

CENTERLINE CURVE DATA						
NAME & PC TO PT	RADIUS	DELTA	ARC	TAN	CHORD	BEARING
OAK BUSH TERRACE PC: 1172.24 to 6111.64	135.00	101°36'50"	239.42	185.57	205.26	N01°18'25"E
OAK BUSH TERRACE PC: 7152.12 to 3108.75	200.00	44°49'33"	156.46	82.48	152.50	N77°32'01"W

Date	Revision
2-16-88	Reduce pipe length to 75' between I-2 & S-1. Reduce drainage & utility easement width to 20'

**DEVELOPER'S/BUILDER'S CERTIFICATE**

"I/We certify that all development and construction will be done according to this plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Dept. of Natural Resources Approved Training Program for the Control of Sedimentation before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District or their authorized agents, as are deemed necessary."

*Blanes Greenfield* 4-5-88  
Signature of Developer/Builder

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

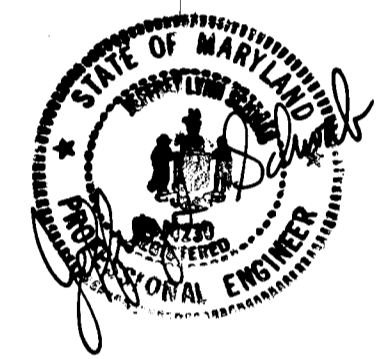
*Small Joseph* 10/24/88  
Chief, Land Development Division Date

*Draville W. Welwood* 10/25/88  
Chief, Bureau of Highways Date

*James S. Row* 10-25-88  
Chief, Bureau of Engineering Date

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING

*Frank S. J. Langley* 11-21-88  
Chief, Division of Community Planning & Land Development Date



**ENGINEER'S CERTIFICATE**

I hereby 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.

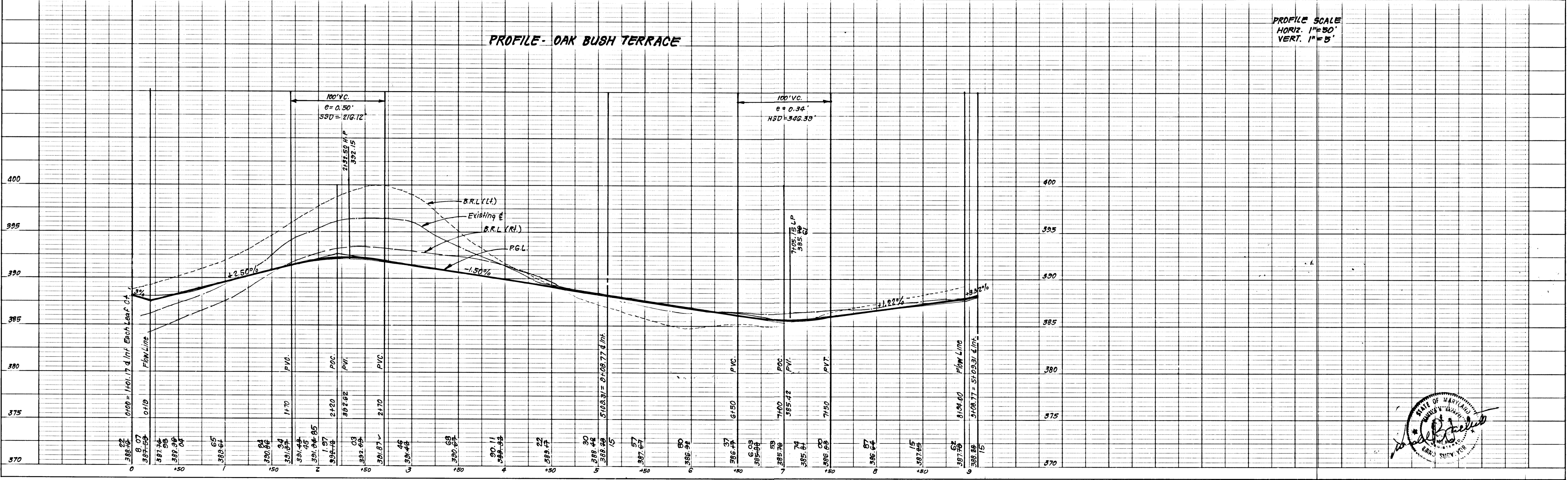
*Jeffrey L. Schweb* 4/8/88  
Date

**CLARK • FINEFROCK & SACKETT, INC.**  
ENGINEERS • PLANNERS • SURVEYORS

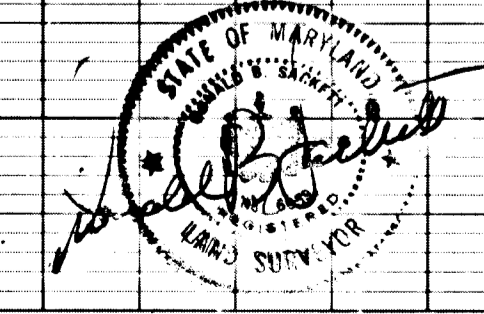
7135 MINSTREL WAY • COLUMBIA, MD 21045 • (301) 381-7500 - BALTO. • (301) 621-8100 - WASH.

DESIGNED <b>DAB</b>	<b>ROAD CONSTRUCTION PLANS</b> <b>OAK BUSH TERRACE</b> <b>COLUMBIA</b> VILLAGE OF LONGREACH SECTION 3 AREA 2 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND. FOR: COLUMBIA BUILDERS, INC. 3 Lakefront North, Suite 200 Columbia Md. 21044	SCALE <b>As Shown</b>
DRAWN <b>KIW.</b>		DRAWING <b>2 OF 5</b>
CHECKED <b>DAB</b>		JOB NO. <b>87.145</b>
DATE <b>4-5-88</b>		FILE NO. <b>87.145-D</b>

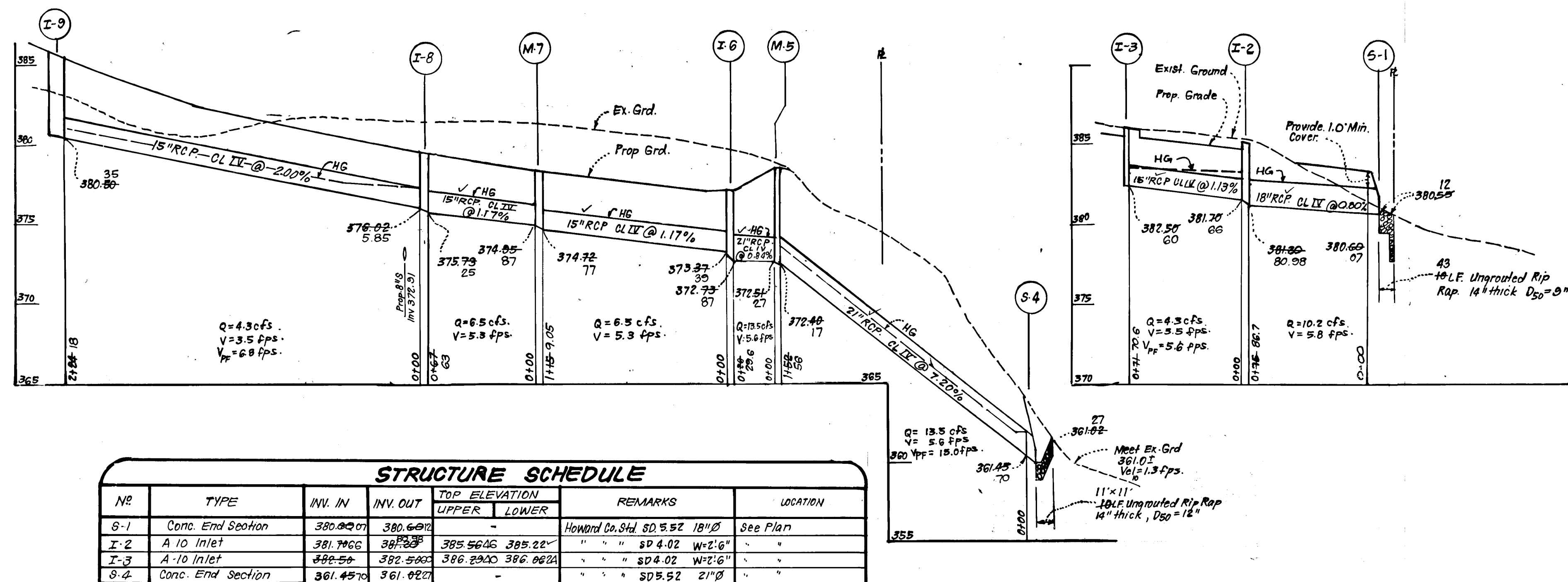
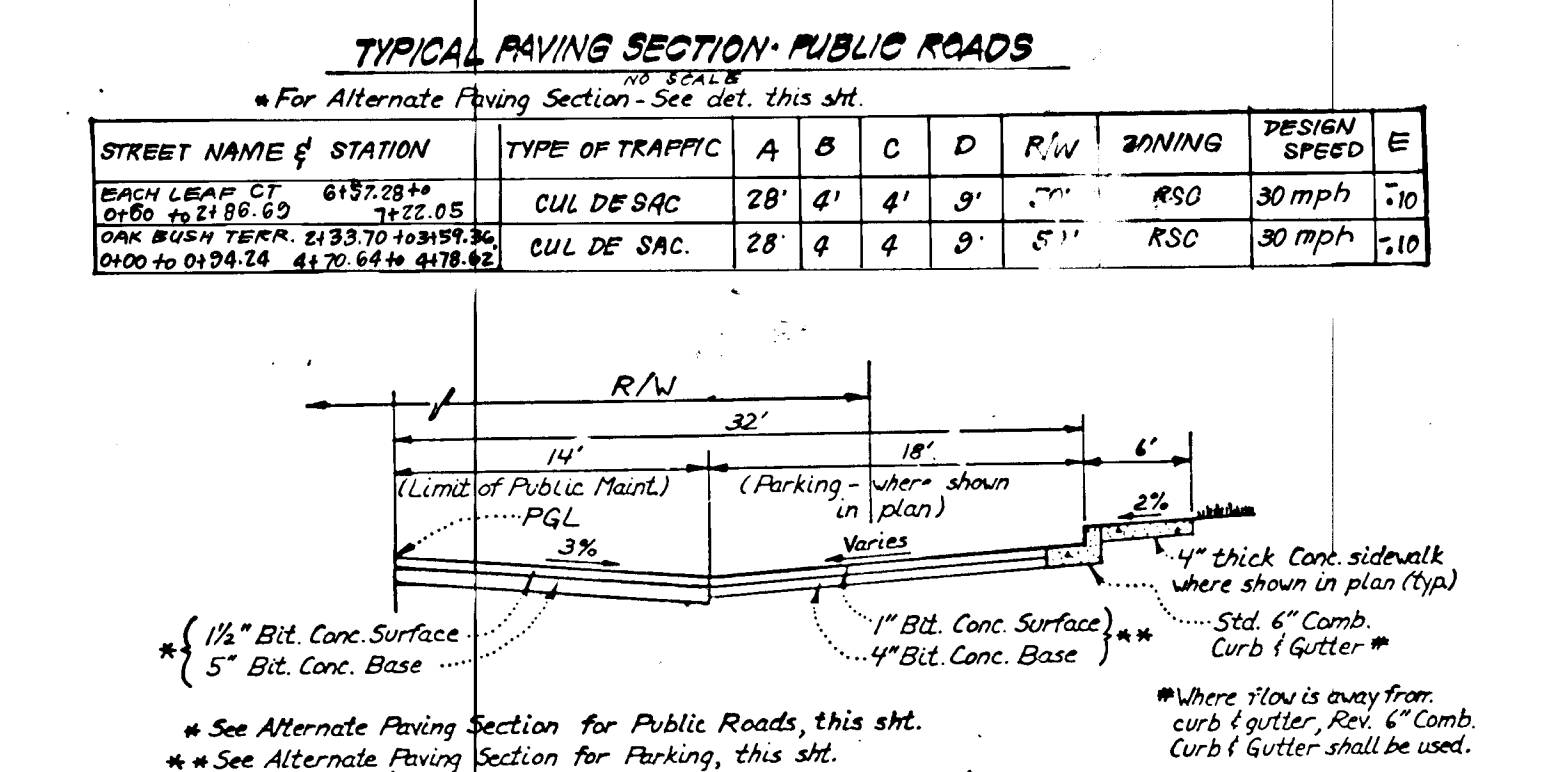
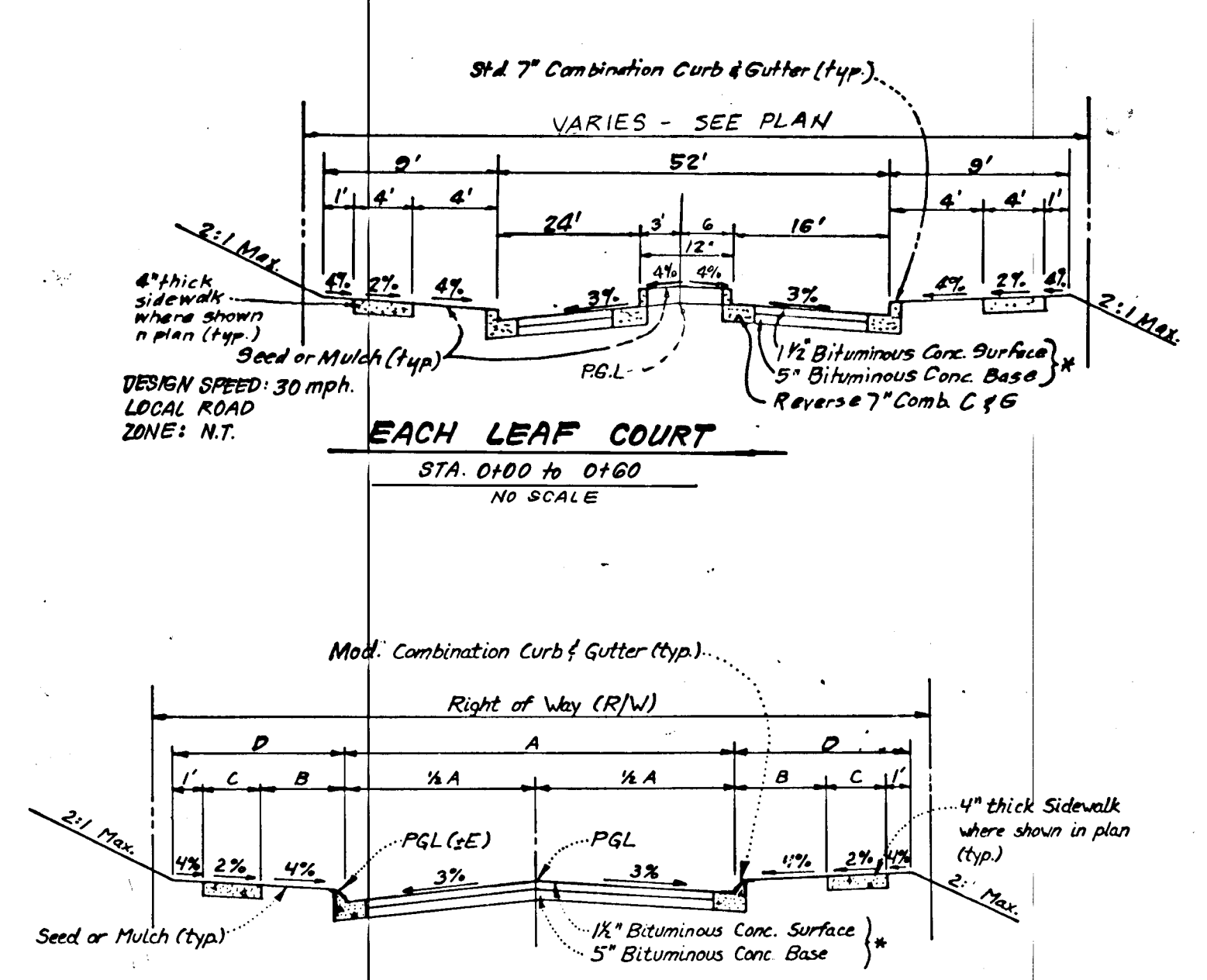
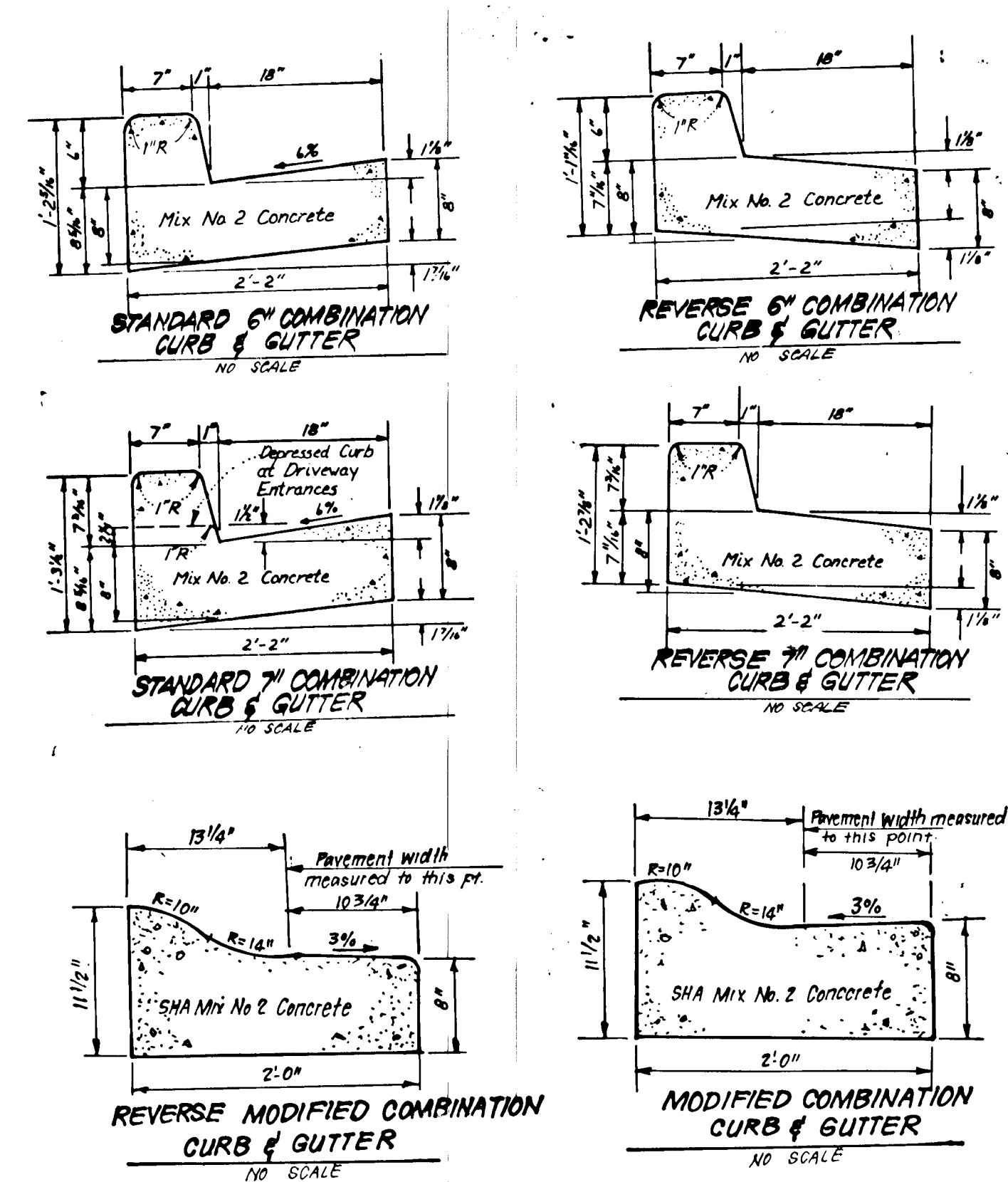
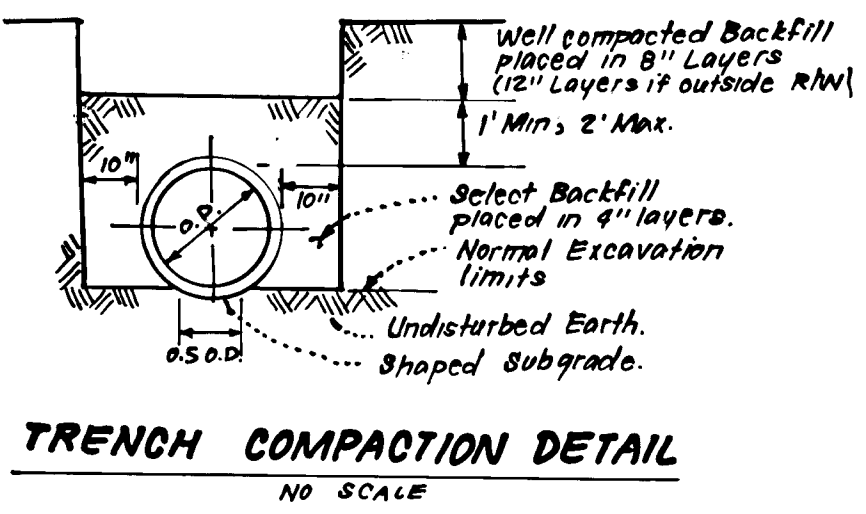
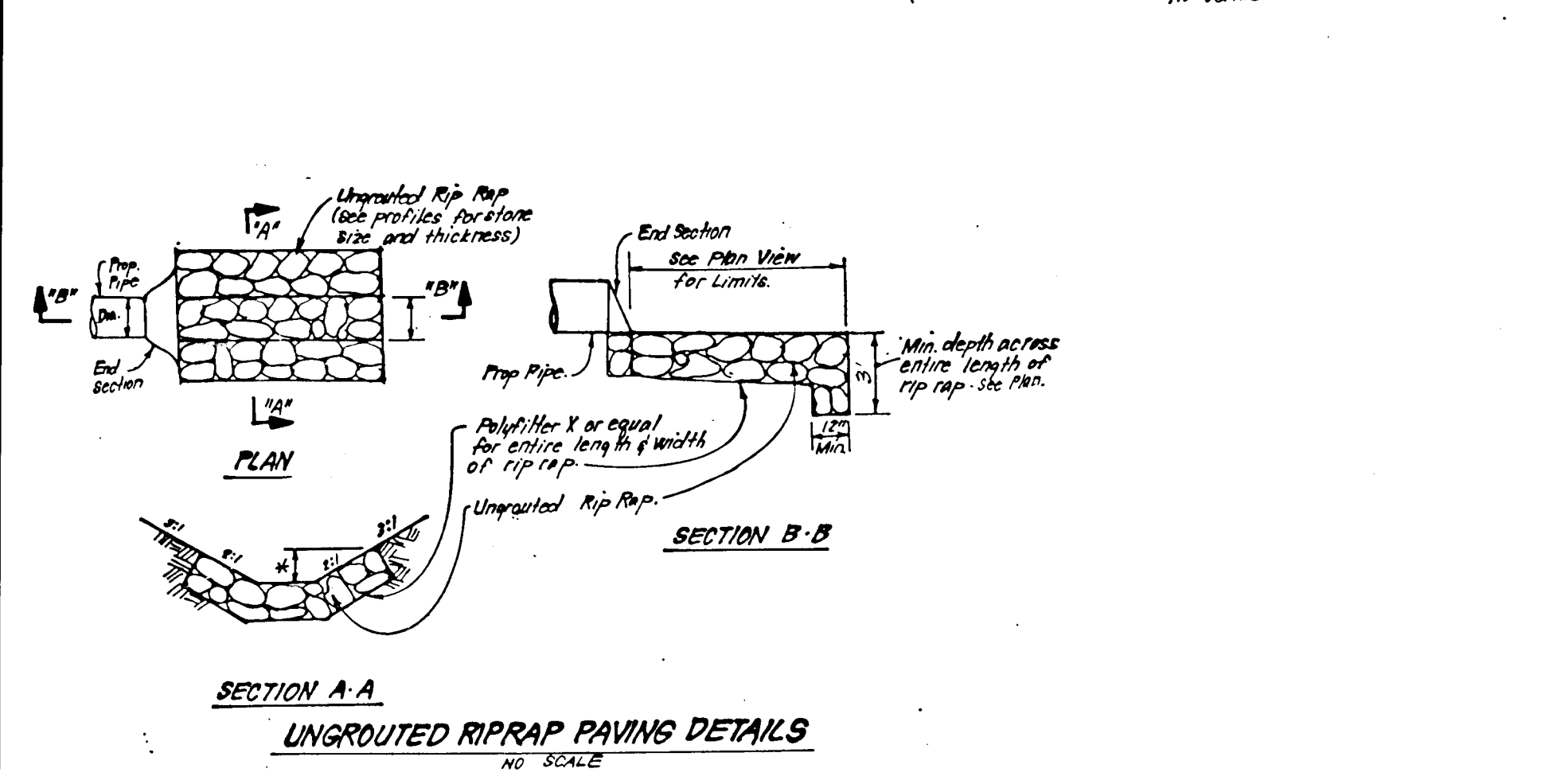
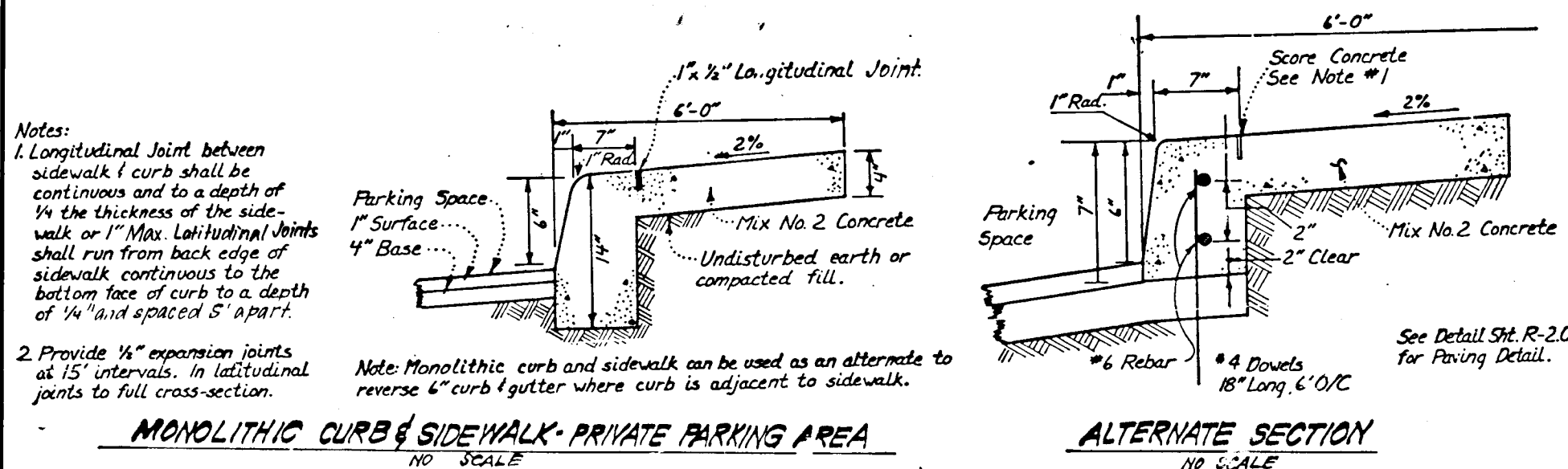
**PROFILE - OAK BUSH TERRACE**



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







NO	TYPE	INV. IN	INV. OUT	TOP ELEVATION		REMARKS	LOCATION
				UPPER	LOWER		
S-1	Conc. End Section	380.00	380.00	-	-	Howard Co. Std. SD 5.52 18"Ø	See Plan
I-2	A 10 Inlet	381.74	381.74	385.56	385.22	" " SD 4.02 W=2'6"	" "
I-3	A 10 Inlet	382.50	382.50	386.29	386.02	" " SD 4.02 W=2'6"	" "
S-4	Conc. End Section	361.45	361.45	-	-	SD 5.52 21"Ø	" "
M-5	Shallow Brick Manhole	372.61	372.61	378.50	378.50	G 5.05 48"sq	" "
I-6	A 10 Inlet	373.35	372.60	377.00	376.30	SD 4.02 W=2'6"	" "
M-7	Shallow Brick Manhole	374.95	374.77	378.57	378.47	G 5.05 48"sq	65th & 84th 180 ft
I-8	A 5 Inlet w/ Deflector	376.35	375.70	379.48	378.37	SD 4.02 W=3'0"	143 ft
I-9	A 10 Inlet w/ Deflector	379.40	379.40	386.00	385.65	SD 4.02 W=2'6"	Inlet #46 139 ft

SIZE	TYPE	LENGTH
15"	RCP CL II	477 LF
18"	RCP CL III	75 LF
21"	RCP CL IV	178 LF



Bituminous Conc. Surface	1 1/2"
Bituminous Conc. Base	2 1/2"
Prime	
8" Crusher Run Base (Placed in 2 Courses)	5"
4" Dense Graded Stabilized Aggregate Base Course	4"

Bituminous Conc. Surface	1"
Bituminous Conc. Base	2"
Prime	
5" Crusher Run Base Course	5"
4" Dense Graded Stabilized Aggregate Base Course	4"

DEVELOPER'S CERTIFICATE  
I/We certify that all development and construction will be done according to this plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Dept. of Natural Resources Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District or their authorized agents, as are deemed necessary.

Signature of Developer/Builder: *B. James Greenfield* Date: 4-5-88

Reviewed for: *Howard Co. S.C.D.*  
Name: *John J. Schmitt*  
Signature: *John J. Schmitt* Date: 10/21/88  
U.S. Soil Conservation Service  
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.  
Approved: *Stephen L. Schmitt* Date: 10/21/88

ENGINEER'S CERTIFICATE  
I hereby 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.  
Signature: *Jeffrey L. Schwab* Date: 4/8/88

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*Donald J. Seaman* 10/24/88  
Chief, Land Development Division  
*David W. Weiland* 10/25/88  
Chief, Bureau of Highways  
*John J. Schmitt* 10-26-88  
Chief, Bureau of Engineering  
APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING  
*Mark S. McCaughy* 11-21-88  
Chief, Division of Community Planning & Land Development

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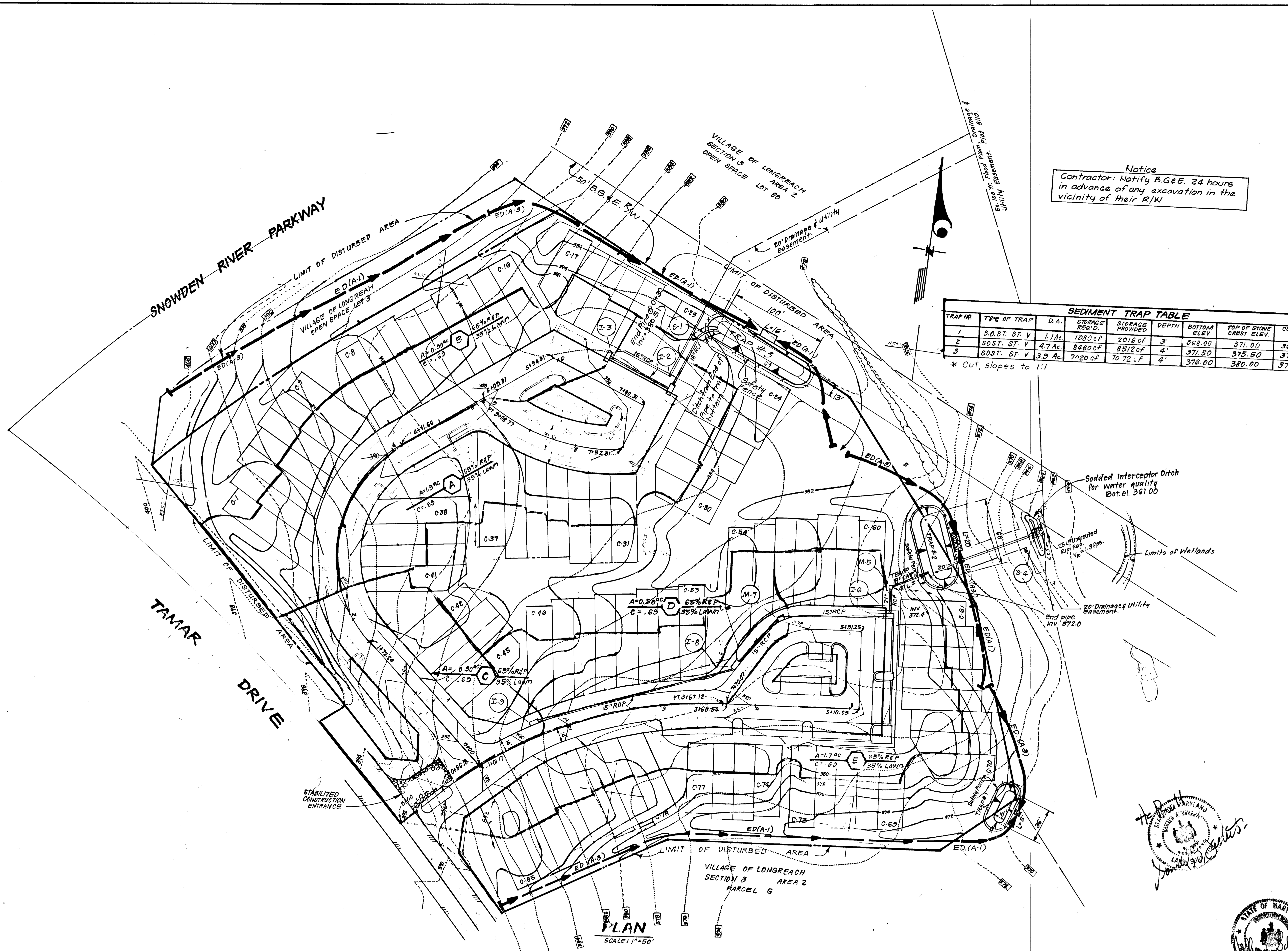
DESIGNED: D.A.B.  
DRAWN: D.A.B.  
CHECKED: D.A.B.  
DATE: 4-5-88

SCALE: AS SHOWN  
DRAWING: 3 OF 5  
JOB NO: 87.145  
FILE NO: 87.145-D

ROAD CONSTRUCTION PLANS  
DRAINAGE PROFILES AND PAVING DETAILS  
COLUMBIA VILLAGE OF LONGREACH SECTION 3 AREA 2 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
FOR: COLUMBIA BUILDERS, INC. 3 Latfront North, Suite 200 Columbia Md. 21044



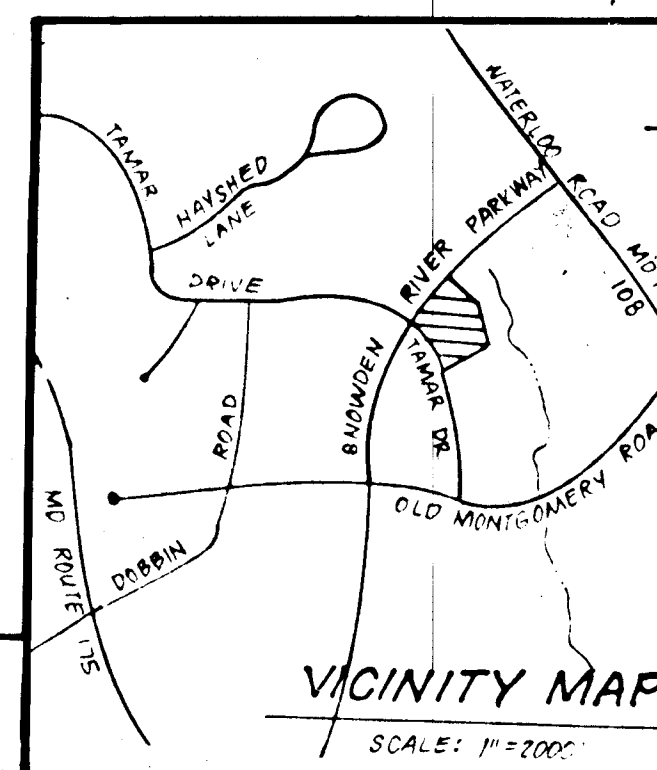
Date	Revision
2-16-89	Reduce pipe length to 75' between I2 & 9-1
	Reduce drainage & utility easement to 20'



Notice  
Contractor: Notify B.G.E. 24 hours in advance of any excavation in the vicinity of their R/W

TRAP NO.	TYPE OF TRAP	D.A.	STORAGE REQUIRED	STORAGE PROVIDED	DEPTH	BOTTOM ELEV.	TOP OF STONE CREST ELEV.	CLEANOUT ELEV.	BOTTOM DIMENSIONS
1	S.D. ST. ST. V.	1.1 Ac.	1280 cf	2016 cf	3'	368.00	371.00	369.50	36' x 10'
2	S.D. ST. ST. V.	4.7 Ac.	8460 cf	8512 cf	4'	371.50	375.50	373.50	68' x 20'
3	S.D. ST. ST. V.	3.9 Ac.	7220 cf	7072 cf	4'	378.00	380.00	378.00	100' x 13'

\* Cut, slopes to 1:1



PLAN  
SCALE: 1" = 50'

Reviewed for.....S.C.D.  
Name  
and meets Technical Requirements  
Signature Date 10/21/88  
U.S. Soil Conservation Service  
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.  
Approved 10/21/88  
Date

DEVELOPER'S CERTIFICATE  
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Signature of Developer/Builder  
Date 4-5-88

ENGINEER'S CERTIFICATE  
I hereby 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.  
Signature of Engineer  
Date 4/8/88

OWNER: Howard Research & Development Land Co.  
10275 Little Patuxent Parkway  
Columbia, Md. 21045

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
Chief, Land Development Division  
Date 10/24/88

Chief, Bureau of Highways  
Date 10/25/88

Chief, Bureau of Engineering  
Date 10/26/88

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING  
Chief, Division of Community Planning & Land Development  
Date 11-2-88

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DESIGNED DAB	ROAD CONSTRUCTION PLANS SEDIMENT & EROSION CONTROL PLAN AND DRAINAGE AREA MAP <b>COLUMBIA</b> VILLAGE OF LONGREACH SECTION 3 AREA 2 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND. FOR: COLUMBIA BUILDERS, INC. 3 LakeFront North Suite 200 Columbia, Md. 21044	SCALE As Shown
DRAWN K.W.		DRAWING 4 OF 5
CHECKED DAB		JOB NO 87 145
DATE 4-5-88		FILE NO 87-145-D



