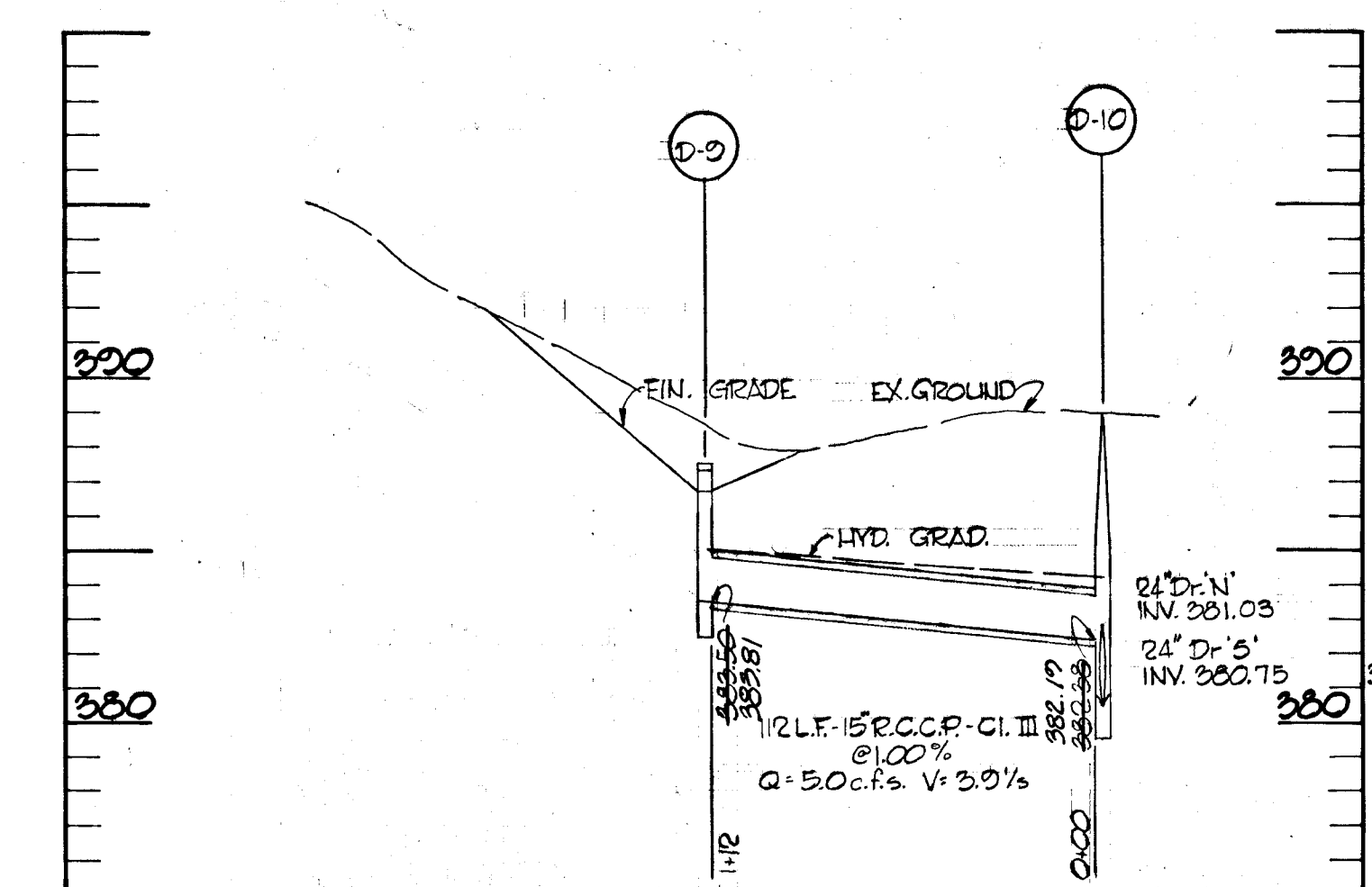
STRUCTURE SCHEDULE						
NO.	TYPE	LOCATION	INV. IN	INV. OUT	T.C.P. ELEV.	REMARKS
D-1	A-10 INLET	STA. 2+94.35-14.00' LT	403.80	408.57	408.57	HO. CO. DWG. 64-A PG. 119-A
D-2	A-5 INLET	STA. 2+94.35-14.00' RT	403.50	403.30	408.57	HO. CO. DWG. 64-A PG. 119-A
D-3	TYPE 'C' INLET	SEE PLAN	396.10	395.90	401.00	HO. CO. DWG. 64-C PG. 119-C
D-4	A-10 INLET	STA. 3+25-14.00' LT	390.38	389.75	395.54/395.28	HO. CO. DWG. 64-A PG. 119-A
D-5	SHALLOW MANHOLE	STA. 4+40-9.00' LT.	387.25	387.05	392.34	SEE DETAIL SHEET 25
D-6	A-5 INLET	STA. 5+59.78-14.00' LT	385.82	385.07	390.41	HO. CO. DWG. 64-A PG. 119-A
D-7	A-10 INLET	STA. 5+59.78-14.00' RT	385.82	385.07	390.41	HO. CO. DWG. 64-A PG. 119-A
D-8	STD. MANHOLE	STA. 1+23.92-10.70' LT	383.39	383.19	392.78	HO. CO. DWG. D-103 PG. 158
D-9	TYPE 'C' INLET	SEE PLAN	383.50	383.50	387.50	HO. CO. DWG. 64-C PG. 119-C
D-10	STD. MANHOLE	SEE PLAN	382.38	381.03	389.50	HO. CO. DWG. D-103 PG. 158
D-11	A-10 INLET	STA. 1+31.45 L.P.	374.82	379.50	379.50	HO. CO. DWG. 64-A PG. 119-A
D-12	SHALLOW MANHOLE	STA. 1+22.73-22.61' LT	372.60	372.39	379.80	SEE DETAIL SHEET 25
D-13	STD. 'C' ENDWALL	SEE PLAN	369.83	369.49	369.49	HO. CO. DWG. D-52 PG. 107
E-1	TYPE 'C' INLET	SEE PLAN	382.50	386.50	386.50	HO. CO. DWG. 64-C PG. 119-C
E-2	A-10 INLET	STA. 4+10.80-14.00' LT	380.00	379.80	385.68/385.38	HO. CO. DWG. 64-A PG. 119-A
E-3	A-5 INLET	STA. 4+26.47-14.00' RT	378.20	378.00	385.10/384.97	HO. CO. DWG. 64-A PG. 119-A
E-4	STD. 'C' ENDWALL	SEE PLAN	372.43			HO. CO. DWG. D-52 PG. 107

NOTE: 1. ALL OFFSET DISTANCES ARE TO FACE OF INLET THROAT
 2. SEE DETAIL SHEET NO. 25 FOR MINIMUM INLET WIDTHS.

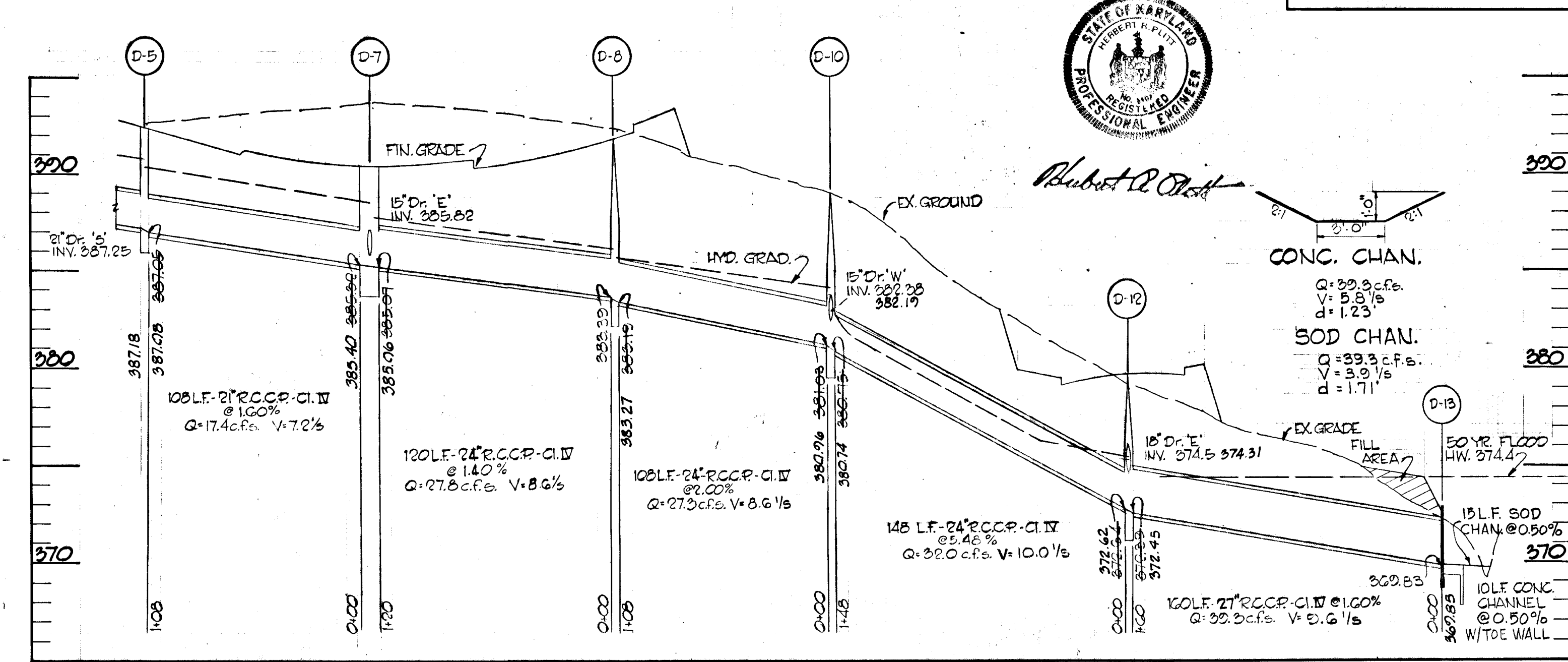
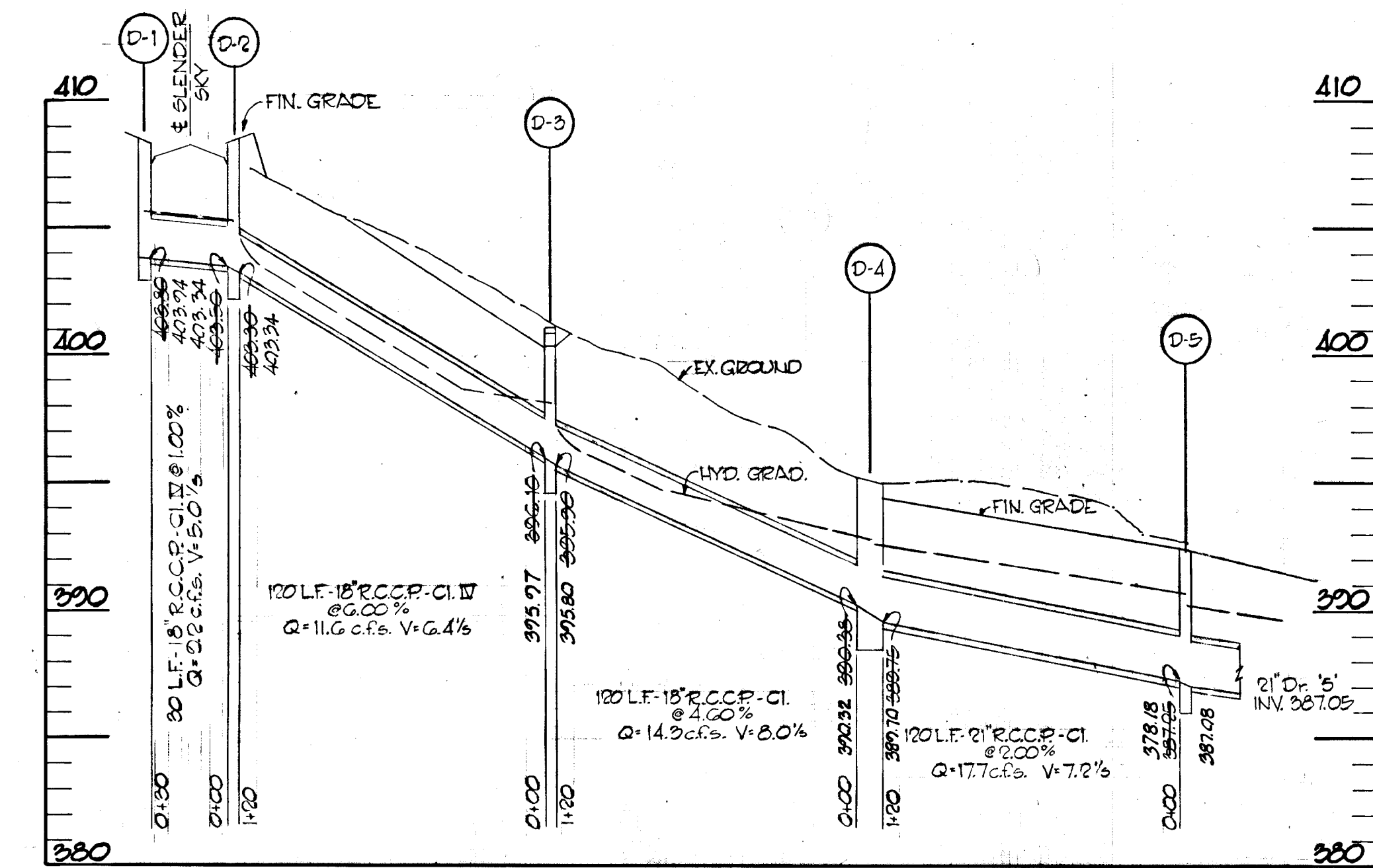
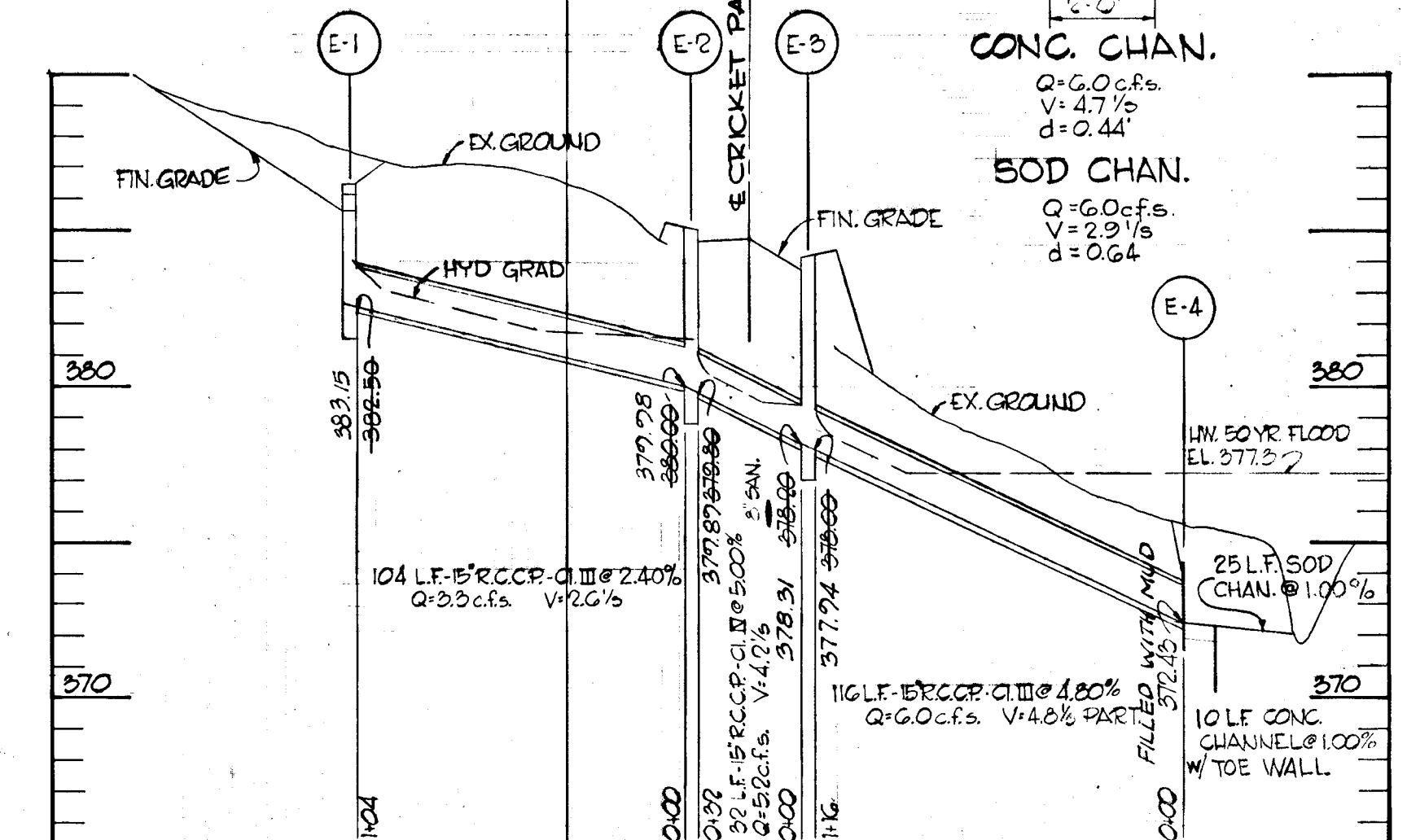
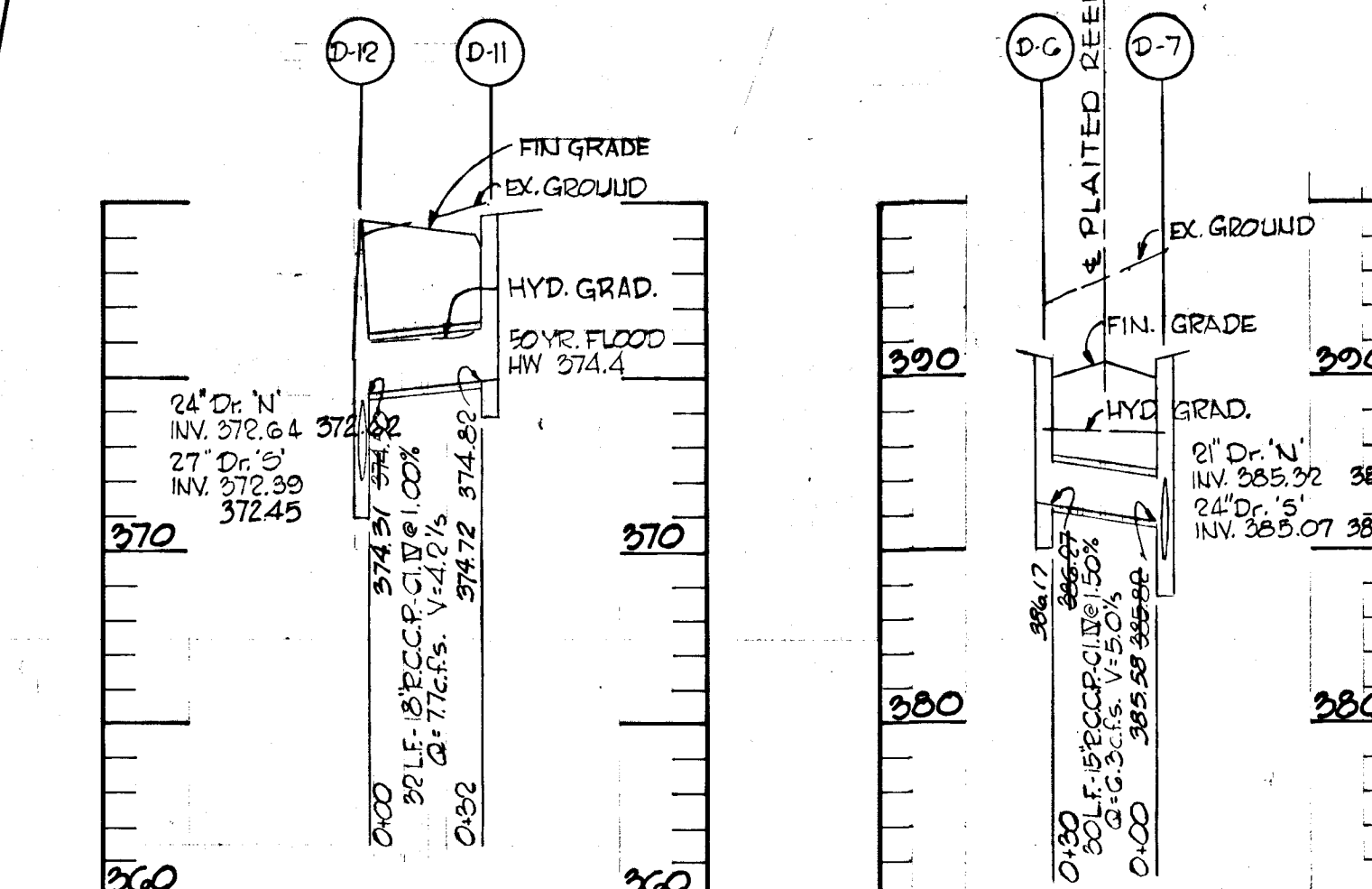
APPROVED
 DIVISION OF LAND DEVELOPMENT
 AND TRANSPORTATION PLANNING
 HOWARD COUNTY, MARYLAND
J. Kelly



PLAN
 SCALE: 1"=50'



PROFILE
 SCALE: HORIZ. 1"=50'
 VERT. 1"=5'



DEPARTMENT OF PUBLIC WORKS

W. O. Fabert 8-18-72
 CHIEF, BUREAU OF HIGHWAYS

OFFICE OF PLANNING AND ZONING

CHIEF DIVISION OF LAND DEVELOPMENT AND TRANSPORTATION PLANNING

GREEN ASSOCIATES, INC.
 CONSULTING ENGINEERS
 BALTIMORE, MARYLAND

Rev. Date: Rev. No.: Revision Description:

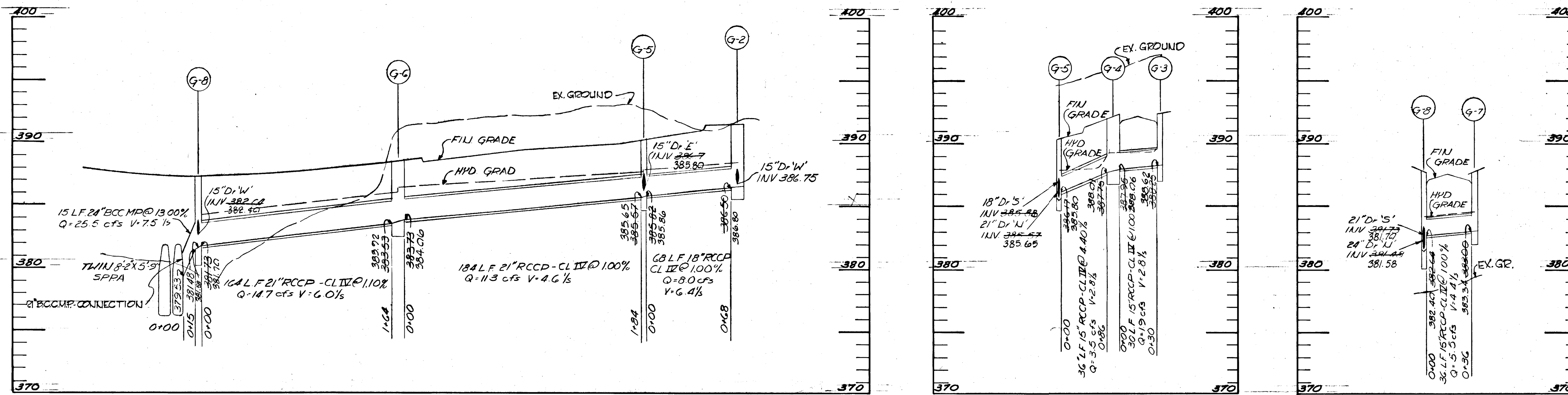
COLUMBIA
 MARYLAND
 5TH ELECTION DISTRICT
 HOWARD COUNTY

PROJECT AREA: THE VILLAGE OF HICKORY RIDGE
 SECTION 1 AREA 1

PROJECT TITLE: STORM DRAIN PLAN & PROFILES

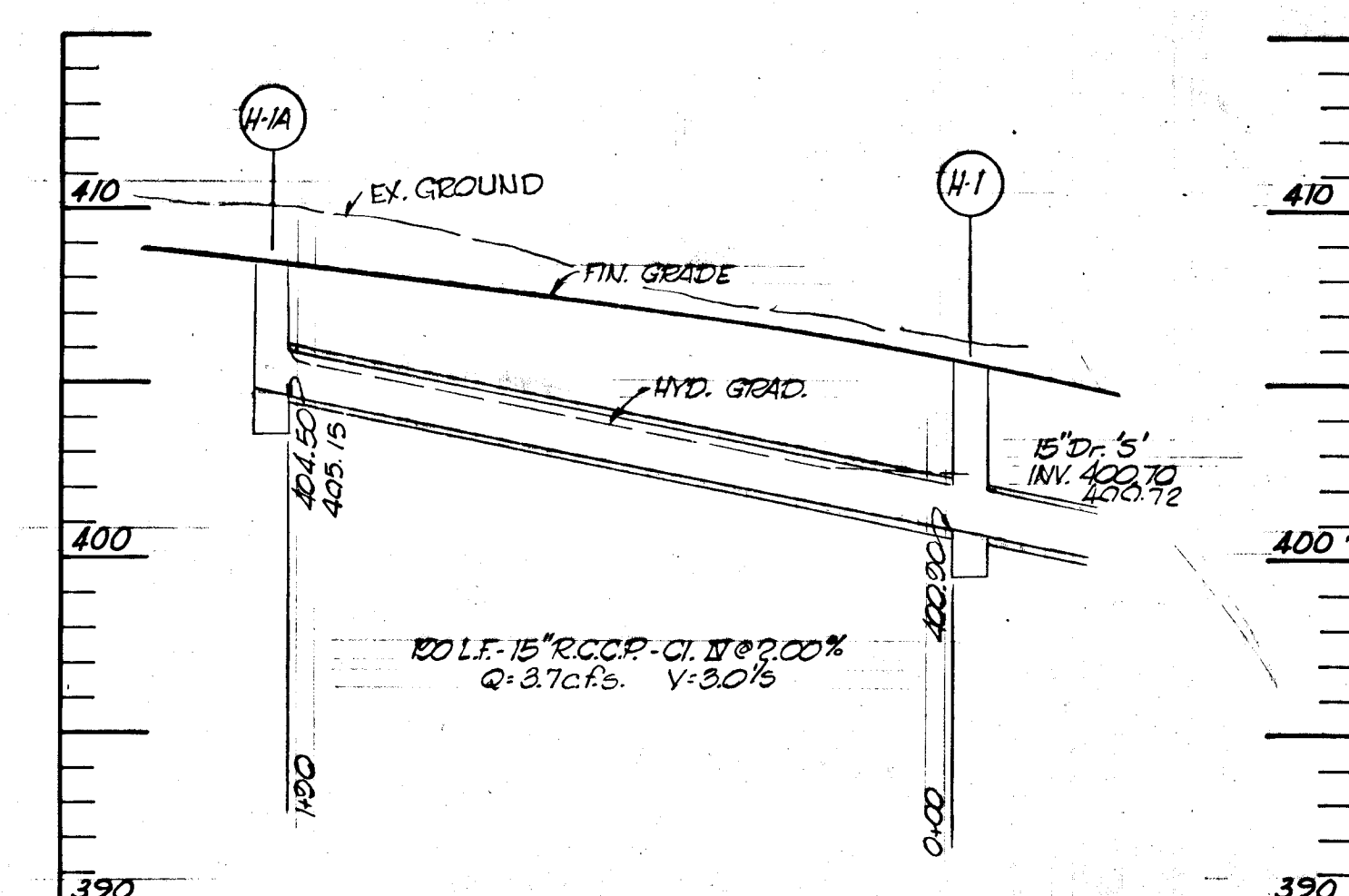
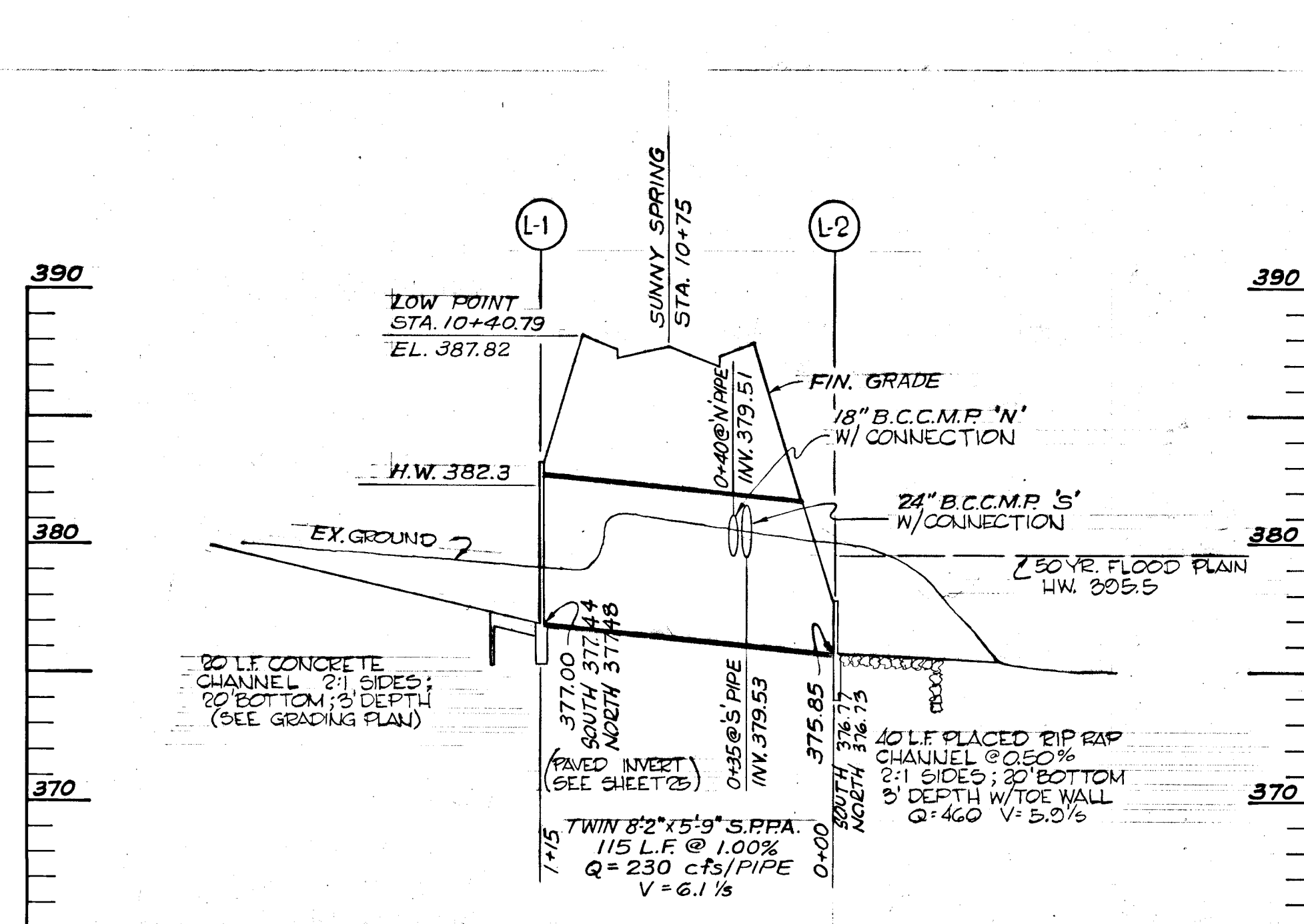
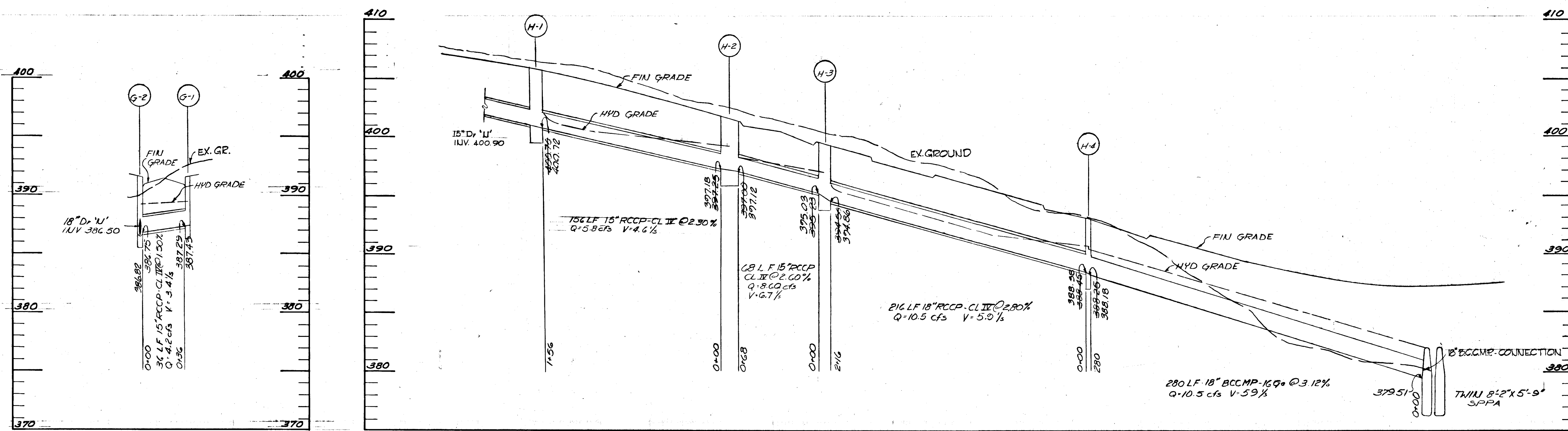
Des. By: F.T. Scale: AS SHOWN Disp. No. 19
 Dir. By: F.T. Date: MARCH 1972 C.C.F. R.
 Ch. By: Approver:

7-1-72



STRUCTURE SCHEDULE							
NO.	TYPE	LOCATION	INV. IN	INV. OUT	T.C.P. ELEV.	REMARKS	
G-1	A-10 INLET	ST. 6+17.72-17.50'LT		387.29	391.45/391.35	HO.CO.DWG. D-64A PG.119A	
G-2	A-10 INLET	ST. 6+17.72-17.50'RT	386.75	386.50	391.45/391.35	HO.CO.DWG. D-64A PG.119A	
G-3	A-10 INLET	ST. 0+65-17.50'RT		388.25	392.02/392.38	HO.CO.DWG. D-64A PG.119A	
G-4	A-10 INLET	ST. 0+65-17.50'LT		387.95	387.75	392.02/392.38	HO.CO.DWG. D-64A PG.119A
G-5	SHALLOW MANHOLE	ST. 6+88-22'RT	386.17	385.82	385.57	390.59	SEE DETAIL SHEET 25
G-6	A-10 INLET	ST. 8+72-17.50'RT		383.73	383.53	388.90/388.80	HO.CO.DWG. D-64A PG.119A
G-7	A-5 INLET	ST. 10+40.79-17.50'LT		383.00	387.49		HO.CO.DWG. D-64A PG.119A
G-8	A-5 INLET	ST. 10+40.79-17.50'RT		382.64	381.73		HO.CO.DWG. D-64A PG.119A
H-1	A-10 INLET	ST. 18+00-17.50'LT		400.90	400.70	405.88/405.68	HO.CO.DWG. D-64A PG.119A
H-2	A-10 INLET	ST. 16+34.50-17.50'LT		397.25	397.00	401.33/401.75	HO.CO.DWG. D-64A PG.119A
H-3	A-10 INLET	ST. 15+65.44-17.50'RT		395.23	394.50	399.45/399.73	HO.CO.DWG. D-64A PG.119A
H-4	SHALLOW MANHOLE	ST. 13+40-7.00'RT		388.45	388.25	393.10	SEE DETAIL SHEET 25
H-1A	A-10 INLET	ST. 20+00-17.50'RT		404.50	408.71/408.69		HO.CO.DWG. D-64A PG.119A

NOTE: 1. OFFSET DISTANCES ARE TO FACE OF INLET THROAT.
 2. SEE DETAIL SHEET 25 FOR MINIMUM INLET WIDTHS.



APPROVED
 DIVISION OF LAND DEVELOPMENT
 AND TRANSPORTATION PLANNING
 HOWARD COUNTY, MARYLAND
 8/18/72
 J. J. J.
 REGISTERED PROFESSIONAL ENGINEER

DEPARTMENT OF PUBLIC WORKS

100 Fallant 8-18-72
 CHIEF, BUREAU OF HIGHWAYS DATE

OFFICE OF PLANNING AND ZONING

CHIEF, DIVISION OF LAND DEVELOPMENT AND TRANSPORTATION PLANNING DATE

GREEN ASSOCIATES, INC.
 CONSULTING ENGINEERS
 BALTIMORE, MARYLAND

Rev. Date: Rev. No.: Revision Description:

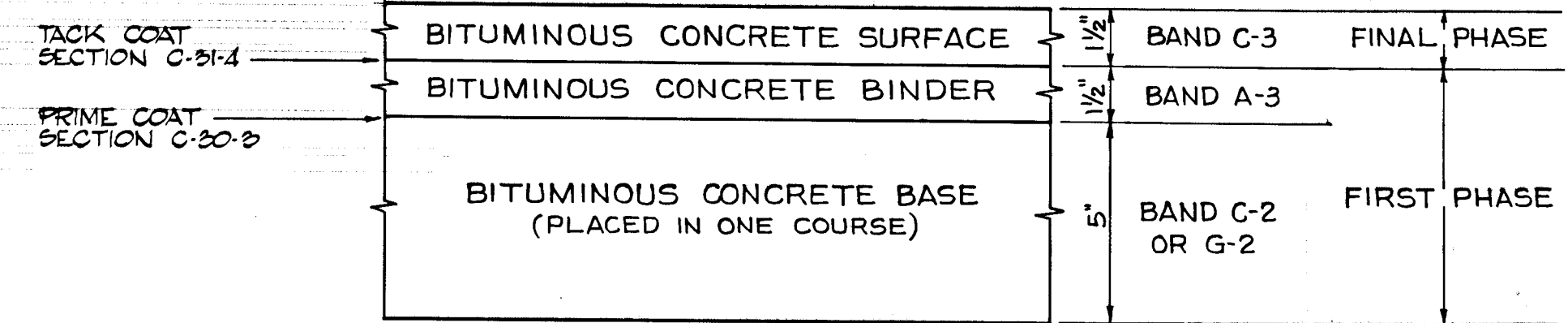
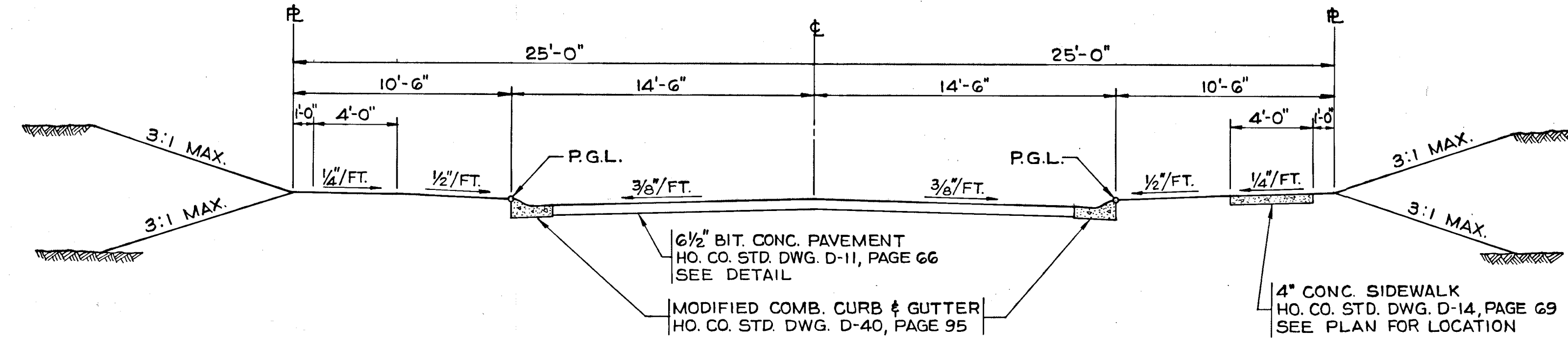
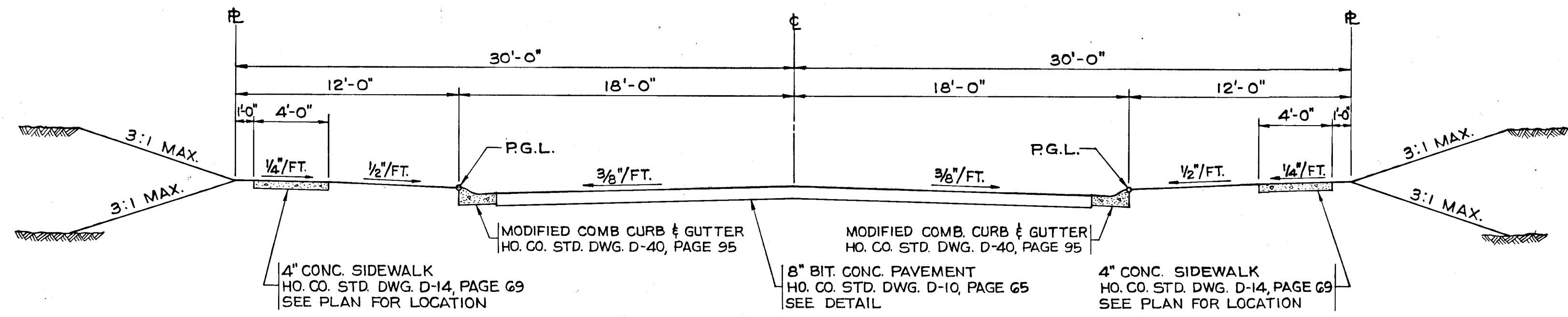
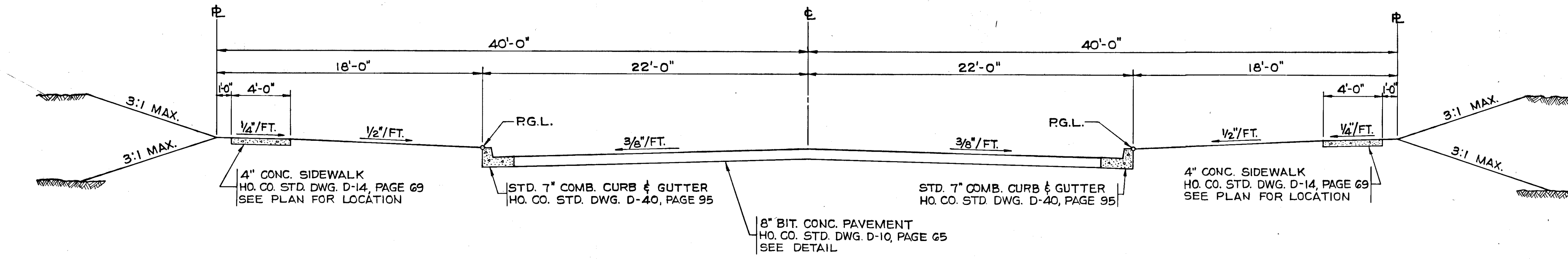
COLUMBIA
 MARYLAND
 5TH ELECTION DISTRICT HOWARD COUNTY

HOWARD RESEARCH AND DEVELOPMENT CORP.
 COLUMBIA, MARYLAND

PROJECT AREA: THE VILLAGE OF HICKORY RIDGE
 SECTION 1 AREA 1

PROJECT TITLE: STORM DRAIN PROFILES

Des. By: F.T. Scale: 1" = 5' VERT. 1" = 50' HORZ. Dwg. No. 21
 Dwn. By: J.P. Date: MARCH 1972 C.C.F. No.
 Chk. By: J.T.J. Approved:

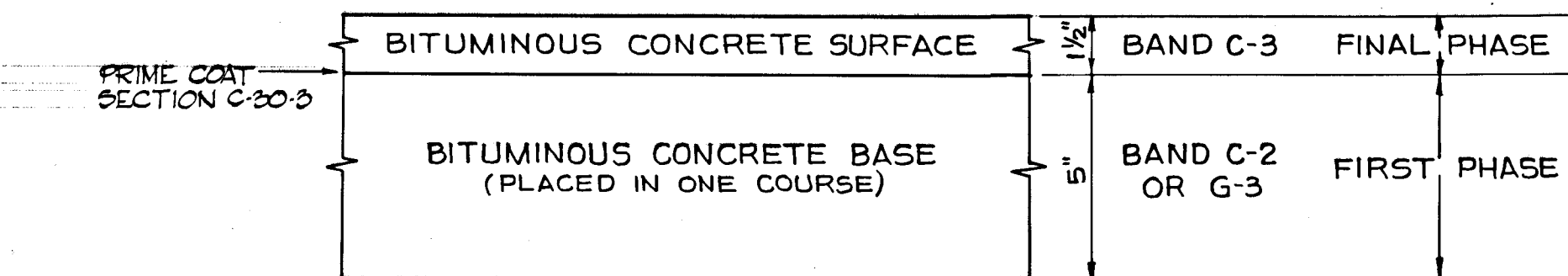


CLEARING AND GRADING
SUBGRADE
BASE COURSE
BINDER COURSE
SURFACE COURSE

ARTICLE C-1
ARTICLE C-2
ARTICLE C-31 OR C-33
ARTICLE C-33
ARTICLE C-31

NOTE:
PAVEMENT TO BE CONSTRUCTED IN ACCORDANCE WITH THE HOWARD COUNTY ROAD CONSTRUCTION CODE AND SPECIFICATIONS DWG. D-10, PAGE 65

8" PAVEMENT DETAIL
NO SCALE

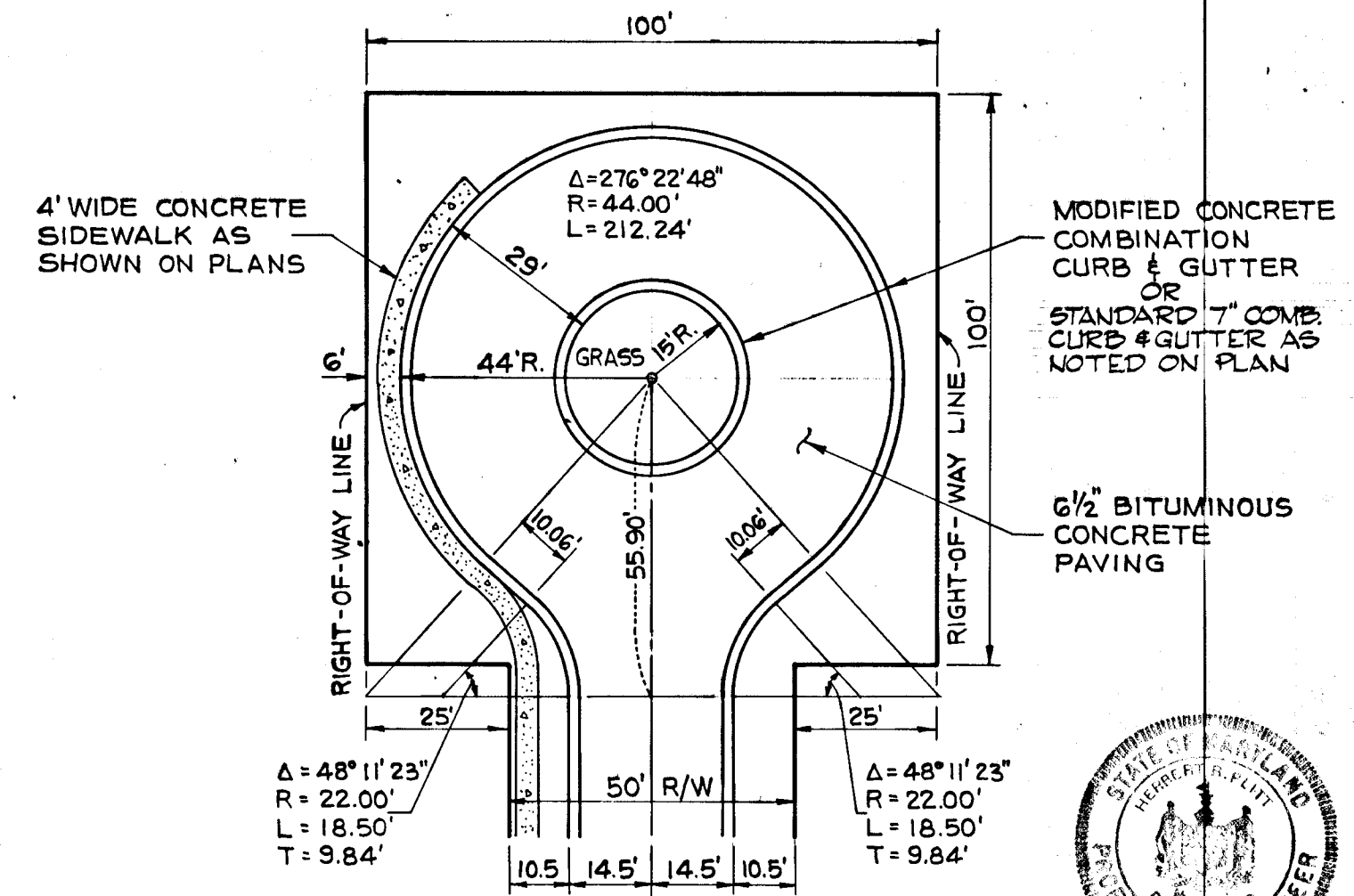
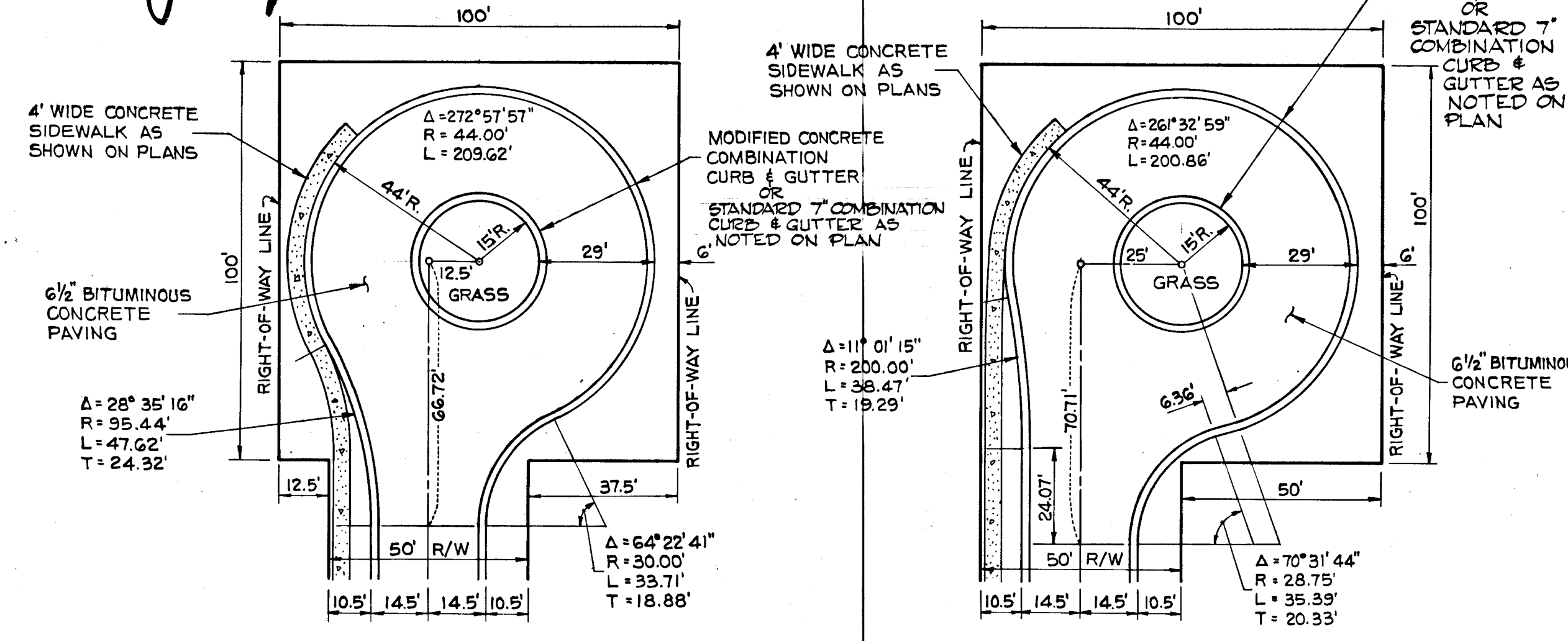
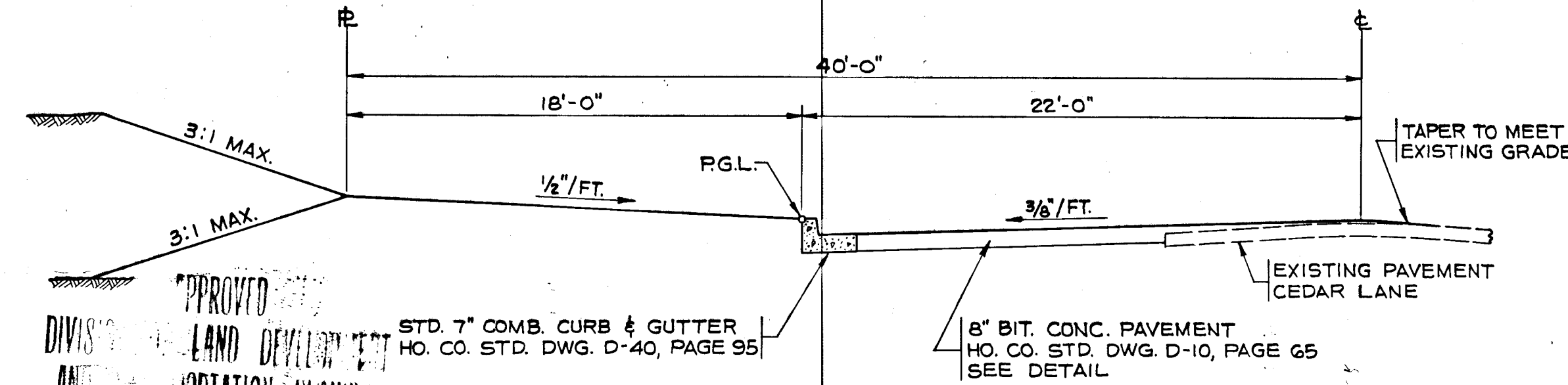
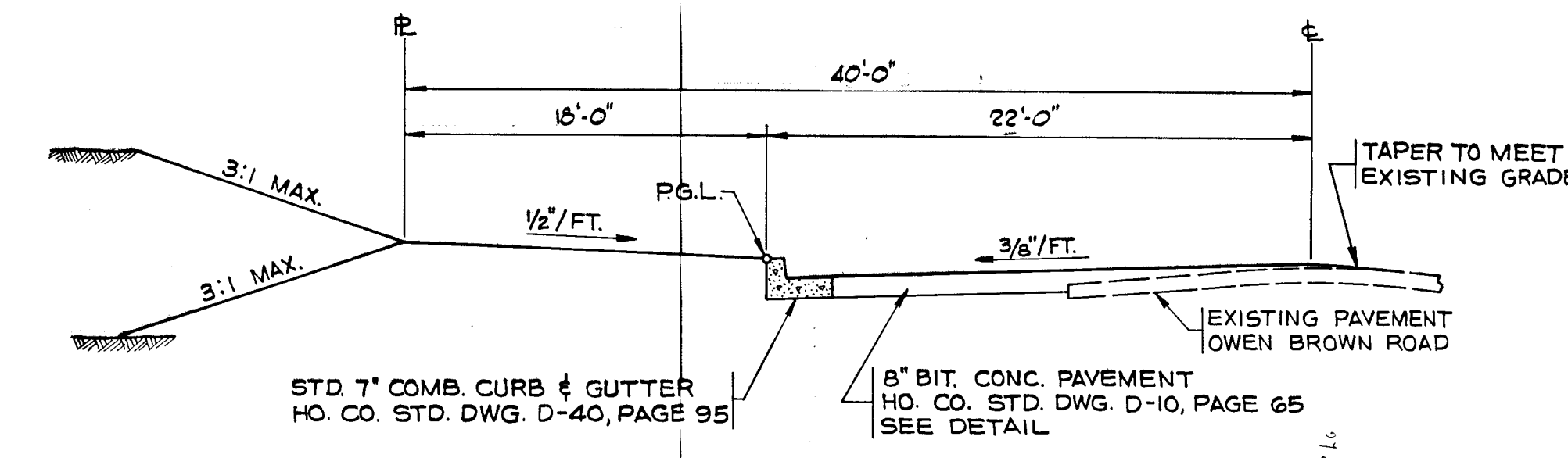


CLEARING AND GRADING
SUBGRADE
BASE COURSE
SURFACE COURSE

ARTICLE C-1
ARTICLE C-2
ARTICLE C-31 OR C-33
ARTICLE C-31

NOTE:
PAVEMENT TO BE CONSTRUCTED IN ACCORDANCE WITH THE HOWARD COUNTY ROAD CONSTRUCTION CODE AND SPECIFICATIONS DWG. D-11, PAGE 66

6 1/2" PAVEMENT DETAIL
NO SCALE



DEPARTMENT OF PUBLIC WORKS

W. O. Fulbert 8-18-72
CHIEF, BUREAU OF HIGHWAYS DATE

OFFICE OF PLANNING AND ZONING

CHIEF DIVISION OF LAND DEVELOPMENT AND TRANSPORTATION PLANNING DATE

GREEN ASSOCIATES, INC.
CONSULTING ENGINEERS
BALTIMORE, MARYLAND

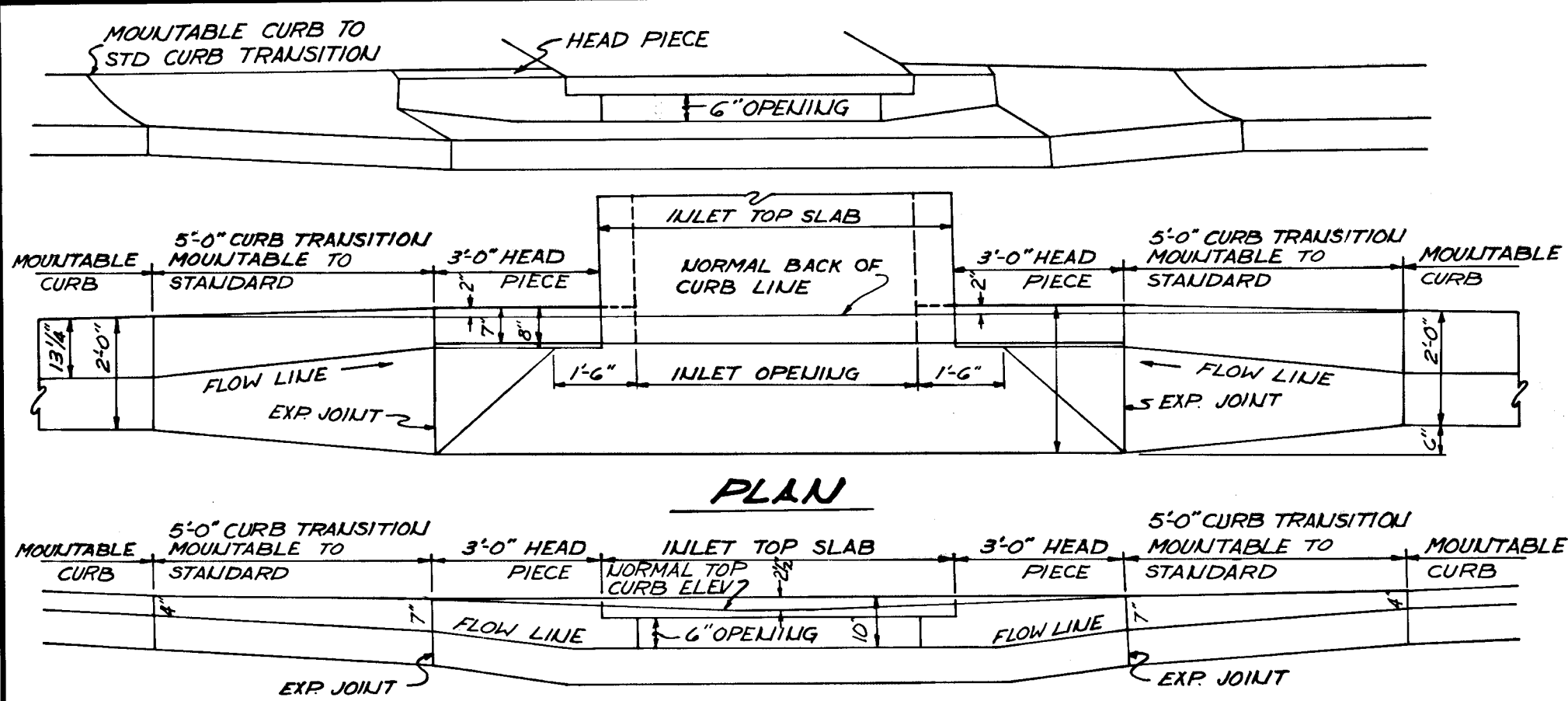
Rev Date Rev No Revision Description

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

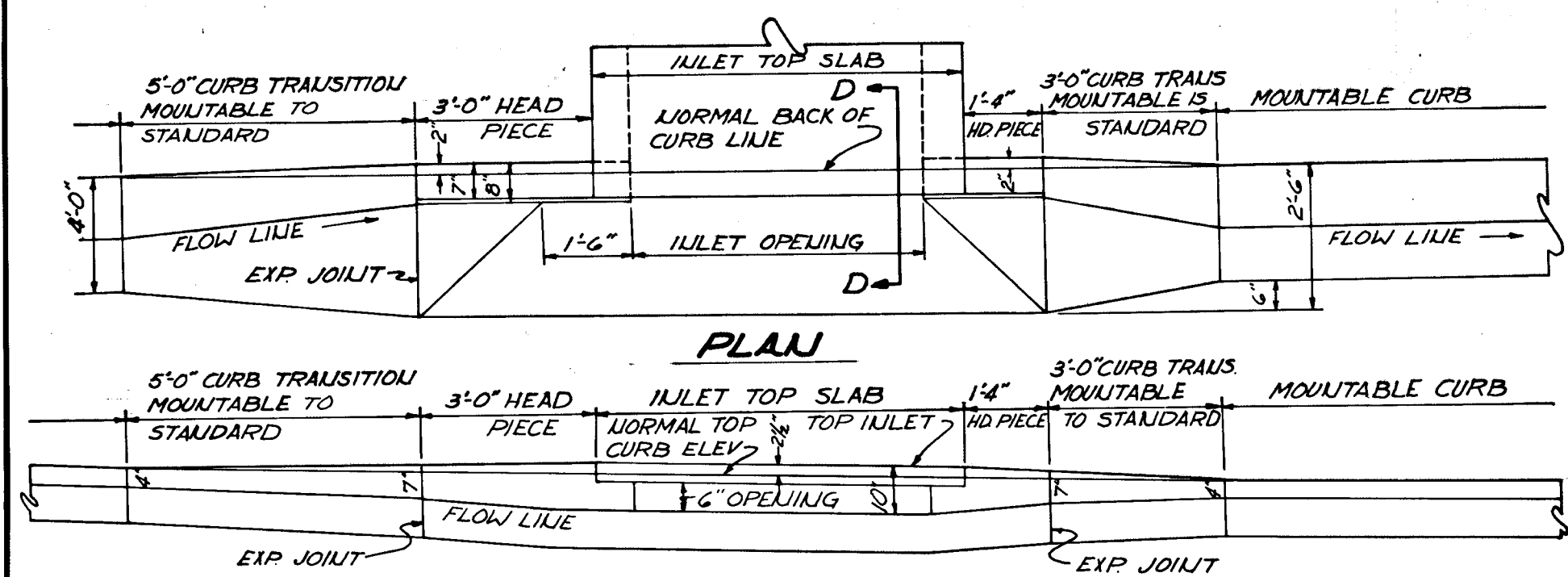
PROJECT AREA THE VILLAGE OF HICKORY RIDGE
SECTION 1 AREA 1

PROJECT TITLE TYPICAL SECTIONS

Des. By F.T. Scale AS SHOWN Dwg. No. 24
Des. By J.A.S. Date MARCH 1972 C.C.F. No.
C.M. By Approved

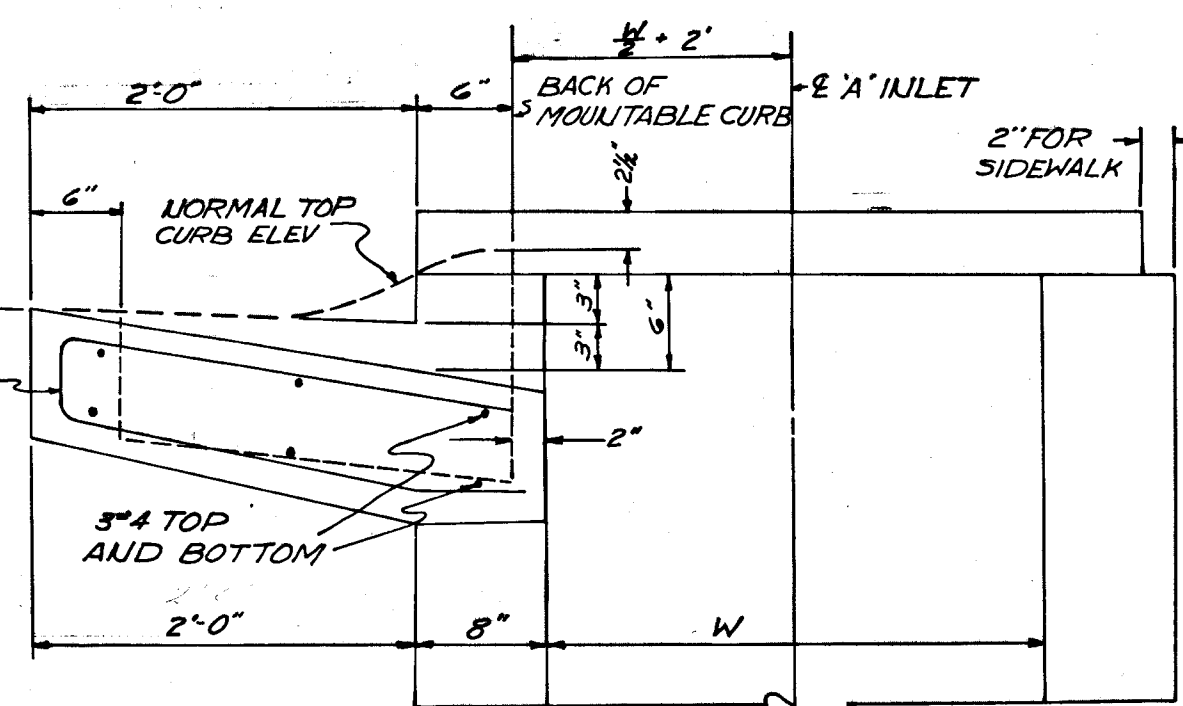


**SECTION ALONG FLOW LINE
SUMPED 'A' INLET-MOUNTABLE CURB**



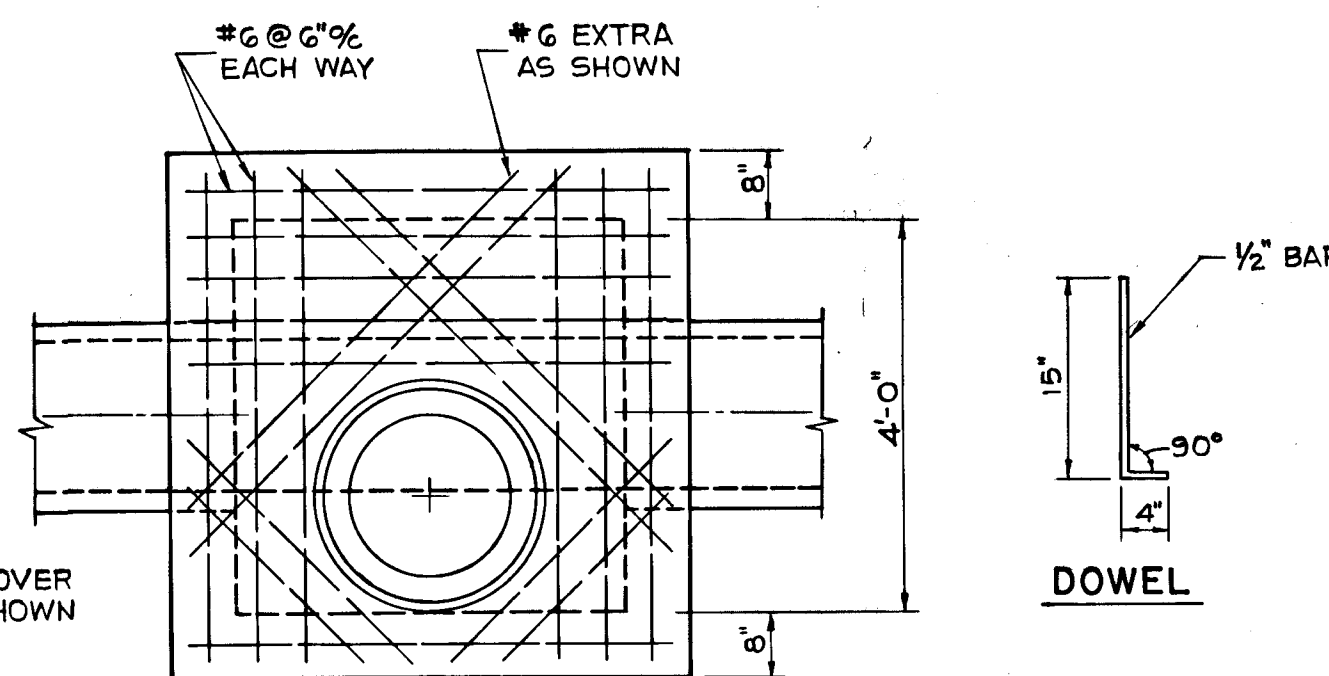
**SECTION ALONG FLOW LINE
'A' INLETS-MOUNTABLE CURB**

INLET WIDTH SCHEDULE			
PIPE DIA.	MIN. INLET WIDTH	PIPE DIA.	MIN. INLET WIDTH
18" R.C.C.P.	2'-9"	33" R.C.C.P.	4'-0"
21" R.C.C.P.	3'-0"	36" R.C.C.P.	4'-4"
24" R.C.C.P.	3'-3"	39" R.C.C.P.	4'-9"
27" R.C.C.P.	3'-6"	42" R.C.C.P.	5'-0"
30" R.C.C.P.	3'-9"	48" R.C.C.P.	5'-6"



**SECTION D-D
'A' INLET-MOUNTABLE CURB**

NOTE: MANHOLE FRAME & COVER TO BE PLACED AS SHOWN

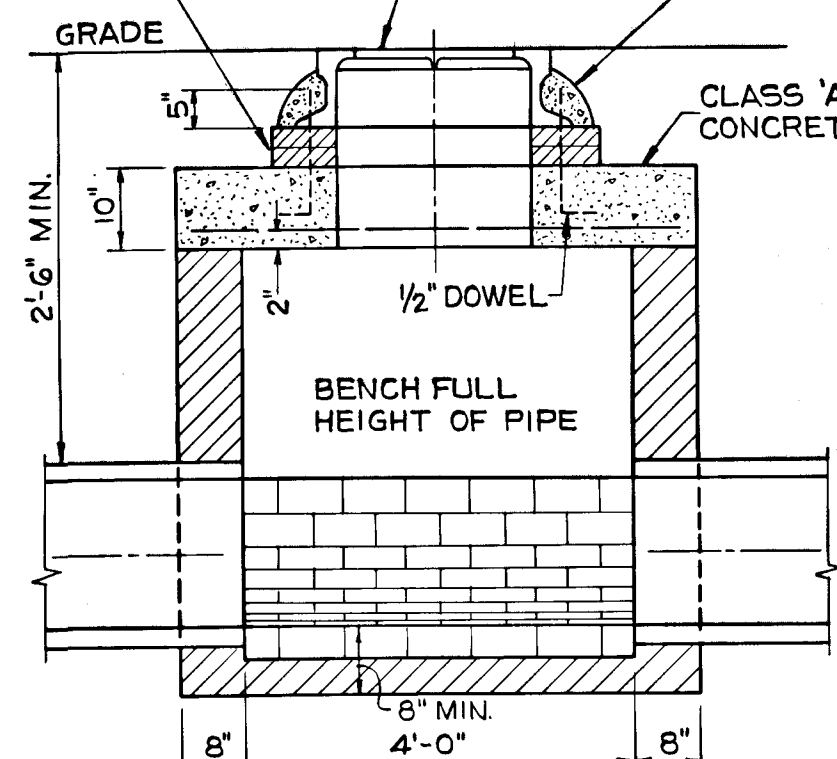


PLAN

4" BRICK MASONRY. ADDITIONAL BRICK SHALL BE USED TO BRING M.H. COVER TO EXISTING GRADE IF REQUIRED.

M.S.R.C. TYPE 'A' FRAME & COVER
M.S.R.C. STD. PLATES MD-383.31 & MD-383.32

INSTALL FRAME & 4 DOWELS, 90° APART, THEN MORTAR



SECTION

SHALLOW MANHOLE DETAIL

SCALE: 1/2" = 1'-0"

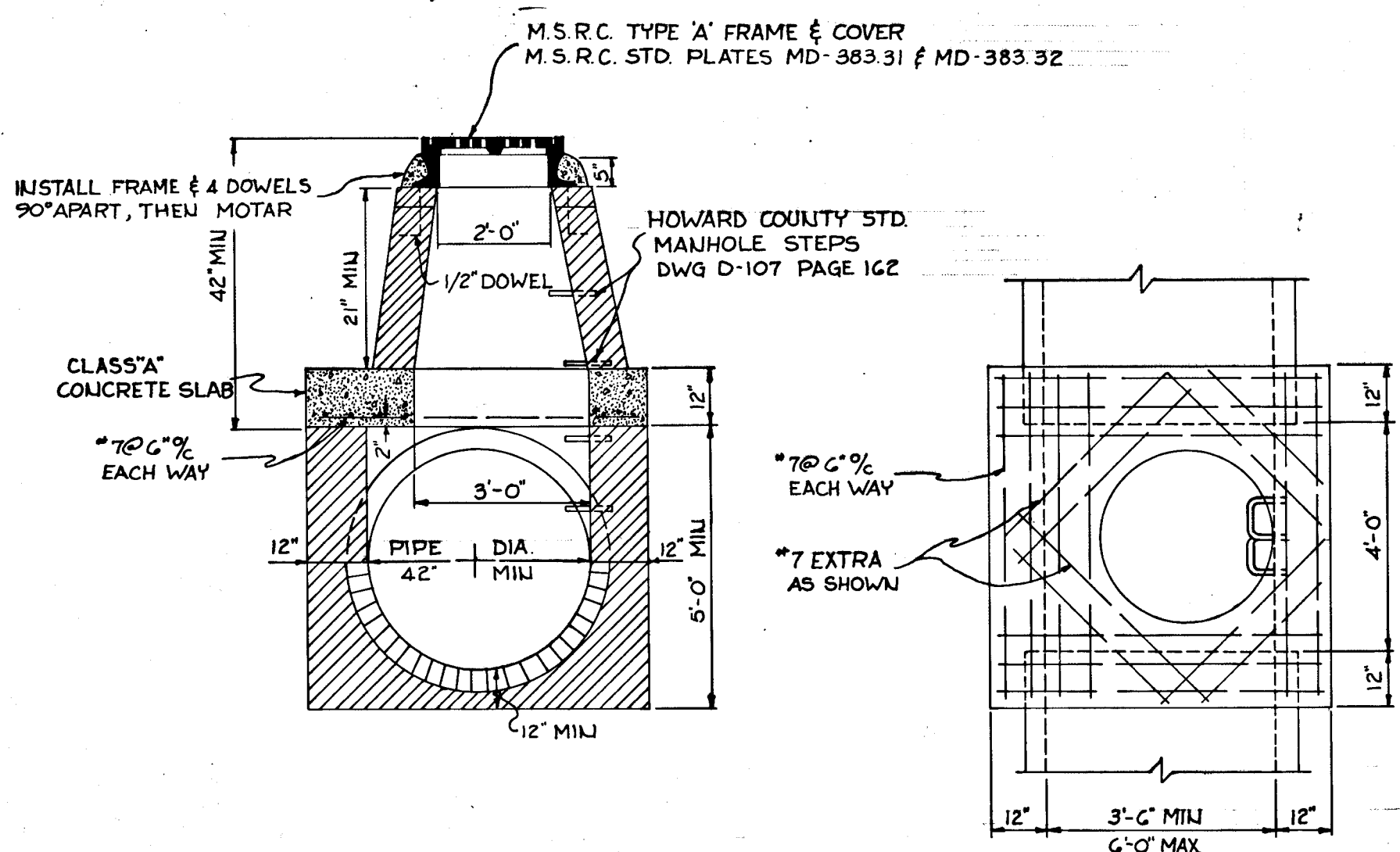
NOTES:

1. WALLS, BOTTOM SLAB AND INVERT SHALL BE BRICK OR PLAIN CLASS 'A' CONCRETE POURED IN PLACE.
2. APPLY TWO COATS OF A WATERPROOF BITUMASTIC COMPOUND OVER CEMENT MORTAR.

NOTE: 2" FOR SIDEWALK WHERE APPLICABLE

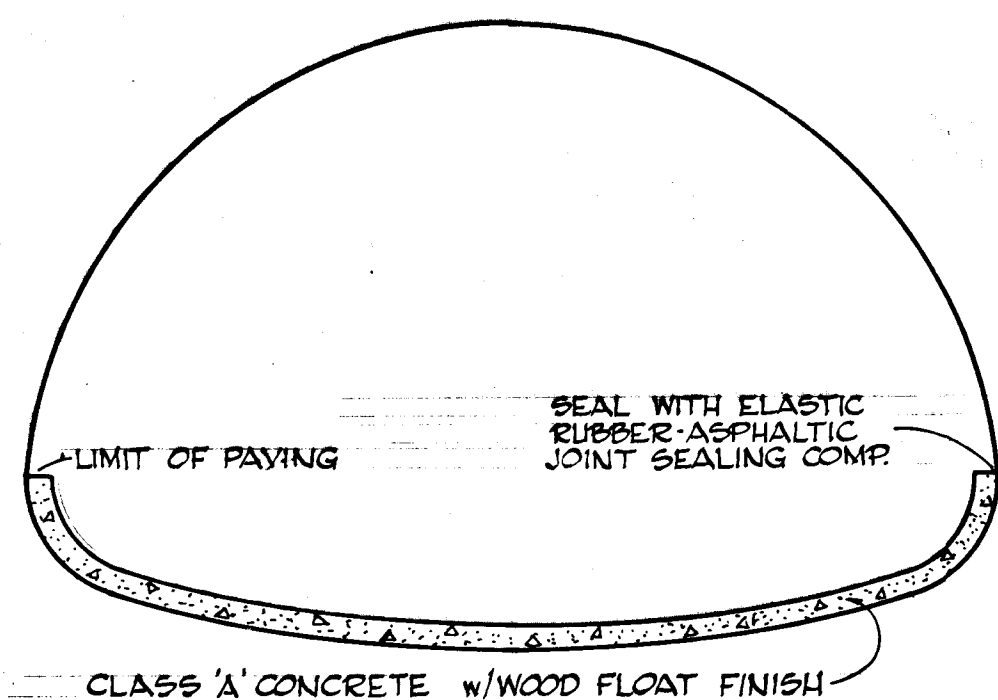
NOTES:

1. WALLS, BOTTOM SLAB AND INVERT SHALL BE BRICK OR PLAIN CLASS 'A' CONCRETE POURED IN PLACE
2. APPLY TWO COATS OF A WATERPROOF BITUMASTIC COMPOUND OVER CEMENT MORTAR



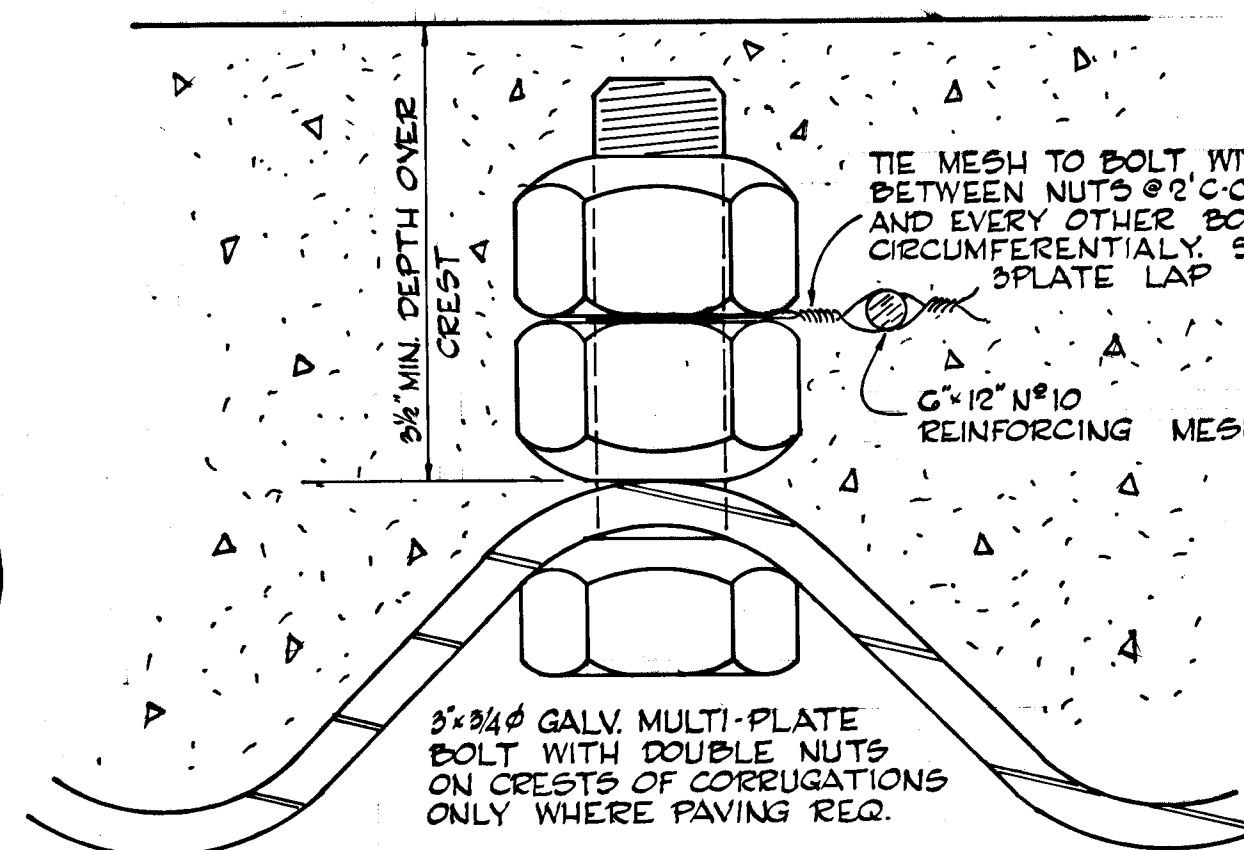
SPECIAL MANHOLE DETAIL

NO SCALE



PAVED INVERT DETAIL

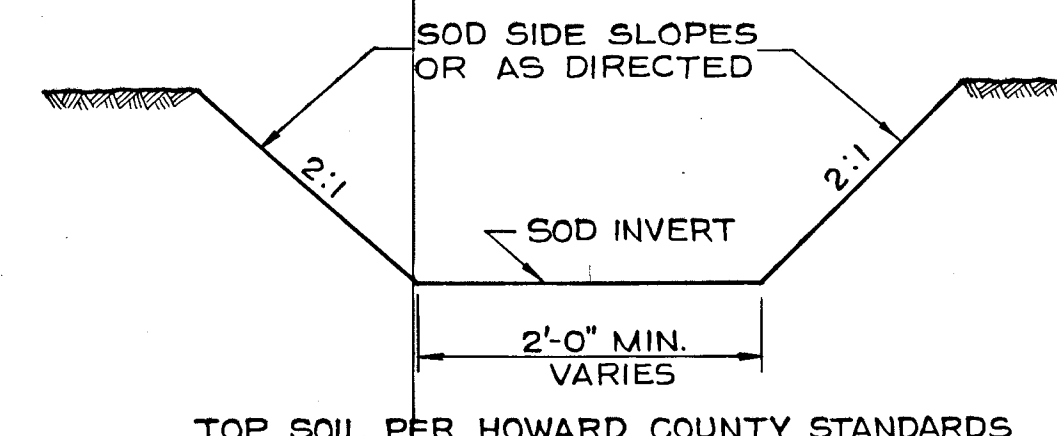
NO SCALE



THE MESH TO BOLT WITH WIRE BETWEEN NUTS @ 2'-0" C.C. LONG. AND EVERY OTHER BOLT CIRCUMFERENTIALLY SKIP AT 90° PLATE LAP

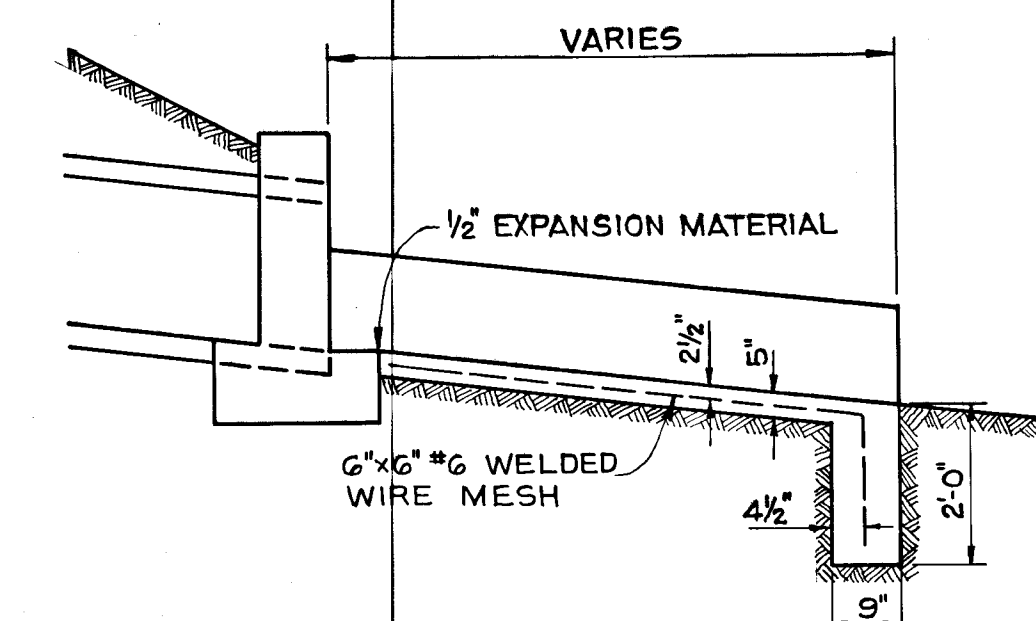
3/4" MIN. DEPTH COVER

3/4" DIA. GALV. MULTI-PLATE BOLT WITH DOUBLE NUTS ON CRESTS OF CORRUGATIONS ONLY WHERE PAVING REQ.



TYPICAL DRAINAGE DITCH

NO SCALE



TYPICAL CONCRETE CHANNEL AND CUTOFF WALL

NO SCALE

DEPARTMENT OF PUBLIC WORKS

W. O. Salt 8-18-72
CHIEF, BUREAU OF HIGHWAYS DATE

OFFICE OF PLANNING AND ZONING

CHIEF DIVISION OF LAND DEVELOPMENT AND TRANSPORTATION PLANNING DATE

GREEN ASSOCIATES, INC.
CONSULTING ENGINEERS
BALTIMORE, MARYLAND

Rev. Date Rev. No. Revision Description

COLUMBIA
MARYLAND

5TH ELECTION DISTRICT HOWARD COUNTY

OWNER AND DEVELOPER
HOWARD RESEARCH AND DEVELOPMENT CORP.
COLUMBIA, MARYLAND

PROJECT AREA THE VILLAGE OF HICKORY RIDGE

SECTION 1 AREA 1

PROJECT TITLE

DETAILS

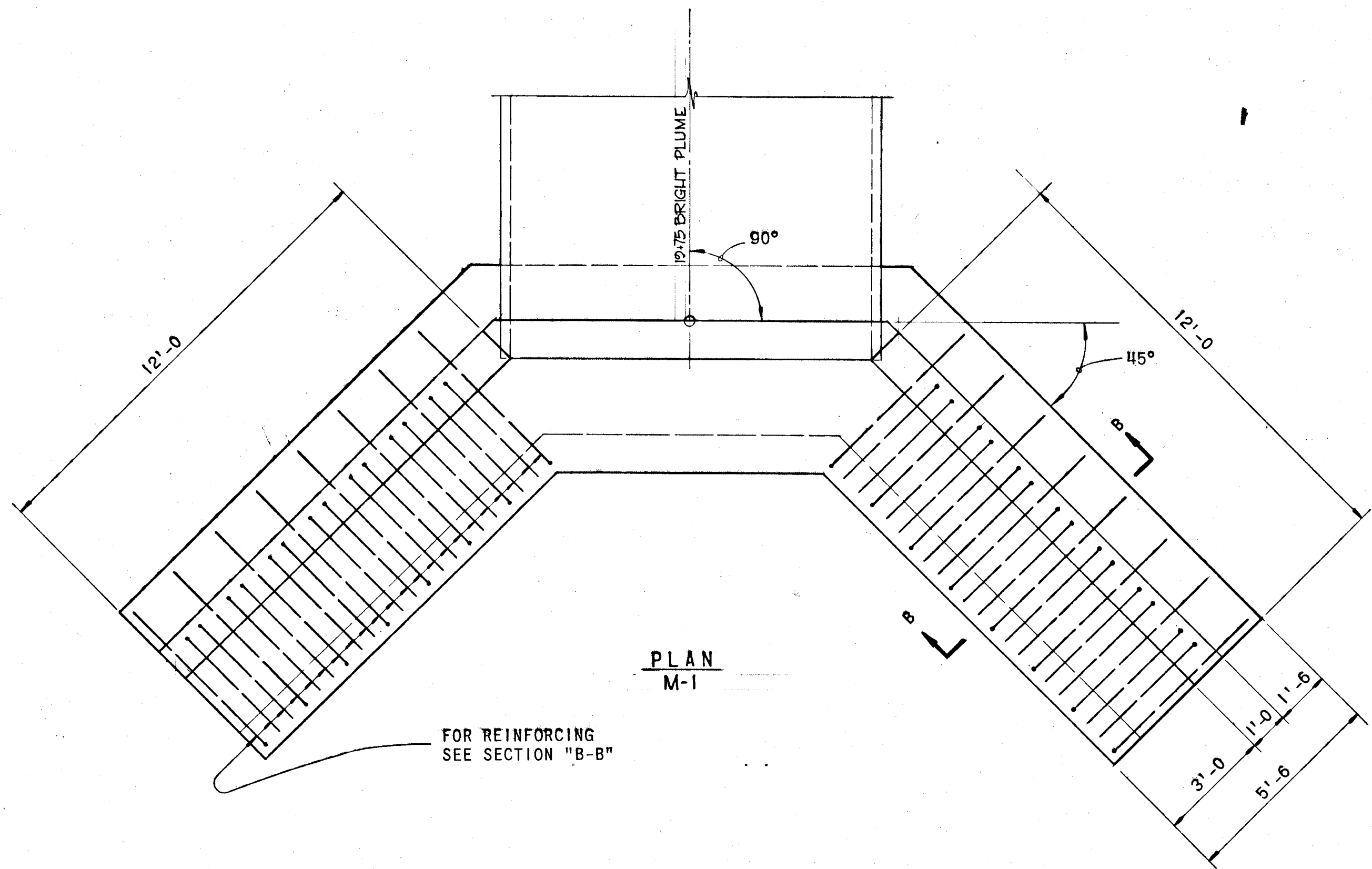
Des. By F.T. Scale AS SHOWN Dwg. No. 25

Des. By J.A.S. Date MARCH 1972 C.P.I. No.

Des. By Approved

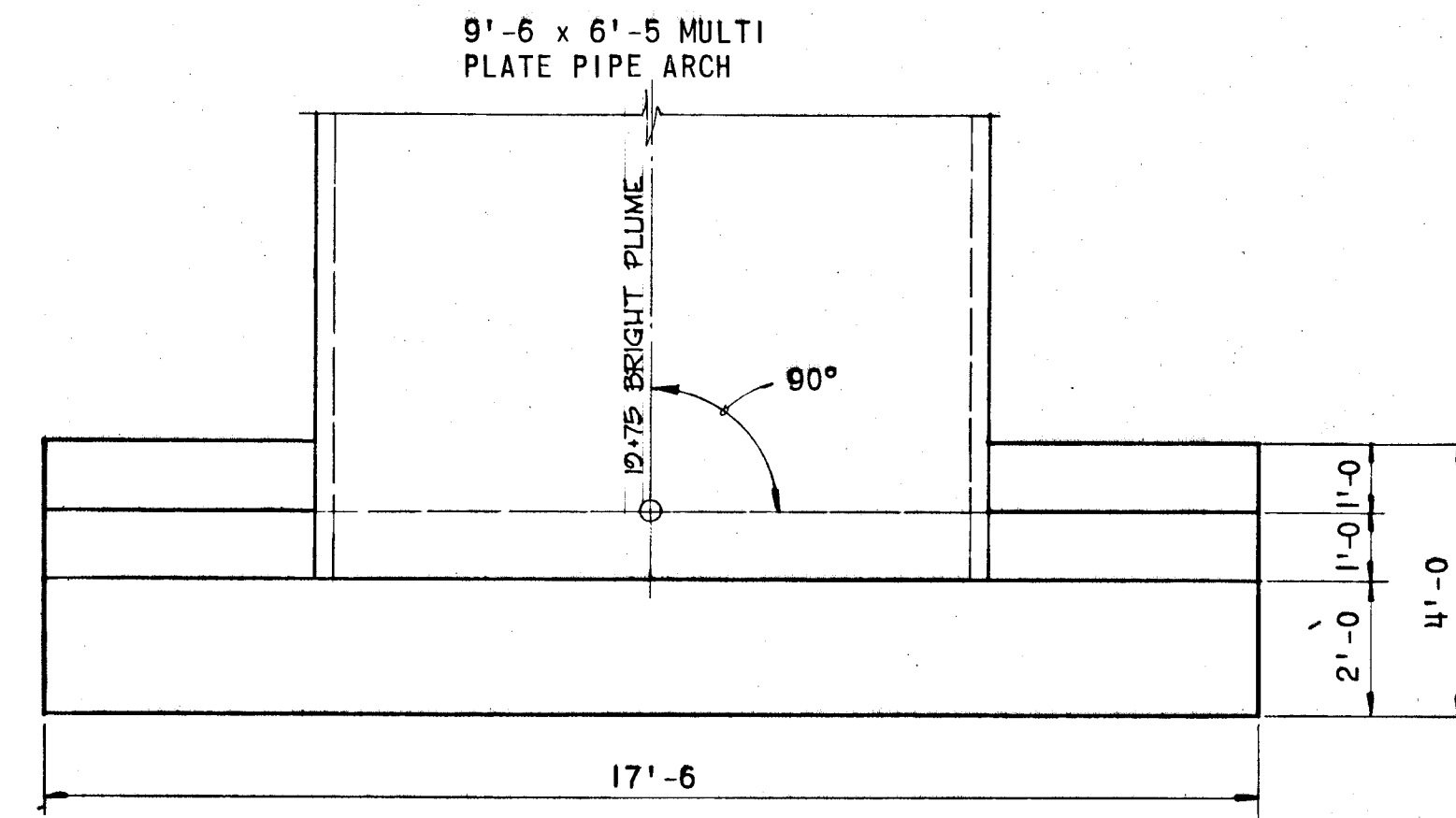


W. O. Salt



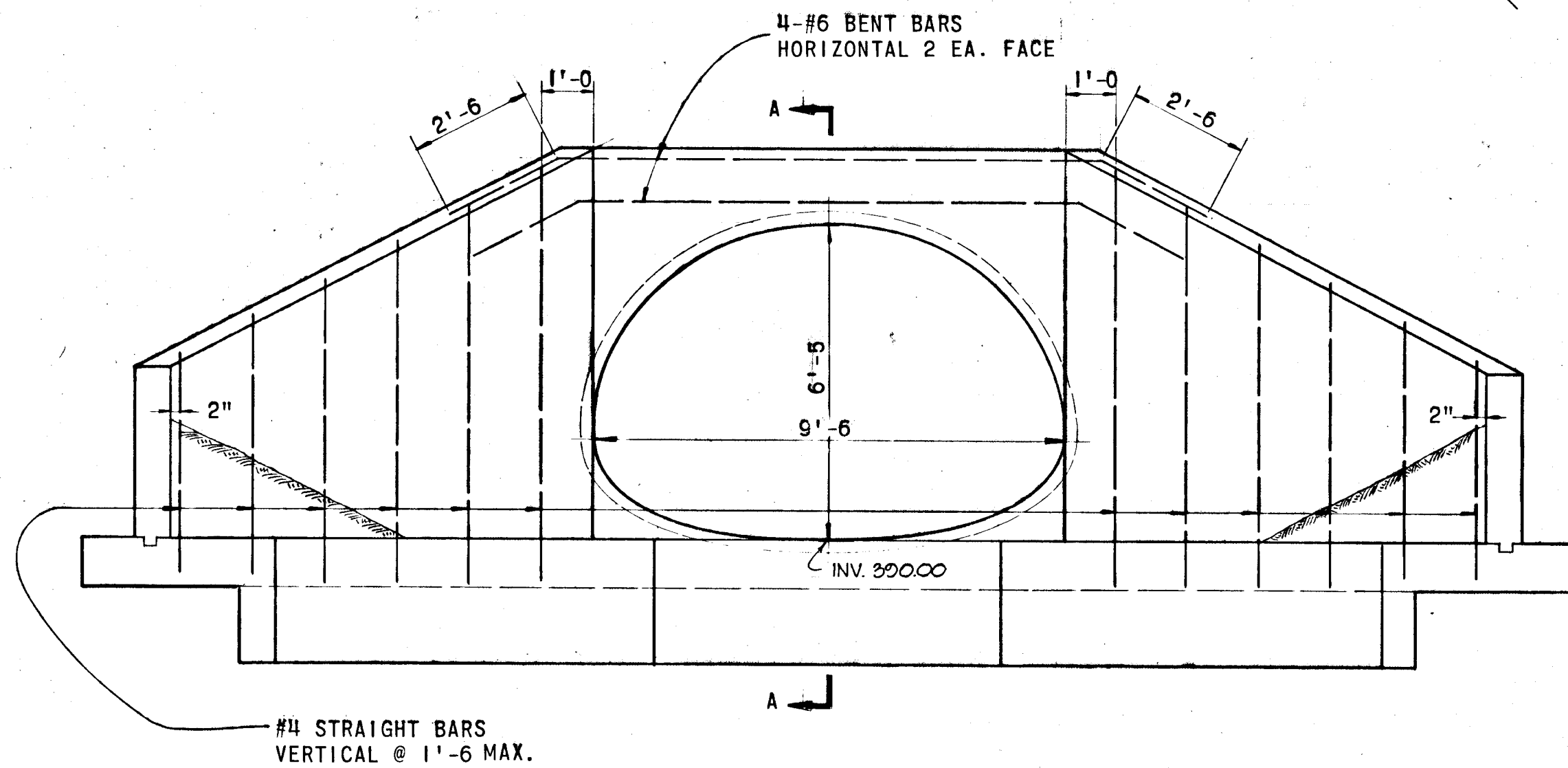
PLAN
M-1

FOR REINFORCING
SEE SECTION "B-B"



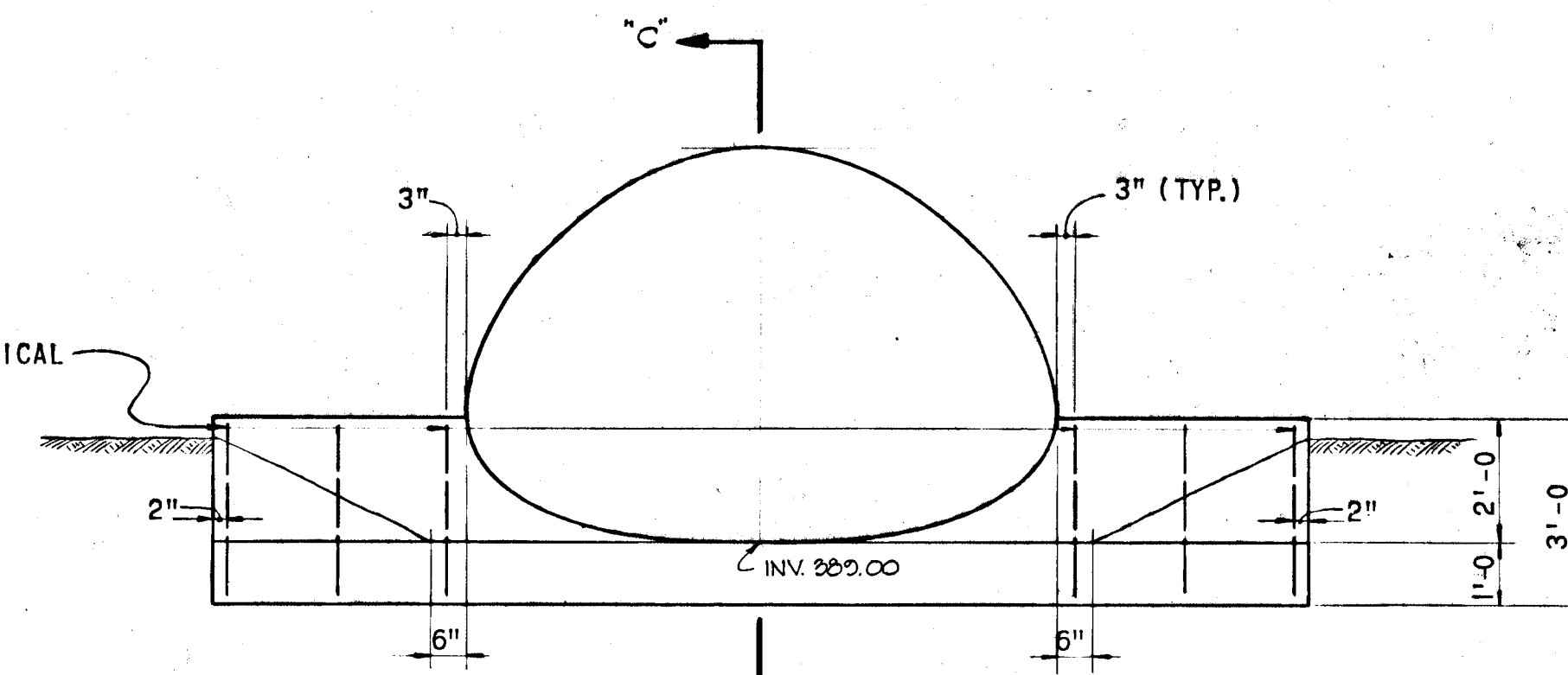
PLAN
M-2

9'-6" x 6'-5" MULTI
PLATE PIPE ARCH

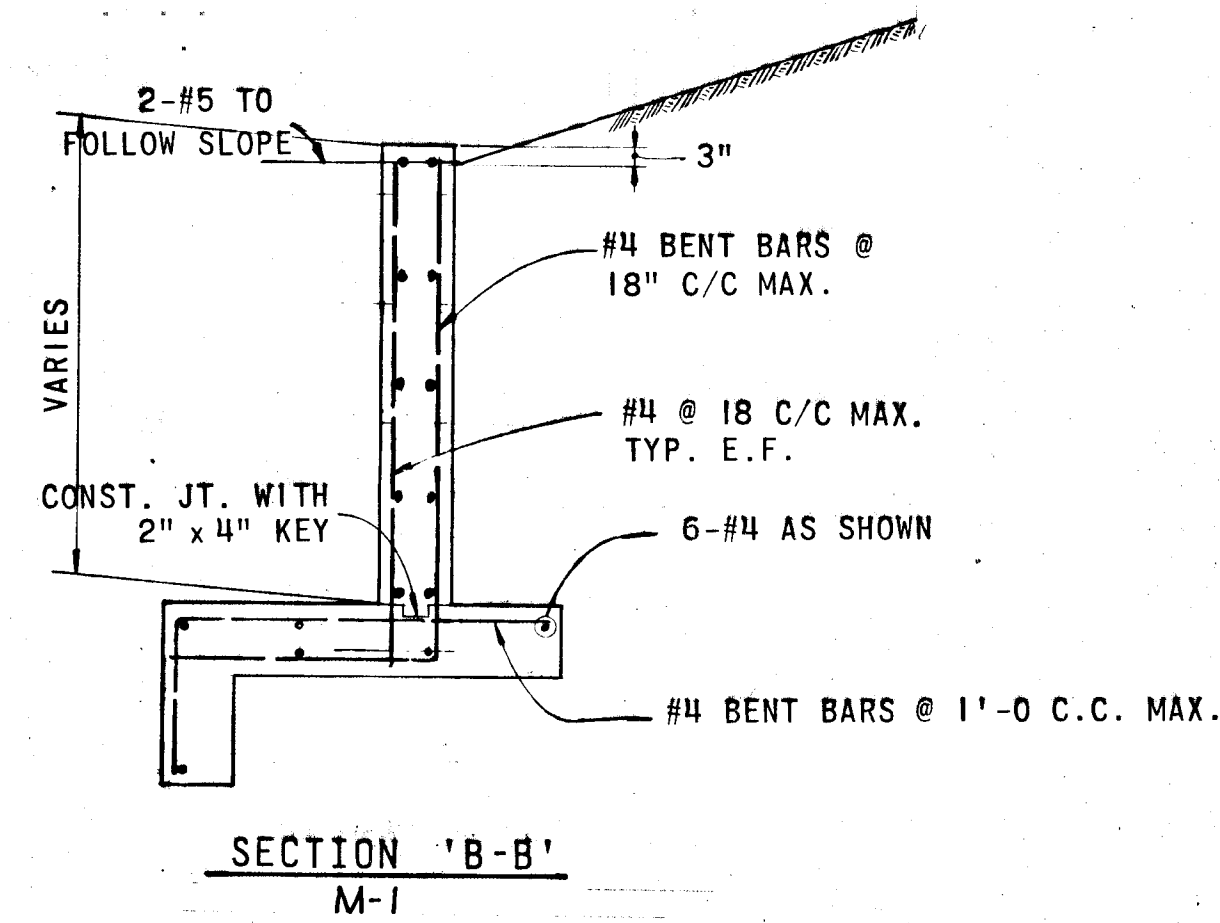
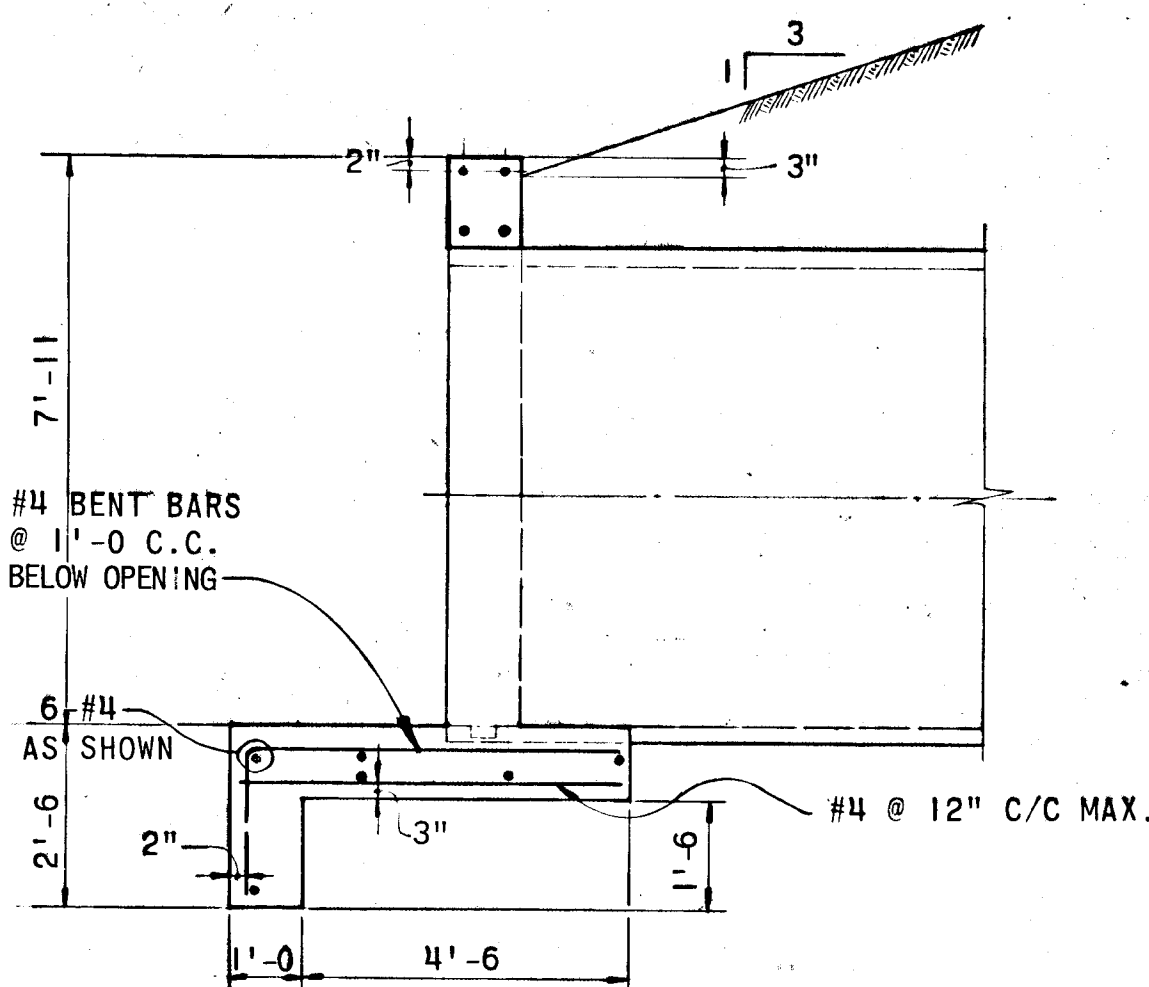


FRONT ELEVATION
M-1

#4 STRAIGHT BARS VERTICAL
@ 1'-6" MAX.



ELEVATION
M-2



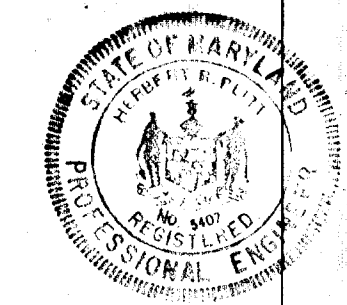
SECTION "C-C"
M-2

APPROVED
DIVISION OF LAND DEVELOPMENT
AND TRANSPORTATION PLANNING
HOWARD COUNTY, MARYLAND
J. F. T.

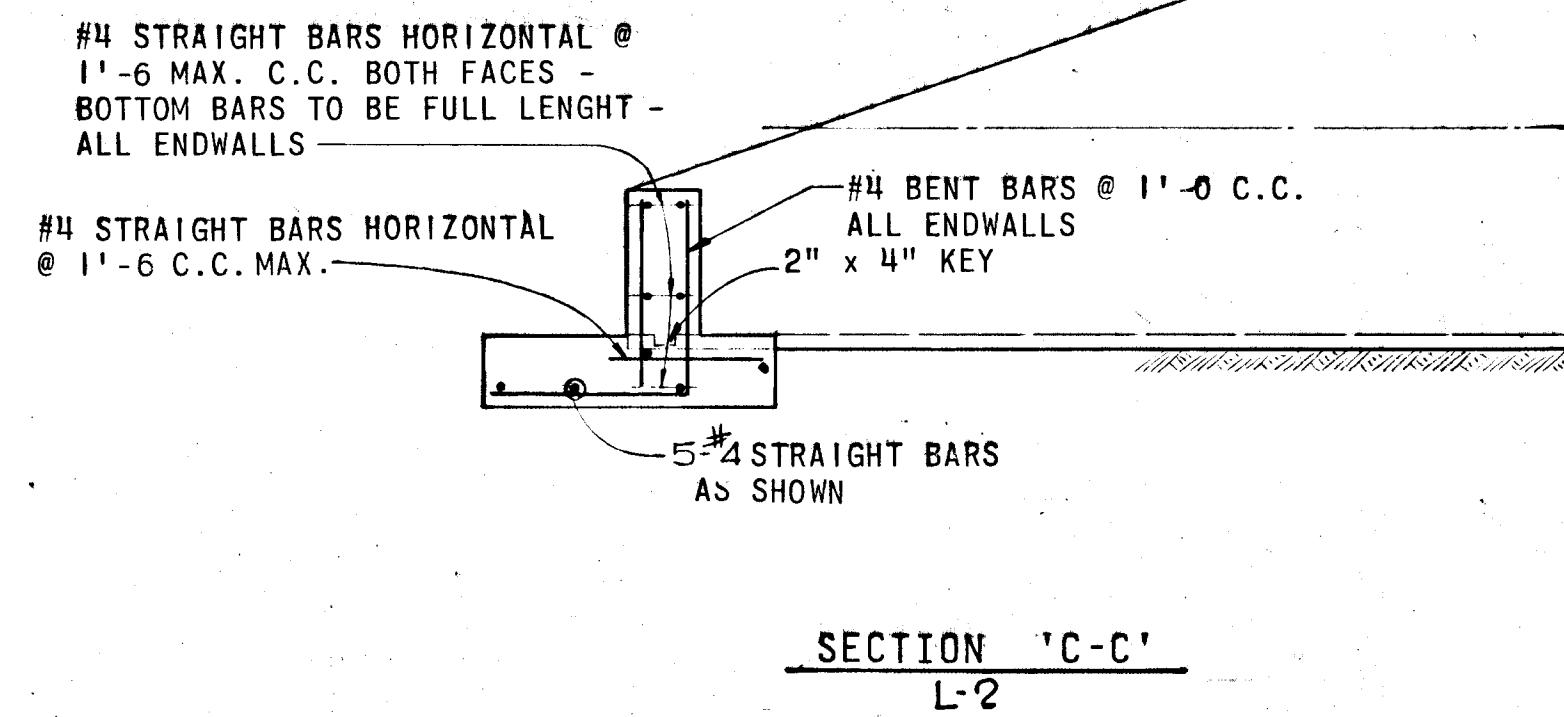
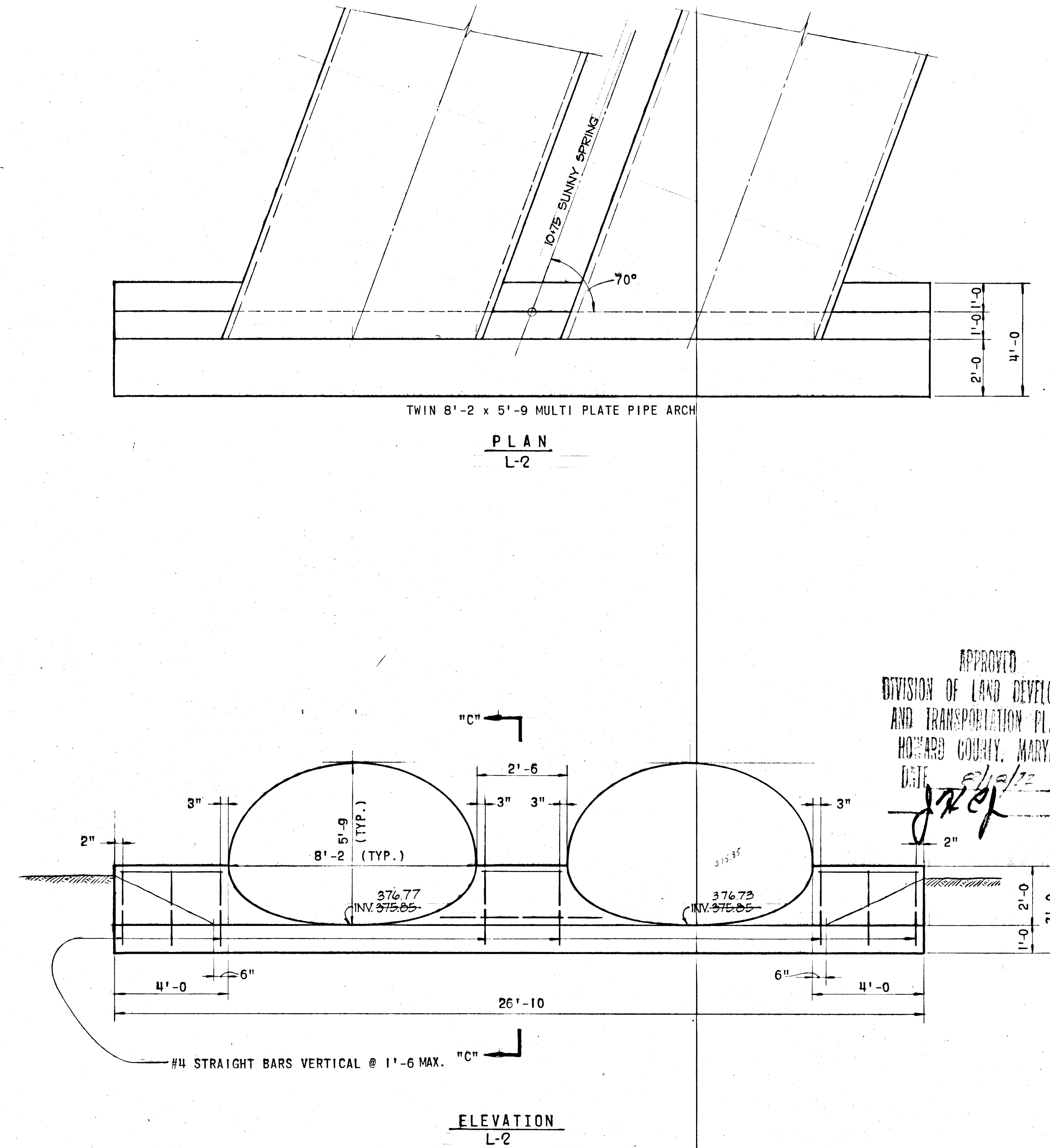
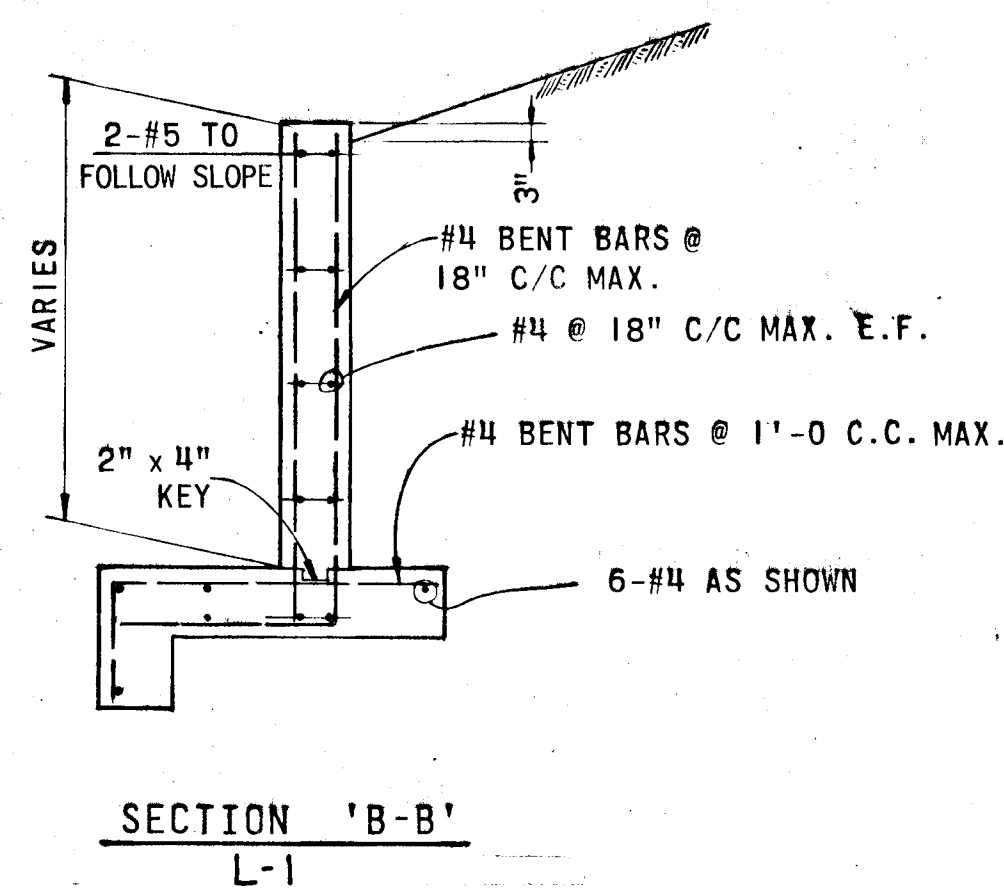
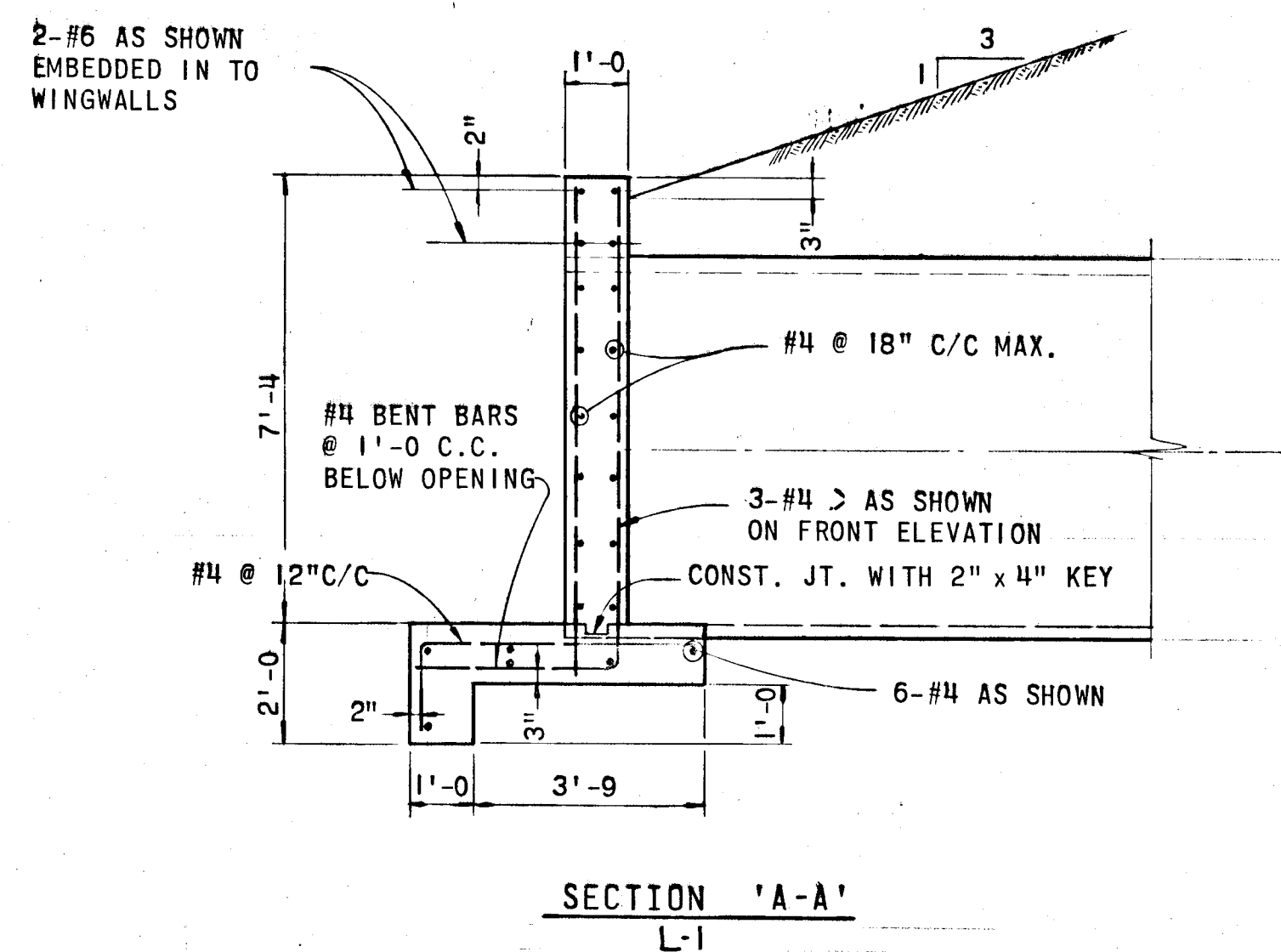
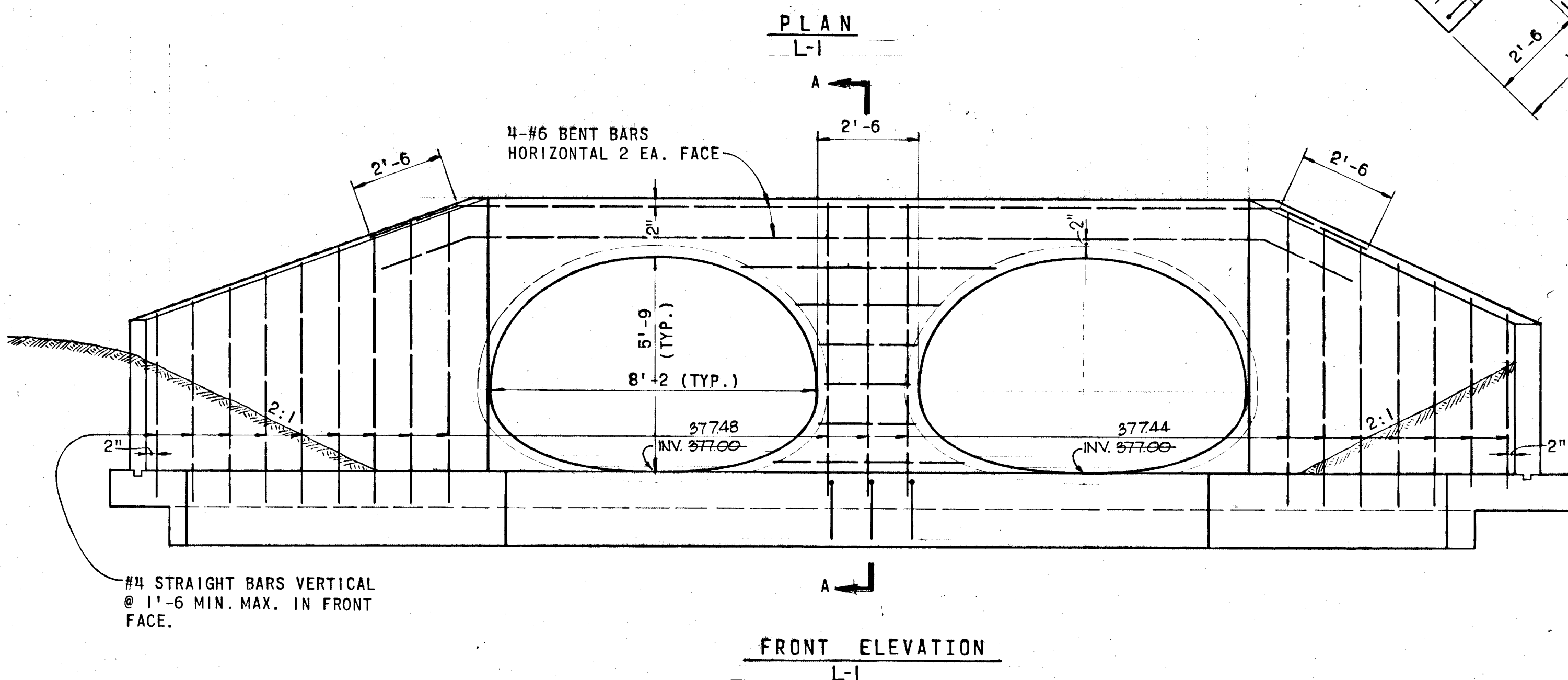
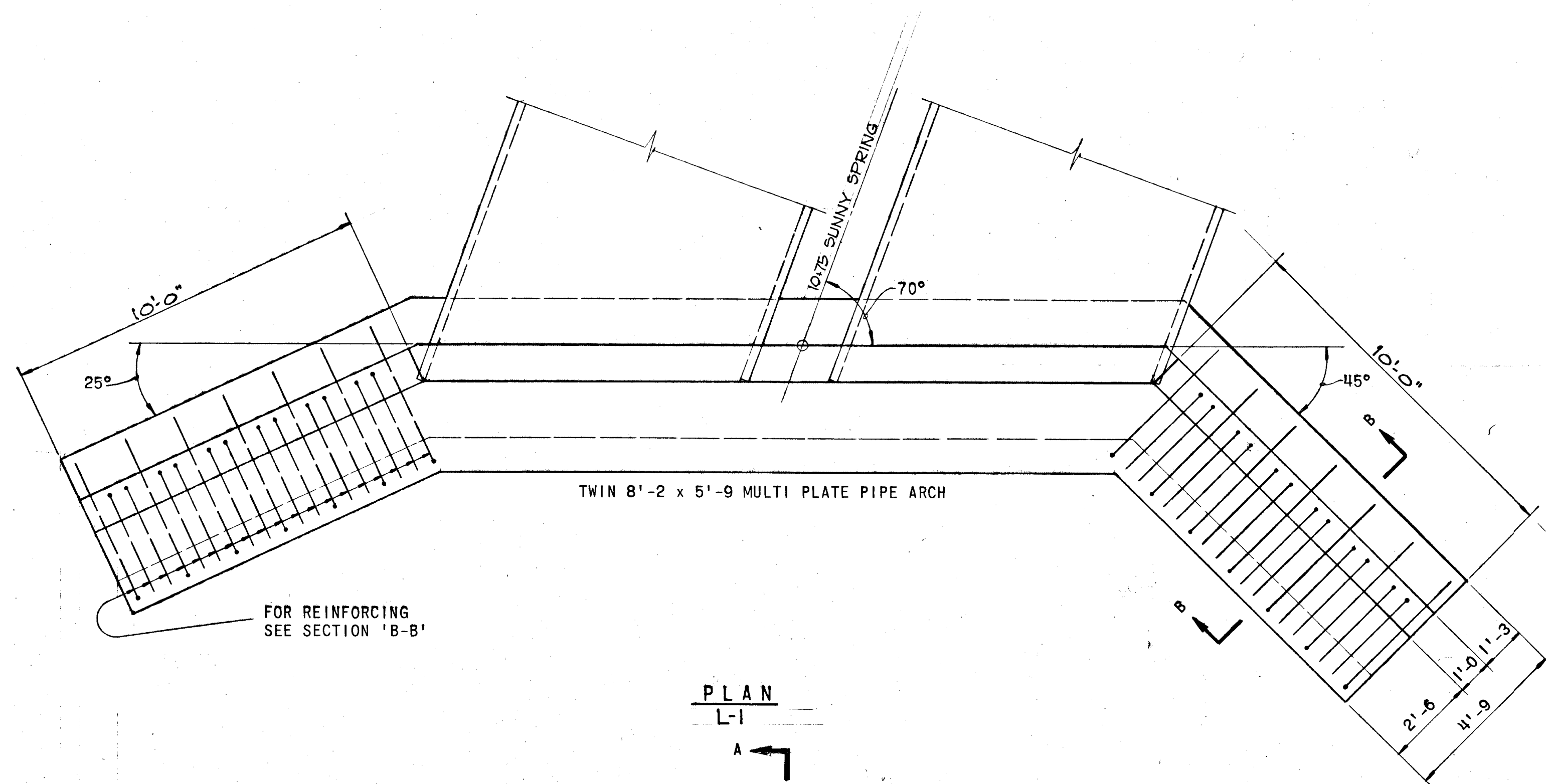
DEPARTMENT OF PUBLIC WORKS	
<i>J. F. T.</i>	8-18-72
CHIEF, BUREAU OF HIGHWAYS	DATE
OFFICE OF PLANNING	
CHIEF, DIVISION OF LAND DEVELOPMENT AND TRANSPORTATION PLANNING	DATE

GREEN ASSOCIATES, INC.
CONSULTING ENGINEERS
BALTIMORE, MARYLAND

Rev. Date	Rev. No.	Revision Description
COLUMBIA MARYLAND		
5TH ELECTION DISTRICT HOWARD COUNTY		
HOWARD RESEARCH AND DEVELOPMENT CORP. COLUMBIA, MARYLAND		
PROJECT AREA	THE VILLAGE OF HICKORY RIDGE	
SECTION 1	AREA 1	
PROJECT TITLE	ENDWALL DETAILS	
9'-6" x 6'-5" MULTI PLATE PIPE ARCH		
Des. By: J. F. T.	Scale: 3/8" = 1'-0"	Drawn No: 26
Dir. By: J. F. T.	Date: MARCH 1972	C. E. N.
CHK. By: J. T. J.	Approved:	



J. F. T.



APPROVED
DIVISION OF LAND DEVELOPMENT
AND TRANSPORTATION PLANNING
HOWARD COUNTY, MARYLAND
DATE 3/12/72
J.F.T.

DEPARTMENT OF PUBLIC WORKS
W. Folwell 8-15-72
CHIEF, BUREAU OF HIGHWAYS DATE
OFFICE OF PLANNING AND ZONING
CHIEF, DIVISION OF LAND DEVELOPMENT AND TRANSPORTATION PLANNING DATE
GREEN ASSOCIATES, INC.
CONSULTING ENGINEERS
BALTIMORE, MARYLAND

Rev. Date	Rev. No.	Revision Description
COLUMBIA MARYLAND 5TH ELECTION DISTRICT HOWARD COUNTY HOWARD RESEARCH AND DEVELOPMENT CORP.		
PROJECT AREA THE VILLAGE OF HICKORY RIDGE AREA 1		
SECTION 1 ENDWALLS DETAILS		
TWIN 8'-2" x 5'-9" MULTI PLATE PIPE ARCH		
Des. By J.F.T.	Scale 3/8" = 1'-0"	Dwg. No. 27
Drn. By J.F.T.	Date MARCH 1972	C.C.F. No.
CHK. By J.T.J.	Approved	

