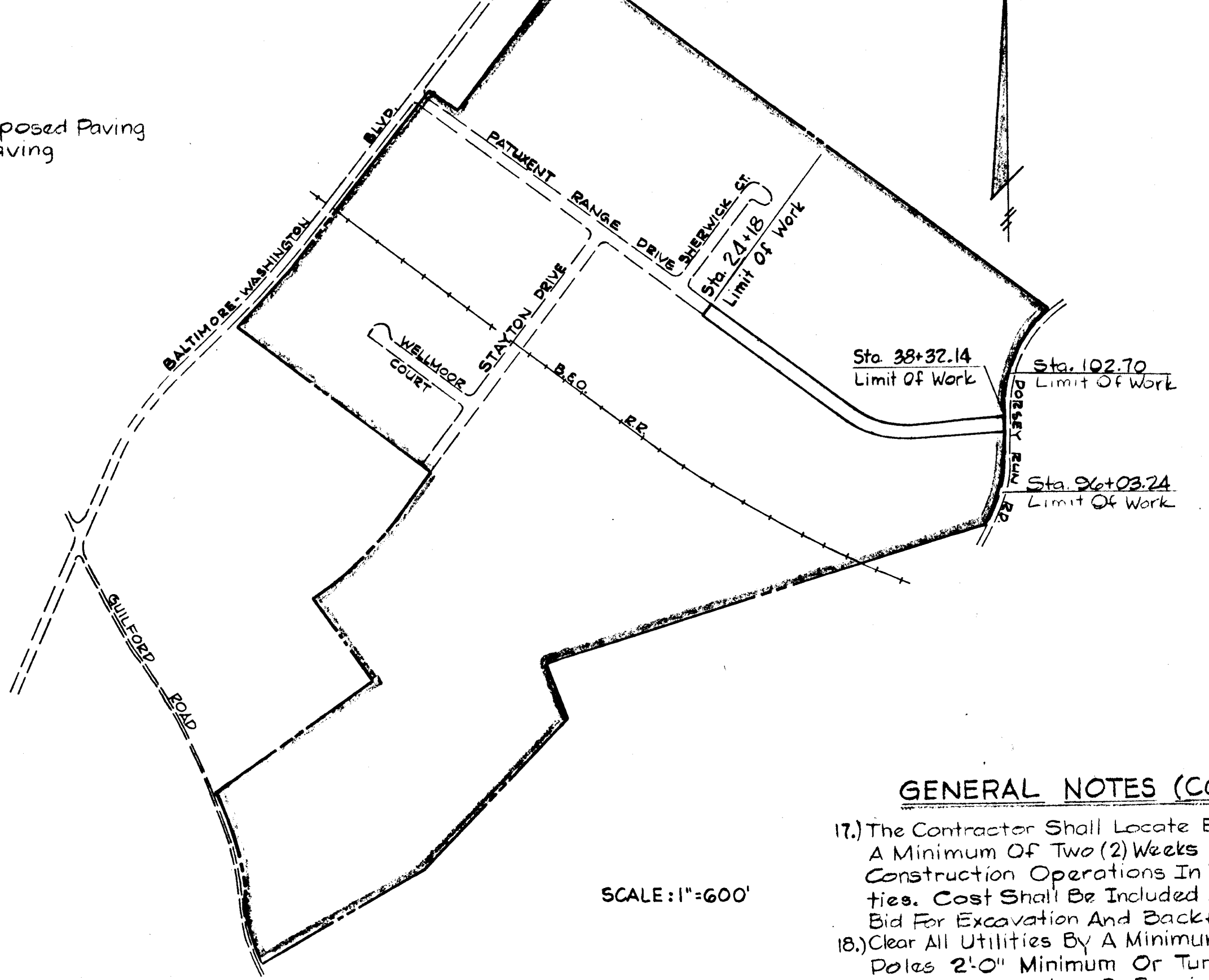
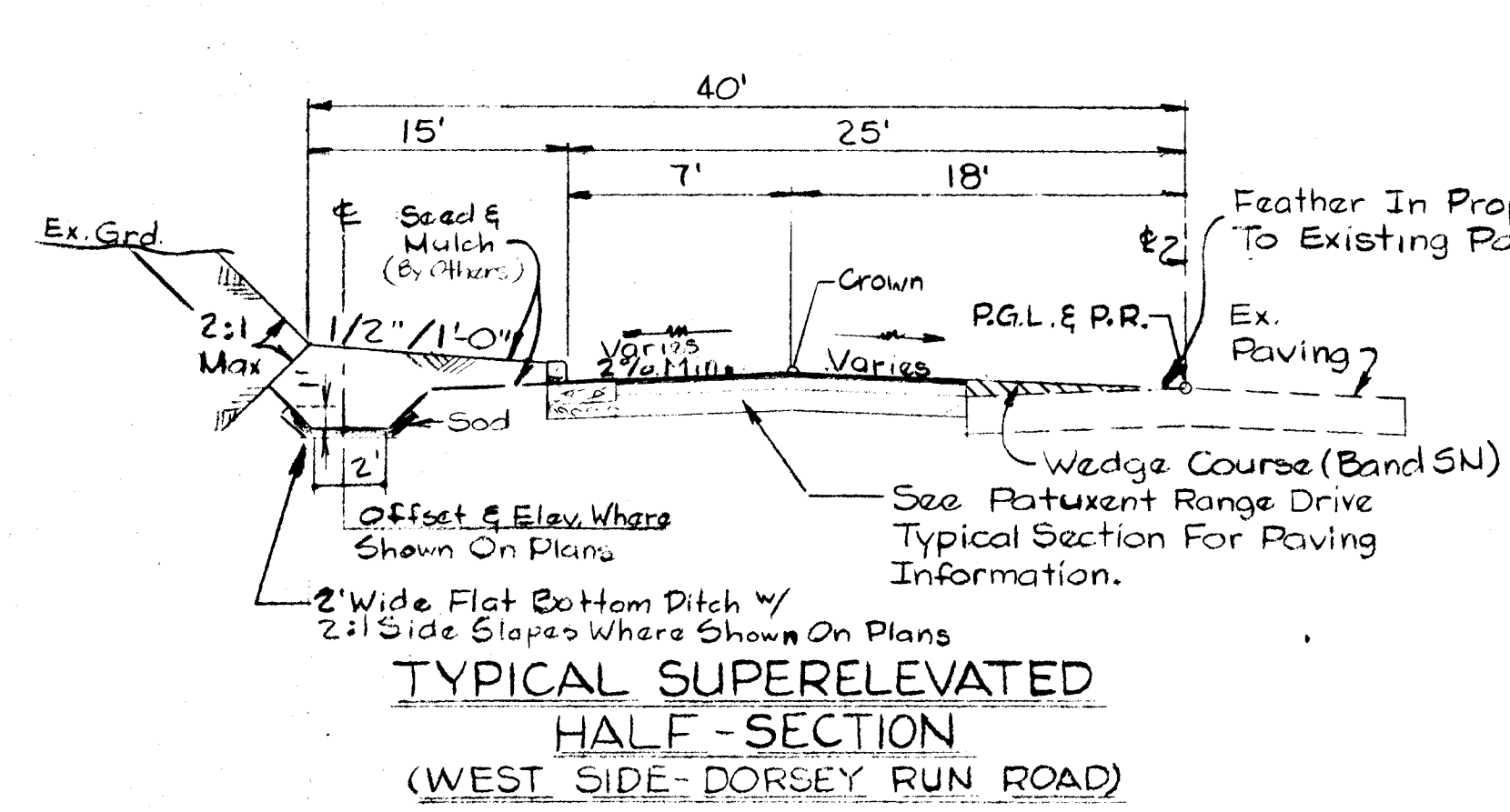
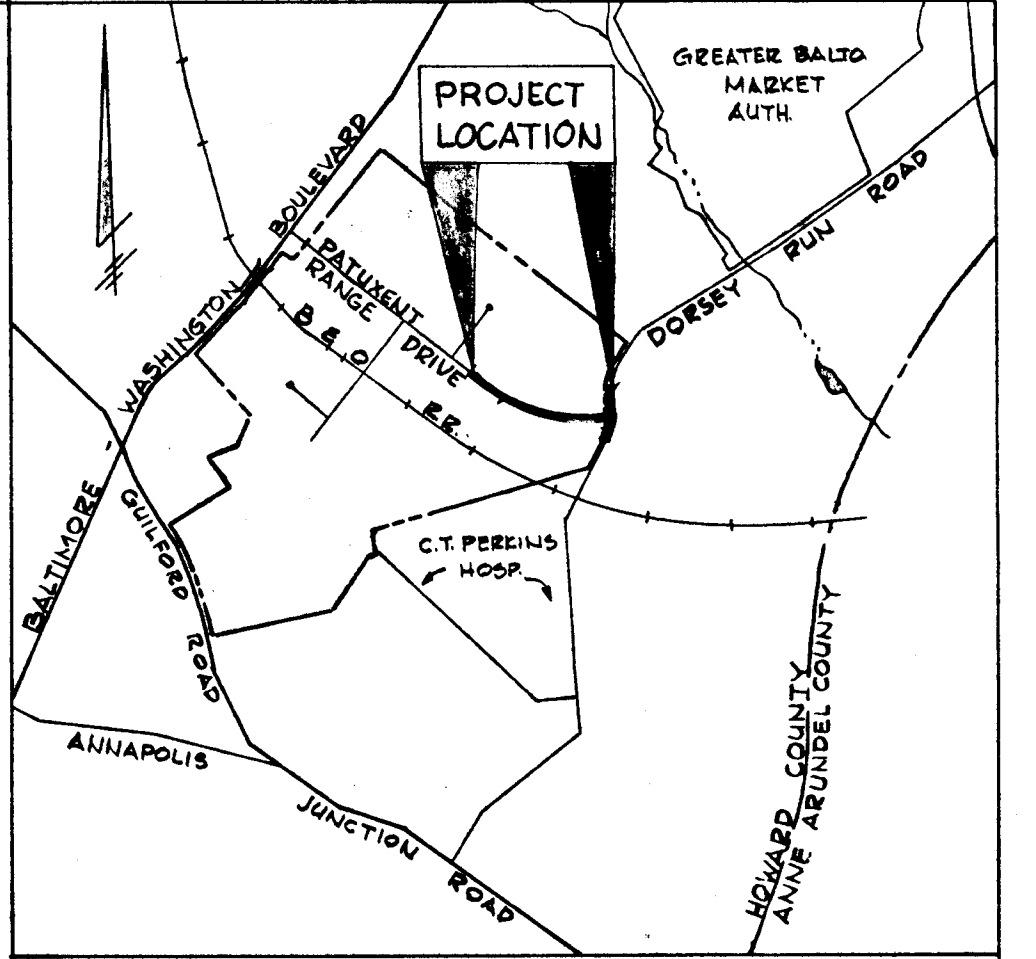
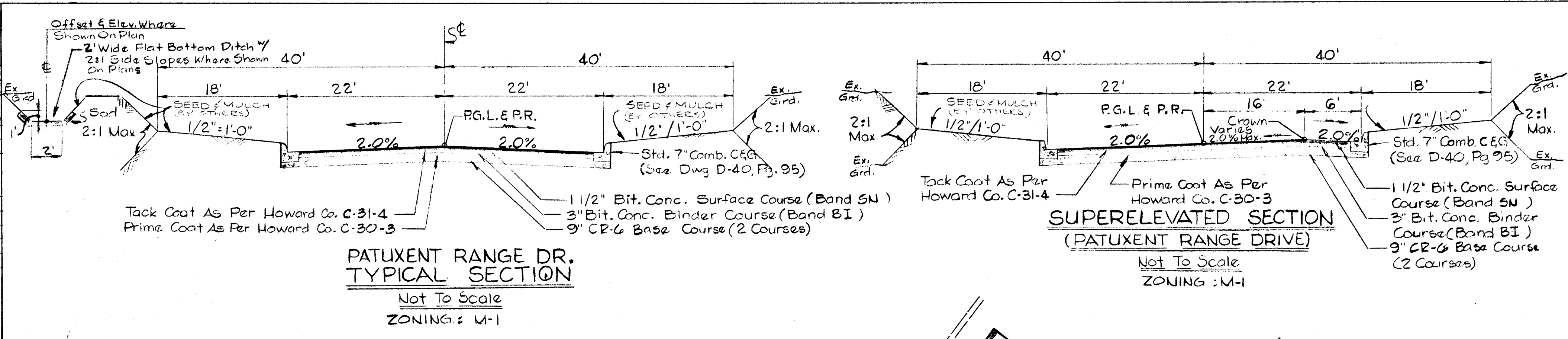


SHEET INDEX	
NO.	DESCRIPTION
1	TITLE SHEET, GENERAL NOTES, TYPICAL ROAD SECTIONS
2	PATUXENT RANGE DRIVE, STA. 24+18 TO STA. 29+50
3	PATUXENT RANGE DRIVE, STA. 29+50 TO DORSEY RUN RD.
4	DORSEY RUN ROAD
5	DRAINAGE AREA MAP, SCHEDULES, DETAILS
6	STORM DRAIN PROFILES
7	SEDIMENT & EROSION CONTROL PLAN
8	SEDIMENT & EROSION CONTROL PLAN
9	SEDIMENT & EROSION CONTROL PLAN



EARTHWORK SUMMARY			
EXCAVATION		FILL	
Roadway	1334 C.Y.	Road	3446 C.Y.
Ditch	2650 C.Y.	Embankment	645 C.Y.
Storm Drains (Excess)	538 C.Y.	+10% Compaction	399 C.Y.
Cut Available	4522 C.Y.	Fill Req'd.	4390 C.Y.
			132 C.Y. Excess

TYPICAL SUPERELEVATED HALF-SECTION (WEST SIDE - DORSEY RUN ROAD)
Not To Scale
ZONING: M-1

- SEQUENCE OF CONSTRUCTION**
1. Install Stabilized Construction Entrances
 2. Install storm drain system beginning at E-1. As inlets are built install inlet traps (I-2, I-3, I-6, I-7, I-10, I-11 only).
 3. Install remainder of sediment control measures
 4. Begin grading
 5. Stabilize all disturbed areas as soon as possible
 6. Remove temporary sediment control measures after site has been stabilized.

PERMANENT SEEDING (See General Notes)

Lime - 2 Tons/Acre Agricultural Ground Limestone
 Fertilizer - 1000 Lbs./Acre (10-10-10)
 Seeding - 100 Lbs./Acre Of The Following:
 20% Kentucky Blue Grass, 20% Marion Blue Grass, 55% Creeping Red Fescue, 5% Redtop

Mulching Required - Mulch Area With Straw At 75 Lbs./1,000 S.F. Or 1.5 Tons/Acre Anchor With Asphalt At Rate Of 480 Gal./Acre
 Stabilization Of Slopes Steeper Than 3:1 Shall Be Planted With Crownvetch 15 Lbs./Acre (0.34 Lbs./1,000 SF)
 Kentucky 31 Tall Fescue 40 Lbs./Acre (1 Lb./1,000 SF)

- GENERAL NOTES (CONT.)**
- 17) The Contractor Shall Locate Existing Utilities A Minimum Of Two (2) Weeks In Advance Of Construction Operations In Vicinity Of Utilities. Cost Shall Be Included In The Unit Prices Bid For Excavation And Backfill.
 - 18) Clear All Utilities By A Minimum Of 6" Clear All Poles 2'-0" Minimum Or Tunnel As Required. Cost For Tunneling Or Bracing At Poles Shall Be Included In The Unit Prices Bid For Excavation And Backfill.
 - 19) All Traffic Signs And Highway Marking Shall Be Done By The Division Of Traffic Engineering, Department Of Public Works.
 - 20) No Storm Water Management Provision Has Been Made At This Time For The Proposed Roadway.
 - 21) For 'S' Comb Inlets Use Std. WR Inlet Frame & Grate (See MD. Std. MD 374.02 & 374.03)
 - 13) All Pipe Elevations Shown Are Invert Elevations.
 - 14) All Manholes Shall Be 4'-0" Inside Diameter.
 - 15) For Details Not Shown On The Contract Drawings See Standard Details Bound In The Specifications.
 - 16) Place Regulation "Men Working" And Warning Signs As Required To Comply With Maryland State Highway Administration Manual Of Traffic Control For Highway Construction And Maintenance Operations (See Special Provisions)

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS.
 DATE 5-5-81
 SIGNATURE: [Signature]
 U.S. SOIL CONSERVATION SERVICE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 APPROVED: [Signature]
 DATE 5-4-81
 HOWARD S.C.D.

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 DATE 5-6-81
 CHIEF - BUREAU OF ENGINEERING

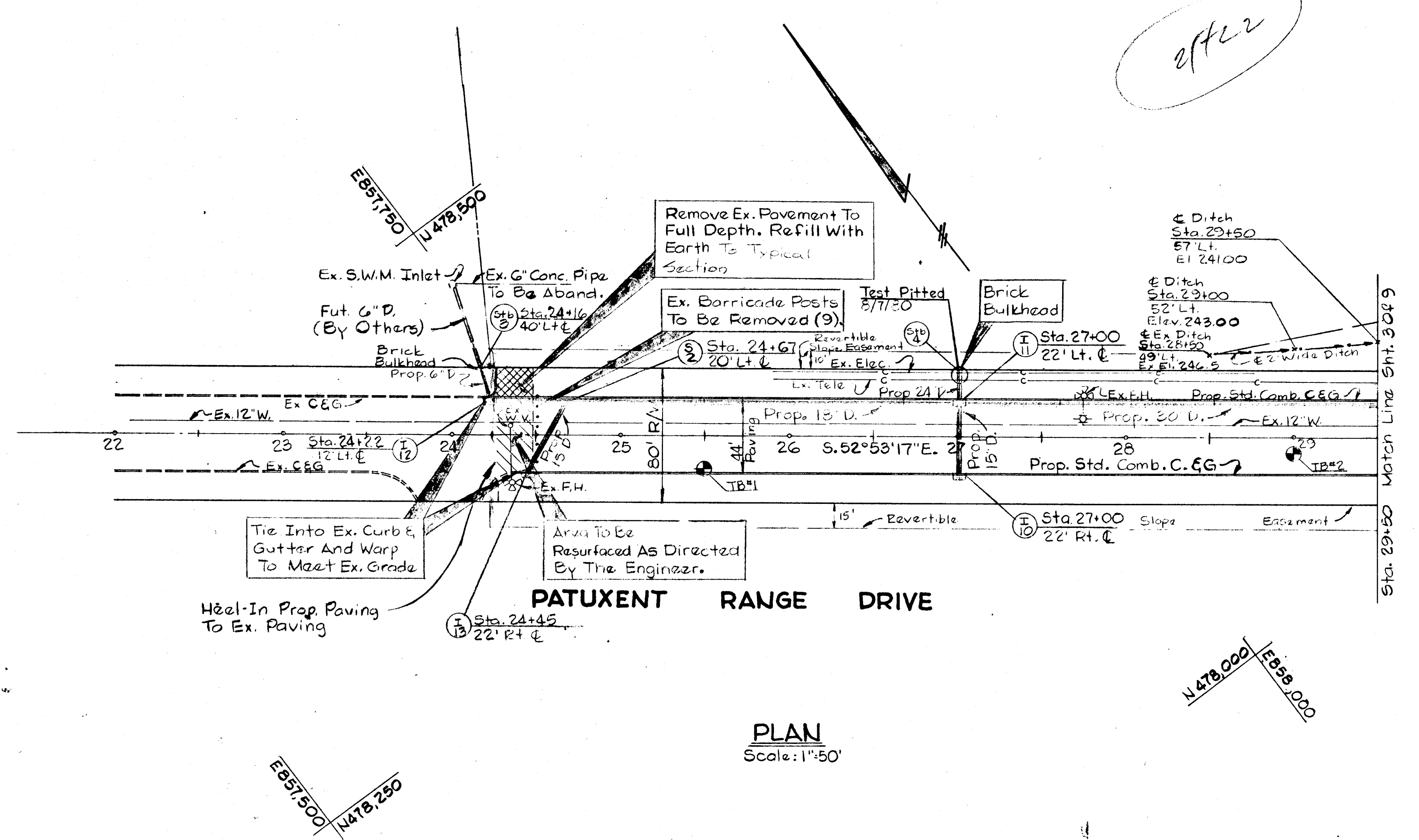
ENGINEER
 GEORGE W. STEPHENS, JR. & ASSOCIATES, INC.
 303 ALLEGHENY AVENUE
 TOWSON, MARYLAND
 21204

CERTIFICATION BY THE ENGINEER
 I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
 JOHN J. STAMM
 REG. NO. 4112
 DATE 5-7-81

CERTIFICATION BY THE DEVELOPER
 I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION OF THE PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT.
 DATE 5-7-81

BALTIMORE-WASHINGTON INDUSTRIAL PARK
ROAD CONSTRUCTION PLANS FOR
PATUXENT RANGE DRIVE
 FROM VICINITY OF SHERWICK COURT TO DORSEY RUN ROAD
 HOWARD COUNTY, MARYLAND ELECTION DISTRICT NO. 6
 CAPITAL PROJECT NO. J-D-4066
 SCALE: AS SHOWN SHEET 1 OF 9 DATE: AUG. 29, 1980

C1092A01

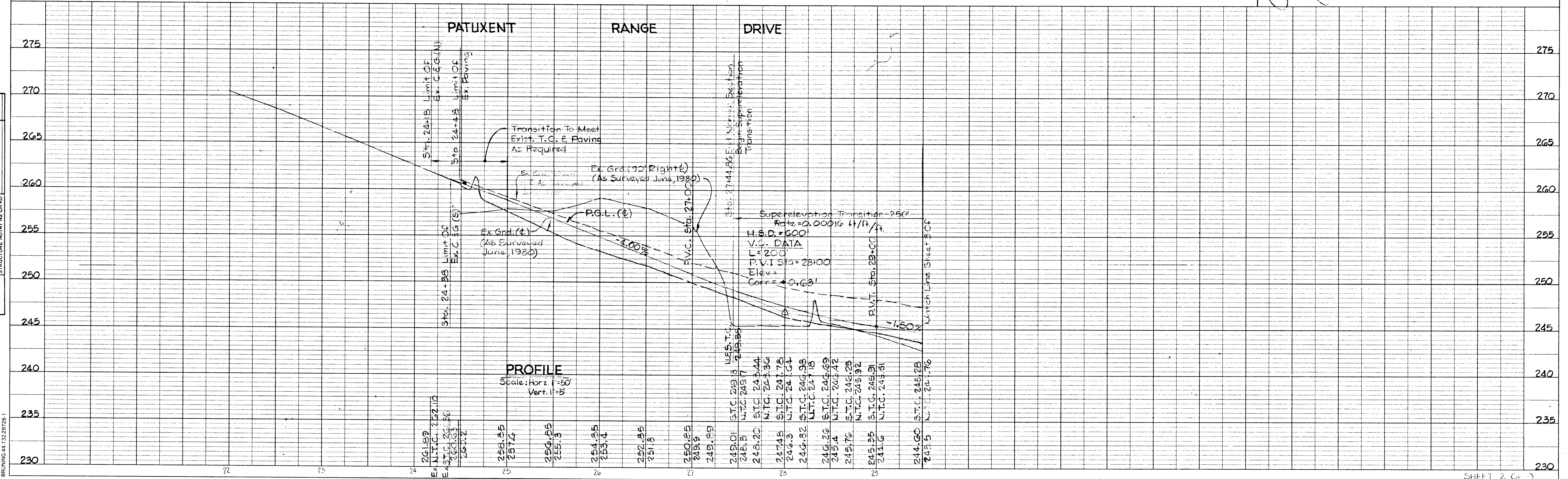


PLAN
 Scale: 1"=50'

BALTIMORE-WASHINGTON INDUSTRIAL PARK
PLAN & PROFILE FOR
PATUXENT RANGE DRIVE
 FROM STATION 24+18 TO STATION 29+50
 HOWARD COUNTY, MARYLAND ELECTION DISTRICT NO. 6
 CAPITAL PROJECT NO. J-O-4066
 SCALE: AS SHOWN DATE: AUG. 29, 1980

ENGINEER
GEORGE W. STEPHENS, JR. & ASSOCIATES, INC.
 303 ALLEGHENY AVENUE
 TOWSON, MARYLAND
 21204

JOHN J. STAMM 4732 8-3-80
 REG. NO. DATE



PROFILE
 Scale: Horiz. 1"=50'
 Vert. 1"=5'

PLAN	DATE
SURVEYED	
PLOTTED	
ALIGNMENT CHECKED	
BY	
NOTE BOOK NO.	

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

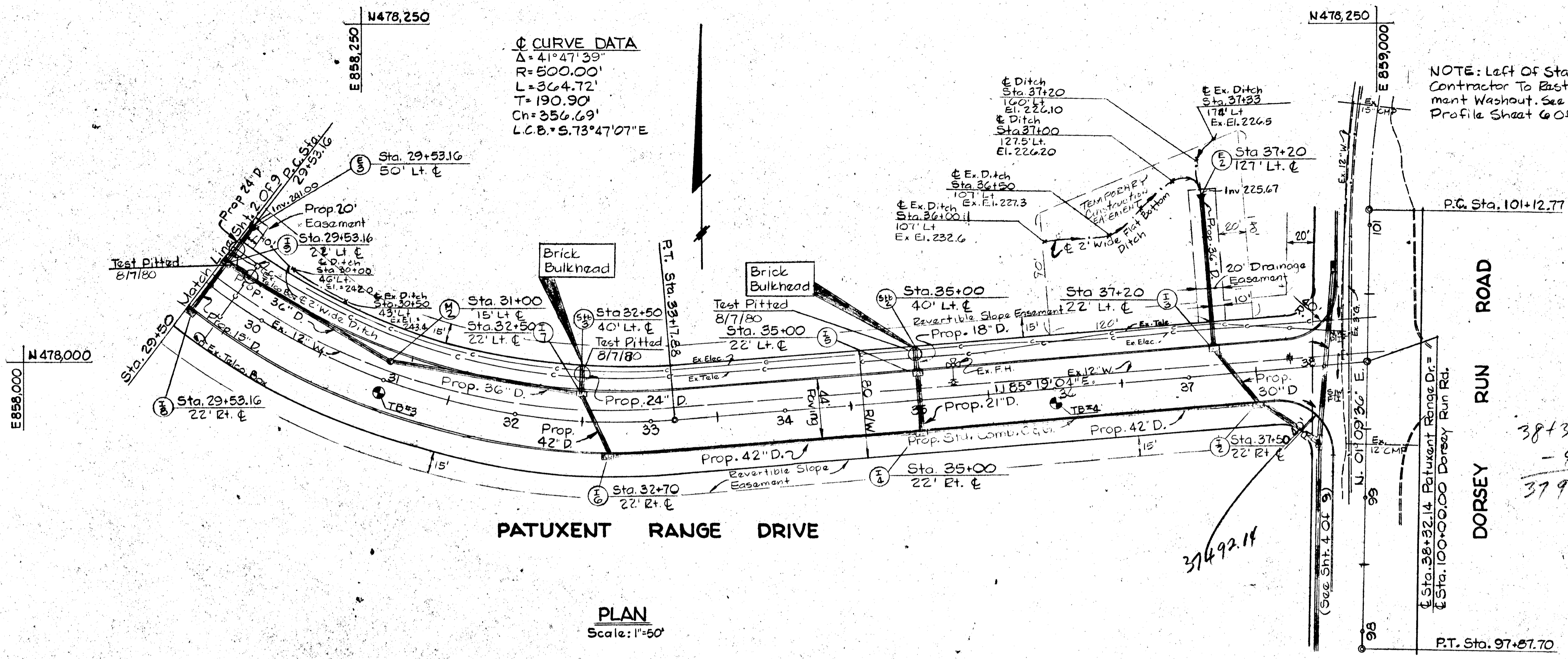
BRUNING 44-132-29756-1

John F. Stamm 5-6-81
 DIRECTOR OF PUBLIC WORKS DATE
William B. Day 5/6/81
 CHIEF - BUREAU OF ENGINEERING DATE
Elizabeth Anderson Palca 5/5/81
 CHIEF - ROADS, BRIDGES & STORM DRAINS DIVISION DATE

DATE	
BY	
REVISIONS	
NO.	
DESCRIPTION	
DATE	

DATE	
BY	
REVISIONS	
NO.	
DESCRIPTION	
DATE	

DATE	
BY	
REVISIONS	
NO.	
DESCRIPTION	
DATE	

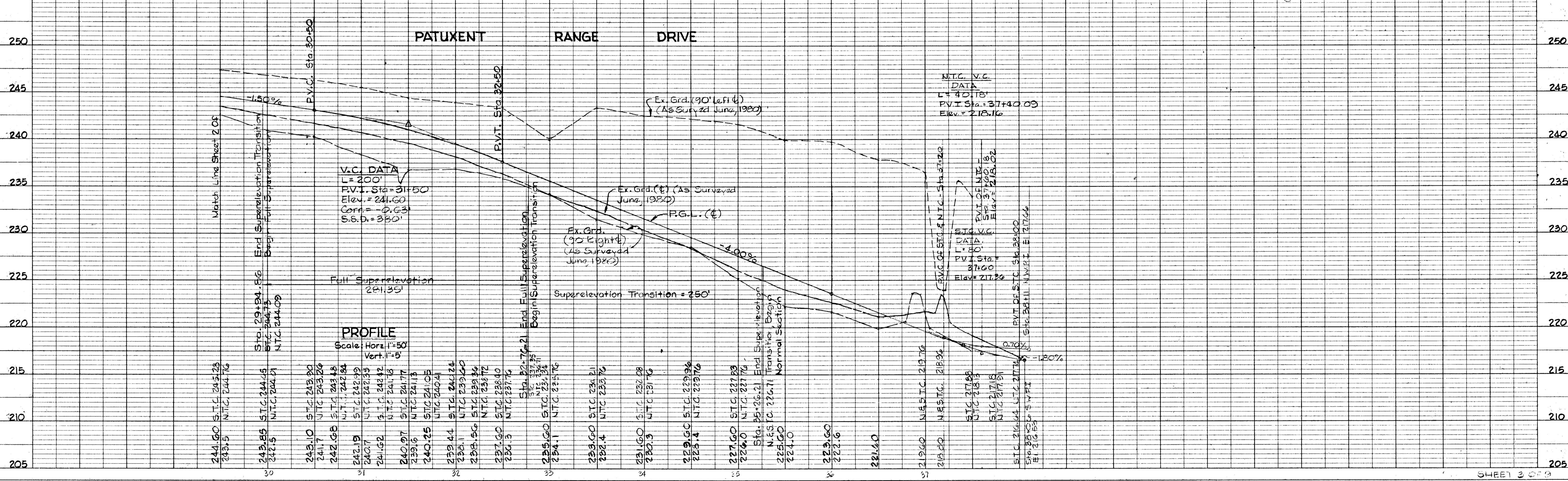


BALTIMORE-WASHINGTON INDUSTRIAL PARK
PLAN & PROFILE FOR
PATUXENT RANGE DRIVE

FROM STATION 29+50 TO STATION 38+32.14 (DORSEY RUN RD)
 HOWARD COUNTY, MARYLAND ELECTION DISTRICT NO. 6
 CAPITAL PROJECT NO. J-O-4066
 SCALE: AS SHOWN DATE: AUG. 29, 1980

ENGINEER
GEORGE W. STEPHENS, JR. & ASSOCIATES, INC.
 303 ALLEGHENY AVENUE
 TOWSON, MARYLAND
 21204

John J. Stamm
 JOHN J. STAMM REG. NO. 4132 DATE 5-3-80



John F. Nunn 5-6-81
DIRECTOR OF PUBLIC WORKS DATE

William S. Ray 5/6/81
CHIEF - BUREAU OF ENGINEERING DATE

Robert A. Anderson 5/5/81
CHIEF - ROADS, BRIDGES & STORM DRAINS DIVISION DATE

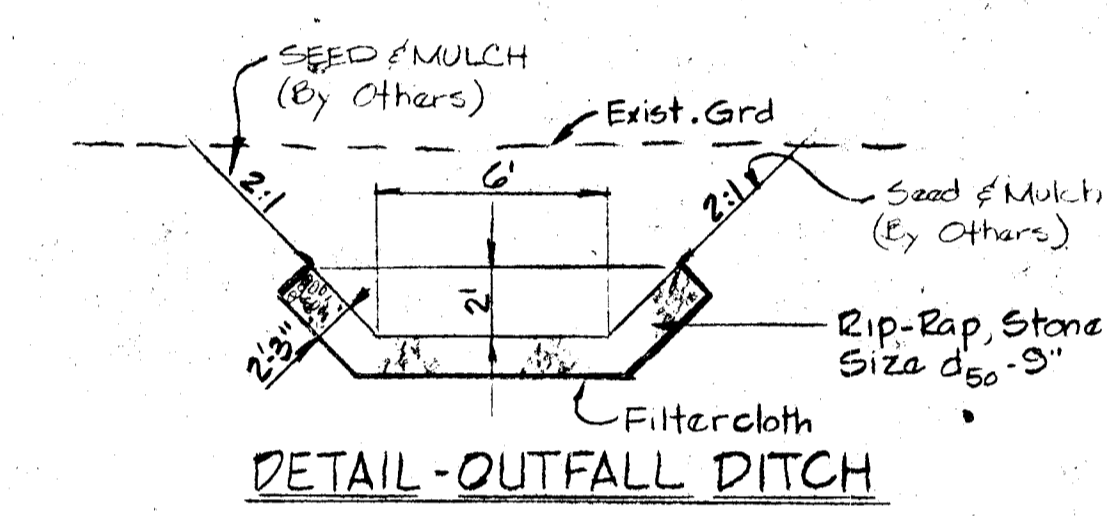
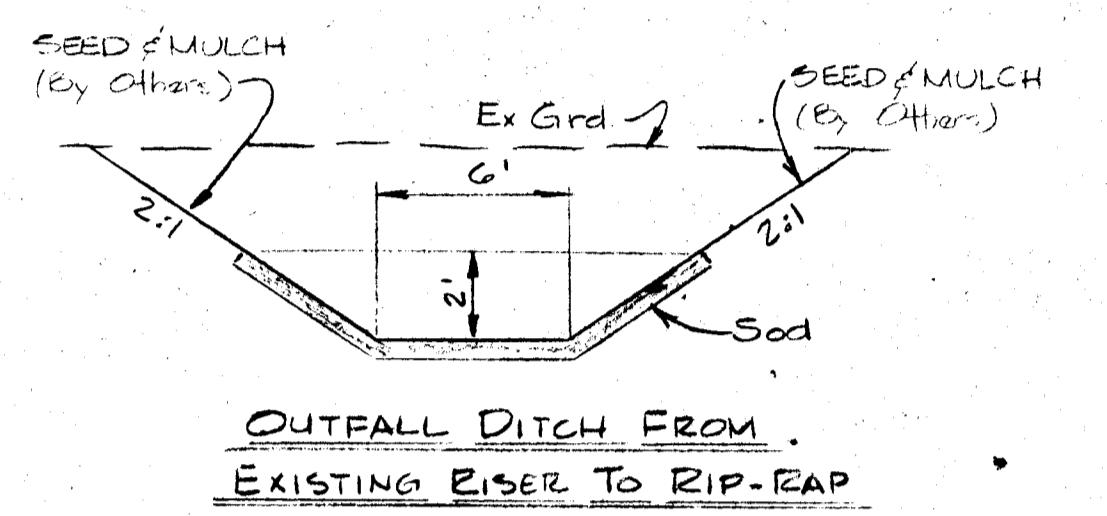
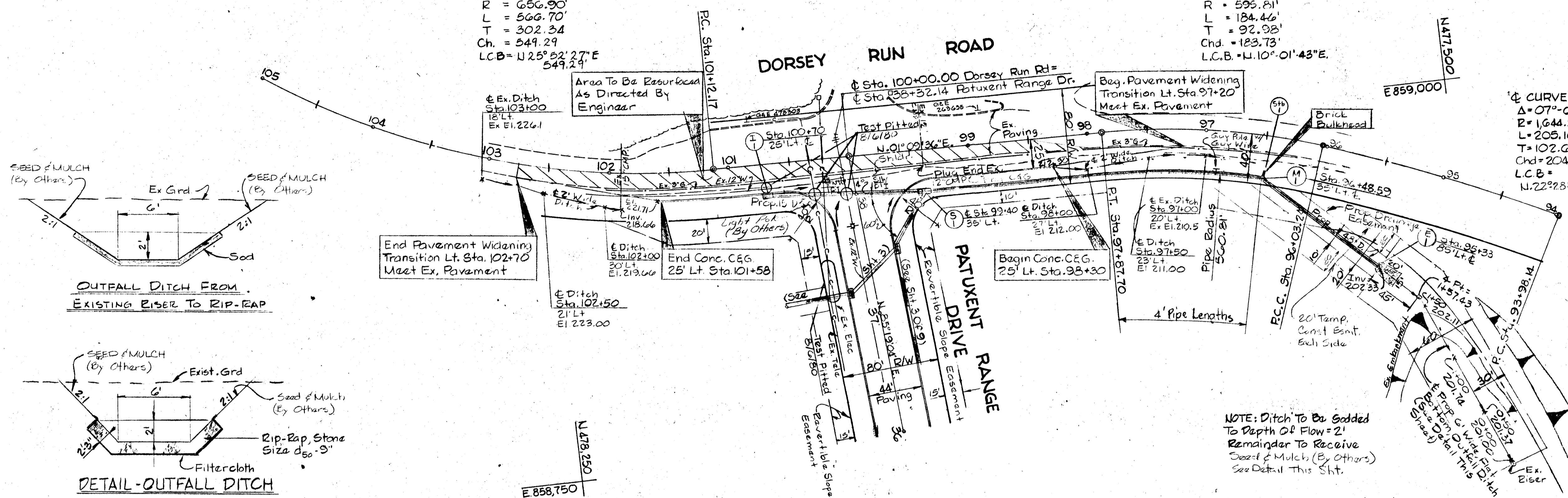
DATE
BY
SURVEYED
GRADES CHECKED
ALIGNMENT CHECKED
NOTE BOOK NO.

DATE
BY
SURVEYED
GRADES CHECKED
STRUCTURE NOTATIONS CHECKED
NOTE BOOK NO.

☺ CURVE DATA
Δ = 49° 25' 42.6"
R = 656.90'
L = 566.70'
T = 302.34
Chd. = 549.29
L.C.B. = N 25° 52' 27" E
549.29'

☺ CURVE DATA
Δ = 17° 44' 20"
R = 595.81'
L = 184.46'
T = 92.98'
Chd. = 123.73'
L.C.B. = N 10° 01' 43" E

☺ CURVE DATA
Δ = 07° 08' 43"
R = 1644.38'
L = 205.10'
T = 102.69'
Chd. = 204.97'
L.C.B. = N 22° 28' 19" E



BALTIMORE-WASHINGTON INDUSTRIAL PARK
PLAN & PROFILE FOR
DORSEY RUN ROAD

FROM STATION 97+20 TO STATION 102+70
HOWARD COUNTY, MARYLAND ELECTION DISTRICT NO. 6
CAPITAL PROJECT NO. J-O-4066
SCALE: AS SHOWN DATE: AUG. 29, 1980

ENGINEER
GEORGE W. STEPHENS, JR. & ASSOCIATES, INC.
303 ALLEGHENY AVENUE
TOWSON, MARYLAND 21204

JOHN J. STAMM 4732 3-3-80
REG. NO. DATE

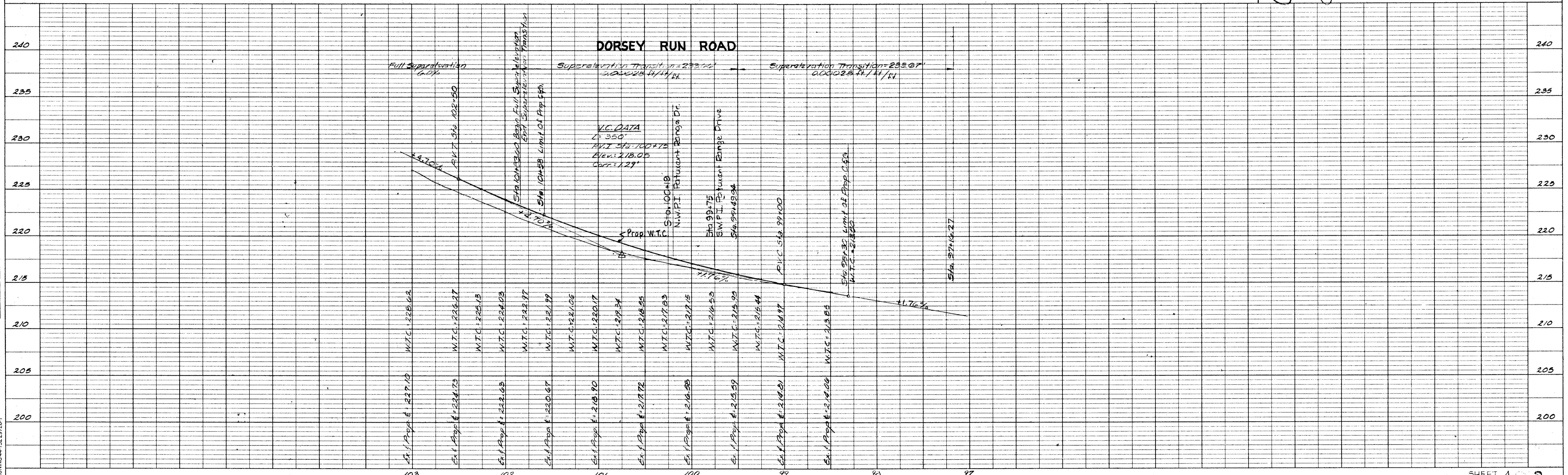
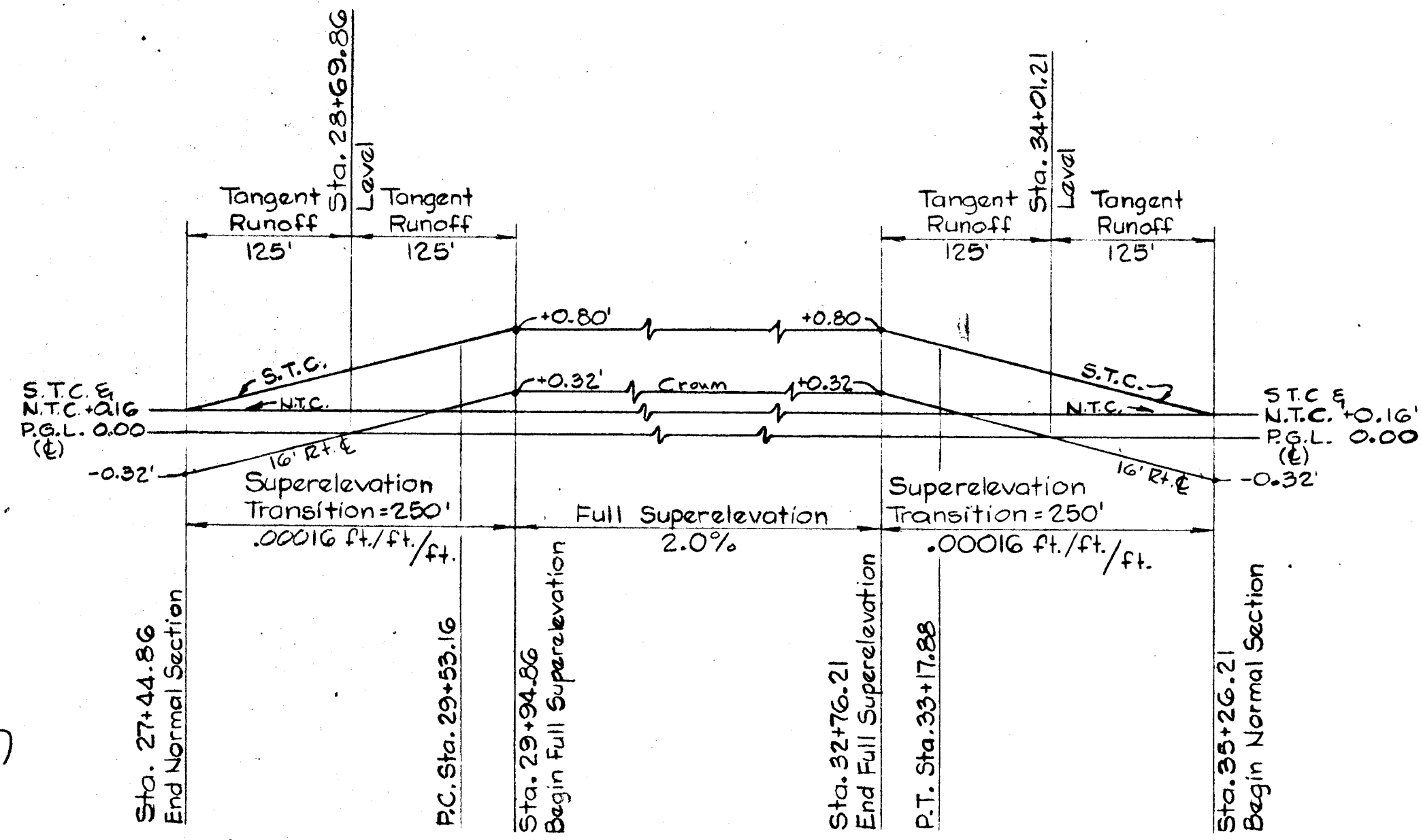


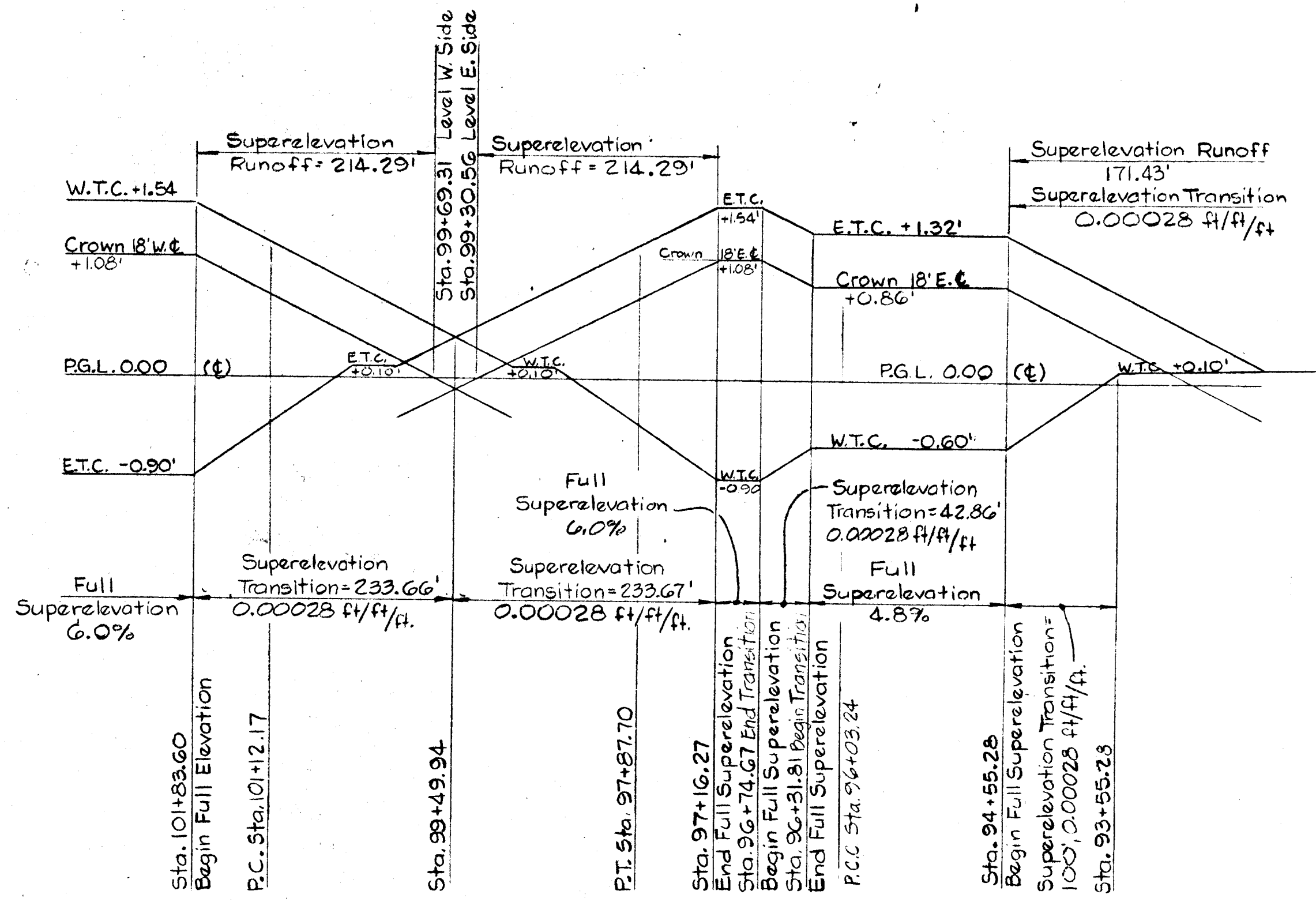
PLATE 1 SINGLE PLAN - PROFILE
CHARLES BRUNING CO.
MADE IN U.S.A.

STRUCTURE SCHEDULE					
NO.	TYPE	TOP. EL.	INV. IN	INV. OUT	REMARKS
I-1	A-5	*219.17	—	201.84	
I-2	A-10	*217.88	210.00	205.13	
I-3	*S' Comb. Dep. **	*218.96	213.57	211.07	
I-4	A-10	*221.83	219.00	213.75	
I-5	*S' Comb. Dep. **	*227.76	220.02	220.87	
I-6	A-10	*237.60	228.00	227.75	
I-7	*S' Comb. Dep. **	*237.76	230.61	225.44	
I-8	A-5	*245.24	—	235.13	
I-9	*S' Comb. Dep. **	*244.71	236.30	236.05	
I-10	A-10	*251.01	—	244.35	
I-11	*S' Comb. Dep. **	*251.01	243.66	242.00	
I-12	*S' Comb. Dep. **	*261.33	256.61	255.11	
I-13	A-10	*260.92	—	254.00	
M-1	C. MH.	213.00	203.37	203.17	
M-2	Std. MH.	241.89	234.65	234.40	
S-1	Bend Structure	216.20	206.45	206.17	
S-2	Wye Structure	—	232.25	232.25	
E-1	Type "B" Headwall (48')	227.33	—	222.33	
E-2	Std. Metal End Sect. (36')	—	225.14	—	
E-3	Std. Conc. End Sect. (24')	—	240.84	—	

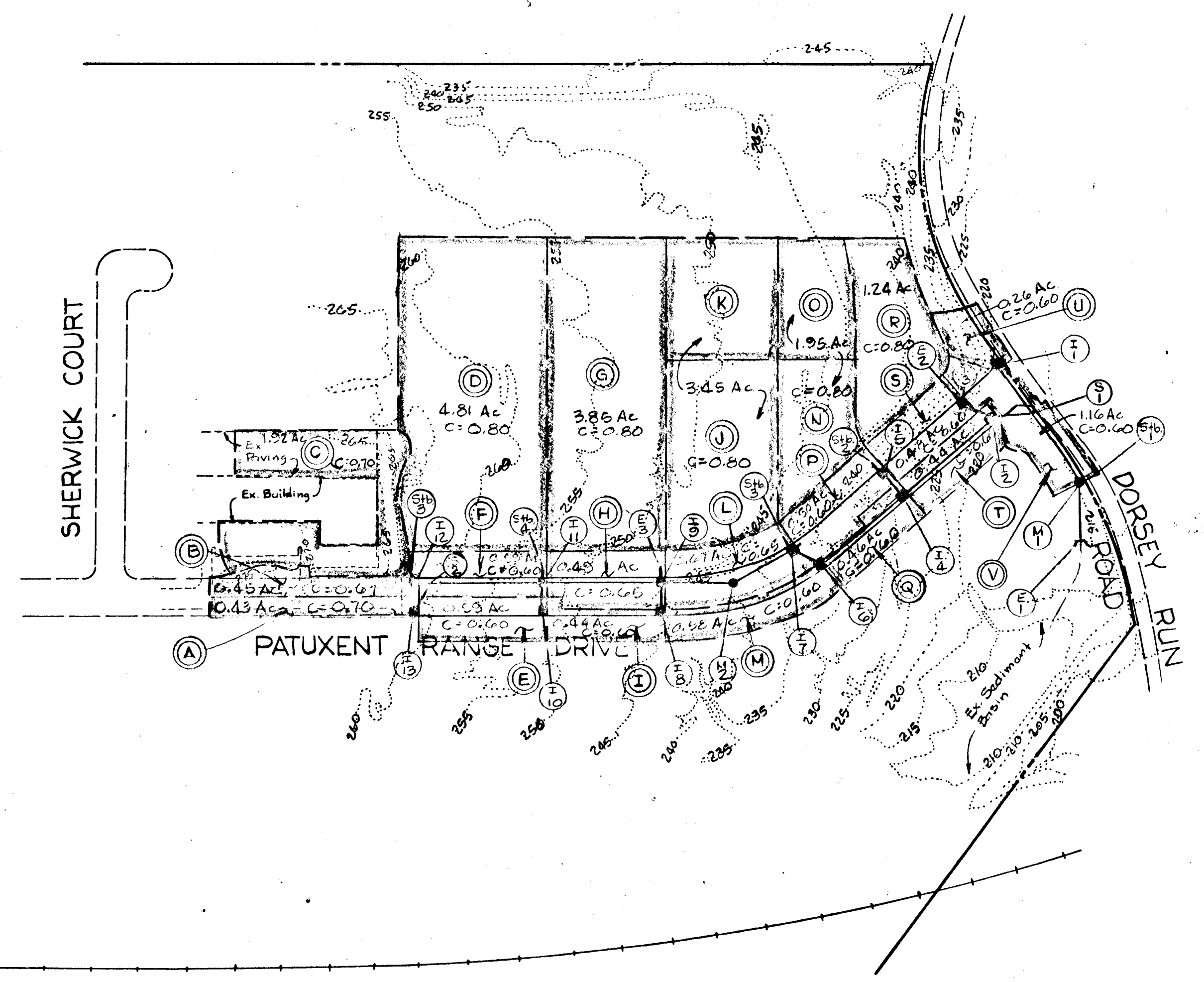
* Top Of Curb Elevation
 ** Use Standard WR Inlet Frame & Grate (See MD Std. MD-374.02 & 374.03)



SUPERELEVATION DIAGRAM
PATUXENT RANGE DRIVE
 NOT TO SCALE



SUPERELEVATION DIAGRAM
DORSEY RUN ROAD



DRAINAGE AREA MAP
 SCALE: 1"=200'

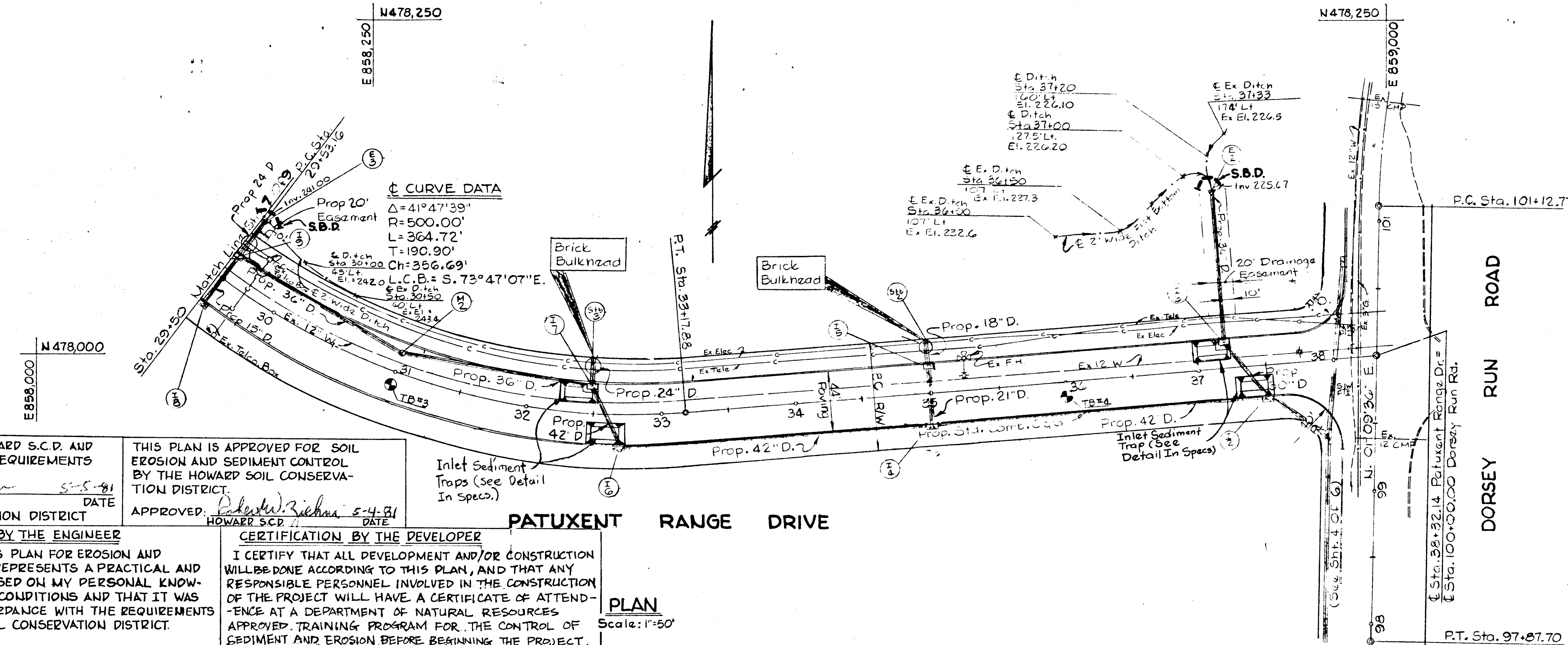
DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Director of Public Works: *John F. Neumann* 5-6-81
 Chief - Bureau of Engineering Date: *George W. Stephens, Jr.* 5/6/81
 Chief - Roads, Bridges & Storm Drains Division Date: *George W. Stephens, Jr.* 5/6/81

ENGINEER
GEORGE W. STEPHENS, JR. & ASSOCIATES, INC.
 303 ALLEGHENY AVENUE
 TOWSON, MARYLAND
 21204
 JOHN J. STAMM
 REG. NO. 4117
 DATE 8-3-80

BALTIMORE-WASHINGTON INDUSTRIAL PARK
 DRAINAGE AREA MAP AND DETAILS
PATUXENT RANGE DRIVE
 HOWARD COUNTY, MARYLAND ELECTION DISTRICT NO. 6
 CAPITAL PROJECT NO. J-O-4066
 SCALE: AS SHOWN SHEET 5 OF 9 DATE: AUG. 29, 1980

PLAN SURVEYED, ALIGNED, GRADES CHECKED, RT. OF WAY CHECKED.
 DATE: 5-5-81
 SIGNATURE: *John J. Stamm*
 U.S. SOIL CONSERVATION DISTRICT

PROFILE SURVEYED, GRADES CHECKED, B.M. NOTED, STRUCTURE NOTATIONS CHECKED.
 DATE: 5-3-80
 SIGNATURE: *John J. Stamm*
 REG. NO. 4732



REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS
 SIGNATURE: *John J. Stamm* 5-5-81
 U.S. SOIL CONSERVATION DISTRICT

THIS PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 APPROVED: *Robert W. ...* 5-4-81
 HOWARD S.C.D.

Inlet Sediment Traps (See Detail In Specs.)

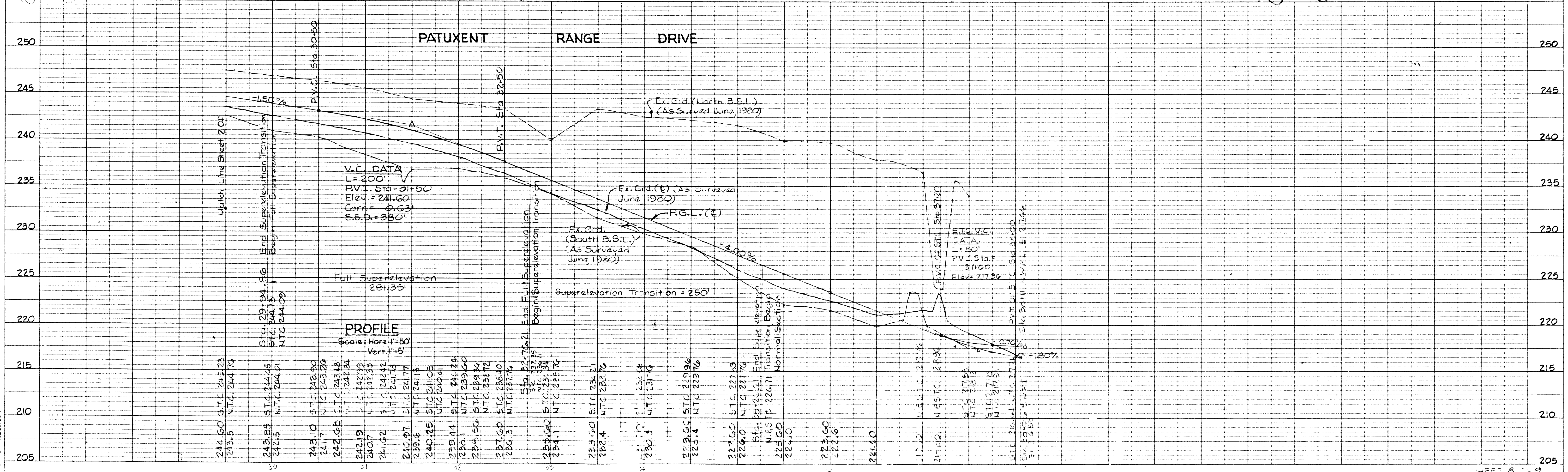
CERTIFICATION BY THE ENGINEER
 I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
 JOHN J. STAMM REG. NO. 4732 DATE 5-3-80

CERTIFICATION BY THE DEVELOPER
 I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION OF THE PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT.
 UAC 88-01-01

PLAN Scale: 1"=50'

BALTIMORE-WASHINGTON INDUSTRIAL PARK
 SEDIMENT & EROSION CONTROL PLAN
 PATUXENT RANGE DRIVE
 FROM STATION 29+50 TO STATION 38+32.14 (DORSEY RUN RD)
 HOWARD COUNTY, MARYLAND ELECTION DISTRICT NO. 6
 CAPITAL PROJECT NO. J-0-4066
 SCALE: AS SHOWN DATE: AUG. 29, 1980
 ENGINEER
 GEORGE W. STEPHENS, JR. & ASSOCIATES, INC.
 303 ALLEGHENY AVENUE
 TOWSON, MARYLAND 21204

JOHN J. STAMM REG. NO. 4732 DATE 5-3-80



Director of Public Works: *Harold F. Neumann* 5-6-81
 Chief - Bureau of Engineering: *Robert S. Esch* 5/1/81
 Chief - Roads, Bridges & Storm Drains Division: *Robert Anderson* 5/1/81

DATE	BY	REVISION

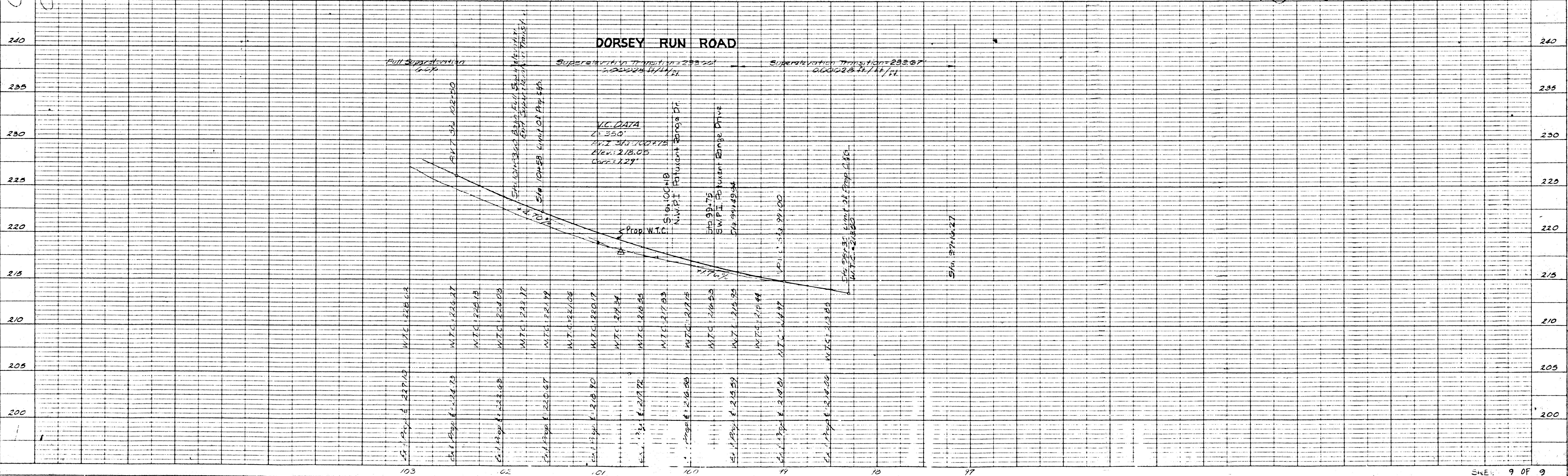
Reviewed For Howard S.C.D. And Meets Technical Requirements
Donna McAllen 5-5-81
 Signature Date
 U.S. Soil Conservation Service

This Development Plan Is Approved For Soil Erosion And Sediment Control By The Howard Soil Conservation District.
 Approved: *Phelan Wilson* 5-4-81
 Howard S.C.D. Date

CERTIFICATION BY THE DEVELOPER
 I certify that all development and/or construction will be done according to this plan, and that any responsible personnel involved in the construction of the project will have a certificate of attendance at a Department of Natural Resources approved Training Program for the control of sediment and erosion before beginning the project.
William E. Quinn

CERTIFICATION BY THE ENGINEER
 I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.
John J. Stamm 4732 5-3-80
 Reg. No. Date

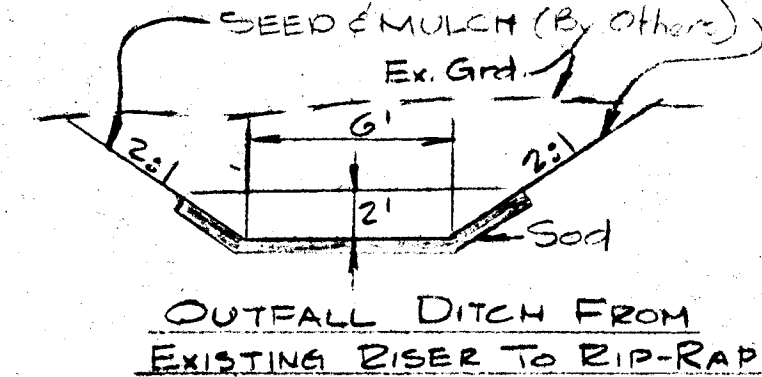
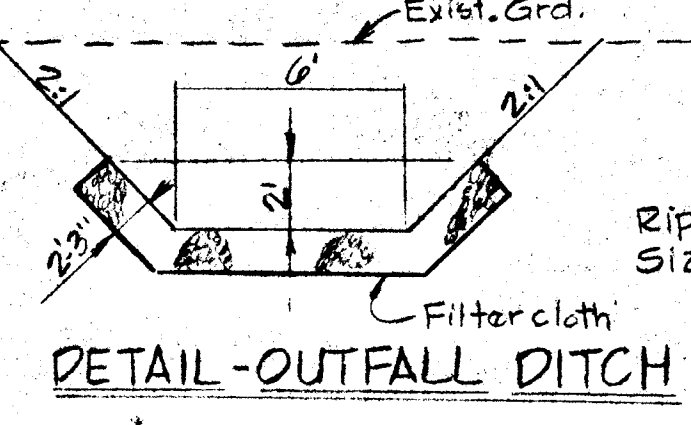
DATE	BY	REVISION



Curve Data 1
 $\Delta = 47^{\circ} 25' 42.6''$
 $R = 656.90'$
 $L = 566.70'$
 $T = 302.34'$
 $Ch = 549.29'$
 $LCB = 1125^{\circ} 52' 27.7'' E$
 $549.29'$

Curve Data 2
 $\Delta = 17^{\circ} 44' 20.0''$
 $R = 595.81'$
 $L = 184.46'$
 $T = 92.03'$
 $Ch = 183.73'$
 $LCB = 111^{\circ} 01' 43.0'' E$

Curve Data 3
 $\Delta = 07^{\circ} 08' 48.0''$
 $R = 1,644.38'$
 $L = 205.10'$
 $T = 102.69'$
 $Ch = 204.97'$
 $LCB = 112^{\circ} 23' 19.0'' E$



**BALTIMORE-WASHINGTON INDUSTRIAL PARK
 SEDIMENT & EROSION CONTROL PLAN
 DORSEY RUN ROAD**

FROM STATION 97+20 TO STATION 102+70
 HOWARD COUNTY, MARYLAND ELECTION DISTRICT NO. 6
 CAPITAL PROJECT NO. J-0-4066
 SCALE: AS SHOWN DATE: AUG. 29, 1980

ENGINEER
GEORGE W. STEPHENS, JR. & ASSOCIATES, INC.
 303 ALLEGHENY AVENUE
 TOWSON, MARYLAND
 21204

John J. Stamm 4732 5-3-80
 REG. NO. DATE