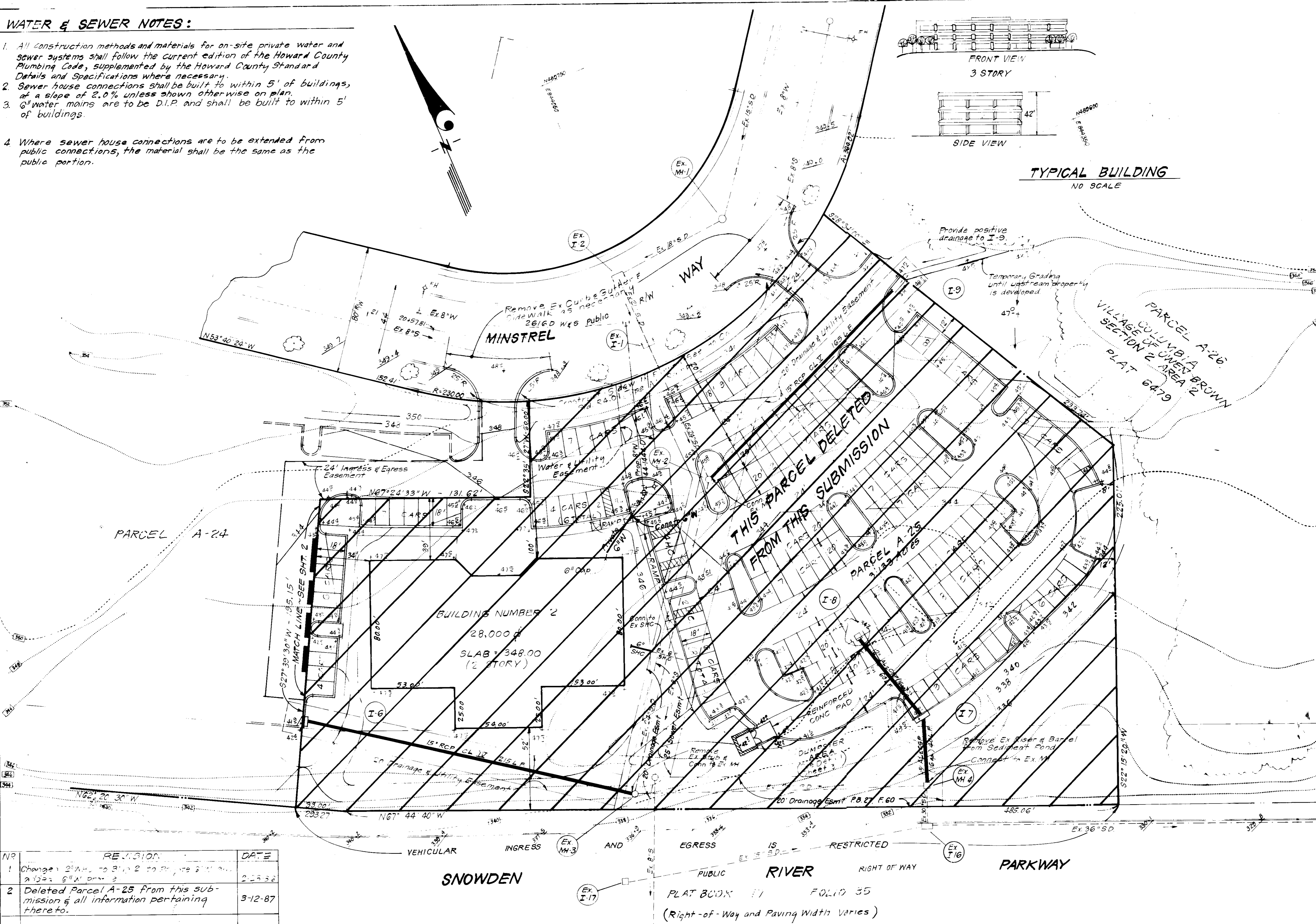
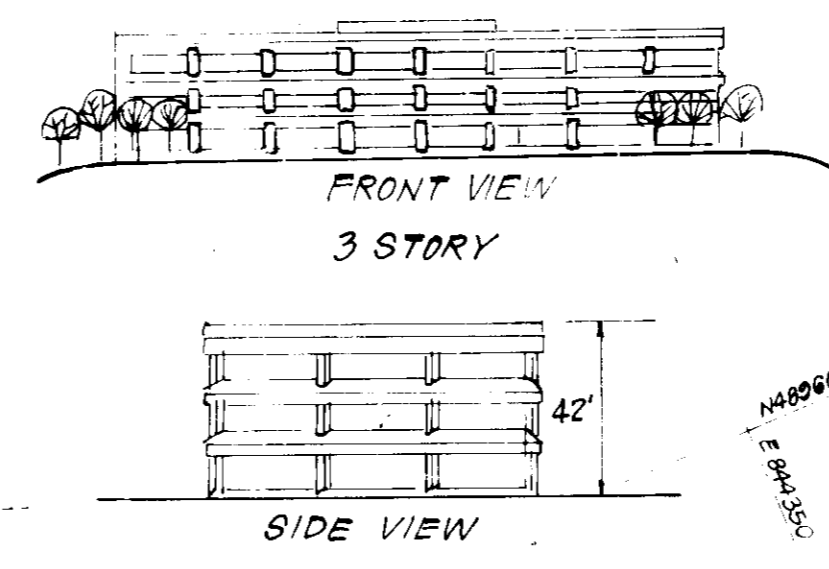


WATER & SEWER NOTES:

- All construction methods and materials for on-site private water and sewer systems shall follow the current edition of the Howard County Plumbing Code, supplemented by the Howard County Standard Details and Specifications where necessary.
- Sewer house connections shall be built to within 5' of buildings, at a slope of 2.0% unless shown otherwise on plan.
- 6" water mains are to be D.I.P. and shall be built to within 5' of buildings.
- Where sewer house connections are to be extended from public connections, the material shall be the same as the public portion.

GENERAL NOTES:

- All materials and construction to be in accordance with the Howard County Road Construction Code and Specifications.
- This plan is covered by Final Development Plan: Phase 118-A-I Part II.
- Any damage to county owned rights of way shall be corrected at the developer's expense.
- Installation of Traffic Control Devices shall be in accordance with the latest edition of the "Manual of Uniform Traffic Control".
- Topography was compiled from plans prepared by Watkins Associates.
- All driveways to be privately owned and maintained.
- All coordinates are based on Howard County Geodetic Control Traverse which is based on the Maryland State Plane Coordinate System.
- Class "C" Trench Bedding shall be used for all storm drains unless shown otherwise.
- Information concerning underground utilities was obtained from available records, but the contractor must determine the exact location and elev. of mains by digging test pits, by hand, at all utility crossings well in advance of construction.
- The contractor or developer shall contact the Construction Inspection/Survey Division 24 hrs in advance of commencement of work at 992-2417 or 792-7272.
- All downspouts shall be handled by one of the following methods:
 A. Downspout to splash blocks and discharged to ground having good percolation.
 B. Downspout in front of units, piped to curb.
 C. Downspout connected to storm drain.
- The developer agrees to work with the Department of Licenses and Inspections to resolve any problem caused by roof water discharge.
- Handicap parking details shall be in accordance with the "Maryland Building Code for the Handicapped" Section 5.01-7.05 and details on sheet 3.
- Storm Water Management is provided by Lake Elkhorn and Parcel D-1 of EGU Section 2, Area 4.



LEGEND:

- 1. Contour Interval ————— 2 Ft
- 2. Existing Contour ———— 340
- 3. Proposed Contour ———— 340
- 4. Spot Elevation ———— +40.5
- 5. Direction of Drainage —————>
- 6. Proposed Storm Drain ————
- 7. Trees to be Retained ————

SITE ANALYSIS:

- Zoning: New Town Commercial (FDP: Phase 118-A-I Part II)
- Area: 4.630 Acres
- No. of Parking Spaces Required: 106 (2 per 1000 sq ft)
- No. of Parking Spaces Provided: 226 (4.3 per 1000 sq ft)
- Net Leasable Area = 52,700 sq ft
- Handicap Spaces = 4 per 100 Spaces Required; 5 Provided; 8
- Use: Professional and Business Offices
- Paved Area (parking & driveways) = 41%
- Green Area (including Entry courts & sidewalks) = 49%
- All Parking and Right of Way for Parcel A-24 Snowden River Pkwy and Minstrel Way are public and existing.
- Building Coverage:
 Building # 1 Parcel A-24: 0.4033 Ac. = 8.71%
 4.930 Ac.

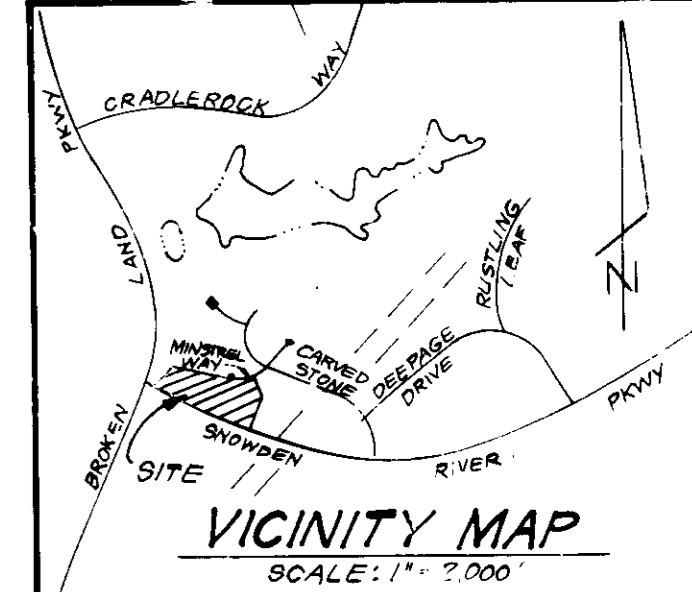
NO	REVISION	DATE
1	Change 2' x 4' to 2' x 2' to 2' x 2' and 2' x 2' to 6' x 6' per 3	2-23-86
2	Deleted Parcel A-25 from this submission & all information pertaining thereto.	3-12-87

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
 [Signature] 4-9-86
 COUNTY HEALTH OFFICER DATE

APPROVED FOR HOWARD COUNTY OFFICE OF PLANNING & ZONING
 [Signature] 4/10/86
 PLANNING DIRECTOR DATE

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 [Signature] 4-8-86
 CHIEF BUREAU OF ENGINEERING DATE

APPROVED
 [Signature] 4-1-86
 [Signature]



SUBDIVISION NAME COLUMBIA - V.O.B.	SECT./AREA 2/2	LOT/PARCEL # A-24
PLAT # OF L/P BLOCK # 6479 3	ZONE COMMERCIAL	TAX ZONE MAP ELECTION DISTRICT 42 6TH
WATER CODE E-12	SEWER CODE	

CLARK · FINEFROCK & SACKETT
 ENGINEERS · PLANNERS · SURVEYORS
 11115 LOCKWOOD DRIVE · SILVER SPRING, MARYLAND 20904 · (301) 593-3400

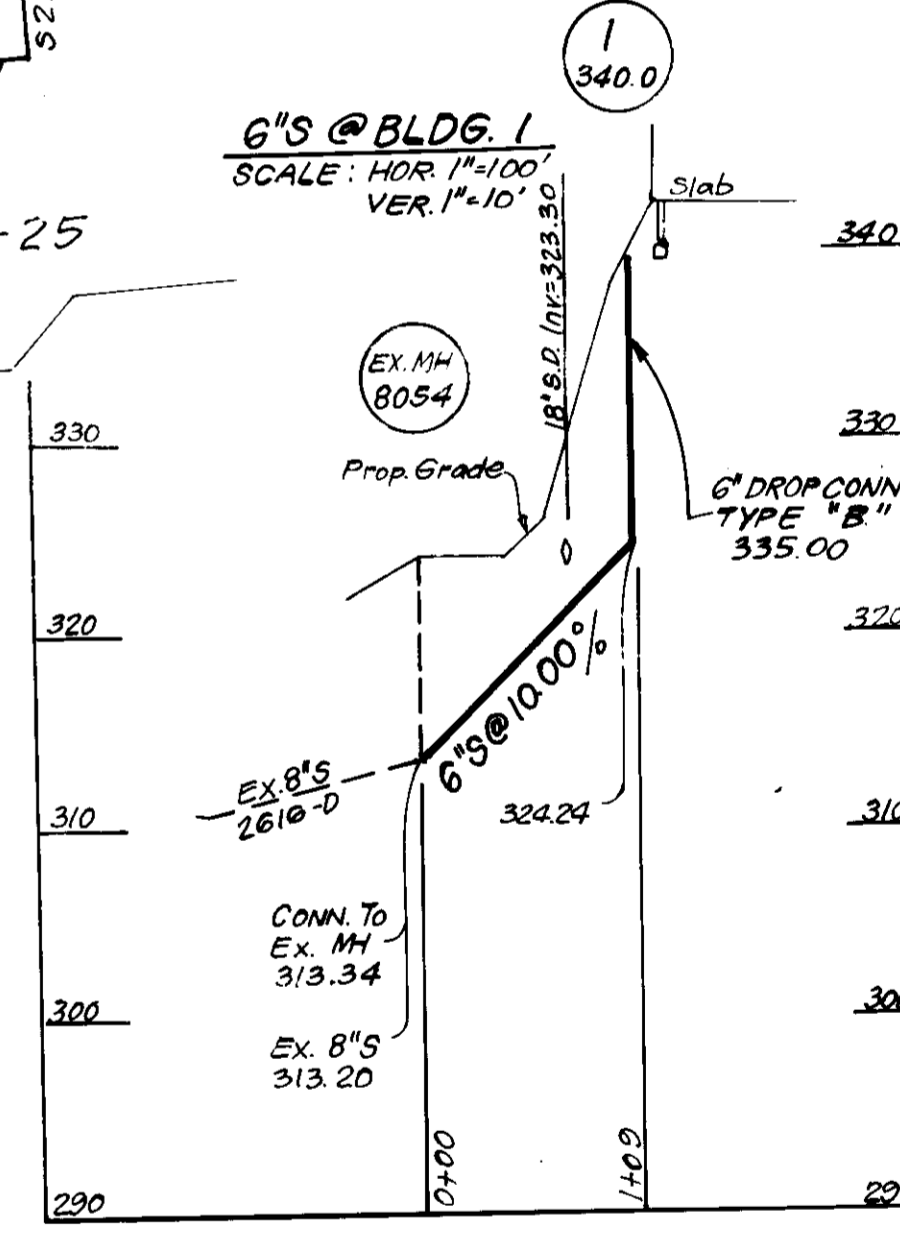
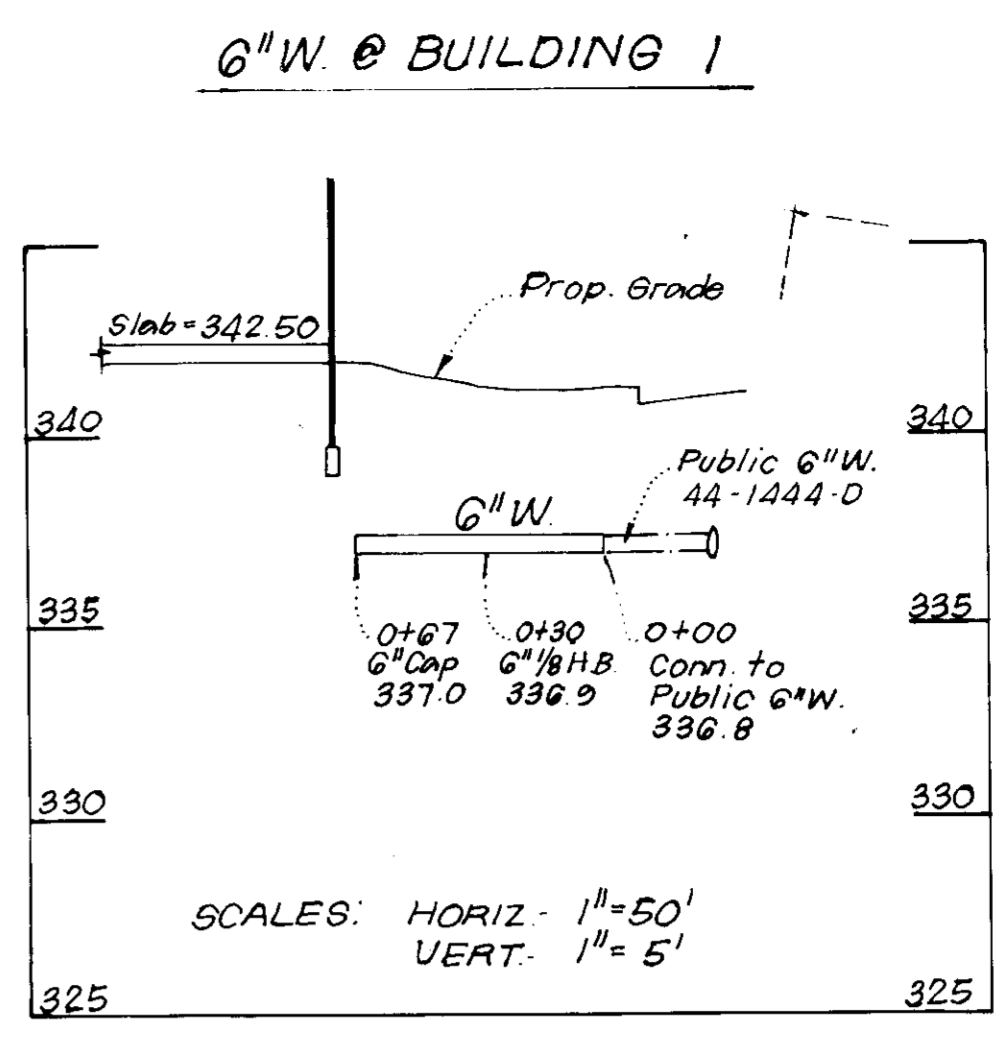
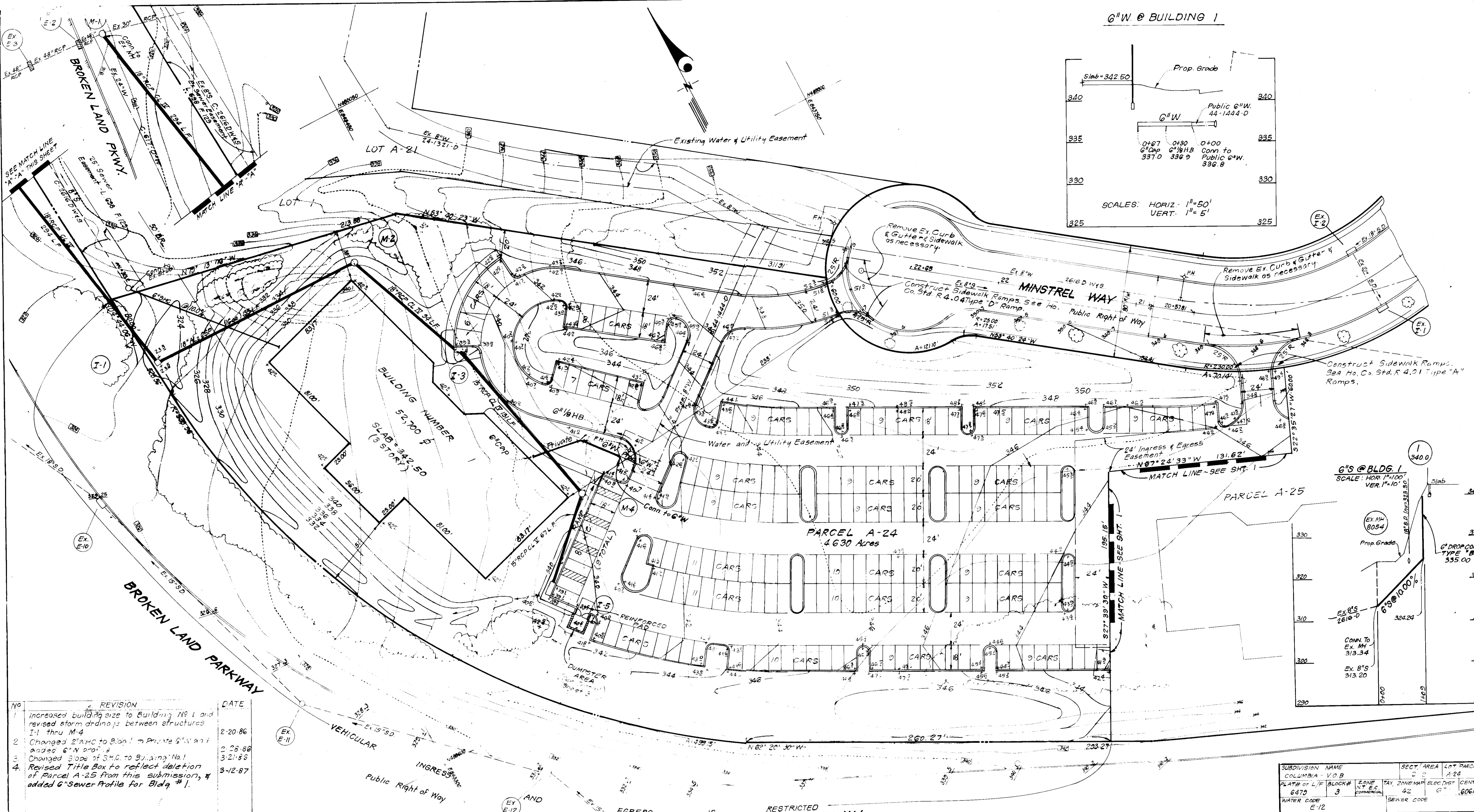
DESIGNED CKG JME	SITE DEVELOPMENT PLAN PARCEL A-24	SCALE 1"=30'
DRAWN VLM		DRAWING 1 OF 8
CHECKED CKG JME	COLUMBIA VILLAGE OF OWEN BROWN SECTION 2 AREA 2 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	JOB NO. 85-074
DATE 12-3-85		FILE NO. 85-074-X

FOR: OWEN BROWN JOINT VENTURE
 10320 Little Patuxent Parkway
 Columbia, Maryland 21044

SDP- 85-130C

ADDRESS CHART

NUMBER	STREET	ADDRESS
BLDG NO 1	7135	MINSTREL WAY



NO	REVISION	DATE
1	Increased building size to Building No. 1 and revised storm drains between structures I-1 thru M-4	2-20-86
2	Changed 2\"/>	

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICER: *[Signature]* 4-7-86
 DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
 PLANNING DIRECTOR: *[Signature]* 4-10-86
 DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DIRECTOR: *[Signature]* 4-8-86
 DATE

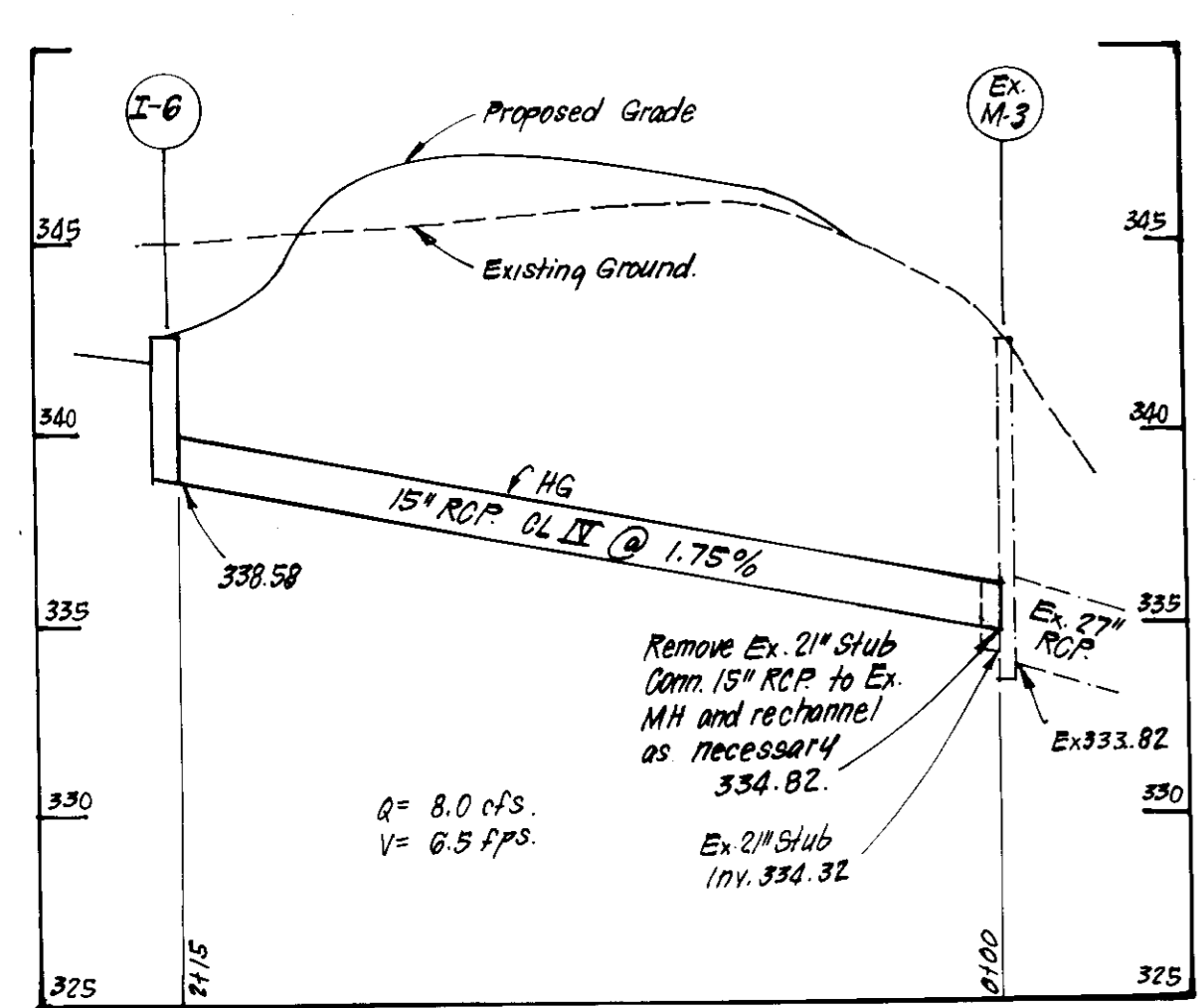
APPROVED
 PLANNING BOARD
 OF HOWARD COUNTY
 DATE 1-8-86
[Signature]

IS RESTRICTED
SNOWDEN RIVER PARKWAY
 (Right of Way and Paving Varies in Width)

SUBDIVISION NAME	SECTION	AREA	LOT	PARCEL #
COLUMBIA - V.O.B.	2	2		A-24
PLAT# OF L.F. BLOCK#	ZONE	TAX ZONE	ELEC. DIST.	CEN. DIST.
6470	3	COMMERCIAL	42	6
WATER CODE	SEWER CODE			
E-12	E-12			

DESIGNED C.K.G. J.M.E.	SITE DEVELOPMENT PLAN PARCEL A-24	SCALE
		1"=30'
DRAWN C.K.G. J.M.E.	COLUMBIA VILLAGE OF OWEN BROWN SECTION 2 AREA 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	DRAWING
		2 OF 8
CHECKED C.K.G. J.M.E.	FOR: OWEN BROWN JOINT VENTURE 10370 Little Patuxent Parkway Columbia, Maryland 21044	JOB NO.
		85-074
DATE	12-3-85	FILE NO.
		85-074

SDP-86-130C



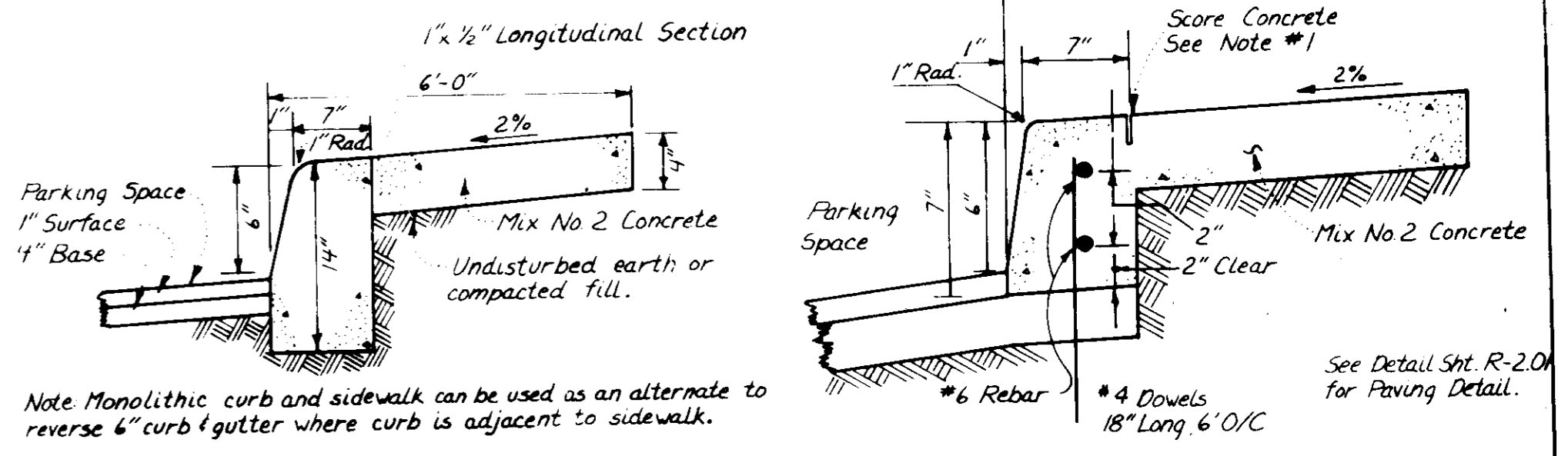
SIZE	TYPE	LENGTH
12"	AL CSP 10ga	60 LF
15"	RCP CL IV	346 LF
15"	RCP CL V	232 LF
15"	AL CSP 16ga	40 LF
18"	RCP CL IV	388 LF
18"	AL CSP 10ga	155 LF

* 2 1/2" x 1/2" Corrugations. Aluminumized CMP may be substituted for AL CSP.

No.	TYPE	INV. IN	INV. OUT	TOP ELEVATION		REMARKS	LOCATION
				UPPER	LOWER		
I-1	D Inlet	319.92	319.10	321.5	323.5	No. 2 Sid	See Plan
M-2	Manhole	330.77	330.54	340.0			
I-5	A-10 Inlet	332.43	332.14	339.93	339.80		
M-4	Manhole	335.30	334.98	341.80			
I-5	A-10 Inlet		336.10	339.60			
I-6	A-10 Inlet		338.58	342.59	342.40		
I-7	A-10 Inlet	337.00	335.00	340.50	340.50		
I-8	S Inlet w/Ret. Grate		338.50	Grate Elev=341.50			
I-9	A-10 Inlet		343.50	348.00	347.10		

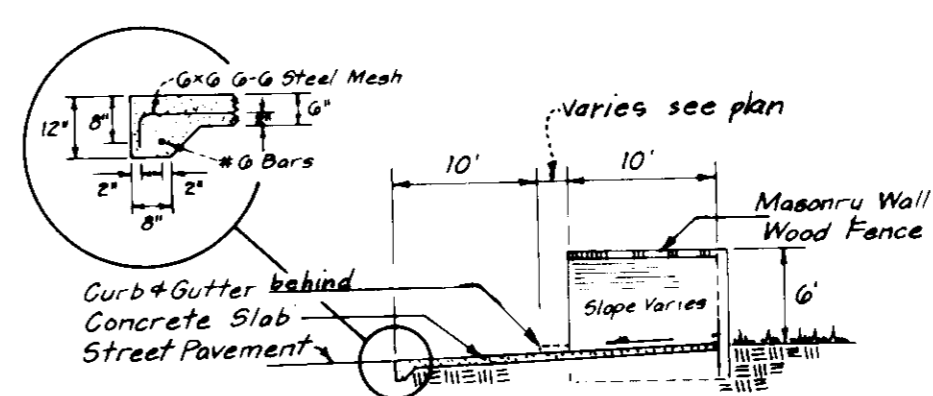
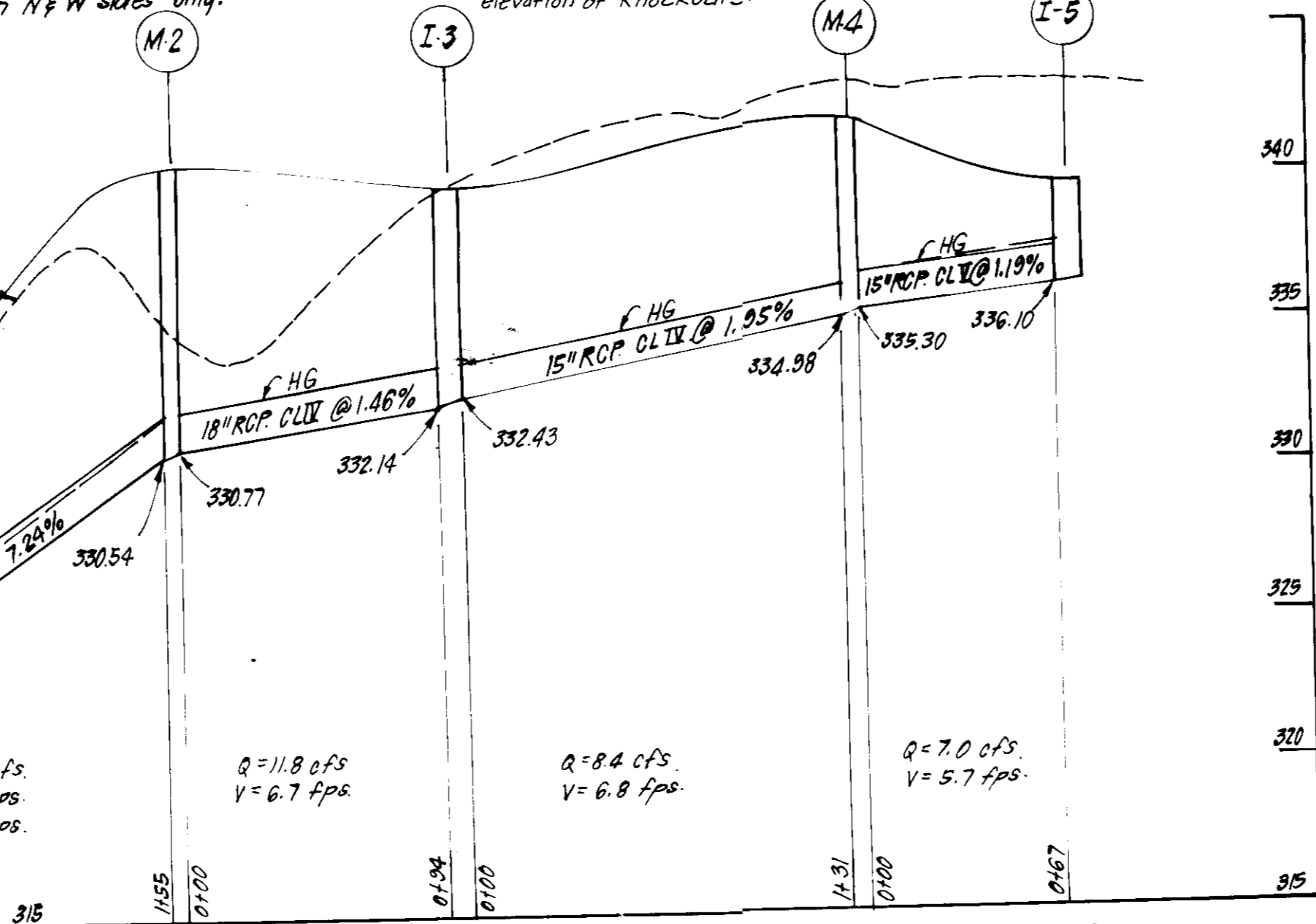
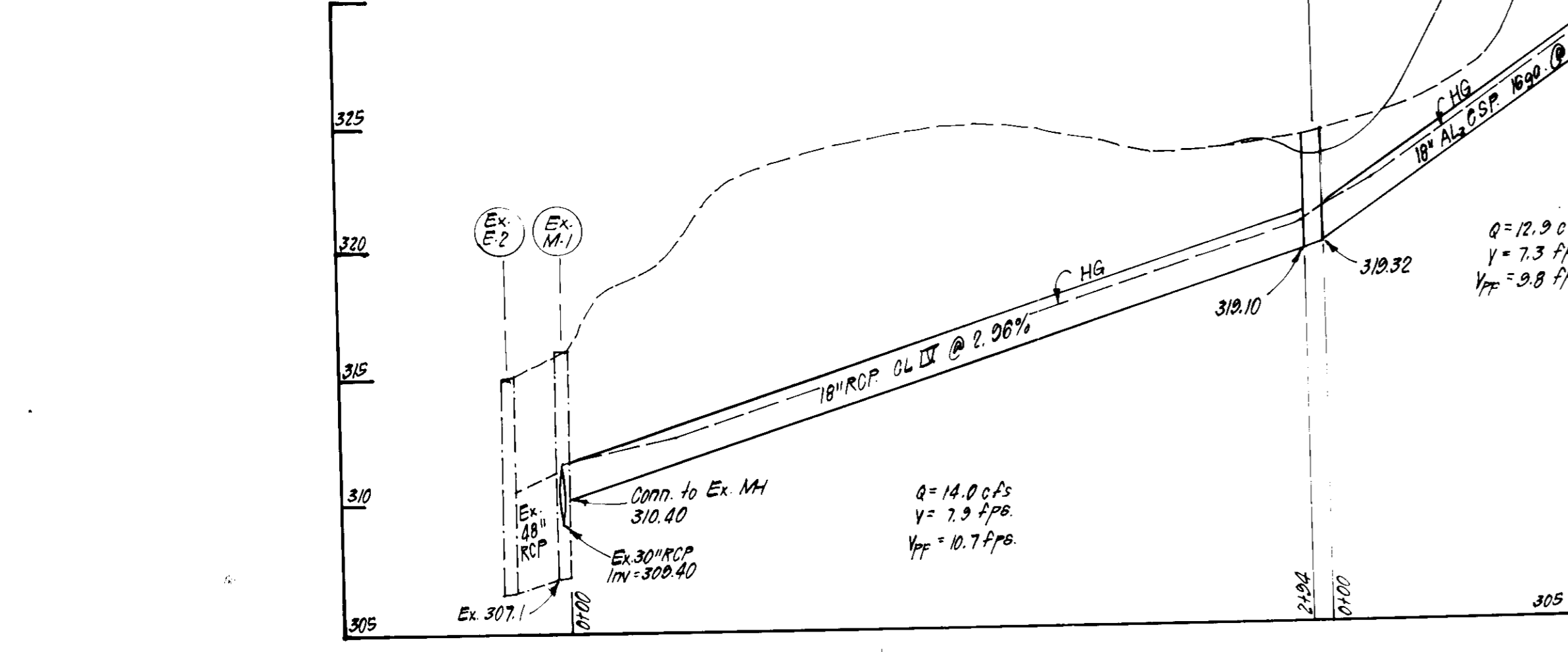
Δ All Inverts shall be fully developed. □ Manholes 2 & 4 shall have knockouts provided for connection of roof drains. Contractor shall coordinate with building contractor as to location, size and elevation of knockouts.
* Slobs on N&W sides only.

Notes:
1. Longitudinal Joint between sidewalk & curb shall be continuous and to a depth of 1/4 the thickness of the sidewalk or 1" longitudinal joints shall run from back edge of sidewalk continuous to the bottom face of curb to a depth of 1/4 the sidewalk thickness or 1" and spaced 5' apart.
2. Provide 1/2" expansion joints at 15' intervals. In longitudinal joints to full cross-section.

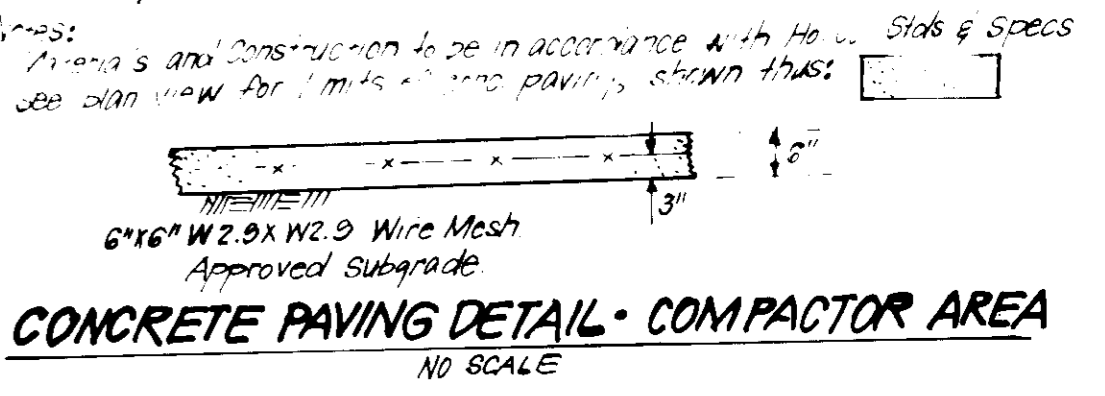


MONOLITHIC CURB & SIDEWALK - PRIVATE PARKING AREA
NO SCALE

ALTERNATE SECTION
NO SCALE

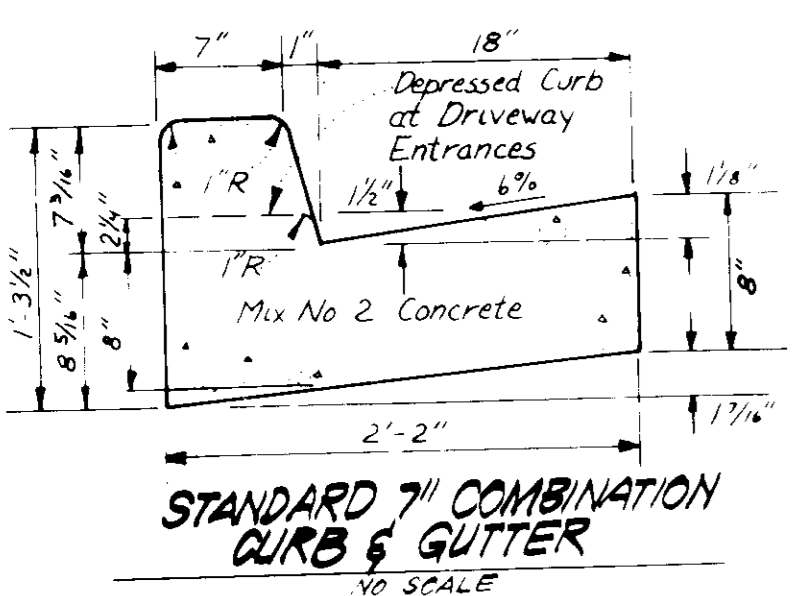
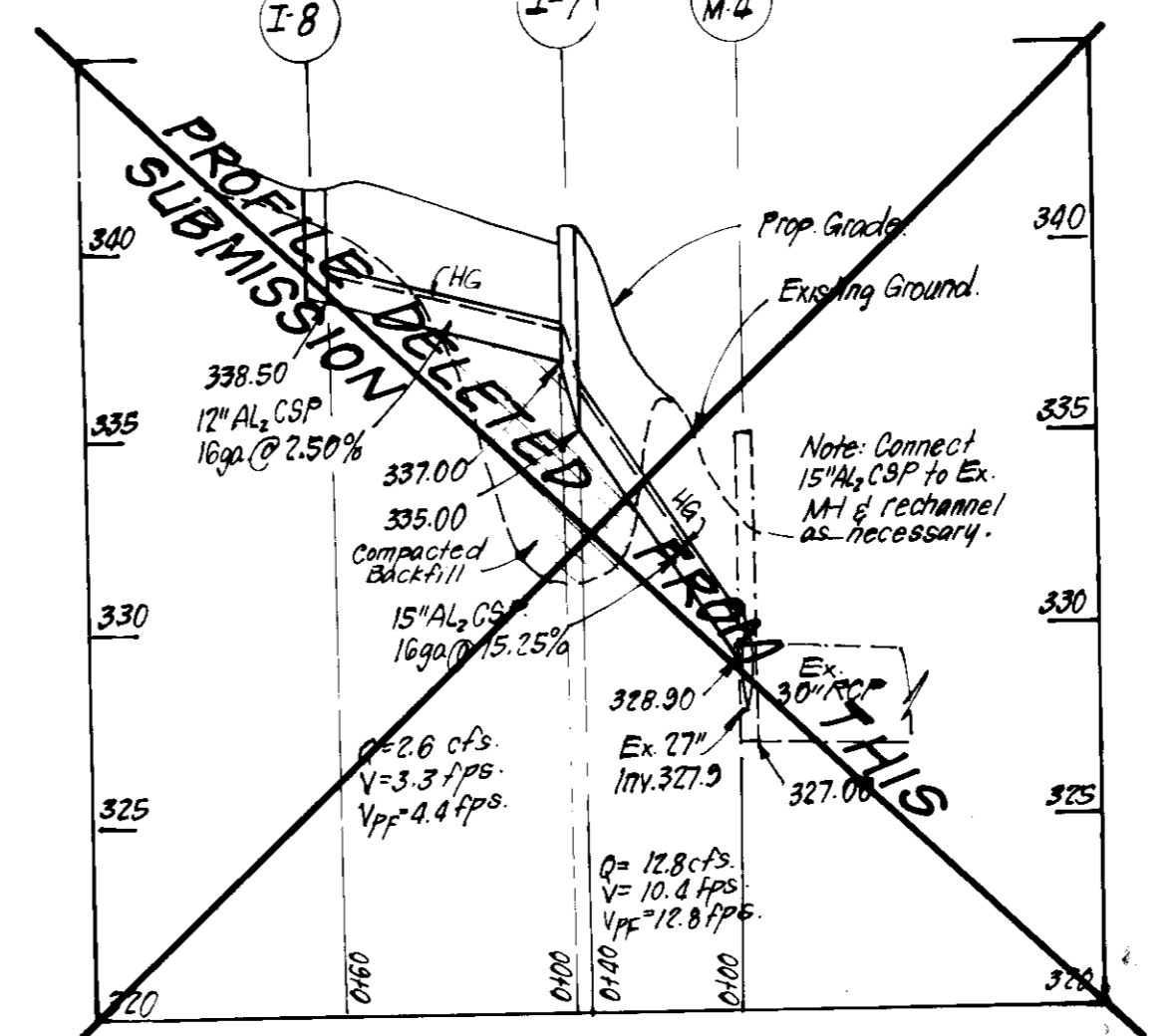
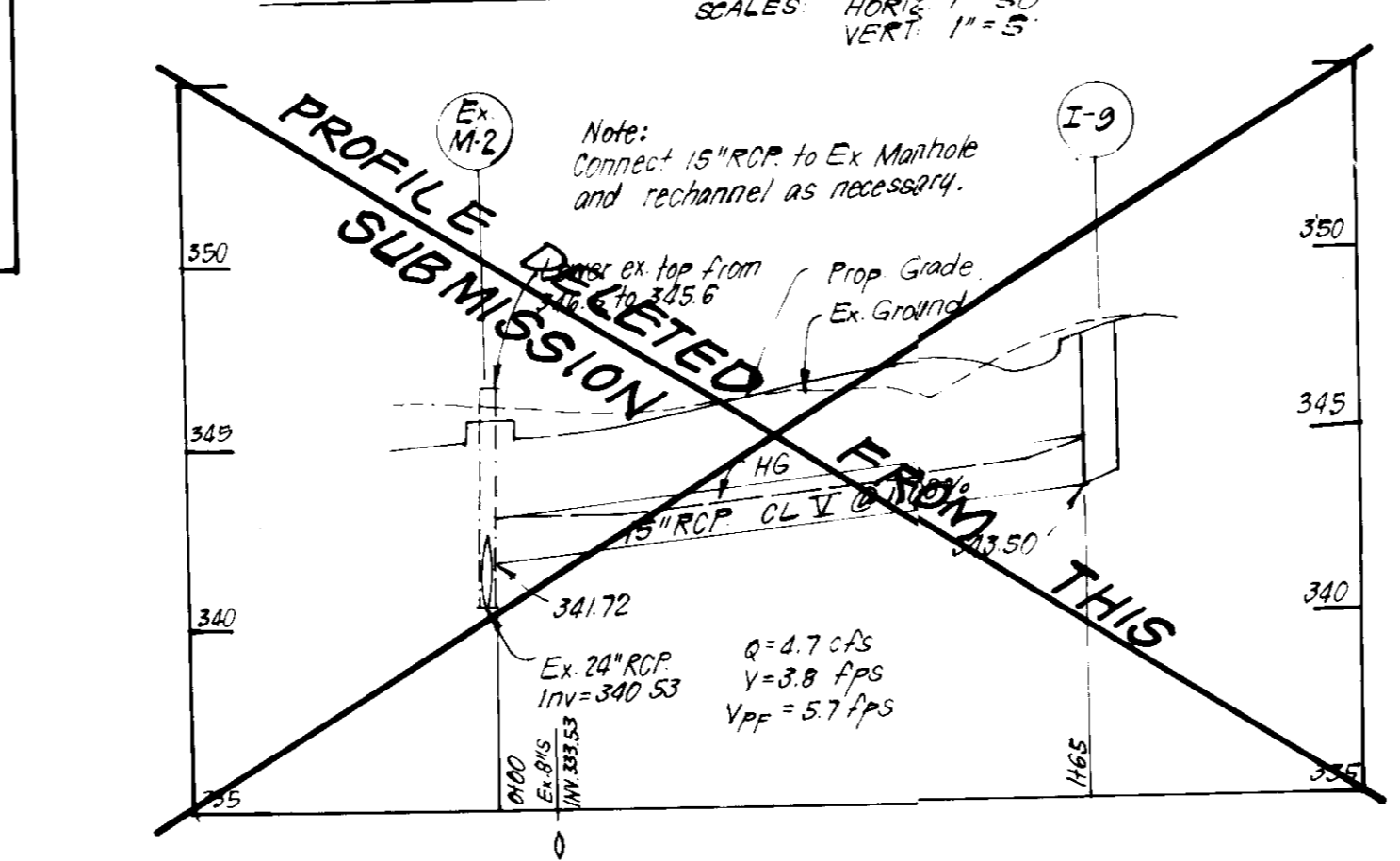


DUMPSTER PAD & ENCLOSURE
No Scale

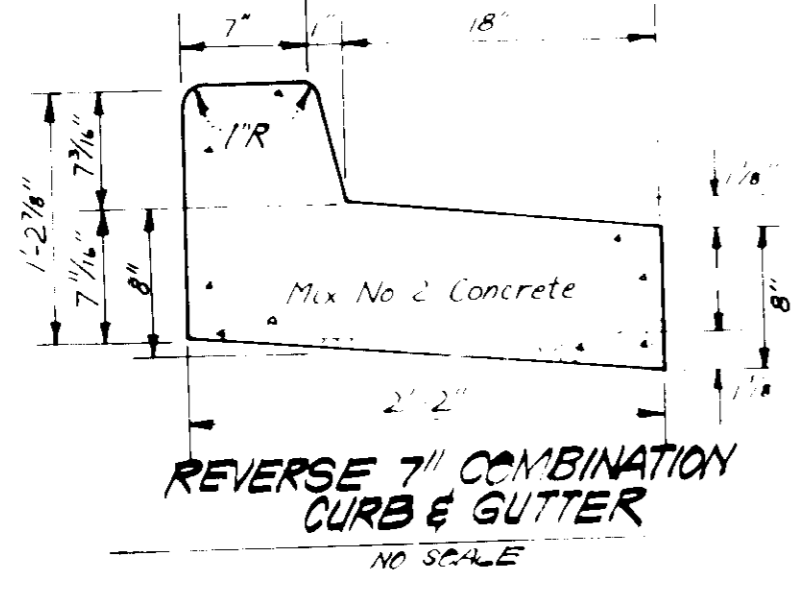


CONCRETE PAVING DETAIL - COMPACTOR AREA
NO SCALE

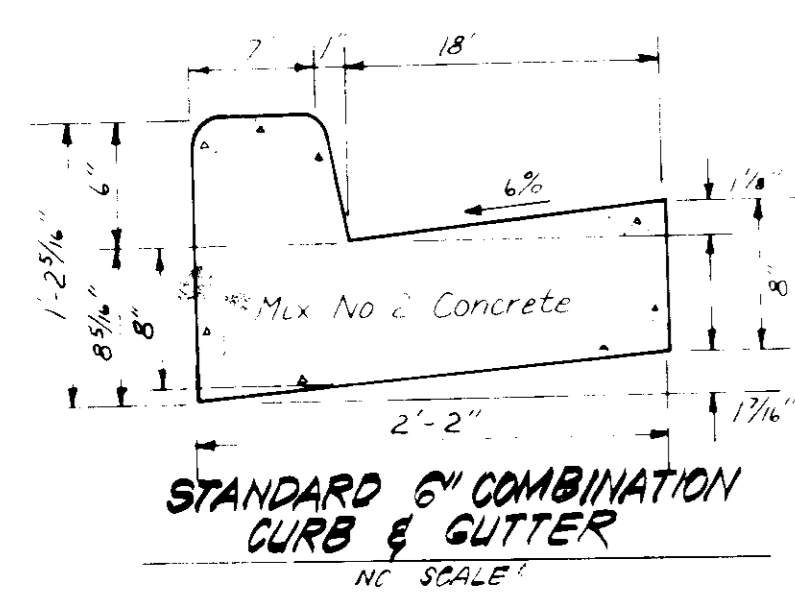
STORM DRAINAGE PROFILES



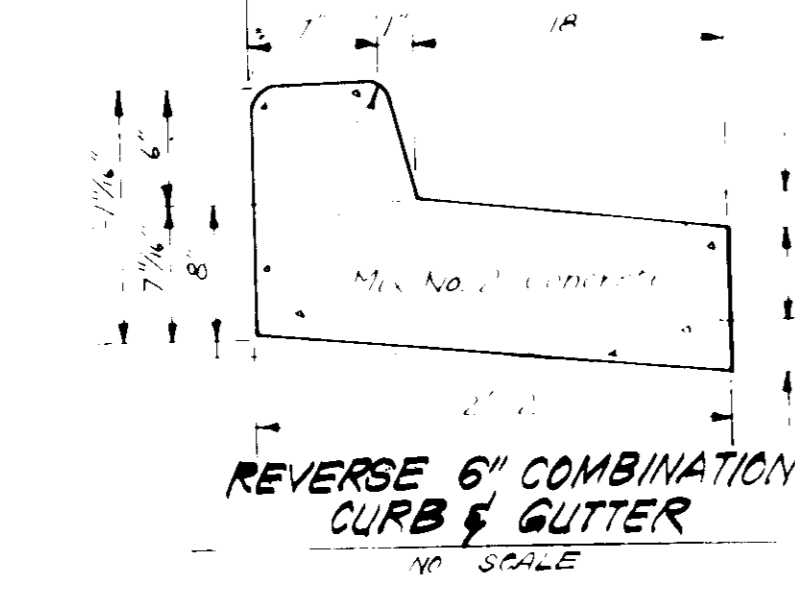
STANDARD 7" COMBINATION CURB & GUTTER
NO SCALE



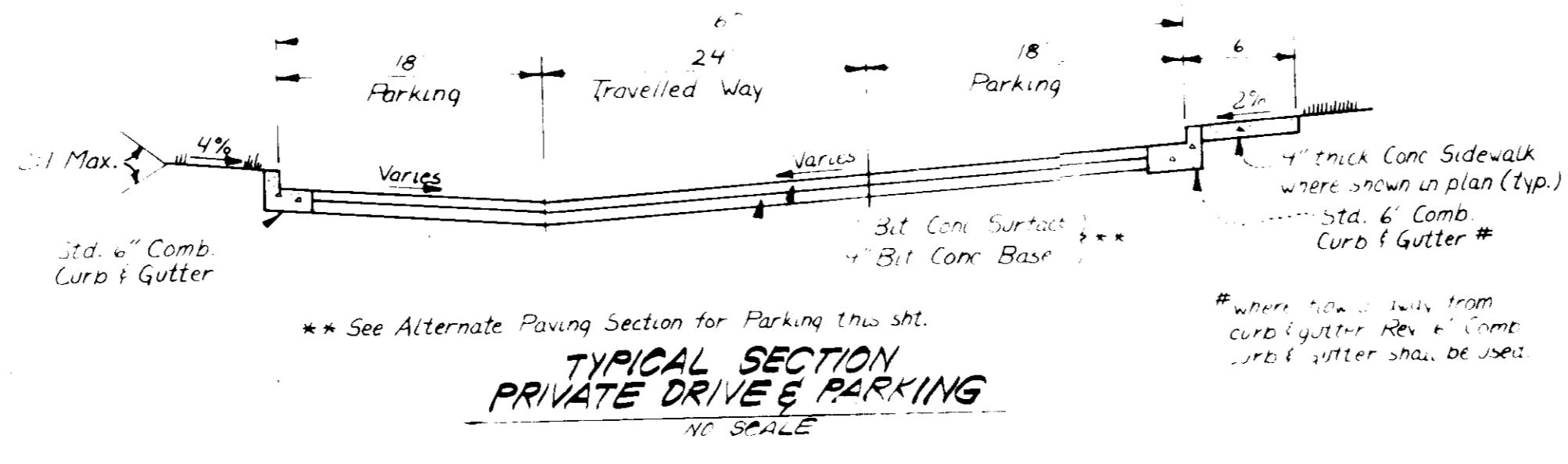
REVERSE 7" COMBINATION CURB & GUTTER
NO SCALE



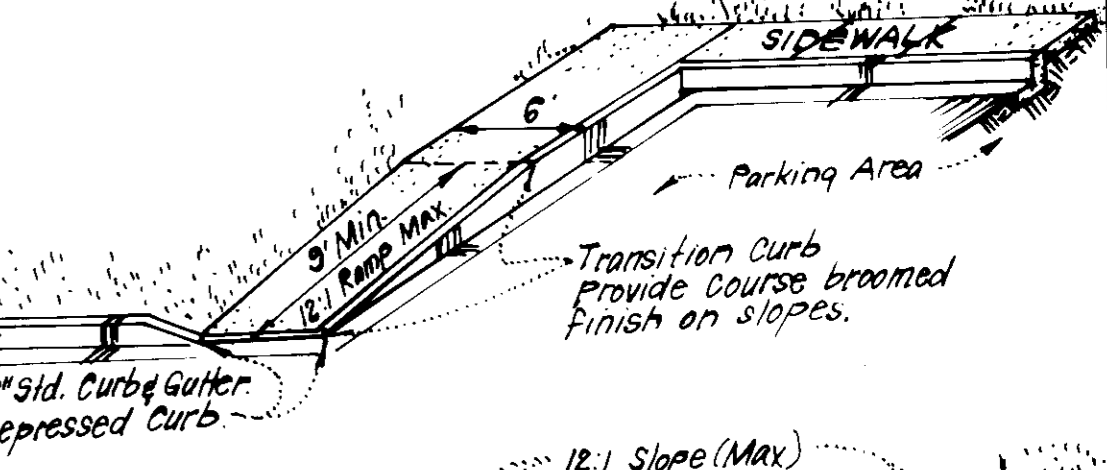
STANDARD 6" COMBINATION CURB & GUTTER
NO SCALE



REVERSE 6" COMBINATION CURB & GUTTER
NO SCALE



TYPICAL SECTION PRIVATE DRIVE & PARKING
NO SCALE



HANDICAP RAMP DETAILS
NO SCALE



HANDICAP PARKING SIGN DETAIL
NO SCALE

Bituminous Conc. Surface	2"
Bituminous Conc. Base	2 1/4"
Prime	
3" Crusher Run Base (Placed in 2 Courses) or	3"
6" Dense Graded Stabilized Aggregate Base Course	6"

ALTERNATE PAVING SECTION FOR PUBLIC ROADS
NO SCALE (SECTION P-2)

Bituminous Conc. Surface	1"
Bituminous Conc. Base	1"
Prime	
5" Crusher Run Base Course or	5"
6" Dense Graded Stabilized Aggregate Base Course	6"

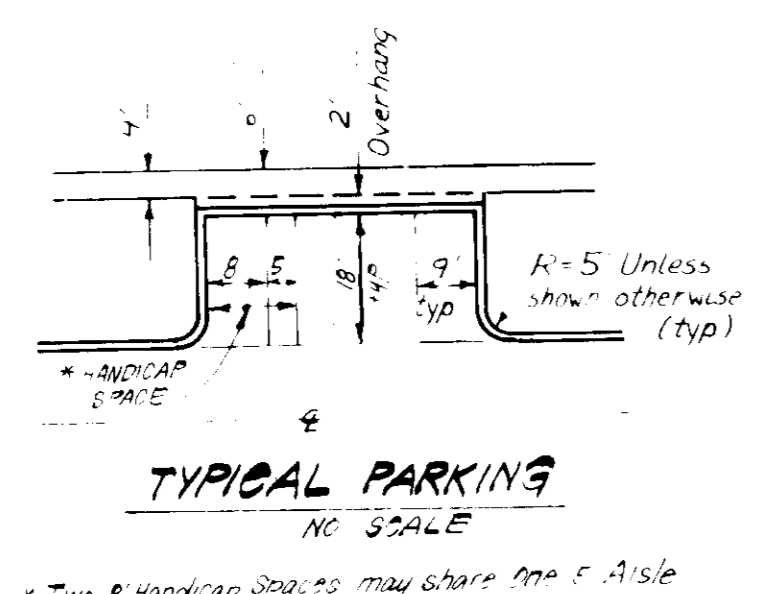
ALTERNATE PAVING SECTION FOR PARKING AREAS
NO SCALE (SECTION P-1)

REVISIONS:
1. Deleted Storm Drainage between structures 2 & 3 thru M-3
Added note to Structure Schedule
2. Deleted two storm drain profiles from this submission.
DATE: 3-12-87

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT
DATE: 4-9-86

APPROVED HOWARD COUNTY OFFICE OF PLANNING & ZONING
DATE: 11-1-86

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS AND PUBLIC ROADS
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DATE: 4-23-86



TYPICAL PARKING
NO SCALE



CLARK · FINEFROCK & SACKETT
ENGINEERS · PLANNERS · SURVEYORS
11315 LOCKWOOD DRIVE · SILVER SPRING, MARYLAND 20904 · (301) 593-3400

DESIGNED: CKG, JME
DRAWN: VLM
CHECKED: CKG, JME
DATE: 12-3-85

SITE DEVELOPMENT PLAN
STORM DRAIN & PAVING DETAILS
PARCEL A-24
COLUMBIA
VILLAGE OF OWEN BROWN
SECTION 12 AREA C
6TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

FOR: OWEN BROWN JOINT VENTURE
10320 Little Patuxent Parkway
Columbia, Maryland 21044

SCALE: 1" = 30'
DRAWING NO.: 305B
JOB NO.: 85-074
FILE NO.: 85-074

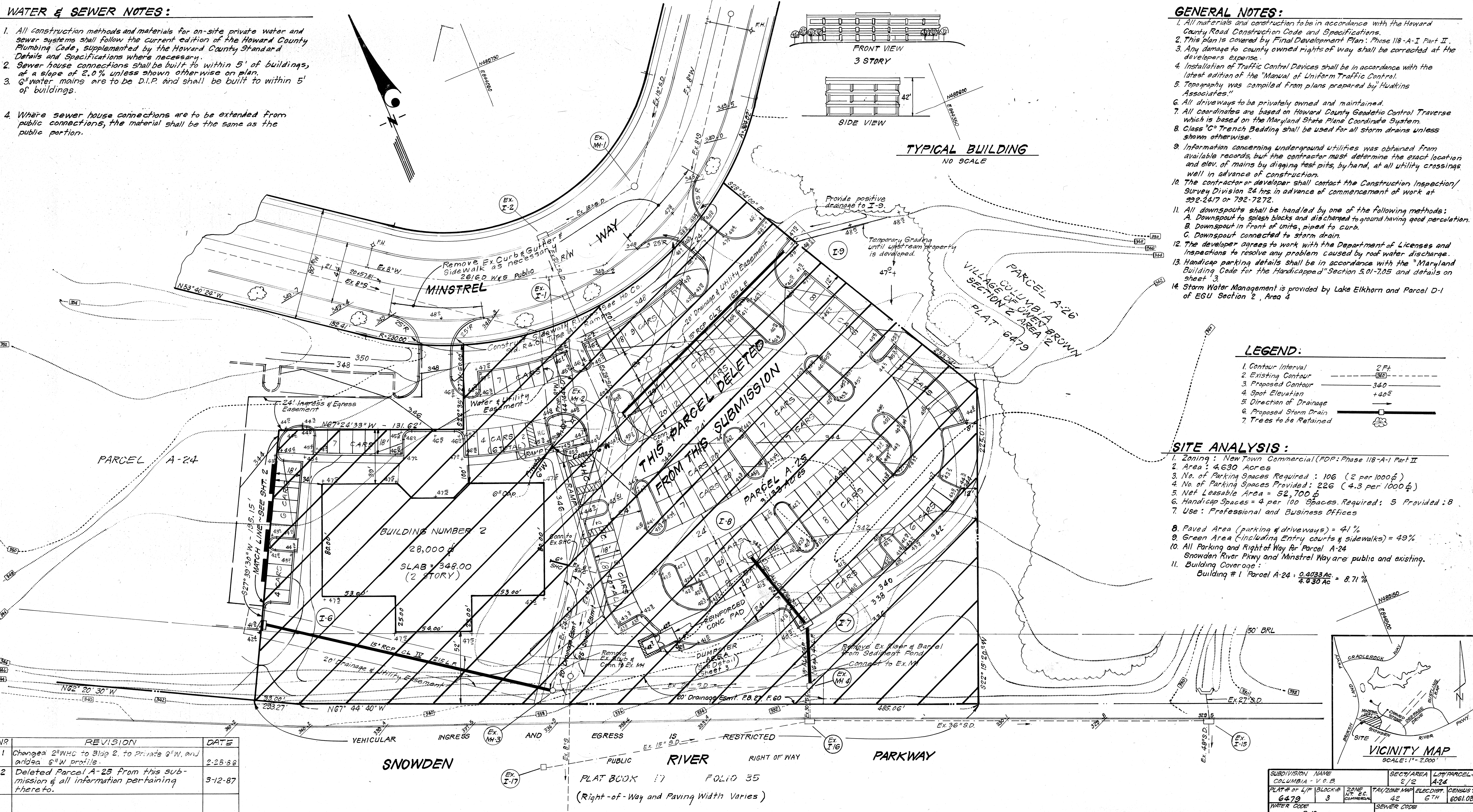
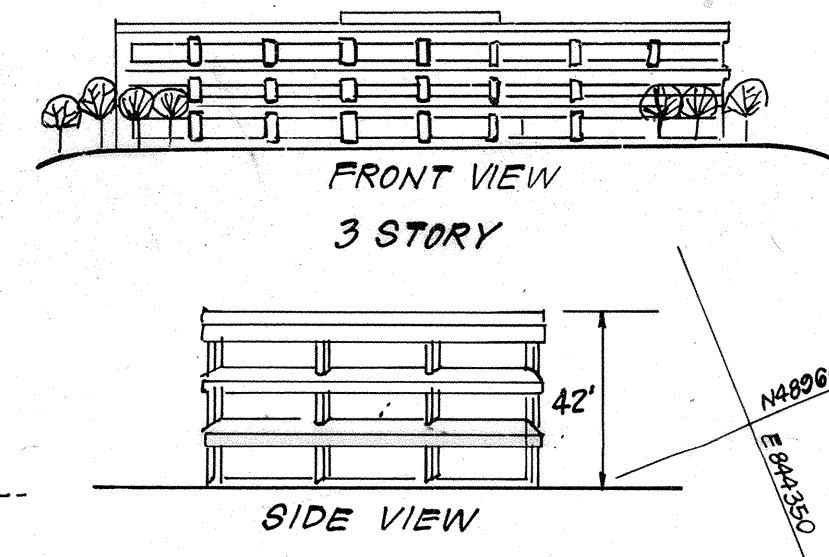
SDP-86-130C

WATER & SEWER NOTES:

- All construction methods and materials for on-site private water and sewer systems shall follow the current edition of the Howard County Plumbing Code, supplemented by the Howard County Standard Details and Specifications where necessary.
- Sewer house connections shall be built to within 5' of buildings, at a slope of 2.0% unless shown otherwise on plan.
- 6" water mains are to be D.I.P. and shall be built to within 5' of buildings.
- Where sewer house connections are to be extended from public connections, the material shall be the same as the public portion.

GENERAL NOTES:

- All materials and construction to be in accordance with the Howard County Road Construction Code and Specifications.
- This plan is covered by Final Development Plan, Phase 118-A-I Part II.
- Any damage to county owned rights of way shall be corrected at the developer's expense.
- Installation of Traffic Control Devices shall be in accordance with the latest edition of the "Manual of Uniform Traffic Control."
- Topography was compiled from plans prepared by Watkins Associates.
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- Information concerning underground utilities was obtained from available records, but the contractor must determine the exact location and elev. of mains by digging test pits, by hand, at all utility crossings well in advance of construction.
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- All downspouts shall be handled by one of the following methods:
A. Downspout to splash blocks and discharged to ground having good percolation.
B. Downspout in front of units, piped to curb.
C. Downspout connected to storm drain.
- The developer agrees to work with the Department of Licenses and Inspections to resolve any problem caused by roof water discharge.
- Handicap parking details shall be in accordance with the "Maryland Building Code for the Handicapped" Section 5.01-7.05 and details on sheet 3.
- Storm Water Management is provided by Lake Elkhorn and Parcel D-1 of EGU Section 2, Area 4.



LEGEND:

- Contour Interval 2 Ft.
- Existing Contour (dashed line)
- Proposed Contour (solid line)
- Spot Elevation +40±
- Direction of Drainage (arrow)
- Proposed Storm Drain (thick line)
- Trees to be Retained (tree symbol)

SITE ANALYSIS:

- Zoning: New Town Commercial (FDP: Phase 118-A-I Part II)
- Area: 4.630 Acres
- No. of Parking Spaces Required: 106 (2 per 1000 sq ft)
- No. of Parking Spaces Provided: 226 (4.3 per 1000 sq ft)
- Net Leasable Area = 52,700 sq ft
- Handicap Spaces = 4 per 100 Spaces Required: 5 Provided: 8
- Use: Professional and Business Offices
- Paved Area (parking & driveways) = 41%
- Green Area (including Entry courts & sidewalks) = 49%
- All Parking and Right of Way for Parcel A-24 Snowden River Pkwy and Minstrel Way are public and existing.
- Building Coverage:
Building #1 Parcel A-24: 0.0033 Ac = 0.71%
4.630 Ac

NO	REVISION	DATE
1	Changed 2" MHC to 3" I.P. to Private 6" W. and added 6" W. profile.	2-28-86
2	Deleted Parcel A-25 from this submission & all information pertaining thereto.	3-12-87

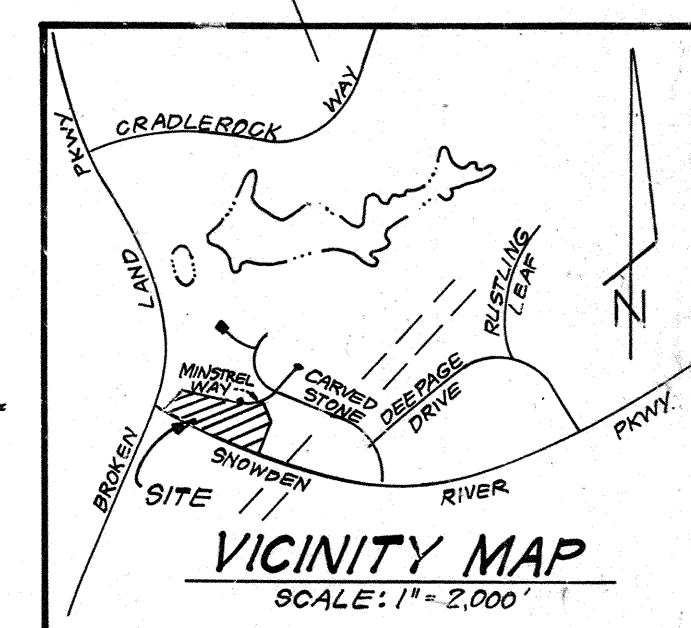
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS,
HOWARD COUNTY HEALTH DEPARTMENT
John J. Gorman 4-9-86
COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
Arthur Donald 4/10/86
PLANNING DIRECTOR DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE,
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
John W. Muesel 4-8-86
DIRECTOR DATE

CHIEF BUREAU OF ENGINEERING *John J. Gorman* 4-8-86 DATE

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE 1-8-86
AM / JMM



SUBDIVISION NAME	SECT./AREA	LOT/PARCEL #
COLUMBIA - V.O.B.	E/2	A-24
PLAT # OF L/F (BLOCK #)	ZONE <td>TAX ZONE MAP ELEC. DIST. DENSITY TR.</td>	TAX ZONE MAP ELEC. DIST. DENSITY TR.
6479	3	42 6TH 6061.03
WATER CODE	E-12	SEWER CODE

ADDRESS CHART

NUMBER	STREET ADDRESS
BLDG NO 1	7185 MINSTREL WAY

CLARK · FINEFROCK & SACKETT
ENGINEERS · PLANNERS · SURVEYORS
11315 LOCKWOOD DRIVE • SILVER SPRING, MARYLAND 20904 • (301) 593-3400

DESIGNED: CKG, JME
DRAWN: VLM
CHECKED: CKG, JME
DATE: 12-3-85

SITE DEVELOPMENT PLAN
PARCEL A-24

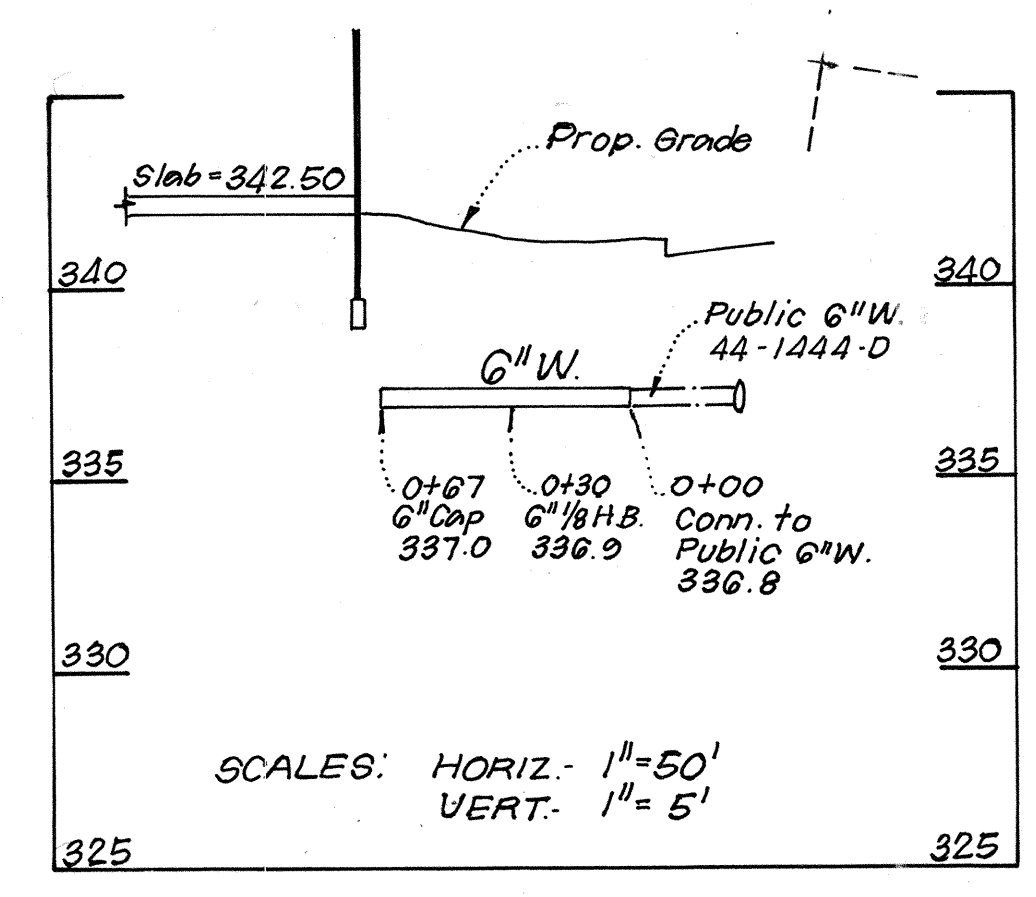
COLUMBIA
VILLAGE OF OWEN BROWN
SECTION 2
6TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

FOR: OWEN BROWN JOINT VENTURE
10320 Little Patuxent Parkway
Columbia, Maryland 21044

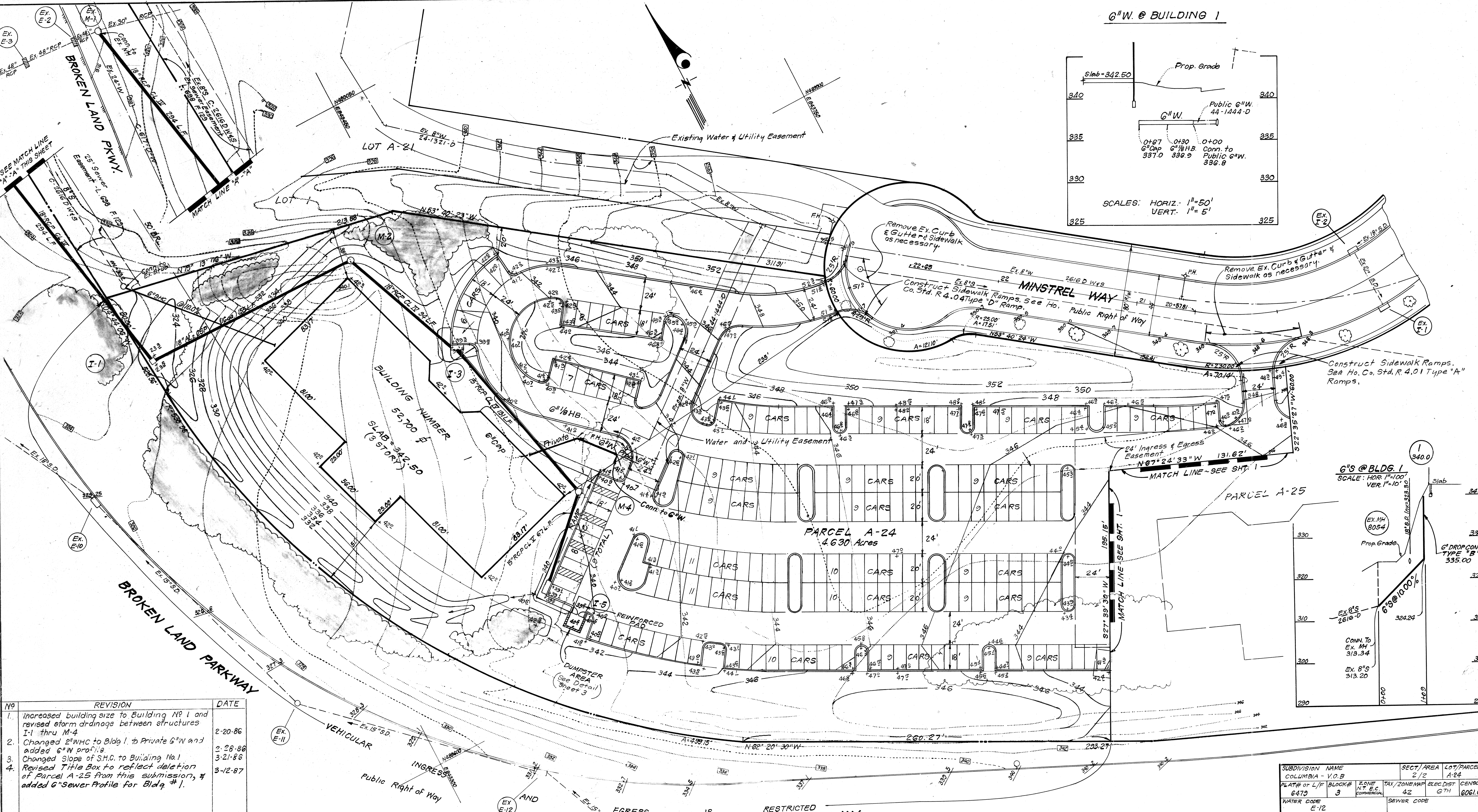
SCALE: 1" = 30'
DRAWING: 1 OF 8
JOB NO.: 85-074
FILE NO.: 85-074-X

SDP-86-130C

6" W. @ BUILDING 1



SCALES: HORIZ. 1"=50'
VERT. 1"=5'



NO	REVISION	DATE
1.	Increased building size to Building No. 1 and revised storm drainage between structures I-1 thru M-4	2-20-86
2.	Changed 2" W.H.C. to Bldg. 1, to Private G.W. and added G.W. profile	2-26-86
3.	Changed slope of S.H.C. to Building No. 1	3-21-86
4.	Revised Title Box to reflect deletion of Parcel A-25 from this submission, & added G" Sewer Profile for Bldg. #1.	3-12-87

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.
HOWARD COUNTY HEALTH DEPARTMENT
DATE: 4-7-86

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
PLANNING DIRECTOR: [Signature] DATE: 4/10/86

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DATE: 4-8-86

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE: 1-8-86

RESTRICTED IS SNOWDEN RIVER PARKWAY
(Right of Way and Paving Varies in Width)

SUBDIVISION NAME COLUMBIA - V.O.B.	SECT./AREA 2/2	LOT/PARCEL # A-24
PLAT# OF L/F BLOCK# 6479 3	ZONE COMMERCIAL	TAX./ZONE MAP ELEC. DIST 42 6TH
WATER CODE E-12	SEWER CODE	CENSUS TR. 6061.08

CLARK · FINEFROCK & SACKETT
ENGINEERS · PLANNERS · SURVEYORS
11315 LOCKWOOD DRIVE • SILVER SPRING, MARYLAND 20904 • (301) 593-3400

DESIGNED: CKG, JME
DRAWN: VLM
CHECKED: CKG, JME
DATE: 12-3-85

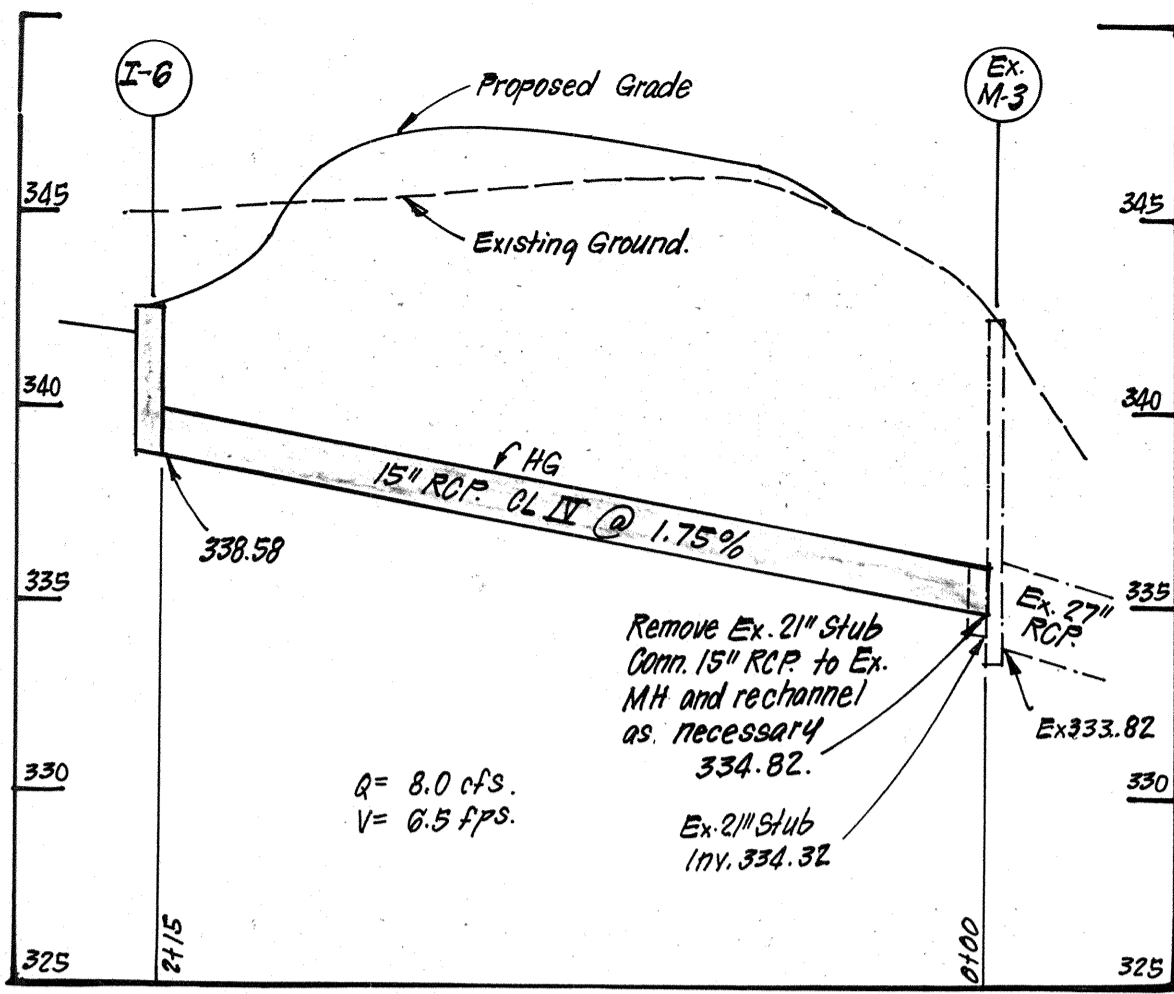
SITE DEVELOPMENT PLAN
PARCEL A-24

COLUMBIA
VILLAGE OF OWEN BROWN
SECTION 2 AREA
6TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

FOR: OWEN BROWN JOINT VENTURE
10320 Little Patuxent Parkway
Columbia, Maryland 21044

SCALE: 1"=30'
DRAWING: 2 OF 8
JOB NO.: 85-074
FILE NO.: 85-074-X

S.D.P. - 86-130c



SIZE	TYPE	LENGTH
12"	AL ₂ OSP 16ga	60 LF
15"	RCP CL IV	346 LF
15"	RCP CL IV	232 LF
15"	AL ₂ OSP 16ga	40 LF
18"	RCP CL IV	388 LF
18"	AL ₂ OSP 16ga	155 LF

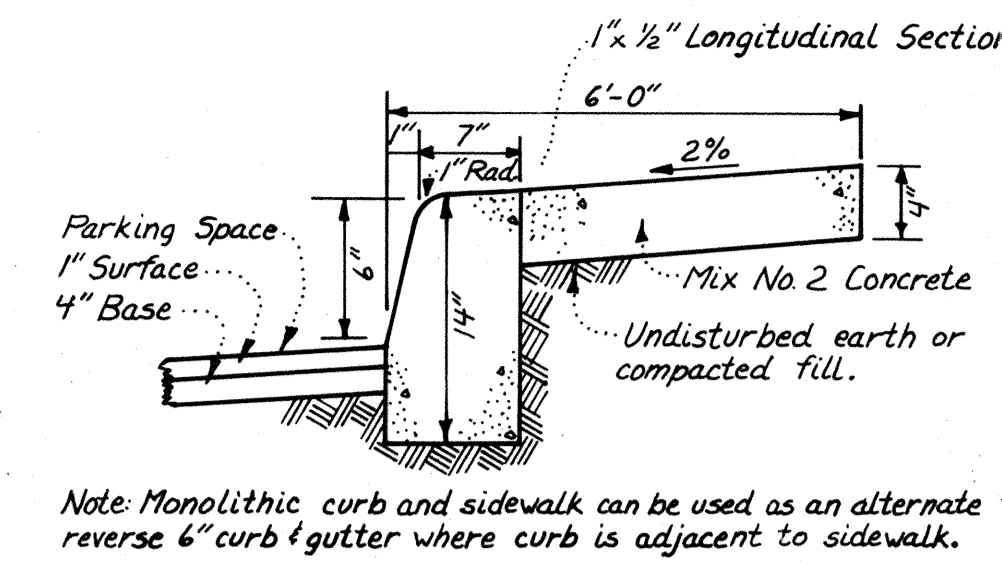
* 2 3/8" x 1/2" Corrugations. Aluminized CMP may be substituted for AL₂OSP.

No.	TYPE	INV. IN	INV. OUT	TOP ELEVATION		REMARKS	LOCATION
				UPPER	LOWER		
I-1	D Inlet	319.32	319.10	319.10	323.5	No. Co. Std. SP/4.11	21" Ø Sp. See Plan
M-2	Manhole	330.77	330.54	340.0		G/5.01	Di=4'
I-2	A-10 Inlet	332.43	332.14	339.93	339.80	SD/4.02	W=2'-9"
M-4	Manhole	335.30	334.98	341.80		G/5.01	Di=4'
I-3	A-10 Inlet	-	336.10	339.60		SD/4.02	W=2'-6"
I-4	A-10 Inlet	-	338.58	342.59	342.40	SD/4.02	W=2'-6"
I-5	A-10 Inlet	337.00	335.00	340.50	340.50	SD/4.02	W=2'-6"
I-6	A-10 Inlet	-	338.50	342.50	342.50	SD/4.02	W=2'-6"
I-7	A-10 Inlet w/Ret. Grate	-	338.50	342.50	341.50	SD/4.02	W=2'-6"
I-8	A-10 Inlet	-	343.50	348.00	347.70	SD/4.02	W=2'-6"

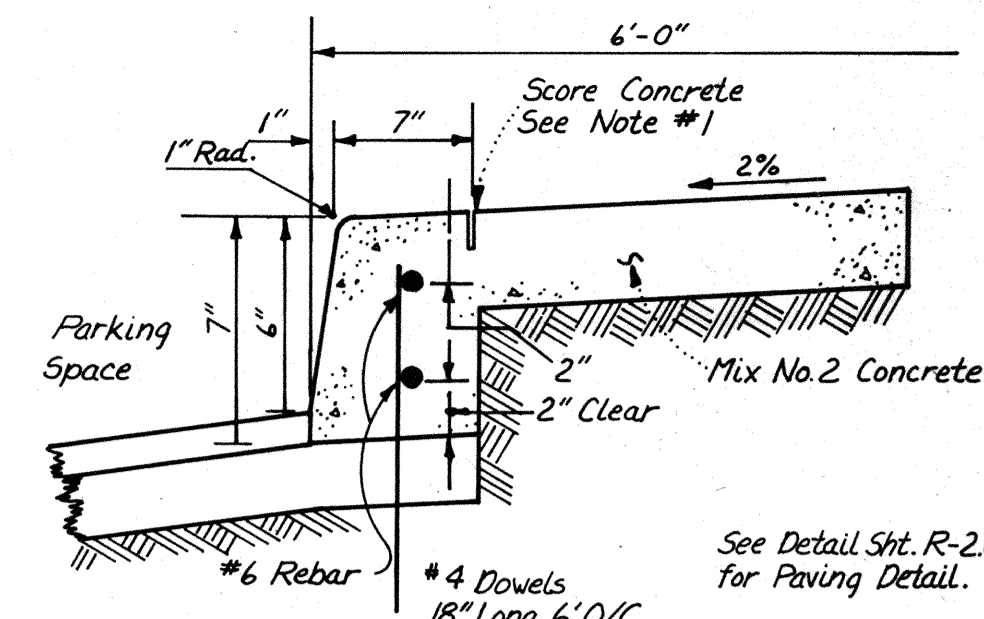
Δ All Inverts shall be fully developed. □ Manholes 2 & 4 shall have knockouts provided for connection of roof drains. Contractor shall coordinate with building contractor as to location, size and elevation of knockouts.
 * Slots on N & W sides only.

NOTES:

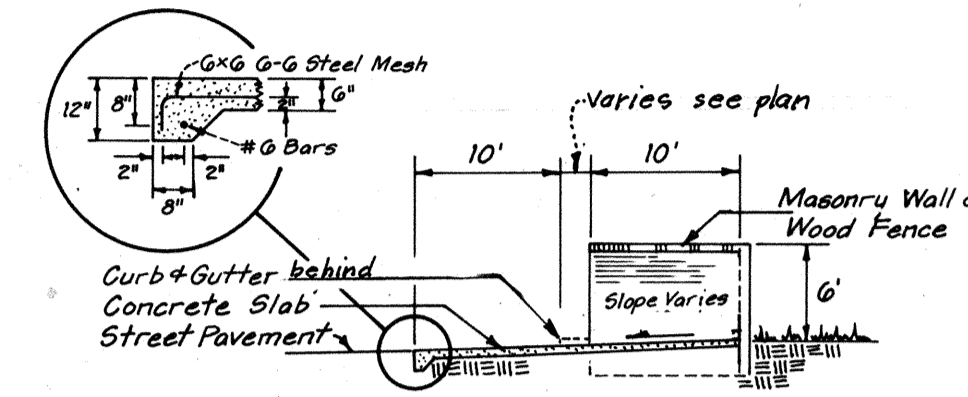
- Longitudinal Joint between sidewalk & curb shall be continuous and to a depth of 1/4 the thickness of the sidewalk or 1" longitudinal joints shall run from back edge of sidewalk continuous to the bottom face of curb to a depth of 1/4 the sidewalk thickness or 1" and spaced 5' apart.
- Provide 1/2" expansion joints at 15' intervals. In longitudinal joints to full cross-section.



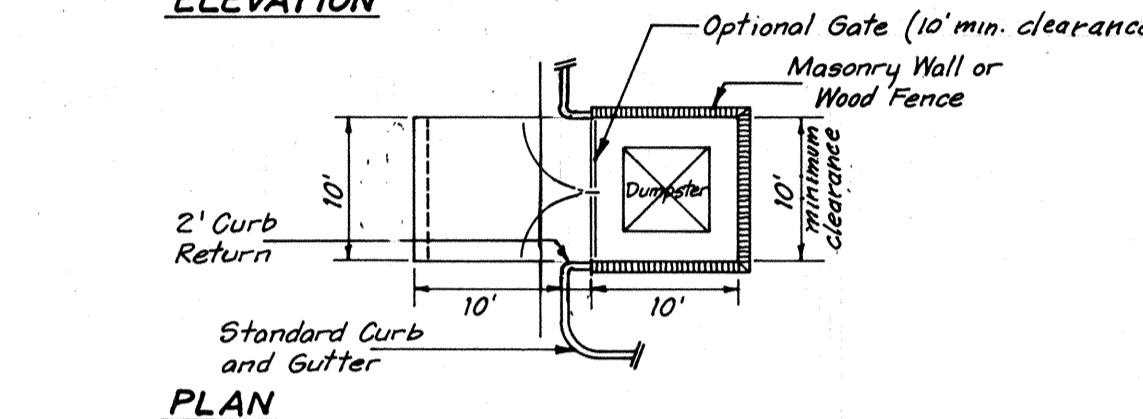
MONOLITHIC CURB & SIDEWALK - PRIVATE PARKING AREA
NO SCALE



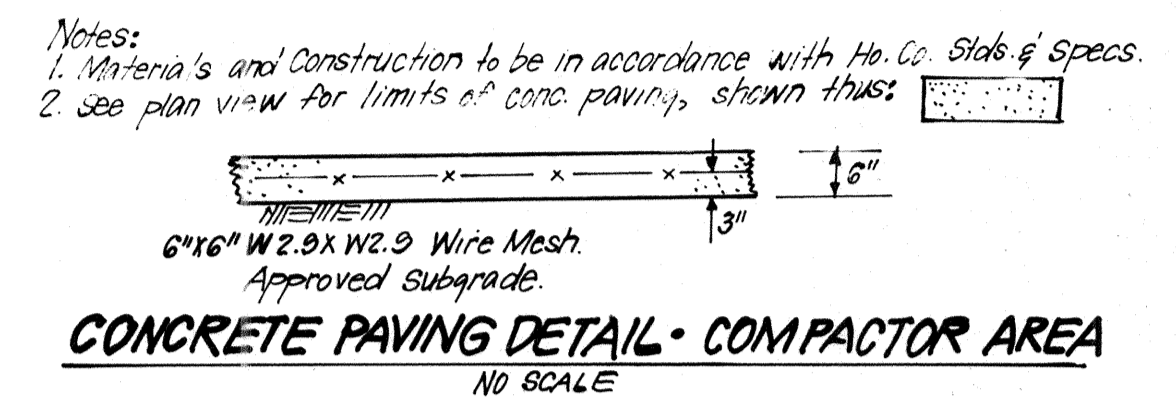
ALTERNATE SECTION
NO SCALE



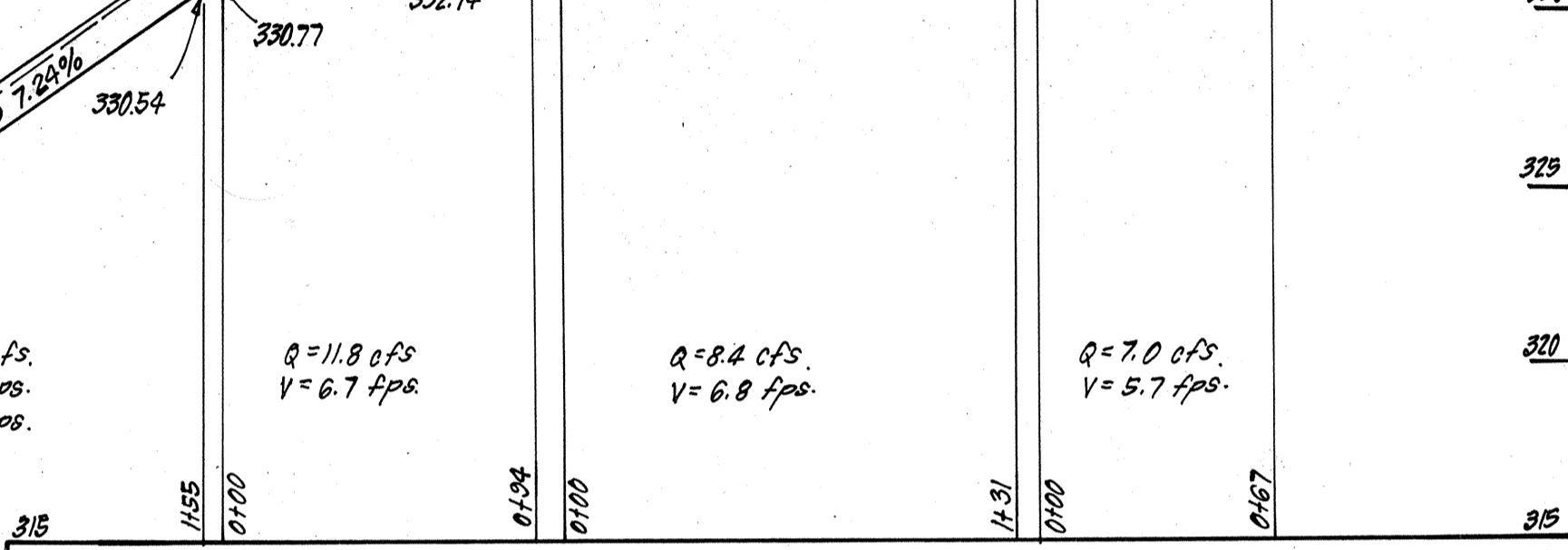
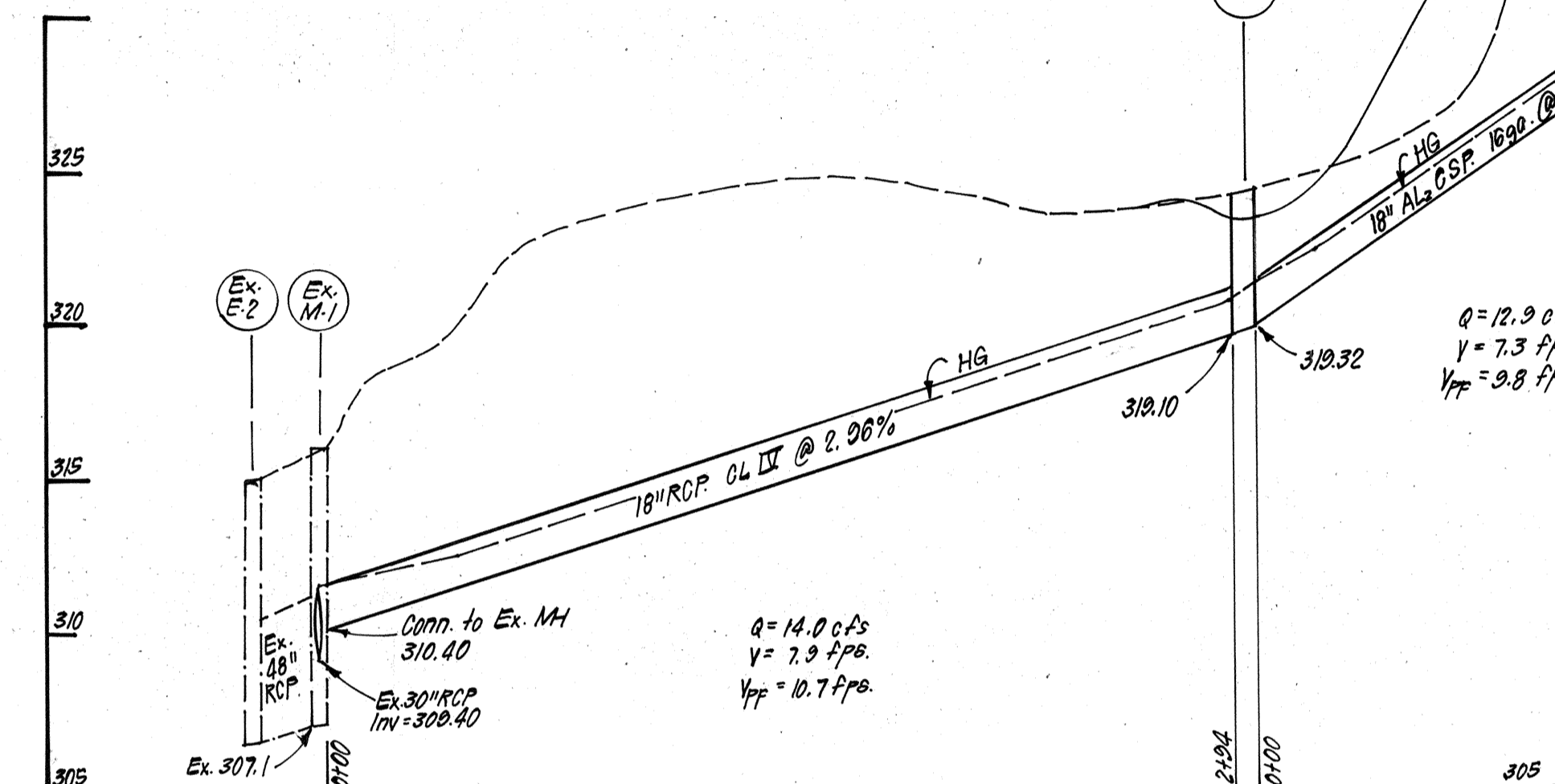
ELEVATION
DUMPSTER PAD & ENCLOSURE
NO SCALE



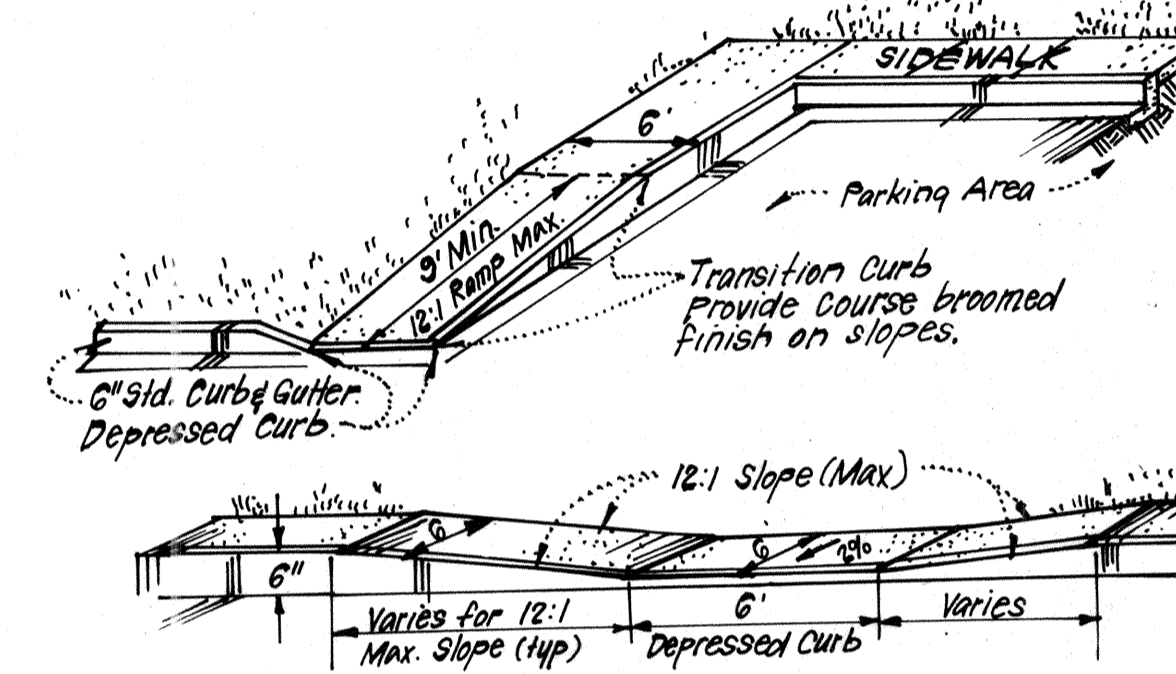
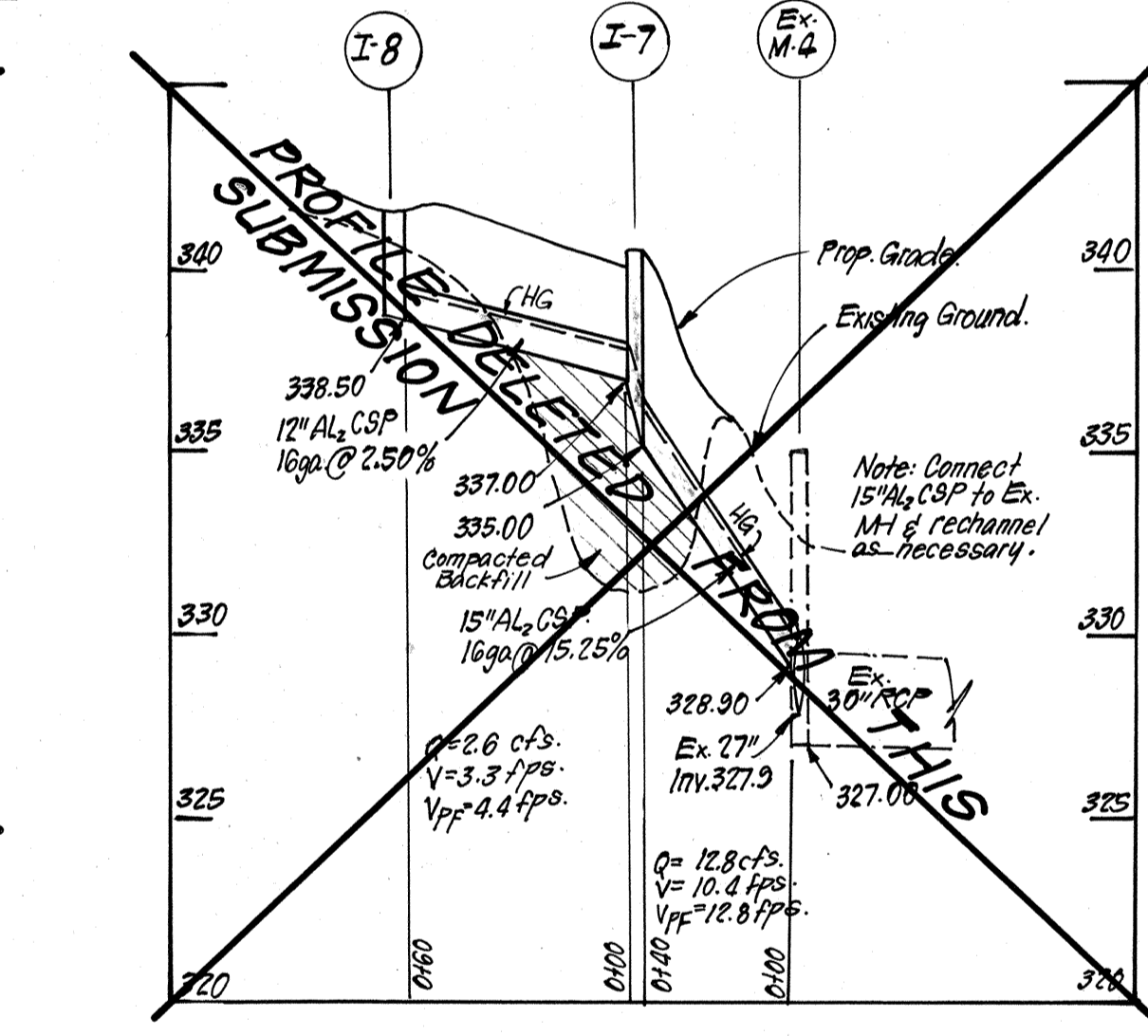
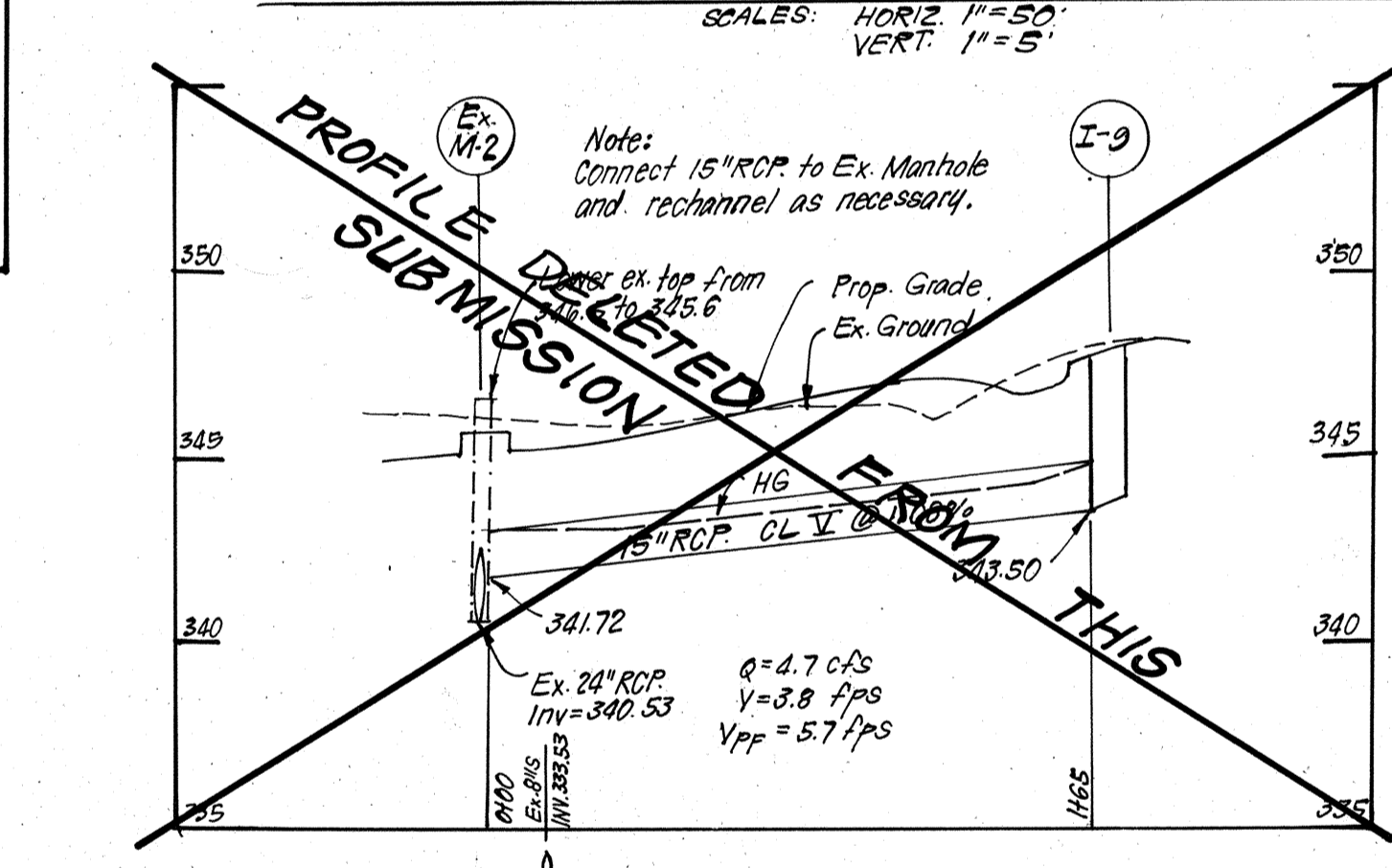
PLAN
DUMPSTER PAD & ENCLOSURE
NO SCALE



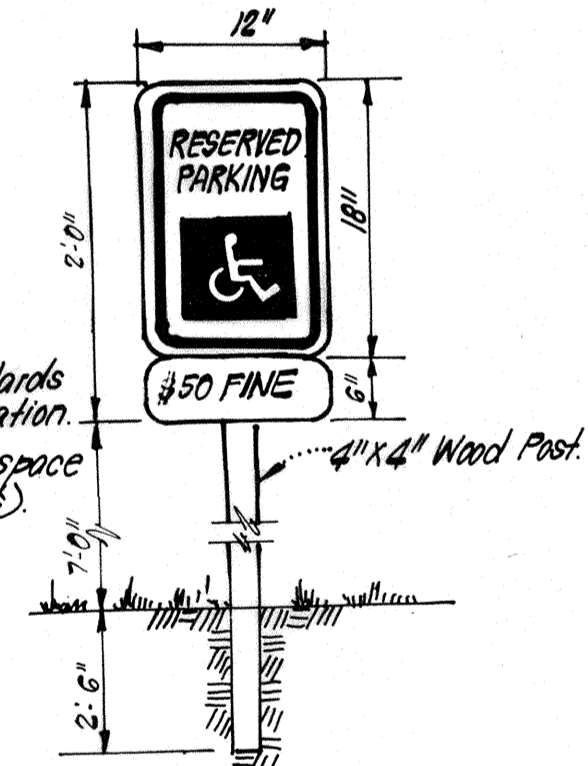
CONCRETE PAVING DETAIL - COMPACTOR AREA
NO SCALE



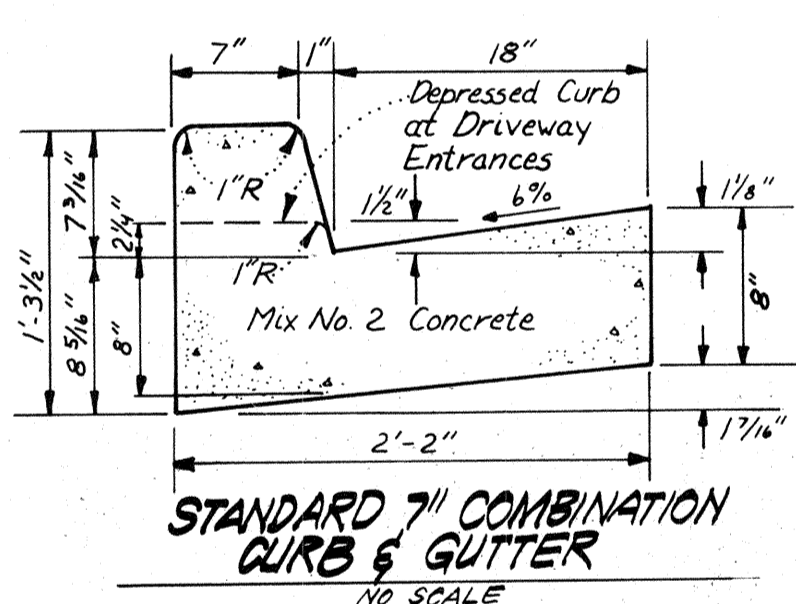
STORM DRAINAGE PROFILES
SCALE: HORIZ. 1"=50' VERT. 1"=5'



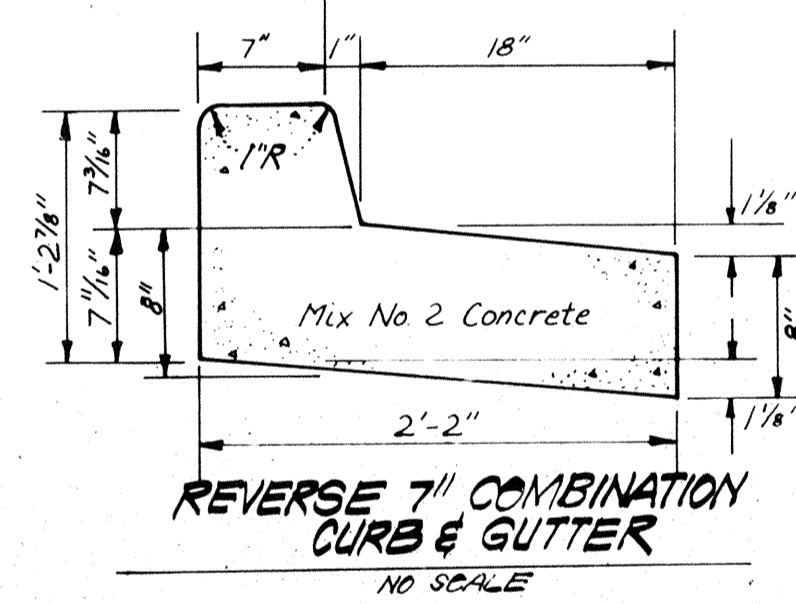
HANDICAP RAMP DETAILS
NO SCALE



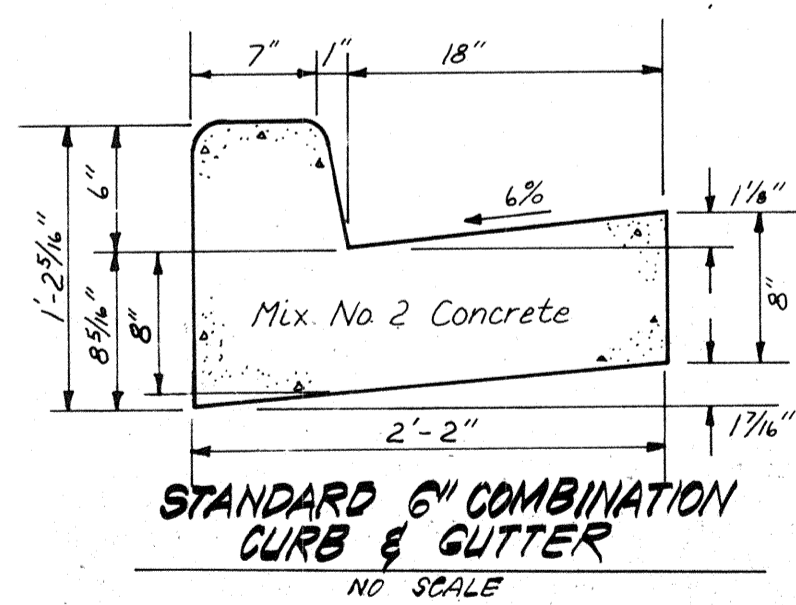
HANDICAP PARKING SIGN DETAIL
NO SCALE



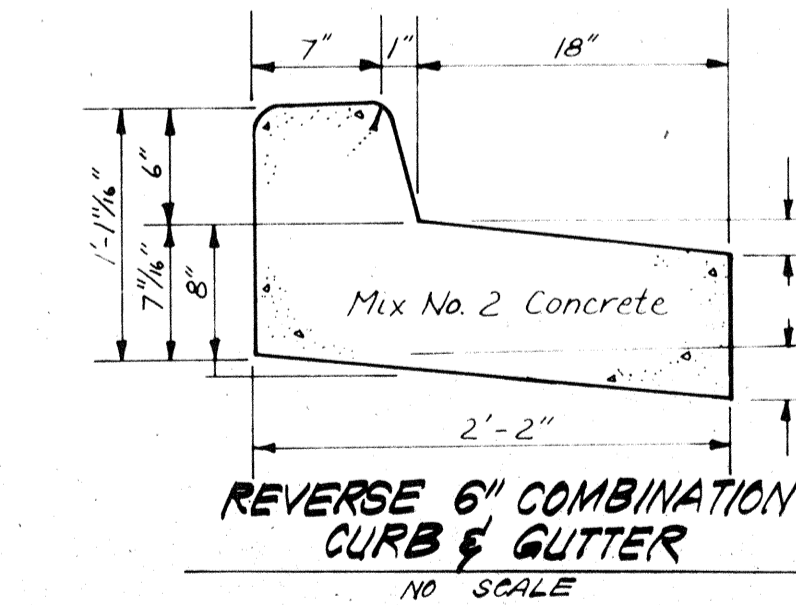
STANDARD 7" COMBINATION CURB & GUTTER
NO SCALE



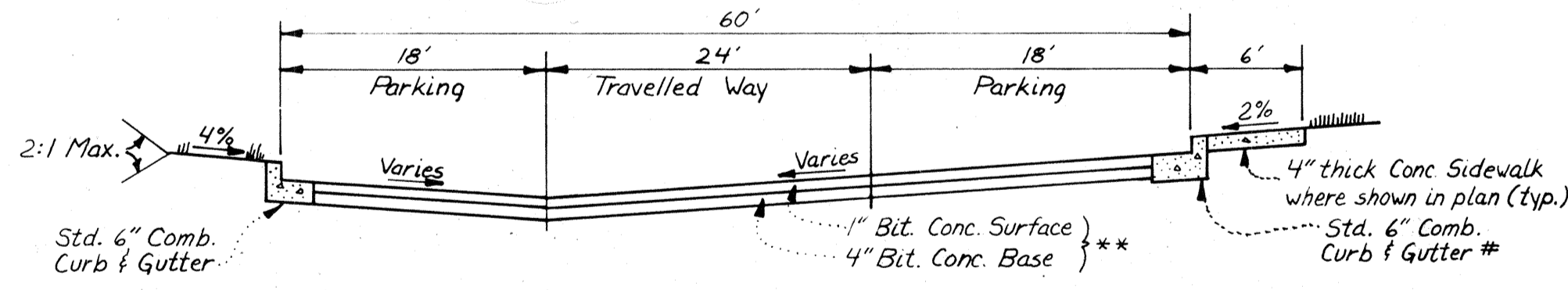
REVERSE 7" COMBINATION CURB & GUTTER
NO SCALE



STANDARD 6" COMBINATION CURB & GUTTER
NO SCALE



REVERSE 6" COMBINATION CURB & GUTTER
NO SCALE



TYPICAL SECTION PRIVATE DRIVE & PARKING
NO SCALE

Bituminous Conc Surface	1 1/2"
Bituminous Conc Base	2 1/2"
Prime	
8" Crusher Run Base (Placed in 2 Courses)	8"
or	6"
6" Dense Graded Stabilized Aggregate Base Course	

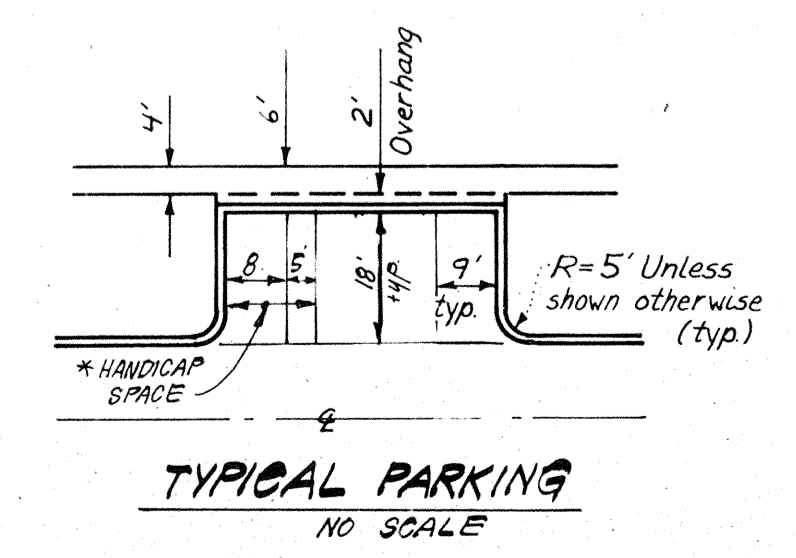
ALTERNATE PAVING SECTION FOR PUBLIC ROADS (SECTION P-2)
NO SCALE

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

ALTERNATE PAVING SECTION FOR PARKING AREAS (SECTION P-1)
NO SCALE

NO	REVISION	DATE
1	Revised Storm Drainage between structures I-1 thru M-4	2-20-86
2	Added note to Structure Schedule	3-6-86
3	Deleted two storm drain profiles from this submission.	3-12-87

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICER: [Signature] 4-9-86
 APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
 PLANNING DIRECTOR: [Signature] 4/10/86
 CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION
 APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DIRECTOR: [Signature] 4-8-86
 CHIEF BUREAU OF ENGINEERING: [Signature] 4-2-86



TYPICAL PARKING
NO SCALE

* Two 8' Handicap Spaces may share one E & Aisle



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 ENGINEERS • PLANNERS • SURVEYORS
 11315 LOCKWOOD DRIVE • SILVER SPRING, MARYLAND 20904 • (301) 593-3400
 DESIGNED: CKG, JME
 DRAWN: VLM
 CHECKED: CKG, JME
 DATE: 12-3-85
 SCALE: 1"=30'
 DRAWING: 30FB
 JOB NO.: 85-074
 FILE NO.: 85-074-X
 FOR: OWEN BROWN JOINT VENTURE
 10320 Little Patuxent Parkway
 Columbia, Maryland 21044
 S.D.P. - 86-130C

CONSTRUCTION SEQUENCE :

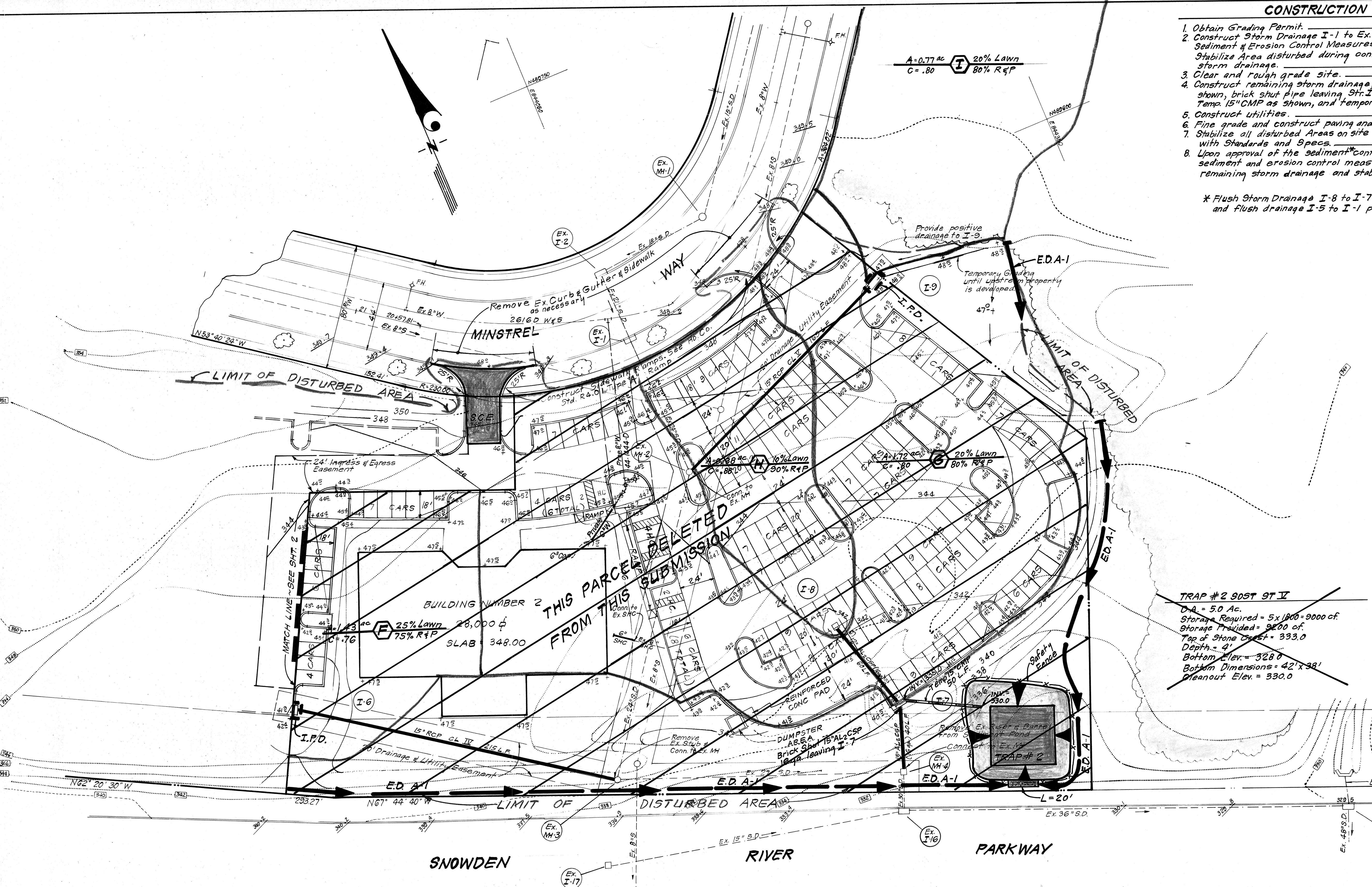
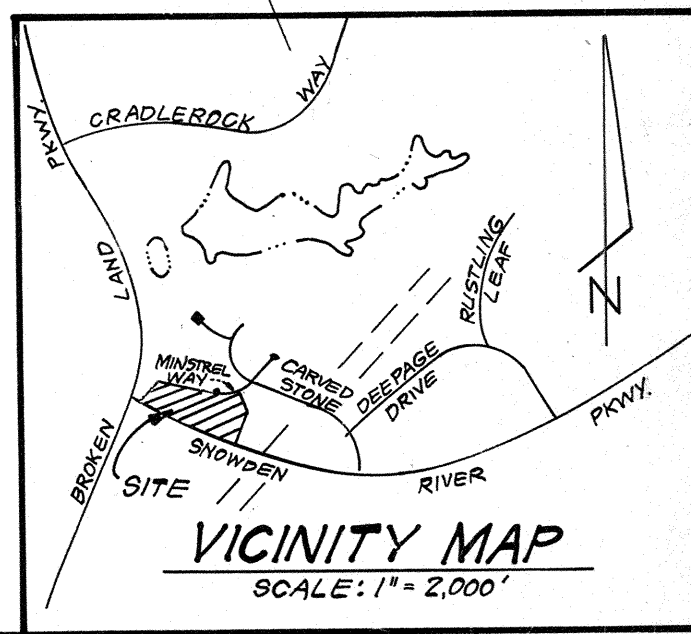
	NO OF DAYS
1. Obtain Grading Permit.	2
2. Construct Storm Drainage I-1 to Ex. M-1 and install Sediment & Erosion Control Measures. Immediately Stabilize Area disturbed during construction of storm drainage.	21
3. Clear and rough grade site.	30
4. Construct remaining storm drainage, install I.P.D. where shown, brick shut pipe leaving Str. I-7 and construct Temp. 15" CMP as shown, and temporarily and 18" AL ₂ CSP where shown.	30
5. Construct utilities.	60
6. Fine grade and construct paving and buildings	180
7. Stabilize all disturbed Areas on site in accordance with Standards and Specs.	14
8. Upon approval of the sediment control inspector remove sediment and erosion control measures, construct remaining storm drainage and stabilize.	14

* Flush Storm Drainage I-8 to I-7 prior to removal of Trap #2 and flush drainage I-5 to I-1 prior to removal of Trap #1.

LEGEND:

1. Contour Interval 2 Ft
2. Existing Contour
3. Proposed Contour 340
4. Spot Elevation +40.5
5. Direction of Drainage
6. Proposed Storm Drain
7. Planter
8. Earth Dike ED A-1
9. Trees to be Retained
10. Stabilized Construction Entrance

TRAP #2 90ST ST II
 O.A. = 5.0 Ac.
 Storage Required = 5x1800 = 9000 cf.
 Storage Provided = 9200 cf.
 Top of Stone Crest = 333.0
 Depth = 4'
 Bottom Elev. = 328.0
 Bottom Dimensions = 42' x 38'
 Cleanout Elev. = 330.0



NO	REVISION	DATE
1	Deleted Parcel A-25 from this submission.	3-12-87

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.
 HOWARD COUNTY HEALTH DEPARTMENT
 DATE: 4-9-86

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
 DATE: 4/10/86

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DATE: 4-8-86

APPROVED
 PLANNING BOARD
 OF HOWARD COUNTY
 DATE: 1-8-86

Reviewed for... Howard S.C.D.
 Name: Howard S.C.D.
 Signature: [Signature]
 Date: 4-7-86
 U.S. Soil Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

Signature: [Signature]
 Approved: [Signature]
 Date: 4/7/86

DEVELOPER'S/BUILDER'S CERTIFICATE
 I hereby 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 may be deemed necessary.
 Signature of Developer/Builder: JOHN C. MARDALL
 Date: 12-3-85

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: [Signature]
 Date: 12-3-85

SUBDIVISION NAME	SECT/AREA	LOT/PARCEL #
COLUMBIA - V.O.B.	2/2	A-24
PLAT # or L.P. BLOCK #	ZONE <td>TAX ZONE MAP ELEC. DIST.</td>	TAX ZONE MAP ELEC. DIST.
6479	3	42 6TH
WATER CODE	SEWER CODE	CENSUS TR.
E-12		6061 03

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 ENGINEERS • PLANNERS • SURVEYORS
 11315 LOCKWOOD DRIVE • SILVER SPRING, MARYLAND 20904 • (301) 593-3400

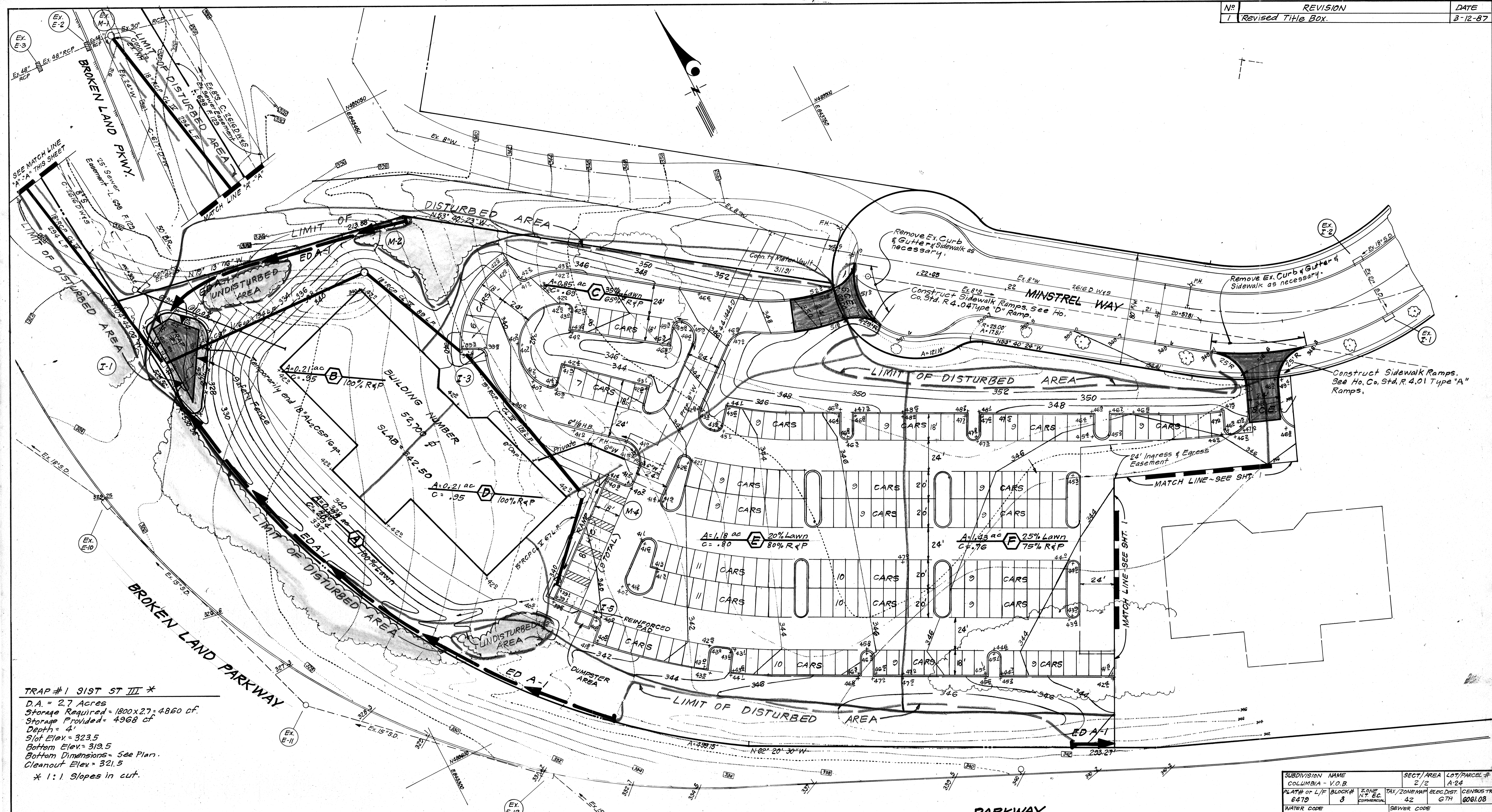
DESIGNED: CKG/JME
 DRAWN: VLM
 CHECKED: CKG/JME
 DATE: 12-3-85

SEDIMENT AND EROSION CONTROL PLAN AND DRAINAGE AREA MAP
 PARCEL A-24
COLUMBIA
 VILLAGE OF OWEN BROWN SECTION 2 AREA 2
 6TH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

FOR: OWEN BROWN JOINT VENTURE
 10320 Little Patuxent Parkway
 Columbia, Maryland 21044

SCALE: 1" = 30'
 DRAWING: 4 OF 8
 JOB NO.: 85-074
 FILE NO.: 85-074-S

S.D.P.-86-130 C



APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.
 HOWARD COUNTY HEALTH DEPARTMENT
 [Signature] 4-9-86
 COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
 [Signature] 4/10/86
 PLANNING DIRECTOR DATE
 CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 [Signature] 4-8-86
 DIRECTOR DATE
 CHIEF BUREAU OF ENGINEERING 4-8-86

APPROVED
 PLANNING BOARD
 OF HOWARD COUNTY
 DATE 1-8-86
 [Signature]

Reviewed for Howard S.C.D.
 Name [Signature] 4-7-86
 and meets Technical Requirements
 Signature Date
 U.S. Soil Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 [Signature] 4/7/86
 Approved Date

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 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] 12-3-85
 Signature of Developer/Builder Date
 JOHN C. WARDALL

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] 12-3-85
 Signature Date
 J. L. SACKETT

SUBDIVISION NAME COLUMBIA - V.O.B.	SECT./AREA 2/2	LOT/PARCEL # A-24
PLAT# OF L/F BLOCK# 6479 3	TAX, ZONE MAP ELEC. DIST. 42 67H	CENSUS TR. 6061.03
WATER CODE E-12	SEWER CODE	

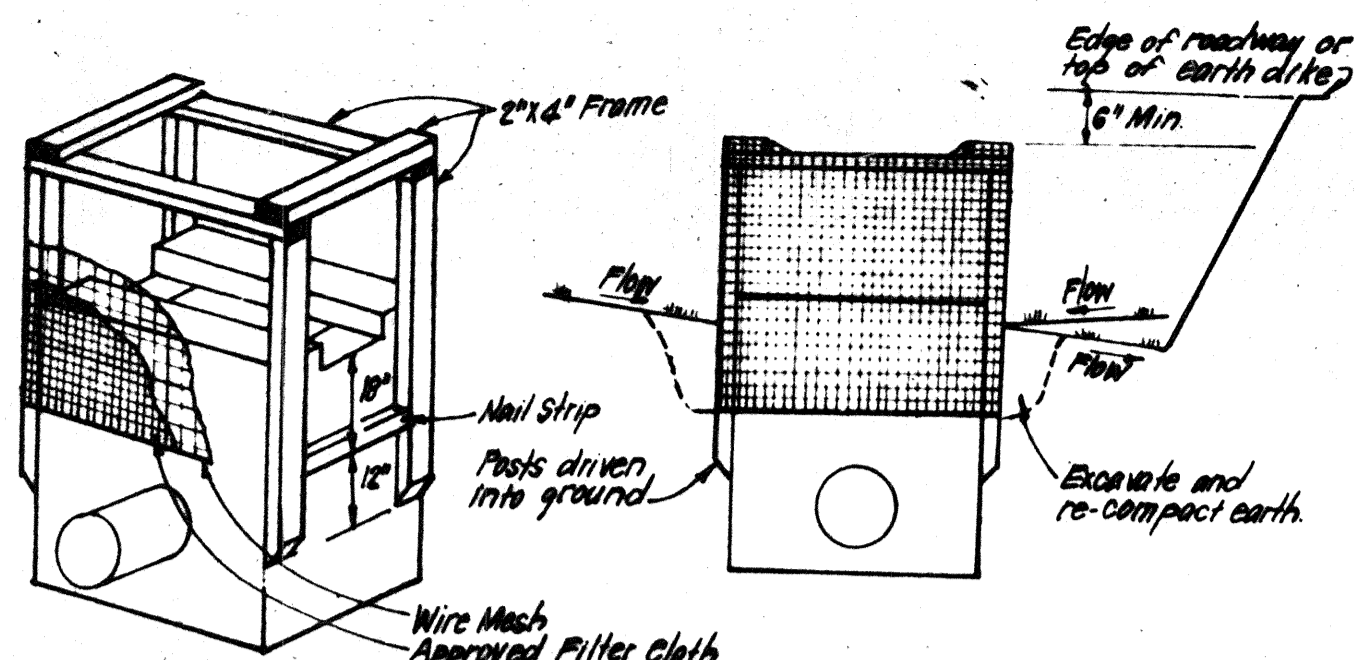
CLARK • FINEFROCK & SACKETT
 ENGINEERS • PLANNERS • SURVEYORS
 11315 LOCKWOOD DRIVE SILVER SPRING, MARYLAND 20904 (301) 593-3400

DESIGNED CJK JME
DRAWN VLM
CHECKED CJK JME
DATE 12-3-85

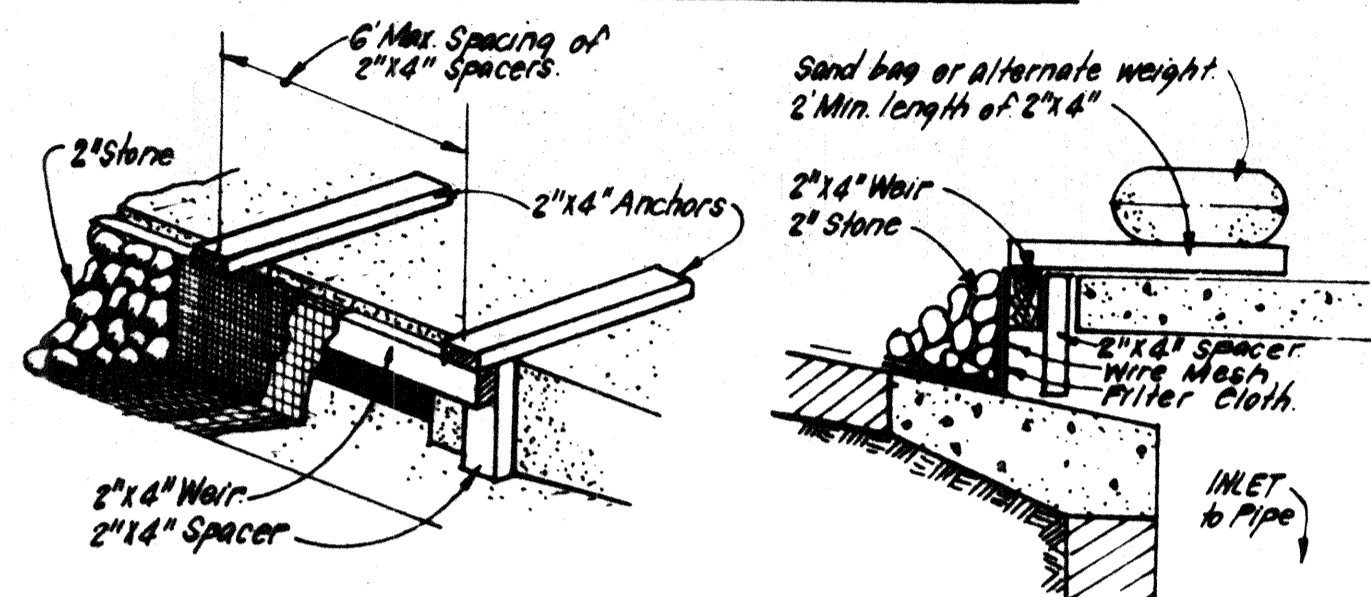
SEDIMENT AND EROSION CONTROL PLAN AND DRAINAGE AREA MAP
 PARCEL A-24
COLUMBIA
 VILLAGE OF OWEN BROWN SECTION 2 AREA 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 FOR: OWEN BROWN JOINT VENTURE 10320 Little Patuxent Parkway Columbia, Maryland 21044

SCALE 1" = 30'
DRAWING 5 OF 8
JOB NO. 85-074
FILE NO. 85-0745E

S. D. P. - 86-130C



SWALE INLET PROTECTION DETAIL



CURB INLET PROTECTION DETAIL

CONSTRUCTION SPECIFICATIONS:

I. MATERIALS:

- Wooden frame is to be constructed of 2x4 construction grade lumber.
- Wire mesh must be of sufficient strength to support filter fabric and stone for curb inlets, with water fully impounded against it.
- Filter cloth must be of a type approved for this purpose, resistant to sunlight with sieve size, EBS, 40-85, to allow sufficient passage of water and removal of sediment.
- Stone is to be 2" in size and clean, since fines would clog the cloth.

II. PROCEDURE: SWALE DITCHLINE OR TRENCH INLET PROTECTION

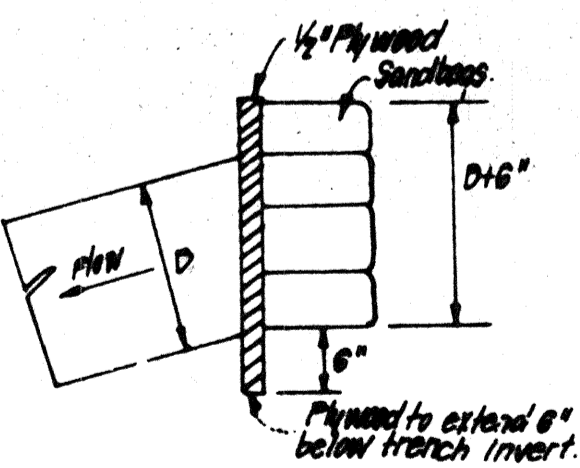
- Excavate completely around inlet to a depth of 18" below notch elevation.
- Drive 2x4 post 1" into ground at four corners of inlet. Place nail strips between posts on ends of inlet. Assemble top portion of 2x4 frame using overlap joint shown. Top of frame (weir) must be 6" below edge of roadway adjacent to inlet.
- Stretch wire mesh tightly around frame and fasten securely. Ends must meet at post.
- Stretch filter cloth tightly over wire mesh, the cloth must extend 1 foot top of frame to 18" below inlet notch elev. Fasten securely to frame. Ends must meet at post, be overlapped and folded, then fastened down.
- Back fill around inlet in compacted 6" layers until layer of earth is even with notch elevation on ends and top elevation on sides.
- If the inlet is not in a low bottom, construct a compacted earth dike in the ditch line below it. The top of this earth dike is to be at least 6" higher than the top of frame (weir).
- The structure must be inspected frequently and filter fabric replaced when clogged.

III. PROCEDURE: CURB INLET PROTECTION

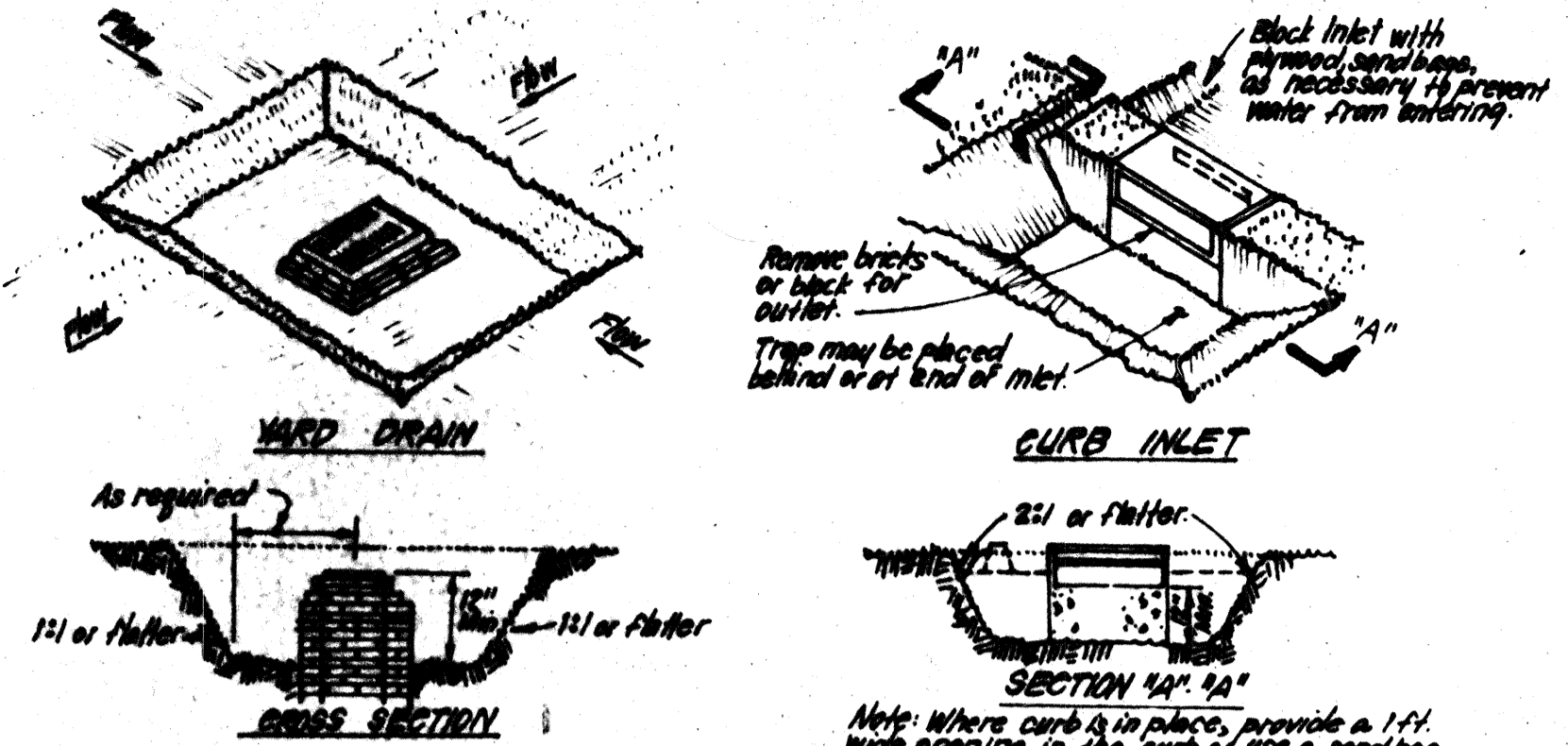
- Attach a continuous piece of wire mesh (30 min. width by throat length plus 6") to the 2x4 weir (measuring throat length plus 2") as shown on site drawing.
- Place a piece of approved filter cloth (40-85 sieve) of the same dimensions as the wire mesh and securely attach to the 2x4 weir.
- Securely nail the 2x4 weir to 2" long vertical spacers to be located behind the weir and inlet face (max. 6" apart).
- Place the assembly against the inlet throat and nail (min. 2" lengths of 2x4" to the top of the weir at spacer locations. These 2x4" anchors shall extend across the inlet top and be held in place by sandbags or alternate weight.
- The assembly shall be placed so that the end spacers are a min. 1" beyond ends of throat opening.
- From the wire mesh and filter cloth to the concrete gutter and against the face of curb on both sides of the inlet. Place clean 2" stone over the wire mesh and filter fabric in such a manner as to prevent water from entering the inlet under or around the filter cloth.
- This type of protection must be inspected frequently and the filter cloth and stone replaced when clogged with sediment.
- Assure that storm flow does not bypass inlet by installing temporary earth or asphalt dikes directing flow to inlet.

INLET PROTECTION DETAIL (I.P.D.)

NO SCALE



PIPE BLOCKING DETAIL

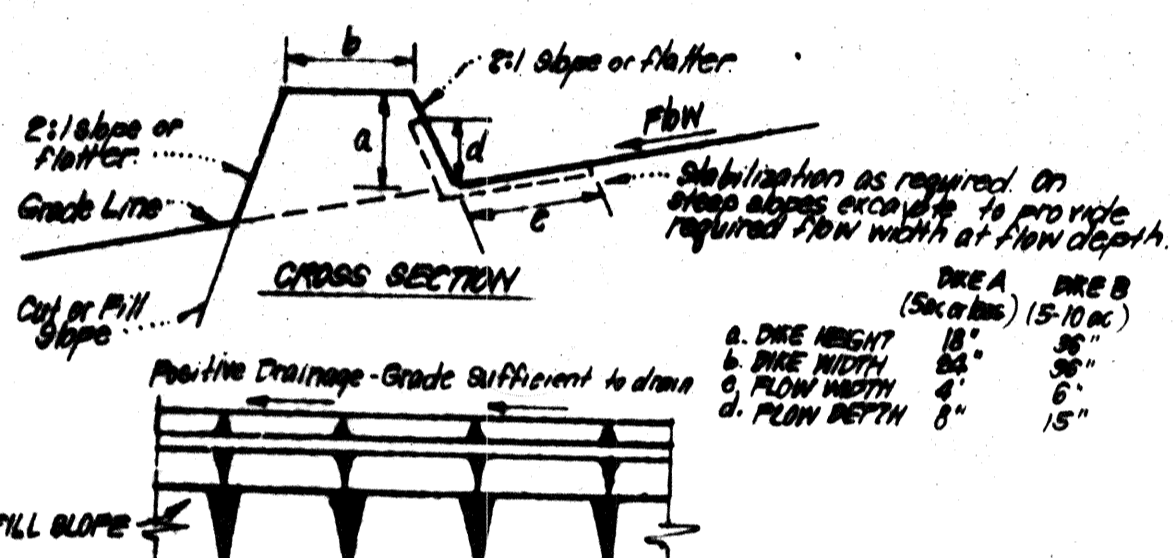


CONSTRUCTION SPECIFICATIONS:

- Sediment trap to be removed and trap restored to its original dimensions when sediment has accumulated to 1/2 the design depth for the trap. Removed sediment shall be deposited in a suitable area and in such a manner that it will not erode.
- The volume of sediment storage shall be 1000 cu. ft. per acre of contributing drainage.
- The structure shall be inspected after each rain and repairs made as needed.
- Construction operations shall be carried out in such a manner that erosion and water pollution shall be minimized.
- The sediment trap shall be removed and the area stabilized when the constructed drainage area has been properly stabilized.
- All cut slopes shall be 1:1 or flatter.

STORM INLET SEDIMENT TRAP (S.I.S.T.) ST III

NO SCALE



CONSTRUCTION SPECIFICATIONS:

- All dikes shall be constructed by earth-moving equipment.
- All dikes shall have positive drainage to an outlet.
- Top width may be wider and side slopes may be flatter if desired, to facilitate clearing by construction traffic.
- Trap location should be adjusted as needed to utilize a stabilized safe outlet.
- Earth dikes shall have an outlet that functions with a minimum of erosion. Runoff shall be conveyed to a permanent trapping device such as a sediment trap or sediment basin whose outlet, the dike channel or the drainage area above the dike are not adequately stabilized.
- 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 chart below.

TYPE OF TREATMENT	CHANNEL	DIKE A	DIKE B
1	0.5 - 0.7%	Seed & Straw Mulch	Seed or Straw Mulch
2	0.8 - 0.9%	Seed & Straw Mulch	Seed or Straw Mulch
3	1.0 - 1.2%	Seed or Straw Mulch	Seed or Straw Mulch
4	1.3 - 1.5%	Seed or Straw Mulch	Seed or Straw Mulch

A. Stone to be 2" stone or recycled concrete equivalent, in a layer at least 3" thick and be placed over and with overlying equipment.

B. Top to be 4" in a layer at least 3" thick, processed into 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.

EARTH DIKE DETAIL (E.D.)

NO SCALE

SEDIMENT CONTROL NOTES

- A minimum of 24 hours notice must be given to the Howard County Office of Inspection and Permits prior to the start of any construction. (992-2437)
- 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.
- Following initial soil disturbance or redistribution, 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.
- 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.
- 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.
- 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.
- Site Analysis:

Total Area of Site	1763 Acres
Area Disturbed	1635 Acres
Area to be roofed or paved	4218 Acres
Area to be vegetatively stabilized	3417 Acres
Total Cut	1941 Cu. yds
Total Fill	1658 Cu. yds
Offsite waste/flow area location	N/A
- Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
- Additional sediment control must be provided, if deemed necessary by the Howard County DPW sediment control inspector.
- On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.
- If houses are to be constructed on "As-Built" basis, at random, Single Lot Sediment Control as shown below shall be implemented. N/A
- All pipes to be blocked at the end of each day (see detail below).
- The total amount of straw bale dikes/silt fence equals L.P.

PERMANENT SEEDING NOTES

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

Seeded 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:

- 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 30-0-0 ureaform fertilizer (9 lbs/1000 sq ft).
- Acceptable - Apply 2 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 60 lbs per acre (1.4 lbs/1000 sq ft) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 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) Use sod; Option (3) Seed with 60 lbs/acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw.

Mulching - Apply 1 1/2 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.

Inspect all seeded areas and make needed repairs, replacements and reseeding.

TEMPORARY SEEDING NOTES

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

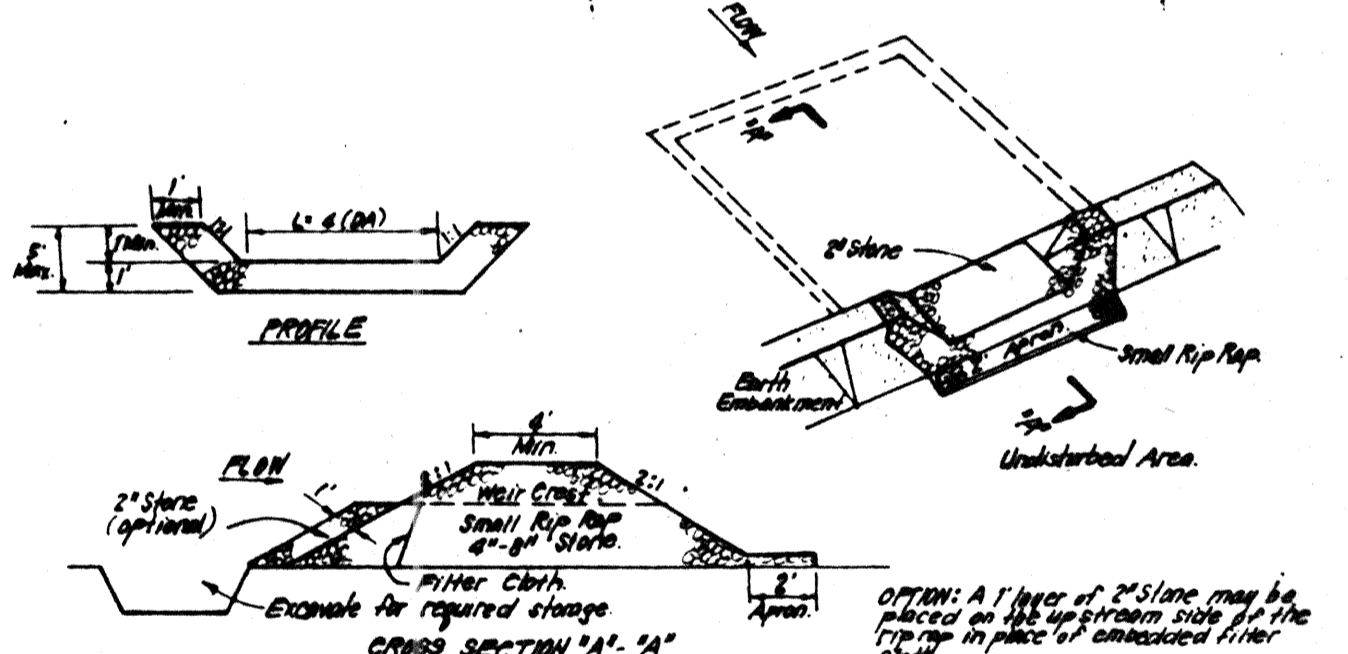
Seeded Preparation: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding.

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 24 bushel per acre of annual rye (3.2 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 1 1/2 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 ft 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.

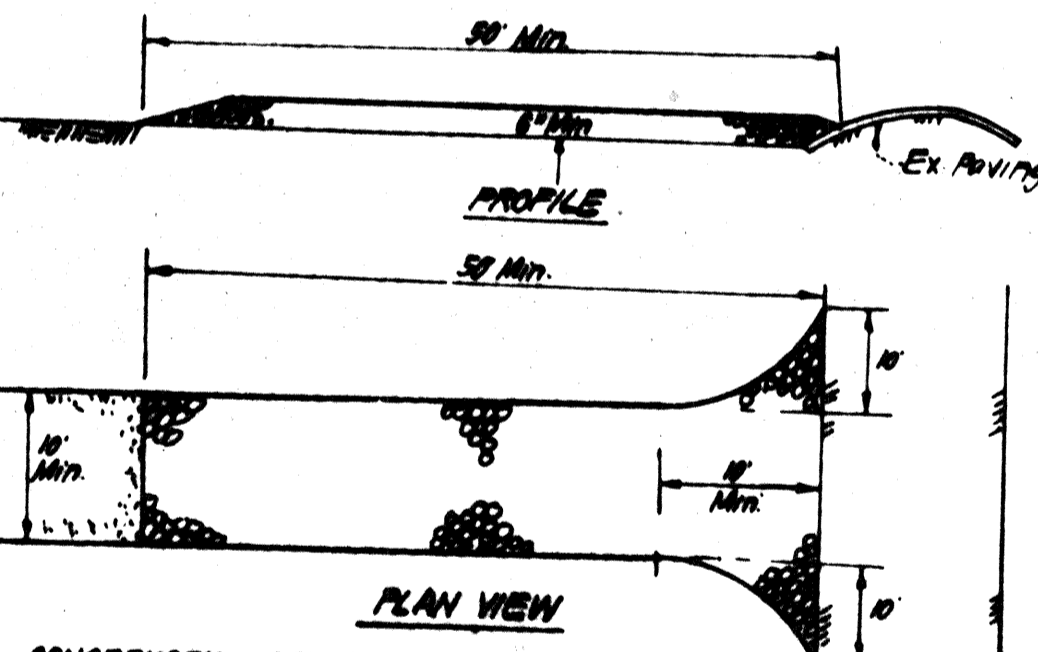


CONSTRUCTION SPECIFICATIONS:

- Any rocky embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The top shall be compacted.
- The filter material for the embankment shall be free of rocks and other easily erodible material as well as over-sized stones, rocks, organic material or other place-able material. The embankment shall be compacted by temporary with equipment while it is being constructed.
- The stone used in the filter shall be small rip rap 4" to 6" in size with a thickness of 2" appropriate placed on the up-slope side of the small rip rap at discharge of filter cloth in the trap.
- Small rip rap shall be compacted and the surface of the embankment shall be compacted when the sediment has accumulated to 1/2 the design depth of the trap.
- The structure shall be inspected after each rain and repairs made as needed.
- Construction operations shall be carried out in such a manner that erosion and water pollution is minimized.
- The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.

STONE OUTLET SEDIMENT TRAP (S.O.S.T.) ST V

NO SCALE



CONSTRUCTION SPECIFICATIONS:

- Stone Size - Use 2" stone, or reclaimed or recycled concrete equivalent.
- Length - As required, but not less than 50 feet (except on a sharp resistance).
- Thickness - 12" min. length (except on a sharp resistance).
- Width - Top 2" min., but not less than the full width at point where imposed traffic load.
- Filter Cloth - Will be placed over the entire area prior to placing of stone. Filter cloth can be replaced on a sharp resistance.
- Surface Inlet - All surface water flowing or directed toward construction entrances shall be piped across the entrance.
- Maintenance - The entrance shall be maintained in a condition which will prevent tracking or hauling of sediment onto nearby roads or ways. This may require tracking, top dressing with sediments, stone or gravel. Work elements and repair and/or placement of any measures used to trap sediment. All sediment applied, exposed, washed or treated into public ways or ways must be removed immediately.
- Final Inspection - Final inspection to remove equipment prior to entrance into public ways or ways. Final inspection to remove equipment prior to entrance into public ways or ways and which drains into on entrance shall be inspected after each rain.
- Periodic inspection and required maintenance shall be provided after each rain.

STABILIZED CONSTRUCTION ENTRANCE (S.C.E.)

NO SCALE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS. HOWARD COUNTY HEALTH DEPARTMENT.

John C. Mardall 4-9-86 DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING.

Amorl Bando 4/10/86 DATE

PLANNING DIRECTOR

John W. Mueselman 4-10-86 DATE

CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS. HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.

Greg F. Neumu 4-8-86 DATE

John C. Mardall 4-8-86 DATE

CHIEF BUREAU OF ENGINEERING

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 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 C. Mardall 12-3-85 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. Schabas 4-3-86 DATE

PROFESSIONAL ENGINEER

Reviewed for: HOWARD S.C.D.

and meets Technical Requirements

Stephen L. Fuler 4/10/86 DATE

U.S. Soil Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

1	Revised Title Box	3-12-87
NO.	REVISION	DATE

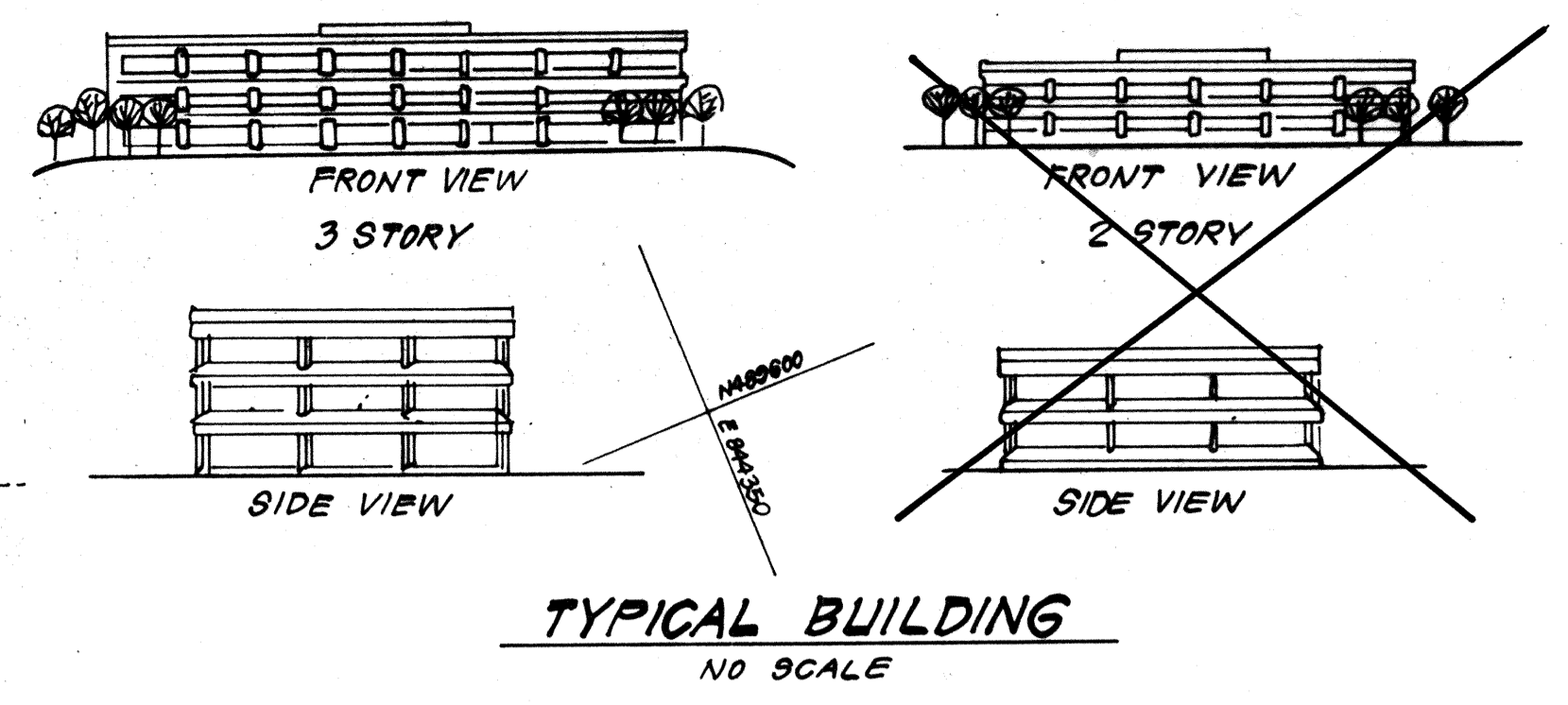
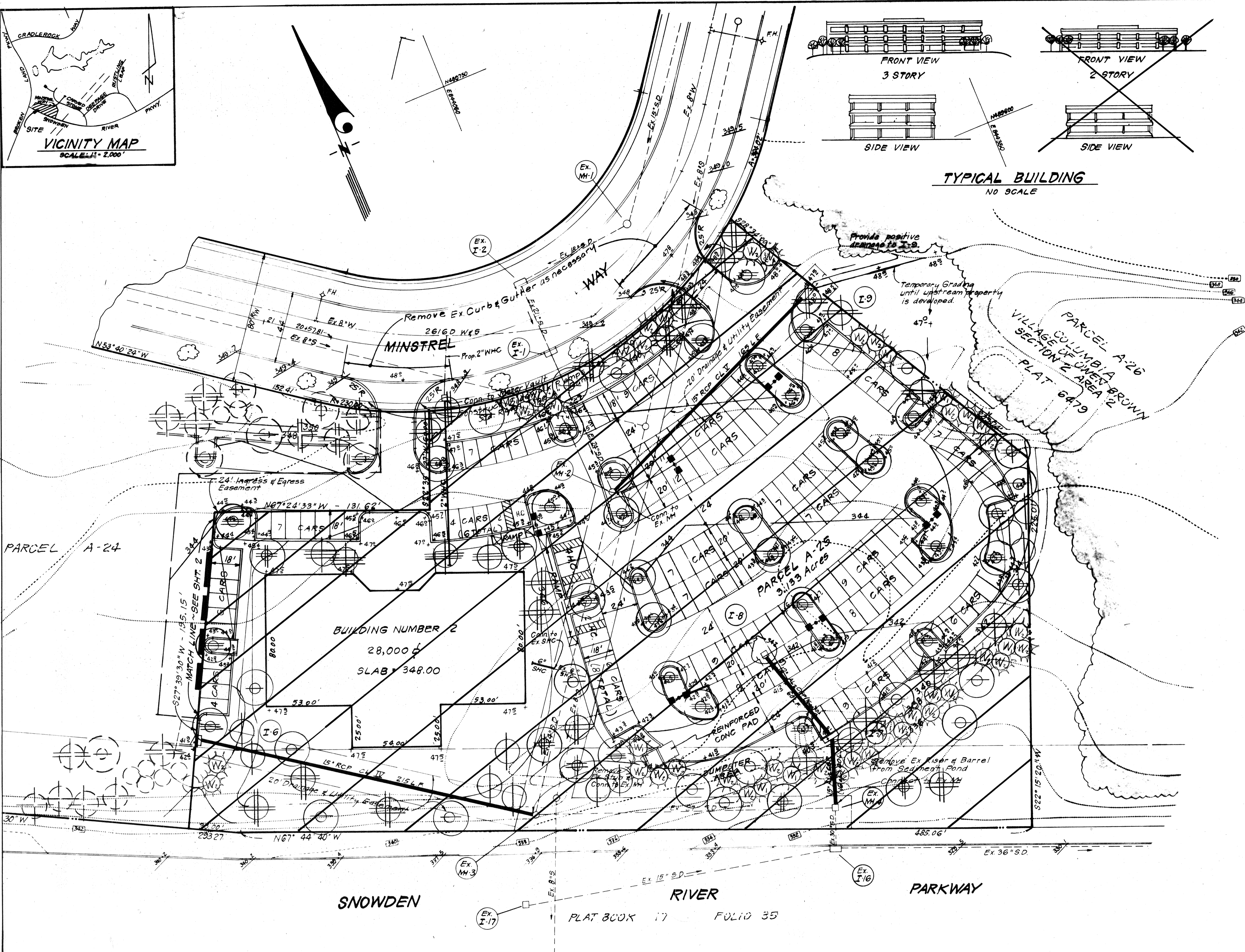
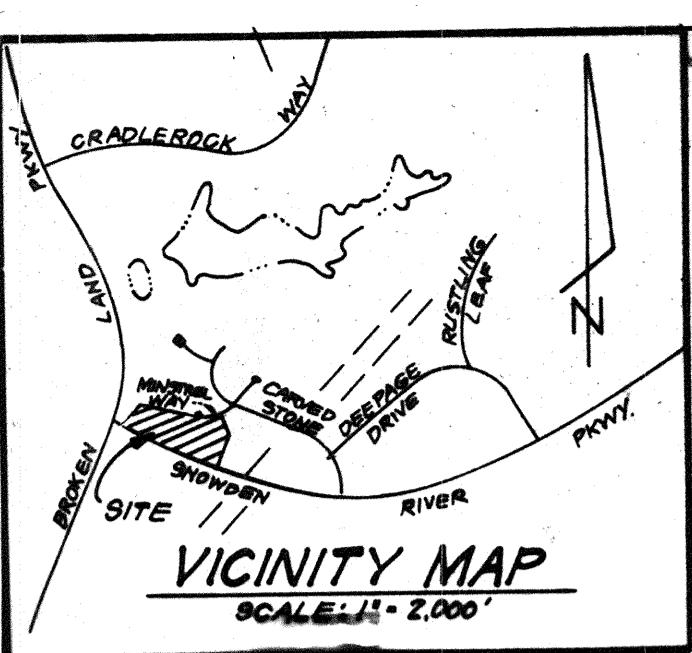
CLARK • FINEFROCK & SACKETT
ENGINEERS • PLANNERS • SURVEYORS

11315 LOCKWOOD DRIVE SILVER SPRING MARYLAND 20904 (301) 583-3400

DESIGNED	JL9	SEDIMENT AND EROSION CONTROL PLAN	SCALE AS SHOWN
DRAWN	VLM	PARGEL A-24	DRAWING 6 OF 8
CHECKED	JLS	COLUMBIA	JOB NO. 85-074
DATE	12-3-85	VILLAGE OF OWEN BROWN SECTION 2 AREA 2 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	FILE NO. 85-074

FOR: OWEN BROWN JOINT VENTURE 10320 Little Patuxent Parkway Columbia, Maryland 21044

S.D.P. 86-130C



PLANT SCHEDULE

KEY	PLANT NAME	SIZE	QUANT	REMARKS
⊕	ACER RUBRUM 'RED SUNSET'	2 1/2-3' CAL	16	B & B
⊕	RED SUNSET MAPLE	12-14' HT		HEAVY HEADS
⊕	QUERCUS PALUSTRIS		25	
⊕	PIN OAK			
⊕	QUERCUS PUBBA		7	
⊕	NORTHERN RED OAK			
⊕	GLEDITSIA T. INEPMIS		18	
⊕	SHADEMASTER HONEYLOCUST			
⊕	PLATANUS ACEFOLIA		62	
⊕	LONDON PLANETREE			
⊕	PRUNUS SUPHIRELLA PENDULA	2-2 1/2' CAL	6	SPECIMEN
⊕	WEeping CHERRY	8-10' HT		
⊕	CRATAEGUS PHAENOPYRUM	2-2 1/2' CAL	12	
⊕	WASHINGTON HAWTHORN	8-10' HT		
⊕	MALUS PINN PERFECTION		16	
⊕	PINK PERFECTION CRAB			
⊕	PRUNUS CEP 'THUNDERCLOUD'		17	
⊕	PURPLELEAF FL. PLUM			
⊕	CRATAEGUS MENTOPENSIS		21	
⊕	THORNLESS TOBA HAWTHORN			
⊕	PRUNUS S. 'KWANZAN'		24	
⊕	KWANZAN CHERRY			
⊕	AMELANCHIER CANDENSIS		5	
⊕	SHADBLow SEVICHEBERPY			
⊕	PINUS STROBUS			
W1	EASTERN WHITE PINE	6-7' HT	38	B & B HEAVY
W2	PINUS STROBUS			
W2	EASTERN WHITE PINE	7-8' HT	56	
B1	PINUS THUNDERBOLL	6-7' HT	11	
B1	JAPANESE BLACK PINE			
B2	PINUS THUNDERBOLL	7-8' HT	16	
B2	JAPANESE BLACK PINE			
⊕	CEDRUS DEODARA	SELECTED	1	B & B SPECIMEN
⊕	DEODARA CEDAR			

LIGHTING NOTE:

- GARDCO #H1923 - 400 MH - BRP / VALMONT #DS230 - 500 X 200 - BRP-2 - FBC 11 FIXTURES
 - GARDCO #H1913 - 400 MH - BRP / VALMONT #DS230 - 500 X 200 - BRP-1 - FBC 6 FIXTURES
- ALL LIGHTS CONSIST OF 400 WATT METAL HALIDE ON A 20' MOUNTING HEIGHT.

NOTE:

- CONTRACTOR SHALL VERIFY LOCATION OF ALL UNDEGROUND UTILITIES PRIOR TO DIGGING.
- ALL PLANTING SHALL BE DONE IN ACCORDANCE WITH COLUMBIA H.P.D. PLANTING SPECIFICATIONS.
- SUBSTITUTIONS MAY BE PERMITTED WITH THE APPROVAL OF THE LANDSCAPE ARCHITECT, (593-3400).

REVISED: 4-1-86

CLARK • FINEFROCK & SACKETT
ENGINEERS • PLANNERS • SURVEYORS
11315 LOCKWOOD DRIVE SILVER SPRING MARYLAND 20904

DESIGNED: DBN
DRAWN: DBN
CHECKED: WHT
DATE: 12-6-85

LANDSCAPE PLANTING PLAN
PARCEL A-24
COLUMBIA
VILLAGE OF OWEN BROOK
SECTION 2 AREA 2
63 ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
FORS OWEN BROOK JOINT VENTURE
10320 LITTLE PATRICK PARKWAY
COLUMBIA, MARYLAND 21044

SCALE: 1" = 30'
DRAWING: 70F8
JOB NO: 85-074
FILE NO: LS 85-074

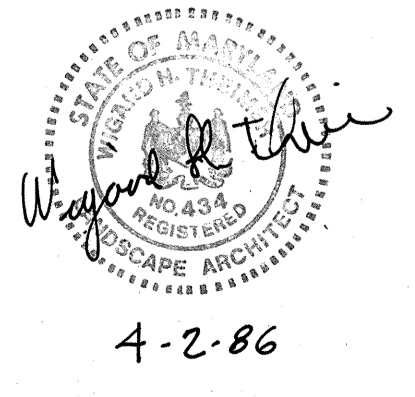
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.
HOWARD COUNTY HEALTH DEPARTMENT
J. B. ... 4-9-86
COUNTY HEALTH OFFICER DATE

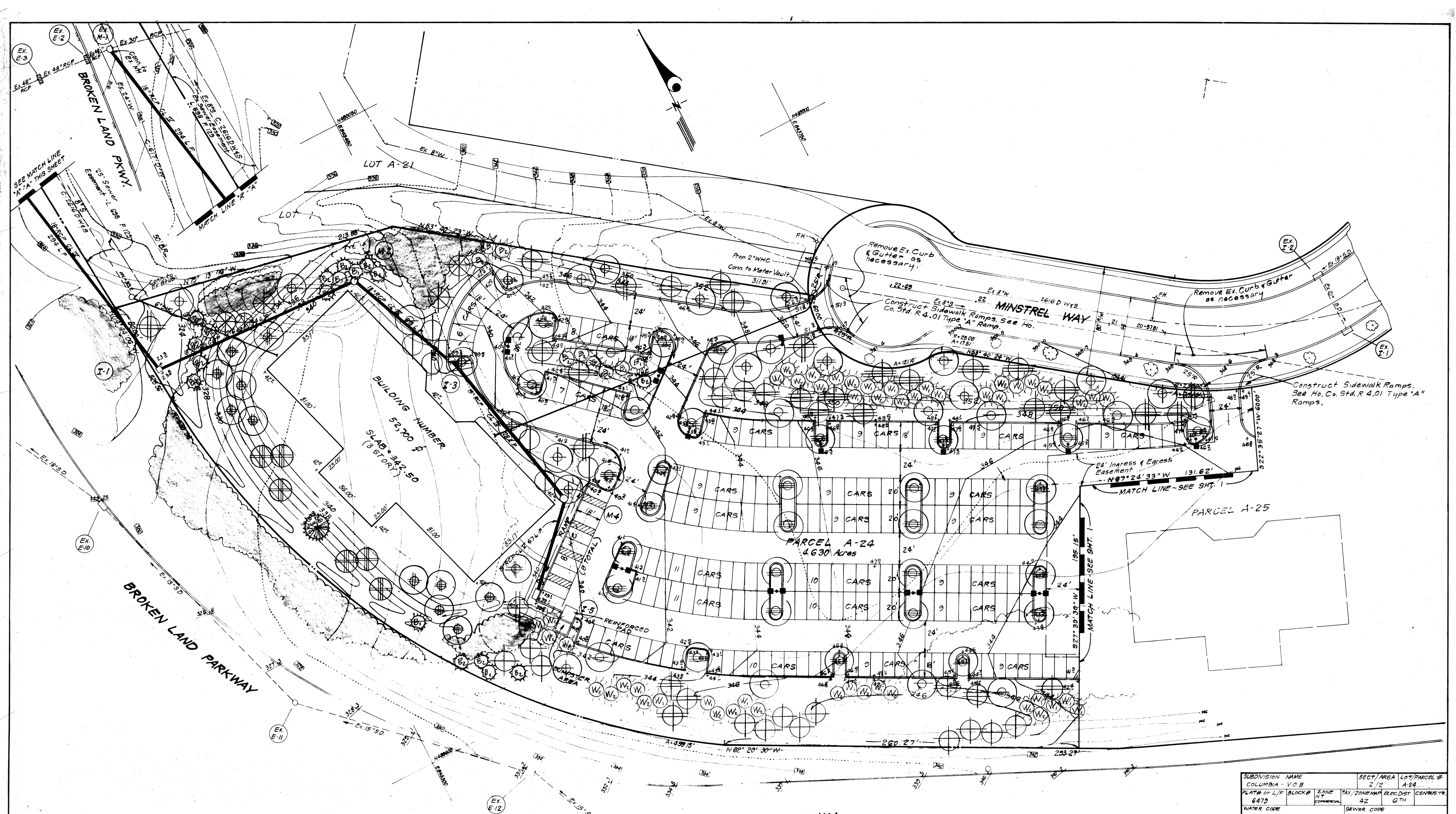
APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
... 4/10/86
PLANNING DIRECTOR DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE,
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
... 4-8-86
DIRECTOR DATE

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE: 1-8-86
...

1	Deleted Parcel A-25 from this submission	3-12-87
Nº	REVISION	DATE





SUBDIVISION NAME	SECT./AREA	LOT/PARCEL #
COLUMBIA - V.O.B.	2/2	A-24
PLAT# OF L/F BLOCK#	ZONE	TAX./ZONE MAP ELEC. DIST.
6470	COMMERCIAL	42 GTH
WATER CODE	SEWER CODE	

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.
 HOWARD COUNTY HEALTH DEPARTMENT
John Selms 4-9-86
 COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
Annal Dandell 4/10/86
 PLANNING DIRECTOR DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE,
 STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
George F. Nemej 4-8-86
 DIRECTOR DATE

APPROVED: 4-2-86
 CHIEF BUREAU OF ENGINEERING DATE

APPROVED
 PLANNING BOARD
 OF HOWARD COUNTY
 DATE 1-8-86
[Signature]

1	Revised Title Box	3-12-87
Nº	REVISION	DATE

CFS CLARK • FINEFROCK & SACKETT
 ENGINEERS • PLANNERS • SURVEYORS
 11315 LOCKWOOD DRIVE • SILVER SPRING, MARYLAND 20904 • (301) 583-3400

DESIGNED: *[Signature]* LANDSCAPE PLANTING PLAN SCALE: 1"=30'

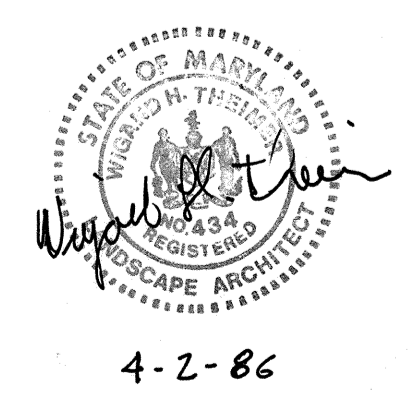
DRAWN: *[Signature]* DRAWING: 8 OF 8

CHECKED: WHT JOB NO.: 85-074

DATE: 12-6-85 FILE NO.: LS 85-074

FOR: OWEN BROWN JOINT VENTURE
 10320 Little Patuxent Parkway
 Columbia, Maryland 21044

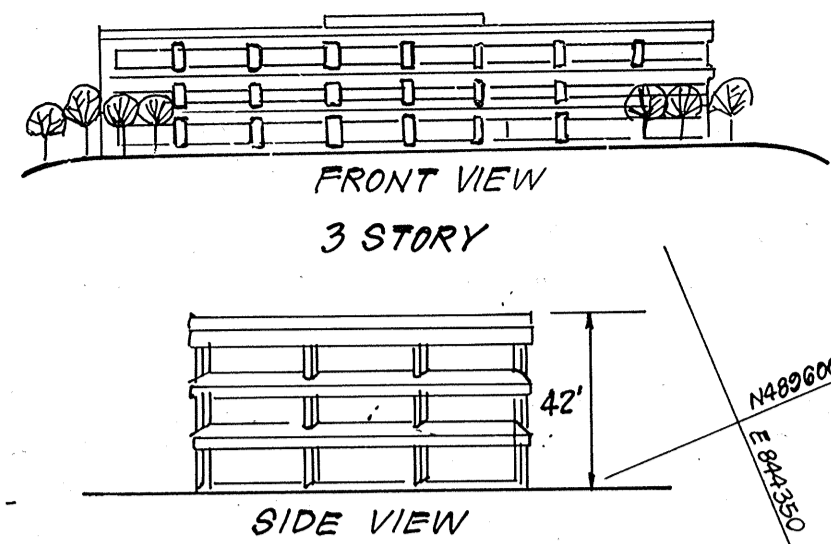
SDP-86-130c



REVISED: 4-1-86

WATER & SEWER NOTES:

- All construction methods and materials for on-site private water and sewer systems shall follow the current edition of the Howard County Plumbing Code, supplemented by the Howard County Standard Details and Specifications where necessary.
- Sewer house connections shall be built to within 5' of buildings, at a slope of 2.0% unless shown otherwise on plan.
- 6" water mains are to be D.I.P. and shall be built to within 5' of buildings.
- Where sewer house connections are to be extended from public connections, the material shall be the same as the public portion.



GENERAL NOTES:

- All materials and construction to be in accordance with the Howard County Road Construction Code and Specifications.
- This plan is covered by Final Development Plan: Phase 118-A-I Part II.
- Any damage to county owned rights of way shall be corrected at the developer's expense.
- Installation of Traffic Control Devices shall be in accordance with the latest edition of the "Manual of Uniform Traffic Control."
- Topography was compiled from plans prepared by Huatkins Associates.
- All driveways to be privately owned and maintained.
- All coordinates are based on Howard County Geodetic Control Traverse which is based on the Maryland State Plane Coordinate System.
- Class "C" Trench Bedding shall be used for all storm drains unless shown otherwise.
- Information concerning underground utilities was obtained from available records, but the contractor must determine the exact location and elev. of mains by digging test pits, by hand, at all utility crossings well in advance of construction.
- The contractor or developer shall contact the Construction Inspection/Survey Division 24 hrs in advance of commencement of work at 392-2417 or 792-7272.
- All downspouts shall be handled by one of the following methods:
 - Downspout to splash blocks and discharged to ground having good percolation.
 - Downspout in front of units, piped to curb.
 - Downspout connected to storm drain.
- The developer agrees to work with the Department of Licenses and Inspections to resolve any problem caused by roof water discharge.
- Handicap parking details shall be in accordance with the "Maryland Building Code for the Handicapped" Section 5.01-7.05 and details on sheet 3.
- Storm Water Management is provided by Lake Elkhorn and Parcel D-1 of EGU Section 2, Area 4.

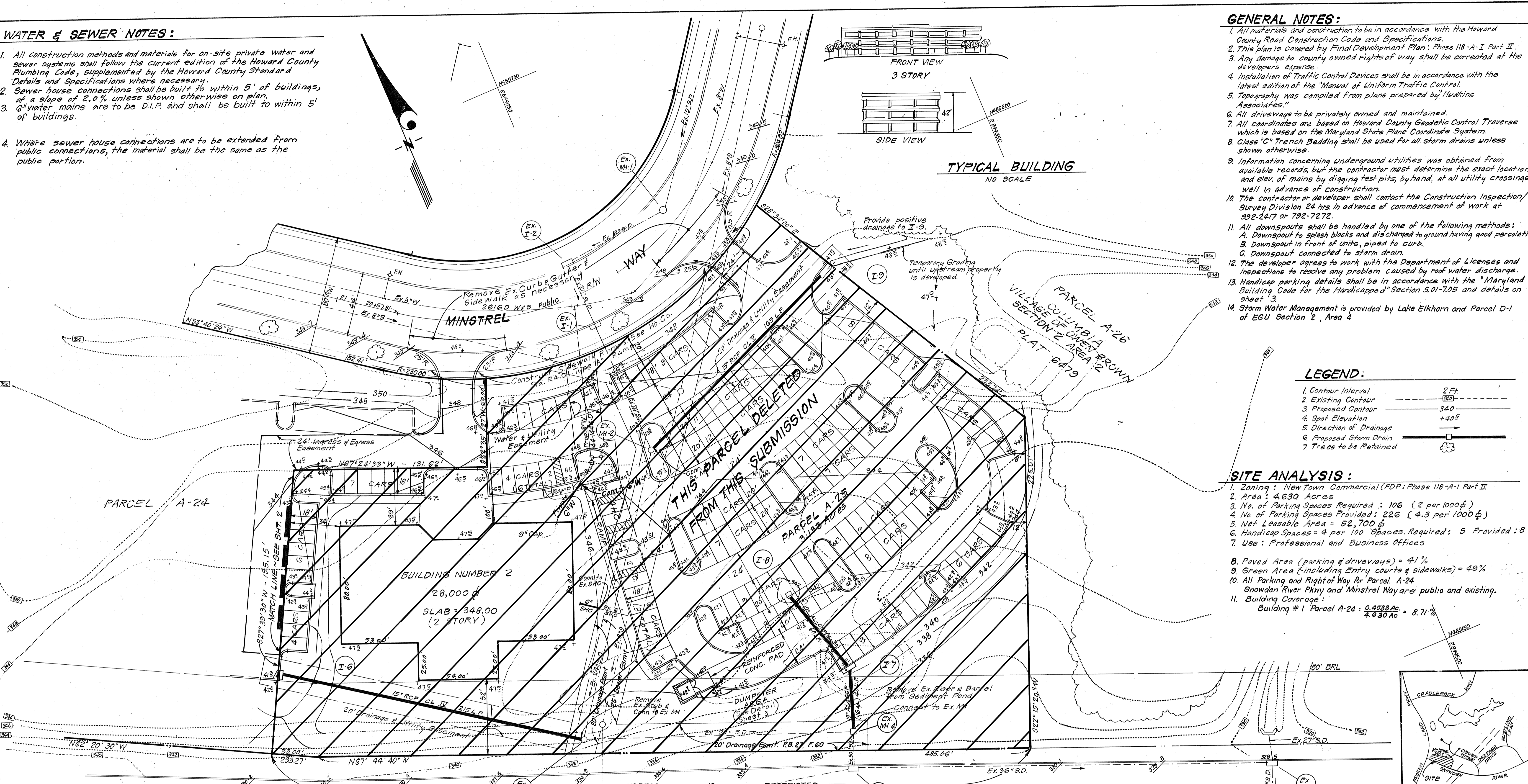
LEGEND:

- Contour Interval: 2 Ft
- Existing Contour: - - - - -
- Proposed Contour: - - - - -
- Spot Elevation: + 40.5
- Direction of Drainage: - - - - -
- Proposed Storm Drain: - - - - -
- Trees to be Retained: (Tree symbol)

SITE ANALYSIS:

- Zoning: New Town Commercial (FDP: Phase 118-A-I Part II)
- Area: 4.630 Acres
- No. of Parking Spaces Required: 106 (2 per 1000 sq ft)
- No. of Parking Spaces Provided: 226 (4.3 per 1000 sq ft)
- Net Leasable Area = 52,700 sq ft
- Handicap Spaces = 4 per 100 Spaces Required: 5 Provided: 8
- Use: Professional and Business Offices

- Paved Area (parking & driveways) = 41%
- Green Area (including Entry courts & sidewalks) = 49%
- All Parking and Right of Way for Parcel A-24 Snowden River Pkwy and Minstrel Way are public and existing.
- Building Coverage:
 - Building #1 Parcel A-24: 0.4033 Ac = 8.71%
 - Parcel A-24: 4.730 Ac



NO	REVISION	DATE
1	Changed 2" WWC to 3" WWC, to Private 6" W, and add 6" W profile.	2-28-86
2	Deleted Parcel A-25 from this submission & all information pertaining thereto.	3-12-87
3	Added sheet index.	2-24-85

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICER: *[Signature]* DATE: 4-9-86

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
 PLANNING DIRECTOR: *[Signature]* DATE: 4/10/86

CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION
 PLANNING DIRECTOR: *[Signature]* DATE: 4-10-86

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DIRECTOR: *[Signature]* DATE: 4-8-86

CHIEF BUREAU OF ENGINEERING: *[Signature]* DATE: 4-8-86

APPROVED
 PLANNING BOARD
 OF HOWARD COUNTY
 DATE: 1-8-86
[Signature]

PLAT BOOK 17 FOLIO 35
 (Right-of-Way and Paving Width Varies)

SHEET INDEX

1	SITE DEVELOPMENT PLAN
2	SITE DEVELOPMENT PLAN
3	STORM DRAIN AND PAVING DETAILS
4	SEDIMENT AND EROSION CONTROL PLAN AND DRAINAGE AREA MAP
5	SEDIMENT AND EROSION CONTROL PLAN AND DRAINAGE AREA MAP
6	SEDIMENT AND EROSION CONTROL PLAN
7	LANDSCAPE PLANTING PLAN
8	LANDSCAPE PLANTING PLAN
9	MATERIALS AND DETAILS

ADDRESS CHART

NUMBER	STREET	ADDRESS
BLDG NO 1	7185	MINSTREL WAY



SUBDIVISION NAME COLUMBIA - V.O.B.	SECT./AREA 2/2	LOT/PARCEL # A-24
PLAT # OF LIF BLOCK # 6479 3	TAX ZONE MAP ELEC DIST. 42 6TH	CENSUS TR. 6061.08
WATER CODE E-12	SEWER CODE	

CLARK • FINEFROCK & SACKETT
 ENGINEERS • PLANNERS • SURVEYORS
 11315 LOCKWOOD DRIVE • SILVER SPRING, MARYLAND 20904 • (301) 593-3400

DESIGNED: CKG, JME
 DRAWN: VLM
 CHECKED: CKG, JME
 DATE: 12-3-85

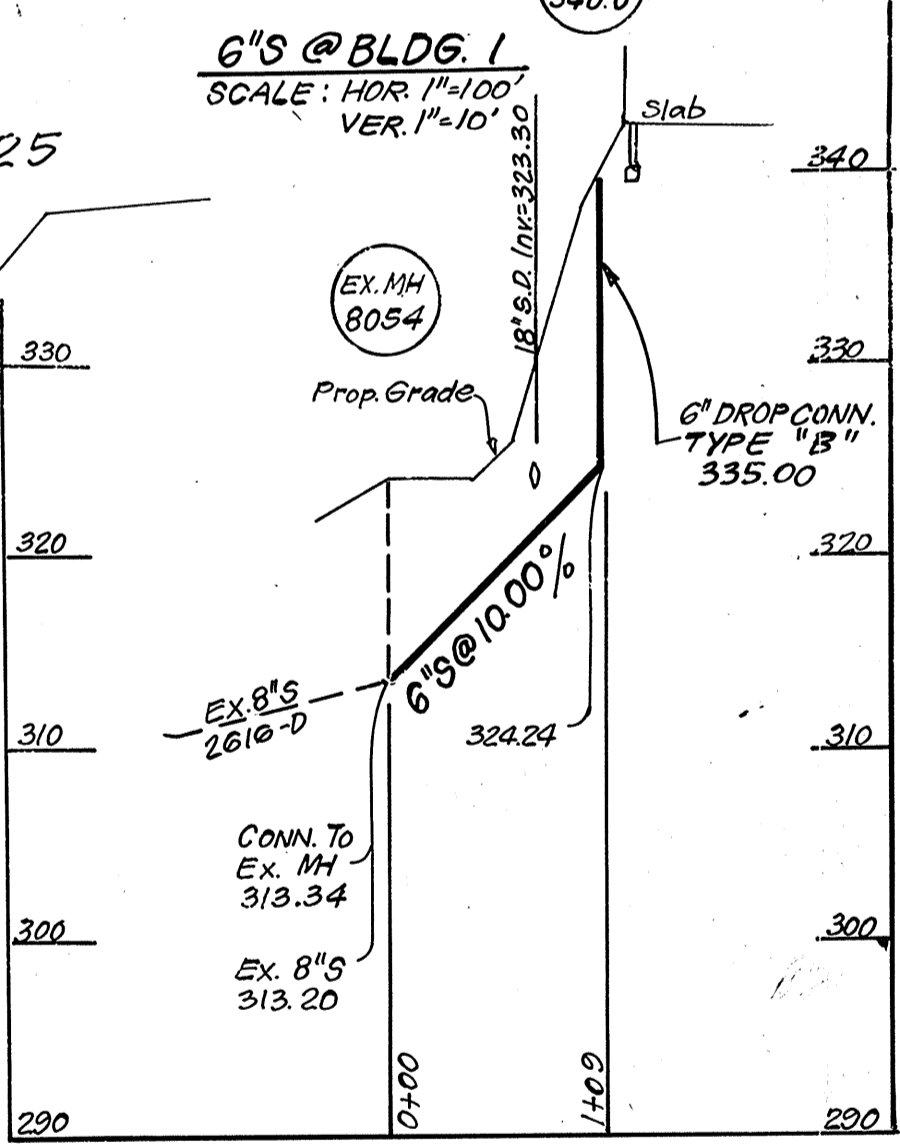
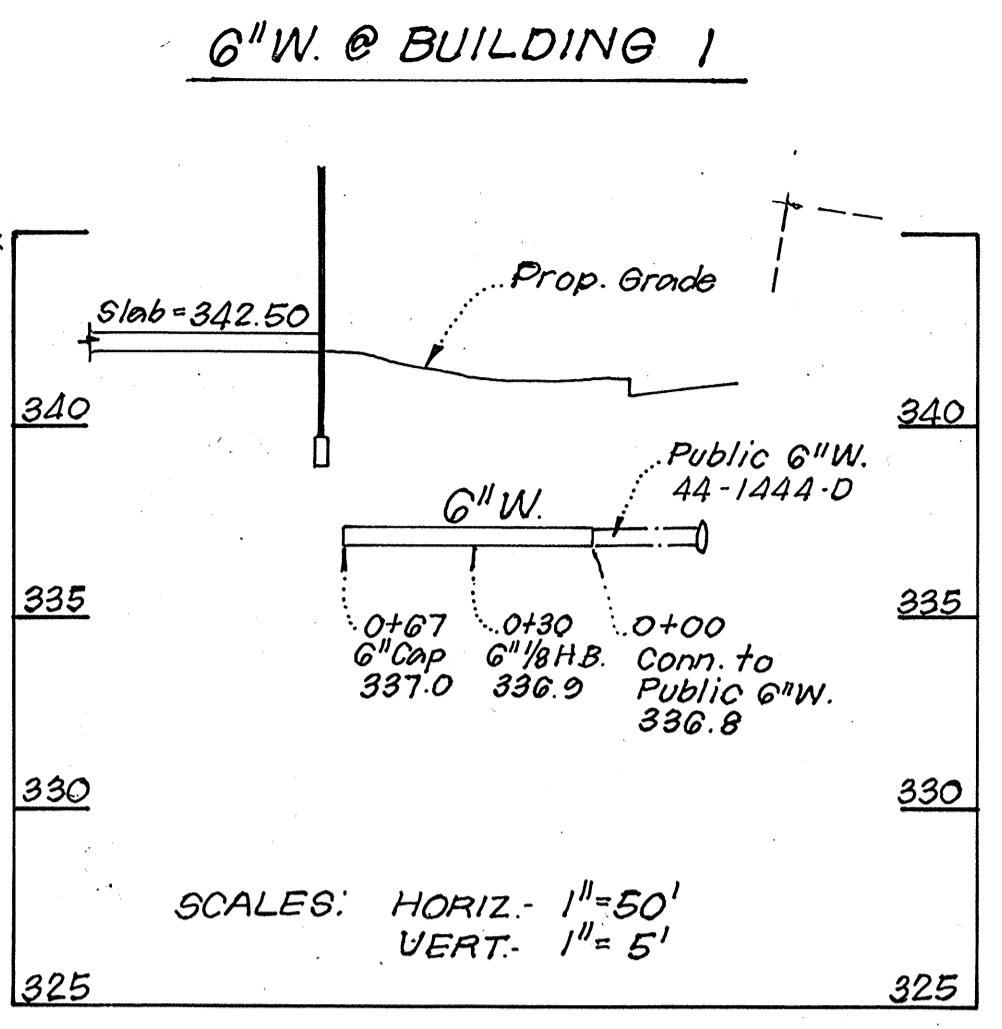
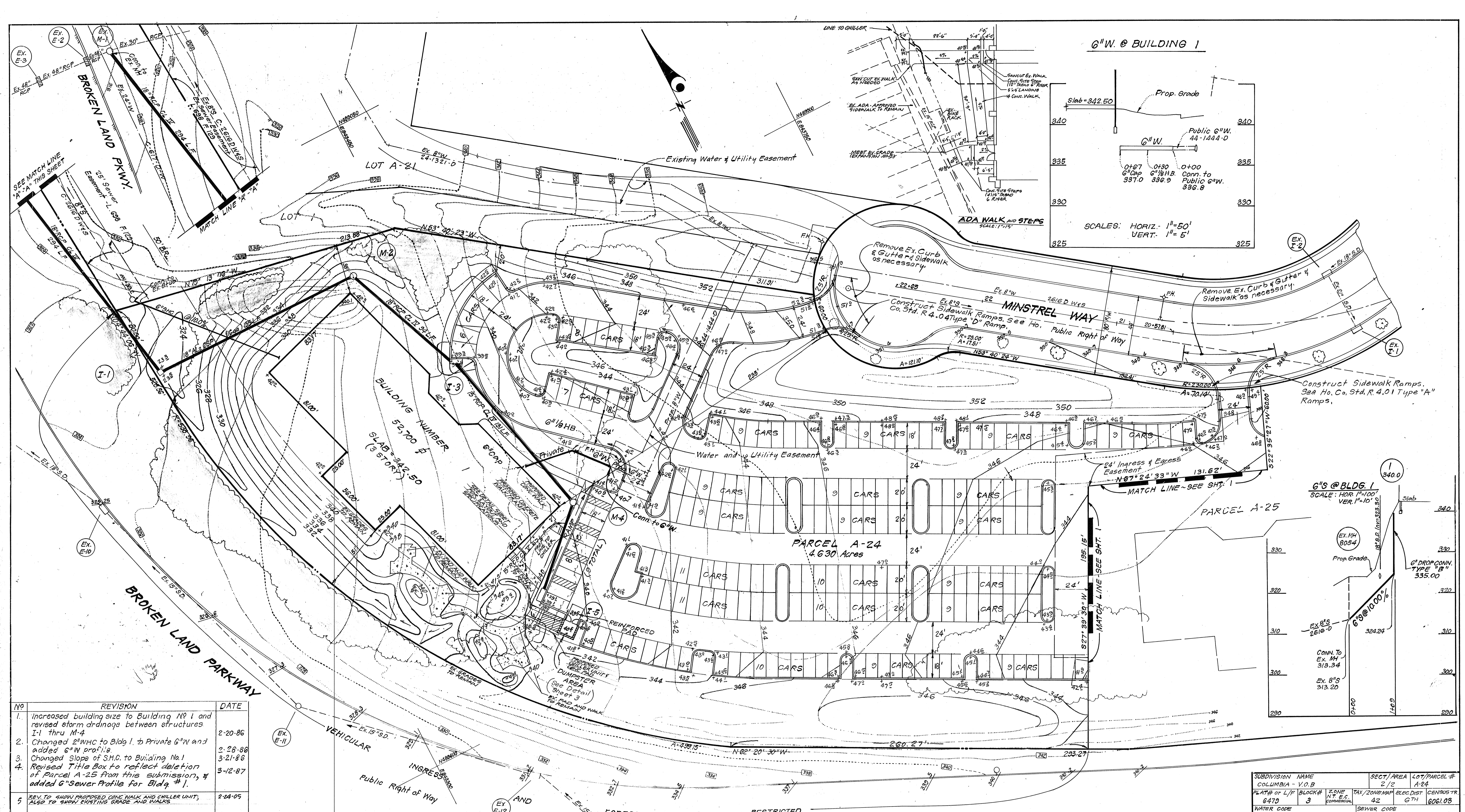
SITE DEVELOPMENT PLAN
 PARCEL A-24

COLUMBIA
 VILLAGE OF OWEN BROWN
 SECTION 2, AREA 2
 6TH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

FOR: OWEN BROWN JOINT VENTURE/PLAT DEVELOPMENT CO.
 1312 DELONIA AVENUE
 TOWSON, MARYLAND 21079

SCALE: 1" = 30'
 DRAWING: 10FB
 JOB NO.: 85-074
 FILE NO.: 85-074-X

S.D.P. 86-130C



NO	REVISION	DATE
1.	Increased building size to Building No. 1 and revised storm drainage between structures I-1 thru M-4	2-20-86
2.	Changed 2" W/C to Bldg 1. to Private G"W and added G"W profile	2-28-86
3.	Changed Slope of S.H.C. to Building No. 1	3-21-86
4.	Revised T.H.E. Box to reflect deletion of Parcel A-25 from this submission, & added G"Sewer Profile for Bldg #1.	3-12-87
5.	REV. TO SHOW PROPOSED CONC. WALK AND CHILLER UNIT, ALSO TO SHOW EXISTING GRADE AND WALKS	2-24-85

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS,
HOWARD COUNTY HEALTH DEPARTMENT

John G. Jones 4-7-86
COUNTY HEALTH OFFICER

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

John G. Jones 4-10-86
PLANNING DIRECTOR

John G. Jones 4-10-86
CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE,
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

John G. Jones 4-8-86
DIRECTOR

John G. Jones 4-8-86
CHIEF BUREAU OF ENGINEERING

APPROVED
PLANNING BOARD
OF HOWARD COUNTY

DATE 1-8-86
M. J. Jones

RESTRICTED
SNOWDEN RIVER PARKWAY
(Right of Way and Paving Varies in Width)

SUBDIVISION NAME COLUMBIA - V.O.B	SECT./AREA 2/2	LOT/PARCEL # A-24
PLAT# OF L/F BLOCK# 6473 3	TAX./ZONE MAP 42	ELEC. DIST. G7H
WATER CODE E-12	SEWER CODE	CENSUS TR. 6061.03

CFS CLARK • FINEFROCK & SACKETT
ENGINEERS • PLANNERS • SURVEYORS

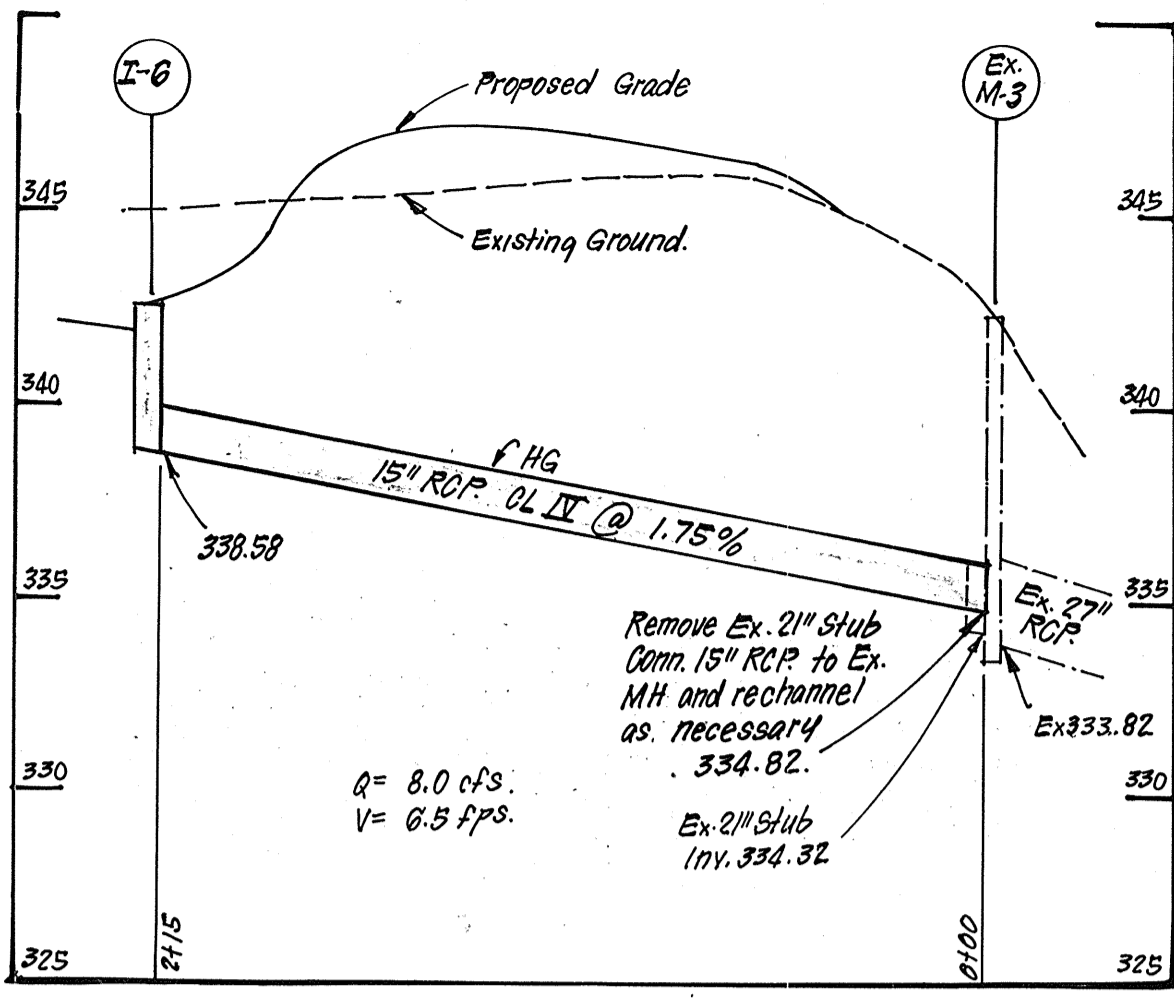
11315 LOCKWOOD DRIVE SILVER SPRING, MARYLAND 20904 (301) 593-3400

DESIGNED C.K.G. J.M.E.	SITE DEVELOPMENT PLAN PARCEL A-24	SCALE 1"=30'
DRAWN V.L.M.		DRAWING 2 OF 8
CHECKED C.K.G. J.M.E.	COLUMBIA VILLAGE OF OWEN BROWN SECTION 2 AREA 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	JOB NO. 85-074
DATE 12-3-85		FILE NO. 85-074-X

FOR: OWEN BROWN JOINT VENTURE/PLATT DEVELOPMENT CO.
1312 BELLONA AVENUE
TOWSON, Maryland 21093

S.D.P.- 86-130c





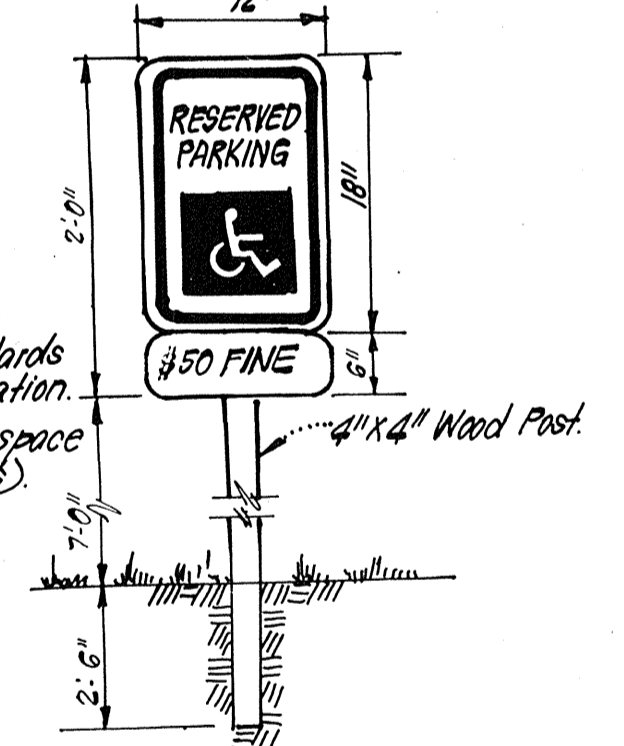
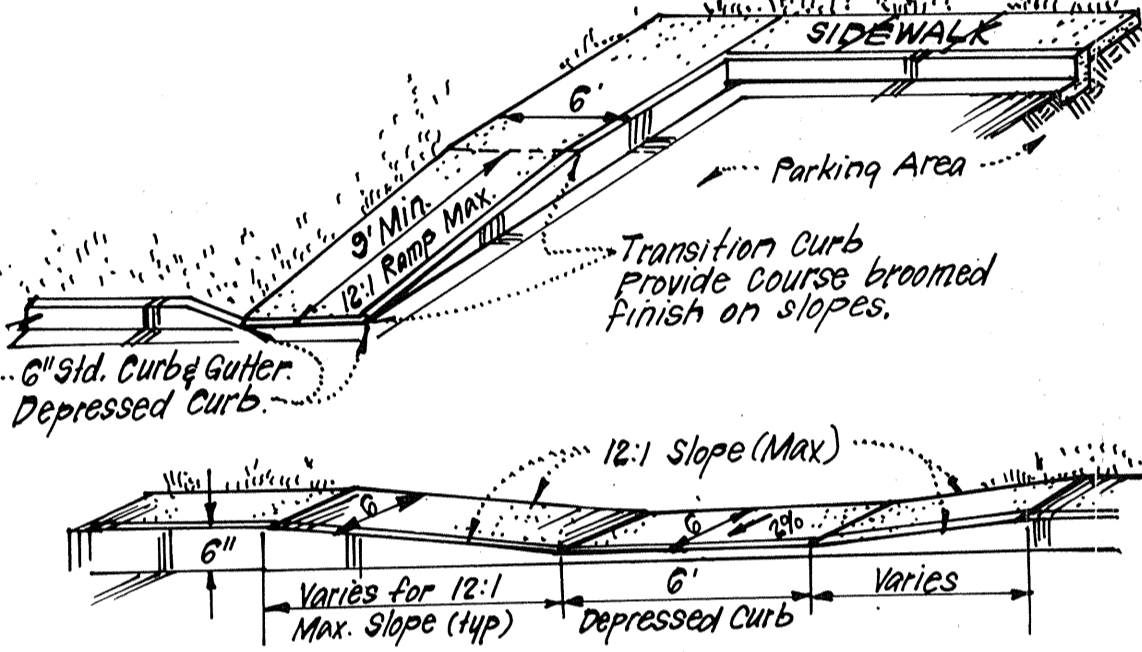
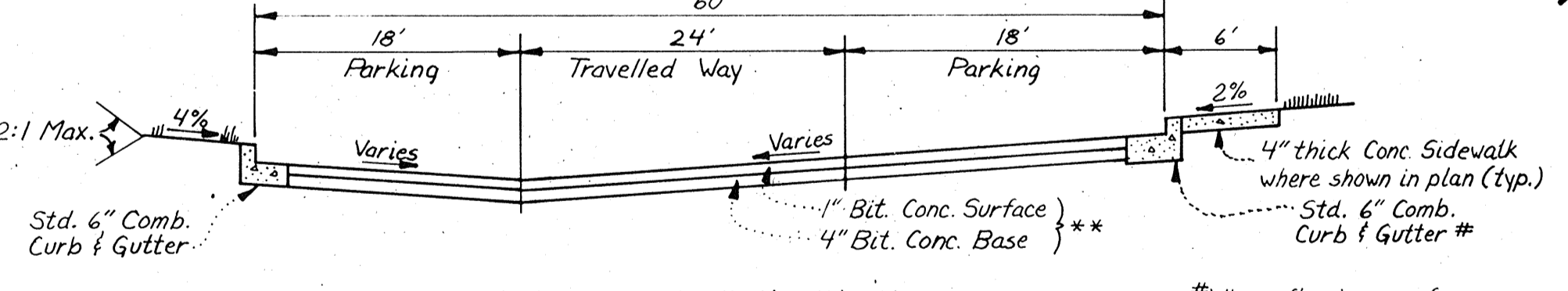
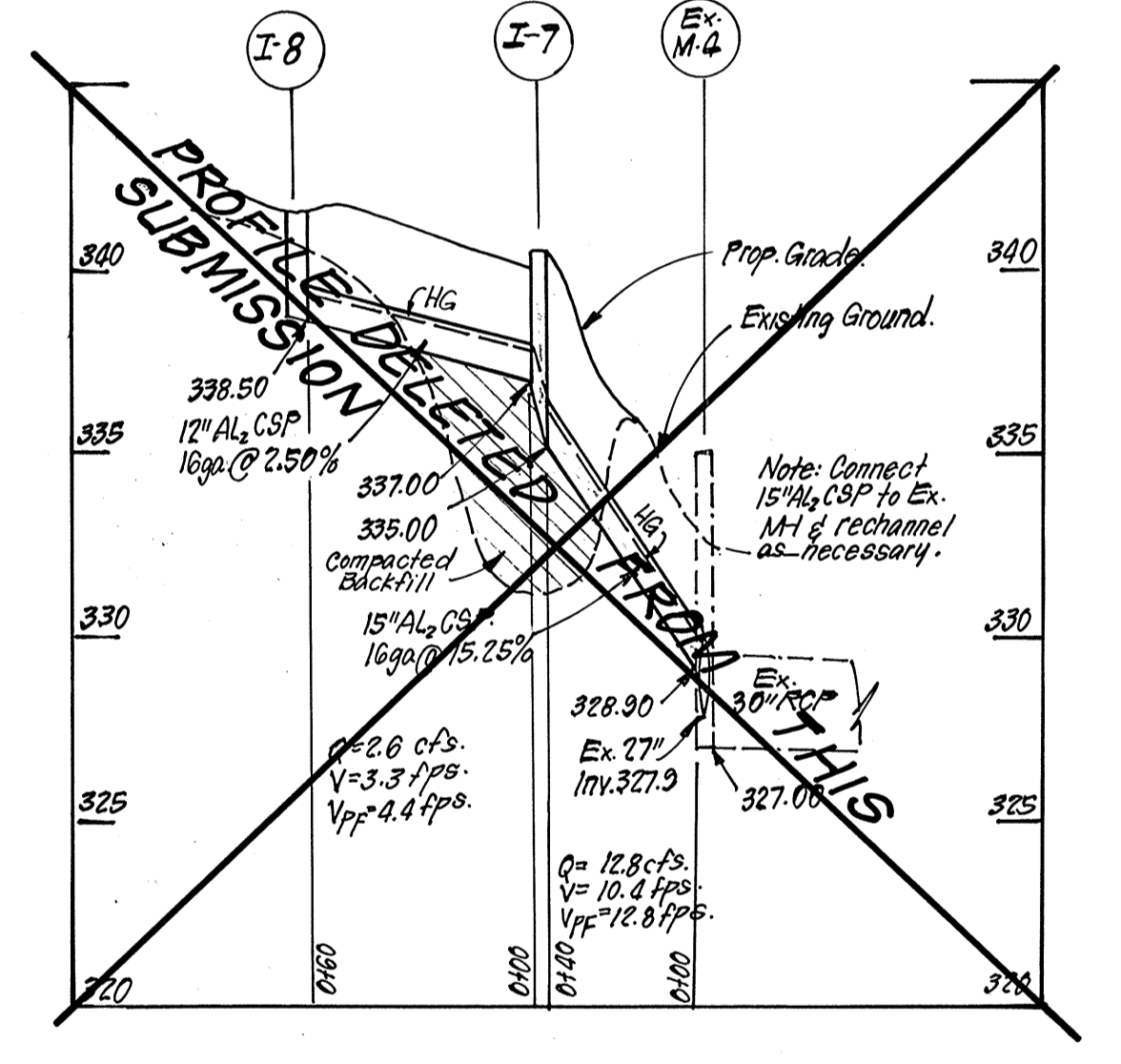
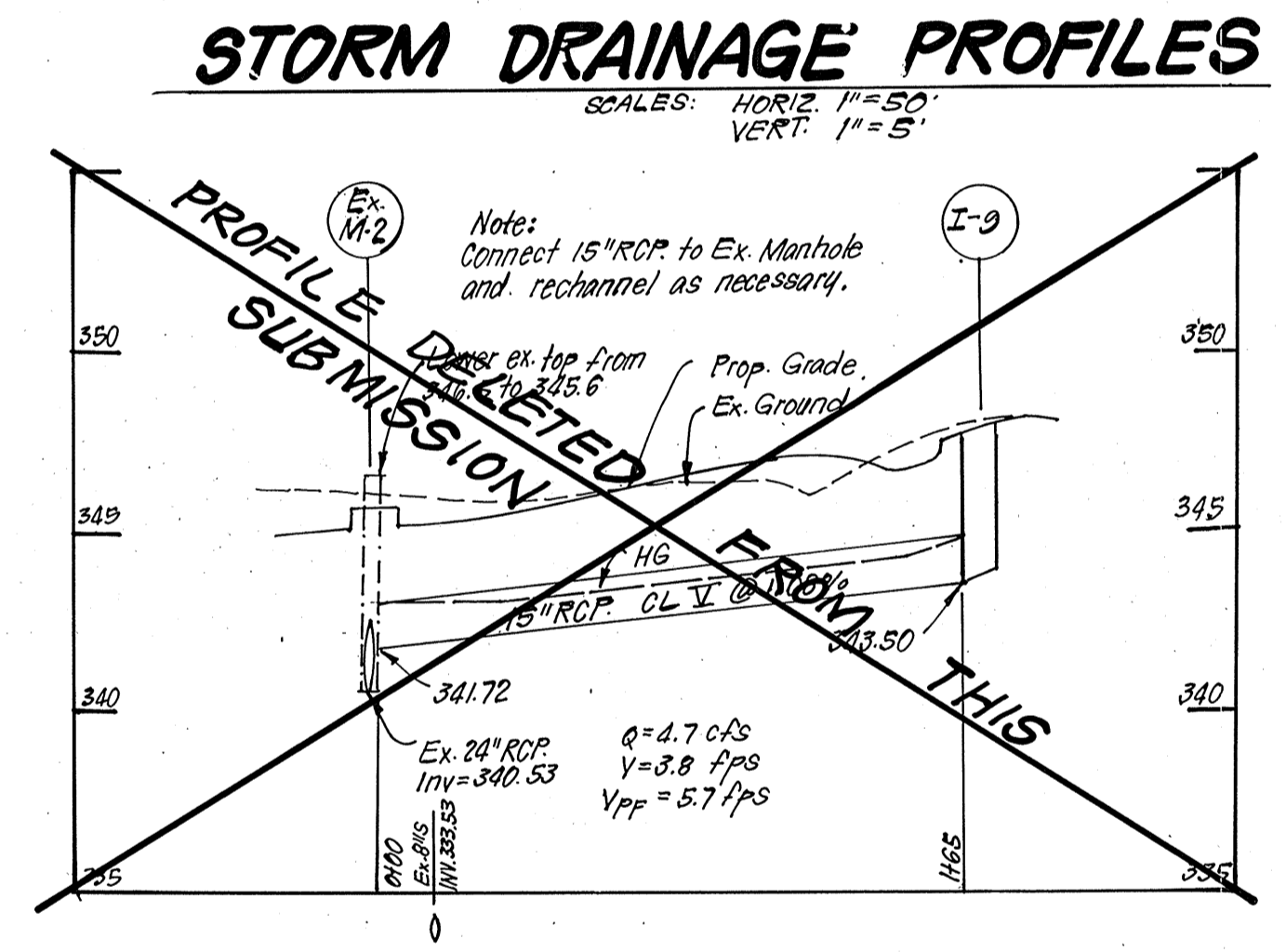
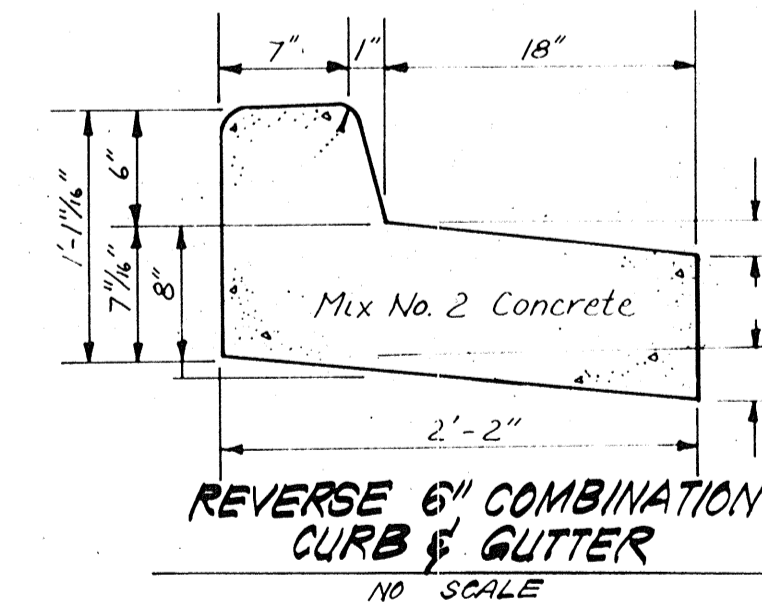
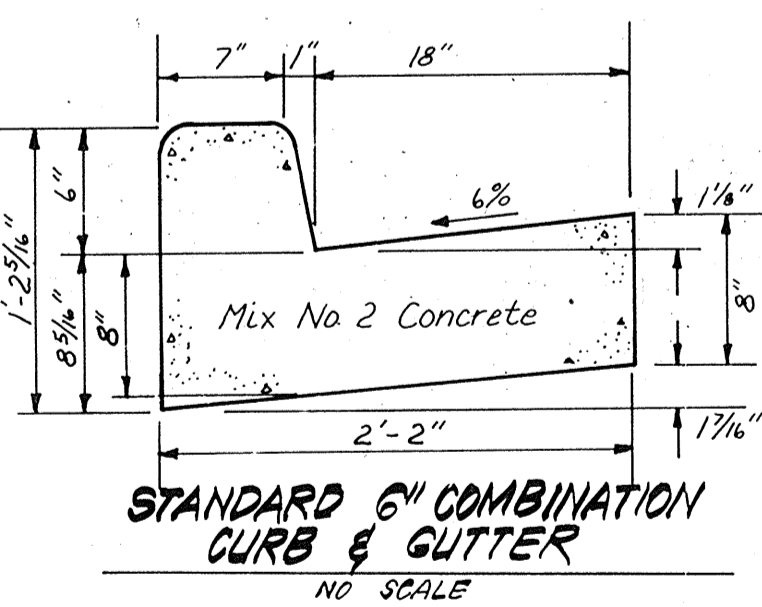
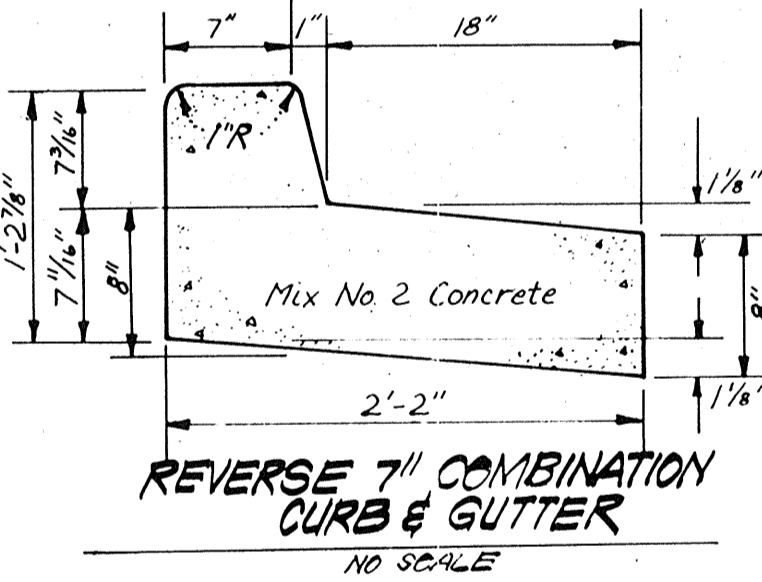
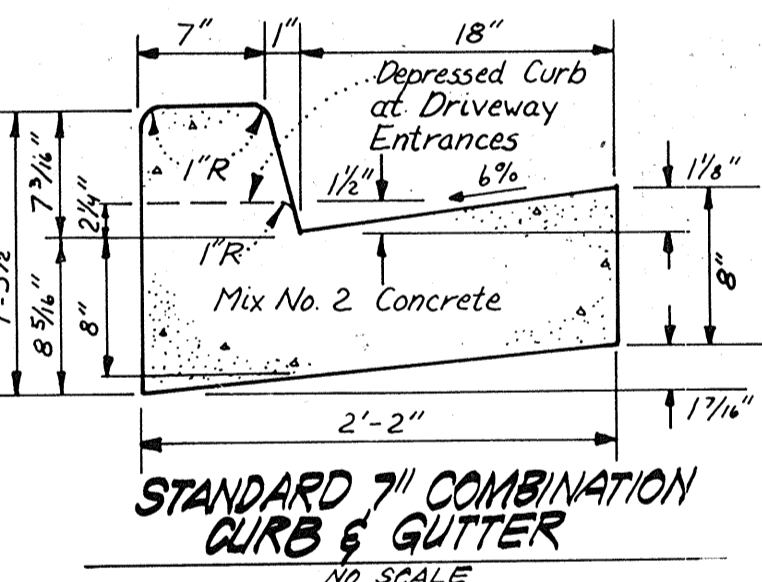
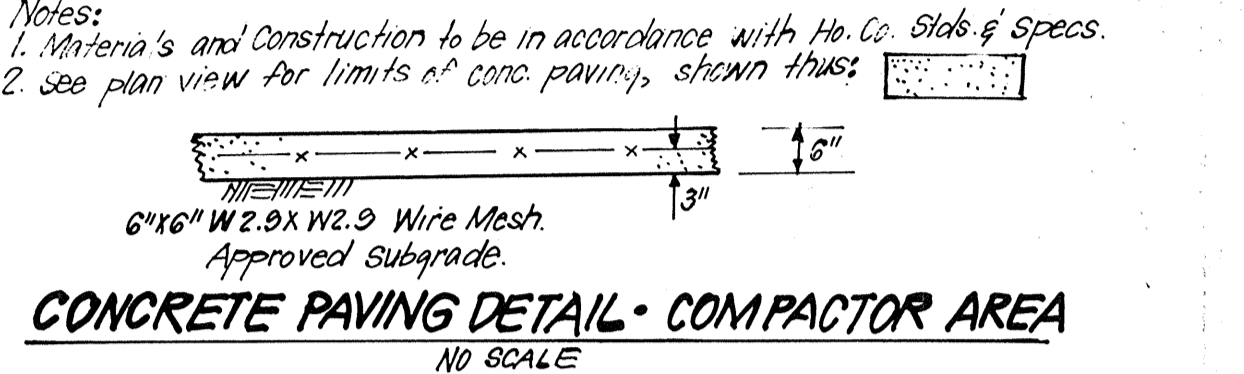
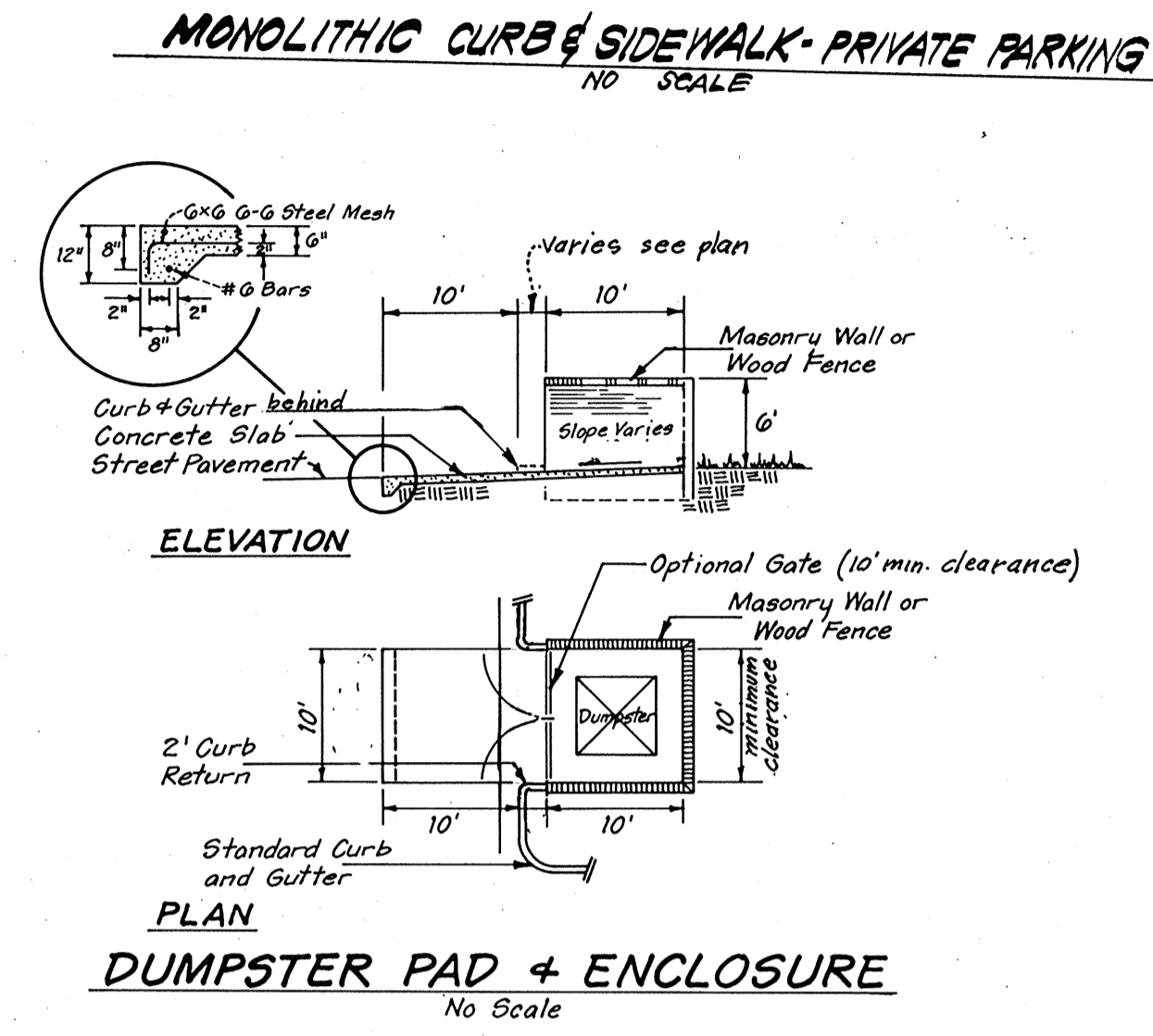
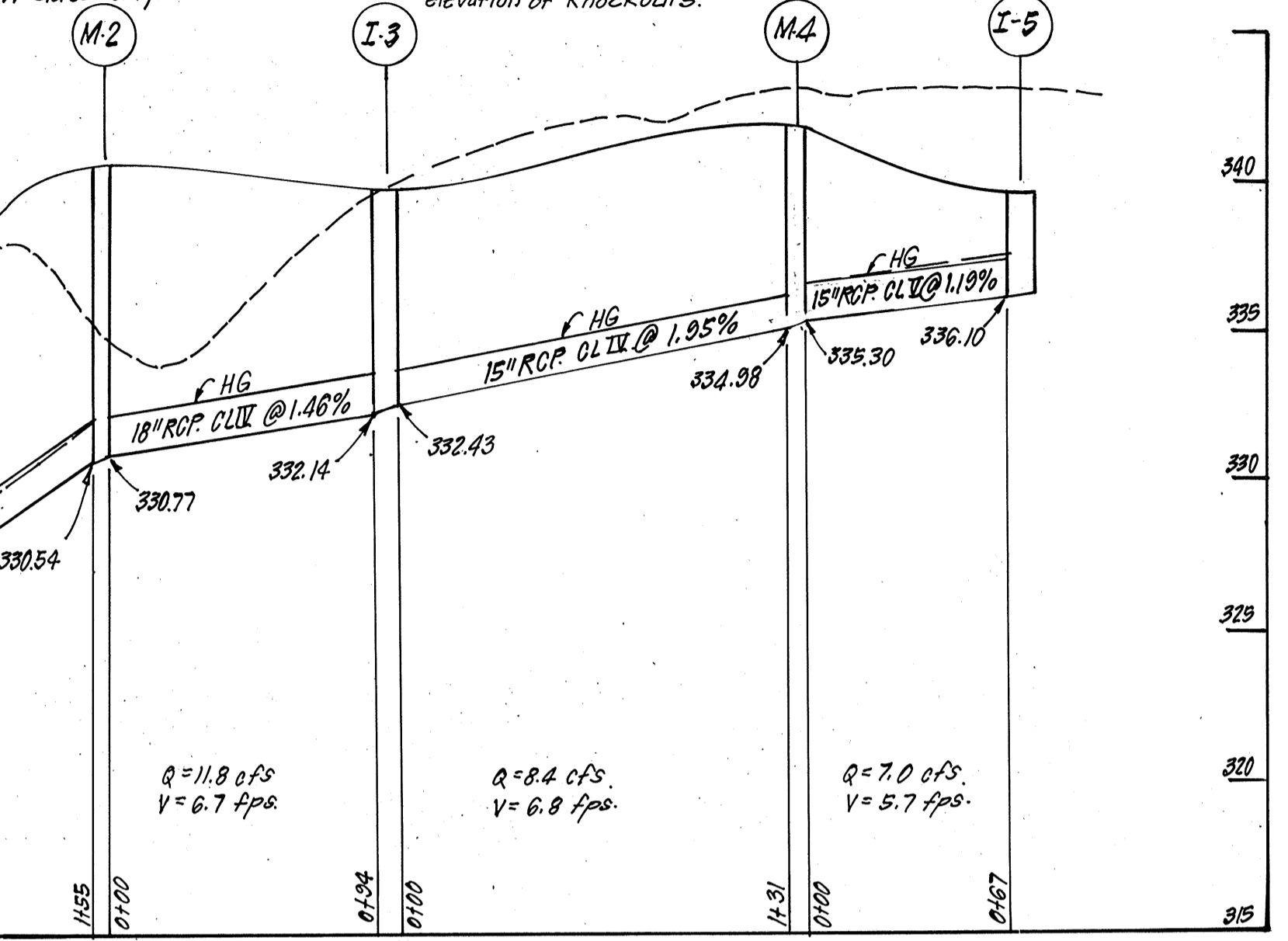
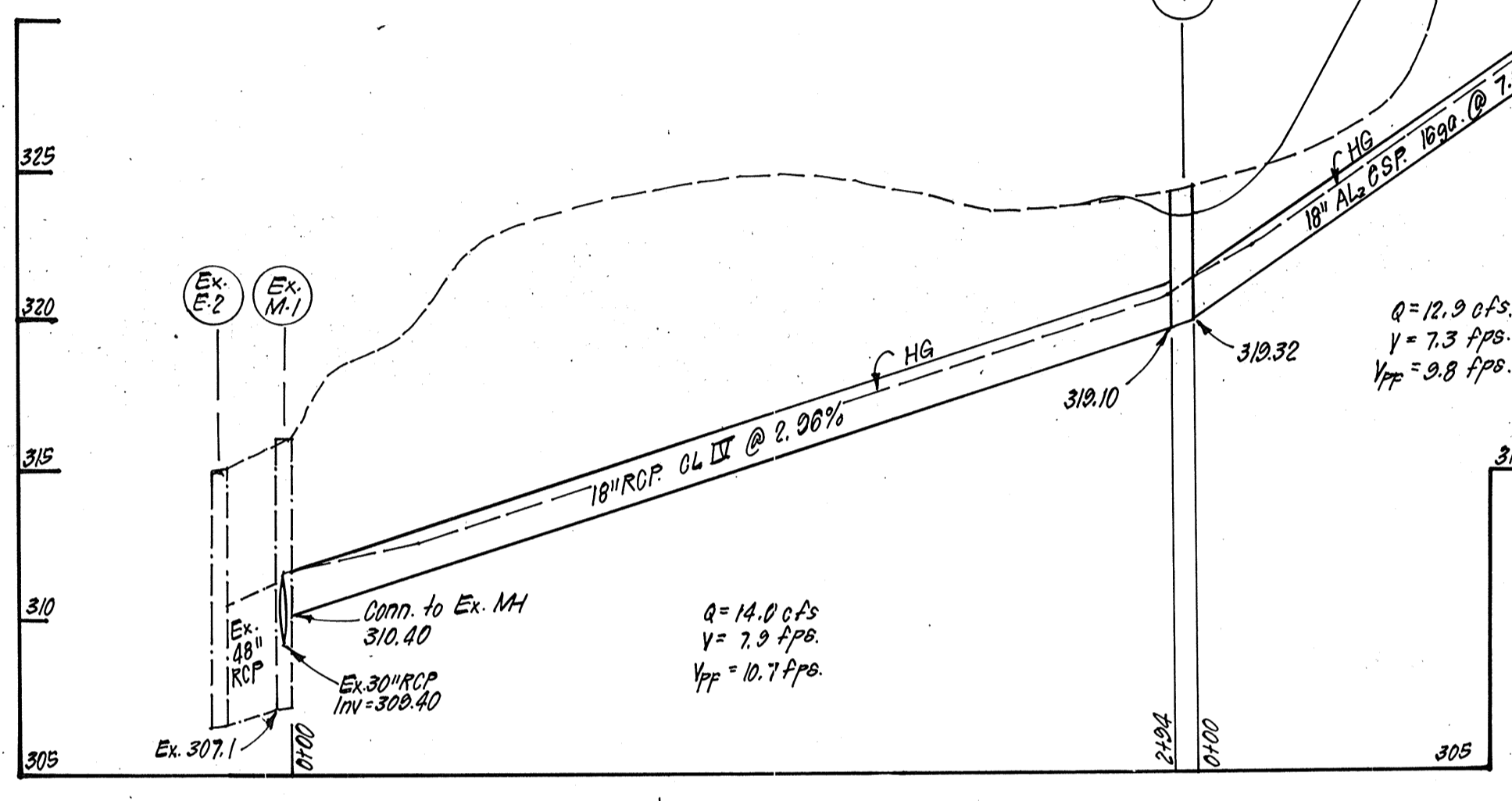
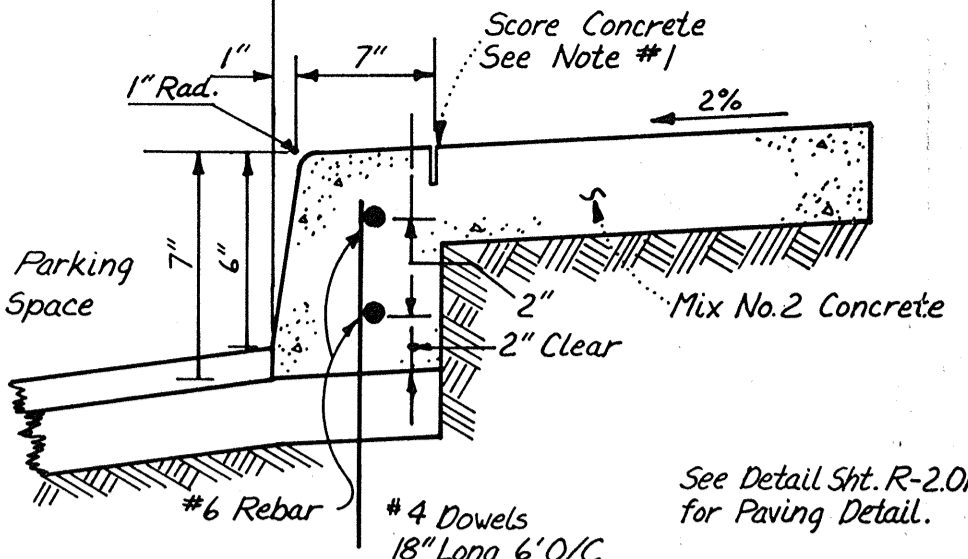
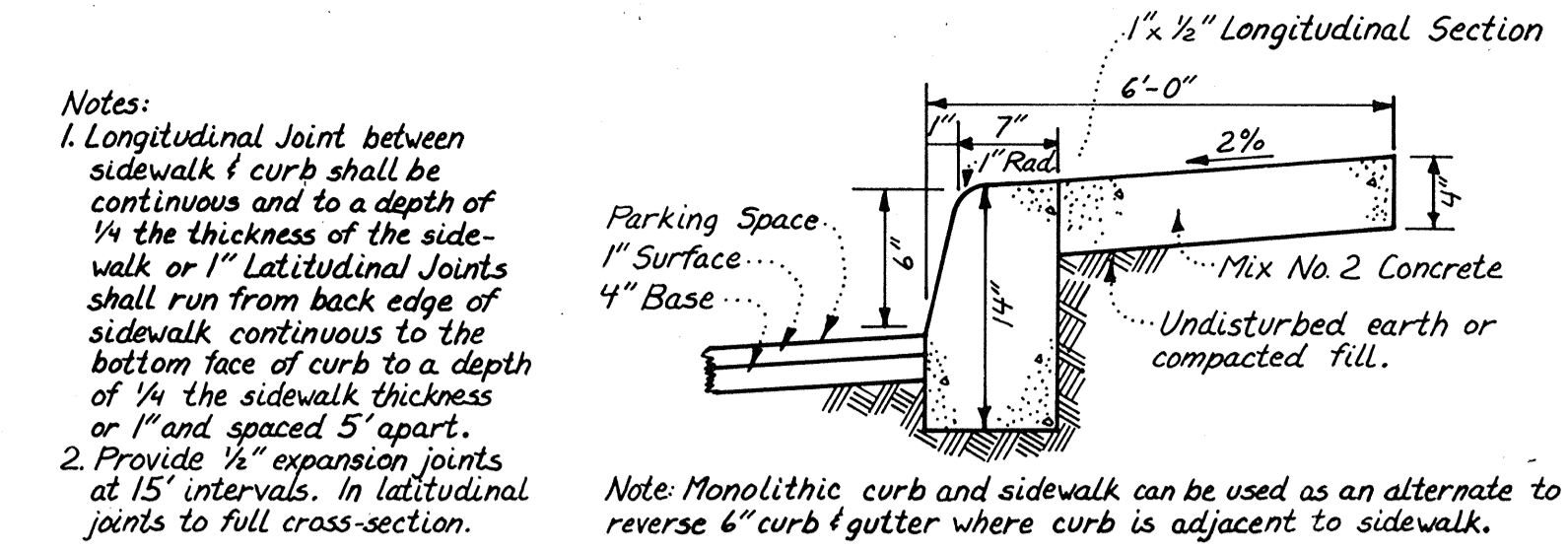
SIZE	TYPE	LENGTH
12"	AL ₂ O ₃ SP 16ga	60 LF
15"	RCP CL IV	346 LF
15"	RCP CL V	232 LF
18"	AL ₂ O ₃ SP 16ga	40 LF
18"	RCP CL IV	388 LF
18"	AL ₂ O ₃ SP 16ga	185 LF

* 2 3/8" x 1/2" Corrugations. Aluminized CMP may be substituted for AL₂O₃SP.

No.	TYPE	INV. IN	INV. OUT	TOP ELEVATION		REMARKS	LOCATION
				UPPER	LOWER		
I-1	D Inlet	319.32	319.10	301 Elev = 323.5	340.0	No. Co. Sid. SP/4.11	21' 0" Sq. See Plan
M-2	Manhole	330.77	330.54	340.0	340.0	G/5.01	D=4'
I-3	A-10 Inlet	332.43	332.14	339.93	339.80	SD/4.02	W=2' 9"
M-4	Manhole	335.30	334.98	341.80	341.80	G/5.01	D=4'
I-5	A-10 Inlet	-	336.10	339.60	339.60	SD/4.02	W=2' 6"
I-6	A-10 Inlet	-	338.58	342.59	342.40	SD/4.02	W=2' 6"
I-7	A-10 Inlet	337.00	336.00	340.50	340.50	SD/4.02	W=2' 6"
I-8	B Inlet w/Ret. Grate	-	338.50	Grate Elev = 341.50	341.50	SD/4.22	W=2' 6"
I-9	A-10 Inlet	-	343.50	348.00	347.70	SD/4.02	W=2' 6"

Δ All Inverts shall be fully developed. □ Manholes 2 & 4 shall have knockouts provided for connection of roof drains. Contractor shall coordinate with building contractor as to location, size and elevation of knockouts.

* Slots on N & W sides only.



** See Alternate Paving Section for Parking this st. # Where flow is away from curb & gutter. Rev. 6" Comb. Curb & Gutter shall be used.

Bituminous Conc Surface	1 1/2"
Bituminous Conc. Base	2 1/2"
Prime	-
8" Crusher Run Base (Placed in 2 Courses)	8"
or	6"
6" Dense Graded Stabilized Aggregate Base Course	6"

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

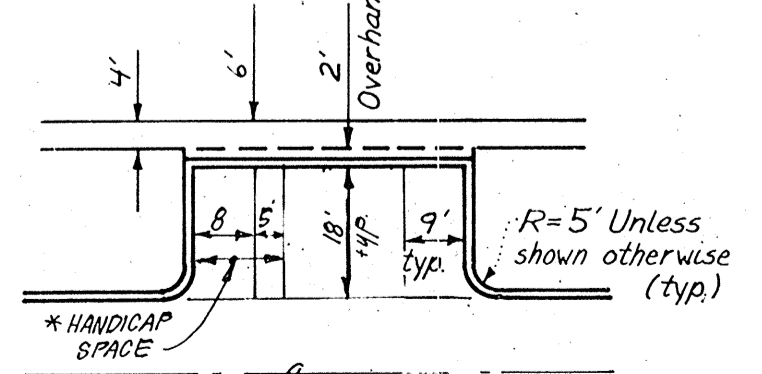
ALTERNATE PAVING SECTION FOR PUBLIC ROADS (SECTION P-2)

ALTERNATE PAVING SECTION FOR PARKING AREAS (SECTION P-1)

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT. DATE: 4-9-86.

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING. DATE: 4/10/86.

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS. DATE: 4-8-86.



TYPICAL PARKING. Note: Two 8' Handicap Spaces may share one E & Side.

NO	REVISION	DATE
1	Revised Storm Drainage between structures I-1 thru M-4	2-20-86
2	Added note to Structure Schedule	3-6-86
3	Deleted two storm drain profiles from this submission.	3-12-87



CLARK · FINEFROCK & SACKETT
ENGINEERS · PLANNERS · SURVEYORS

11315 LOCKWOOD DRIVE • SILVER SPRING, MARYLAND 20904 • (301) 593-3400

DESIGNED: CKG, JME
DRAWN: VLM
CHECKED: CKG, JME
DATE: 12-3-85

**SITE DEVELOPMENT PLAN
STORM DRAIN & PAVING DETAILS
PARCEL A-24
COLUMBIA**

VILLAGE OF OWEN BROWN
SECTION 2 AREA 2
6TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

FOR: OWEN BROWN JOINT VENTURE/PLATT DEVELOPMENT CO.
1312 BELLONA AVENUE
TOWSON, Maryland 21073

SCALE: 1" = 30'
DRAWING: 30F 8
JOB NO.: 85-074
FILE NO.: 85-074-X

DATE: 1-8-86

SD.P-86-130C

CONSTRUCTION SEQUENCE :

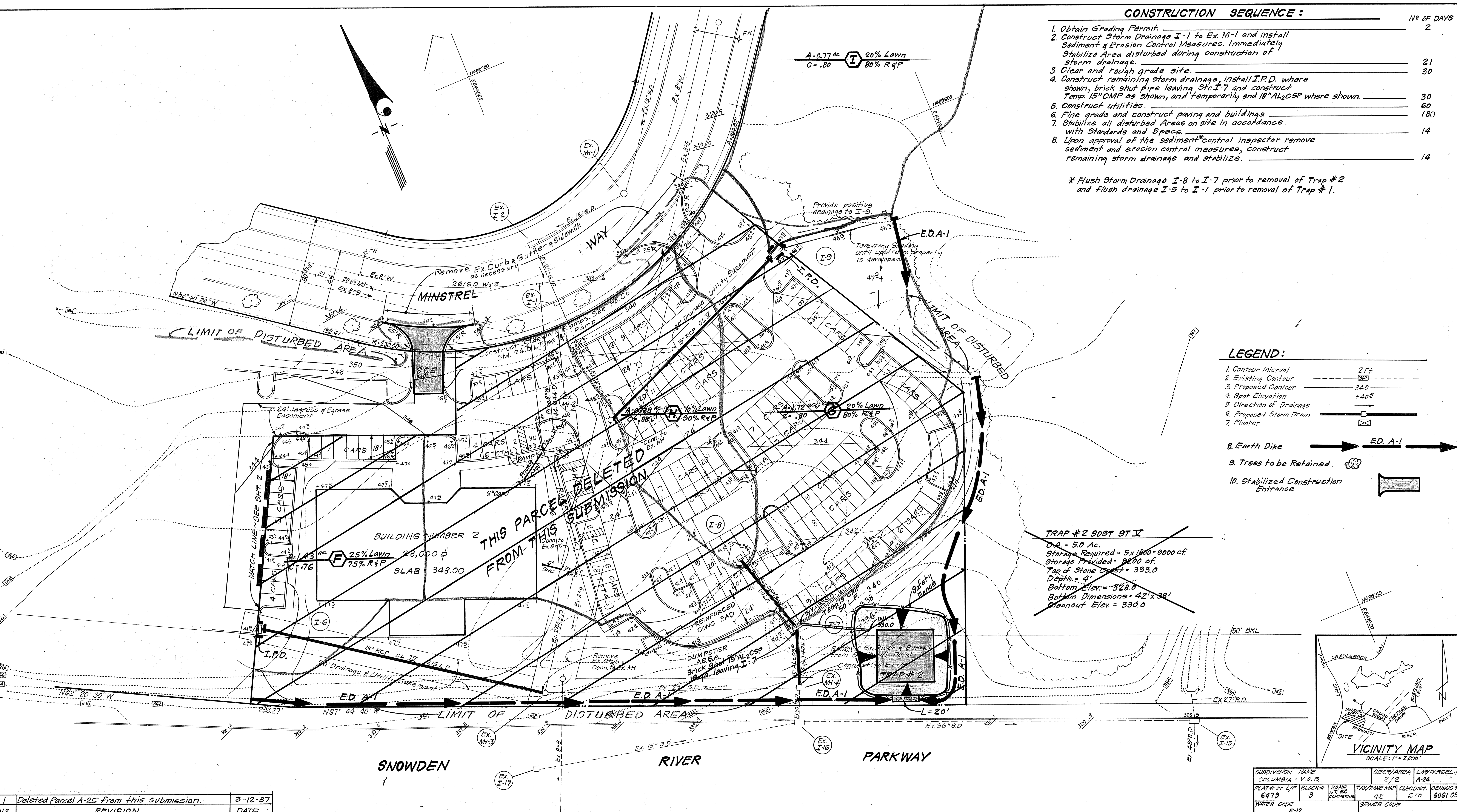
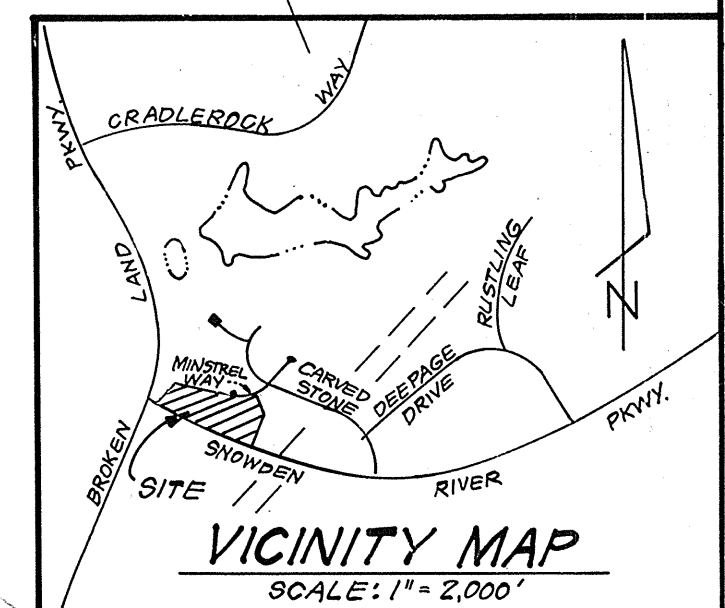
	NO OF DAYS
1. Obtain Grading Permit.	2
2. Construct Storm Drainage I-1 to Ex. M-1 and install Sediment & Erosion Control Measures. Immediately Stabilize Area disturbed during construction of storm drainage.	21
3. Clear and rough grade site.	30
4. Construct remaining storm drainage, install I.P.D. where shown, brick shut pipe leaving Str. I-7 and construct Temp. 15" CMP as shown, and temporarily, and 18" AL ₂ CSP where shown.	30
5. Construct utilities.	60
6. Fine grade and construct paving and buildings.	180
7. Stabilize all disturbed Areas on site in accordance with Standards and Specs.	14
8. Upon approval of the sediment control inspector remove sediment and erosion control measures, construct remaining storm drainage and stabilize.	14

* Flush Storm Drainage I-8 to I-7 prior to removal of Trap # 2 and flush drainage I-5 to I-1 prior to removal of Trap # 1.

LEGEND:

1. Contour Interval	2 Ft.
2. Existing Contour	---
3. Proposed Contour	---
4. Spot Elevation	+40'
5. Direction of Drainage	→
6. Proposed Storm Drain	— [] —
7. Planter	[]
8. Earth Dike	→ ED A-1 →
9. Trees to be Retained	[]
10. Stabilized Construction Entrance	[]

TRAP # 2 90ST ST II
 O.A. = 5.0 Ac.
 Storage Required = 5x1800 = 9000 cf.
 Storage Provided = 9200 cf.
 Top of Stone Crest = 333.0
 Depth = 4'
 Bottom Elev. = 328.0
 Bottom Dimensions = 42'x38'
 Cleanout Elev. = 330.0



N ^o .	REVISION	DATE
1	Deleted Parcel A-25 From this submission.	3-12-87

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
Joseph B. Jones 4-9-86
 COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
Donald B. Bando 4/10/86
 PLANNING DIRECTOR DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Walter F. Nunn 4-8-86
 DIRECTOR DATE

APPROVED: CHIEF BUREAU OF ENGINEERING
Walter F. Nunn 4-8-86
 CHIEF BUREAU OF ENGINEERING DATE

APPROVED
 PLANNING BOARD
 OF HOWARD COUNTY
 DATE 1-8-86
M. H. M.

Reviewed for... *Howard* Name... B.B.D.
 and meets Technical Requirements
John C. Mardall Signature
 U.S. Soil Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
Stephen L. Fisher 4/7/86
 Approved Date

DEVELOPER'S/BUILDER'S CERTIFICATE
 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 site inspections by the Howard Soil Conservation District or their authorized agents, as deemed necessary.
John C. Mardall Signature of Developer/Builder
 12-3-85 Date

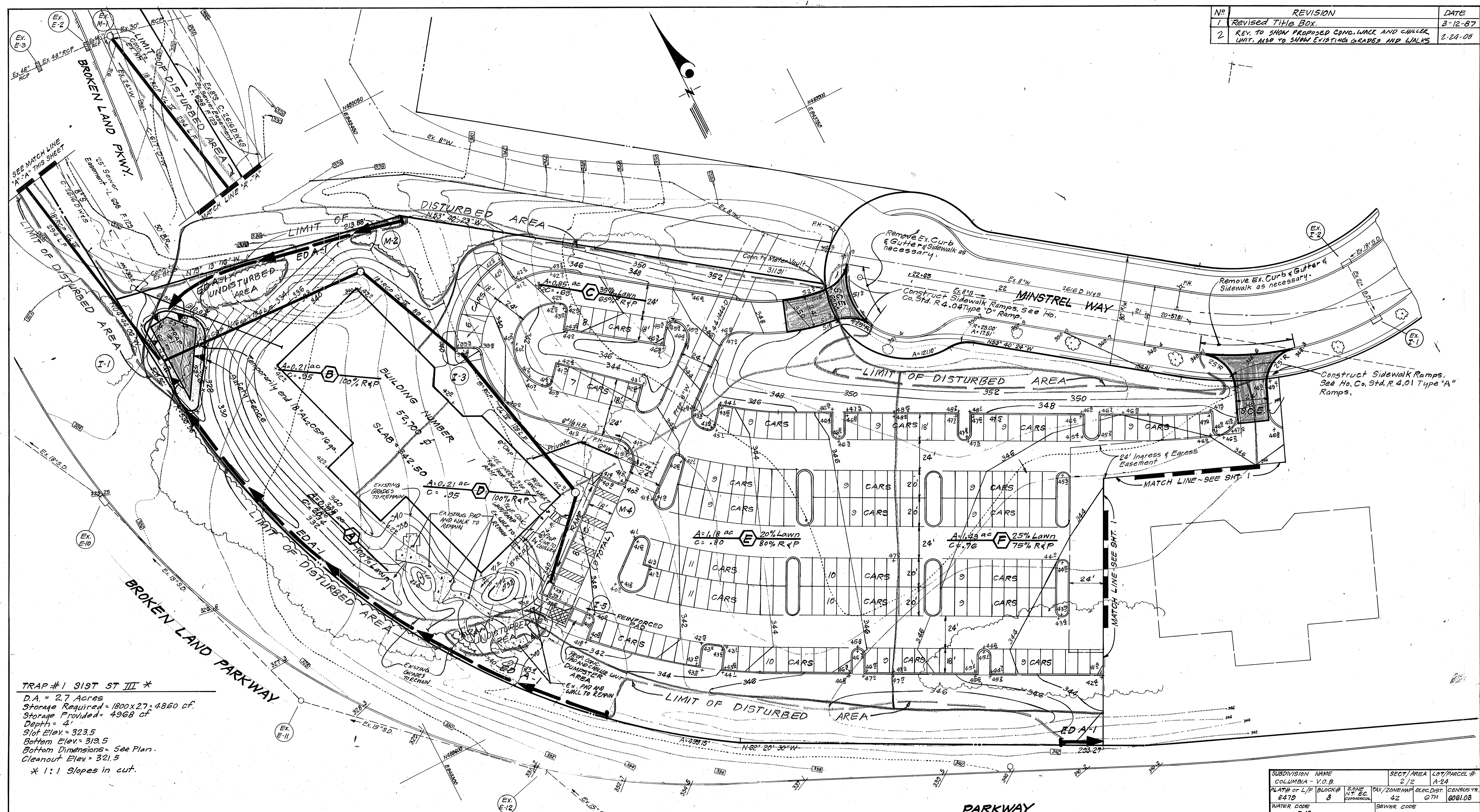
ENGINEER'S CERTIFICATE
 I hereby certify that this plan for Erosion and Sediment Control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.
Jeffrey A. Sackett Signature
 12-3-85 Date

CLARK • FINEFROCK & SACKETT
 ENGINEERS • PLANNERS • SURVEYORS
 11315 LOCKWOOD DRIVE SILVER SPRING, MARYLAND 20904 (301) 593-3400

DESIGNED CKG JME	SEDIMENT AND EROSION CONTROL PLAN AND DRAINAGE AREA MAP PARCEL A-24 COLUMBIA VILLAGE OF OWEN BROWN SECTION 2 AREA 2 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	SCALE 1" = 30'
DRAWN VLM		DRAWING 4.0F B
CHECKED CKG JME		JOB NO. 85-074
DATE 12-3-85	FOR: OWEN BROWN JOINT VENTURE/PLATT DEVELOPMENT CO. 1912 DELLONA AVENUE TOWSON, Maryland 21286	FILE NO. 85-074-5E

S.D.P.-86-130 C

No	REVISION	DATE
1	Revised Title Box	3-12-87
2	REV. TO SHOW PROPOSED CONC. WALK AND CHALKER LIMIT. ALSO TO SHOW EXISTING GRADES AND WALKS	2-24-88



TRAP #1 31ST ST III *
 D.A. = 2.7 Acres
 Storage Required = 1800x27 = 4860 cf.
 Storage Provided = 4968 cf.
 Depth = 4'
 Slot Elev. = 323.5
 Bottom Elev. = 319.5
 Bottom Dimensions = See Plan.
 Cleanout Elev. = 321.5
 * 1:1 Slopes in cut.

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS,
 HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICER: *John B. Jones* 4-9-86
 DATE: 4-9-86

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
 PLANNING DIRECTOR: *James Smallwood* 4/10/86
 DATE: 4-10-86
 CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE,
 STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DIRECTOR: *Frank F. Neuman* 4-8-86
 DATE: 4-8-86
 CHIEF BUREAU OF ENGINEERING: *William D. Davis* 4-8-86
 DATE: 4-8-86

APPROVED
 PLANNING BOARD
 OF HOWARD COUNTY
 DATE: 1-8-86
W. Quinn

Reviewed for *Howard* S.C.D. Name
 and meets Technical Requirements
 Signature: *Stephen L. Rubin* 4-7-86 Date
 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. Rubin* 4/7/86 Date

SNOWDEN RIVER

PARKWAY

CONTRACTOR'S CERTIFICATE
 I/we certify that all design 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 deemed necessary.
 Signature: *John C. Wardall* Date: 12-3-85

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. Sackett* Date: 12-3-85

SUBDIVISION NAME	SECT./AREA	LOT/PARCEL #
COLUMBIA - V.O.B.	2/2	A-24
PLAT# OF L/F BLOCK#	ZONE	TAX./ZONEMAP
647D	3	42
WATER CODE	E-12	SEWER CODE
		6001.08

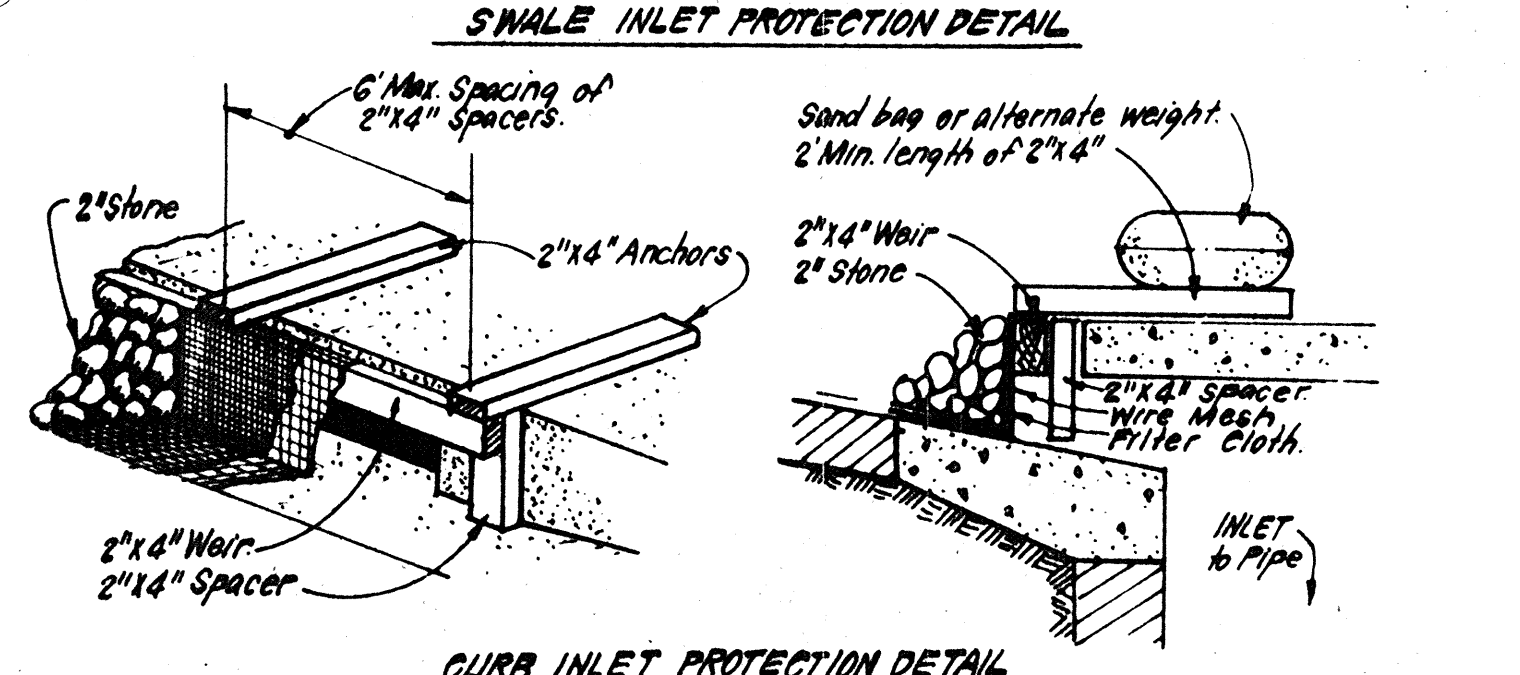
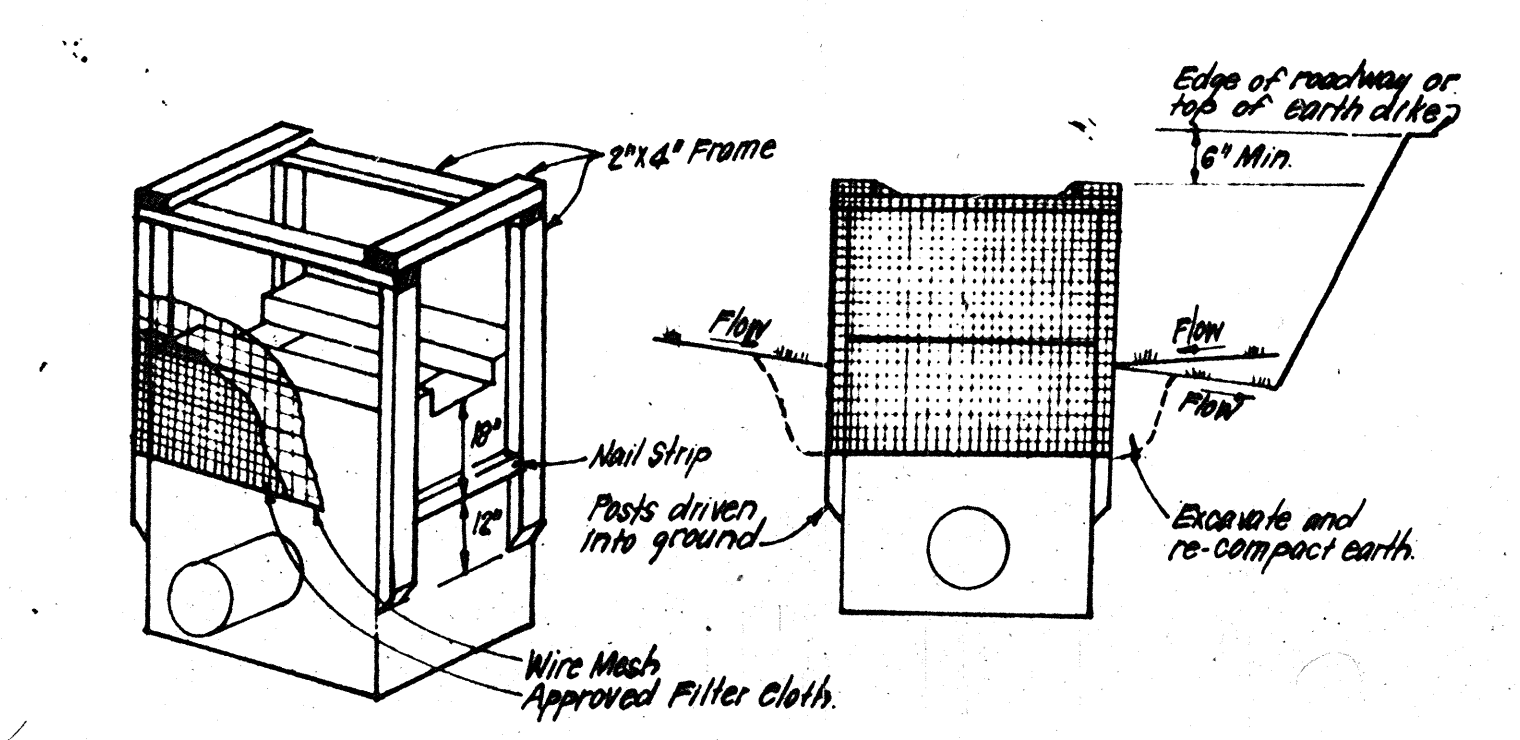
CLARK · FINEFROCK & SACKETT
 ENGINEERS · PLANNERS · SURVEYORS
 11315 LOCKWOOD DRIVE · SILVER SPRING, MARYLAND 20904 (301) 593-3400

DESIGNED	CKG	JME
DRAWN	VLM	
CHECKED	CKG	JME
DATE	12-3-85	

SEDIMENT AND EROSION CONTROL PLAN AND DRAINAGE AREA MAP
PARCEL A-24
COLUMBIA
 VILLAGE OF OWEN BROWN SECTION 2 AREA
 6TH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 FOR: OWEN BROWN JOINT VENTURE/PLAT DEVELOPMENT Co.
 1512 BELLONA AVENUE
 TOWSON, Maryland 21093

SCALE: 1" = 30'
 DRAWING: 5 OF 8
 JOB NO.: 85-074
 FILE NO.: 85-0745E

S.D.P. - 86-130 C



CONSTRUCTION SPECIFICATIONS:

I MATERIALS:

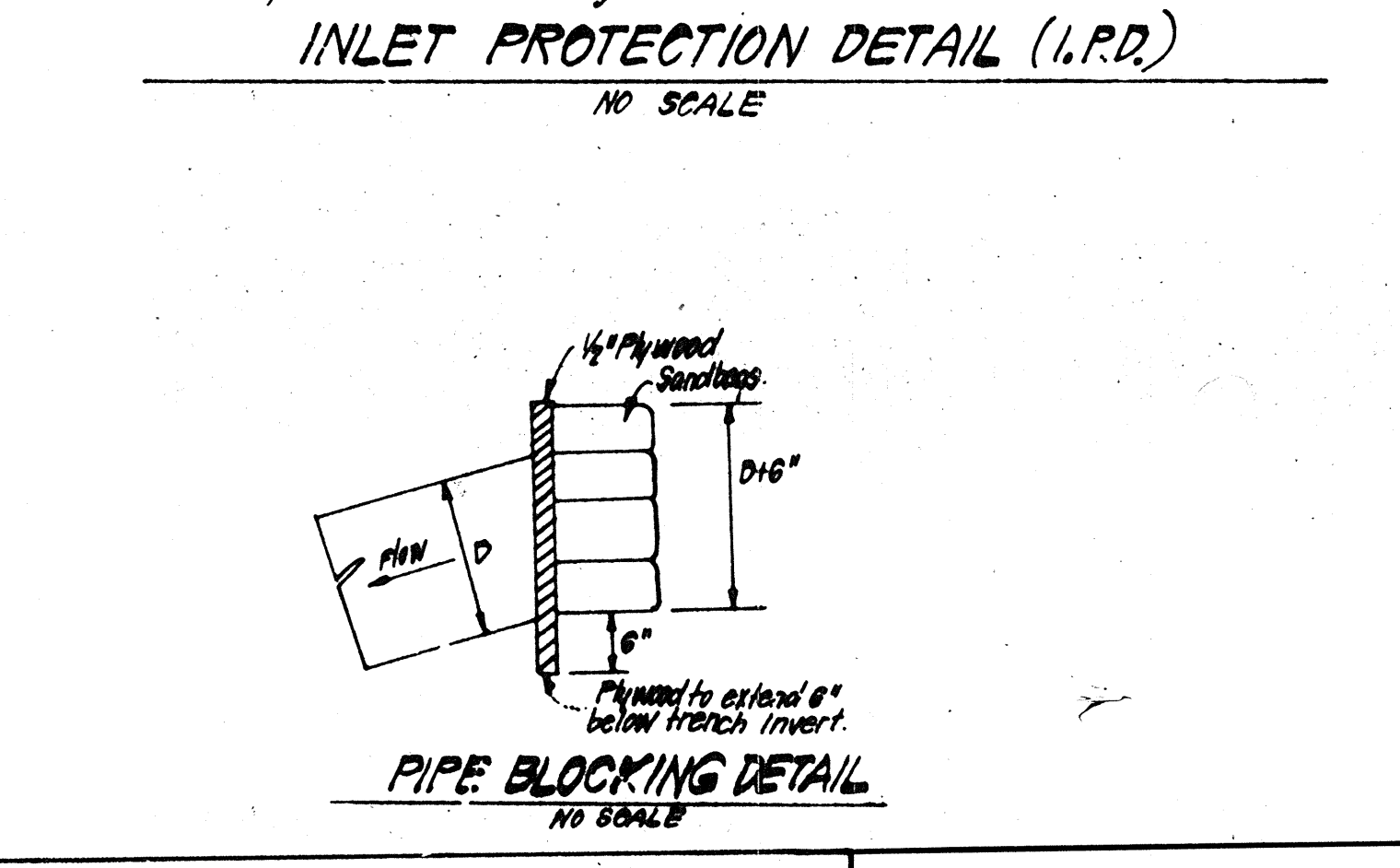
1. Wooden frame is to be constructed of 2x4 construction grade lumber.
2. Wire mesh must be of sufficient strength to support filter fabric, and stone for curb inlets, with water fully impounded against it.
3. Filter cloth must be of a type approved for this purpose; resistant to sunlight with sieve size, 50's, 40-85, to allow sufficient passage of water and removal of sediment.
4. Slope is to be 2" in size and clean, since fines will clog the cloth.

II PROCEDURES: SMALLE DITCHLINE OR VARDINLET PROTECTION

1. Excavate completely around inlet to a depth of 18" below notch elevation.
2. Drive 2x4 posts 1.0m apart at four corners of inlet. Place nail strips between posts at ends of inlet. Assemble top portion of 2x4 frame using one top joint shown. Top of frame (weir) must be 6" below edge of roadway adjacent to inlet.
3. Stretch wire mesh tightly over frame and fabric securely. Ends must meet at post. Stretch filter cloth tightly over wire mesh; the cloth must extend from top of frame to 18" below inlet notch elev. Fasten securely to frame. Ends must meet at post, be overlapped and stapled, then fastened down.
4. Place fill around inlet in compacted 6" layers until layer of earth is even with notch elevation at ends and top elevation on sides.
5. If the inlet is not in a low point, construct a compacted earth dike in the ditch line below it. The top of this earth dike is to be at least 6" higher than the top of frame (weir).
6. The structure must be inspected frequently and filter to be replaced when clogged.

II PROCEDURES: CURB INLET PROTECTION

1. Attach a continuous piece of wire mesh (30" min. width by throat length plus 6") to the 2x4 weir (measuring throat length plus 6" to allow for overlap).
2. Place a piece of approved filter cloth (40-85 sieve) of the same dimensions as the wire mesh over the wire mesh and securely attach to the 2x4 weir.
3. Spread soil, the 2x4 weirs to 2" long vertical spacers to be located between the weir and filter cloth (max 6" apart).
4. Place the assembly against the inlet throat and nail (min 2" lengths of 2x4) to the top of the weir at spacer locations. These 2x4 anchors shall extend across the inlet and be held in place by sandbags or alternate weight.
5. The assembly shall be placed so that the end spacers are a min. 1" beyond 1/2" ends of throat opening.
6. From the wire mesh and filter cloth to the concrete gutter and against the face of curb on both sides of the inlet, place about 2" stone over the wire mesh and filter fabric in such a manner as to prevent water from entering the inlet under or around the filter cloth.
7. This type of protection must be inspected frequently and the filter cloth and stone replaced when clogged with sediment.
8. Assure that storm flow does not bypass inlet by installing temporary earth or asphalt dikes directing flow to inlet.



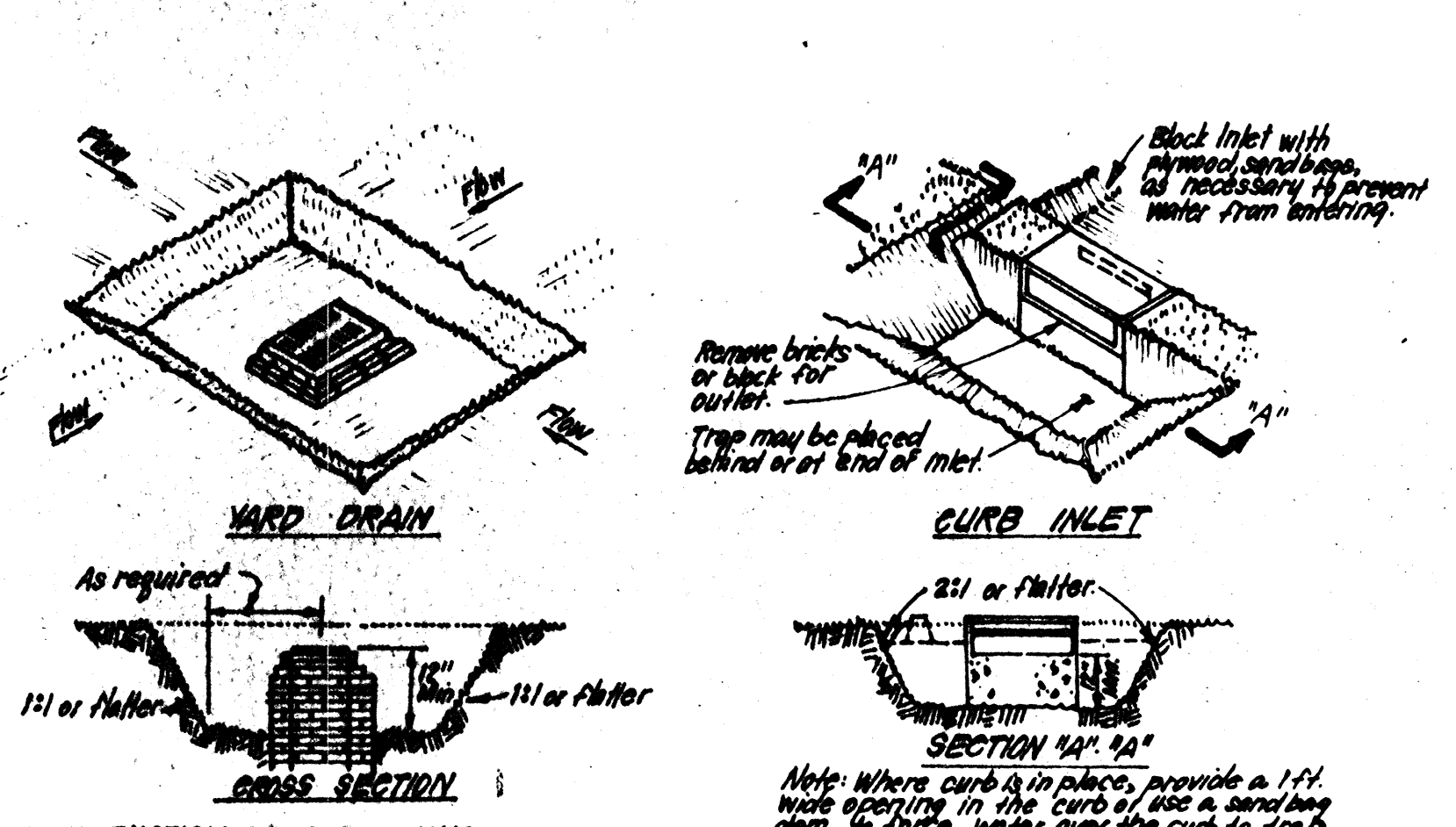
APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT

APPROVED: *[Signature]* 4-2-86

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
 PLANNING DIRECTOR: *[Signature]* 4/11/86
 PLANNING ZONING ADMINISTRATOR: *[Signature]* 4-10-86

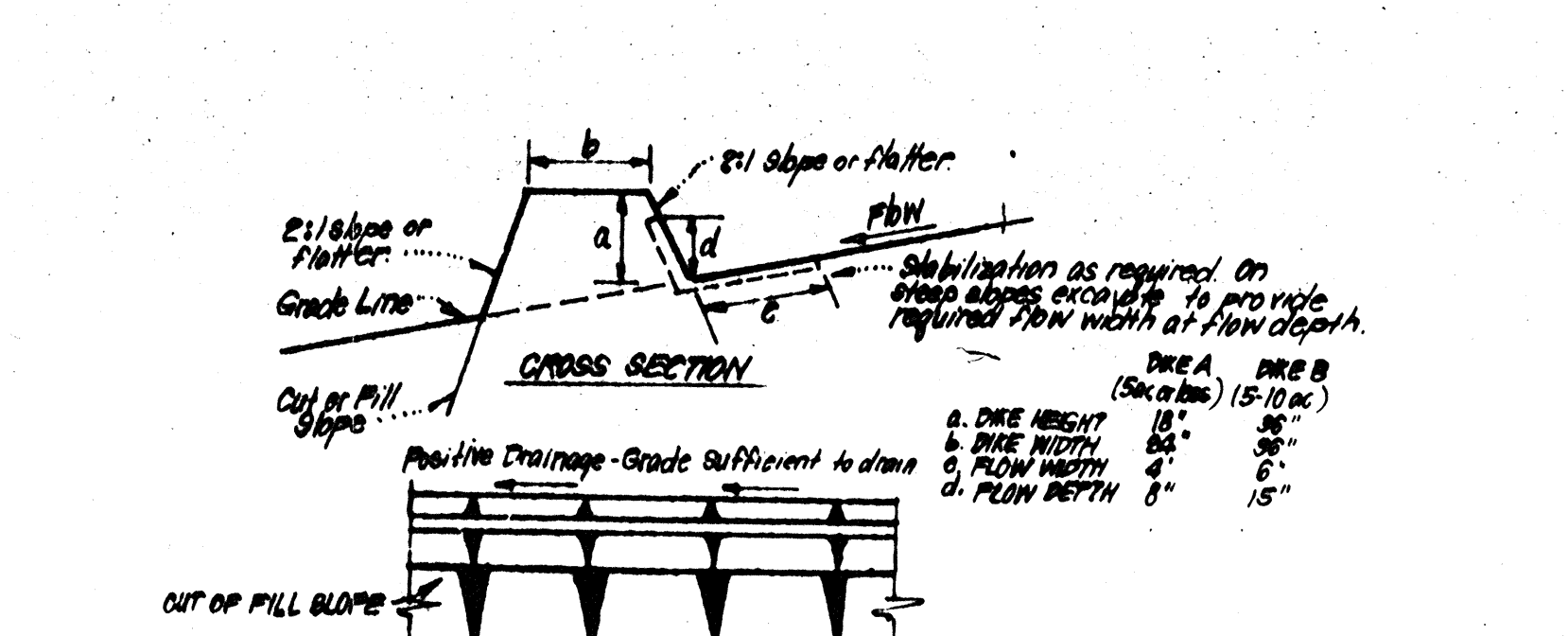
APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

APPROVED: *[Signature]* 4-2-86
 DIRECTOR: *[Signature]* 4-8-86
 CHIEF BUREAU OF ENGINEERING: *[Signature]* 4-8-86



CONSTRUCTION SPECIFICATIONS:

1. Sediment trap shall be removed and the trap restored to its original dimensions when sediment has accumulated to 1/2" the design depth of the trap. Removed sediment shall be deposited in a suitable area and in such a manner that it will not drain.
2. The volume of sediment allowed shall be 100 cu. yds. of contributory drainage.
3. The structure shall be inspected after each rain and repairs made as needed.
4. Construction operations shall be carried out in such a manner that erosion and water pollution shall be minimized.
5. The sediment trap shall be removed and the area stabilized when the constructed drainage area has been properly stabilized.
6. All cut slopes shall be 1:1 or flatter.

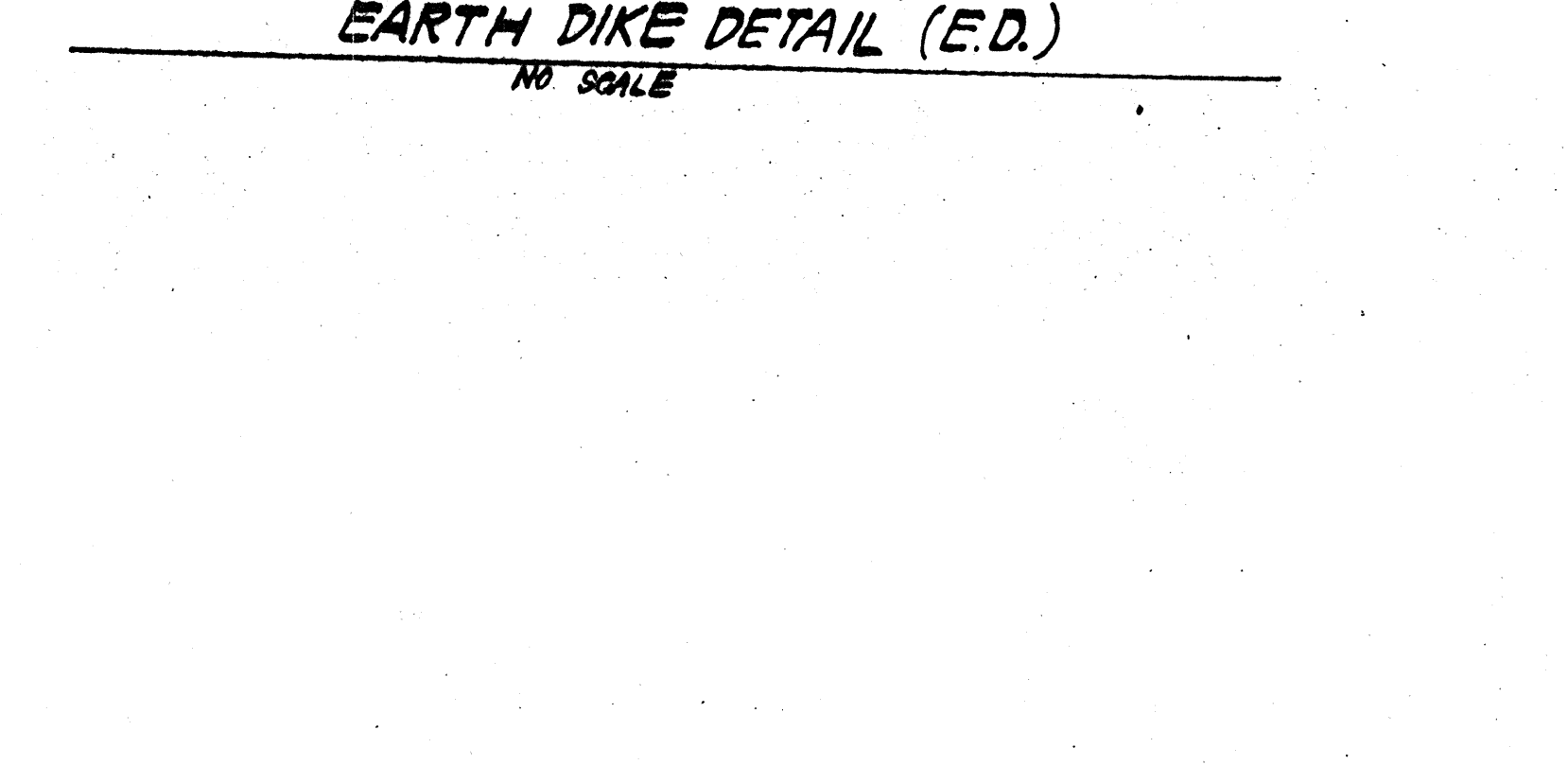


CONSTRUCTION SPECIFICATIONS:

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. Slope 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 is flatter or the drainage area above the dike is not adequately stabilized.
6. Stabilization shall be (A) in accordance with standard specifications for seed and straw mulch or straw mulch 1/2" in seeding season, (B) flow channel as per chart below.

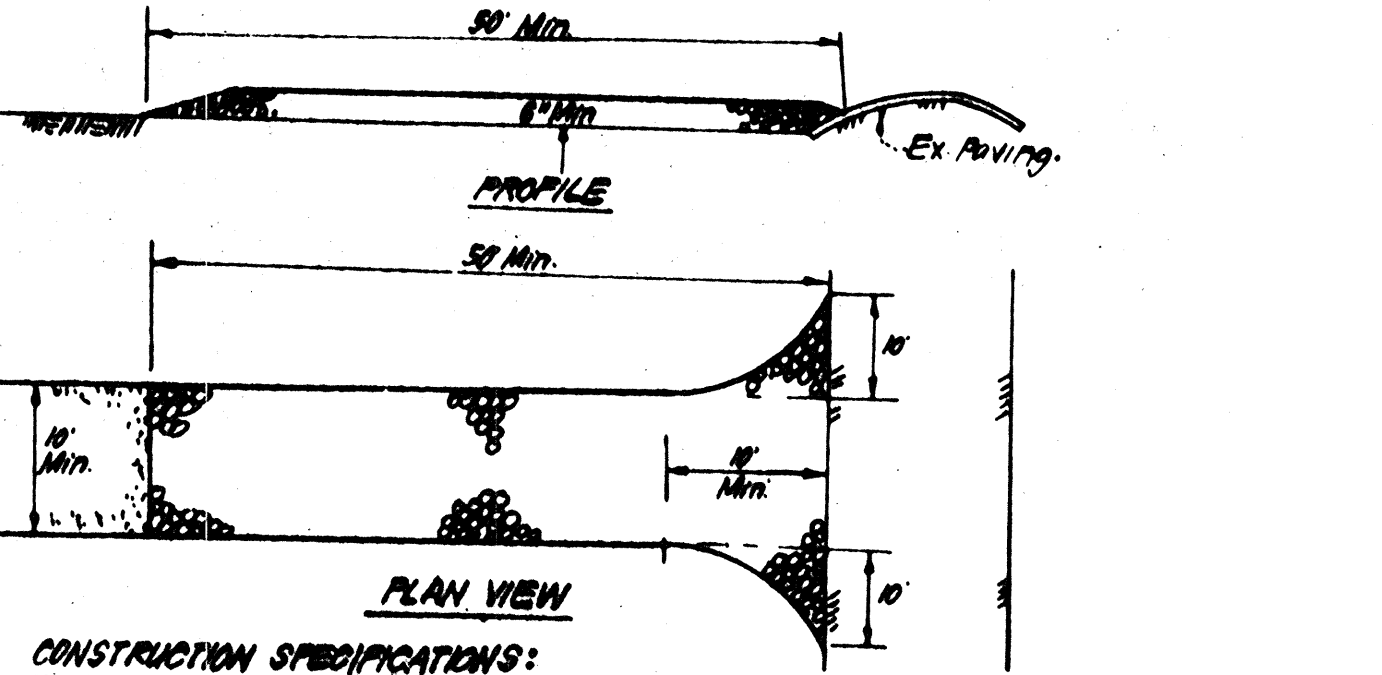
TYPE OF TREATMENT	CHANNEL GRADE	DIKE A	DIKE B
1	0.5 - 0.0%	Seed & Straw Mulch	Seed or Straw Mulch
2	0.1 - 0.0%	Seed & Straw Mulch	Seed or Straw Mulch
3	0.1 - 0.0%	Seed & Straw Mulch	Seed or Straw Mulch
4	0.1 - 0.0%	Seed & Straw Mulch	Seed or Straw Mulch

A Slope to be 2:1 slope or flatter, concrete equivalent, in a layer at least 3" thick and be prepared with soil with construction equipment.
 B Top flap to be 4" x 12" in layer at foot of which, pressed into soil.
 C Approved systems can be substituted for any of the above materials.



SEDIMENT CONTROL NOTES

- 1) A minimum of 24 hours notice must be given to the Howard County Office of Inspection 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 redistribution, 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) and (Sec. 54), temporary seeding (Sec. 50) and mulching (Sec. 52). Temporary stabilization with mulch alone can only be done when recommended seeding rates 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: 1763 Acres
 Area Disturbed: 7.635 Acres
 Area to be roofed or paved: 3.218 Acres
 Area to be vegetatively stabilized: 3.417 Acres
 Total Cut: 19,911 Cu. yds
 Total Fill: 14,938 Cu. yds
 Offsite waste/low area location: N/A
- 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 control must be provided, if deemed necessary by the Howard County DPM sediment control inspector.
- 10) On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.
- 11) If houses are to be constructed on an "As-Built" basis, at random, Single Lot Sediment Control as shown below shall be implemented, N/A.
- 12) All pipes to be blocked at the end of each day (see detail below).
- 13) The total amount of straw bale dikes/silt fence equals 1.7.



CONSTRUCTION SPECIFICATIONS:

1. Stone Size - Use 8" stone or equivalent or recycled concrete equivalent.
2. Length - As required, but not less than 50 feet (except on a slope residence lot) where a 25' min. length would apply.
3. Thickness - 18" (less than 6").
4. Width - The top width, but not less than the full width at point where ingress of water occurs.
5. Surface - The top surface shall be covered with a 2" layer of stone. Filter will not be required on a single family residence lot.
6. Surface Inlet - All surface water flowing or directed toward construction entrances shall be piped across the entrance.
7. Maintenance - The entrance shall be maintained in a condition which will prevent erosion of the surface and shall be inspected frequently and repaired as needed. The entrance shall be inspected with additional stone as construction progresses. All equipment used to trap sediment shall be cleaned or removed after each rain. All equipment used to trap sediment shall be cleaned or removed after each rain. All equipment used to trap sediment shall be cleaned or removed after each rain.
8. Maintenance - The entrance shall be maintained in a condition which will prevent erosion of the surface and shall be inspected frequently and repaired as needed. The entrance shall be inspected with additional stone as construction progresses. All equipment used to trap sediment shall be cleaned or removed after each rain. All equipment used to trap sediment shall be cleaned or removed after each rain. All equipment used to trap sediment shall be cleaned or removed after each rain.
9. Periodic inspection and needed maintenance shall be provided after each rain.

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 t-test recommendations, use one of the following schedules:

- 1) Preferred - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sq 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 30-0-0 ureaform fertilizer (9 lbs/1000 sq ft).
- 2) Acceptable - Apply 2 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 60 lbs per acre (1.4 lbs/1000 sq ft) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 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) Seed with 60 lbs/acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw.

Mulching - Apply 1 1/2 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.

Inspect all seeded areas and make needed repairs, replacements and seedings.

TEMPORARY SEEDING NOTES

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

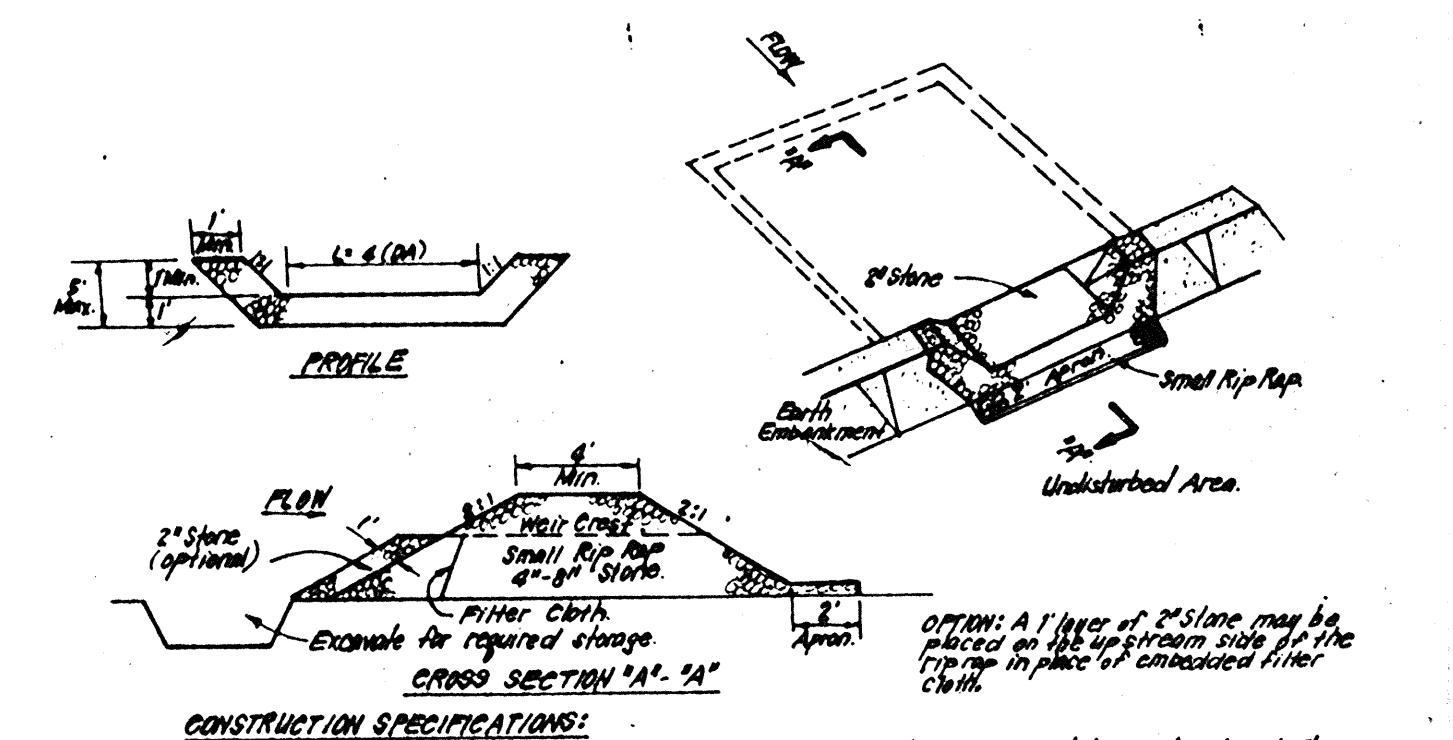
Seedbed Preparation: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding.

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 25 bushel per acre of annual rye (3.2 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 1 1/2 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 ft 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.



CONSTRUCTION SPECIFICATIONS:

1. Area under construction shall be cleared, grubbed and stripped of any vegetation and root mat. The 2" top material shall be removed.
2. The 18" material shall be placed in the embankment above the face of rock and other needs vegetation as well as over the stone outlet, which are exposed to the weather. The embankment shall be compacted by hand or machine, with a minimum of 12" of stone.
3. All cut and fill slopes shall be 2:1 or flatter.
4. The stone used in the outlet shall be 2" to 4" in size with a thickness of 2" or greater placed on the stone side on the stone top top of embankment. The filter cloth in the opening shall be 1/2" the actual depth of the trap.
5. The structure shall be inspected after each rain and repairs made as needed.
6. Construction operations shall be carried out in such a manner that erosion and water pollution is minimized.
7. The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT

APPROVED: *[Signature]* 4-2-86

APPROVED PLANNING BOARD OF HOWARD COUNTY

DATE: 1-8-86

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

APPROVED: *[Signature]* 4-2-86
 DIRECTOR: *[Signature]* 4-8-86
 CHIEF BUREAU OF ENGINEERING: *[Signature]* 4-8-86

DEVELOPER'S/BUILDER'S CERTIFICATE

I hereby 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] 12-3-85

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] 4-3-86

Revised Title Box

NO.	REVISION	DATE
1	3-12-87	

CLARK • FINECROCK & SACKETT
 ENGINEERS • PLANNERS • SURVEYORS
 1315 LOCKWOOD DRIVE SILVER SPRING, MARYLAND 20904 (301) 583-1400

DESIGNED: JLS
DRAWN: VLM
CHECKED: JLS
DATE: 12-3-85

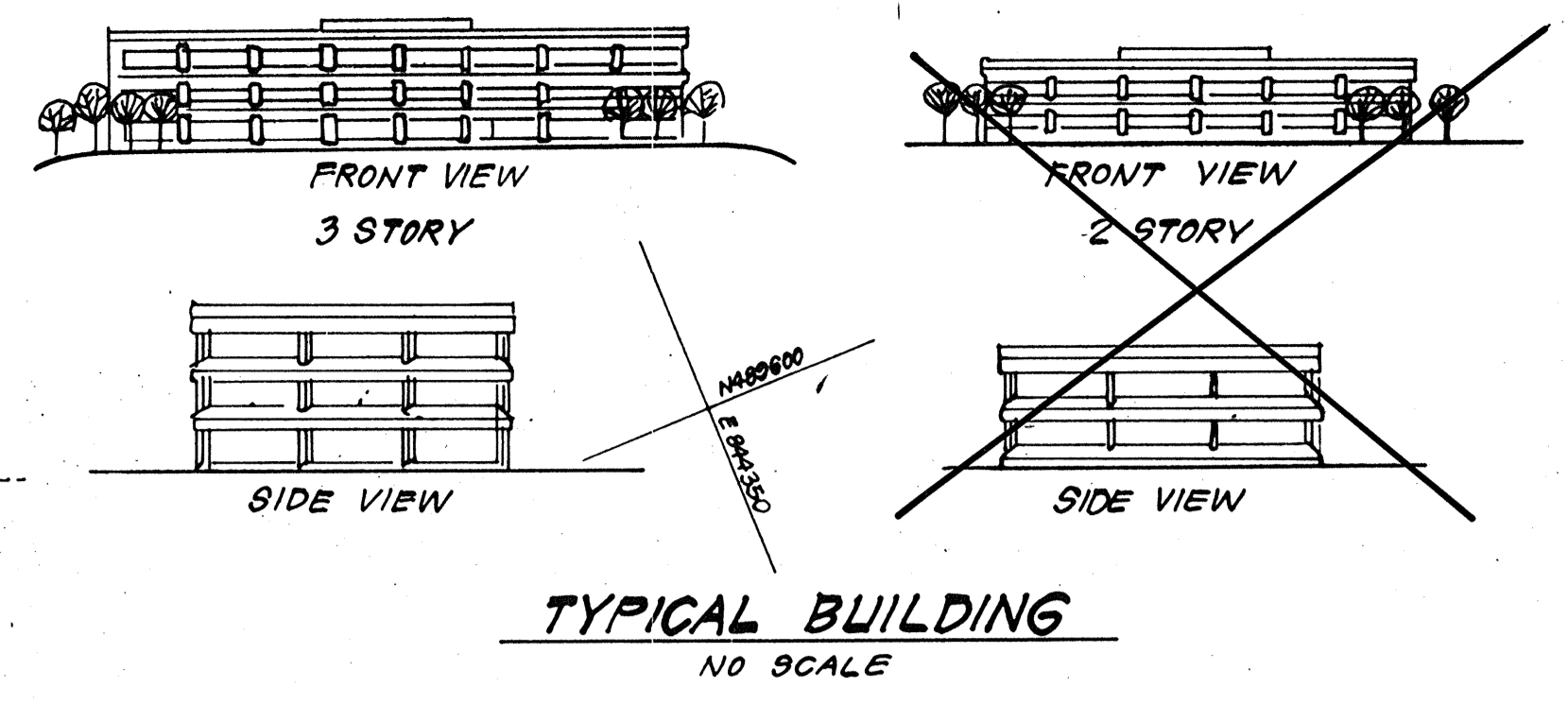
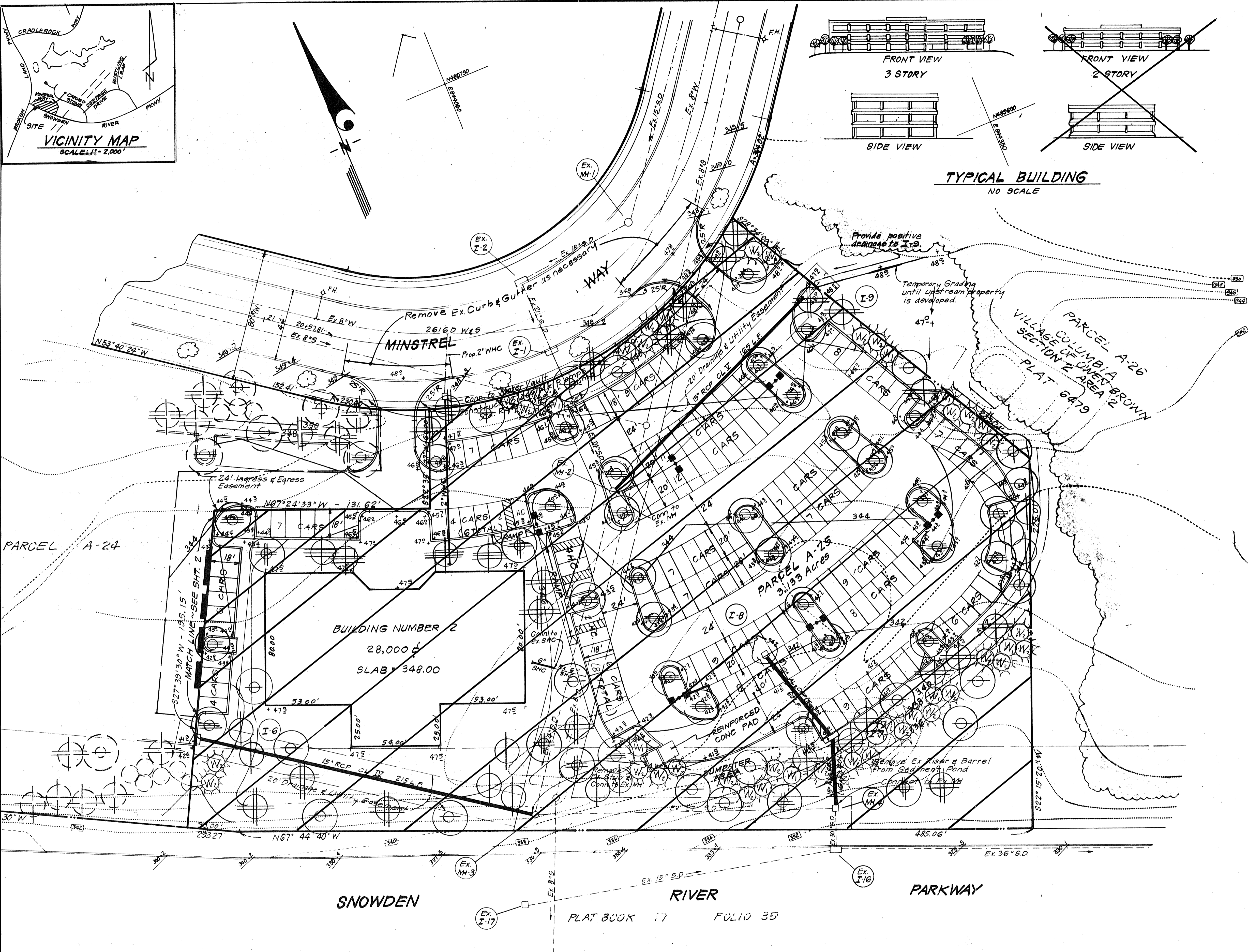
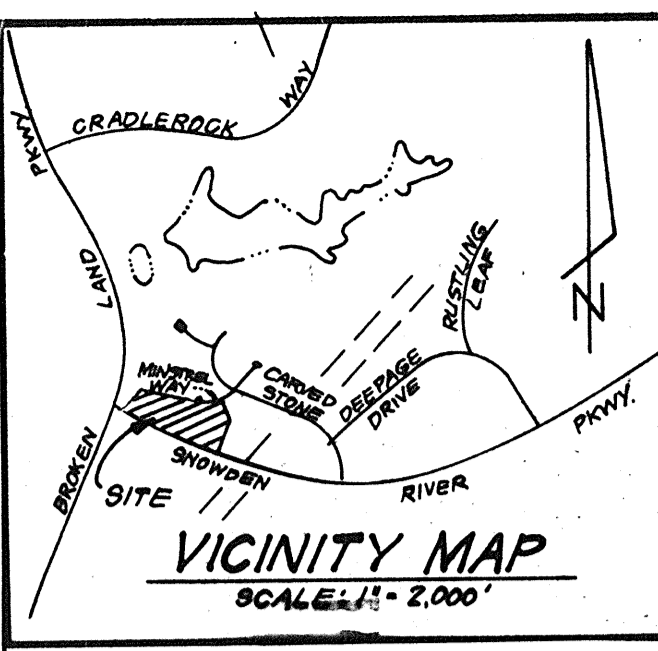
SEDIMENT AND EROSION CONTROL PLAN
 PARGEL A-24

COLUMBIA
 VILLAGE OF OWEN BROWN
 SECTION 2 AREA 2
 6TH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

FOR: OWEN BROWN JOINT VENTURE/PLATT DEVELOPMENT CO.
 1312 DELLOVA AVENUE
 TOWNSHIP, MARYLAND 21023

SCALE: AS SHOWN
 DRAWING: 6 OF 8
 JOB NO.: 85-074
 FILE NO.: 85-074-35

S.D.P. 86-1300



PLANT SCHEDULE

KEY	PLANT NAME	SIZE	QUANT	REMARKS
⊕	ACER RUBRUM 'RED SUNSET'	2 1/2-3' CAL	16	B & B
⊕	RED SUNSET MAPLE	12-14' HT		HEAVY HEADS
⊕	QUERCUS PALUSTRIS		25	
⊕	PIN OAK			
⊕	QUERCUS PUBBA		7	
⊕	NORTHERN RED OAK			
⊕	GLEDTISIA T. INEPMIS		18	
⊕	SHADEMASTER HONEYLOCUST			
⊕	PLATANUS ACEFOLIA		62	
⊕	LONDON PLANETREE			
⊕	PRUNUS SUPHIRELLA PENDULA	2-2 1/2' CAL	6	SPECIMEN
⊕	WEeping CHERRY	8-10' HT		
⊕	CRATAEGUS PHAENOPYRUM	2-2 1/2' CAL	12	
⊕	WASHINGTON HAWTHORN	8-10' HT		
⊕	MALUS PINN PERFECTION		16	
⊕	PINK PERFECTION CRAB			
⊕	PRUNUS CEP 'THUNDERCLOUD'		17	
⊕	PURPLELEAF FL. PLUM			
⊕	CRATAEGUS MENTOPENSIS		21	
⊕	THORNLESS TOBA HAWTHORN			
⊕	PRUNUS S. 'KWANZAN'		24	
⊕	KWANZAN CHERRY			
⊕	AMELANCHIER CANDENSIS		5	
⊕	SHADBLow SERVICEBERRY			
⊕	PINUS STROBUS			
W1	EASTERN WHITE PINE	6-7' HT	38	B & B HEAVY
W2	PINUS STROBUS			
W2	EASTERN WHITE PINE	7-8' HT	56	
B1	PINUS THUNDERGILL	6-7' HT	11	
B1	JAPANESE BLACK PINE			
B2	PINUS THUNDERGILL	6-7' HT	16	
B2	JAPANESE BLACK PINE	7-8' HT		
⊕	CEDRUS DEODARA	SELECTED	1	B & B SPECIMEN
⊕	DEODARA CEDAR			

LIGHTING NOTE:

- GARDCO # H1923 - 400 MH - BRP / VALMONT # DS230 - 500 X 200 - BRP-2 - FBC 11 FIXTURES
- GARDCO # H1913 - 400 MH - BRP / VALMONT # DS230 - 500 X 200 - BRP-1 - FBC 6 FIXTURES

ALL LIGHTS CONSIST OF 400 WATT METAL HALIDE ON A 20' MOUNTING HEIGHT.

NOTE:

- CONTINGENT SHALL VERIFY LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO DIGGING.
- ALL PLANTING SHALL BE DONE IN ACCORDANCE WITH COLUMBIA H.P.D. PLANTING SPECIFICATIONS.
- SUBSTITUTIONS MAY BE PERMITTED WITH THE APPROVAL OF THE LANDSCAPE ARCHITECT, (593-3400).

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.
 HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICER: *[Signature]* DATE: 4-9-86
 APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
 PLANNING DIRECTOR: *[Signature]* DATE: 4/10/86
 CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION
 APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DIRECTOR: *[Signature]* DATE: 4-8-86
 CHIEF BUREAU OF ENGINEERING

APPROVED
 PLANNING BOARD
 OF HOWARD COUNTY
 DATE: 1-8-86
[Signature]

1	Deleted Parcel A-25 from this submission	3-12-87
Nº	REVISION	DATE



REVISED: 4-1-86

CLARK • FINEPROCK & SACKETT
 ENGINEERS • PLANNERS • SURVEYORS
 11315 LOCKWOOD DRIVE SILVER SPRING, MARYLAND 20904

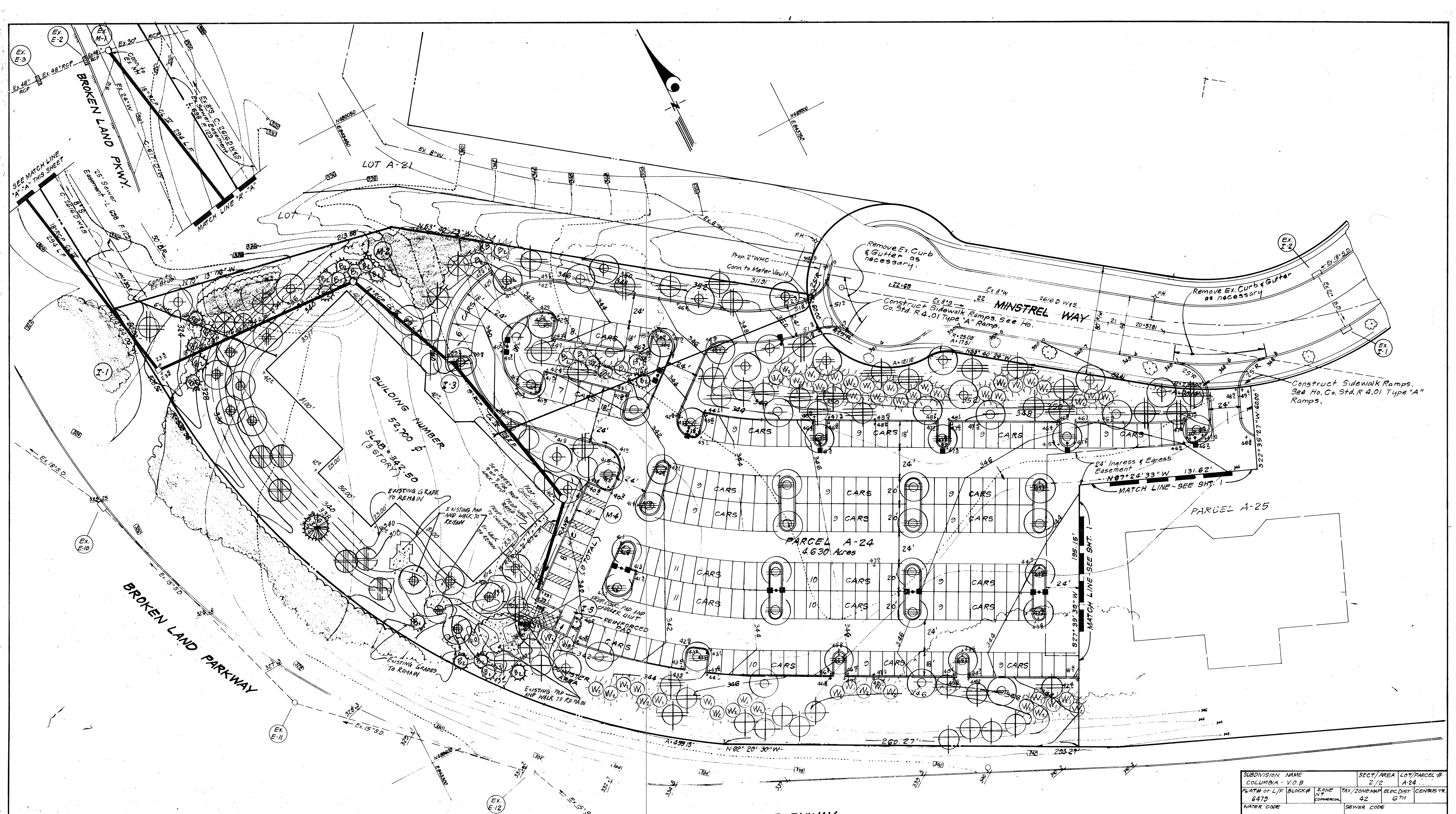
LANDSCAPE PLANTING PLAN
 PARCEL A-24
 COLUMBIA
 VILLAGE OF OWEN BROWN
 SECTION 2 AREA 2
 6th ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

DESIGNED: MBN
 DRAWN: MBN
 CHECKED: WHT
 DATE: 12-6-85

SCALE: 1" = 30'
 DRAWING: 70F8
 JOB NO: 85-074
 FILE NO: L3 85-074

FOR: OWEN BROWN JOINT VENTURE / PLATT DEVELOPMENT CO.
 1912 BELLONA AVENUE
 TOWSON, MARYLAND 21093

SDP-86-130c



SUBDIVISION NAME COLUMBIA - V.O.B.	SECT./AREA 2/2	LOT/PARCEL # A-24
PLAT# OF L/F BLOCK# 6473	E. ONE N.T. COMMERCIAL	TAX./ZONE MAP ELEC. DIST. 42 6TH
WATER CODE	SEWER CODE	

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS,
HOWARD COUNTY HEALTH DEPARTMENT
John G. Jones 4-9-86
COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
James A. Marshall 4/10/86
PLANNING DIRECTOR DATE

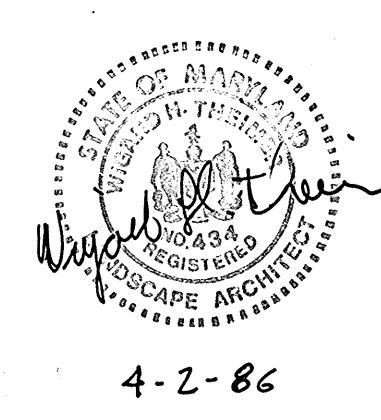
William H. Newman 4-10-86
CHIEF DIVISION OF LAND DEVELOPMENT
AND ZONING ADMINISTRATION DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE,
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Deane F. Neman 4-8-86
DIRECTOR DATE

John G. Jones 4-2-86
CHIEF BUREAU OF ENGINEERING DATE

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE 1-8-86
W. H. Newman

Nº	REVISION	DATE
2	REV. TO SHOW PROP. CONC. WALK AND CHILLER UNIT, ALSO TO SHOW EXISTING GRADES AND WALKS	2-24-86
1	REVISED TITLE BOX	3-12-87
Nº	REVISION	DATE



CLARK · FINEFROCK & SACKETT
ENGINEERS · PLANNERS · SURVEYORS
11315 LOCKWOOD DRIVE · SILVER SPRING, MARYLAND 20904 · (301) 593-3400

DESIGNED KBN	LANDSCAPE PLANTING PLAN PARCEL A-24 COLUMBIA VILLAGE OF OWEN BROWN SECTION 2 AREA 2 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND FOR: OWEN BROWN JOINT VENTURE/PIATT DEVELOPMENT CO. 1312 BELLOJA AVENUE TOWSON, MARYLAND 21286	SCALE 1" = 30'
DRAWN KBN		DRAWING 8 OF 8
CHECKED WHT		JOB NO. 85-074
DATE 12-6-85		FILE NO. LS 85-074
		REVISED: 4-1-86

SDP-86-130c