

SHEET INDEX	
No.	Description
1	COVER SHEET
2	PLAN AND PROFILE - RUMSEY ROAD
3	STORM DRAIN PROFILES & TYPICAL DETAILS
4	DRAINAGE AREA MAP
5	SOIL EROSION PLAN
6	SOIL EROSION DETAILS

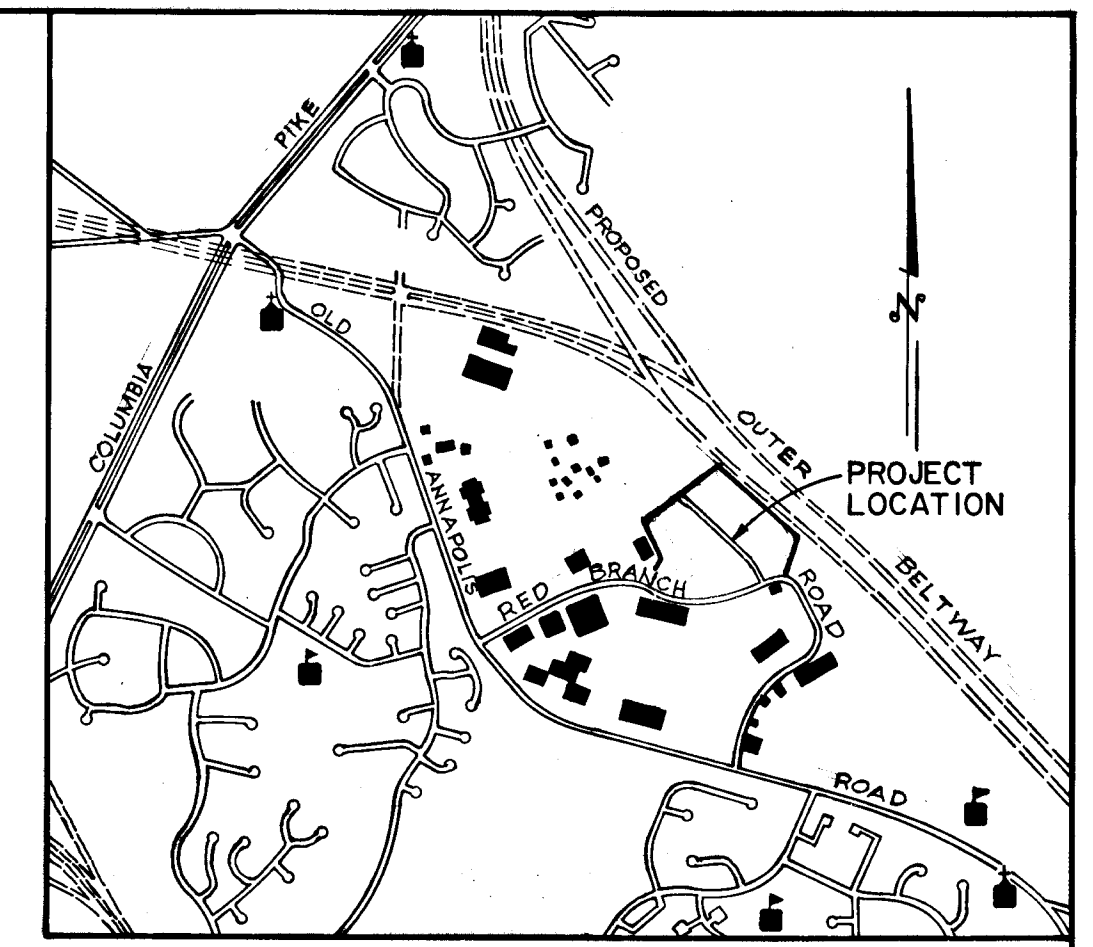
COLUMBIA

HOWARD COUNTY, MARYLAND

2 ND ELECTION DISTRICT

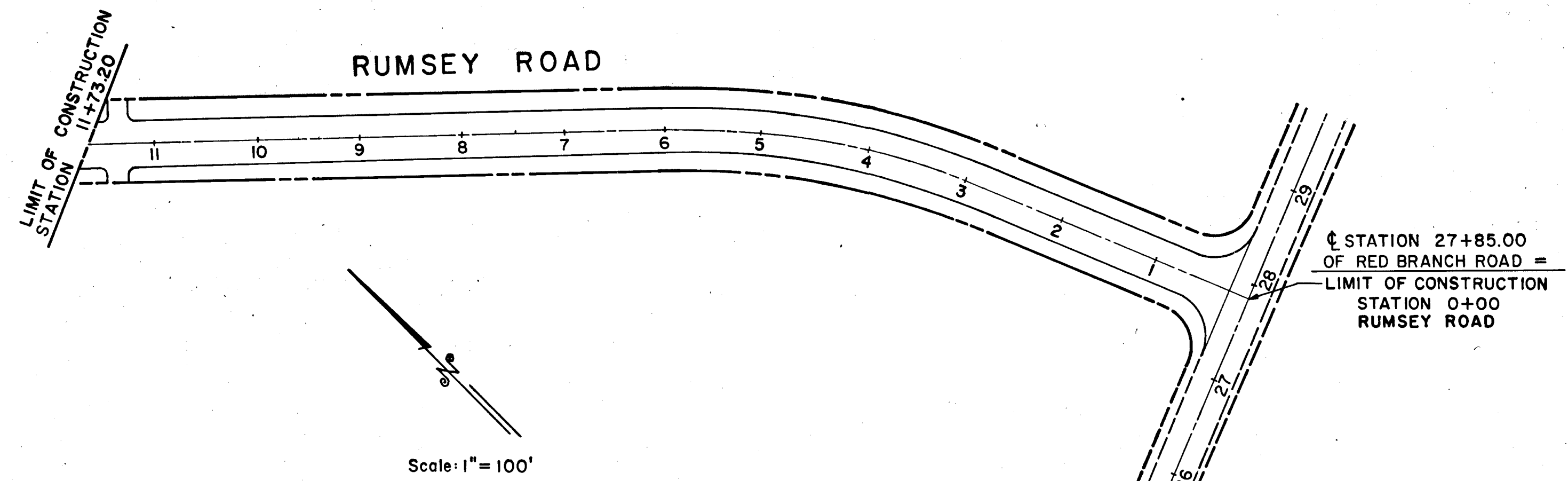
OAKLAND RIDGE INDUSTRIAL PARK

SECTION 2



VICINITY MAP
SCALE: 1" = 2000'

SUMMARY OF QUANTITIES				
DESCRIPTION	UNIT	TOTAL QUANTITY	CONTINGENT QUANTITY	PROPOSAL QUANTITY
DRAINAGE ITEMS				
36" R.C.C. PIPE, CL. IV	L.F.	388	--	388
30" R.C.C. PIPE, CL. IV	L.F.	294	--	294
21" R.C.C. PIPE, CL. IV	L.F.	90	--	90
18" R.C.C. PIPE, CL. IV	L.F.	18	--	18
15" R.C.C. PIPE, CL. IV	L.F.	72	--	72
STANDARD DOUBLE 'S' COMB. INLET	EA.	6	--	6
STANDARD TYPE MANHOLE	EA.	1	--	1
CONCRETE END SECTION	EA.	1	--	1
RIPRAP	S.Y.	44	--	44
SODDING	S.Y.	172	--	172
PAVING ITEMS				
COMBINATION CONCRETE CURB & GUTTER	L.F.	2,020	--	2,020
PAVEMENT - RUMSEY RD.	S.Y.	10,837	--	10,837



GENERAL NOTES

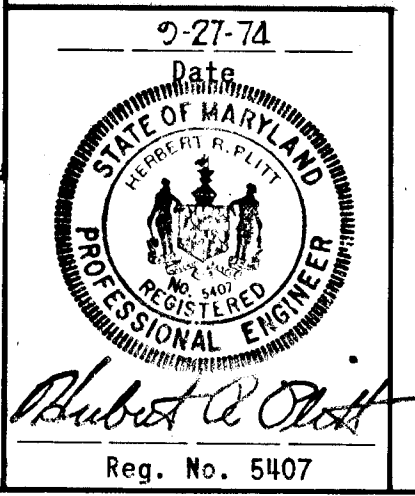
1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE HOWARD COUNTY ROAD CONSTRUCTION CODE AND STANDARD SPECIFICATIONS.
2. APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY 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 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
5. BRICK BULKHEAD SHALL BE INSTALLED IN ALL STORM DRAIN STUBS.
6. ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS.
7. ALL STREET CURB RETURNS SHALL HAVE 500' RADII UNLESS OTHERWISE NOTED.
8. STORM DRAIN TRENCHES WITHIN ROAD RIGHT-OF-WAY SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH HOWARD COUNTY ROAD CODE.
9. DESIGNED TRAFFIC SPEED IN ACCORDANCE WITH THE AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIAL STANDARDS. RUMSEY ROAD 35 M.P.H.
10. INSTALLATION OF TRAFFIC CONTROL DEVICES, MARKING, AND SIGNING SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES 1971 EDITION.
11. 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.
12. 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.
13. END WALLS: THE TYPES OF ENDWALLS SHOWN ON THE PLANS ARE SUBJECT TO CHANGE, AND ARE NOT TO BE CONSTRUCTED UNTIL GRADING IS COMPLETED. DIMENSIONS OF ENDWALLS AS SHOWN ON STANDARD PLATES MAY BE MODIFIED FOR USE WITH CORRUGATED METAL PIPE, PIPE ARCH OR OTHERWISE AS DIRECTED BY THE ENGINEER.
14. INVERTS OF INLETS AND HEADWALLS: INVERT ELEVATIONS OF INLETS AND HEADWALLS MAY BE MODIFIED FOR USE WITH CORRUGATED METAL PIPE, PIPE ARCH OR OTHERWISE AS DIRECTED BY THE ENGINEER.
15. ALL COORDINATES BASED ON MARYLAND STATE GRID SYSTEM.
16. ALL ELEVATIONS SHOWN ARE BASED ON U.S.C. & G.S. MEAN SEA LEVEL DATUM 1929.
17. ALL STUB CONNECTIONS MUST BE PROPERLY LOCATED PRIOR TO BACKFILLING.
18. STORM WATER MANAGEMENT FACILITIES WILL BE PROVIDED IN THE SITE DEVELOPMENT PLAN STAGE ON EACH LOT. THE AMOUNT OF WATER TO BE RETAINED SHALL BE RUNOFF OF DEVELOPED AREA BASED ON A TEN (10) YEAR FREQUENCY STORM. THE RELEASE FROM THE RETENTION STRUCTURE SHALL BE THE RUNOFF BEFORE THE DEVELOPMENT BASED ON A TWO (2) YEAR FREQUENCY STORM.

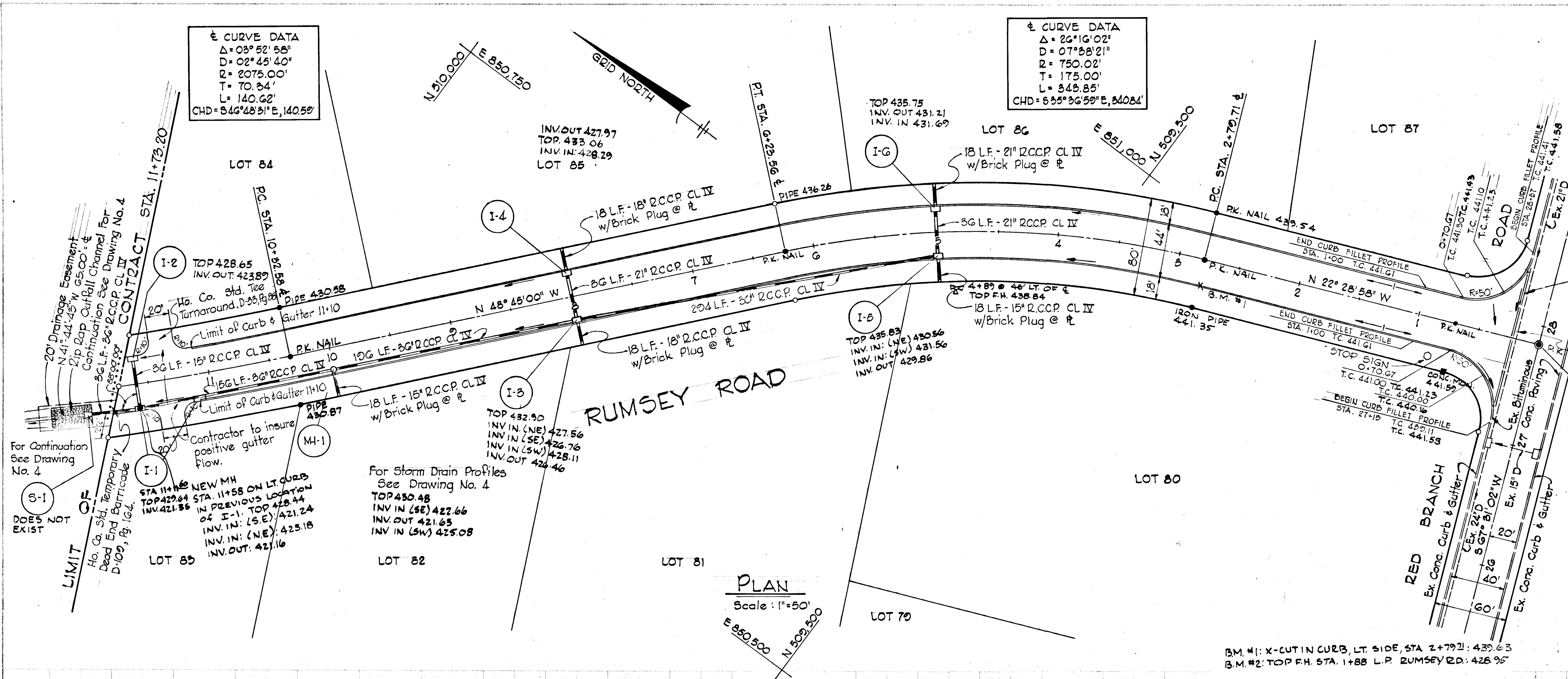
DEPARTMENT OF PUBLIC WORKS
D. H. McLeod 1/6/75
 CHIEF, BUREAU OF HIGHWAYS DATE

OFFICE OF PLANNING AND ZONING
J. W. Clow 1/3/75
 CHIEF, DIVISION OF LAND DEVELOPMENT AND TRANSPORTATION PLANNING DATE

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



APPROVED
 DIVISION OF LAND DEVELOPMENT
 AND TRANSPORTATION PLANNING
 HOWARD COUNTY, MARYLAND
 DATE 12/30/74



STRUCTURE		SCHEDULE				REMARKS
NO.	TYPE	LOCATION	INV. IN.	INV. OUT.	TOP ELEV.	
S-1	CONC. END SECT.	AS SHOWN IN PLAN	420.42	--	--	S.H.A. STD. MD 368.01
I-1	DBLE. 'S' COMB.	11+60 - LT.	423.27(15*) 421.52(16*)	421.32	428.63*	HO.CO.STD., D-99, PG. 154
I-2	DBLE. 'S' COMB.	11+60 - RT.	--	423.34	428.63*	HO.CO.STD., D-99, PG. 154
I-3	DBLE. 'S' COMB.	8+00 - LT.	427.96(18*) 427.33(19*)	426.46	432.84*	HO.CO.STD., D-99, PG. 154
I-4	DBLE. 'S' COMB.	8+00 - RT.	428.25	428.00	432.84*	HO.CO.STD., D-99, PG. 154
I-5	DBLE. 'S' COMB.	5+00 - LT.	431.15(15*) 431.75(14*)	429.90	435.84*	HO.CO.STD., D-99, PG. 154
I-6	DBLE. 'S' COMB.	5+00 - RT.	431.42	431.22	435.84*	HO.CO.STD., D-99, PG. 154
MH-1	STD. MANHOLE	10+00 - 18" LT.	424.56(15*) 422.81(16*)	422.61	430.39**	HO.CO.STD., D-103PG. 158

* TOP OF CURB PIECE ELEV.
 ** TOP OF MH COVER @ C OF MH

143± LF Existing curb to be removed.

Contractor to match existing paving for line and grade.

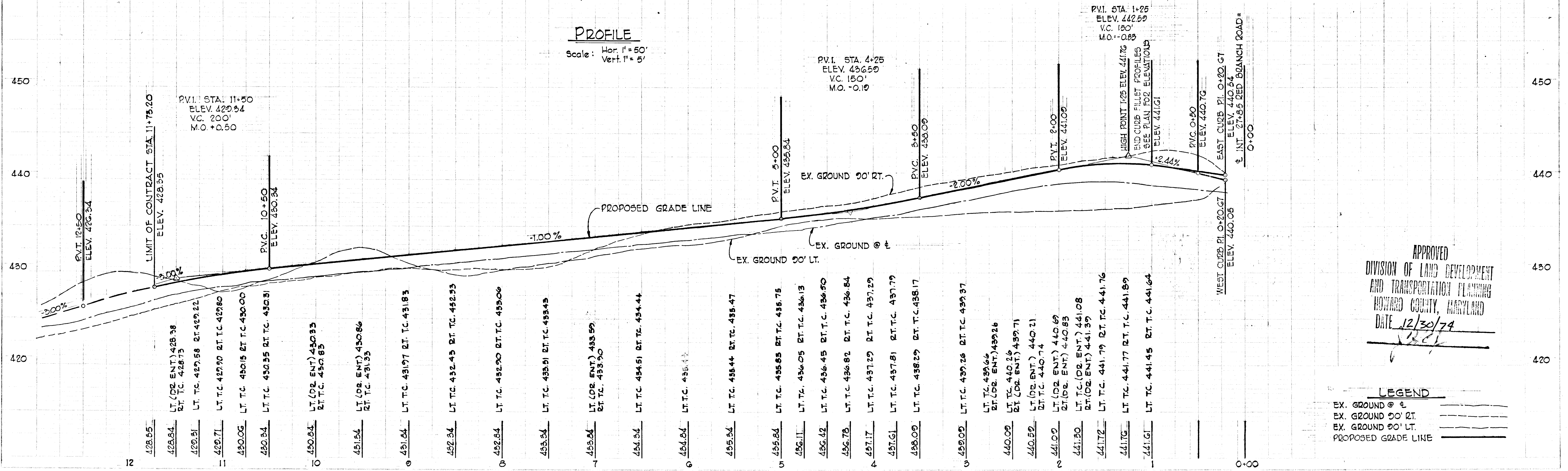
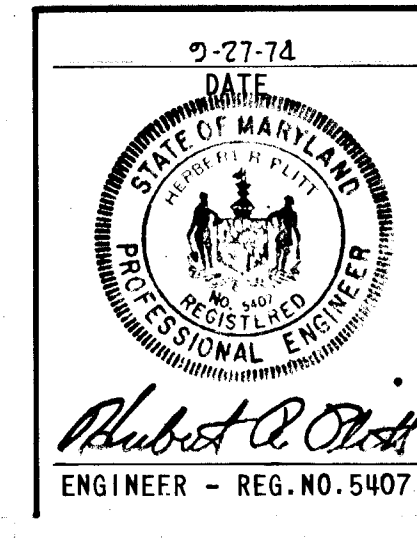
Rev. Date	Rev. No.	Revision Description
		DEPARTMENT OF PUBLIC WORKS
		OFFICE OF PLANNING AND ZONING
		CENTURY ENGINEERING, INC.

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

COLUMBIA
 2ND ELECTION DISTRICT HOWARD COUNTY
 COLUMBIA INDUSTRIAL DEVELOPMENT CORPORATION
 COLUMBIA, MARYLAND

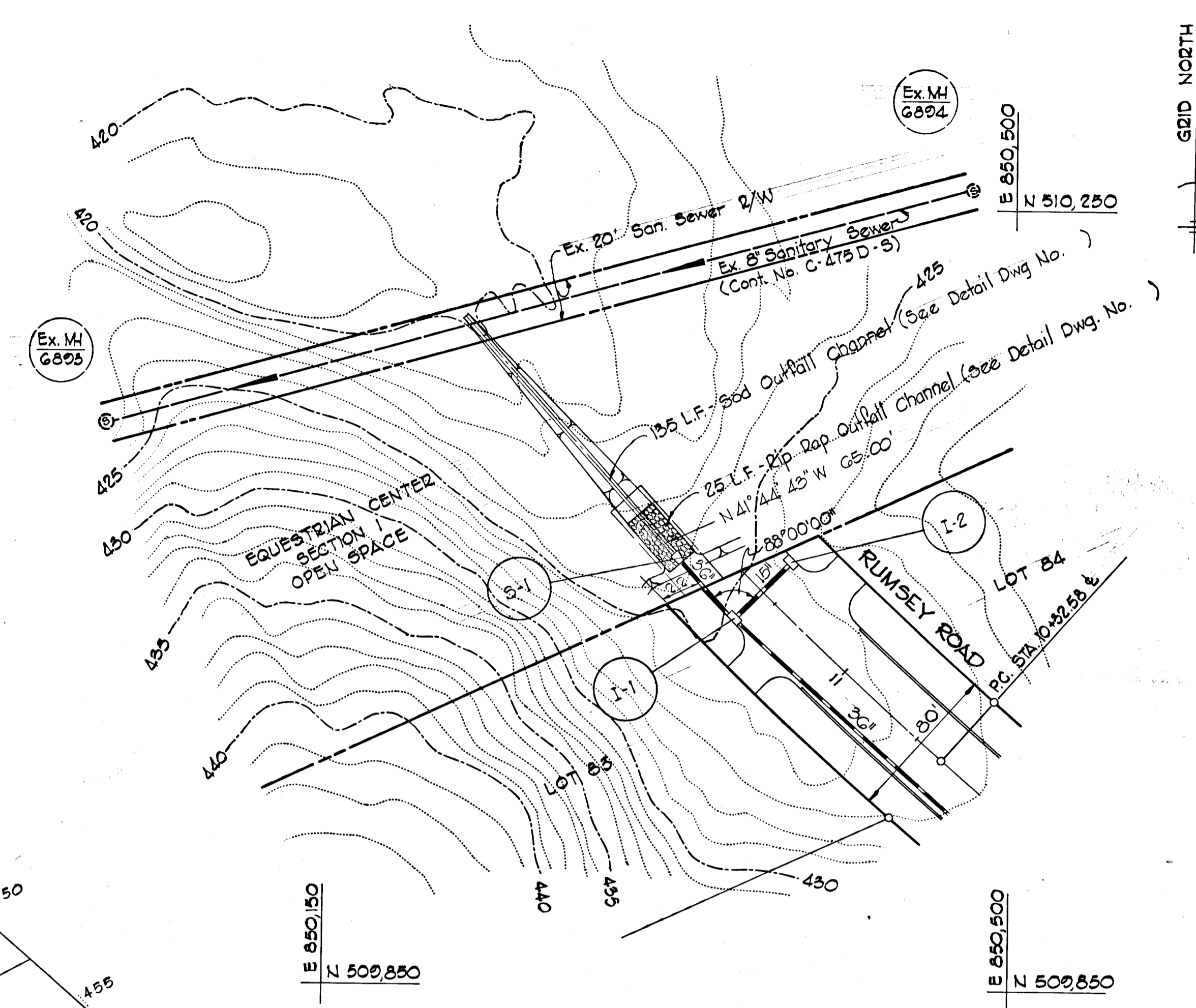
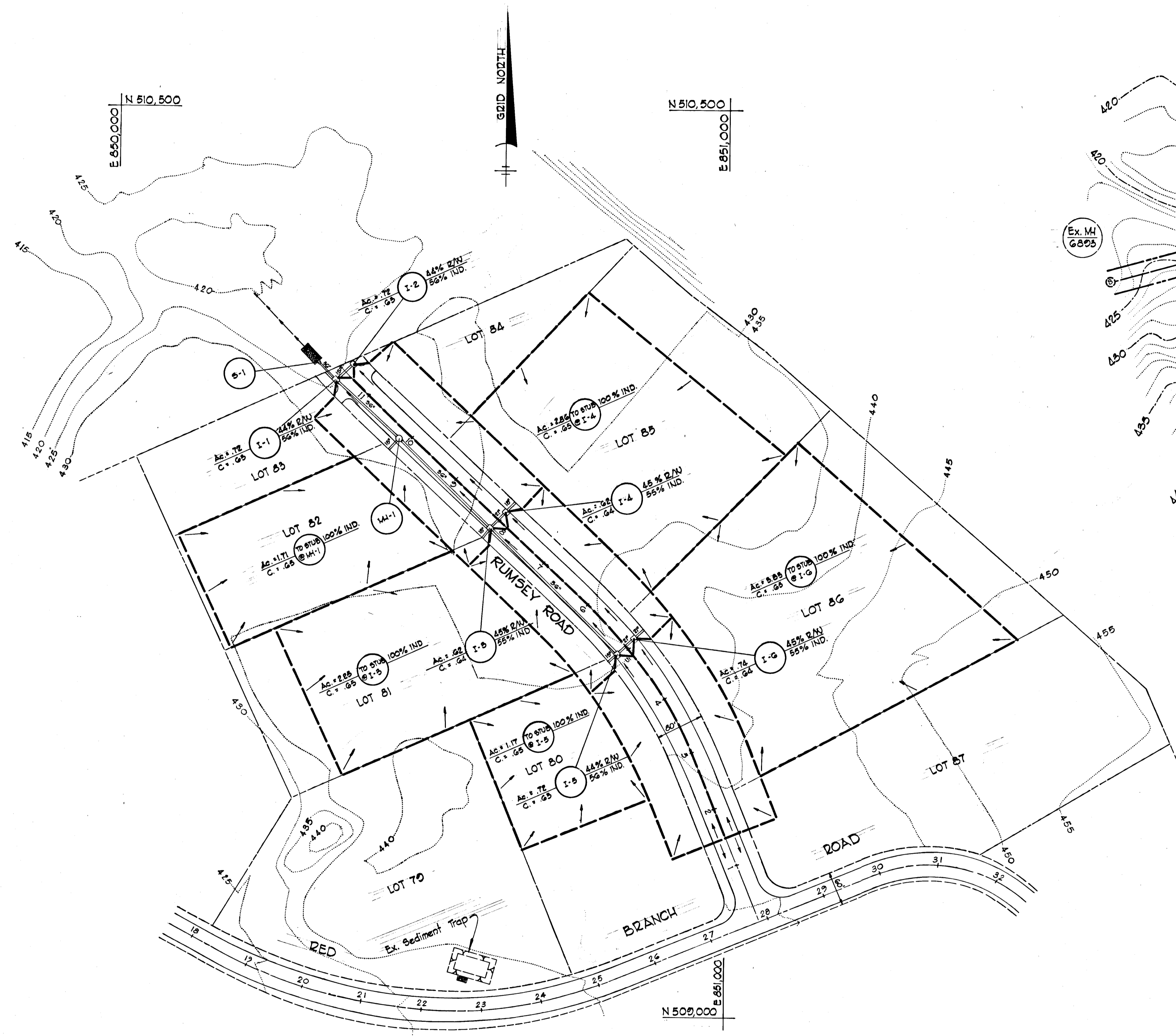
PROJECT AREA: OAKLAND RIDGE INDUSTRIAL PARK - SECTION 2
 PROJECT TITLE: RUMSEY ROAD PLAN AND PROFILE

Des. By: A.W.R. Scale: AS SHOWN Dwg. No.: 2 of 6
 Ck. By: L.J.D. Date: 9-27-74 C.C.F. No.:
 Approved



APPROVED
 DIVISION OF LAND DEVELOPMENT AND TRANSPORTATION PLANNING
 HOWARD COUNTY, MARYLAND
 DATE: 12/30/74

LEGEND
 EX. GROUND @ e
 EX. GROUND @ 00' RT.
 EX. GROUND @ 00' LT.
 PROPOSED GRADE LINE



PLAN OF CHANNEL OUTFALL AT I-1
Scale: 1"=50'

APPROVED
DIVISION OF LAND DEVELOPMENT
AND TRANSPORTATION PLANNING
HOWARD COUNTY, MARYLAND
DATE 12/30/74

Rev. Date	Rev. No.	Revision Description
DEPARTMENT OF PUBLIC WORKS		
<i>J. M. [Signature]</i>		1/3/75
CHIEF, BUREAU OF HIGHWAYS		
OFFICE OF PLANNING AND ZONING		
<i>[Signature]</i>		1/3/75
CHIEF, DIVISION OF LAND DEVELOPMENT AND TRANSPORTATION PLANNING		

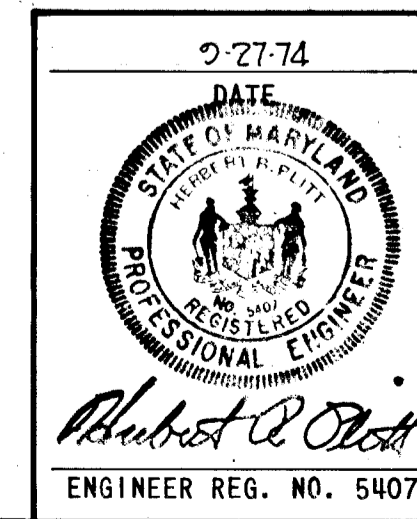
CENTURY ENGINEERING, INC.
CONSULTING ENGINEERS - PLANNERS
TOWSON, MARYLAND 21204

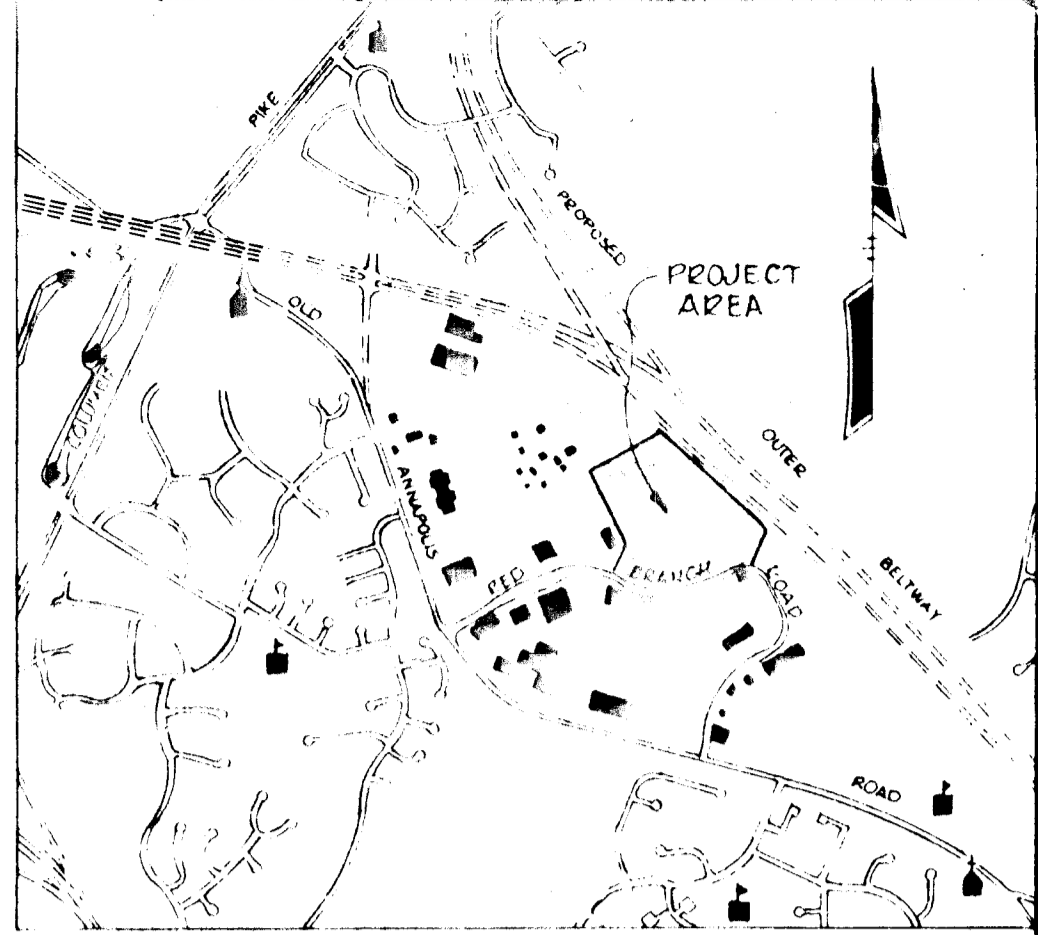
COLUMBIA
2ND ELECTION DISTRICT HOWARD COUNTY
OWNER AND DEVELOPER
COLUMBIA INDUSTRIAL DEVELOPMENT CORPORATION
COLUMBIA, MARYLAND

PROJECT AREA
OAKLAND RIDGE INDUSTRIAL PARK
SECTION 2

PROJECT TITLE
DRAINAGE AREA MAP & CHANNEL OUTFALL @ I-1

Des. By A.W.R. Scale AS SHOWN Dwg. No. 4 of 6
Dwn. By L.J.D. Date 9-27-74 C.C.F. No.
Chk. By Approved





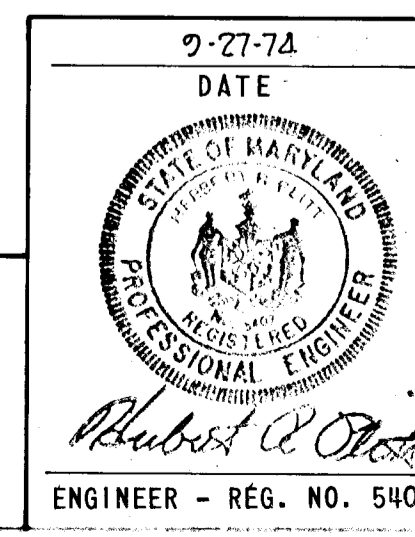
VICINITY MAP
1"=7000'

RECEIVED
DIVISION OF LAND DEVELOPMENT
AND TRANSPORTATION PLANNING
HOWARD COUNTY, MARYLAND
DATE 12/30/74



TYPICAL ROADWAY GRADING
STA. 9+00 TO STA. 13+00

CENTURY ENGINEERING, INC.
CONSULTING ENGINEERS - PLANNERS
TOWSON, MARYLAND



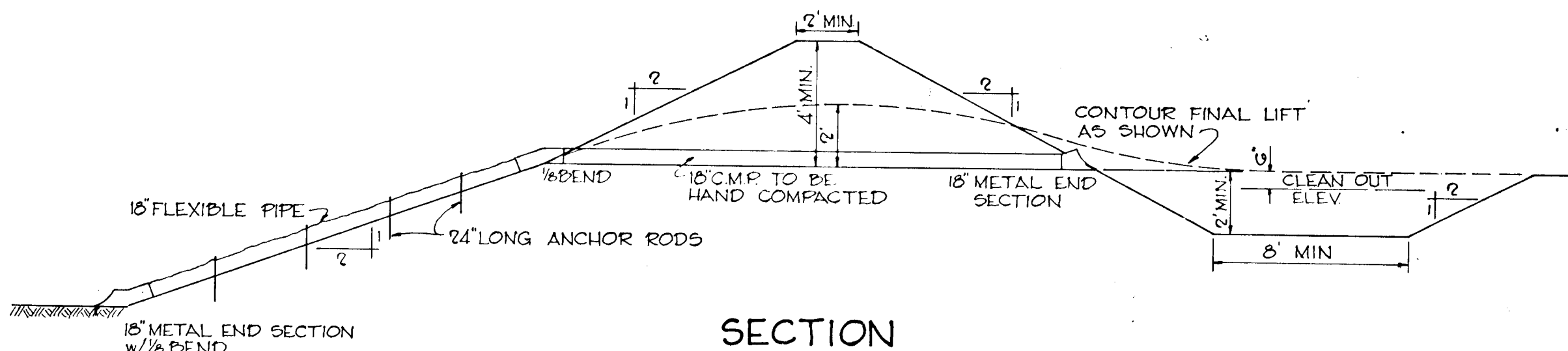
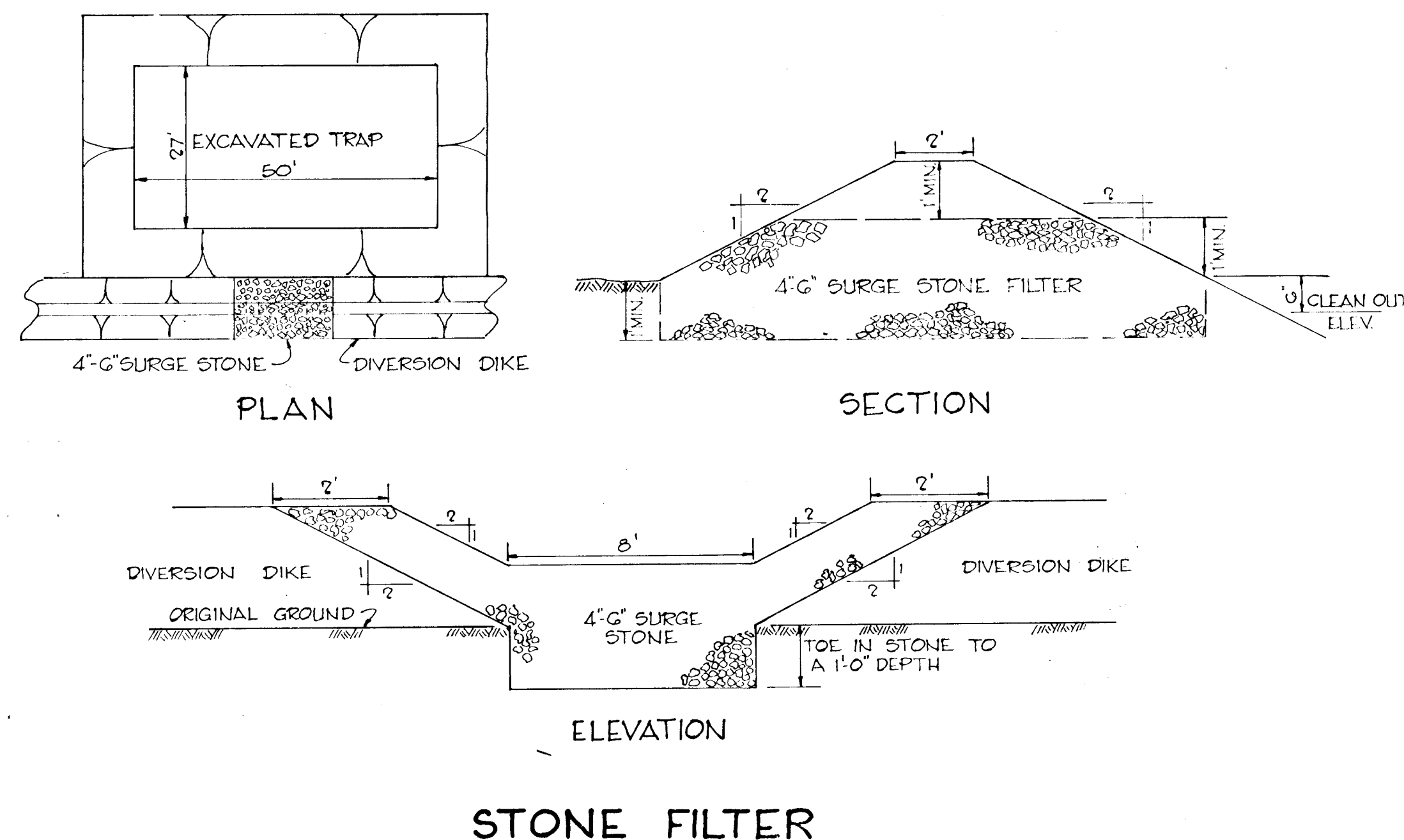
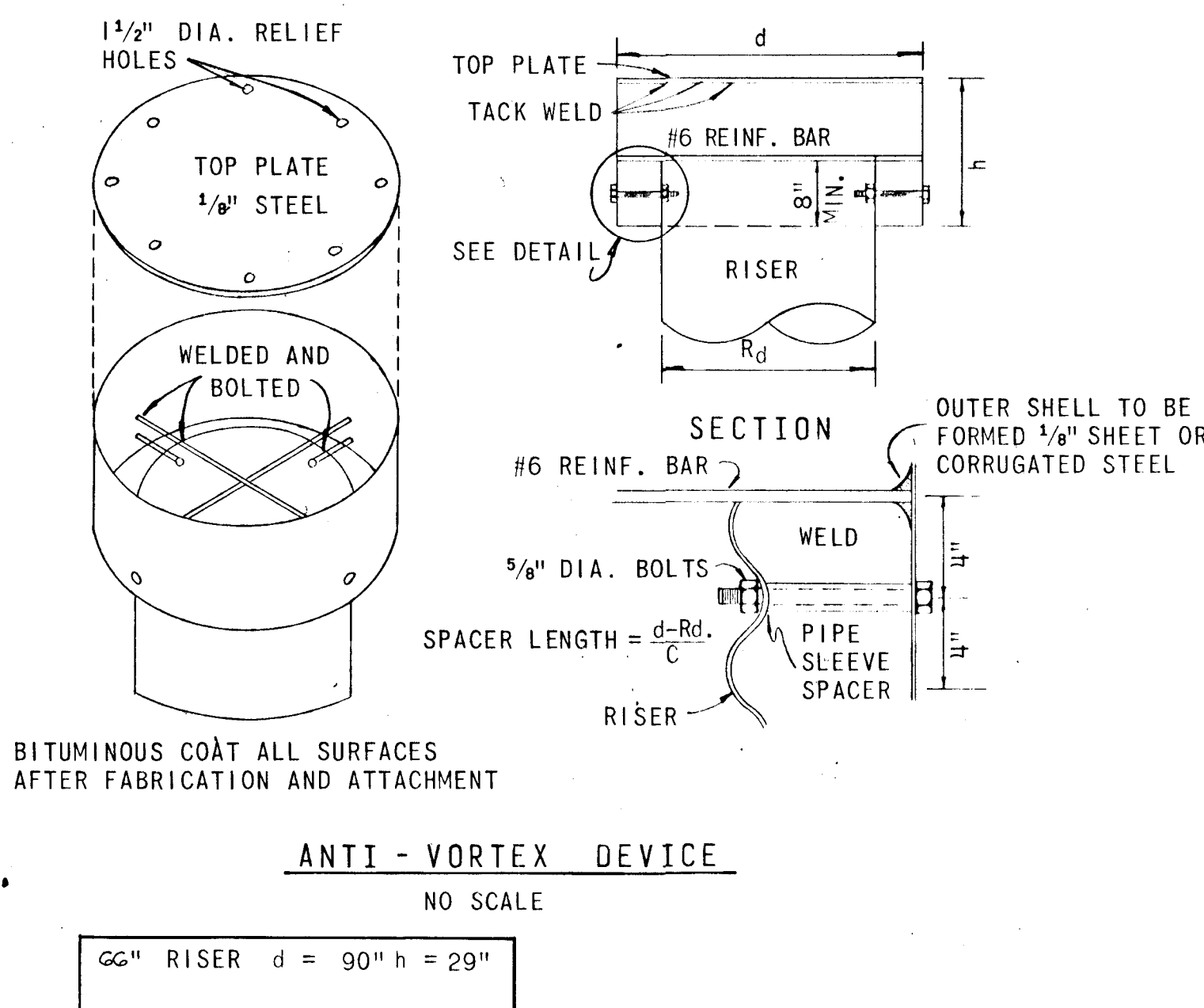
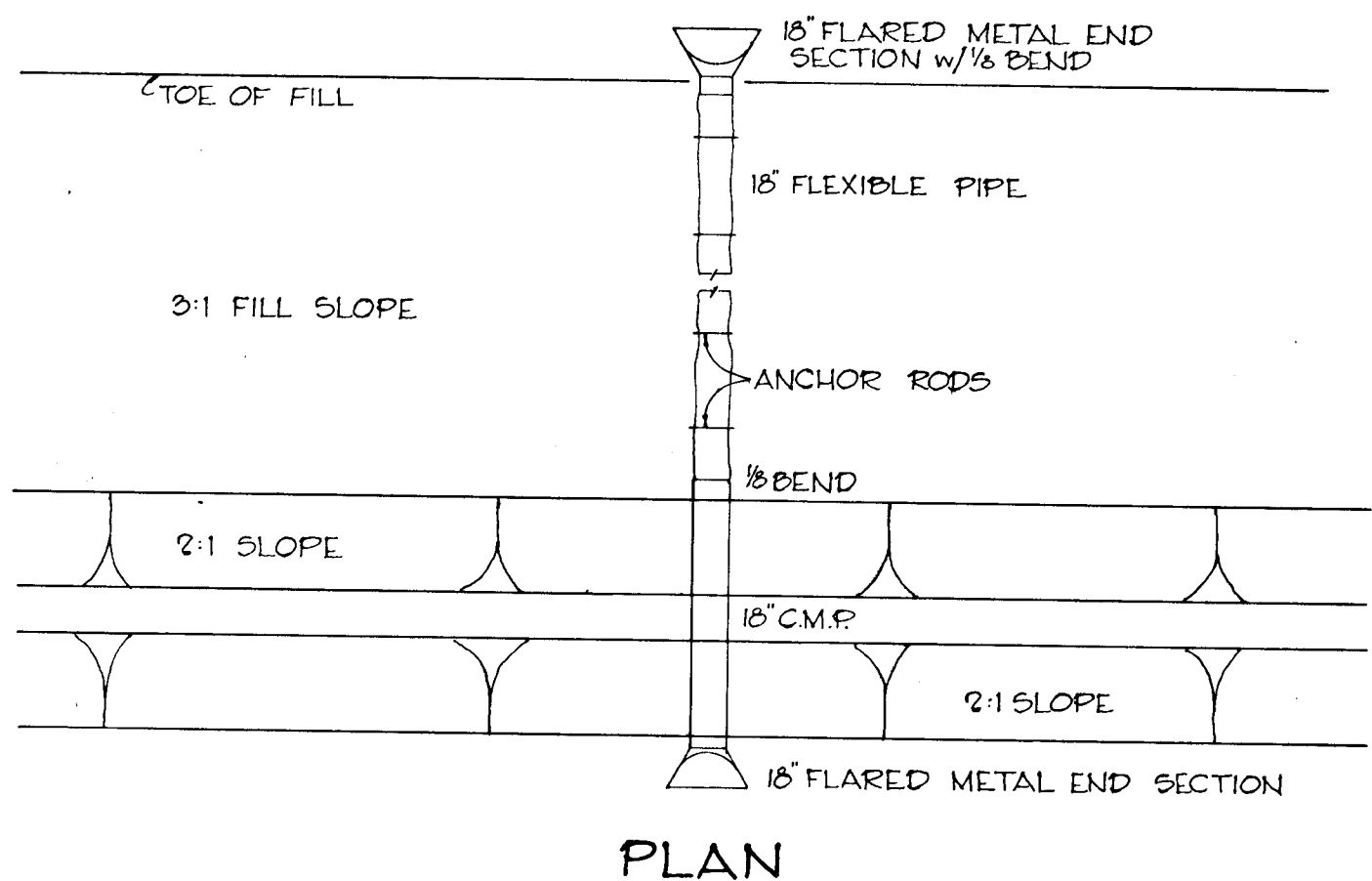
DEPARTMENT OF PUBLIC WORKS	
<i>[Signature]</i>	1/75
CHIEF, BUREAU OF HIGHWAYS	DATE
OFFICE OF PLANNING AND ZONING	
<i>[Signature]</i>	1/3/75
CHIEF, DIV. OF LAND DEVELOPMENT AND TRANSPORTATION PLANNING	DATE
10-25-74	Rev. Lot No's Per Ho. Co. Letter Dated 10-25-74
Rev. Date	Rev. No
Revision Description	
COLUMBIA MARYLAND 2ND ELECTION DISTRICT HOWARD COUNTY ENGINEER AND DEVELOPER HOWARD RESEARCH AND DEVELOPMENT CORP. COLUMBIA, MARYLAND	
PROJECT TITLE	OAKLAND RIDGE INDUSTRIAL PARK SECTION 2
PROJECT TITLE	SOIL EROSION AND GRADING PLAN
Des. By	K.A.L. Scale 1" = 100'
Drawn By	D.A.C. Date 9-27-74
Checked By	Approved
Engineer - REG. NO. 5407	5 of 6

#64

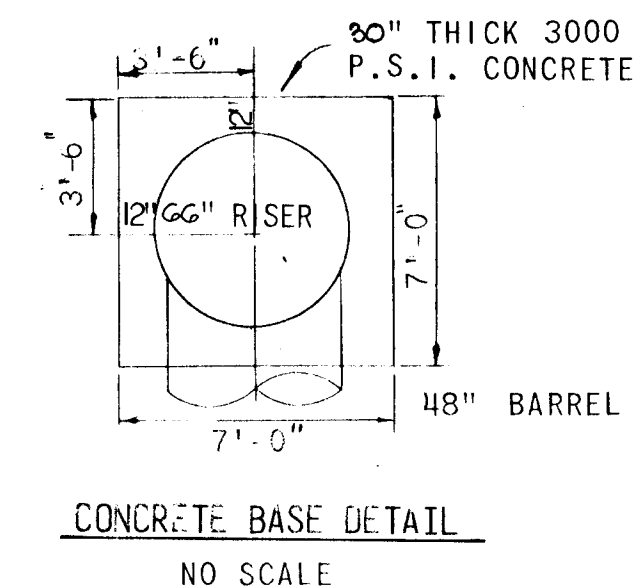
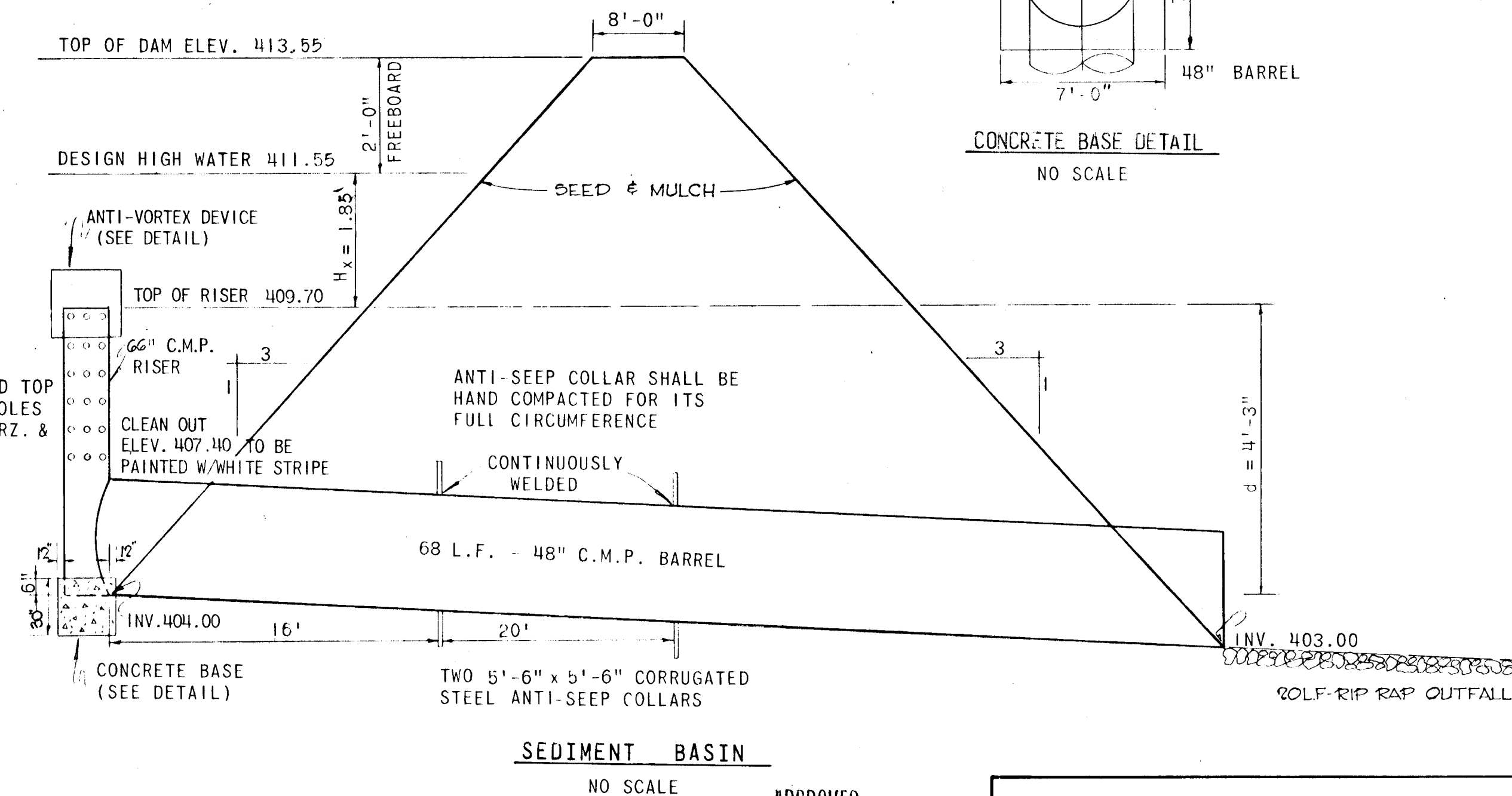
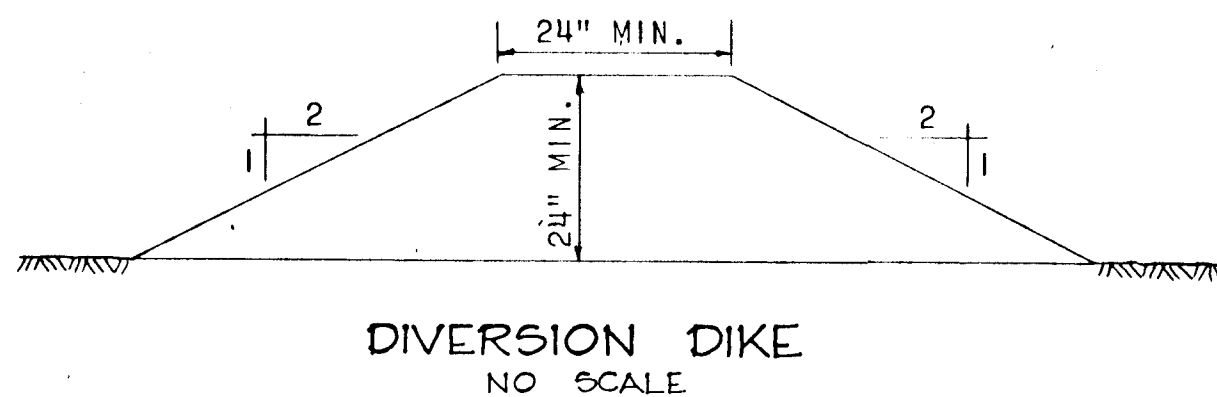
F-75-200 6/27/75

GENERAL NOTES

- ALL SEDIMENT CONTROL MEASURES ARE TO BE INSTALLED AND STABILIZED ACCORDING TO NOTE 7 PRIOR TO ANY GRADING ON THIS SITE.
- DISTURBED AREAS ARE TO BE MAINTAINED IN ROUGH GRADED CONDITION UNTIL PROPER WEATHER CONDITIONS EXIST FOR THE ESTABLISHMENT OF PERMANENT VEGETATIVE COVER.
- ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND BE MAINTAINED IN EFFECTIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD SOIL CONSERVATION DISTRICT (465-3180 OR 465-5000 EXT. 320)
- A MINIMUM 24 HOUR NOTICE MUST BE GIVEN TO THE HOWARD CONSERVATION DISTRICT PRIOR TO THE START OF ANY WORK.
- SEDIMENT BASINS WILL BE CLEANED OUT WHEN SILT REACHES A DEPTH EQUAL TO THE ELEVATION AS SHOWN ON PLAN.
- NO SLOPES SHALL BE STEEPER THAN 3:1.
- ALL STABILIZATION WILL BE DONE AS FOLLOWS:
 - APPLY GROUND LIMESTONE AT 2 TONS PER ACRE
 - APPLY 10-10-10 FERTILIZER AT 1000 LBS. PER ACRE
 - WORK BOTH INTO SOIL AND PREPARE AREA TO BE SEEDDED WITH A YORK RAKE
 - SEED AREAS WITH COMMON KENTUCKY BLUEGRASS AT 40 LBS. PER ACRE, CERTIFIED MERION KENTUCKY BLUEGRASS AT 30 LBS. PER ACRE AND PENNLAWN RED FESCUE AT 30 LBS. PER ACRE.
 - MULCH WITH UNWEATHERED SMALL GRAIN STRAW AT 2 1/2 TONS PER ACRE AND TACK WITH ASPHALT



- THE FILL IN THIS AREA WILL START AT THE TOE AND WILL UTILIZE A FLEXIBLE DOWNDRAIN PIPE AND INTERCEPTOR DIKE OF THE MINIMUM DIMENSIONS SHOWN IN THE DETAILS ON THIS SHEET.
- THE INTERCEPTOR DIKE WILL BE REESTABLISHED AS REQUIRED DURING THE CONSTRUCTION OF THE FILL.
- ON THE LAST OR FINAL LIFT THE INTERCEPTOR DIKE WILL BE SHAPED TO THE CONTOUR SHOWN IN THE DETAIL AND THE CONTRACTOR WILL INSURE POSITIVE DRAINAGE TO THE SEDIMENT BASIN TO THE WESTERLY SIDE OF THE SITE.



OFFICE OF PLANNING AND ZONING

Chief, Division of Land Development and Transportation Planning. Date

Reviewed for Howard S.C.D. and meets Technical Requirements

Signature: James M. Nelson
U.S. SOIL CONSERVATION SERVICE
Date: 1-2-75

This Development Plan is approved for Soil Erosion and Sediment Control by the Howard Soil Conservation District.

Approved: [Signature]
Howard S.C.D.
Date: 1-2-75

DEPARTMENT OF PUBLIC WORKS

Signature: [Signature]
Chief, Bureau of Highways
Date: 1/6/75

ENGINEERS CERTIFICATE

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.

Signature of Engineer Reg. No. [Signature]
Date: 9-16-74

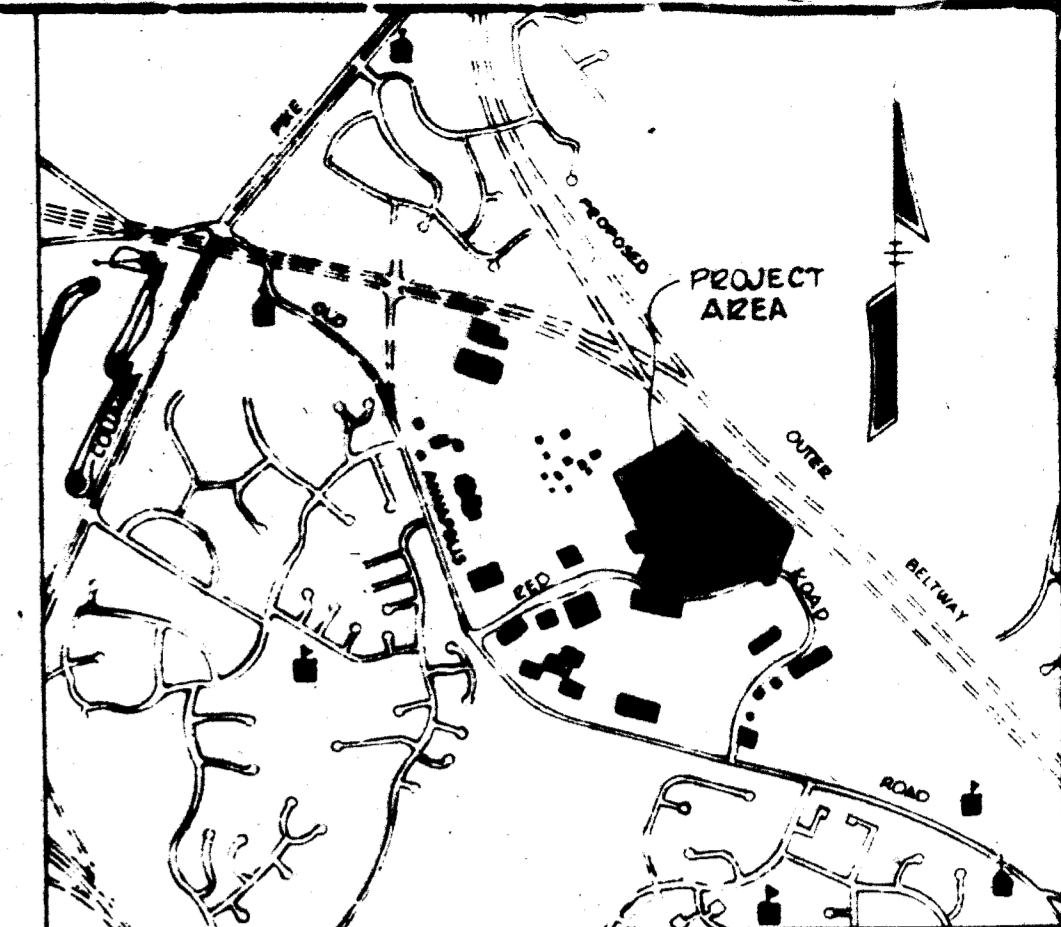
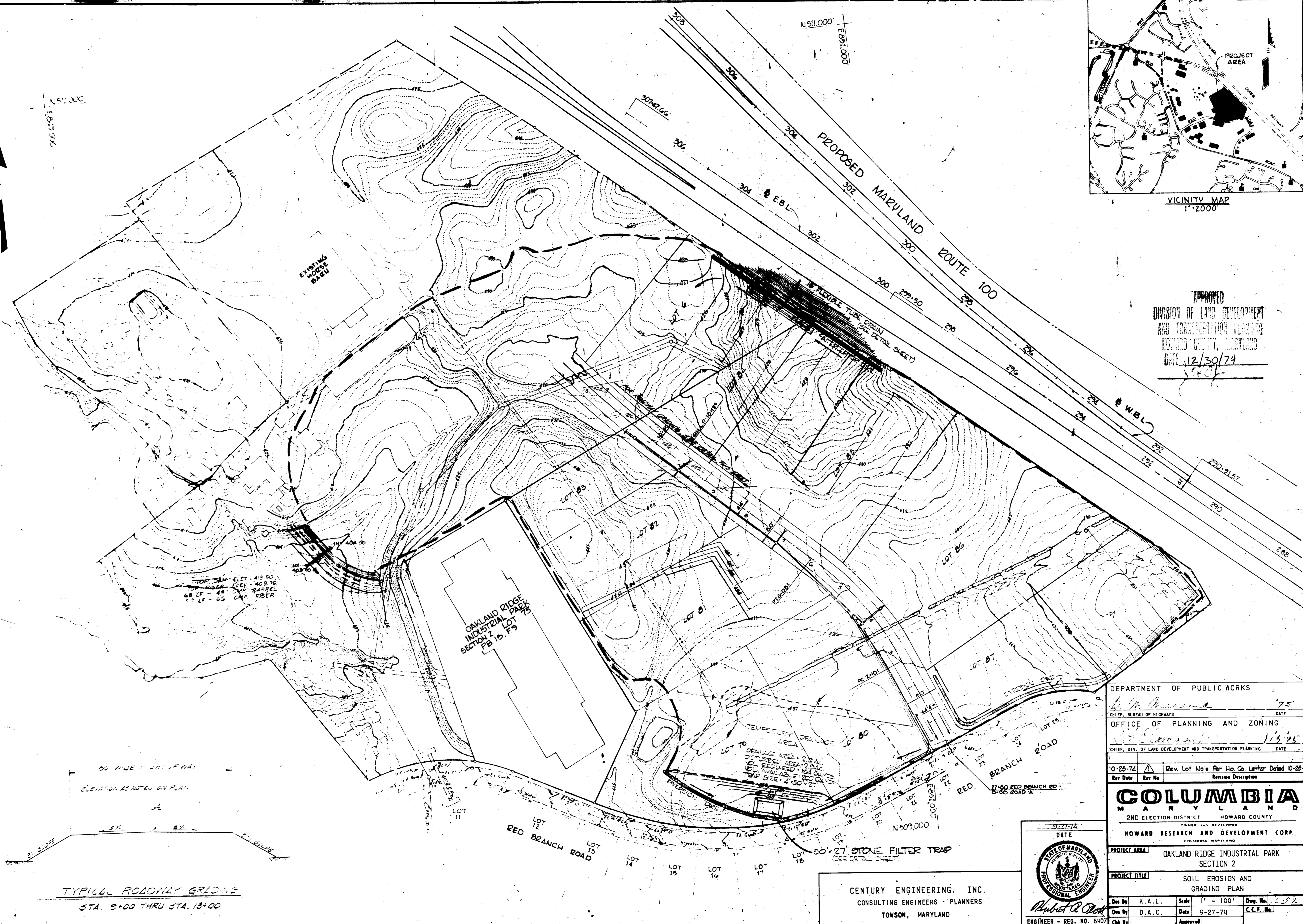
DEVELOPER CERTIFICATE

I hereby certify that all development and/or construction will be done according to this plan of development and plan for Erosion and Sediment Control, and I also authorize periodic on-site inspection by the Howard Soil Conservation District or their authorized agents, as are deemed necessary.

Deviation from this plan will not be made unless authorized by the Howard Soil Conservation District.

Signature of Developer: [Signature]
Date: 12/30/74

CENTURY ENGINEERING, INC. CONSULTING ENGINEERS TOWSON, MARYLAND		
Rev Date	Rev No	Revision Description
COLUMBIA MARYLAND 2ND ELECTION DISTRICT HOWARD COUNTY OWNER AND DEVELOPER HOWARD RESEARCH AND DEVELOPMENT CORP. COLUMBIA, MARYLAND		
PROJECT AREA	OAKLAND INDUSTRIAL PARK SECTION 2	
PROJECT TITLE	SOIL EROSION DETAILS	
Des. By	K.A.L.	Scale NONE
Drn. By	D.A.C.	Date 8-23-1974
Chk. By	J.T.J.	Approved
Dwg. No.	GofG	
CCF. No.		



VICINITY MAP
1"=2000

APPROVED
DIVISION OF LAND DEVELOPMENT
AND TRANSPORTATION PLANNING
HOWARD COUNTY, MARYLAND
DATE 12/30/74

60' WIDE - 30' OF WAY
ELEVATION AS NOTED ON PLAN

TYPICAL ROADWAY GRADING
STA. 9+00 THRU STA. 13+00

DEPARTMENT OF PUBLIC WORKS		DATE
CHIEF, BUREAU OF HIGHWAYS	<i>[Signature]</i>	1/75
OFFICE OF PLANNING AND ZONING		DATE
CHIEF, DIV. OF LAND DEVELOPMENT AND TRANSPORTATION PLANNING	<i>[Signature]</i>	1/13/75
10-25-74	Rev. Lot No's Per Ho. Co. Letter Dated 10-25-74	
Rev. Date	Rev. No.	Revision Description

COLUMBIA
MARYLAND
2ND ELECTION DISTRICT HOWARD COUNTY

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

PROJECT AREA
OAKLAND RIDGE INDUSTRIAL PARK
SECTION 2

PROJECT TITLE
SOIL EROSION AND
GRADING PLAN

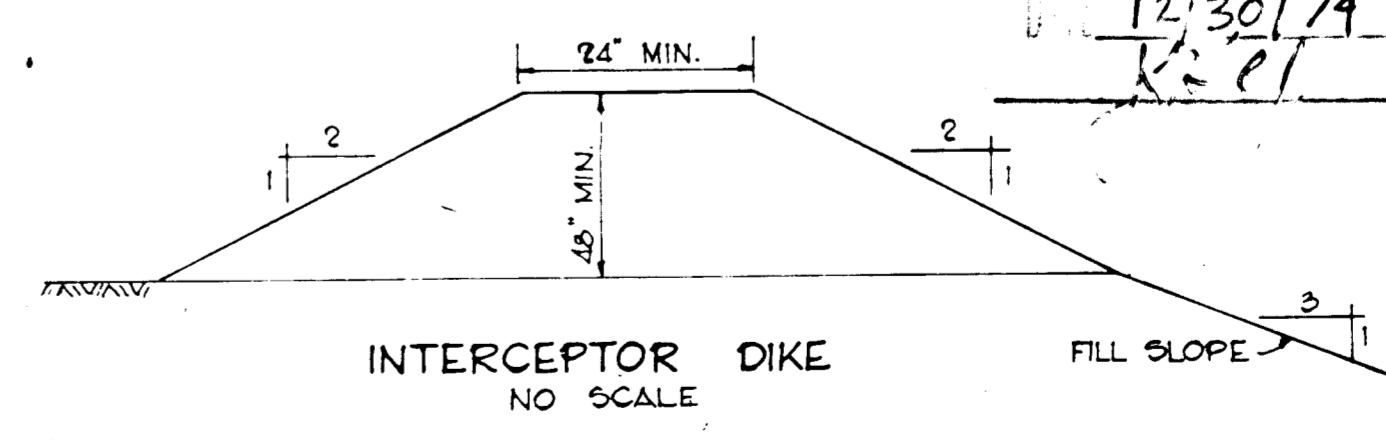
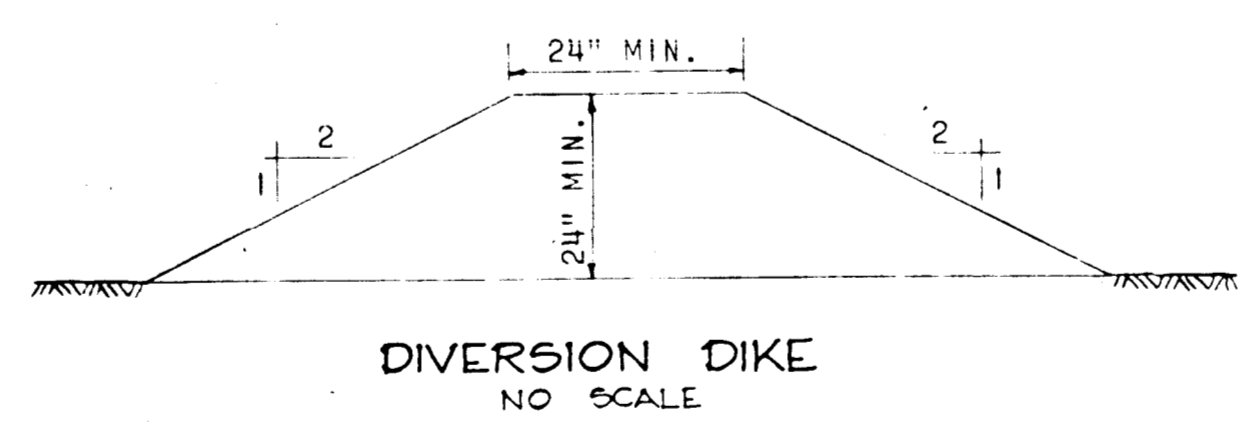
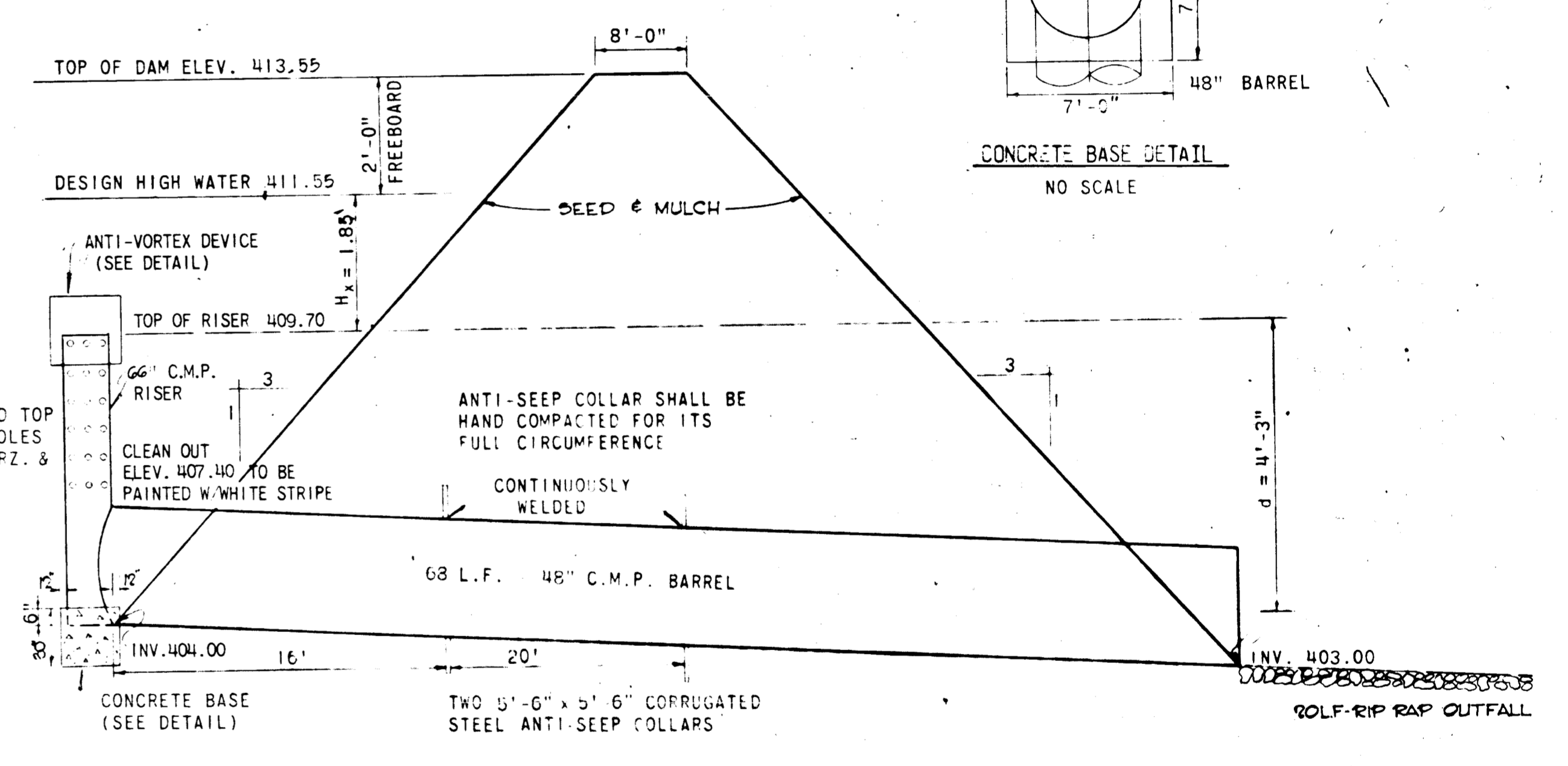
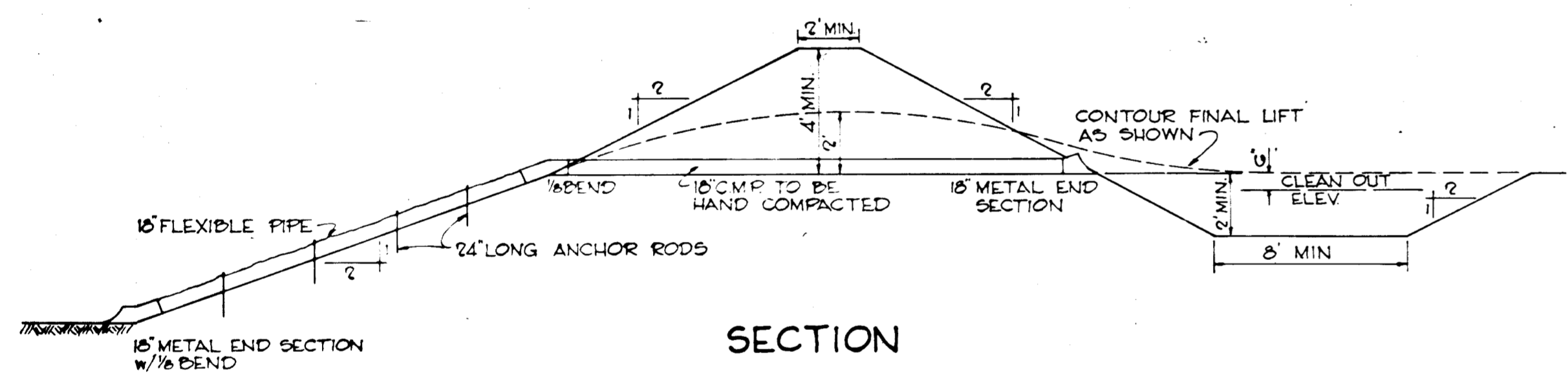
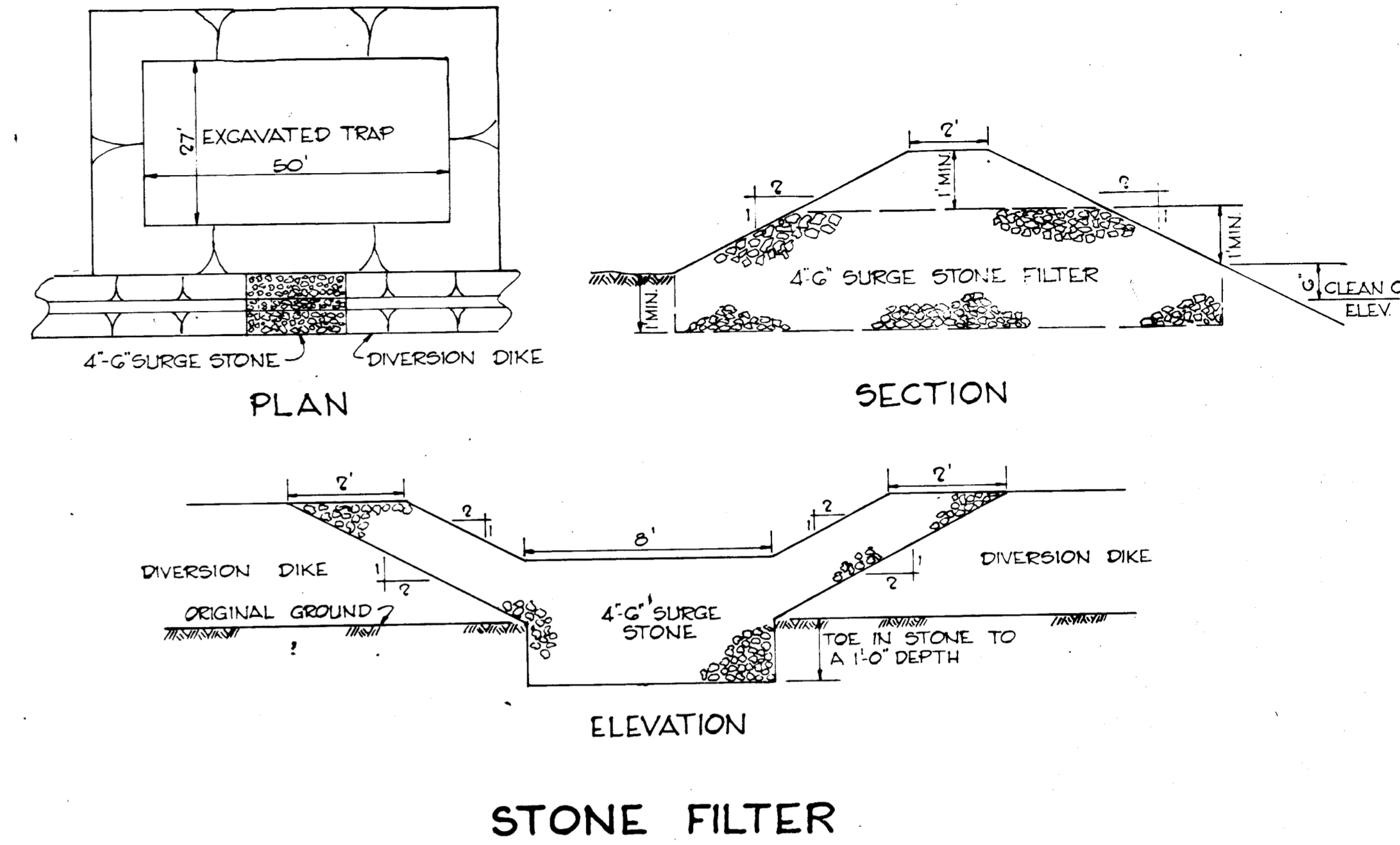
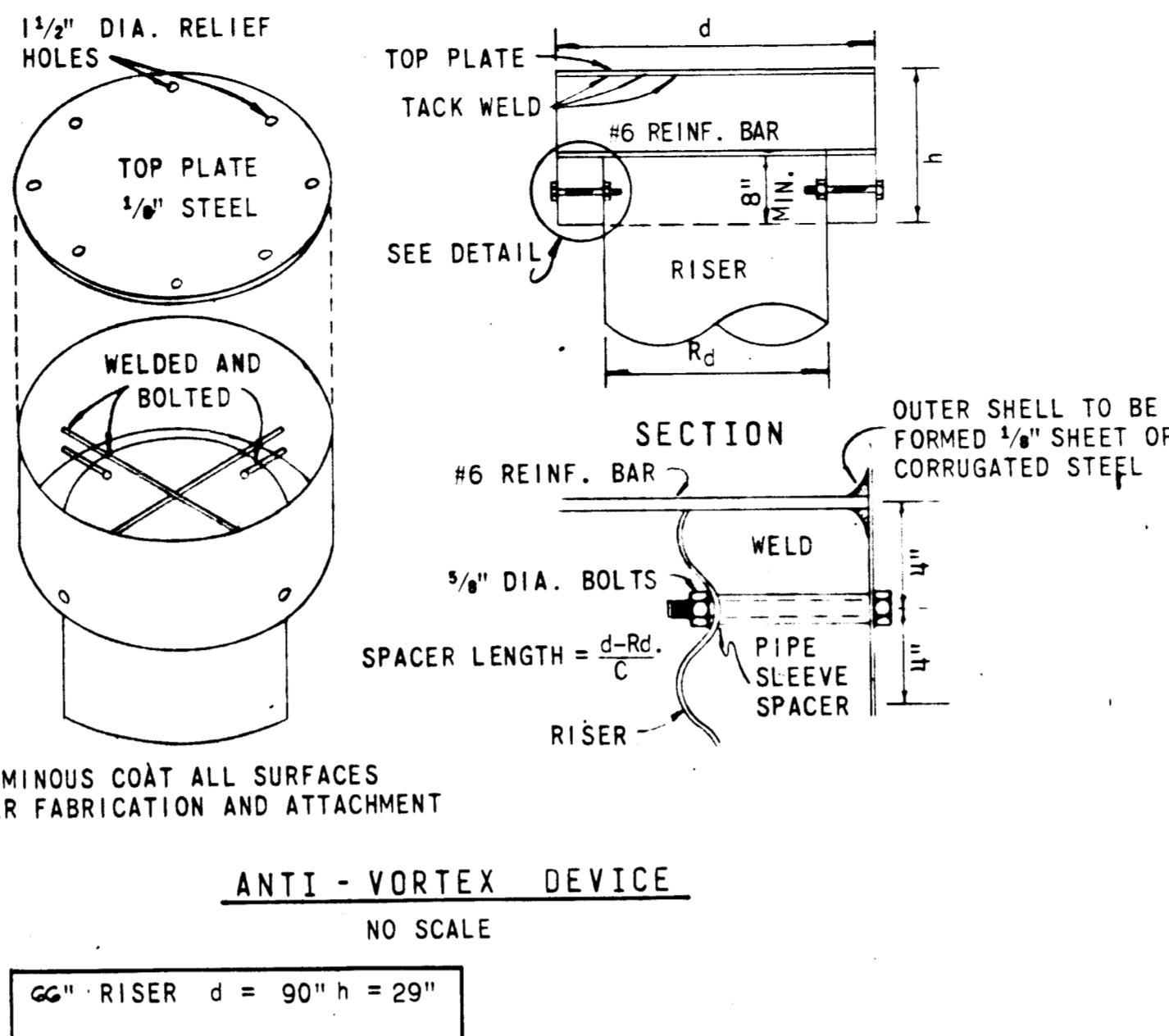
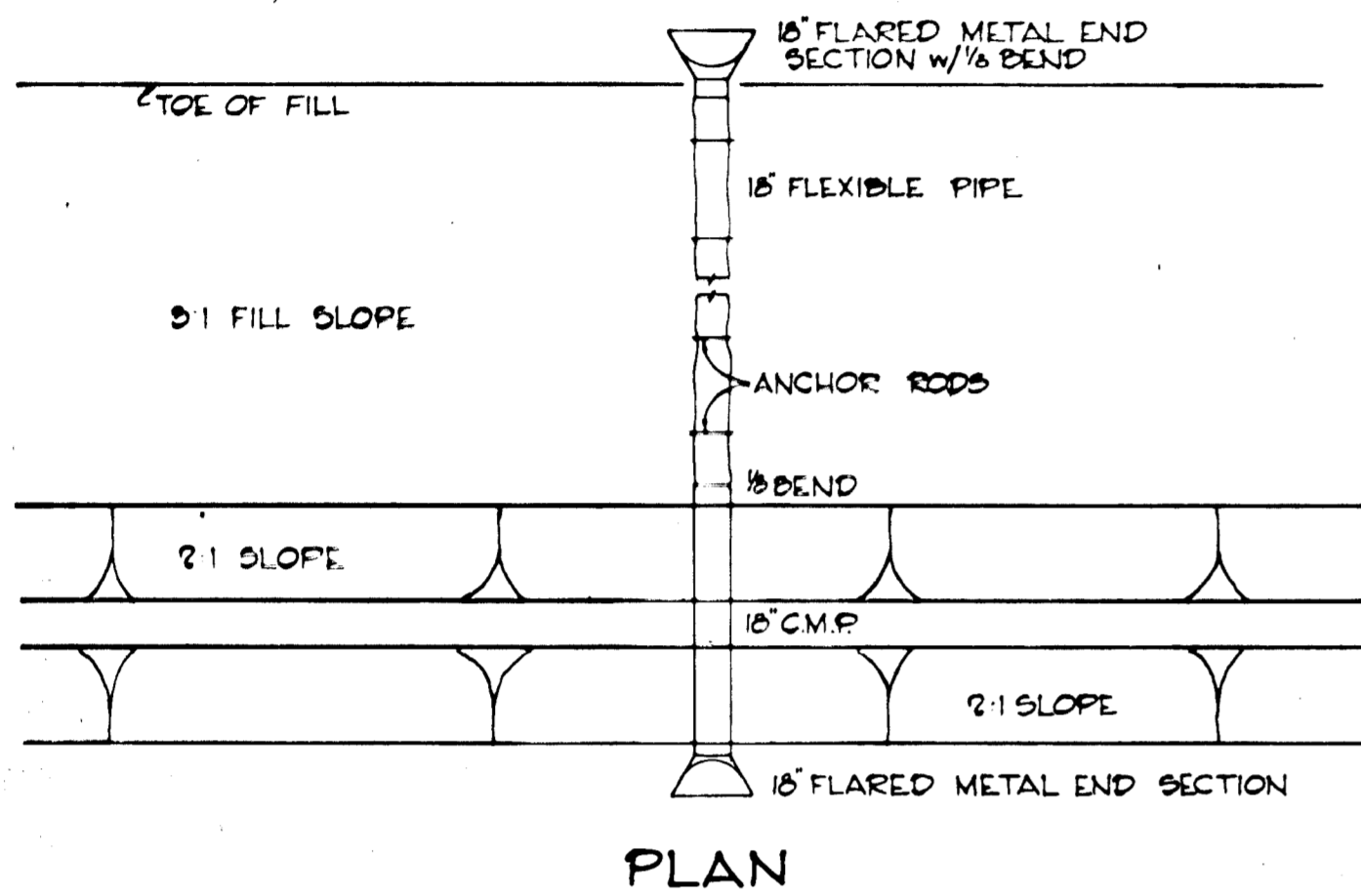
Des. By	K.A.L.	Scale	1" = 100'	Dwg. No.	1392
Des. By	D.A.C.	Date	9-27-74	C.C.F. No.	
Chk. By	Approved				

CENTURY ENGINEERING, INC.
CONSULTING ENGINEERS - PLANNERS
TOWSON, MARYLAND



GENERAL NOTES

1. ALL SEDIMENT CONTROL MEASURES ARE TO BE INSTALLED AND STABILIZED ACCORDING TO NOTE 7 PRIOR TO ANY GRADING ON THIS SITE.
2. DISTURBED AREAS ARE TO BE MAINTAINED IN ROUGH GRADED CONDITION UNTIL PROPER WEATHER CONDITIONS EXIST FOR THE ESTABLISHMENT OF PERMANENT VEGETATIVE COVER.
3. ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND BE MAINTAINED IN EFFECTIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD SOIL CONSERVATION DISTRICT (465-3180 OR 465-5000 EXT. 320).
4. A MINIMUM 24 HOUR NOTICE MUST BE GIVEN TO THE HOWARD CONSERVATION DISTRICT PRIOR TO THE START OF ANY WORK.
5. SEDIMENT BASINS WILL BE CLEANED OUT WHEN SILT REACHES A DEPTH EQUAL TO THE ELEVATION AS SHOWN ON PLAN.
6. NO SLOPES SHALL BE STEEPER THAN 3:1.
7. ALL STABILIZATION WILL BE DONE AS FOLLOWS:
 - A. APPLY GROUND LIMESTONE AT 2 TONS PER ACRE
 - B. APPLY 10-10-10 FERTILIZER AT 1000 LBS. PER ACRE
 - C. WORK BOTH INTO SOIL AND PREPARE AREA TO BE SEEDDED WITH A YORK RAKE
 - D. SEED AREAS WITH COMMON KENTUCKY BLUEGRASS AT 50 LBS. PER ACRE, CERTIFIED MERION KENTUCKY BLUEGRASS AT 50 LBS. PER ACRE AND PENNLAWN RED FESCUE AT 50 LBS. PER ACRE.
 - E. MULCH WITH UNWEATHERED SMALL GRAIN STRAW AT 2 1/2 TONS PER ACRE AND TACK WITH ASPHALT



1. THE FILL IN THIS AREA WILL START AT THE TOE AND WILL UTILIZE A FLEXIBLE DOWNDRAIN PIPE AND INTERCEPTOR DIKE OF THE MINIMUM DIMENSIONS SHOWN IN THE DETAILS ON THIS SHEET.
2. THE INTERCEPTOR DIKE WILL BE REESTABLISHED AS REQUIRED DURING THE CONSTRUCTION OF THE FILL.
3. ON THE LAST OR FINAL LIFT THE INTERCEPTOR DIKE WILL BE SHAPED TO THE CONTOUR SHOWN IN THE DETAIL AND THE CONTRACTOR WILL INSURE POSITIVE DRAINAGE TO THE SEDIMENT BASIN TO THE WESTERLY SIDE OF THE SITE.

OFFICE OF PLANNING AND ZONING

Chief, Division of Land Development and Transportation Planning. Date.

Reviewed for Howard S.C.D. and meets Technical Requirements

Signature: James M. Helm Date: 1-2-75

U.S. SOIL CONSERVATION SERVICE

This Development Plan is approved for Soil Erosion and Sediment Control by Howard Soil Conservation District. Approved: Robert W. Ziehm Date: 1-2-75

ENGINEERS CERTIFICATE

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.

Signature of Engineer Reg. No. 9-16-74 Date

DEVELOPER CERTIFICATE

I hereby certify that all development and/or construction will be done according to this plan of development and plan for Erosion and Sediment Control, and I also authorize periodic on-site inspection by the Howard Soil Conservation District or their authorized agents, as are deemed necessary.

Deviation from this plan will not be made unless authorized by the Howard Soil Conservation District.

Signature of Developer: Walter W. ... Date: 12/30/74

CENTURY ENGINEERING, INC. CONSULTING ENGINEERS TOWSON, MARYLAND			
Rev. Date	Rev. No.	Revision Description	
COLUMBIA MARYLAND			
2ND ELECTION DISTRICT HOWARD COUNTY OWNER AND DEVELOPER HOWARD RESEARCH AND DEVELOPMENT CORP. COLUMBIA MARYLAND			
PROJECT AREA: OAKLAND INDUSTRIAL PARK SECTION 2			
PROJECT TITLE: SOIL EROSION DETAILS			
Des. By	K.A.L.	Scale	NONE
Drawn By	D.A.C.	Date	8-23-1974
Chk. By	J.T.J.	Approved	
Date		Dwg. No. 2 of 2	
Date		C.C.F. No.	

DEPARTMENT OF PUBLIC WORKS
Signature: B. W. ... Date: 1/6/75
Chief, Bureau of Highways