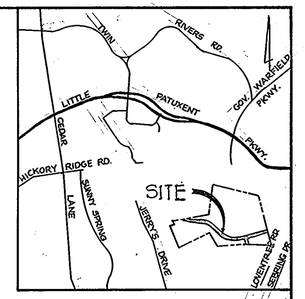
VILLAGE OF HICKORY RIDGE

SECTION 5 AREA 1

5TH. ELECTION DISTRICT

HOWARD COUNTY, MARYLAND



VICINITY MAP

SCALE: 1" = 2000'

BENCH MARKS

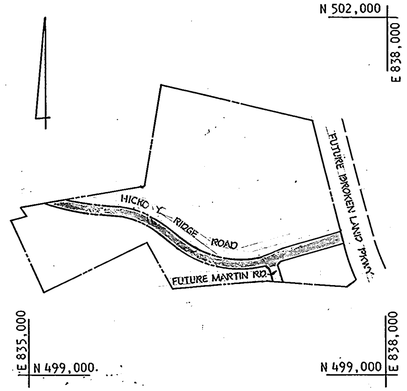
W.R.&A. B.M. #Z-12 ELEV. 350.65
R.R. SPIKE BASE 15" OAK @ TOP STREAM BANK 20'± PAST P.I. #Z-621

W.R.&A. B.M. #Z-13 ELEV. 340.93
R.R. SPIKE BASE 15" BEECH 10'± LEFT OF P.I. #Z-623

CONCRETE MONUMENT STA. 0+75 FUTURE MARTIN RD.
⊕40' LT. N 499902.97 ELEV. 384.68
E 837080.69

GENERAL NOTES

1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL VOLUME IV, *"STANDARD DETAILS AND SPECIFICATIONS FOR CONSTRUCTION"*.
2. APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
3. THE CONTRACTOR SHALL TEST PIT EXISTING UTILITIES, WHERE DIRECTED BY THE ENGINEER, A MINIMUM OF TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS.
4. CONTRACTOR TO NOTIFY *"MISS UTILITY"* PHONE (1) 539-0100 AT LEAST THREE (3) DAYS BEFORE STARTING WORK SHOWN ON THIS/THESE DRAWING(S).
5. INSTALLATION OF TRAFFIC CONTROL DEVICES, MARKING AND SIGNING SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES 1971 REVISED EDITION.
6. DESIGNED TRAFFIC SPEED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL VOLUME III STANDARDS. 40 MPH.
7. ALL ELEVATIONS SHOWN ARE BASED ON U.S.C.AND G.S. MEAN SEA LEVEL DATUM 1929.
8. ALL COORDINATES BASED ON MARYLAND STATE GRID SYSTEM.
9. PIPE SHALL NOT BE INSTALLED BY THE CONTRACTOR UNTIL THE LENGTH CALLED FOR AT EACH STATION HAS BEEN APPROVED BY THE ENGINEER IN THE FIELD.
10. BRICK BULKHEADS SHALL BE INSTALLED IN ALL STORM DRAIN STUBS.
11. CONTRACTOR TO RESTORE ALL EXISTING PAVING, SIDEWALKS OR LAWNS AFFECTED BY THE CONSTRUCTION SHOWN HEREON TO A CONDITION COMPARABLE TO THAT EXISTING PRIOR TO CONSTRUCTION.
12. REFER TO APPROVED GP 85-36, FOR SEDIMENT CONTROL DEVICES THAT ARE TO BE MAINTAINED DURING CONSTRUCTION OF THIS CONTRACT. SEE DRAWINGS 9, 10 AND 11 FOR ANY REVISIONS REQUIRED BY THIS WORK.
13. ALL STORM DRAIN BEDDING TO BE CLASS C EXCEPT WHERE OTHERWISE NOTED.
14. STORM WATER MANAGEMENT WILL BE PROVIDED BY A REGIONAL FACILITY TO BE CONSTRUCTED UNDER DEVELOPER AGREEMENT F-85-131.
15. 100 YEAR FLOODPLAIN ELEVATIONS ARE BASED ON THE VILLAGE OF HICKORY RIDGE REGIONAL STORM WATER MANAGEMENT REPORT PREPARED BY CENTURY ENGINEERING, INC.
16. STREET TREES (128 TOTAL)
THE LOCATION, TYPE AND NUMBER OF TREES SHOWN ON THIS PLAN ARE TENTATIVE AND ARE USED FOR BOND PURPOSES ONLY. THE FINAL LOCATION AND VARIETY OF TREES MAY VARY TO ACCOMMODATE FIELD CONDITIONS AND BUILDERS LANDSCAPE PROGRAM. BOND RELEASE IS CONTINGENT UPON SECTION 16.131 OF THE HOWARD COUNTY SUBDIVISION REGULATIONS, AS APPROVED BY THE OFFICE OF PLANNING AND ZONING.



PLAN

SCALE: 1" = 600'

NO.	DESCRIPTION
1	TITLE SHEET
2	TYPICAL SECTIONS AND MISCELLANEOUS DETAILS
3	PLAN AND PROFILE - STA. 35+80.85 TO STA. 46+81.92
4	PLAN AND PROFILE - STA. 46+81.92 TO STA. 57+00
5	PLAN AND PROFILE - STA. 57+00 TO STA. 62+30
6	STORM DRAIN PROFILES
7	STORM DRAIN PROFILES
8	DRAINAGE AREA MAP
9	GRADING AND SEDIMENT CONTROL PLAN
10	GRADING AND SEDIMENT CONTROL PLAN
11	SEDIMENT CONTROL NOTES AND DETAIL

As-Built Survey 9/12/86

AS-BUILD SURVEY CERTIFIED BY GREGORY R. KLAR REG-P.E. NO.11432 ON FEB.7,1985

2-7-85
Date

Gregory R. Klar
Professional Engr. No. 11432

DEPARTMENT OF PUBLIC WORKS
CHIEF, BUREAU OF ENGINEERING — DATE 5/14/85

DEPARTMENT OF PLANNING AND ZONING
CHIEF, DIV. OF LAND DEVELOP. & ZONING ADM. — DATE 5-9-85

Date	No	Revision Description
7-15-85	1	Add Sidewalk per 7/11/85 Tom Harris Letter

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

CENTURY ENGINEERING, INC.
CONSULTING ENGINEERS • PLANNERS
TOWSON, MARYLAND 21204

AREA: VILLAGE OF HICKORY RIDGE
SECTION 5 AREA 1
5TH ELECTION DISTRICT, HOWARD CO., MD.

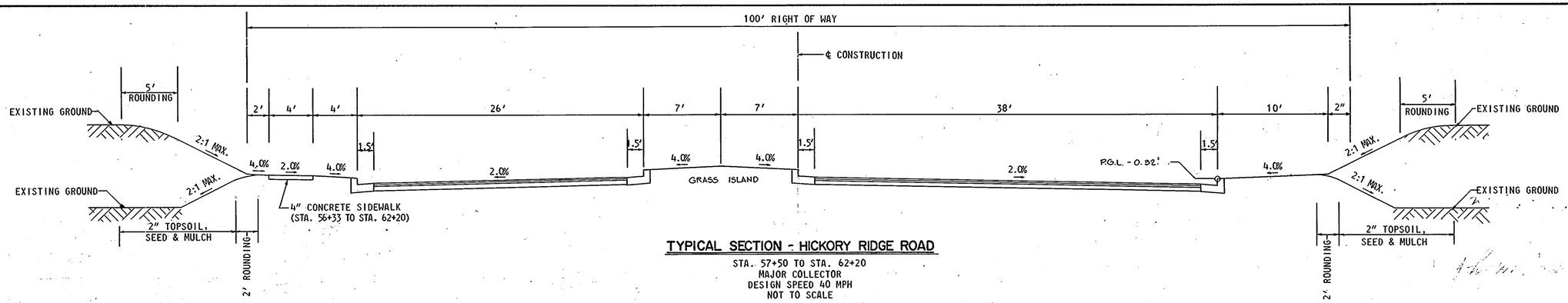
TITLE: TITLE SHEET

Des By	Scale AS SHOWN	Proj No 84-1342
Drn By A.E.B.	Date 6 FEB 85	Drawing No. 1 OF 11
Chk By	Approved	

AS-BUILT

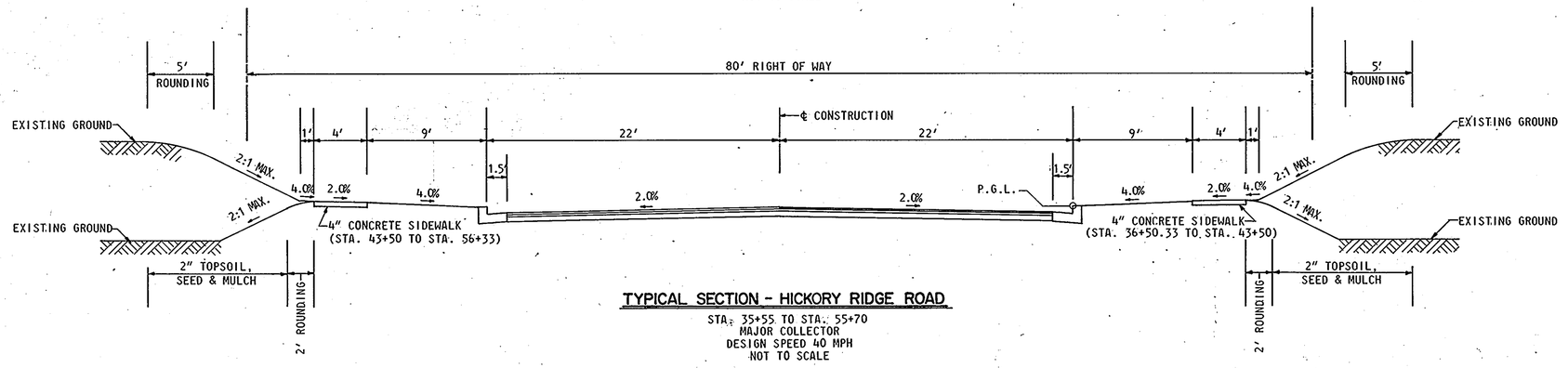
F-85-101

#42



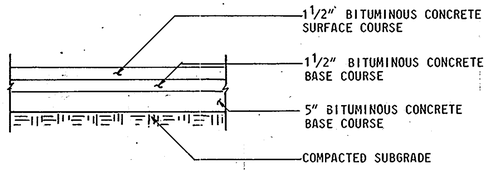
TYPICAL SECTION - HICKORY RIDGE ROAD

STA. 57+50 TO STA. 62+20
MAJOR COLLECTOR
DESIGN SPEED 40 MPH
NOT TO SCALE



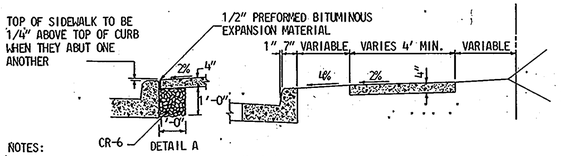
TYPICAL SECTION - HICKORY RIDGE ROAD

STA. 35+55 TO STA. 55+70
MAJOR COLLECTOR
DESIGN SPEED 40 MPH
NOT TO SCALE



TYPICAL PAVING SECTION

HOWARD CO. STANDARD R-2.01 P-3
NOT TO SCALE

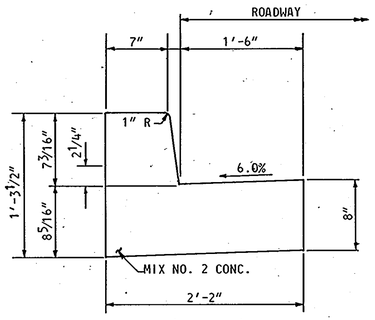


NOTES:

1. SIDEWALK TO BE SCRIBED IN 5' MAXIMUM SQUARES.
2. EXPANSION JOINTS ACROSS THE SIDEWALK NOT TO BE MORE THAN 15' APART.
3. 1/2" PREFORMED BITUMINOUS EXPANSION MATERIAL IN EXPANSION JOINTS TO BE KEPT 1/4" BELOW SURFACE OF SIDEWALK.
4. CONCRETE TO BE MIX NO. 2.
5. WHEN SIDEWALK ABUTS CURB, WALK SHALL BE 1/4" ABOVE CURB WITH 1/2" PREFORMED BITUMINOUS EXPANSION MATERIAL. BETWEEN SIDEWALK AND CURB AND RESTING ON A COMPACTED CRUSHED STONE BASE. SEE DETAIL A THIS SHEET.
6. ON LONGITUDINAL SIDEWALK GRADES OF 5% OR GREATER, A CONCRETE HEADER, 6" THICK AND 6" DEEP BELOW THE NORMAL 4" SIDEWALK THICKNESS SHALL BE CONSTRUCTED FOR THE FULL WIDTH OF THE SIDEWALK AT INTERVALS OF 48 FEET. THE HEADERS SHALL BE PLACED AT EXPANSION JOINT LOCATIONS AND SHALL BE MONOLITHIC WITH THE SIDEWALK.

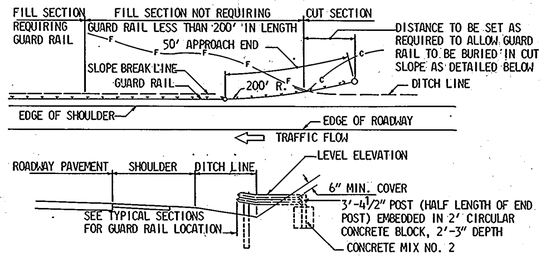
CONCRETE SIDEWALK DETAIL

HOWARD CO. STANDARD R-3.05
NOT TO SCALE



7" COMBINATION CURB & GUTTER

HOWARD CO. STANDARD R-3.01
NOT TO SCALE



GUARD RAIL WITH BEAM END TREATMENT CUT TO FILL

HOWARD CO. STANDARD R-7.05
NOT TO SCALE

NOTES:

1. APPROACH END IS SHOWN. TRAIL END ARRANGEMENT TO BE SIMILAR.
2. APPROACH END TO BE FLARED AT NORMAL ELEVATION FROM SHOULDER TO DITCH LINE AND EXTENDED AT LEVEL ELEVATION INTO CUT BACKSLOPE AND ANCHORED WITH POST AND CONCRETE BLOCK TO END GUARD RAIL. THE CONTRACTOR SHALL ADJUST THE PLACEMENT OF POSTS WHERE NECESSARY TO AVOID POSTS BEING INSTALLED IN THE CENTER OF THE DITCH.
3. THE COST OF THE CONCRETE BLOCK TO BE INCIDENTAL TO THE ITEM - GUARD RAIL W/BEAM.

2-7-85
Date

STATE OF MARYLAND — GREGORY R. KUN — No. 11432 — PROFESSIONAL ENGINEER

Professional Engr. No. 11432

DEPARTMENT OF PUBLIC WORKS

CHIEF, BUREAU OF ENGINEERING — DATE 5-14-85

DEPARTMENT OF PLANNING AND ZONING

CHIEF, DIV. OF LAND DEVEL. AND ZONING ADM. — DATE 5-9-85

Date	No	Revision Description

OWNER AND DEVELOPER

THE HOWARD RESEARCH AND DEVELOPMENT CORP.
THE ROUSE COMPANY
COLUMBIA, MARYLAND

CENTURY ENGINEERING, INC.
CONSULTING ENGINEERS • PLANNERS
TOWSON, MARYLAND 21204

AREA: VILLAGE OF HICKORY RIDGE
SECTION 5 AREA 1
5TH ELECTION DISTRICT, HOWARD CO., MD.

TITLE: TYPICAL SECTIONS AND MISCELLANEOUS DETAILS

Des By	A.E.B.	Scale	AS SHOWN	Proj No	84-1342
Drn By	A.E.B.	Date	6 FEB 85	Drawing No.	2 OF 11
Chk By	G.R.K.	Approved			

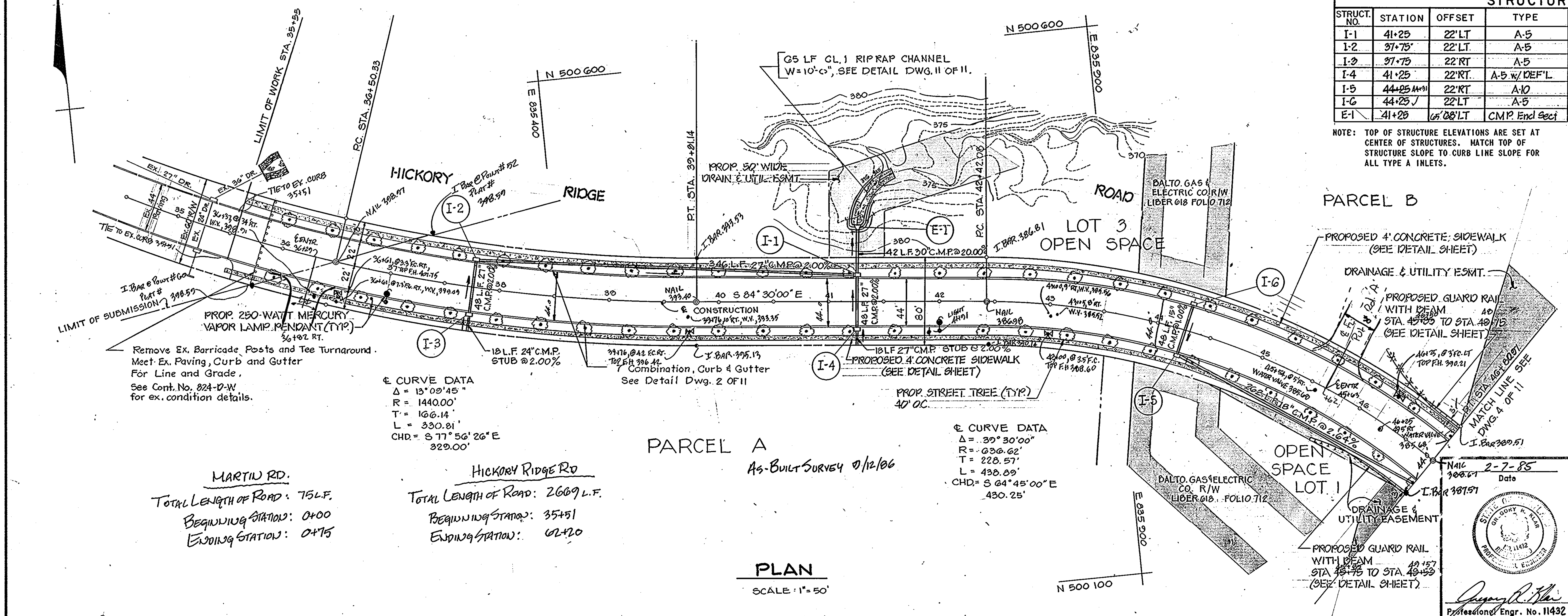
#42

AS-BUILT

F-85-101

STRUCTURE SCHEDULE					
STRUCT. NO.	STATION	OFFSET	TYPE	TOP ELEVATION	REMARKS
I-1	41+25	22' LT	A-5	339.94 ~~390.05~~	S.D.-4.01
I-2	37+75	22' LT	A-5	397.14 ~~397.20~~	S.D.-4.01
I-3	37+75	22' RT	A-5	397.00 ~~397.20~~	S.D.-4.01
I-4	41+25	22' RT.	A-5 w/ DEF'L	389.98 ~~390.05~~	S.D.-4.01
I-5	~~44+25~~ 44+31	22' RT	A-10	384.61 ~~384.72~~	S.D.-4.02
I-6	44+25	22' LT	A-5	384.70 ~~384.72~~	S.D.-4.01
E-1	41+25	65.08' LT	CMP End Sect	378.34	S.D.-5.61

NOTE: TOP OF STRUCTURE ELEVATIONS ARE SET AT CENTER OF STRUCTURES. MATCH TOP OF STRUCTURE SLOPE TO CURB LINE SLOPE FOR ALL TYPE A INLETS.



HICKORY RIDGE ROAD
PARCEL A
PARCEL B
LOT 3 OPEN SPACE
OPEN SPACE LOT 1
LIMIT OF SUBMISSION
LIMIT OF WORK STA. 35+55
P.C. STA. 36+50.33
P.T. STA. 39+81.14
P.C. STA. 42+08
N 500 600
N 500 100
PROP. 50' WIDE DRAIN. & UTIL. ESMT.
65 LF CL. 1 RIP RAP CHANNEL W=10'-0", SEE DETAIL DWG. 11 OF 11.
346 L.F. 27" C.M.P. @ 2.00%
42 L.F. 30" C.M.P. @ 20.00%
S 84°30'00" E
℄ CONSTRUCTION
PROP. 250-WATT MERCURY VAPOR LAMP PENDANT (TYP.)
Remove Ex. Barricade Posts and Tee Turnaround. Meet Ex. Paving, Curb and Gutter For Line and Grade. See Cont. No. 824-D-W for ex. condition details.
18 L.F. 24" C.M.P. STUB @ 2.00%
Combination Curb & Gutter See Detail Dwg. 2 OF 11
18 LF 27" C.M.P. STUB @ 2.00%
PROPOSED 4' CONCRETE SIDEWALK (SEE DETAIL SHEET)
PROP. STREET TREE (TYP.) 40' O.C.
PROPOSED 4' CONCRETE SIDEWALK (SEE DETAIL SHEET)
DRAINAGE & UTILITY ESMT.
PROPOSED GUARD RAIL WITH BEAM STA. 45+55 TO STA. 46+75 (SEE DETAIL SHEET)
PROPOSED GUARD RAIL WITH BEAM STA. 45+75 TO STA. 46+57 (SEE DETAIL SHEET)
DRAINAGE & UTILITY EASEMENT
BALTO. GAS & ELECTRIC CO. R/W LIBER 618 FOLIO 712
MATCH LINE SEE DWG. 4 OF 11
℄ CURVE DATA
Δ = 13°09'45"
R = 1440.00'
T = 166.14'
L = 330.81'
CHD. = S 77°56'26" E 329.00'
℄ CURVE DATA
Δ = 39°30'00"
R = 636.62'
T = 228.57'
L = 438.89'
CHD. = S 64°45'00" E 430.25'
As-Built Survey 8/12/86
MARTIN RD.
Total Length of Road: 75 L.F.
Beginning Station: 0+00
Ending Station: 0+75
HICKORY RIDGE RD
Total Length of Road: 2669 L.F.
Beginning Station: 35+51
Ending Station: 62+20
PLAN
SCALE: 1" = 50'

LIMIT OF SUBMISSION
EXISTING HICKORY RIDGE ROAD, SEE CONT. NO. 824-D-W
EX. -1.50% P.G.L.
MEET EXISTING CURB & GUTTER ELEV. 400.11
STA. 35+80.85
P.V.I. STA. 39+34.23
ELEV. = 394.81
V.C. = 120'
CORR. = -0.15'
S.S.D. = 760'
P.V.C. STA. 38+74.23 ELEV. 395.71
P.V.C. STA. 39+94.23 ELEV. 393.31
-1.50%
-2.50%
Existing Ground @ ℄
PROFILE GRADE LINE
Existing Ground 70' Left ℄ Construction
Existing Ground 70' Right ℄ Construction
P.V.I. STA. 44+75
ELEV. = 381.29
V.C. = 450'
CORR. = +3.61
H.S.D. = 330'
P.V.C. STA. 42+50 ELEV. 386.92
SUMP STA. 44+25.23 ELEV. 384.72
MATCH LINE SEE DWG. 4 OF 11
P.V.T. STA. 47+00 ELEV. 390.11
STA. 46+81.92
-2.50%
+3.92%
P.G.L. ELEV. N & S TOP OF CURB
LIMIT OF WORK STA. 35+55
410
400
390
380
370
35
36
37
38
39
40
41
42
43
44
45
46
47
HICKORY RIDGE ROAD - PROFILE
SCALE: HOR. 1" = 50' VERT. 1" = 5'

AS-BUILD SURVEY CERTIFIED BY GREGORY R. KLAR REG-P.E. NO. 11432 on FEB. 7, 1985

DEPARTMENT OF PUBLIC WORKS

5/14/85

CHIEF, BUREAU OF ENGINEERING DATE

DEPARTMENT OF PLANNING AND ZONING

5-9-85

CHIEF, DIV. OF LAND DEVEL. AND ZONING ADM. DATE

Date	No	Revision Description
7-16-85	1	Add Sidewalk per 7/11/85 Tom Harris Letter

Owner and Developer
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
THE ROUSE COMPANY
Columbia, Maryland 21044

2-7-85
Date

Professional Engr. No. 11432

CENTURY ENGINEERING, INC.
CONSULTING ENGINEERS – PLANNERS
TOWSON, MARYLAND 21204

AREA VILLAGE OF HICKORY RIDGE
SECTION 5 AREA 1
5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

TITLE HICKORY RIDGE ROAD
PLAN AND PROFILE

Des By G.B.Z.	Scale AS SHOWN	Proj No 84-1342
Drn By G.B.Z.	Date 2-6-85	
Chk By G.R.K.	Approved	

PLAN	
NOTE BOOK	SURVEYED
	PLOTTED
	ALIGNMENT CHECKED
NO.	RT. OF WAY CHECKED

PROFILE	
NOTE BOOK	SURVEYED
	PLOTTED
	GRADES CHECKED
	B.M.s NOTED
NO.	STRUCTURE NOTATIONS CHKD

#42

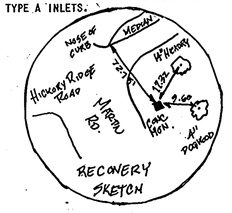
Drawing No. 3 OF 11

AS-BUILT

F-85-101

STRUCTURE SCHEDULE					
STRUCT. NO.	STATION	OFFSET	TYPE	TOP ELEVATION	REMARKS
I-7	47+75	22' LT.	A-5 w/DEF'L.	~~393.05~~ 390.50	S.D.-4.01
I-8	47+75	22' RT.	A-5	~~393.05~~ 390.50	S.D.-4.01
I-11	55+40	22' RT.	A-5 w/DEF'L.	~~392.78~~ 390.23	S.D.-4.01
I-12	55+40	22' LT.	A-5 w/DEF'L.	~~392.78~~ 390.23	S.D.-4.01
E-3	47+02.6	90' LT.	C.M.P. End Sect.	370.50	S.D.-5.61
E-4	46+90.7	68' RT.	C.M.P. End Sect.	377.10	S.D.-5.61
MH-1	46+88.3	257 LT	BRICK MH	390.15	G-5.02

NOTE: TOP OF STRUCTURE ELEVATIONS ARE SET AT CENTER OF STRUCTURES. MATCH TOP OF STRUCTURE SLOPE TO CURB LINE SLOPE FOR ALL TYPE A INLETS.



DEPARTMENT OF PUBLIC WORKS

CHIEF, BUREAU OF ENGINEERING — DATE 5-14-85

DEPARTMENT OF PLANNING AND ZONING

CHIEF, DIV. OF LAND DEVEL. AND ZONING ADM. — DATE 5-9-85

Date	No	Revision Description
7/15/85	1	Add Sidewalk per 7/12/85 Tom Harris letter

Owner and Developer

THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
THE ROUSE COMPANY
Columbia, Maryland 21044

CENTURY ENGINEERING, INC.
CONSULTING ENGINEERS · PLANNERS
TOWSON, MARYLAND 21204

2-7-85
Date

STATE OF MARYLAND — GREGORY R. KLAR — REG. PROFESSIONAL ENGINEER

Gregory R. Klar
Professional Engr. No. 11432

AREA: VILLAGE OF HICKORY RIDGE
SECTION 5 AREA 1
5TH ELECTION DISTRICT HOWARD CO., MD.

TITLE: HICKORY RIDGE ROAD
PLAN AND PROFILE

Des By G.B.Z.	Scale AS SHOWN	Proj No 84-1342	
Drn By G.B.Z.	Date 6 FEB 85		
Chk By G.R.K.	Approved		

Drawing No. 4 OF 11

PLAN: SURVEYED, PLOTTED, DESIGNED, ALIGNMENT CHECKED, NOTE BOOK, NO., RT. OF WAY CHECKED, BY, DATE

PROFILE: SURVEYED, PLOTTED, DESIGNED, CHECKED, NOTE BOOK, NO., B.M.'s NOTED, STRUCTURE NOTATNS CHKD, BY, DATE

BRUNING 44-132 28586

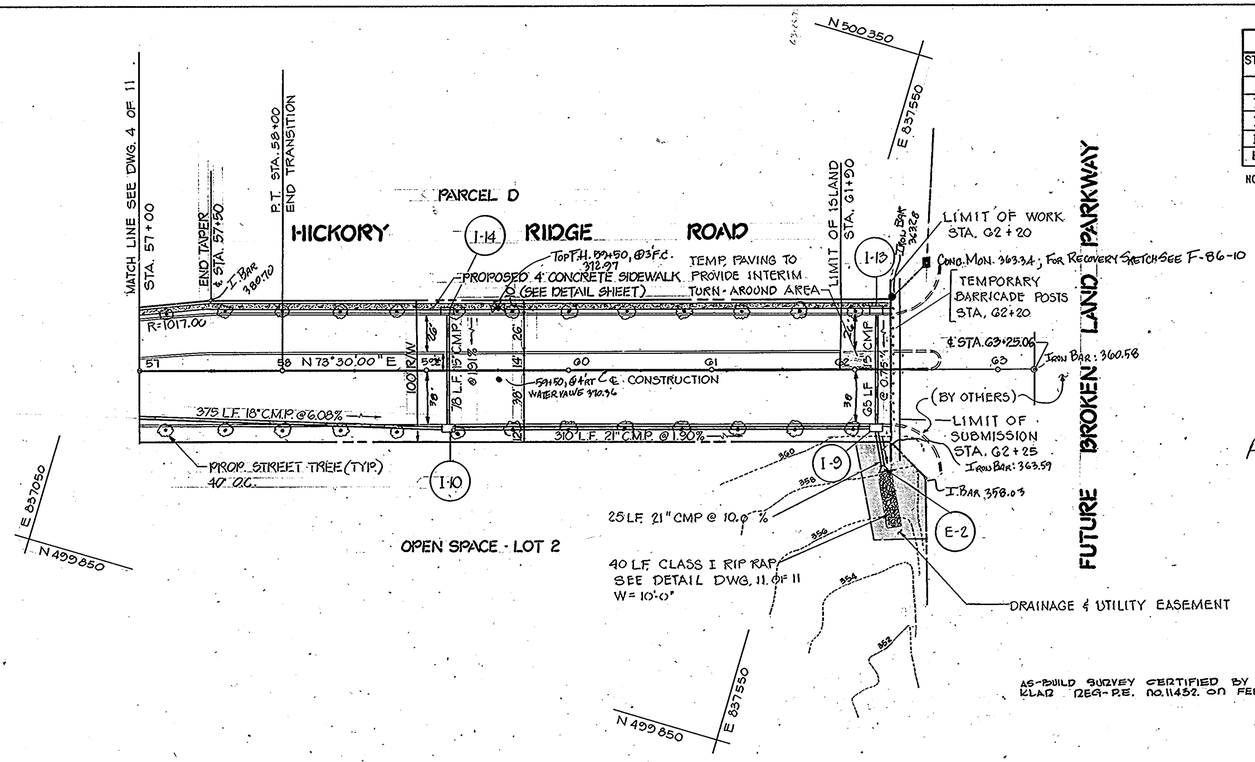
#42

AS-BUILT

F-85-101

STRUCTURE SCHEDULE					
STRUCT. NO.	STATION	OFFSET	TYPE	TOP ELEVATION	REMARKS
I-9	62+15	38' RT.	A-5 w/ DEF'L.	~~364.22~~ 364.84	S.D.-4.01
I-10	59+15	38' RT.	A-10	~~371.72~~ 371.93	S.D.-4.02
I-13	62+15	40' LT.	A-5 w/ DEF'L.	~~364.22~~ 364.41	S.D.-4.01
I-14	59+15	40' LT.	A-5 w/ DEF'L.	~~371.72~~ 371.87	S.D.-4.01
E-2	62+19.5	69.88' RT.	CMP. End Sect.	358.07	STD-5.61

NOTE: TOP OF STRUCTURE ELEVATIONS ARE SET AT CENTER OF STRUCTURES. MATCH TOP OF STRUCTURE SLOPE TO CURB LINE SLOPE FOR ALL TYPE A INLETS.



As-Built Survey 9/12/86

As-Built Survey certified by Gregory R. Klar Reg. P.E. No. 11432 on Feb. 7, 1985

2-7-85
Date

STATE OF MARYLAND GREGORY R. KLAR NO. 11432 REGISTERED PROFESSIONAL ENGINEER

Professional Engr. No. 11432

DEPARTMENT OF PUBLIC WORKS

CHIEF, BUREAU OF ENGINEERING — DATE 6/10/85

DEPARTMENT OF PLANNING AND ZONING

CHIEF, DIV. OF LAND DEVEL. AND ZONING ADM. — DATE 5-9-85

Date	No	Revision Description

Owner and Developer

THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
THE ROUSE COMPANY
Columbia, Maryland 21044

CENTURY ENGINEERING, INC.
CONSULTING ENGINEERS · PLANNERS
TOWSON, MARYLAND 21204

AREA: VILLAGE OF HICKORY RIDGE SECTION 5 AREA 1 5TH ELECTION DISTRICT HOWARD CO., MD.

TITLE: HICKORY RIDGE ROAD PLAN AND PROFILE

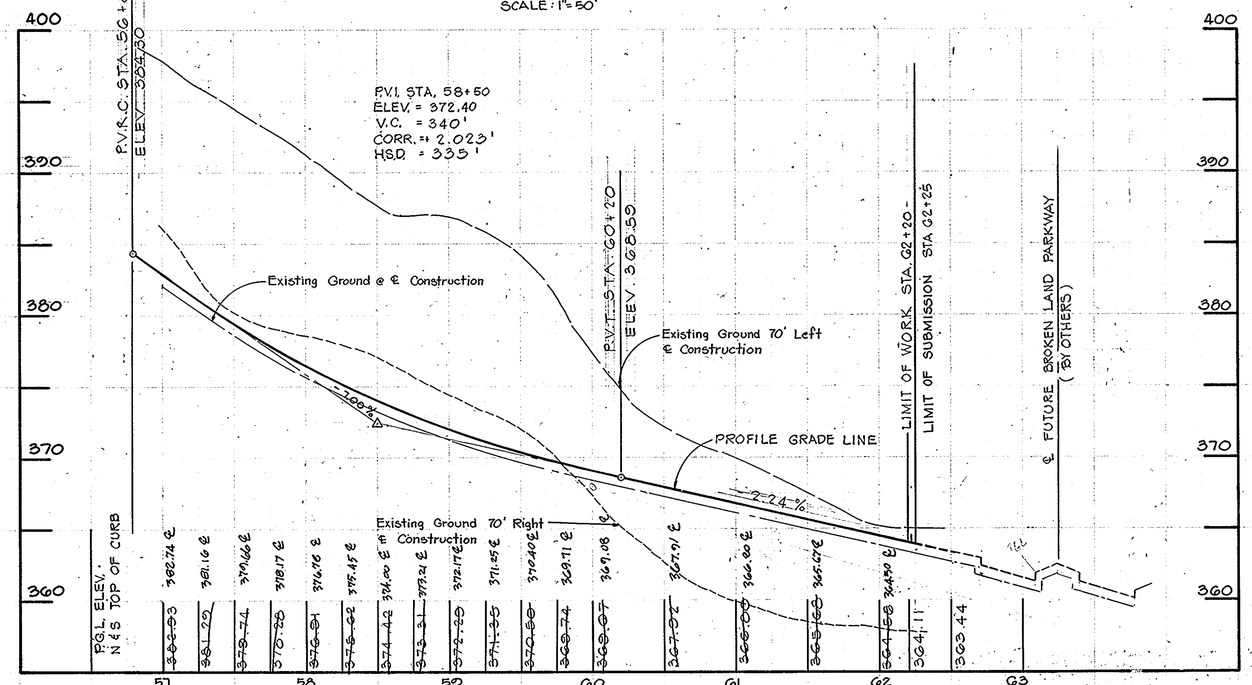
Des By G.B.Z.	Scale AS SHOWN	Proj No 84-1342	
Drn By G.B.Z.	Date 2-5-85		
Chk By G.R.K.	Approved		

PLAN — SURVEYED, PLOTTED, DESIGN CHECKED, ALIGNMENT CHECKED, RT. OF WAY CHECKED, NOTE BOOK NO.: — BY — DATE

PROFILE — SURVEYED, PLOTTED, DESIGN CHECKED, S.M.H. NOTED, STRUCTURE NOTATIVIS CHKD — BY — DATE

PLAN

SCALE: 1" = 50'



HICKORY RIDGE ROAD - PROFILE

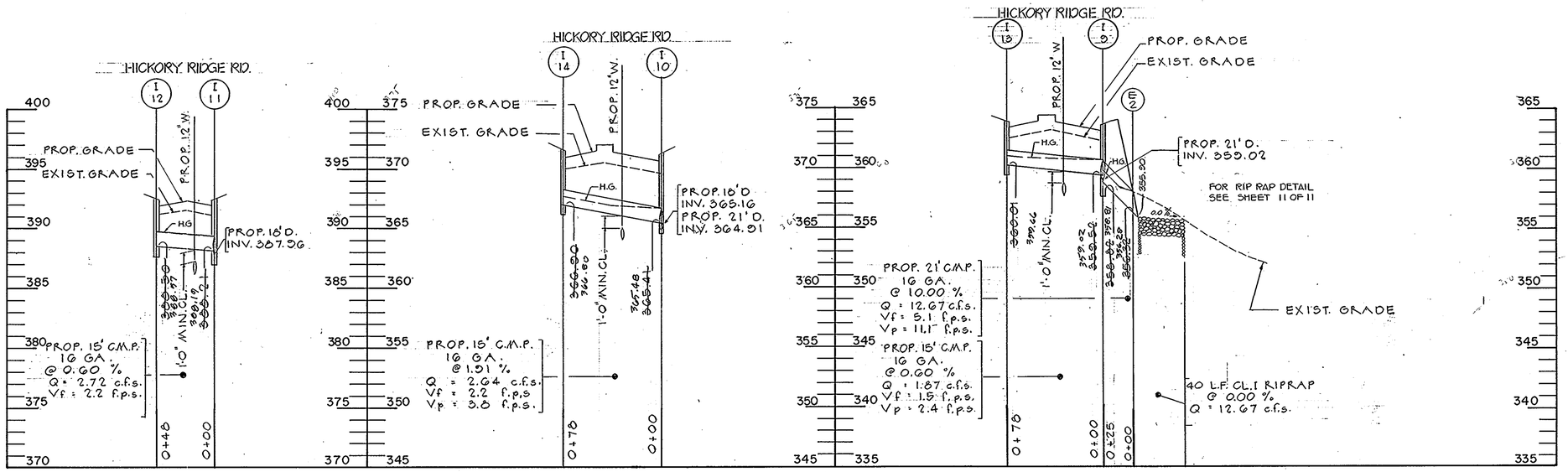
SCALE: HOR. 1" = 50'
VERT. 1" = 5'

Drawing No. 5 OF 11

#42

BRUNING 44-132 28586

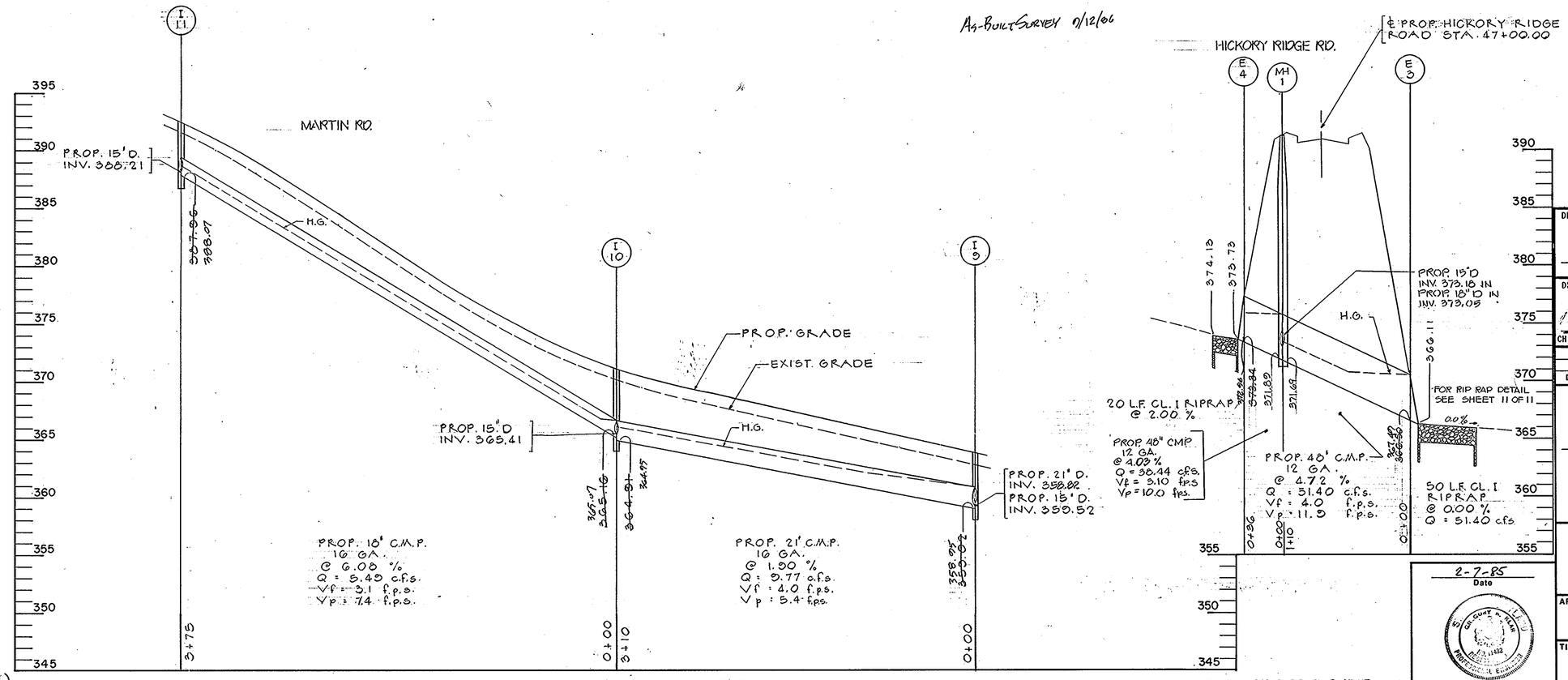
As-Built F-85-101



STORM DRAIN PROFILES

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

As-Built Survey 11/12/86



STORM DRAIN PROFILES

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

AS-BUILT SURVEY CERTIFIED BY GREGORY R. KLAR DEG-P.E. No. 11432 on FEB. 7, 1985

2-7-85
Date

Professional Engr. No. 11432

DEPARTMENT OF PUBLIC WORKS

5/14/85
CHIEF, BUREAU OF ENGINEERING — DATE

DEPARTMENT OF PLANNING AND ZONING

5-9-85
CHIEF, DIV. OF LAND DEVEL. AND ZONING ADM. — DATE

Date	No	Revision Description

OWNER AND DEVELOPER

THE HOWARD RESEARCH AND DEVELOPMENT CORP.
THE ROUSE COMPANY
COLUMBIA, MARYLAND

CENTURY ENGINEERING, INC.
CONSULTING ENGINEERS • PLANNERS
TOWSON, MARYLAND 21204

AREA: VILLAGE OF HICKORY RIDGE
SECTION 5 AREA 1
5TH ELECTION DISTRICT, HOWARD CO., MD.

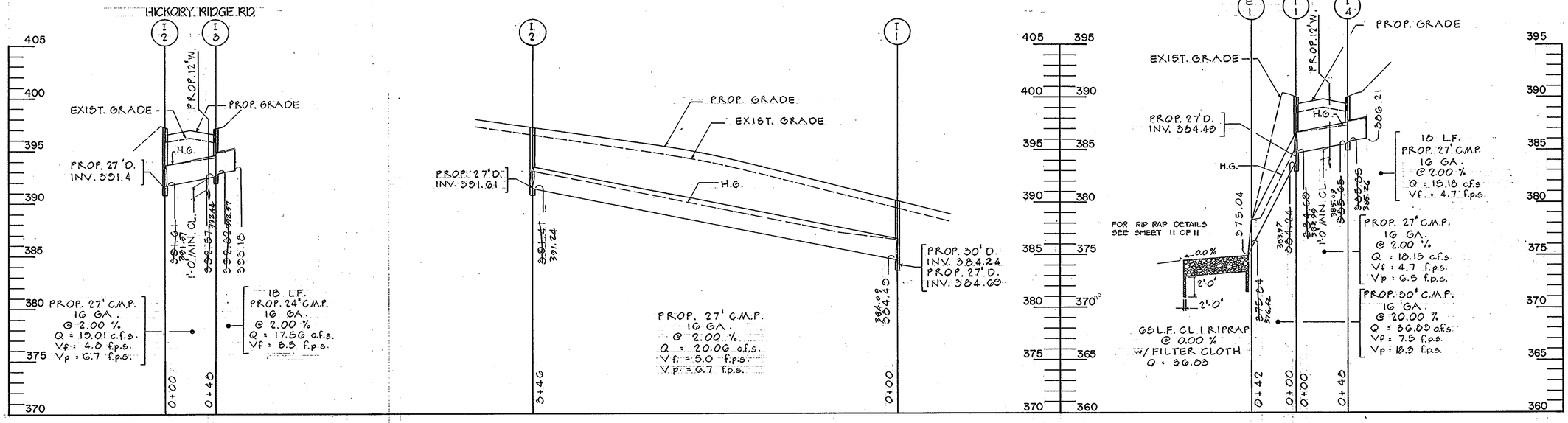
TITLE: STORM DRAIN PROFILES

Des By	A.E.B.	Scale	AS SHOWN	Proj No	84-1342
Drn By	A.E.B.	Date	6 FEB 85	Drawing No.	6 OF 11
Chk By	G.R.K.	Approved			

AS-BUILT

F-85-101

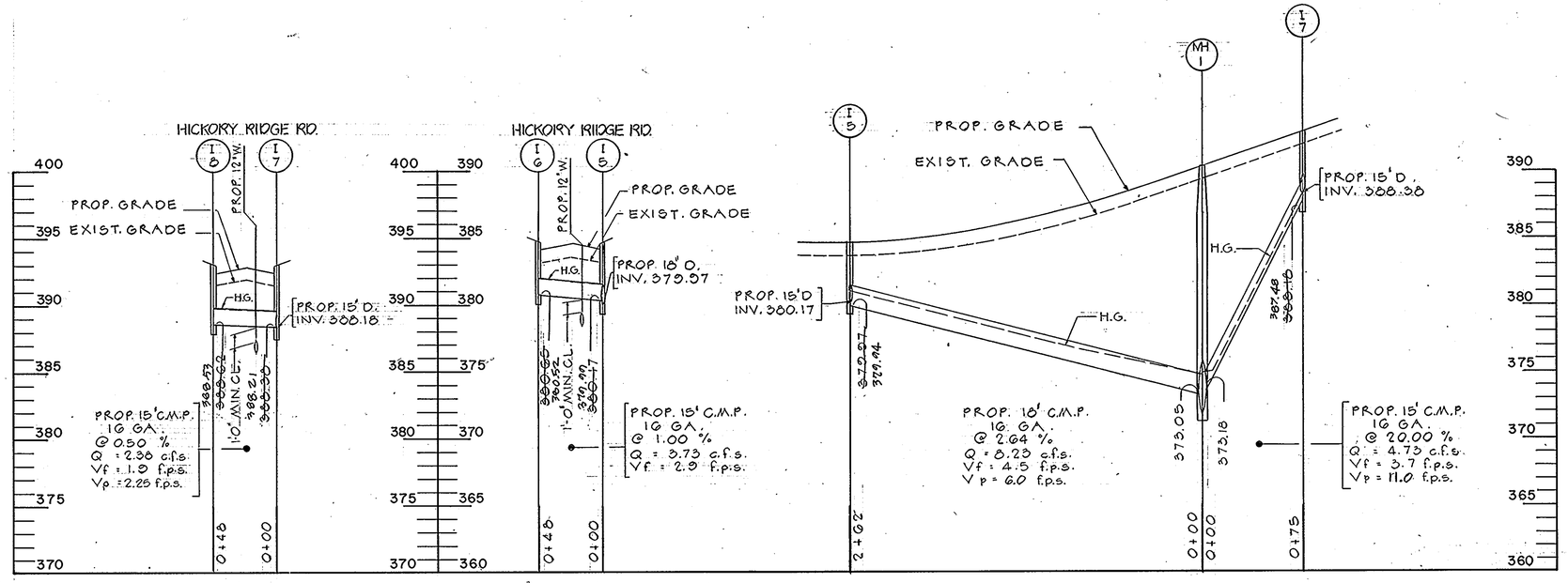
#42



STORM DRAIN PROFILES

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

AS-BUILT SURVEY 3/12/86



STORM DRAIN PROFILES

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

AS-BUILD SURVEY CERTIFIED BY GREGORY R. KLAR REG-P.E. NO. 11432 ON FEB. 7, 1985

2-7-85
Date

STATE OF MARYLAND GREGORY R. KLAR NO. 11432 REGISTERED PROFESSIONAL ENGINEER

Professional Engr. No. 11432

AS-BUILT

DEPARTMENT OF PUBLIC WORKS

CHIEF, BUREAU OF ENGINEERING — DATE 5/14/85

DEPARTMENT OF PLANNING AND ZONING

CHIEF, DIV. OF LAND DEVEL. AND ZONING ADM. — DATE 5-9-85

Date	No	Revision Description

OWNER AND DEVELOPER

THE HOWARD RESEARCH AND DEVELOPMENT CORP.
THE ROUSE COMPANY
COLUMBIA, MARYLAND

CENTURY ENGINEERING, INC.
CONSULTING ENGINEERS • PLANNERS
TOWSON, MARYLAND 21204

AREA: VILLAGE OF HICKORY RIDGE
SECTION 5 AREA 1
5TH ELECTION DISTRICT. HOWARD CO., MD.

TITLE: STORM DRAIN PROFILES

Des By	A.E.B.	Scale	AS SHOWN	Proj No	84-1342
Drn By	A.E.B.	Date	6 FEB 85	Drawing No.	7 OF 11
Chk By	G.R.K.	Approved			

F-85-101

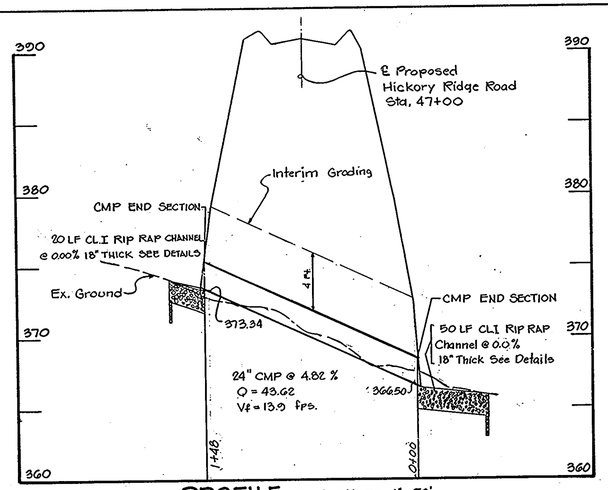
#42

#42

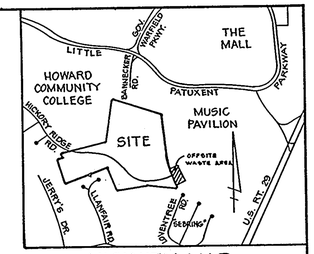
AS BUILT F-85-101

SEDIMENT CONTROL STRUCTURE SCHEDULE

TRAP NO.	TRAP	TRAP DEPTH	DRAINAGE AREA	DISTURBED AREA	VOLUME (cf) REQ'D.	VOLUME (cf) PROV.	BOTTOM DIMENSION	BOTTOM ELEVATION	CLEANOUT ELEVATION	CREST ELEV.
1	S.O.S.T.	2.00'	3.88 AC.	2.01 AC.	3636	4000	50'x40'	382.0	383.0	385.0
2	S.O.S.T.	3.06'	1.01 AC.	1.01 AC.	1818	1836	40'x 15'	371.0	372.5	375.0
3	S.O.S.T.	3.06'	1.01 AC.	1.01 AC.	1818	1875	125'x 5'	375.0	376.5	378.0
4	S.O.S.T.	3.00'	0.41 AC.	0.41 AC.	738	750	25'x10'	366.0	367.5	370.0
5	S.O.S.T.	2.60'	0.42 AC.	0.42 AC.	756	780	30'x10'	371.4	372.7	375.0



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

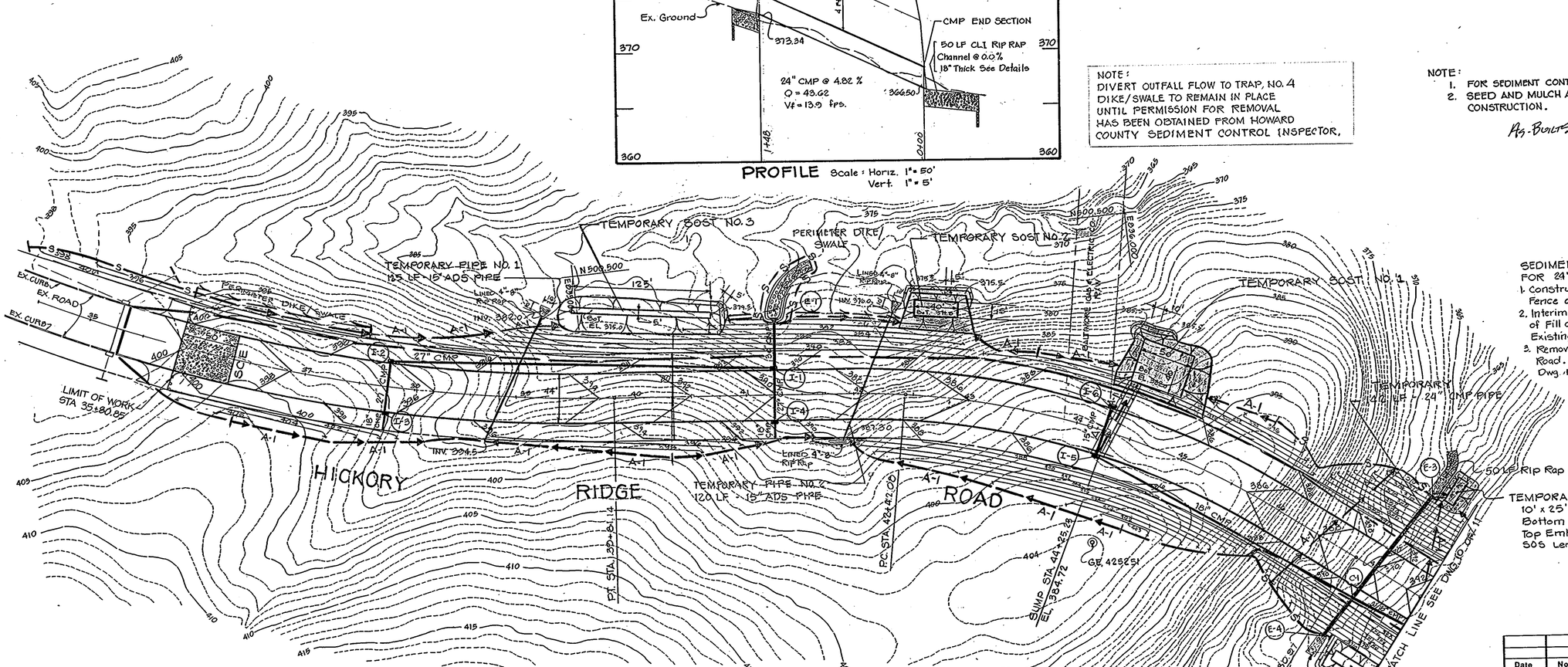


VICINITY MAP
SCALE : 1" = 2000'

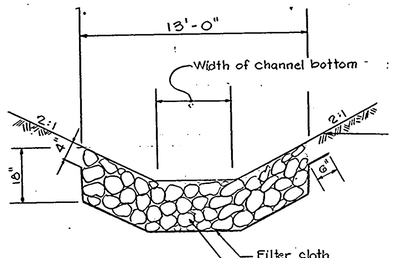
NOTE :
DIVERT OUTFALL FLOW TO TRAP, NO. 4
DIKE/SWALE TO REMAIN IN PLACE
UNTIL PERMISSION FOR REMOVAL
HAS BEEN OBTAINED FROM HOWARD
COUNTY SEDIMENT CONTROL INSPECTOR.

NOTE :
1. FOR SEDIMENT CONTROL DETAILS SEE DWG. 11 OF 11 .
2. SEED AND MULCH ALL SLOPES IMMEDIATLY AFTER CONSTRUCTION.

As-Built Survey 9/12/86



SEDIMENT CONTROL NOTE
FOR 24" CMP INSTALLATION.
1. Construct Earth Dike and Install Silt Fence as Shown on Plan.
2. Interim Grading Operation - Provide 4 Feet of Fill over Pipe and Grade Fill Slope to Existing Ground @ 1.0%.
3. Remove Earth Dike and Begin Grading Road. For Sequence of Operation See Dwg. 11 of 11



Slope to vary from 2:1 at pipe outlet to existing channel slope at end of apron.

TEMPORARY
RIP RAP CHANNEL
NO SCALE

As-Built Survey certified by Gregory R. Klar Reg-P.E. No. 11432 on Feb. 7, 1985

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.

James M. Helman — 5/9/85
U.S. SOIL CONSERVATION SERVICE — DATE

THESE PLANS FOR EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

APPROVED:
Stephen L. Peach — 5/9/85
HOWARD SOIL CONSERVATION DISTRICT — DATE

CERTIFICATION BY THE DEVELOPER:
I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS OF DEVELOPMENT AND PLANS FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.

John H. Nolan — 2-7-85
SIGNATURE OF DEVELOPER — DATE

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".

Gregory R. Klar — 2-8-85
GREGORY R. KLAR — DATE

DEPARTMENT OF PUBLIC WORKS
M. Cousin S. Ray — 5/14/85
CHIEF, BUREAU OF ENGINEERING — DATE

DEPARTMENT OF PLANNING AND ZONING
John W. Moorehman — 5-9-85
CHIEF, DIV. OF LAND DEVEL. AND ZONING ADM. — DATE

2-8-85
Date

STATE OF MARYLAND — GREGORY R. KLAR — 11432 — REGISTERED PROFESSIONAL ENGINEER

Professional Engr. No. 11432

Date	No	Revision Description

Owner and Developer
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
THE ROUSE COMPANY
Columbia, Maryland 21044

CENTURY ENGINEERING, INC.
CONSULTING ENGINEERS • PLANNERS
TOWSON, MARYLAND 21204

AREA VILLAGE OF HICKORY RIDGE
SECTION 5 AREA I
PARCEL 49 & 81 — TAX MAP 35 & 36
5TH ELECTION DISTRICT — HOWARD COUNTY, MARYLAND

TITLE GRADING & SEDIMENT CONTROL PLAN

Des By G.B.Z.	Scale : 1" = 50'	Proj No 1342
Drn By J.A.G.	Date: 2-6-85	Drawing No. 10 OF 11
Chk By G.R.K.	Approved	

AS-BUILT

F-85-101

#42

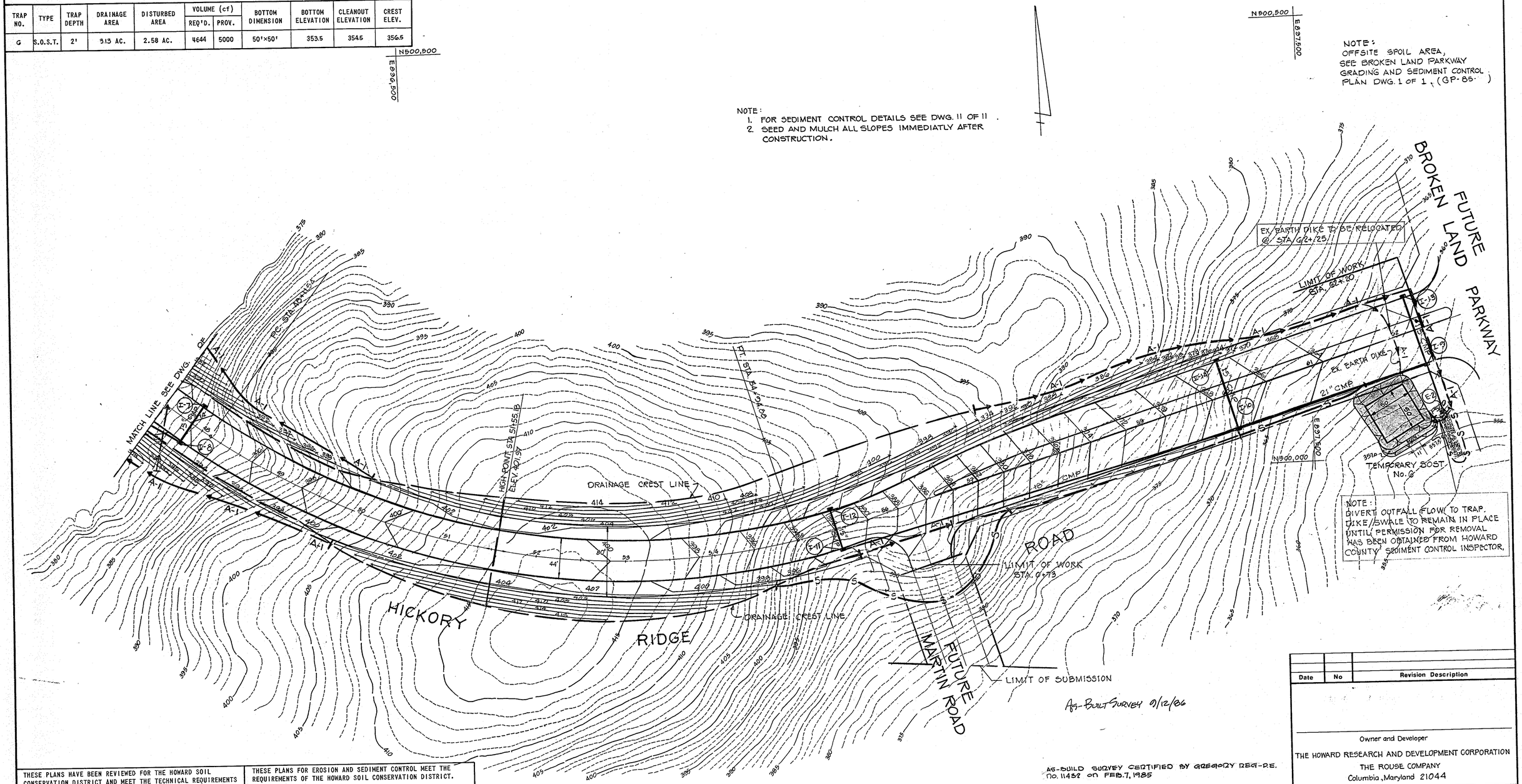
BRUNING 44-132 53964

SEDIMENT CONTROL STRUCTURE SCHEDULE

TRAP NO.	TYPE	TRAP DEPTH	DRAINAGE AREA	DISTURBED AREA	VOLUME (cf) REQ'D.	VOLUME (cf) PROV.	BOTTOM DIMENSION	BOTTOM ELEVATION	CLEANOUT ELEVATION	CREST ELEV.
G	S.O.S.T.	2'	3.13 AC.	2.58 AC.	4644	5000	50'x50'	353.5	354.5	356.5

NOTE:
1. FOR SEDIMENT CONTROL DETAILS SEE DWG. 11 OF 11 .
2. SEED AND MULCH ALL SLOPES IMMEDIATLY AFTER CONSTRUCTION.

NOTE:
OFFSITE SPOIL AREA, SEE BROKEN LAND PARKWAY GRADING AND SEDIMENT CONTROL PLAN DWG. 1 OF 1, (GP-85-)



AS-BUILD SURVEY CERTIFIED BY GREGORY REG-P.E. No. 11432 ON FEB. 7, 1985

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.

James M. Helman — 5/9/85
U.S. SOIL CONSERVATION SERVICE — DATE

THESE PLANS FOR EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

APPROVED:

Stephen L. Huber — 5/9/85
HOWARD SOIL CONSERVATION DISTRICT — DATE

CERTIFICATION BY THE DEVELOPER:

I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS OF DEVELOPMENT AND PLANS FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.

John H. Nolan — 2-7-86
SIGNATURE OF DEVELOPER — DATE

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".

Gregory R. Klar — 2-8-85
GREGORY R. KLAR — DATE

DEPARTMENT OF PUBLIC WORKS

[signature] — 5/14/85
CHIEF, BUREAU OF ENGINEERING — DATE

DEPARTMENT OF PLANNING AND ZONING

[signature] — 5-9-85
CHIEF, DIV. OF LAND DEVEL. AND ZONING ADM. — DATE

2-8-85
Date

STATE OF MARYLAND — GREGORY R. KLAR — 11432 — REGISTERED PROFESSIONAL ENGINEER

Gregory R. Klar
Professional Engr. No. 11432

Date	No	Revision Description

Owner and Developer

THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
THE ROUSE COMPANY
Columbia, Maryland 21044

CENTURY ENGINEERING, INC.
CONSULTING ENGINEERS • PLANNERS
TOWSON, MARYLAND 21204

AREA VILLAGE OF HICKORY RIDGE
SECTION 5 AREA 1
PARCEL 495 & 91 — TAX MAP 35 & 36
5TH ELECTION DISTRICT — HOWARD COUNTY, MARYLAND

TITLE GRADING & SEDIMENT CONTROL PLAN

Des By G.B.Z.	Scale: 1"=50'	Proj No 1342
Drn By A.E.D.	Date 2-5-85	Drawing No. 10 OF 11
Chk By G.R.K.	Approved	

AS-BUILT

F-85-101

#42

BRUNING 44-133 53864

SEDIMENT CONTROL NOTES

1) A minimum of 24 hours notice must be given to the Howard County Office of Inspections and Permits prior to the start of any construction (992-2437)

2) All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.

3) Following initial soil disturbance or redisturbance, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1, b) 14 days as to all other disturbed or graded areas on the project site.

4) All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chapter 12, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.

5) All disturbed areas must be stabilized within the time period specified above in accordance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings (Sec. 51) sod (Sec. 54), temporary seeding (Sec.50) and mulching (Sec. 52). Temporary stabilization with mulch alone can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.

6) All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.

7) Site Analysis:

Total Area of Site	5.07 acres
Area Disturbed	3.01 acres
Area to be roofed or paved	2.80 acres
Area to be vegetatively stabilized	2.27 acres
Total Cut	0 Cu. yds
Total Fill	0 Cu. yds
Offsite waste/borrow area location	

8) Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.

9) Additional sediment controls must be provided, if deemed necessary by the Howard County DPW sediment control inspector.

PERMANENT SEEDING NOTES

Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.

Seedbed Preparation: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding.

Soil Amendments: In lieu of soil test recommendations, use one of the following schedules:

1) Preferred - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 square ft) and 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft) before seeding. Harrow or disc into upper three inches of soil. At time of seeding, apply 400 lbs per acre 20-0-0 urea-form fertilizer (9 lbs/1000 sq ft).

2) Acceptable - Apply 3 tons per acre dolomitic limestone (92 lbs/1000 sq ft) and 1000 lbs per acre 10-10-10 fertilizer (23 lbs/1000 sq ft) before seeding. Harrow or disc into upper three inches of soil.

Seeding - For the periods March 1 thru April 30, and August 1 thru October 15, seed with 50 lbs per acre (1.1 lbs/1000 sq ft) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 40 lbs Kentucky 31 Tall Fescue per acre and 2 lbs per acre (.05 lbs/1000 sq ft) of weeping lovegrass. During the period of October 16 thru February 28, protect site by: Option (1) 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring. Option (2) Sod mulch with 60 lbs/ acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw.

Mulching - Apply 1½ to 2 tons per acre (70 to 90 lbs/1000 sq ft) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sq ft) for anchoring.

Maintenance - Inspect all seeded areas and make needed repairs, replacements and reseedings.

TEMPORARY SEEDING NOTES

Apply to graded or cleared areas likely to be redisturbed where a short-term vegetative cover is needed.

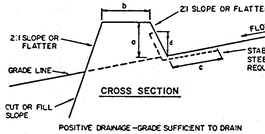
Seedbed Preparation: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding.

Soil Amendments: Apply 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft)

Seeding: For periods March 1 thru April 30 and from August 15 thru November 15, seed with 2½ bushel per acre of annual rye (2.2 lbs/1000 sq ft). For the period May 1 thru August 14, seed with 3 lbs per acre of weeping lovegrass (.07 lbs/1000 sq ft). For the period November 16 thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use sod.

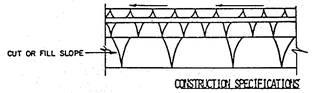
Mulching: Apply 1½ to 2 tons per acre (70 to 90 lbs/1000 sq ft) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gal per acre (8 gal/1000 sq ft) for anchoring.

Refer to the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rate and methods not covered.



CROSS SECTION

	DIKE A (5 ac or less)	DIKE B (5-10 ac.)
a-DIKE HEIGHT	18"	36"
b-DIKE WIDTH	24"	36"
c-FLOW WIDTH	4'	6'
d-FLOW DEPTH	8"	15"



CONSTRUCTION SPECIFICATIONS

1. ALL DIKES SHALL BE COMPACTED BY EARTH-MOVING EQUIPMENT.
2. ALL DIKES SHALL HAVE POSITIVE DRAINAGE TO AN OUTLET.
3. TOP WIDTH MAY BE WIDER AND SIDE SLOPES MAY BE FLATTER IF DESIRED TO FACILITATE CROSSING BY CONSTRUCTION TRAFFIC.
4. FIELD LOCATION SHOULD BE ADJUSTED AS NEEDED TO UTILIZE A STABILIZED SAFE OUTLET.
5. EARTH DIKES SHALL HAVE AN OUTLET THAT FUNCTIONS WITH A MINIMUM OF EROSION. RUNOFF SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE SUCH AS A SEDIMENT TRAP OR SEDIMENT BASIN WHERE EITHER THE DIKE CHANNEL OR THE DRAINAGE AREA ABOVE THE DIKE ARE NOT ADEQUATELY STABILIZED.
6. STABILIZATION SHALL BE: (A) IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR SEED AND STRAW MULCH OR STRAW MULCH IF NOT IN SEEDING SEASON, (B) FLOW CHANNEL AS PER THE CHART BELOW.

FLOW CHANNEL STABILIZATION

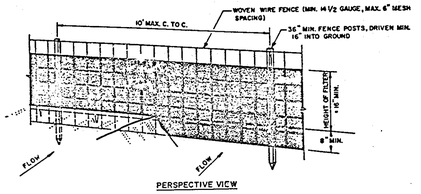
TYPE OF TREATMENT	CHANNEL GRADE	DIKE A	DIKE B
1	.5-3.0%	SEED AND STRAW MULCH	SEED AND STRAW MULCH
2	3.1-5.0%	SEED AND STRAW MULCH	SEED USING JUTE, OR EXCELSIOR; SOD; 2" STONE
3	5.1-8.0%	SEED WITH JUTE, OR SOD; 2" STONE	LINED RIP-RAP 4-8"
4	8.1-20%	LINED RIP-RAP 4-8"	ENGINEERING DESIGN

A. STONE TO BE 2 INCH STONE, OR RECYCLED CONCRETE EQUIVALENT, IN A LAYER AT LEAST 3 INCHES IN THICKNESS AND BE PRESSED INTO THE SOIL WITH CONSTRUCTION EQUIPMENT.
B. RIP-RAP TO BE 4-8 INCHES IN A LAYER AT LEAST 8 INCHES THICKNESS AND PRESSED INTO THE SOIL.
C. APPROVED EQUIVALENTS CAN BE SUBSTITUTED FOR ANY OF THE ABOVE MATERIALS.

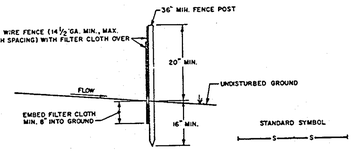
7. PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.

EARTH DIKE DETAIL

NO SCALE



PERSPECTIVE VIEW



SECTION

CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

POSTS: STEEL EITHER T OR U TYPE OR 2" HARDWOOD

FENCE: WOVEN WIRE, 14½ GA. 6" MAX. MESH OPENING

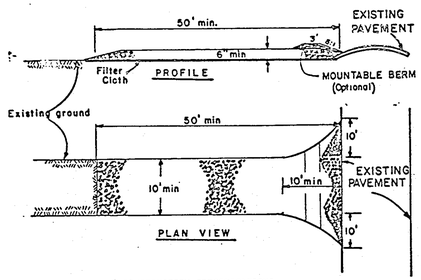
FILTER CLOTH: FILTER X, MIRAFI 100X, STABILINKA T140N OR APPROVED EQUAL

PREFABRICATED UNIT: GEOFAB, ENVIROFENCE, OR APPROVED EQUAL.

SILT FENCE DETAIL

NO SCALE

STANDARD SYMBOL SCE



CONSTRUCTION SPECIFICATIONS

1. Stone Size - Use 2" stone, or reclaimed or recycled concrete equivalent.
2. Length - As required, but not less than 50 feet (except on a single residence lot where a 30 foot minimum length would apply).
3. Thickness - Not less than six (6) inches.
4. Width - Ten (10) foot minimum, but not less than the full width at points where ingress or egress occurs.
5. Filter Cloth - Will be placed over the entire area prior to placing of stone. Filter will not be required on a single family residence lot.
6. Surface Water - All surface water flowing or diverted toward construction entrances shall be piped across the entrance. If piping is impractical, a mountable berm with 5:1 slopes will be permitted.
7. Maintenance - The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanout of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately.
8. Washing - Wheels shall be cleaned to remove sediment prior to entrance onto public rights-of-way. When washing is required, it shall be done on an area stabilized with stone and which drains into an approved sediment trapping device.
9. Periodic inspection and needed maintenance shall be provided after each rain.

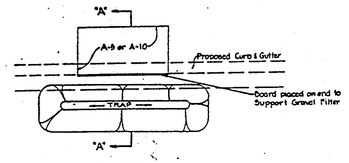
STABILIZED CONSTRUCTION ENTRANCE DETAIL

NO SCALE

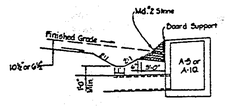
SEQUENCE OF CONSTRUCTION

1. OBTAIN GRADING PERMIT
2. NOTIFY THE DPW SEDIMENT CONTROL INSPECTOR FOR HOWARD COUNTY, 48 HOURS PRIOR TO THE START OF ANY CONSTRUCTION.
3. SEDIMENT CONTROL DEVICES AND PRACTICES SHALL BE IN ACCORDANCE WITH GP-85-36 UNLESS OTHERWISE NOTED.
4. MAINTAIN EXISTING STABILIZED CONSTRUCTION ENTRANCE
5. MAINTAIN SILT FENCE AT LIMITS OF DISTURBED AREAS AS SHOWN ON PLAN.
6. MAINTAIN EXISTING PIPES NO. 1 AND NO. 2.
7. MAINTAIN EXISTING EARTH DIKE A-1.
8. MAINTAIN EXISTING SEDIMENT TRAP NO. 1 & 6.
9. EXISTING SEDIMENT TRAP NO. 2,3,4 AND 5 ARE TO REMAIN IN PLACE AND IN OPERATION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
10. MAINTAIN TEMPORARY SWALE IN CONJUNCTION WITH ROADWAY CONSTRUCTION.
11. BEGIN CONSTRUCTION FOR:
    - WATER PIPE
    - STORM DRAIN & INLETS

    NOTE: EXCAVATED MATERIAL TO BE PLACED ON UP HILL SIDE.
12. PROVIDE INLET BLOCKING - SEE DETAIL THIS SHEET.
13. DIVERT STORM DRAIN OUTFALL FLOW TO TRAP. (AS SHOWN ON PLAN)
14. REMOVE TEMPORARY SWALE AT STATION 44+25 WITHIN ROADWAY ONLY.
15. BEGIN ROAD CONSTRUCTION.
16. UPON COMPLETION OF ALL GRADING OPERATIONS AND APPROVAL BY THE HOWARD COUNTY DPW SEDIMENT CONTROL INSPECTOR. PUMP OUT AND BACKFILL ALL TRAPS, REMOVE ALL SILT FENCING, TEMPORARY SWALES, STABILIZED CONSTRUCTION ENTRANCE AND EARTH DIKES. STABILIZE ALL DISTURBED AREAS IN ACCORDANCE WITH THE PERMANENT SEEDING NOTES.



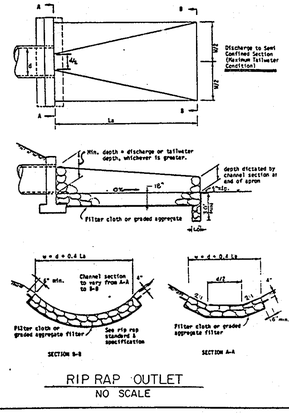
PLAN



SECTION 'A'-'A'

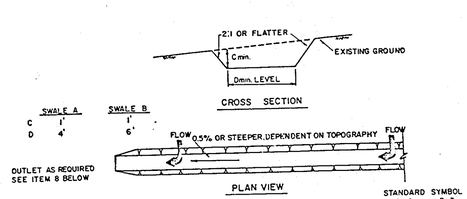
INLET BLOCKING DETAIL

NO SCALE

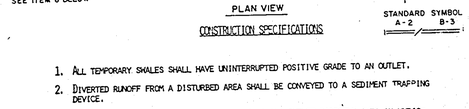


RIP RAP OUTLET

NO SCALE



CROSS SECTION



CONSTRUCTION SPECIFICATIONS

1. ALL TEMPORARY SWALES SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET.
2. DIVERTED RUNOFF FROM A DISTURBED AREA SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE.
3. DIVERTED RUNOFF FROM AN UNDISTURBED AREA SHALL OUTLET DIRECTLY INTO AN UNDISTURBED STABILIZED AREA AT NON-EROSIVE VELOCITY.
4. ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED AND DISPOSED OF SO AS NOT TO INTERFERE WITH THE PROPER FUNCTIONING OF THE SWALE.
5. THE SWALE SHALL BE EXCAVATED OR SHAPED TO LINE, GRADE, AND CROSS SECTION AS REQUIRED TO MEET THE CRITERIA SPECIFIED HEREIN AND BE FREE OF BANK PROJECTIONS OR OTHER IRREGULARITIES WHICH WILL IMPEDE NORMAL FLOW.
6. FILLS SHALL BE COMPACTED BY EARTH MOVING EQUIPMENT.
7. ALL EARTH REMOVED AND NOT NEEDED ON CONSTRUCTION SHALL BE PLACED SO THAT IT WILL NOT INTERFERE WITH THE FUNCTIONING OF THE SWALE.
8. STABILIZATION SHALL BE AS PER THE CHART BELOW:

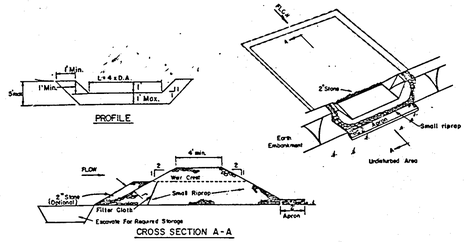
FLOW CHANNEL STABILIZATION

TYPE OF TREATMENT	CHANNEL GRADE	A (5 AC OR LESS)	B (5 AC - 10 AC)
1	0.5-3.0%	SEED AND STRAW MULCH	SEED AND STRAW MULCH
2	3.1-5.0%	SEED AND STRAW MULCH	SEED USING JUTE OR EXCELSIOR
3	5.1-8.0%	SEED WITH JUTE OR EXCELSIOR; SOD	LINED RIP-RAP 4-8" RECYCLED CONCRETE EQUIVALENT
4	8.1-20%	LINED 4-8" RIP-RAP	ENGINEERED DESIGN

9. PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.

TEMPORARY SWALE DETAIL

NO SCALE



OPTION: A one foot layer of 2" stone may be placed on the upstream side of the riprap in place of the embedded filter cloth.

CONSTRUCTION SPECIFICATIONS FOR ST-Y

1. Area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The pool area shall be cleared.
2. The fill material for the embankment shall be free of roots and other woody vegetation as well as over-sized stones, rocks, organic material or other objectionable material. The embankment shall be compacted by traversing with equipment while it is being constructed.
3. All cut and fill slopes shall be 2:1 or flatter.
4. The stone used in the outlet shall be small riprap 4"-8" along with a 1' thickness of 2" aggregate placed on the up-grade side on the small riprap on embedded filter cloth in the riprap.
5. Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to ½ the design depth of the trap.
6. The structure shall be inspected after each rain and repairs made as needed.
7. Construction operations shall be carried out in such a manner than erosion and water pollution is minimized.
8. The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.

Maximum Drainage Area: 5 Acres

STONE OUTLET SEDIMENT TRAP DETAIL

NO SCALE

AS-BUILD SURVEY BY GREGORY R. KLAR PREG-P.E. NO.11432. ON FEB. 7,1985

2-7-85
Date

STATE OF MARYLAND GREGORY R. KLAR No. 11432 PROFESSIONAL ENGINEER

Professional Engr 11432

AS-BUILT

ACCEPTED AND APPROVED FOR CONSTRUCTION BY:

OWNER: DATE:

CONTRACTOR: DATE:

THESE PLANS FOR EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

APPROVED:

Stephen L. Thule 5/9/85
HOWARD SOIL CONSERVATION DISTRICT DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.

James M. Helman 5/9/85
U.S. SOIL CONSERVATION SERVICE DATE

CERTIFICATION BY THE DEVELOPER:

I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS OF DEVELOPMENT AND PLANS FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.

John H. Nolan Jr 2-7-85
SIGNATURE OF DEVELOPER DATE

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".

Gregory R. Klar 2-7-85
GREGORY R. KLAR DATE

DEPARTMENT OF PUBLIC WORKS:

[signature] 5/14/85
CHIEF, BUREAU OF ENGINEERING DATE

DEPARTMENT OF PLANNING AND ZONING:

[signature] 5/9/85
CHIEF, DIV. OF LAND DEVELOP. AND ZONING ADM. DATE

Date	No	Revision Description

As-Built Survey 9/12/86

CENTURY ENGINEERING, INC.
CONSULTING ENGINEERS • PLANNERS
TOWSON, MARYLAND 21204

AREA: VILLAGE OF HICKORY RIDGE
SECTION 5 AREA 1
5TH ELECTION DISTRICT, HOWARD CO., MD.

TITLE: SEDIMENT CONTROL NOTES AND DETAILS

Des By	AEB	Scale	AS SHOWN	Proj No	
Drn By	AEB	Date	6 FEB 85	Drawing No.	11 OF 11
Chk By	GRK	Approved			

#42

RUNNING 44-132 53864

F-85-101